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Interlocking Editorship. A Network Analysis of the Links Between Economic Journals

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Abstract - The exploratory analysis developed in this paper relies on the hypothesis that each editor possesses some power in the definition of the editorial policy of her journal. Consequently if the same scholar sits on the board of editors of two journals, those journals could have some common elements in their editorial policies. The proximity of the editorial policies of two scientific journals can be assessed by the number of common editors sitting on their boards. A database of all editors of ECONLIT journals is used.
The structure of the network generated by interlocking editorship is explored by applying the instruments of network analysis. Evidences have been found of a compact network containing different components. This is interpreted as the result of a plurality of perspectives about the appropriate methods for the investigation of problems and the construction of theories within the domain of economics.

Keywords: Networks; Economic journals; Editorial boards; Interlocking editorship.
JEL classification: A 140

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The aim of this paper is to explore the structural properties of the network generated by the editorial activities of economists. The domain of the research is the academic community of the economists involved in journals included in the *Econlit* database maintained by the American Economic Association. The basic intuition of our research is that studying the structure of the network of the economic journals, with the instruments of network analysis, can shed some light on the underlying processes according to which the research is conducted by economists.

More in general this intuition is based on the common experience that scientific activities have a not reducible social dimension (Longino, 2006 and the bibliography cited therein). It is usual to ask a colleague to collaborate in writing a paper, to comment a book, to revise a project. And it is usual when judging the quality of a paper, a research outcome or of a research project to commit it to the opinions of experts or *peers*. The editorial boards of scientific journals decide which papers are worthy of publication by asking the opinion of anonymous referees. The proxies normally used for measuring the scientific quality of a paper or of a journal, e.g. the well known Impact Factor (IF), are implicitly based on the relational dimension of scientific activity. The bibliometric popularity indeed depends on the number of the citations that the articles of a scholar or of a journal receives by articles authored by other scholars principally in the same domain of research. In some cases, the relevance of individual scientific activity is approximated by indicators of the *esteem*. The esteem is based on the positive appraisal that other scholars give to an individual, and this positive appraisal is reflected in the position he occupies in the scientific community, as, for example, director of a research project, of a scientific journal and so on.

All of the agents and actions described above can be viewed as interdependent rather than as autonomous units; the actions can then be considered as relational ties (linkages) between agents (Wasserman and Faust, 1994). The patterns of connections between agents form a social network, and the structure of such networks affects the social interactions amongst agents (Goyal, 2007; Newman, In press). Such a network can be represented as a set of points (the so called nodes) denoting actors, joined in pairs by lines (the so-called edges) denoting acquaintance. The quantitative empirical studies of such networks can be conducted with the instruments of network analysis (Wasserman and Faust, 1994).

The network analysis was already applied in the study of network generated by scientific activities. The most frequented topic is that of scientific collaboration. In this case, two scientists are considered connected if they have co-authored a paper together. Newman (2000; 2004) analyzed the collaboration networks of scientists from biology, medicine and physics and found that all networks constitute a "small world" (Barabási, 2003) in which the average distance between scientists via intermediate collaborators is very small. Goyal, Van der Leij and Moraga-González (2004) studied the coauthorship network in economics and found evidences that in the period 1970-2000 the network became a small world. This feature was explained in reference to a decision model according to which authors rationally decide whether to work alone or with some co-authors (Fafchamps, Van der Leij and Goyal, 2006).

Another application of network analysis to the study of scientific activity concerns the network generated by citations either in patents (Jaffe and Trajtenberg, 1996) or scientific paper (Otte and Rousseau, 2002). In this latter case the vertices of the network are papers and a (direct) link is a citation of a paper by another paper. It is easy to see that hyperlinks in the WWW are a general case of a citation network. The networks generated by the citations of scientific papers and by WWW hyperlinks show a strong characterization in terms of the degree distribution of the nodes. The degree of a vertex is the number of links with the other vertices in the network. The degree distribution strongly characterizes the underlying network pattern. In the above cited as in many other cases, empirical investigations have shown that the degree distributions often display Paretian tail behaviour (see e.g. Newman, 2005 and the reference therein). The probability to be cited can be affected by the number of citation already collected by a paper (Simkin and Roychowdhury, 2006). This self reinforcing mechanism can push the authors to preferential attachment, i.e. in this case the tendency among papers in the growing network of citations to form new links citing preferentially to papers with a high number of citations and, as a consequence, to the emergence of star papers and authors (Barabási and Albert, 1999; Faria, 2005).

This paper proposes a new application of the standard network analysis techniques. We focus on the network of economic journals generated by the presence of at least a same editor in their boards. The vertices of the network considered are scientific journals, and a (not directed) link is

generated between a pair of journals by the presence of at least a same editor in the board of both. This network is generated by a simple transformation of the dual-mode or affiliation network (de Nooy, Mrvar and Batagelj, 2005; Wasserman and Faust, 1994). An affiliation network is a network in which the vertices are divided in two sets (actors and events) and the affiliation connects vertices from the two different sets only. In our case affiliation (being member of the board) connects a scientist to a journal. Our attention will be focused on the links generated between journals through the affiliations of scientists. It is worth remarking that the present framework is similar to that considered in interlocking directorship analysis, which is probably the most developed field of application of dual mode network analysis. An interlocking directorate occurs when a person sitting on the board of directors of a firm also sits on the board of another firm. Those interlocks have become the primary indicator of inter-firm network ties. An inter-firm tie can be explained as the result of a strategic decision of the firms, as collusion, or cooptation or monitoring of sources of environmental uncertainty (Mizruchi, 1996 ant the reference cited therein). In analogy with interlocking directorates analysis, we will refer to the phenomenon here considered as *interlocking editorship*.

The issues on which we focus are: which are the most central journals of the network and which are the most peripheral? Which journals have the most influence over others? Does the community of economists break down into smaller groups? If so what are they? More in general is it possible to separate schools of thought, methodologies or pattern of research characterizing the scientific community under scrutiny? And it is possible to infer something about the functioning of the "market of research" in the domain of economics?

Editorial boards

Cogent answers to those questions require a significant unit of observation at the basis of our research. To the best of our knowledge, no literature presents extensive discussions about the role of the board of editors for scientific journals; but we have anecdotal evidence and some recent tentative generalizations. Traditionally the main function of the board of editors was to determine which articles were appropriate for publication. In the last two or three decades this function has

changed. The diffusion of the anonymous referees process allows the board of editors to work for obtaining and evaluating referees: “The job of both the editors and the referees is to do ‘peer review’” (Coupe, 2004). In every case the role of editors can be considered of some relevance in steering discipline, and pushing or suppressing various lines of research (for some anecdotal evidence see Stigler, Stigler and Friedland, 1995 and the reference therein). Probably an editor’s objective is to produce a journal of high quality. The advent of modern bibliometric indicators, as the impact factor, slightly modified the traditional problem of editors: journal editors compete now with each other to attract the *best* papers, i.e. the papers with highest probability to be cited. The instruments used by editors to attract the *best* papers are the reputation of the journal, the reduction in transaction costs involved in the publication process, but also favoritism for individuals or institutions (Laband and Piette, 1994; Medoff, 2003).

Recently some general models of the functioning of the market for publication has been developed. Faria (2005) models the market for research as a game populated by two kind of agents: authors and editors, with some market power. Authors seek to maximise the number of their publications and the impact of their work in the literature, captured by citations. Editors maximise the quality of papers they publish in order to increase the reputation of their journals. High reputation journals are journals often cited in the literature, i.e. journals with high impact factor. Authors searching to increase the probability to be cited, compete to publish in journals with a high reputation. As a consequence “editors of journals with strong reputations enjoy an enormous amount of power in their hands” (Faria, 2005). The competition between authors generates a pressure to publish which open the space to new journal and new editors, which, at their turn, seek to position their journals in empty niches and to adopt strategies to improve their impact factor. The overall result of this mechanism is largely positive driving the system toward the enhancement of research quality (Goel and Faria, forthcoming). A more critical view is developed by Frey (2003; 2005) starting from a property rights approach. According to Frey, there are more than two groups of actors in the academic publishing system: notably publishers, editors, referees and authors. Each groups owns different property rights on the scientific journal. And the behavior of each group must be modeled according the traditional rational choice model of man. Commercial publishers owning

complete private property rights on various journals, search to maximize profits. They are interested in the quality and reputation of the journals. A high quality journal has market power, and market power permits the gain of profits. Editors enjoy property rights on their journal; they are interested in the quality of their journal because this enhances their academic reputation. Authors, as we have seen in Faria's model, are interested in publishing their article in high reputation journals. A large amount of decision power over the publishing process is detained by the referees who have no property right at all on the journals. So it is at least incoherent to model them as acting only in the interest of the science or quality of the research, as for example in Engers and Gans (1998). Personal interest can play a role in their choices. "Many referees will be tempted to judge papers according to whether their own contribution are sufficiently appreciated and their own publications quoted" (Frey, 2003). The diffusion of anonymous referee processes reduced drastically, at least in economics, the power of editors. This reduction can have negative consequences on the overall quality of research, driving the authors to "intellectually prostitute themselves by slavishly following the demands made by anonymous referees who have no property rights to the journals they advise" (Frey, 2003). Evidence on three of the most eminent journals in economics shows that in the last years the power of editors in accepting or rejecting paper is anew growing, driving, as a consequence, to the publication of papers authored by scholars concentrated in few highly reputed institutions in the United States (Wu, 2007).

From the point of view of this article, the moral of the story is trivial: the board of editors have some power in shaping the editorial processes and policies of scientific journals. Because of their importance, it appears reasonable that the positions on the boards are held by "persons who have the confidence and trust of their colleagues in the journal's areas of coverage for the journal to be successful in attracting quality submissions and in building and maintaining a reputation for quality. Thus, selection as an editor or member of an editorial board is a considerable honor that reflects one's standing in the profession as evaluated by his or her peers" (Kaufman, 1984). Unsurprisingly, members of the editorial board usually place this information in evidence in their *curriculum vitae*; and it is universally recognized that to be a member of an editorial board is a signal of the esteem reserved to a scholar by the academic community.

The esteem or reputation of a scientist is shared also by her institution given that her affiliation is clearly displayed in the journal. This point was stressed by some empirical papers which ranked academic institutions on the basis of their representation on the editorial boards of top journals (Gibbons and Fish, 1991; Kaufman, 1984). Interestingly enough, Gibbons and Fish (1991) found that there is a correlation between the ranking of institutions based on the membership of their affiliated scholars on editorial boards and those based on citations and publications in top journals. Hodgson and Rothman (1999) did not find surprising at all that editors and authors who ranked according to some quality (merit, prestige, citation) came from the best institutions ranked according to the same criterion. This can be explicable in terms of "familiar mechanism and cultural processes" (Hodgson and Rothman, 1999). In a nutshell: "having an editor increases the member of the departments' chance to publish in that journal" (Coupe, 2004 and the references cited therein). In the case of economics, Hodgson and Rothman present data evidencing a strong concentration of editors and authors in few academic institutions of the United States, and argue that this institutional oligopoly may be unhealthy for the development of innovative research.

As already anticipated, this paper approaches the question of the membership of an editorial board from a perspective slightly different from the ones seen above. We are interested in the relation between the editorial policies of the various journal and we would infer some considerations on this topic by studying the cross-presence of the editors in their boards.

It is apparent that editorial boards have some power in shaping the editorial processes and policies of economic journals. Therefore, our perspective is based on the hypothesis that each editor may influence the editorial policy of her journal. Consequently if the same individual sits in the board of two journals, those journals could have some common elements in their editorial policies. It is evident that we will not be concerned with direct observations of the editorial policies adopted by the boards of economic journals. We will infer considerations about the similarity of editorial policies through the observation of the presence of scholars in the boards of editor.

Centre and periphery in the interlocking editorship network

First, it should be emphasized that the empirical notion of editor adopted in this paper is very broad. Indeed, it covers all the individuals listed as editor, co-editor, member of the editorial board or of the advisory editorial board. There is no evidence regarding the roles of different kinds of editors in the editorial process (possibly apart from the role of editor-in-chief) and a single title such as managing editor may often entail very different roles for different journals. Hence, as in Hodgson and Rothman (1999), the broad definition is assumed.

The affiliation network database was constructed *ad hoc* for this paper. We have included in our research 746 journals present in the ECONLIT database and with an active editorial board in January 2006. That is we excluded from the database journals ceased before January 2006. According to common wisdom, this set of journals includes all major scientific journals in the field of economics.

The data on the members of the editorial boards was directly obtained from the website of the journals or - for the few cases when the site was unavailable - from the hard copy. The data was collected from March to July 2006 considering the boards published on the websites of the journals in that period. When the hard copy was necessary, the board considered was that of the first issue in 2006 or, alternatively, that of the last issue in 2005. Moreover, the database was managed by means of the package *Pajek* (Batagelj and Mrvar, 2006; de Nooy et al., 2005).

In this database, 21,525 seats were available on the editorial boards and they were occupied by 15,921 scholars. The average number of seats per journal turned out to be 28.9, while the average number of seats occupied by each scholar (*i.e.* the mean rate of participation) was 1.35. The number of lines linking the journals is 6,407, and the density of the interlocking directorship network (*i.e.* the ratio of the actual number of lines to the maximum possible number of lines in the network) is 0.023. This means that only 2.3% of the possible lines is present (Wasserman and Faust, 1994). A comparison with statistical journals network (Baccini, Barabesi and Marcheselli, 2008) shows that economic journals network is much more dispersed than the statistical one.

The graph of the network is reported in Figure 1. The vertices in the graph are automatically placed by the package *Pajek* on the basis of the Fruchterman-Reingold procedure. In this graph two

main subsets may be roughly recognized: a giant central component composed by the majority of economic journals and a small group of isolated journals.

Figure 1 about here
Figure 1. The economic journals network.

