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Italian economic journals. A network-based ranking and an
exploratory analysis of their influence on setting international
professional standards

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Abstract: An exploratory analysis of the crossed presence (interlocking editorship) of the same scholars in the editorial boards of Italian and international economic journals is developed. The position and the degree of integration of Italian journals in the worldwide network of economic journals is studied with network analysis techniques and a ranking of Italian journals, based on a measure of centrality, is proposed. Then relatively compact groups of international journals are individuated, representing different specialized sub-field or different methodological approaches to the study of economics. The analysis of the relative position of Italian journals in those groups suggests that Italian journals are not connected to the cores of the various schools operating at an international level, with the only exception of the history of economic thought.

Keywords: Economic journals; Italian economic journals; ranking of journals; editorial boards; interlocking editorship; journals gatekeeping; network analysis

Jel Classification: A14

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The Italian economic journals and the academic community of the Italian economists are the objects of this paper. The basic intuition of our research is that through studying the structure of the network of the Italian economic journals, with the instruments of network analysis, some light can be shed on the underlying processes of research conducted by Italian economists. This analysis has to be conducted with a comparative point of view: we are interested in the Italian economic research *vis a vis* the international standards of the profession of economic research.

The notion of *interlocking editorship*, developed by the present authors in other papers (Baccini and Barabesi, In press; Baccini, Barabesi and Marcheselli, In press) is applied to this aim. An interlocking editorship occurs when a scholar sitting on the board of editors of a journal also sits on the board of other journals. Those interlocks are considered the primary indicator of inter-journal network ties. In analogy with interlocking directorates analysis an inter-journal tie can be explained as the result of a strategic decision of the journals, as collusion, or cooptation or as the monitoring of sources of environmental uncertainty (Mizruchi, 1996 and the reference cited therein).

The issues addressed with interlocking editorship analysis 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 scientists break down into smaller groups? If so what are they? More in general, interlocking editorship analysis permits us to explore the existence of separate schools of thought, methodologies, or pattern of research characterizing the scientific community under scrutiny.

In this paper this technique is applied to the study of the Italian community of economists. In the first part, the position and the degree of integration of Italian journals in the worldwide network of economic journals is explored and a network-based ranking of Italian journals is proposed. In the second part relatively compact groups of journals are individuated with network analysis techniques, representing different specialized sub-field or different methodological approaches to the study of economics. The relative position of Italian journals in those groups is discussed and some tentative inferences are drawn about the role and the weight of economics developed in Italy in the setting of the international standards of the profession.

Data on editorial boards

The unit of observation at the basis of our research is the editorial board of scientific journals. A lot of literature on sociology of science (Braun, 2004; Nisonger, 2002) and economics of science (Addis and Villa, 2003) uses data on editorial boards for empirical research, starting at least from the seminal work of Zuckerman and Merton (1971). Recently the relevance of the role of the board of editors has been synthesized on the notion of *journal gatekeeper*. “The members of the editorial and advisory board of journals are rightfully considered the gatekeepers of these journals. The gatekeepers in controlling the system of manuscript evaluation and selection occupy powerful strategic position in the collective activity of science” (Braun et al., 2007), they “exert a special influence on the orchestration of the international research activity” (Braun and Diospatonyi, 2005).

From the point of view adopted in this paper, the reader will accept the statement that each editor may more or less influence the editorial policy of her journal. Consequently if the same individual sits on the board of two journals, those journals could have some common elements in their editorial policies. We will not be concerned with direct observations of the editorial policies adopted by the boards of economic journals. But we will infer considerations about the similarity of editorial policies through the observation of the crossed presence of scholars on the boards of editors.

We constructed affiliation network databases where each scholar is associated with the journals in which she sits as an editor. Those dual-mode networks are then transformed into one-mode networks where the vertices are journals and a link between a pair of journals is generated by the presence of a common editor on the boards of both.