In order to consider an initial exploratory analysis, the degree distribution has been provided. In the present setting, the degree of a journal is the number of lines which it shares with the other journals. Table I contains the degree distribution of the journals considered. The mean degree is 17.18 (while the median degree turns out to be 11) and the degree standard deviation is 17.55. It is interesting to remark that about 10% of journals, precisely 74 journals, are isolated from the network (*i.e.* they have zero degree). They are in part non-English language journals (as for example *L'impresa* or *Bancaria* in Italian, *Tahqiqat-e eqtesadi* in Arabian, *Investigación Económica* in Spanish), journals edited by national scientific societies (e.g. *Schweizerische Zeitschrift für Volkswirtschaft und Statistik/Swiss Journal of Economics and Statistics* edited by the Swiss Society of Economics and Statistics) or by institutions with a complete control of the board of editors (e.g. the *Antitrust Bulletin*) journals dedicated to very narrow topics (e.g. *Australian Commodities Forecasts and Issues* or *Agronomia Mesoamericana* ; *Australian Bulletin of Labour*); journals on the boundaries with other disciplines with only a minor emphasis in economics (e.g. *American Historical Review* or *Transportation Journal*). Indeed the search for components in the network (de Nooy et al., 2005) trivially shows 74 components each made up of one element (the aforementioned journals), a component made up of two journals (both edited by the American Statistical Society: *American Statistician* and the *Journal of the American Statistical Association*), and a big component made up of the remaining 670 journals. As usual, a component is a maximal connected sub-network, *i.e.* each pair of sub-network vertices are connected by a sequence of distinct lines (de Nooy et al., 2005)

Table I. Degree frequency distribution of the statistical journals.

Degree	Freq	Freq%	Degree	Freq	Freq%	Degree	Freq	Freq%
0	74	9,9	24	8	1,1	48	5	0,7
1	44	5,9	25	6	0,8	49	1	0,1
2	39	5,2	26	13	1,7	50	3	0,4
3	37	5,0	27	13	1,7	51	4	0,5
4	23	3,1	28	11	1,5	52	1	0,1
5	32	4,3	29	10	1,3	53	3	0,4
6	19	2,5	30	7	0,9	54	4	0,5
7	25	3,4	31	3	0,4	55	2	0,3
8	21	2,8	32	9	1,2	57	5	0,7
9	21	2,8	33	5	0,7	59	2	0,3
10	19	2,5	34	6	0,8	60	2	0,3
11	20	2,7	35	6	0,8	61	1	0,1
12	16	2,1	36	7	0,9	62	2	0,3
13	22	2,9	37	2	0,3	63	1	0,1
14	16	2,1	38	8	1,1	65	2	0,3
15	19	2,5	39	6	0,8	66	1	0,1
16	12	1,6	40	6	0,8	68	1	0,1
17	8	1,1	41	7	0,9	69	2	0,3
18	9	1,2	42	5	0,7	71	1	0,1
19	12	1,6	43	6	0,8	72	3	0,4
20	14	1,9	44	7	0,9	73	1	0,1
21	10	1,3	45	3	0,4	76	1	0,1
22	11	1,5	46	5	0,7	79	1	0,1
23	8	1,1	47	5	0,7	94	1	0,1
						124	1	0,1

A main concern in network analysis is to distinguish between the centre and the periphery of the network. In our case, the problem is to distinguish between the economic journals which have a central position in the network and those in the periphery. As suggested by Wasserman and Faust (1994), three centrality measures for each journal in the network may be adopted. The simplest measure for the centrality of a journal is represented by its degree: indeed, the more ties a journal has to other journals, the more central is its position in the network. For example, the *Pacific Economic Review* is linked with 124 journals, while *Journal of Development and Economic Policies* is linked with solely one. Hence, the first is more central in the network than the second. In

addition, the normalized degree of a journal is the ratio of its degree to the maximum possible degree (*i.e.* the number of journals minus 1). Thus, the *Pacific Economic Review* is linked with about 16.6% of the other journals in the network, while *Statistical Modelling* is linked with only 0.001%. Table A1 contains the degree and the normalized degree for the journals considered. An overall measure of centralization in the network (based on marginal degrees) is given by the so-called degree centralization (Wasserman and Faust, 1994). In this case, the index turns out to be 0.14, showing that the network of economic journals is less centralized than the one of statistical journals for which the degree centralization is 0.34 (Baccini et al., 2008).

The second centrality measure is given by closeness centrality, which is based on the distance between a journal and all the other journals. In the network analysis, the distance between two vertices is usually based on so-called geodesic distance. Geodesic is the shortest path between two vertices, while its length is the number of lines in the geodesic ((Wasserman and Faust, 1994). Hence, the closeness centrality of a journal is the number of journals (linked to this journal by a path) divided by the sum of all the distances (between the journal and the linked journals). The basic idea is that a journal is central if its board can quickly interact with all the other boards. Journals occupying a central location with respect to closeness can be very effective in communicating information (sharing research, sharing papers, deciding editorial policies) to other journals. Table A1 contains the closeness centrality for economic journals. By focussing on the connected network of 640 journals, it is possible to compute the overall closeness centrality of journals (Wasserman and Faust, 1994). The overall closeness centrality is 0.29, showing in turn that the network of economic journals is less centralized than the statistical one [0.35].

The third considered measure is the so-called betweenness centrality. The idea behind the index is that similar editorial aims between two non-adjacent journals might depend on other journals in the network, especially on those journals lying on the paths between the two. The other journals potentially might have some control over the interaction between two non-adjacent journals. Hence, a journal is more central in this respect if it is an important intermediary in links between other journals. From a formal perspective, the betweenness centrality of a journal is the proportion of all paths between pairs of other journals that include this journal. Table A1 contains

the betweenness centrality of the economic journals. For example, the *Pacific Economic Review* is in about 4% of the paths linking all other journals in the network. It is interesting to note that in the statistical journal network, the two journals with higher betweenness are each in about 12% of the paths linking all other journals (Baccini et al., 2008). In turn, the overall betweenness centralization of the network (Wasserman and Faust, 1994) is 0.04; also in the case of this index the centralization is lower than in the network of statistical journal [0.10].

It is worth noting the ranking similarity of the three centrality measures. This item is emphasized by the high value of Kendall's concordance index which equals 0.95 (for more details on Kendall's tau and concordance indexes see e.g.Gibbons and Chakraborti, 1992).

Valued network analysis

It is interesting to consider the strength of the relationship between journals. The network of journals can be characterized as a valued network. More precisely, in a valued network the lines have a value indicating the strength of the tie linking two vertices (Wasserman and Faust, 1994). In our case the value of the line is the number of editors sitting on the board of the two journals linked by that line.

Table III shows the distribution of line values: 74.6% of the links are generated by journals sharing only one editor and about 94% are generated by journals sharing three or less editors.

In social network analysis it is usual to consider lines with higher value to be more important since they are less personal and more institutional (de Nooy *et al.*, 2005). In the case of the journal network, the basic idea is very simple: the editorial proximity between two journals can be measured by observing the degree of overlap among their boards. Two journals with no common editors have no editorial relationship. With an example: the *American Economic Review* and the *Australian Bulletin of Labour* have no common editors, so that their editorial policies can be considered independent of each other.

The opposite situation occurs when two journals have the same board; probably they have a common or, at least shared, editorial policy, i.e. they are *companion* journals. As an example, *Applied Economics* and *Applied Economics Letters* share all their 23 editors. In its "aims and scope"

declaration for 2007, the latter explicitly stated that it is the "companion journal" of the former. And again, *Politická Ekonomie* and *Prague Economic Papers* not only share all their 40 editors, but they are published by the University of Economics of Prague, and in their web sites they present the same description of the mission of both journals. In economics, there are a few journals that can be considered properly *companion journals* sharing all their editorial board members. The most common situation is the intermediate one in which two journals share only a part of their board members.

Table III. Line multiplicity frequency distribution.

Line value	Freq	Freq (%)
1	4780	74,61
2	934	14,58
3	297	4,64
4	145	2,26
5	89	1,39
6	51	0,80
7	33	0,52
8	24	0,37
9	15	0,23
10	10	0,16
11	8	0,12
12	6	0,09
13	3	0,05
14	2	0,03
15	1	0,02
16	4	0,06
19	1	0,02
20	1	0,02
23	1	0,02
24	1	0,02
40	1	0,02

Starting from this basis it is possible to define cohesive subgroups, *i.e.* subsets of journals among which there are relatively strong ties. In a valued network a cohesive subgroup is a subset of vertices among which ties have a value higher than a given threshold. In our case, a cohesive subgroup of journals is a set of journals sharing a number of editors equal or higher than the

threshold. In our interpretation, a cohesive subgroup of journals is a subgroup with a similar editorial policy, belonging to the same subfield of the discipline or sharing a common methodological approach. Following de Nooy et al. (2005), cohesive subgroups are identified as weak components in *m*-slices, *i.e.* subsets for which the threshold value is at least *m*.

As previously remarked, the network of statistical journals is not compact: there is a big component of 670 journals and all the others are isolated. The search for cohesive subgroups strengthens this path: fixing a minimum value of threshold to $m = 2$ the big component reduces to 474 journals, 13 components emerge of 2-4 journals, and the isolated journals grow to 242. With $m = 3$ the big component reduces to 284 journals and isolated journals grow to 369. With higher threshold value, the network gives rise to components worthy of being noticed here.

In particular we focused our attention on the weak components emerging in 6-slices network. It is possible to isolate 41 components including 176 journals. We comment, first, on the three weak components with the biggest number of journals

Figure 2 contains the representation of the central and biggest component of the network. The 36 journals in this subset of the network have at least 6 common editors. The dimension of each vertex represents the betweenness centrality of the corresponding journal in the complete network. The centre of this component is occupied by the *Journal of Money Credit and Banking*. It is linked directly with 8 journals. Four out of eight have not other links (*American Economic Review*, *Journal of Monetary Economics*, *Journal of Macroeconomics* and *Federal Reserve Bank of New York Economic Policy Review*) and therefore they configure themselves as an efficient star at the centre of the network; the other four out of eight journals bridge the central star to four groups of journals. In the upper right of the figure, *Macroeconomics Dynamics*, is the bridge toward journal of macroeconomic dynamics and computational economics at the boundaries of macroeconomics;[1] on the right *The International Journal of Finance and Economics* is the bridge with a small group of other policy oriented and accessible to non-specialists journals. On the lower left *The Journal of Financial Intermediation* and *The Journal of Financial Services Research* are the bridge toward a

[1] In the aims and scope of *Netnomics* it is stated that "the journal also explores the emerging network-based, real-time macroeconomy with its own set of economic characteristics."

group of financial journals; in this group the *European Financial Management* connects also a group of business and marketing journals. On the upper left the *Review of International Economics* is the bridge with a group of journals of international economics and development. So, the central component of the network contains journals of macroeconomics, monetary economics, international economics, a few journals of financial economics and the *American Economic Review* considered by all rankings the most important journal of general economics. It is interesting to note that the central star contains all the journals classified by (CNRS, 2007) as the most important journals of macroeconomics, international and monetary economics. This configuration is probably the outcome of the general consensus achieved in monetary policy (and also in macroeconomics?) by scientists and practitioners, as discussed by Goodfriend (2007).

Figure 2 about here

Figure 2. The central weak component in 6-slices network: macroeconomic, monetary and international economics journals (the dimension of vertices is proportional to betweenness centrality).

Figure 3 contains a second weak component with 12 journals devoted to economic theory, econometrics, game and decision theory. The centre of the component is *Games and Economic Behavior*. It is linked directly to seven journals devoted to the study of mathematical and quantitative methods (*Econometrica, Journal of Mathematical Economics, International Journal of Game Theory, Journal of Economic Theory, Review of Economic Design*), of theoretical public economics (*Social Choice and Welfare*), and experimental economics (*Experimental Economics*). In this case the network is not configured as a star, because there are direct links between some of the seven journals around the central one. In this case, as for the macroeconomic component, all linked journals are in the first or second class in the CNRS ranking (CNRS, 2007). It is useful to note that the *Journal of Economic Behavior and Organization* presents a relatively high betweenness

centrality, indicating that this controls the links of the component with the rest of the network of economic journals.

Figure 3 about here

Figure 3. A weak component in 6-slices network: economic theory, econometrics, game and decision theory journals (the dimension of vertices is proportional to betweenness centrality).

The third weak component is drawn in Figure 4. It contains journals devoted to urban, spatial and geographical economics, and to real estate economics. At the centre of the component there is a pair of journals, *The Journal of Urban Economics* and *The Journal of Regional Science*. The first is linked through *The Journal of Regional Science* to other journals of geographical economics; the second to journals of housing economics and real estate economics and finance. The journals on the right of the Figure 3 are at the boundaries of economics, as for example the *Journal of Real Estate Literature* which is a general publication of the American Real Estate Society; but they are also relatively isolated in the network of the economic journals, as we can infer by their relatively low betwenness centrality values. The journals on the left of the Figure 3 are more central in the network and they have also an interesting position in the CNRS ranking.

Figure 4 about here

Figure 4. A weak component in 6-slices network: urban and regional economics journals (the dimension of vertices is proportional to betweenness centrality).

The other eight weak components of network containing more than three journals are drawn in Figure 5. The first component in clockwise contains five journals dedicated to insurance. The second is the component containing six journals of accounting research. In particular four journals out of six are linked in a complete subnetwork (*Accounting Review*, *Journal of Accounting Research*, *Journal of Accounting and Economics*, *Review of Accounting Studies*); these four

journals are all classified as the most important journals in the field of accounting by the CNRS ranking (CNRS, 2007). The third group contains five journals of environmental economics; two out of five, *Journal of Environmental Economic and Management* and *Ecological Economics* are top ranked in CNRS (CNRS, 2007). On the lower part of the figure there is a line network of five journals of applied finance; and another line network of four journals of finance. It is interesting to note that the journals classified by CNRS as "Finance and Insurance" when analyzed with our technique split in three specialized groups. On the left a component is drawn containing six journals of public economics: in this component there are three highly ranked journals by CNRS (*Journal of Public Economics*; *International Tax and Public Finance* and *National Tax Journal*) and three journals published in Germany. The public choice approach to public economics defines a weak component of three journals (*Public Choice, European Journal of Political Economy* and *Constitutional Political Economy*) presented in Figure 6. The last two components of Figure 5 are strongly characterized for their methodological approach. On the upper left there are six journals sharing an Austrian perspective on the study of political economy and political science. In the centre of the figure there is a component containing journals strongly characterized for the evolutionary approach to the analysis of economics, industrial organization and technological change.

Figure 5 about here

Figure 5. Weak components in 6-slices network with more than three journals (the dimension of vertices is proportional to betweenness centrality)

Figure 6 contains the weak components with three journals. Again in clockwise, on the right there is a group of law and economics journals; then a group of business history journals; the already mentioned group of public choice journal; three journals devoted to the study of the economics of new technology; a component containing three review of development published by Oxford University; and finally three Brazilian economic journals.

Figure 6 about here

Figure 6. Weak components in 6-slices network with three journals (the dimension of vertices is proportional to betweenness centrality)

Conclusive remarks

The exploratory analysis developed in this paper relies on a weak hypothesis: each editor possesses some power in the definition of the editorial policy of her journal. Consequently, if the same scholar sits on the board of two journals, those journals could have some common elements in their editorial policies. The proximity of the editorial policies of two scientific journals can be assessed by the number of common editors sitting on their boards. On the basis of this statement, applying the instruments of network analysis, a simple interpretation of the economic journal network has been given.

The network generated by interlocking editorship is at first sight very compact, given that about 90% of the journals considered are linked directly or indirectly forming a compact subnetwork. According to our hypothesis, if the degree of overlapping of editorial boards is considered to explore the editorial policies of journals, it is possible to individuate a lot of different groups of journals. This is probably the result of different perspectives about the appropriate methods for the investigation of problems and the constructing of theories within the domain of economics. The competing visions or approaches to economic research prompt scholars to endorse different languages and visions about the correct view of how to conduct research.

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Figure 1. The economic journals network

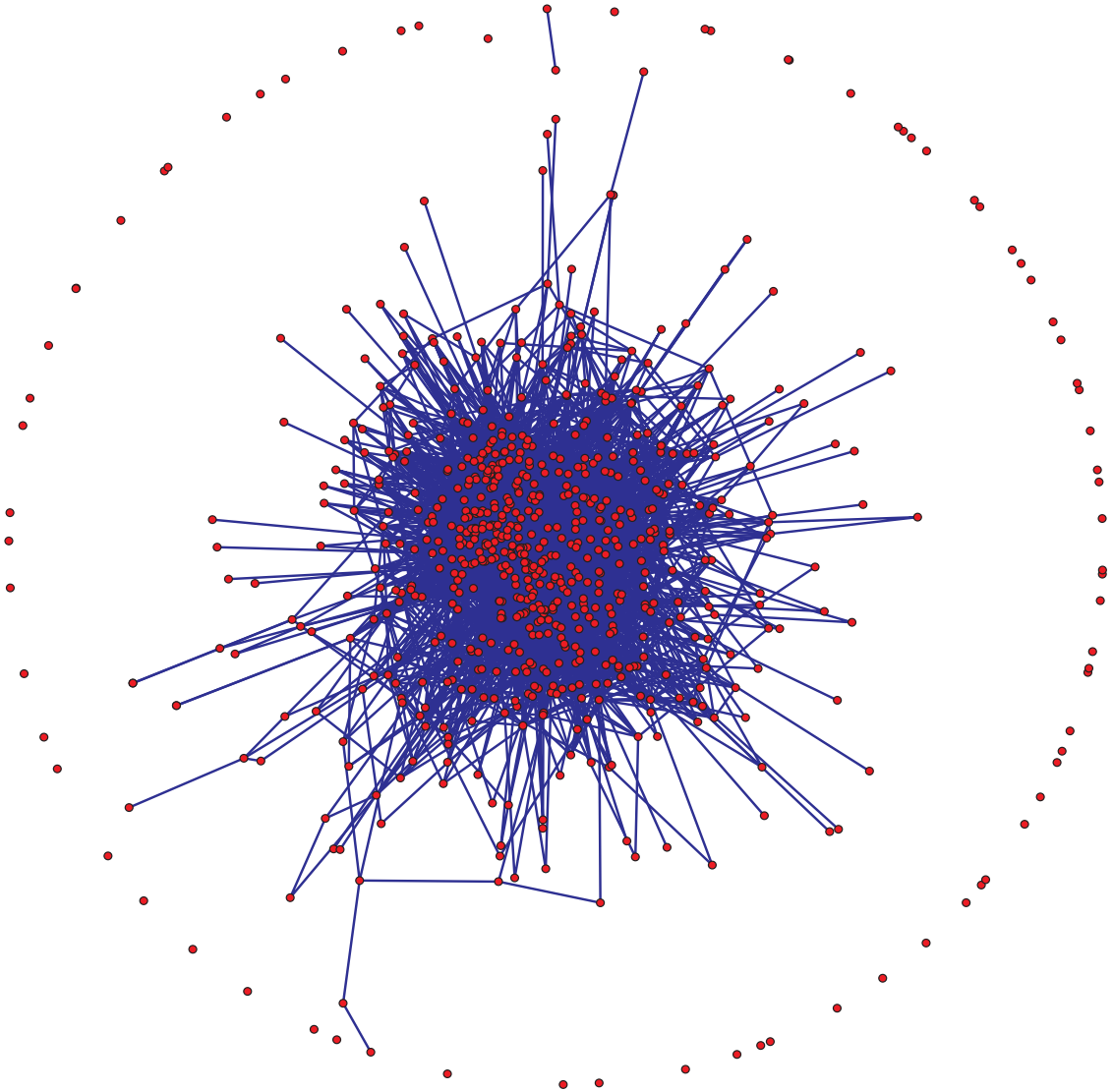


Figure 2. The central weak component in 6-slices network: macroeconomic, monetary and international economics journals.

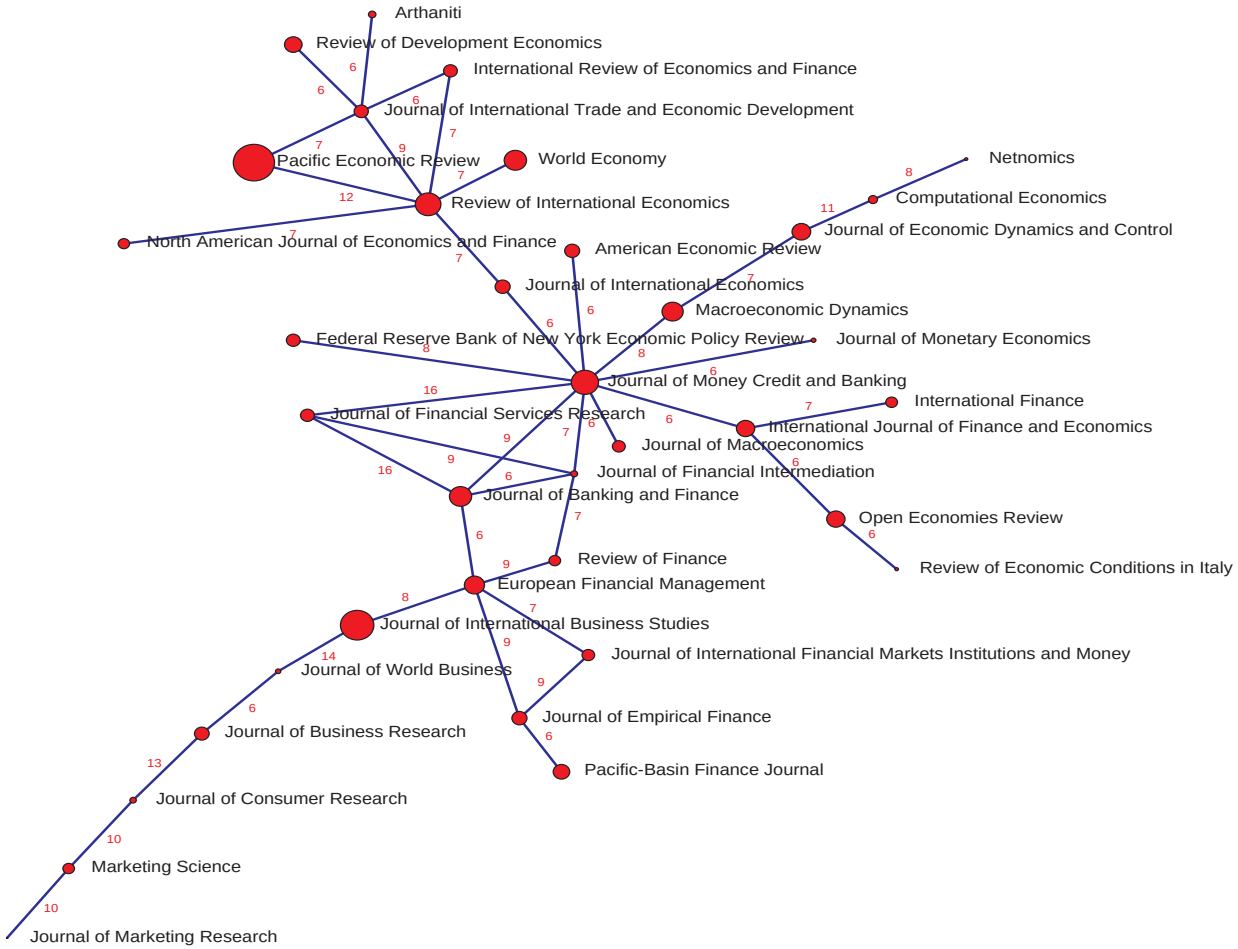


Figure 3. A weak component in 6-slices network: economic theory, econometrics, game and decision theory journals

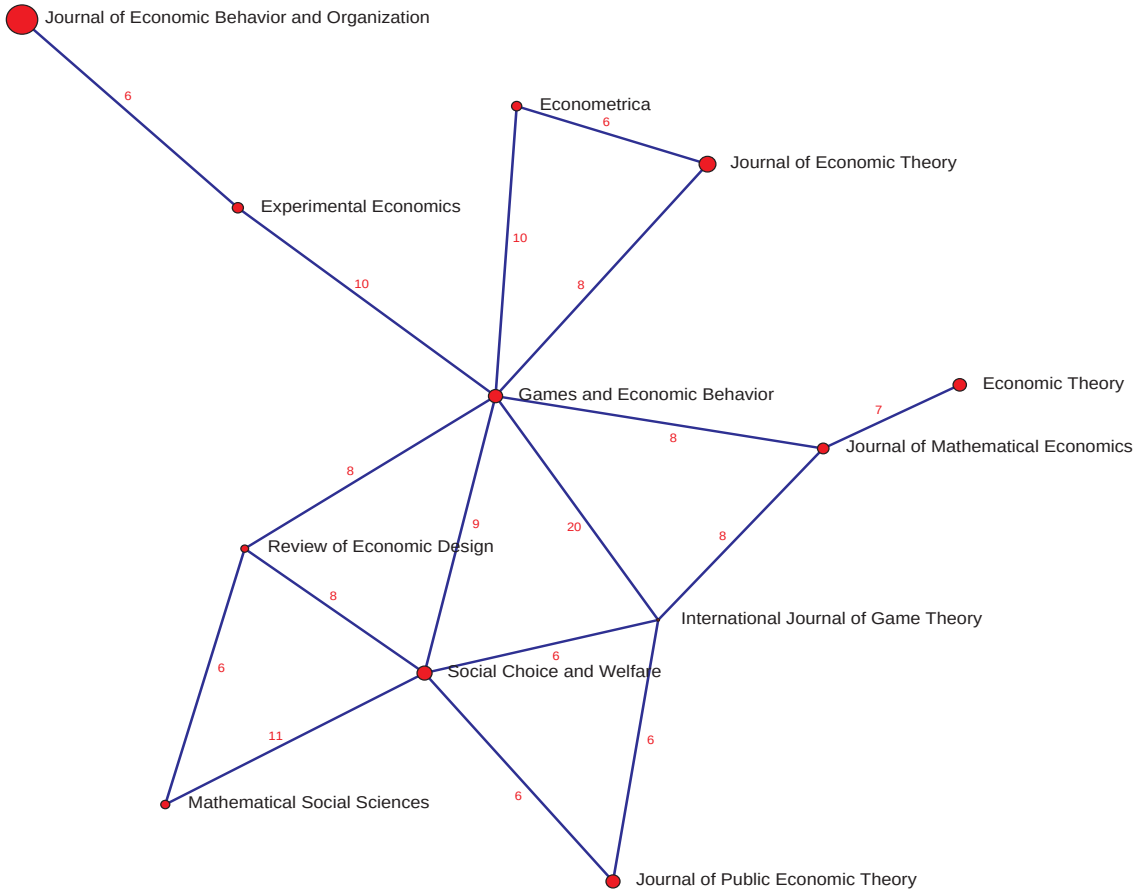


Figure 4. A weak component in 6-slices network: regional, urban and housing economics