A very broad definition of editor is adopted, covering all the individuals listed as editor, co-editor, member of the editorial board or of the advisory editorial board of the journal considered. This strategy, the same of other papers (Addis and Villa, 2003; Braun and Diospatonyi, 2005; Hodgson and Rothman, 1999), permits us to overcome the problem that editors with a same title have different roles in different journals. The easiest way to understand this point is to consider the different approach used by Frey and Rost (2008). They argue that there are two different roles for editors: there are editors largely concerned with the practical management of the journals, and

editors playing an active academic role in shaping the journal. It is very improbable that high quality scholars have a managerial role in economic journals, but their presence on a board signals the shape of the journal to the scientific community. To be member of a board without managerial engagements is, according to Frey and Rost, an indication of the quality of a scholar: so it is possible to rank scholars counting their membership on not-managerial positions in the editorial boards. We are interested, instead, in the whole publishing process of economic journals, in the signalling role toward academic community, and also in the decisional role of editors. As a consequence we consider all editors of a journal in our analysis.

As already said, we have considered the position of the Italians in the worldwide economic journals network. The general network includes 746 journals listed in the ECONLIT database and with an active editorial board in January 2006. This set of journals includes all major scientific journals in the field of economics. It will be called the Econlit network.

For Italian journals there is a definition problem (Marcuzzo and Zacchia, 2007). There are in fact two possible criteria to define a journal as Italian: the first one is the language (if the Language field of UNIMARC bibliographic format is set as Italian, then the journal is Italian); the second is the country of publication or production (if this field in UNIMARC code is set as Italy, then the journal is Italian). We considered as Italian (1) all journals published in Italian; (2) all journals in English (e.g. *History of Economic Ideas*) or multilingual (e.g. *RISEC*) published in Italy; (3) five journals (*Decisions in Economics and Finance*; *Economic Notes*; *Labour*; *Metroeconomica*; *Research in Economics*) published in English by international publishers, but having their origin or editorial staff mainly located in Italy.

According to these criteria, the ECONLIT database already contains 30 Italian economic journals. It is common knowledge that these 30 journals are not the complete set of Italian economic journals (Cainelli et al., 2006). So we have included in our database other 72 journals classified as “economic journal” in ESSPER bibliographic database (<http://www.biblio.liuc.it/essper/>). The *Italian network* therefore comprises of 102 economic journals; and the worldwide-Italian network (hereinafter the *worldwide network*) includes 818 journals.

The data on the members of the editorial boards was directly obtained from the website of the journals or 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. The database was managed by means of the package *Pajek* (Batagelj and Mrvar, 2006; de Nooy, Mrvar and Batagelj, 2005).

Internationalization of Italian journals

Table 1 contains data on the dimension and density of the three networks used in this paper. The Italian network is much denser than the ECONLIT one, that is to say the ratio of the actual number of lines to the maximum possible number of lines in the network is greater for the Italian journals. When the Italian network is considered in the context of the worldwide network, the density falls. This can be interpreted as a first evidence of the fact that Italian economic journals are very much connected with each other, but not with the worldwide network of journals.

Table 1 about here

Table 1. Dimensions and density of economic journals networks

This quantitative evidence is strengthened by the observation of the graph of the worldwide network reported in Figure 1. The vertices-journals in the graph are automatically placed by the package *Pajek* on the basis of the Fruchterman-Reingold algorithm. The vertex layout is determined by the forces pulling vertices together and pushing them apart, starting from an initial random disposition. Yellow vertices are the Italian journals. In this graph two main subsets may be roughly recognized: a giant central component composed by the majority of economic journals and a group of isolated journals. Some Italian journals are isolated; but for the most part they are in a peripheral position of the giant component; only a small minority are near the centre of the network. This graph can be interpreted as follows: Italian economic journals have a peripheral position in the

worldwide network of economic journals; only a small number of journals are fully integrated in the international network.

Figure 1 about here

Figure 1. The economic journals network. In yellow the Italian journals.