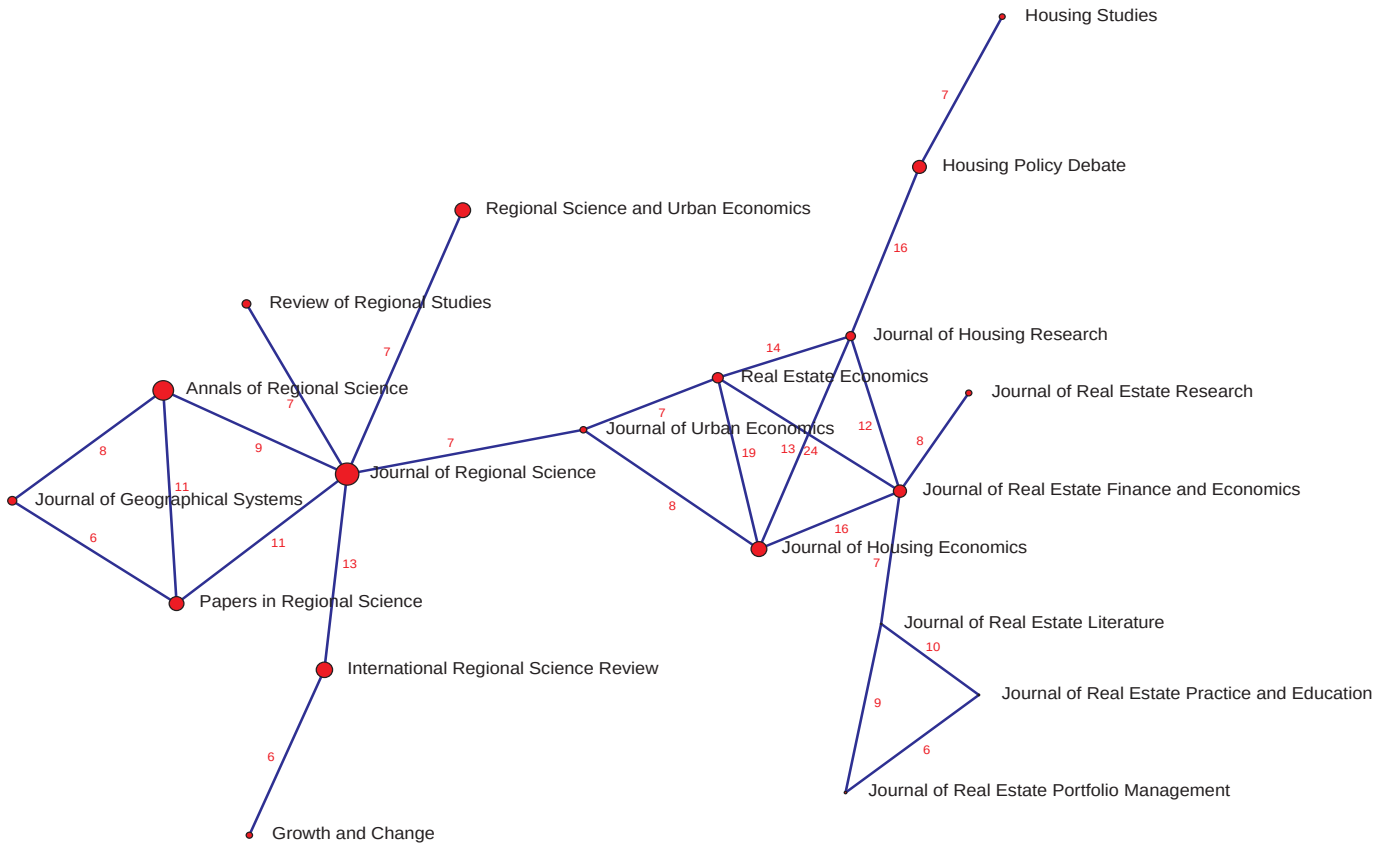


Figure 5. Weak components in 6-slices network with more than three journals

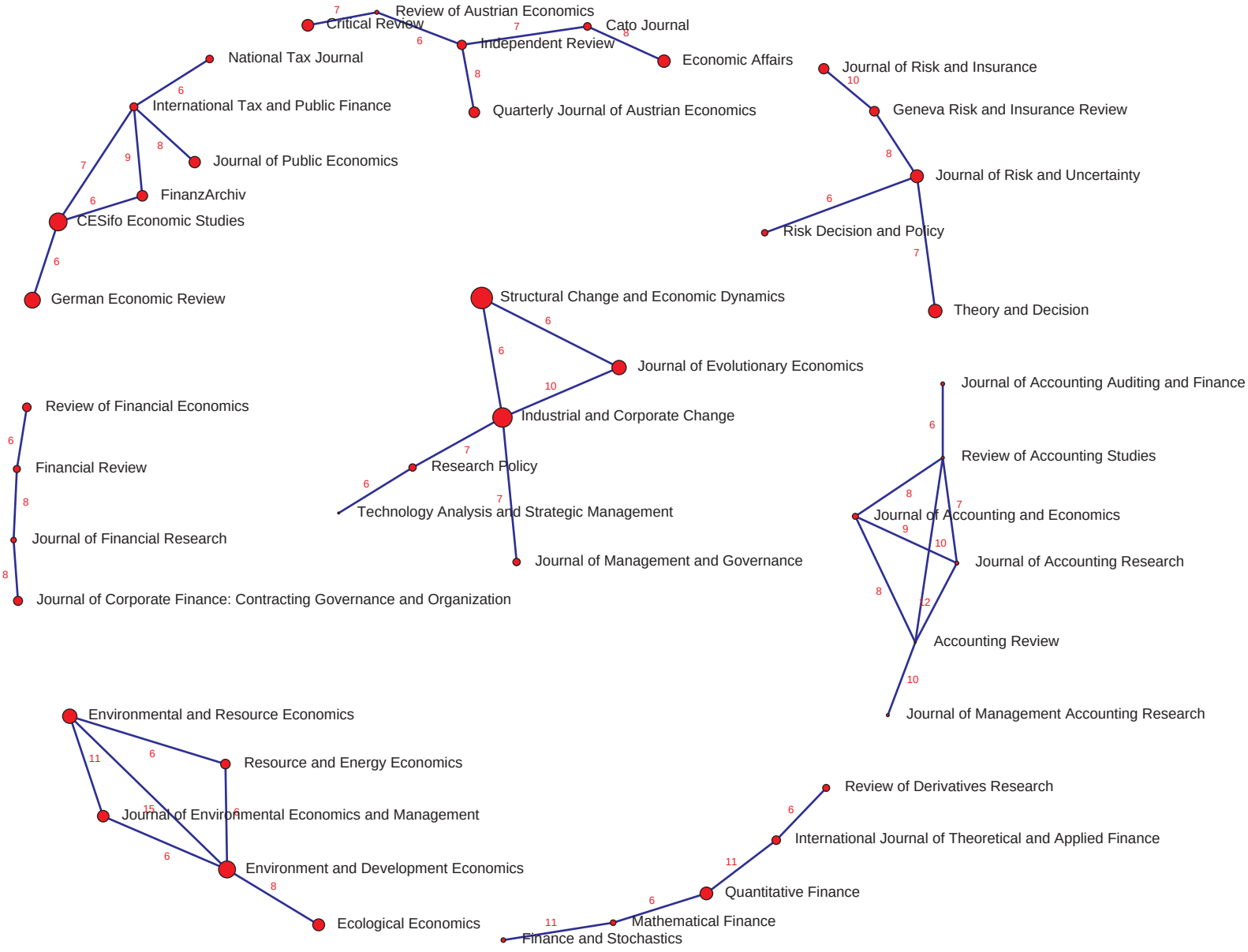
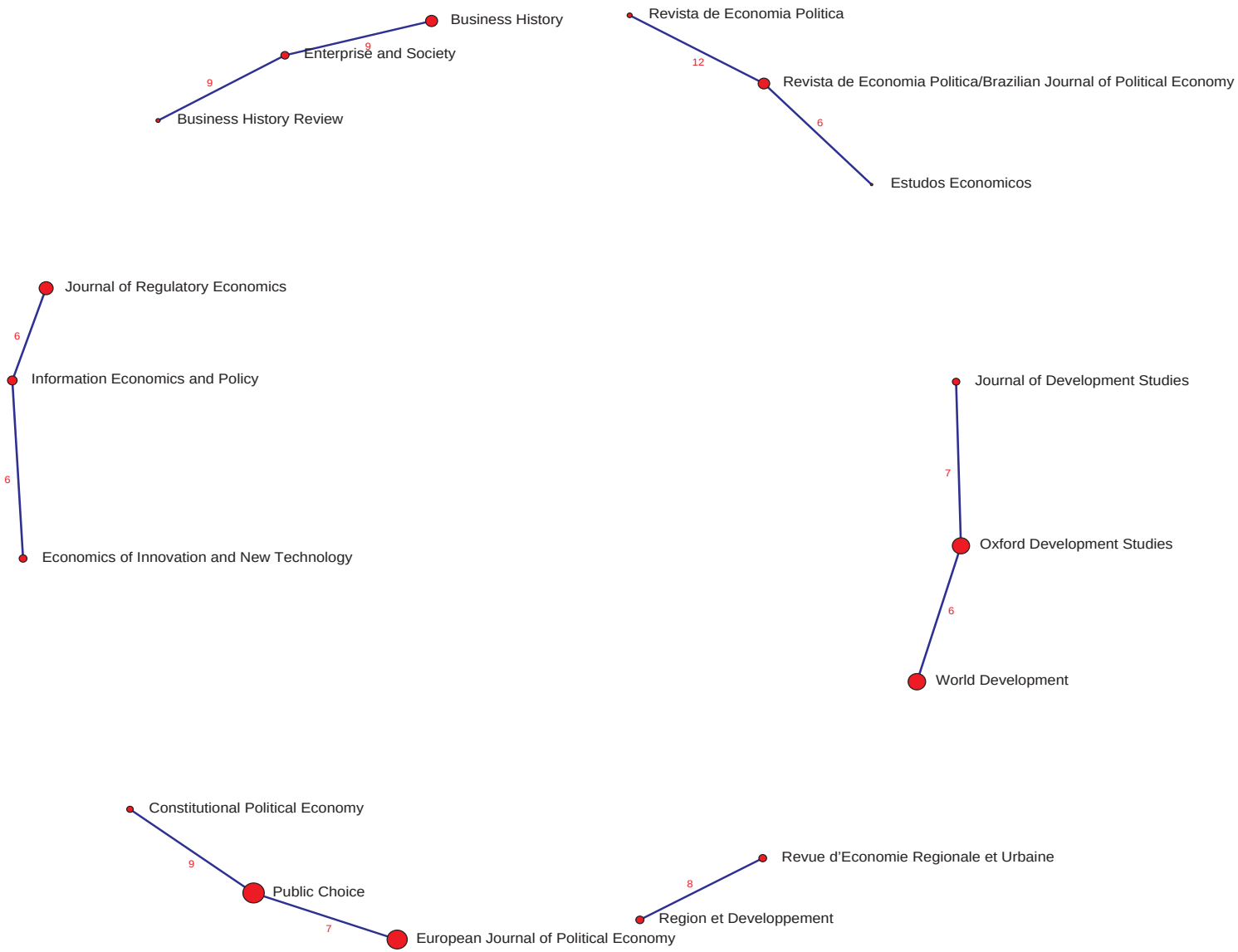