In Figure 2 the network of the Italian journals is drawn with Kamada-Kawai algorithm. Also in this case the network splits in a big component linking 83 journals and 19 isolated journals. This latter group is composed of journals improperly classified by our sources as “economic” (*Il Politico; Industrie alimentari; Psicologia e lavoro; Quaderni storici; Ventunesimo Secolo Roma*); of non-academic journals, published by banks or local institution and devoted to the study of local economy (*Parma Economica; Pavia Economica*), of journals belonging to very specific field of study as for example health economic policy (*Tendenze Nuove; Economia agro-alimentare; Economia Montana; Sistemi e impresa*); or of non-academic journals (*Bollettino economico; L'impresa; Osservatorio ISFOL; Risk Italia; Rivista della scuola superiore dell'economia e delle finanze*). Only three academic economic journals are really isolated: *Studi e note di economia* published by a bank (Banca Toscana) and with a small board nominated by the bank itself; and *Quaderni di economia del lavoro*, a journal based on monographic issues always edited by the only one member of the board of editors; the third one is the *European Journals of Comparative Economics*, the only journal with international connections and without ties with other Italian journals. The big component of 83 journals has a density of 0,11: the Italian economic academy is then well connected.

Figure 2 about here

Figure 2. The Italian economic journals network

A main concern in network analysis is to distinguish between the centre and the periphery of a network. In the analysis of interlocking editorship (Baccini and Barabesi, In press; Baccini et al., In press), the problem is to distinguish by using some measures of centrality (Wasserman and Faust,

1994), between the journals which have a central position in the network and those which remain in the periphery.

Here we are interested in the centrality of Italian journals; and the question can be considered in two different perspectives. In the first, the centrality of Italian journals is calculated considering the network generated by Italian journals only; in the second, the centrality of Italian journals is calculated in the worldwide network. It is useful to note that the centrality measures depend on the network considered: maybe a journal with high centrality in the Italian network is peripheral (low centrality) in the worldwide network; or a peripheral journal in the Italian network is central in the worldwide network because it has a high degree of international connections.

We suggest (Baccini and Barabesi, In press; Baccini et al., In press) to interpret the centrality calculated in the Italian network as a measure of the weight of the journal in shaping economic studies and the academy in Italy. After having calculated a centrality measure for each journal, it is possible to rank the journals according to their centrality. A more central journal has a relatively high power in setting the national goals and standards of the profession.

The centrality of an Italian journal calculated in the worldwide network measures instead the degree of its international integration. The basic idea behind this is that Italian journals with high centrality in the international network are well integrated in economic studies conducted worldwide; these journals have scholars in their boards whose reputation, based on their past research quality, is recognized by peers at an international level. So, very probably, they are scientific journals of *acceptable* quality serving as an outlet for papers of *acceptable* quality. “Intuitively there is considerable reason to believe that international membership on a journals’s editorial board might be associated with better overall quality. High quality journals might attract international members to their editorial board and international board member could use their connections to improve journal quality” (Nisonger, 2002). As a consequence it is possible to rank Italian journals according to their centrality in the worldwide network: this ranking, based on the degree of internationalization of the editorial board of a journal, may be argued to reflect the quality of the research published in it. A board with a high degree of integration in the international network of scholars, probably tends to publish papers reflecting the international standards of the profession.

Maybe the same is not true for an isolated Italian journal, probably more exposed to the pressures of Italian peers interested to quickly publish their own papers or papers of their pupils in view of hiring or promotion processes: “editors have power in deciding what is worth publishing, particularly when there is no refereeing process-as is still the case with some Italian journals” (Addis and Villa, 2003; Cainelli et al., 2006).