Figure 6. Weak components in 6-slices network with three journals



Journal	Degree	Normalized degree	Rank degree	Centrality	Rank centrality	Betweenness (x100)	Rank betweenness
Academia Economic Papers	8	0,011	433	0,323	334	0,026	470
Accounting Business and Financial History	6	0,008	479	0,303	431	0,011	523
Accounting Review	8	0,011	433	0,276	560	0,011	520
Acta Oeconomica	10	0,013	393	0,325	328	0,104	332
African Development Review/Revue Africaine de Developpement	26	0,035	189	0,351	193	0,228	229
African Economic History	0	0,000	673	0,000	673	0,000	593
African Finance Journal	21	0,028	235	0,342	237	0,307	169
Afrika Spectrum	3	0,004	553	0,282	531	0,000	593
Agenda	5	0,007	498	0,284	516	0,006	544
Agribusiness	8	0,011	433	0,282	531	0,058	399
Agricultural and Resource Economics Review	0	0,000	673	0,000	673	0,000	593
Agricultural Economics	11	0,015	373	0,293	472	0,111	322
Agricultural Finance Review	2	0,003	590	0,271	575	0,005	547
Agriculture and Human Values	0	0,000	673	0,000	673	0,000	593
Agronomia Mesoamericana	0	0,000	673	0,000	673	0,000	593
Allgemeines Statistisches Archiv/Journal of the German Statistical Society	2	0,003	590	0,258	607	0,005	552
American Economic Review	40	0,054	90	0,378	72	0,518	82
American Economist	12	0,016	357	0,328	311	0,024	474
American Enterprise	0	0,000	673	0,000	673	0,000	593
American Historical Review	0	0,000	673	0,000	673	0,000	593
American Journal of Agricultural Economics	15	0,020	300	0,321	342	0,311	165
American Journal of Economics and Sociology	3	0,004	553	0,253	614	0,000	593
American Law and Economics Review	19	0,026	259	0,341	243	0,102	335
American Political Science Review	7	0,009	454	0,285	513	0,053	409
American Prospect	5	0,007	498	0,290	487	0,005	550
American Statistician	1	0,001	629	0,003	671	0,000	593
Analyse Prévision	5	0,007	498	0,282	530	0,013	513
Annales dEconomie et de Statistique	34	0,046	125	0,361	149	0,426	117
Annals of Economics and Finance	44	0,059	65	0,371	98	0,545	74
Annals of Public and Cooperative Economics	13	0,017	335	0,327	314	0,345	150
Annals of Regional Science	48	0,064	47	0,373	90	0,984	23
Annals of the American Academy of Political and Social Science	3	0,004	553	0,280	543	0,007	538
Antitrust Bulletin	0	0,000	673	0,000	673	0,000	593
Antitrust Law and Economics Review	15	0,020	300	0,329	300	0,118	315
Applied Economics	36	0,048	112	0,371	100	0,192	256
Applied Economics Letters	36	0,048	112	0,371	100	0,192	256
Applied Economics Quarterly	22	0,030	224	0,344	229	0,229	227
Applied Financial Economics	29	0,039	155	0,361	148	0,126	308
Applied Mathematical Finance	5	0,007	498	0,280	543	0,140	293
Aquaculture Economics and Management	10	0,013	393	0,305	417	0,132	301
Archives of Economic History	17	0,023	280	0,324	330	0,094	345
Arthaniti	33	0,044	131	0,367	112	0,127	304
ASEAN Economic Bulletin	13	0,017	335	0,314	372	0,025	472
Asia Pacific Business Review	21	0,028	235	0,339	255	0,251	211
Asia Pacific Journal of Economics and Business	6	0,008	479	0,306	414	0,063	386
Asian Development Review	41	0,055	83	0,372	94	0,417	121
Asian Economic Journal	52	0,070	38	0,395	20	0,421	120
Asian-Pacific Economic Literature	43	0,058	72	0,366	117	0,437	111
Asia-Pacific Development Journal	7	0,009	454	0,300	451	0,001	582
Asia-Pacific Financial Markets	7	0,009	454	0,301	435	0,002	565
Atlantic Economic Journal	44	0,059	65	0,385	43	0,763	41
Aussenwirtschaft	3	0,004	553	0,295	466	0,002	567
Australasian Journal of Regional Studies	18	0,024	271	0,330	299	0,160	279
Australian Bulletin of Labour	0	0,000	673	0,000	673	0,000	593
Australian Commodities Forecasts and Issues	0	0,000	673	0,000	673	0,000	593
Australian Economic History Review	7	0,009	454	0,318	357	0,036	435
Australian Economic Papers	30	0,040	148	0,365	121	0,177	272
Australian Economic Review	25	0,034	202	0,358	161	0,150	283
Australian Journal of Agricultural and Resource Economics	12	0,016	357	0,328	310	0,080	366
Australian Journal of Labour Economics	21	0,028	235	0,342	238	0,224	232
Australian Journal of Management	3	0,004	553	0,286	505	0,001	572
Banca Nazionale del Lavoro Quarterly Review	2	0,003	590	0,264	593	0,000	593
Bancaria	0	0,000	673	0,000	673	0,000	593
Bangladesh Development Studies	35	0,047	119	0,370	106	0,202	247
Bank of Israel Economic Review	9	0,012	412	0,325	327	0,014	511
Bank of Japan Monetary and Economic Studies	14	0,019	319	0,332	281	0,055	405
Bank of Valletta Review	1	0,001	629	0,155	670	0,000	593
Banker	1	0,001	629	0,265	588	0,000	593
Behavioral Research in Accounting	6	0,008	479	0,288	497	0,014	509
Brazilian Electronic Journal of Economics	9	0,012	412	0,317	360	0,059	394
Brazilian Review of Econometrics	22	0,030	224	0,341	241	0,258	204
British Journal of Industrial Relations	14	0,019	319	0,330	292	0,104	333
Brookings Papers on Economic Activity	0	0,000	673	0,000	673	0,000	593
Brookings-Wharton Papers on Financial Services	2	0,003	590	0,277	554	0,001	578
Brookings-Wharton Papers on Urban Affairs	2	0,003	590	0,282	528	0,000	593
Buffalo Law Review	0	0,000	673	0,000	673	0,000	593
Bulletin for International Fiscal Documentation	5	0,007	498	0,259	604	0,247	215
Bulletin of Economic Research	40	0,054	90	0,371	98	0,492	89
Bulletin of Indonesian Economic Studies	22	0,030	224	0,332	284	0,145	286
Business and Economic History	2	0,003	590	0,252	619	0,000	593
Business Economics	5	0,007	498	0,283	521	0,003	563
Business History	19	0,026	259	0,340	249	0,481	93
Business History Review	7	0,009	454	0,308	404	0,056	402
Cahiers dEconomie et Sociologie Rurales	12	0,016	357	0,294	470	0,708	49
Cahiers dEconomie Politique	10	0,013	393	0,301	438	0,020	485
Cahiers Economiques de Bruxelles	1	0,001	629	0,258	605	0,000	593
California Management Review	17	0,023	280	0,330	297	0,120	312

Journal	Degree	Normalized degree	Rank degree	Centrality	Rank centrality	Betweenness (x100)	Rank betweenness
Cambridge Journal of Economics	59	0,079	22	0,388	36	0,974	24
Canadian Business Economics	7	0,009	454	0,324	331	0,029	459
Canadian Journal of Agricultural Economics	0	0,000	673	0,000	673	0,000	593
Canadian Journal of Development Studies	3	0,004	553	0,258	605	0,009	531
Canadian Journal of Economics	16	0,021	288	0,345	224	0,120	313
Canadian Journal of Regional Science	11	0,015	373	0,295	467	0,053	410
Canadian Public Policy	6	0,008	479	0,293	471	0,030	455
Canadian Tax Journal	10	0,013	393	0,300	444	0,082	364
Cato Journal	30	0,040	148	0,360	157	0,204	245
Central European Journal of Operations Research	8	0,011	433	0,301	440	0,071	377
CESifo Economic Studies	63	0,085	16	0,400	12	1,116	16
Challenge	39	0,052	96	0,384	48	0,368	140
China Economic Review	19	0,026	259	0,345	221	0,147	284
China Quarterly	1	0,001	629	0,222	656	0,000	593
Chinese Economy	3	0,004	553	0,280	540	0,001	575
CIRIEC-España Revista de Economía Pública Social y Cooperativa	3	0,004	553	0,283	521	0,014	510
Comercio Exterior	1	0,001	629	0,227	651	0,000	593
Communications and Strategies	2	0,003	590	0,241	636	0,000	593
Comparative Economic Studies	11	0,015	373	0,325	326	0,092	350
Computational Economics	27	0,036	176	0,363	132	0,190	261
Conceptos (Buenos Aires)	0	0,000	673	0,000	673	0,000	593
Conflict Management and Peace Science	8	0,011	433	0,309	394	0,046	424
Constitutional Political Economy	23	0,031	216	0,352	184	0,143	289
Contemporary Economic Policy	72	0,097	6	0,401	10	1,883	4
Contributions to Political Economy	1	0,001	629	0,268	581	0,000	593
Critical Review	39	0,052	96	0,376	76	0,484	92
Cuadernos de Economia	6	0,008	479	0,305	417	0,005	554
Cuadernos Economicos de I.C.E.	20	0,027	245	0,330	292	0,137	296
Cyprus Review	1	0,001	629	0,219	657	0,000	593
De Economist	38	0,051	102	0,377	73	0,290	182
Defence and Peace Economics	20	0,027	245	0,346	220	0,134	299
Demography	11	0,015	373	0,320	347	0,215	239
Desarrollo Económico	2	0,003	590	0,252	617	0,003	557
Developing Economies	38	0,051	102	0,373	90	0,347	148
Development	20	0,027	245	0,351	197	0,072	373
Development and Change	23	0,031	216	0,331	287	0,304	170
Development Southern Africa	6	0,008	479	0,299	456	0,008	537
Eastern Africa Journal of Rural Development	0	0,000	673	0,000	673	0,000	593
Eastern Economic Journal	20	0,027	245	0,335	273	0,118	316
Eastern European Economics	4	0,005	530	0,272	572	0,000	593
East-West Journal of Economics and Business	38	0,051	102	0,375	80	0,734	45
ECLAP Review	1	0,001	629	0,227	651	0,000	593
Ecological Economics	27	0,036	176	0,361	146	0,500	85
Econometric Reviews	19	0,026	259	0,339	258	0,078	367
Econometric Theory	9	0,012	412	0,308	399	0,002	568
Econometrica	40	0,054	90	0,362	143	0,239	222
Econometrics Journal	9	0,012	412	0,309	395	0,011	522
Economia (Pontifical Catholic University of Peru)	1	0,001	629	0,265	589	0,000	593
Economia Aplicada/Brazilian Journal of Applied Economics	22	0,030	224	0,333	280	0,360	144
Economía Chilena	12	0,016	357	0,320	346	0,034	442
Economia e Lavoro	4	0,005	530	0,273	570	0,126	307
Economia Industrial	7	0,009	454	0,286	507	0,037	433
Economia Internazionale/International Economics	1	0,001	629	0,219	658	0,000	593
Economia Mexicana Nueva Epoca	11	0,015	373	0,304	425	0,571	68
Economia Politica	15	0,020	300	0,332	281	0,053	411
Economic Affairs	36	0,048	112	0,363	136	0,544	75
Economic Analysis and Policy	2	0,003	590	0,259	602	0,000	593
Economic and Business Review	13	0,017	335	0,308	405	0,435	112
Economic and Financial Modelling	12	0,016	357	0,323	335	0,044	426
Economic and Industrial Democracy	18	0,024	271	0,342	239	0,290	181
Economic and Labour Relations Review	18	0,024	271	0,340	251	0,073	370
Economic and Social Review	10	0,013	393	0,316	365	0,035	437
Economic Development and Cultural Change	14	0,019	319	0,328	307	0,030	453
Economic Development Quarterly	14	0,019	319	0,301	440	0,055	403
Economic Geography	13	0,017	335	0,313	379	0,098	342
Economic History Review	8	0,011	433	0,307	410	0,009	532
Economic Inquiry	19	0,026	259	0,344	226	0,117	317
Economic Issues	19	0,026	259	0,353	183	0,104	330
Economic Journal	21	0,028	235	0,341	243	0,069	378
Economic Modelling	34	0,046	125	0,372	95	0,738	43
Economic Notes	49	0,066	46	0,378	70	0,639	56
Economic Perspectives	0	0,000	673	0,000	673	0,000	593
Economic Policy	38	0,051	102	0,368	111	0,263	197
Economic Record	19	0,026	259	0,351	193	0,110	323
Economic Systems	27	0,036	176	0,356	172	0,804	36
Economic Systems Research	17	0,023	280	0,331	289	0,280	190
Economic Theory	41	0,055	83	0,379	67	0,414	122
Economica	28	0,038	165	0,357	167	0,257	206
Económica (National University of La Plata)	4	0,005	530	0,279	547	0,029	458
Economics and Philosophy	18	0,024	271	0,341	246	0,046	423
Economics and Politics	29	0,039	155	0,376	74	0,263	199
Economics Letters	46	0,062	57	0,376	77	0,388	131
Economics of Education Review	15	0,020	300	0,327	316	0,393	130
Economics of Governance	26	0,035	189	0,351	193	0,296	176
Economics of Innovation and New Technology	27	0,036	176	0,354	177	0,204	246
Economics of Planning (dal 9/01/06 Economic Change and Restructuring)	28	0,038	165	0,357	167	0,547	73
Economics of Transition	11	0,015	373	0,318	358	0,107	327

Journal	Degree	Normalized degree	Rank degree	Centrality	Rank centrality	Betweenness (x100)	Rank betweenness
Economie Appliquée	14	0,019	319	0,318	356	0,263	198
Economie et Prévision	22	0,030	224	0,345	223	0,331	153
Economie et Statistique	2	0,003	590	0,222	655	0,000	593
Economie Internationale	24	0,032	208	0,362	139	0,477	94
Economie Rurale	4	0,005	530	0,226	653	0,252	210
Economies et Sociétés	7	0,009	454	0,290	487	0,059	396
Economisch en Sociaal Tijdschrift	0	0,000	673	0,000	673	0,000	593
Economy and Society	5	0,007	498	0,273	569	0,005	549
Education Economics	11	0,015	373	0,319	350	0,058	397
Ekonomia	41	0,055	83	0,370	104	0,368	139
Ekonomiska Samfundets Tidskrift	6	0,008	479	0,313	377	0,011	519
Ekonomska Misao i Praksa	0	0,000	673	0,000	673	0,000	593
El Trimestre Economico	13	0,017	335	0,322	336	0,232	225
Emerging Markets Finance and Trade	27	0,036	176	0,362	143	0,404	125
Empirica	45	0,060	62	0,380	63	0,465	97
Empirical Economics	29	0,039	155	0,362	139	0,409	124
Energy Economics	15	0,020	300	0,331	289	0,116	319
Energy Journal	14	0,019	319	0,326	318	0,066	381
Energy Studies Review	1	0,001	629	0,264	592	0,000	593
Engineering Economist	0	0,000	673	0,000	673	0,000	593
Enterprise and Society	15	0,020	300	0,305	422	0,218	237
Entrepreneurship and Regional Development	10	0,013	393	0,289	494	0,084	360
Environment and Development Economics	55	0,074	29	0,392	24	1,005	20
Environment and Planning A	13	0,017	335	0,312	382	0,102	336
Environment and Planning C: Government and Policy	13	0,017	335	0,315	370	0,437	110
Environmental and Resource Economics	47	0,063	52	0,385	43	0,725	46
Environmental Economics and Policy Studies	15	0,020	300	0,326	318	0,031	450
Environmental Values	1	0,001	629	0,233	648	0,000	593
Estudios de Economia	0	0,000	673	0,000	673	0,000	593
Estudios Económicos	15	0,020	300	0,333	278	0,317	160
Estudios Internacionales	0	0,000	673	0,000	673	0,000	593
Estudos Economicos	6	0,008	479	0,285	515	0,018	495
Eurasian Geography and Economics	7	0,009	454	0,276	564	0,122	311
EuroChoices	5	0,007	498	0,283	525	0,055	404
European Economic Review	50	0,067	43	0,383	54	0,775	38
European Financial Management	60	0,081	20	0,390	30	0,936	26
European Journal of Development Research	19	0,026	259	0,329	302	0,186	265
European Journal of Finance	47	0,063	52	0,381	58	1,001	21
European Journal of Housing Policy	12	0,016	357	0,325	323	0,009	529
European Journal of Industrial Relations	8	0,011	433	0,284	517	0,030	456
European Journal of International Relations	16	0,021	288	0,311	386	0,335	152
European Journal of Law and Economics	27	0,036	176	0,357	166	0,737	44
European Journal of Political Economy	69	0,093	10	0,402	9	1,362	10
European Journal of the History of Economic Thought	43	0,058	72	0,379	67	0,859	30
European Review of Agricultural Economics	5	0,007	498	0,277	556	0,017	499
European Review of Economic History	17	0,023	280	0,316	364	0,345	149
Experimental Economics	41	0,055	83	0,385	42	0,285	186
Explorations in Economic History	15	0,020	300	0,337	263	0,207	244
Family Economics and Nutrition Review	1	0,001	629	0,214	660	0,000	593
FDIC Banking Review	0	0,000	673	0,000	673	0,000	593
Federal Reserve Bank of Atlanta Economic Review	4	0,005	530	0,284	518	0,001	577
Federal Reserve Bank of Chicago Economic Perspectives	4	0,005	530	0,299	456	0,008	534
Federal Reserve Bank of Dallas Economic and Financial Policy Review	5	0,007	498	0,282	527	0,000	593
Federal Reserve Bank of Kansas City Economic Review	4	0,005	530	0,301	438	0,000	588
Federal Reserve Bank of Minneapolis Quarterly Review	3	0,004	553	0,297	460	0,000	593
Federal Reserve Bank of New York Economic Policy Review	44	0,059	65	0,366	117	0,439	109
Federal Reserve Bank of San Francisco Economic Review	2	0,003	590	0,287	498	0,000	592
Federal Reserve Bank of St. Louis Review	8	0,011	433	0,311	383	0,003	561
Federal Reserve Bulletin	4	0,005	530	0,286	509	0,000	593
Feminist Economics	54	0,072	31	0,385	45	1,192	13
Finance	27	0,036	176	0,339	257	0,072	375
Finance a Úver/Czech Journal of Economics and Finance	7	0,009	454	0,277	554	0,026	469
Finance and Development	5	0,007	498	0,284	518	0,074	369
Finance and Stochastics	20	0,027	245	0,326	318	0,073	371
Finance India	72	0,097	6	0,405	5	1,449	9
Financial History Review	4	0,005	530	0,266	584	0,003	560
Financial Management	6	0,008	479	0,290	491	0,000	593
Financial Markets Institutions and Instruments	5	0,007	498	0,300	451	0,000	593
Financial Review	40	0,054	90	0,362	139	0,177	271
FinanzArchiv	38	0,051	102	0,371	100	0,396	128
Finnish Economic Papers	21	0,028	235	0,349	204	0,170	278
Fiscal Studies	33	0,044	131	0,358	162	0,232	226
Food Policy	6	0,008	479	0,299	455	0,023	479
Foreign Affairs	3	0,004	553	0,259	600	0,019	493
Foresight	9	0,012	412	0,293	475	0,064	383
Forum for Development Studies	0	0,000	673	0,000	673	0,000	593
Forum for Social Economics	2	0,003	590	0,264	591	0,002	566
Games and Economic Behavior	47	0,063	52	0,384	48	0,461	99
Geneva Papers on Risk and Insurance: Issues and Practice	7	0,009	454	0,306	412	0,002	570
Geneva Risk and Insurance Review	39	0,052	96	0,376	79	0,329	155
German Economic Review	65	0,087	14	0,399	16	0,884	29
Gestion 2000	2	0,003	590	0,248	624	0,003	564
Giornale degli Economisti e Annali di Economia	11	0,015	373	0,307	406	0,028	462
Global Business and Economics Review	15	0,020	300	0,332	281	0,175	274
Global Economic Review	23	0,031	216	0,359	160	0,045	425
Global Economy Quarterly	17	0,023	280	0,338	262	0,252	209
Global Environmental Politics	12	0,016	357	0,296	462	0,099	340

Journal	Degree	Normalized degree	Rank degree	Centrality	Rank centrality	Betweenness (x100)	Rank betweenness
Global Finance Journal	23	0,031	216	0,338	261	0,027	465
Growth and Change	18	0,024	271	0,314	375	0,093	349
Harvard Business Review	0	0,000	673	0,000	673	0,000	593
Health Care Management Science	4	0,005	530	0,281	537	0,017	500
Health Economics	16	0,021	288	0,326	321	0,220	236
Health Marketing Quarterly	5	0,007	498	0,293	475	0,031	452
Health Services Research	9	0,012	412	0,310	389	0,025	473
History of Economic Ideas	30	0,040	148	0,347	214	0,380	135
History of Economics Review	14	0,019	319	0,316	367	0,016	502
History of Political Economy	12	0,016	357	0,311	386	0,057	400
Hitotsubashi Journal of Economics	2	0,003	590	0,292	479	0,000	587
Housing Policy Debate	21	0,028	235	0,339	254	0,434	114
Housing Studies	11	0,015	373	0,291	483	0,080	365
Human Resource Development Quarterly	0	0,000	673	0,000	673	0,000	593
Humanomics	2	0,003	590	0,275	566	0,000	593
IIUM Journal of Economics and Management	3	0,004	553	0,277	552	0,000	593
Il Pensiero Economico Italiano	7	0,009	454	0,279	545	0,020	484
Il Politico	1	0,001	629	0,248	623	0,000	593
Il Risparmio	3	0,004	553	0,252	618	0,068	380
IMF Staff Papers	5	0,007	498	0,292	480	0,010	527
Independent Review	29	0,039	155	0,352	187	0,299	174
Indian Economic and Social History Review	20	0,027	245	0,347	212	0,228	228
Indian Economic Journal	28	0,038	165	0,369	109	0,362	143
Indian Economic Review	23	0,031	216	0,344	230	0,128	303
Indian Journal of Economics	2	0,003	590	0,265	589	0,000	593
Indian Journal of Gender Studies	5	0,007	498	0,305	424	0,006	545
Indian Journal of Labour Economics	10	0,013	393	0,305	422	0,041	431
Indiana Business Review	0	0,000	673	0,000	673	0,000	593
Industrial and Corporate Change	61	0,082	19	0,401	10	1,329	11
Industrial and Labor Relations Review	15	0,020	300	0,319	350	0,094	347
Industrial Development. Global Report/Unido	12	0,016	357	0,320	347	0,020	492
Industrial Relations	14	0,019	319	0,322	336	0,091	351
Industry and Innovation	24	0,032	208	0,347	216	0,286	184
Info	8	0,011	433	0,286	508	0,100	339
Informacion Comercial Española Revista de Economia	6	0,008	479	0,286	511	0,032	448
Information Economics and Policy	30	0,040	148	0,354	178	0,309	168
Innovations	33	0,044	131	0,348	205	0,430	116
Inquiry	0	0,000	673	0,000	673	0,000	593
Insurance: Mathematics and Economics	11	0,015	373	0,308	401	0,084	361
Integration and Trade	7	0,009	454	0,289	492	0,072	372
International Advances in Economic Research	8	0,011	433	0,306	415	0,018	496
International Economic Journal	62	0,083	17	0,400	14	0,896	27
International Economic Review	7	0,009	454	0,310	393	0,035	438
International Economy	20	0,027	245	0,344	226	0,281	189
International Finance	48	0,064	47	0,389	33	0,319	159
International Game Theory Review	26	0,035	189	0,359	159	0,286	185
International Journal of Business	36	0,048	112	0,366	120	0,584	65
International Journal of Finance and Economics	62	0,083	17	0,390	30	0,773	40
International Journal of Forecasting	30	0,040	148	0,360	151	0,178	270
International Journal of Game Theory	20	0,027	245	0,346	218	0,017	498
International Journal of Industrial Organization	41	0,055	83	0,375	85	0,463	98
International Journal of Manpower	12	0,016	357	0,312	380	0,072	374
International Journal of Production Economics	7	0,009	454	0,308	401	0,159	280
International Journal of Social Economics	11	0,015	373	0,322	336	0,314	164
International Journal of the Economics of Business	34	0,046	125	0,370	104	0,497	88
International Journal of Theoretical and Applied Finance	32	0,043	136	0,356	170	0,259	201
International Journal of Transport Economics	9	0,012	412	0,290	490	0,283	187
International Journal of Urban and Regional Research	3	0,004	553	0,264	593	0,010	528
International Labour Review	0	0,000	673	0,000	673	0,000	593
International Organization	10	0,013	393	0,294	468	0,275	191
International Regional Science Review	31	0,042	145	0,341	246	0,616	59
International Review of Applied Economics	35	0,047	119	0,360	151	0,255	208
International Review of Economics and Finance	57	0,077	24	0,391	26	0,440	107
International Review of Financial Analysis	41	0,055	83	0,356	175	0,315	161
International Review of Law and Economics	15	0,020	300	0,331	289	0,093	348
International Social Science Journal	2	0,003	590	0,268	582	0,001	583
International Tax and Public Finance	38	0,051	102	0,367	115	0,225	231
International Trade Journal	12	0,016	357	0,330	295	0,035	439
Investigación Económica	0	0,000	673	0,000	673	0,000	593
Investigaciones Economicas	8	0,011	433	0,309	396	0,016	504
Investment Policy	0	0,000	673	0,000	673	0,000	593
Irish Journal of Agricultural and Food Research	4	0,005	530	0,280	542	0,005	548
ISE Review	11	0,015	373	0,297	458	0,020	488
Jahrbuch für Regionalwissenschaft/Review of Regional Research	3	0,004	553	0,272	572	0,001	581
Jahrbücher für Nationalökonomie und Statistik	4	0,005	530	0,278	550	0,010	524
Japan and the World Economy	54	0,072	31	0,394	22	0,566	70
Japanese Economic Review	59	0,079	22	0,400	14	0,896	28
Japanese Economy	4	0,005	530	0,287	502	0,000	593
Journal for Studies in Economics and Econometrics	1	0,001	629	0,248	625	0,000	593
Journal of Accounting and Economics	15	0,020	300	0,320	344	0,126	309
Journal of Accounting Auditing and Finance	10	0,013	393	0,308	401	0,049	418
Journal of Accounting Research	11	0,015	373	0,309	397	0,052	414
Journal of African Business	14	0,019	319	0,322	336	0,031	451
Journal of African Economies	26	0,035	189	0,355	176	0,249	213
Journal of African Finance and Economic Development	14	0,019	319	0,324	333	0,038	432
Journal of Agricultural and Applied Economics	5	0,007	498	0,252	615	0,009	530
Journal of Agricultural and Resource Economics	9	0,012	412	0,300	447	0,047	422

Journal	Degree	Normalized degree	Rank degree	Centrality	Rank centrality	Betweenness (x100)	Rank betweenness
Journal of Agricultural Economics	10	0,013	393	0,297	459	0,202	248
Journal of Applied Business Research	9	0,012	412	0,319	350	0,042	430
Journal of Applied Econometrics	57	0,077	24	0,384	47	0,813	34
Journal of Applied Economics	20	0,027	245	0,353	179	0,064	382
Journal of Applied Finance	29	0,039	155	0,341	246	0,095	344
Journal of Applied Statistics	1	0,001	629	0,237	639	0,000	593
Journal of Asian Economics	46	0,062	57	0,382	55	0,850	31
Journal of Asian Studies	0	0,000	673	0,000	673	0,000	593
Journal of Asia-Pacific Business	19	0,026	259	0,328	307	0,064	385
Journal of Australian Political Economy	3	0,004	553	0,286	509	0,003	559
Journal of Banking and Finance	72	0,097	6	0,392	25	1,137	15
Journal of Bioeconomics	30	0,040	148	0,367	114	0,431	115
Journal of Business	6	0,008	479	0,294	469	0,026	468
Journal of Business and Economic Statistics	26	0,035	189	0,350	201	0,251	212
Journal of Business Research	27	0,036	176	0,351	192	0,498	87
Journal of Common Market Studies	15	0,020	300	0,329	302	0,188	263
Journal of Comparative Economics	8	0,011	433	0,328	309	0,053	412
Journal of Conflict Resolution	22	0,030	224	0,344	230	0,259	200
Journal of Consumer Affairs	6	0,008	479	0,265	585	0,042	429
Journal of Consumer Policy	5	0,007	498	0,288	496	0,035	436
Journal of Consumer Research	10	0,013	393	0,300	447	0,094	346
Journal of Corporate Finance: Contracting Governance and Organization	37	0,050	110	0,348	209	0,288	183
Journal of Cultural Economics	26	0,035	189	0,360	156	0,213	240
Journal of Derivatives	3	0,004	553	0,276	560	0,000	593
Journal of Developing Areas	28	0,038	165	0,353	181	0,190	260
Journal of Development and Economic Policies	1	0,001	629	0,247	626	0,000	593
Journal of Development Economics	35	0,047	119	0,363	130	0,142	290
Journal of Development Studies	26	0,035	189	0,339	258	0,182	266
Journal of East-West Business	13	0,017	335	0,309	398	0,290	180
Journal of Econometrics	36	0,048	112	0,363	132	0,323	158
Journal of Economic and Social Measurement	16	0,021	288	0,331	287	0,037	434
Journal of Economic and Social Policy	15	0,020	300	0,325	323	0,029	460
Journal of Economic and Social Research	3	0,004	553	0,285	514	0,002	571
Journal of Economic Behavior and Organization	79	0,106	3	0,417	3	2,277	3
Journal of Economic Development	26	0,035	189	0,362	137	0,117	318
Journal of Economic Dynamics and Control	51	0,068	39	0,393	23	0,805	35
Journal of Economic Education	28	0,038	165	0,364	126	0,245	218
Journal of Economic Growth	51	0,068	39	0,386	40	0,584	66
Journal of Economic History	7	0,009	454	0,296	464	0,033	445
Journal of Economic Integration	38	0,051	102	0,370	103	0,196	255
Journal of Economic Issues	3	0,004	553	0,283	521	0,000	593
Journal of Economic Literature	53	0,071	35	0,389	34	0,544	76
Journal of Economic Methodology	45	0,060	62	0,375	82	0,597	63
Journal of Economic Perspectives	29	0,039	155	0,360	154	0,098	343
Journal of Economic Psychology	26	0,035	189	0,360	151	0,301	172
Journal of Economic Studies	43	0,058	72	0,383	51	0,700	50
Journal of Economic Surveys	32	0,043	136	0,371	96	0,446	104
Journal of Economic Theory	57	0,077	24	0,388	37	0,650	54
Journal of Economics (MVEA)	0	0,000	673	0,000	673	0,000	593
Journal of Economics (Zeitschrift für Nationalökonomie)	24	0,032	208	0,352	187	0,090	353
Journal of Economics and Business	37	0,050	110	0,360	154	0,435	113
Journal of Economics and Finance	24	0,032	208	0,347	215	0,170	277
Journal of Economics and Management Strategy	26	0,035	189	0,353	181	0,384	132
Journal of Education Finance	0	0,000	673	0,000	673	0,000	593
Journal of Emerging Markets	14	0,019	319	0,317	360	0,059	393
Journal of Empirical Finance	51	0,068	39	0,381	61	0,526	79
Journal of Energy and Development	4	0,005	530	0,288	495	0,018	494
Journal of Energy Literature	6	0,008	479	0,281	539	0,023	475
Journal of Environment and Development	13	0,017	335	0,318	358	0,098	341
Journal of Environmental Economics and Management	28	0,038	165	0,367	112	0,469	95
Journal of Environmental Planning and Management	10	0,013	393	0,305	417	0,244	219
Journal of European Economic History	7	0,009	454	0,286	505	0,027	466
Journal of Evolutionary Economics	47	0,063	52	0,375	80	0,723	47
Journal of Family and Economic Issues	4	0,005	530	0,281	534	0,257	207
Journal of Finance	27	0,036	176	0,351	193	0,061	390
Journal of Financial and Quantitative Analysis	32	0,043	136	0,348	205	0,142	291
Journal of Financial Economics	40	0,054	90	0,356	174	0,268	195
Journal of Financial Intermediation	25	0,034	202	0,335	271	0,108	324
Journal of Financial Management and Analysis	1	0,001	629	0,260	598	0,000	593
Journal of Financial Research	34	0,046	125	0,347	211	0,105	329
Journal of Financial Services Research	54	0,072	31	0,373	93	0,443	105
Journal of Forensic Economics	4	0,005	530	0,290	484	0,005	551
Journal of Futures Markets	3	0,004	553	0,280	540	0,000	590
Journal of Geographical Systems	20	0,027	245	0,337	263	0,189	262
Journal of Health Economics	16	0,021	288	0,325	325	0,157	282
Journal of Health Politics Policy and Law	11	0,015	373	0,329	301	0,101	337
Journal of Higher Education Policy and Management	1	0,001	629	0,243	633	0,000	593
Journal of Housing Economics	35	0,047	119	0,369	110	0,574	67
Journal of Housing Research	27	0,036	176	0,352	186	0,212	241
Journal of Human Resources	13	0,017	335	0,319	354	0,034	444
Journal of Income Distribution	9	0,012	412	0,305	421	0,023	477
Journal of Industrial Economics	26	0,035	189	0,349	202	0,297	175
Journal of Institutional and Theoretical Economics	10	0,013	393	0,322	341	0,016	505
Journal of International Business Studies	71	0,095	9	0,406	4	2,583	2
Journal of International Development	16	0,021	288	0,331	286	0,314	163
Journal of International Economic Law	29	0,039	155	0,356	172	0,792	37
Journal of International Economics	46	0,062	57	0,384	48	0,526	80