Table A1 contains three measures of centrality calculated for Italian journals in reference to the worldwide network. The first and simplest measure is represented by the degree of a journal: the more ties a journal has to other journals, the more central is its position in the network. For example *RISEC: International Review of Economics and Business*, the journal published by the Università Bocconi of Milano is linked with 54 journals in Italy and worldwide, while the *Rivista di economia agraria* is linked with solely one. Hence, the first one is more central in the network than the second one. The second measure is the normalized degree of a journal, that is the ratio of its degree to the maximum possible degree (i.e. the number of journals minus 1). It is a linear transformation of the degree and ranks journals in an equivalent order. Thus, the *RISEC* is linked with about 6.6% of the other journals in the network, while the *Rivista di economia agraria* is linked with only 0.01%. The third 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 the 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 with a higher value of closeness centrality occupying a more central position can be very effective in communicating information (sharing research, sharing papers, deciding editorial policies) to other journals.

Table A1 contains also the ranking position of each journal according to normalized degree and closeness centrality. The rankings in columns 7 and 8 are calculated over the complete set of 818 journals. Column 9 shows the rank of each journal according to closeness centrality considering

the Italian journals only. So the most central Italian journal in the network (rank 1 in column 9), *RISEC*, has rank 32 worldwide; *Economic Notes* with rank two amongst the Italians, has rank 51 worldwide and so on. Only 4 Italian journals are in the top-100 worldwide centrality ranking; and 9 in the top-200. If we split the worldwide ranking in two parts, only 24 Italian journal are in the first part of the ranking, and 79 (about 77%) in the second half.

Column 10 of Table A1 shows the ranking of Italian journals according to closeness centrality calculated in the Italian network. The comparison of this ranking with the ranking in the worldwide network (column 9) sheds some lights on the different impact of Italian journals in the profession at national and international level. In the graph of Figure 3 the position in the Italian ranking can be read in the y-axis while the worldwide ranking is on the x-axis. The correlation between the two rankings is high, but there are some significant inconsistencies. Only 5 of the top-10 Italian journal in the worldwide ranking are also in the top-10 of Italian ranking. *Economic Notes* is second in the international ranking and only 35th in the Italian one; similarly *Research in Economics* is third in the international ranking and 40th in the national one; and so on for *Metroeconomica* (6th; 52th), *History of Economic Ideas* (4th ; 23th), *Labour* (9th; 23th). A total of 8 journals with good international integration, that is with a relatively good ranking position in the worldwide network, have a relatively low position in the ranking calculated on the Italian network. 7 out of 8 journals are published in English and the eighth (*Imprese e storia*) is multilingual; 5 out of 8 have an international publisher; 3 are general and 5 are specialized journals. There are not similar outliers from the other point of view; that is there are not journals with a high rank in the Italian network and anomalous low rank in the worldwide network.

Figure 3 about here

Figure 3. The comparison of the rankings of Italian journals in the Italian and worldwide network.

The degree centrality observed includes all links of a journal. It is possible to calculate also the degree of each Italian journal generated by the links with non-Italian journals only, as in Table A.2. The ranking is not substantially modified, but it is possible to argue that the overall integration in the international network of the Italian journals is not so remarkable. In fact, the median degree

of a journal in the Econlit network is 11 (Baccini and Barabesi, In press); only 9 Italian journals have a degree greater than this median value.

From this point of view, it is possible to see anomalous behaviors. For example two of the outlier journals seen above (*Decisions in Economics and Finance*; *European Journal of Comparative Economics*) are completely internationalized (they have in fact only links with international journals). But they are in a peripheral position (have a low degree) in the Econlit network. The high ranking position of two other journals (*Mercato concorrenza e regole*; *Moneta e Credito*) in the worldwide network is due more to their links with other Italian journals than to international journals.

The evidence cited above reinforces the idea that Italian economic journals have a peripheral position in the worldwide network, and that probably Italian journals, with a few exceptions, do not influence the professional standard adopted worldwide in economic studies. To individuate these few exceptions it is necessary to deepen the analysis, considering the strength of the links between journals. But before we do this, a last descriptive element deserves attention.