Journal	Degree	Normalized degree	Rank degree	Centrality	Rank centrality	Betweenness (x100)	Rank betweenness
Journal of International Financial Markets Institutions and Money	51	0,068	39	0,380	62	0,366	142
Journal of International Money and Finance	35	0,047	119	0,371	97	0,120	314
Journal of International Trade and Economic Development	60	0,081	20	0,398	17	0,466	96
Journal of Labor Economics	20	0,027	245	0,344	226	0,090	354
Journal of Labor Research	9	0,012	412	0,299	454	0,023	476
Journal of Law and Economics	8	0,011	433	0,313	376	0,059	395
Journal of Law Economics and Organization	22	0,030	224	0,340	249	0,103	334
Journal of Legal Economics	0	0,000	673	0,000	673	0,000	593
Journal of Legal Studies	2	0,003	590	0,260	596	0,001	573
Journal of Macroeconomics	44	0,059	65	0,379	67	0,381	134
Journal of Management Accounting Research	9	0,012	412	0,287	498	0,029	457
Journal of Management and Governance	18	0,024	271	0,348	210	0,191	258
Journal of Marketing	1	0,001	629	0,225	654	0,000	593
Journal of Marketing Research	5	0,007	498	0,270	577	0,003	558
Journal of Markets and Morality	9	0,012	412	0,296	463	0,005	553
Journal of Mathematical Economics	39	0,052	96	0,376	74	0,304	171
Journal of Monetary Economics	28	0,038	165	0,357	164	0,053	407
Journal of Money Credit and Banking	76	0,102	4	0,398	18	1,714	5
Journal of Multinational Financial Management	29	0,039	155	0,346	217	0,047	421
Journal of Peace Research	18	0,024	271	0,327	316	0,127	306
Journal of Pharmaceutical Finance Economics and Policy	7	0,009	454	0,314	374	0,007	540
Journal of Policy Analysis and Management	11	0,015	373	0,304	428	0,106	328
Journal of Policy Modeling	48	0,064	47	0,383	51	0,440	108
Journal of Policy Reform	43	0,058	72	0,375	82	0,412	123
Journal of Political Economy	3	0,004	553	0,279	546	0,001	576
Journal of Population Economics	47	0,063	52	0,386	41	0,971	25
Journal of Portfolio Management	33	0,044	131	0,361	146	0,264	196
Journal of Post Keynesian Economics	36	0,048	112	0,365	124	0,621	58
Journal of Private Enterprise	5	0,007	498	0,287	504	0,000	591
Journal of Productivity Analysis	25	0,034	202	0,366	119	0,448	102
Journal of Public and International Affairs	0	0,000	673	0,000	673	0,000	593
Journal of Public Economic Theory	50	0,067	43	0,389	34	0,454	100
Journal of Public Economics	46	0,062	57	0,373	92	0,452	101
Journal of Public Finance and Public Choice/Economia Delle Scelte Pubbliche	5	0,007	498	0,289	492	0,021	482
Journal of Real Estate Finance and Economics	33	0,044	131	0,364	129	0,393	129
Journal of Real Estate Literature	11	0,015	373	0,306	412	0,004	555
Journal of Real Estate Portfolio Management	10	0,013	393	0,305	416	0,016	506
Journal of Real Estate Practice and Education	8	0,011	433	0,297	460	0,006	543
Journal of Real Estate Research	21	0,028	235	0,329	302	0,089	355
Journal of Regional Analysis and Policy	5	0,007	498	0,265	586	0,051	417
Journal of Regional Science	53	0,071	35	0,385	45	1,268	12
Journal of Regulatory Economics	38	0,051	102	0,374	86	0,651	53
Journal of Risk and Insurance	32	0,043	136	0,361	150	0,369	138
Journal of Risk and Uncertainty	53	0,071	35	0,390	28	0,585	64
Journal of Social and Economic Development	8	0,011	433	0,307	409	0,182	267
Journal of Socio-Economics	39	0,052	96	0,381	58	0,614	60
Journal of Sports Economics	22	0,030	224	0,348	205	0,133	300
Journal of Taxation	1	0,001	629	0,201	666	0,000	593
Journal of Technology Transfer	12	0,016	357	0,333	278	0,061	391
Journal of the American Statistical Association	1	0,001	629	0,003	671	0,000	593
Journal of the Asia Pacific Economy	46	0,062	57	0,388	37	0,599	62
Journal of the History of Economic Thought	16	0,021	288	0,329	305	0,114	320
Journal of the Japanese and International Economies	42	0,056	78	0,378	70	0,294	177
Journal of the Royal Statistical Society, Series A	1	0,001	629	0,270	577	0,000	593
Journal of the Social Sciences	0	0,000	673	0,000	673	0,000	593
Journal of Transnational Management	11	0,015	373	0,308	399	0,068	379
Journal of Transport Economics and Policy	20	0,027	245	0,350	199	0,174	275
Journal of Urban Economics	23	0,031	216	0,340	252	0,104	331
Journal of World Business	9	0,012	412	0,300	449	0,064	384
Journal of World Trade	1	0,001	629	0,255	609	0,000	593
Kansantaloudellinen Aikakauskirja	2	0,003	590	0,263	595	0,000	593
Keio Economic Studies	2	0,003	590	0,268	580	0,000	593
Kobe Economic and Business Review	2	0,003	590	0,281	535	0,000	589
Kredit und Kapital	0	0,000	673	0,000	673	0,000	593
Kyklos	44	0,059	65	0,383	53	0,217	238
Kyoto Economic Review	0	0,000	673	0,000	673	0,000	593
Labor History	12	0,016	357	0,302	434	0,053	408
Labour	22	0,030	224	0,346	218	0,815	33
Labour Economics	27	0,036	176	0,349	203	0,159	281
LActualité Economique/Revue DAnalyse Economique	24	0,032	208	0,341	241	0,349	147
Lahore Journal of Economics	0	0,000	673	0,000	673	0,000	593
Land Economics	5	0,007	498	0,290	484	0,063	387
Law and Contemporary Problems	0	0,000	673	0,000	673	0,000	593
Lecturas de Economia	2	0,003	590	0,259	603	0,000	593
Liiketaloudellinen Aikakauskirja	3	0,004	553	0,293	477	0,016	501
LImpresa	0	0,000	673	0,000	673	0,000	593
LIndustria, Nuova Serie	1	0,001	629	0,240	637	0,000	593
Local Economy	9	0,012	412	0,301	435	0,033	446
Macroeconomic Dynamics	68	0,091	12	0,398	19	1,036	18
Management	3	0,004	553	0,244	632	0,013	512
Managerial and Decision Economics	54	0,072	31	0,395	21	1,090	17
Manchester School	25	0,034	202	0,357	167	0,082	362
Margin	2	0,003	590	0,234	646	0,001	574
Marine Resource Economics	3	0,004	553	0,265	587	0,001	580
Maritime Economics and Logistics	9	0,012	412	0,311	383	0,060	392
Maritime Policy and Management	1	0,001	629	0,246	630	0,000	593
Marketing Science	13	0,017	335	0,300	444	0,311	167

Journal	Degree	Normalized degree	Rank degree	Centrality	Rank centrality	Betweenness (x100)	Rank betweenness
Mathematical Finance	18	0,024	271	0,324	331	0,113	321
Mathematical Methods of Operations Research	5	0,007	498	0,275	566	0,013	515
Mathematical Social Sciences	24	0,032	208	0,337	265	0,186	264
Metrika	1	0,001	629	0,237	639	0,000	593
Metroeconomica	32	0,043	136	0,363	132	0,238	224
Michigan Academician	0	0,000	673	0,000	673	0,000	593
Michigan Law Review	1	0,001	629	0,237	641	0,000	593
Middle East Journal	2	0,003	590	0,246	628	0,000	593
Middle East Technical University Studies in Development	14	0,019	319	0,344	232	0,047	420
Modern Asian Studies	4	0,005	530	0,271	575	0,021	481
Momento Económico	0	0,000	673	0,000	673	0,000	593
Moneda y Crédito	27	0,036	176	0,353	180	0,293	178
Moneta e Credito	16	0,021	288	0,327	315	0,377	136
Monthly Labor Review	1	0,001	629	0,255	609	0,000	593
Multinational Finance Journal	27	0,036	176	0,362	145	0,082	363
National Institute Economic Review	2	0,003	590	0,266	583	0,000	593
National Tax Journal	22	0,030	224	0,345	224	0,198	253
Nationaløkonomisk Tidsskrift	3	0,004	553	0,283	526	0,001	584
Natural Resource Modeling	5	0,007	498	0,293	473	0,010	526
Natural Resources Journal	0	0,000	673	0,000	673	0,000	593
Netnomics	10	0,013	393	0,336	268	0,022	480
New Political Economy	24	0,032	208	0,342	239	0,820	32
New Zealand Economic Papers	0	0,000	673	0,000	673	0,000	593
New Zealand Geographer	0	0,000	673	0,000	673	0,000	593
Nigerian Journal of Economic and Social Studies	0	0,000	673	0,000	673	0,000	593
Nonlinear Dynamics, Psychology, and Life Sciences	7	0,009	454	0,327	313	0,011	521
Nonprofit Management and Leadership	3	0,004	553	0,259	601	0,006	546
Nordic Journal of Political Economy	0	0,000	673	0,000	673	0,000	593
North American Actuarial Journal	2	0,003	590	0,260	599	0,000	593
North American Journal of Economics and Finance	42	0,056	78	0,379	65	0,299	173
OECD Economic Studies	1	0,001	629	0,244	631	0,000	593
Okonomi og Politik	1	0,001	629	0,242	635	0,000	593
OPEC Review	0	0,000	673	0,000	673	0,000	593
Open Economies Review	57	0,077	24	0,390	32	0,775	39
OR Spectrum	13	0,017	335	0,307	408	0,544	77
Organization and Environment	6	0,008	479	0,296	465	0,026	467
Oxford Bulletin of Economics and Statistics	13	0,017	335	0,329	306	0,016	503
Oxford Development Studies	55	0,074	29	0,390	28	0,996	22
Oxford Economic Papers	25	0,034	202	0,352	187	0,137	295
Oxford Review of Economic Policy	15	0,020	300	0,330	292	0,032	447
Pacific Economic Bulletin	9	0,012	412	0,306	411	0,008	536
Pacific Economic Review	124	0,166	1	0,449	1	3,932	1
Pacific-Basin Finance Journal	50	0,067	43	0,367	115	0,631	57
Pakistan Development Review	0	0,000	673	0,000	673	0,000	593
Papeles de Economía Española	0	0,000	673	0,000	673	0,000	593
Papers in Regional Science	32	0,043	136	0,351	197	0,505	83
Pesquisa e Planejamento Econômico	3	0,004	553	0,273	570	0,000	593
PharmacoEconomics	3	0,004	553	0,250	620	0,003	562
Philippine Review of Economics	5	0,007	498	0,310	388	0,002	569
Policy	2	0,003	590	0,234	647	0,000	593
Policy Review	0	0,000	673	0,000	673	0,000	593
Policy Sciences	2	0,003	590	0,249	622	0,020	486
Policy Studies	3	0,004	553	0,255	611	0,000	593
Politica Economica	11	0,015	373	0,304	425	0,034	441
Political Science Quarterly	2	0,003	590	0,236	643	0,003	556
Politická Ekonomie	13	0,017	335	0,310	389	0,085	357
Population	1	0,001	629	0,207	664	0,000	593
Population and Development Review	5	0,007	498	0,312	380	0,660	52
Population Bulletin	1	0,001	629	0,246	628	0,000	593
Population Research and Policy Review	6	0,008	479	0,285	512	0,021	483
Population Review	3	0,004	553	0,283	520	0,071	376
Population Studies	1	0,001	629	0,207	664	0,000	593
Post-Communist Economies	17	0,023	280	0,320	349	0,326	156
Post-Soviet Affairs	7	0,009	454	0,277	552	0,127	305
Prague Economic Papers	13	0,017	335	0,310	389	0,085	357
Problemas del Desarrollo	0	0,000	673	0,000	673	0,000	593
Problems of Economic Transition	2	0,003	590	0,212	663	0,000	593
Public Administration Review	0	0,000	673	0,000	673	0,000	593
Public Budgeting and Finance	0	0,000	673	0,000	673	0,000	593
Public Choice	69	0,093	10	0,405	6	1,539	7
Public Finance	0	0,000	673	0,000	673	0,000	593
Public Finance Review	16	0,021	288	0,330	297	0,259	203
Public Policy Research	0	0,000	673	0,000	673	0,000	593
Quaderni storici	1	0,001	629	0,181	669	0,000	593
Quantitative Finance	41	0,055	83	0,382	57	0,569	69
Quarterly Journal of Austrian Economics	21	0,028	235	0,343	234	0,399	127
Quarterly Journal of Business and Economics	13	0,017	335	0,343	234	0,210	243
Quarterly Journal of Economics	35	0,047	119	0,374	89	0,282	188
Quarterly Review of Economics and Finance	43	0,058	72	0,382	55	0,535	78
RAND Journal of Economics	23	0,031	216	0,339	258	0,125	310
Rassegna Economica	2	0,003	590	0,213	662	0,000	593
Real Estate Economics	32	0,043	136	0,363	131	0,272	194
Recherches Economiques de Louvain/Louvain Economic Review	24	0,032	208	0,343	233	0,274	192
Région et Développement	14	0,019	319	0,311	385	0,221	235
Regional Science and Urban Economics	45	0,060	62	0,379	66	0,562	71
Regional Studies	28	0,038	165	0,352	187	0,557	72
Regulation	28	0,038	165	0,358	163	0,200	252

Journal	Degree	Normalized degree	Rank degree	Centrality	Rank centrality	Betweenness (x100)	Rank betweenness
Research in Economics	39	0,052	96	0,369	107	0,340	151
Research in Law and Economics	0	0,000	673	0,000	673	0,000	593
Research Policy	21	0,028	235	0,335	273	0,190	259
Research Review	1	0,001	629	0,276	563	0,000	593
Resource and Energy Economics	31	0,042	145	0,369	107	0,324	157
Resources Policy	17	0,023	280	0,333	277	0,086	356
Review of Accounting Studies	10	0,013	393	0,303	432	0,031	449
Review of African Political Economy	7	0,009	454	0,300	444	0,049	419
Review of Agricultural Economics	3	0,004	553	0,255	612	0,010	525
Review of Austrian Economics	19	0,026	259	0,326	321	0,054	406
Review of Black Political Economy	4	0,005	530	0,300	450	0,000	585
Review of Derivatives Research	32	0,043	136	0,348	205	0,173	276
Review of Development Economics	66	0,089	13	0,400	13	0,716	48
Review of Economic Conditions in Italy	8	0,011	433	0,293	477	0,029	461
Review of Economic Design	34	0,046	125	0,365	123	0,138	294
Review of Economic Dynamics	29	0,039	155	0,357	165	0,179	269
Review of Economic Studies	44	0,059	65	0,374	86	0,504	84
Review of Economics and Statistics	36	0,048	112	0,362	137	0,200	250
Review of Finance	40	0,054	90	0,365	124	0,311	166
Review of Financial Economics	32	0,043	136	0,356	171	0,258	205
Review of Financial Studies	18	0,024	271	0,317	362	0,020	489
Review of Income and Wealth	16	0,021	288	0,335	271	0,422	118
Review of Industrial Organization	15	0,020	300	0,333	276	0,223	234
Review of International Economics	94	0,126	2	0,419	2	1,514	8
Review of International Political Economy	29	0,039	155	0,343	236	0,748	42
Review of International Studies	12	0,016	357	0,290	487	0,330	154
Review of Political Economy	30	0,040	148	0,352	185	0,293	179
Review of Quantitative Finance and Accounting	44	0,059	65	0,363	132	0,499	86
Review of Radical Political Economics	6	0,008	479	0,281	538	0,012	518
Review of Regional Studies	21	0,028	235	0,314	371	0,177	273
Review of Social Economy	26	0,035	189	0,345	221	0,356	146
Review of Urban and Regional Development Studies	28	0,038	165	0,352	187	0,366	141
Review of World Economics/Weltwirtschaftliches Archiv	34	0,046	125	0,365	121	0,249	214
Revista Brasileira de Economia	0	0,000	673	0,000	673	0,000	593
Revista de Analisis Economico	25	0,034	202	0,341	245	0,422	119
Revista de Economía	0	0,000	673	0,000	673	0,000	593
Revista de Economia Aplicada	10	0,013	393	0,301	443	0,034	440
Revista de Economía Institucional	13	0,017	335	0,325	328	0,144	287
Revista de Economia Política	8	0,011	433	0,290	486	0,085	359
Revista de Economia Política/Brazilian Journal of Political Economy	20	0,027	245	0,335	275	0,446	103
Revista de Economía y Estadística, N.S.	2	0,003	590	0,250	621	0,000	593
Revista de Estudios Políticos	2	0,003	590	0,246	627	0,000	593
Revista de Historia Económica	9	0,012	412	0,287	498	0,062	388
Revista de Historia Industrial	7	0,009	454	0,277	551	0,034	443
Revue Canadienne des Sciences de lAdministration/Canadian Journal of Administrative	4	0,005	530	0,291	482	0,008	535
Revue de LOFCE	3	0,004	553	0,260	597	0,107	326
Revue dEconomie du Développement	2	0,003	590	0,257	608	0,000	593
Revue dEconomie Financière	9	0,012	412	0,300	451	0,014	508
Revue dEconomie Industrielle	16	0,021	288	0,317	362	0,179	268
Revue dEconomie Politique	22	0,030	224	0,340	253	0,315	162
Revue dEconomie Regionale et Urbaine	14	0,019	319	0,320	344	0,200	251
Revue dEtudes Comparatives Est-Ouest	3	0,004	553	0,278	548	0,007	541
Revue Economique	20	0,027	245	0,336	270	0,202	249
Revue Finance Contrôle Stratégie	5	0,007	498	0,282	533	0,259	202
Revue Française de Gestion	1	0,001	629	0,215	659	0,000	593
Revue Française dEconomie	13	0,017	335	0,315	369	0,136	297
Revue Tiers Monde	4	0,005	530	0,275	565	0,012	517
RISEC: International Review of Economics and Business	42	0,056	78	0,380	63	0,600	61
Risk Decision and Policy	31	0,042	145	0,364	126	0,143	288
Rivista di Politica Economica	26	0,035	189	0,362	139	0,384	133
Rivista di Storia Economica, N.S.	9	0,012	412	0,305	417	0,020	491
Rivista Internazionale di Scienze Sociali	6	0,008	479	0,304	425	0,030	454
Rivista Italiana degli Economisti	11	0,015	373	0,328	312	0,023	478
Scandinavian Economic History Review	2	0,003	590	0,252	616	0,000	586
Scandinavian Journal of Economics	17	0,023	280	0,337	267	0,061	389
Schmollers Jahrbuch: Zeitschrift für Wirtschafts- und Sozialwissenschaften/Journal of /	5	0,007	498	0,276	560	0,013	516
Schweizerische Zeitschrift für Volkswirtschaft und Statistik/Swiss Journal of Economics	0	0,000	673	0,000	673	0,000	593
Schweizerische Zeitschrift für Wirtschafts- und Finanzmarktrecht / Revue suisse de dro	0	0,000	673	0,000	673	0,000	593
Science and Society	8	0,011	433	0,303	433	0,140	292
Scottish Journal of Political Economy	16	0,021	288	0,347	212	0,025	471
Seoul Journal of Economics	28	0,038	165	0,364	128	0,091	352
Singapore Economic Review	48	0,064	47	0,376	77	0,376	137
Sloan Management Review	14	0,019	319	0,332	284	0,135	298
Small Business Economics	23	0,031	216	0,360	158	0,400	126
Social and Economic Studies	2	0,003	590	0,254	613	0,007	542
Social Choice and Welfare	57	0,077	24	0,391	26	0,523	81
Social Research	0	0,000	673	0,000	673	0,000	593
Social Science Japan Journal	8	0,011	433	0,301	442	0,058	398
Social Science Quarterly	0	0,000	673	0,000	673	0,000	593
Social Security Bulletin	0	0,000	673	0,000	673	0,000	593
Society	4	0,005	530	0,282	528	0,077	368
South African Journal of Economic and Management Sciences, N.S.	5	0,007	498	0,301	435	0,008	533
South African Journal of Economics	19	0,026	259	0,350	200	0,147	285
Southern Economic Journal	0	0,000	673	0,000	673	0,000	593
Soviet Studies	10	0,013	393	0,319	353	0,101	338
Spanish Economic Review	10	0,013	393	0,303	430	0,014	507
Spoudai	1	0,001	629	0,237	638	0,000	593

Journal	Degree	Normalized degree	Rank degree	Centrality	Rank centrality	Betweenness (x100)	Rank betweenness
Statistica	4	0,005	530	0,237	641	0,491	90
Statistica Applicata	2	0,003	590	0,188	667	0,241	221
Statistical Journal	0	0,000	673	0,000	673	0,000	593
Statistical Papers	14	0,019	319	0,322	340	0,679	51
Strategic Finance	0	0,000	673	0,000	673	0,000	593
Structural Change and Economic Dynamics	65	0,087	14	0,404	7	1,621	6
Studi Economici	5	0,007	498	0,272	574	0,197	254
Studies in Economics and Finance	13	0,017	335	0,321	342	0,243	220
Studies in Family Planning	5	0,007	498	0,269	579	0,489	91
Studies in Nonlinear Dynamics and Econometrics	42	0,056	78	0,374	86	0,223	233
Supreme Court Economic Review	3	0,004	553	0,283	524	0,027	464
Survey of Current Business	0	0,000	673	0,000	673	0,000	593
Swiss Political Science Review	9	0,012	412	0,277	556	0,020	490
Tahqiqat-e eqtesadi (Quarterly Journal of Economic Research)	0	0,000	673	0,000	673	0,000	593
Teaching Business and Economics	0	0,000	673	0,000	673	0,000	593
Technology Analysis and Strategic Management	5	0,007	498	0,277	559	0,013	514
Technology and Culture	7	0,009	454	0,291	481	0,044	427
Telecommunications Policy	11	0,015	373	0,318	355	0,239	223
Theory and Decision	42	0,056	78	0,381	58	0,646	55
Tijdschrift voor Economie en Management	8	0,011	433	0,314	372	0,028	463
Tourism and Hospitality Management	1	0,001	629	0,186	668	0,000	593
Tourism Economics	3	0,004	553	0,235	644	0,245	216
Transnational Corporations	15	0,020	300	0,337	265	0,226	230
Transportation	12	0,016	357	0,304	428	0,052	416
Transportation Journal	0	0,000	673	0,000	673	0,000	593
Transportation Research: Part A: Policy and Practice	13	0,017	335	0,316	366	0,107	325
Transportation Research: Part B: Methodological	19	0,026	259	0,330	295	0,272	193
Transportation Research: Part D: Transport and Environment	12	0,016	357	0,316	367	0,056	401
Transportation Research: Part E: Logistics and Transporation Review	15	0,020	300	0,339	255	0,356	145
Travail et Emploi	2	0,003	590	0,293	473	0,000	593
Ukrainian Economic Review	1	0,001	629	0,230	650	0,000	593
UN Chronicle	0	0,000	673	0,000	673	0,000	593
Urban Studies	8	0,011	433	0,287	502	0,018	497
Venture Capital	7	0,009	454	0,307	407	0,020	487
Vierteljahrsheftze zur Wirtschaftsforschung	7	0,009	454	0,310	392	0,042	428
Water Resources Research	3	0,004	553	0,243	634	0,052	413
Wirtschaftspolitische Blätter	0	0,000	673	0,000	673	0,000	593
WorkingUSA	13	0,017	335	0,313	378	0,132	302
World Bank Economic Review	48	0,064	47	0,388	37	0,442	106
World Bank Research Observer	13	0,017	335	0,336	269	0,210	242
World Development	43	0,058	72	0,375	82	1,030	19
World Economy	73	0,098	5	0,403	8	1,156	14
Yale Journal on Regulation	1	0,001	629	0,214	661	0,000	593
Yale Law Journal	4	0,005	530	0,281	535	0,245	217
Yapi Kredi Economic Review	1	0,001	629	0,234	645	0,000	593
Zagreb International Review of Economics and Business	3	0,004	553	0,287	501	0,001	579
Zbornik Radova Ekonomskog Fakulteta U. Rijeci/Proceedings of Rijeka School of Econo	2	0,003	590	0,230	649	0,000	593
Zeitschrift für ArbeitsmarktForschung/Journal for Labour Market Research	3	0,004	553	0,277	556	0,007	539
Zeitschrift für Betriebswirtschaft	6	0,008	479	0,274	568	0,052	415
Zeitschrift für Wirtschaftspolitik	1	0,001	629	0,278	548	0,000	593