This last point is based on the following idea: if you have few links but with *important* vertices, your position in the network is important because your link is an important one. The importance of a vertex is measured, as usual, with its centrality. So, in our case, it is interesting to study the centrality (relative importance) of the journals with which Italian journals are linked. A visual inspection of Figure 4 shed light on this point. Italian journals are the yellow points; blue points are international journals linked (at distance 1) with Italian journals. The size of the vertices is proportional to their centrality in the worldwide network. It is immediately evident that Italian journals are linked with not-central journals: the size of each yellow point is normally greater than the size of the blue point connected to it. It is possible to argue that Italian journals are not only on the periphery of the network, but their links are generally with non-central international journals.

Figure 4 about here

Figure 4. The international links of Italian journals. (Italian journals are in yellow; Econlit journal are in blue; the size of each vertex is proportional the its centrality)

The power of shaping professional standards

When the strength of the ties linking journals is considered, the network 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. 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 between their boards. Two journals with no common editors have no editorial relationship. Take for example the *American Economic Review* and *Pensiero economico moderno*, they have no common editors, so 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. The most common situation is the intermediate one in which two journals share only a part of their board members.

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 .

In our previous paper on the Econlit network (Baccini and Barabesi, In press), we identified 6-slices as the most interesting threshold, giving rise to 41 components made up of 176 journals. It is useful for the readers of the present paper to briefly summarize the results as follow, limiting the attention to the groups composed by more than two journals. The analysis permitted us to

individuate cohesive groups of journals characterized by sub-disciplinary specialization, country of publication, or methodological approach to economics.

With the only exception of a big group of 19 journals devoted to urban, spatial and geographical economics, and to real estate economics, all groups characterized by sub-disciplinary specialization are composed of a small number of journals. We identified sub-groups of journals of insurance (5 journals), accounting research (6); environmental economics (5); applied finance (5); finance (4); public economics (6); law and economics (3); business history (3); economics of new technology (3). A mix of specialization and insularity characterize the group of journals of economic development published by Oxford University (3). Insularity is the only characterization of the group of Brazilian journals (3).

Probably the (now falling?) general consensus in monetary policy and in macroeconomics, as suggested by Goodfriend (2007) is the *glue* amongst the 36 journals of the most central component of the Econlit network,. It contains journals of macroeconomics, monetary economics, international economics, financial economics and the *American Economic Review*. Similarly a common methodological approach is the basis of the component with 12 journals devoted to economic theory, econometrics, game and decision theory. The centre of the component is *Games and Economic Behavior*, linked directly to 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*).

Probably these two components represent the editorial realization of the core of the elusive notion of *mainstream* economics (Colander, Holt and Rosser, 2004).

The Austrian approach to the study of political economy and political science defines a group of 6 journals, amongst them the *Review of Austrian Economics* and the *Quarterly Journal of Austrian Economics*. Another group of 6 journals is strongly characterized for their evolutionary approach to the analysis of economics, industrial organization and technological change; amongst them *Journal of Evolutionary Economics*, *Structural Change and Economic Dynamics* and *Industrial and Corporate Change*. Lastly, the public choice approach to public economics defines a

component with three journals (*Public Choice*, *European Journal of Political Economy* and *Constitutional Political Economy*).

Only one Italian journal is enclosed in one of the components listed above: the *Review of Economic Conditions in Italy* located at the extreme periphery of the macroeconomic component. As already said, only a minority of Italian economic journals are covered by Econlit. Therefore we repeat the same exercise of searching cohesive subgroups, with the threshold 6, in the worldwide network in view of detecting the localization of the Italian economic journals in these components or individuating some new or different components. The results of this exercise are clear: the introduction of the Italian journal in the Econlit network does not modify at all the compositions of the groups. Only a new small component emerges with 3 journals of management and organization (*Economia e management*; *Sviluppo e organizzazione e Studi organizzativi*).

This result probably reflects the difficulty of the Italian journals to join positions that probably could permit participation in the definition of the winning lines of research and methodological issues of economics at international level.

Nevertheless, a bit of caution must be used because the threshold of 6 is probably very high: the components are characterized by a very strong overlapping of the boards amongst journals. And in effect, if the research of components in the worldwide network is repeated with a lower threshold some interesting results emerge. With a threshold of 5 a component of journals dedicated to the history of political economy (HOPE) is found, with an Italian journal (*History of Economic Ideas*) in central position. If the threshold is lowered again to 4, as in Figure 5, the HOPE component widens to 10 journals, including all of the most important journals of the discipline, at least according to the CNRS ranking (CNRS, 2007). It is interesting to note that 5 journals out of 10 are Italian, and that they are central in this component contributing to the links of the European and U.S. schools.

Figure 5 about here

Figure 5. The HOPE (history of political economy) component (4-slices)

With a threshold of 4, a component appears, drawn in figure 6 of 10 Italian journals dedicated to applied economics, industrial economics, local development, and management. 5 journals are

connected in a star configuration to *Economia e politica industriale* in the central position; *Studi Organizzativi* is the bridge to other management journals, and *Sviluppo locale* is linked to an agrarian economy journal.

Figure 6 about here

Figure 6. The Italian applied economics component (4-slices)

If we lower again the threshold the two mainstream components described above merge in a giant component. This point can be interpreted as an evidence supporting the intuition of Colander, Holt and Rosser (2004) according to which “mainstream consists of the ideas that are held by those individuals who are dominant in the leading academic institutions, organization and journals”. The HOPE group is attracted at the center of the giant component with two journals (*History of Economic Ideas* and *Metroeconomica*) acting as bridges, while the Italian applied economics component is again in a marginal position with only a link to the giant component passing through *Economia e politica industriale*. *Research in Economics*, *Economic Notes* and *RISEC* have each a link of value 3 with a journal of this giant component.

The exploratory analysis developed here suggests that Italian journals face difficulties in positioning themselves at the centre of an international network. This is true not only for general journals, but also for specialized journals. The only exception is in the field of the history of economic thought, where Italian journals probably have some power in shaping international research. Applied economic research has a strong national character probably derived by a linguistic bias and by its relevance to national/local policy. In the case of Italy the prevalence of national interest probably pushes scholars of applied economic research toward a national lock-in. Conclusive remarks

Two issues have been explored using network analysis techniques, both related to the question of the degree of international integration of economic studies developed in Italy.

The first issue is the degree of integration of Italian economic journals in the international network of economic journals. The interlocking editorship analysis here developed permits us to study the centrality of Italian economic journals in the worldwide network of economic journals. The crossed presence on the editorial boards of economic journals is considered a proxy of the internationalization of a journal. The proximity of an Italian journal to international standard can be

assessed by its links with other international journals. The links considered are those generated by scholars sitting on the board of editors of an Italian journal and also on the board of other international journals. The degree of internationalization of a journals is then proxied by the numbers of links of an Italian journal to international journals.

By using this simple framework we have found that the majority of Italian journals have a relatively low degree of internationalization and that they are positioned with few exceptions on the periphery of the worldwide network of economic journals.

A ranking of Italian economic journals based on their degree of internationalization has then been developed. This ranking can substitute the idiosyncratic one used by (Checchi, 1999; Perotti, 2002, 2002-2006, 2008), given that it permits a direct comparison of the position of Italian journals with international journals covered by Econlit. It can be considered a tentative reply to the demand of Lippi and Peracchi (2007a) of a list of (Italian) journals without impact factors “publishing serious and good papers”, usable also for research evaluations purposes.

The second issue refers to the consideration of various research fields and the role of Italian journals in the shaping of these fields. The exploratory analysis developed 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 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. Baccini and Barabesi (In press) individuated a lot of different groups of economic journals with strong editorial proximity. Those groups reflect various schools in the economics profession many of which have long histories, their own organizations, academic institutions and notably journals.

The points developed here are: the connection of Italian journals to these groups, their central or peripheral position, their role in shaping research and methods developed by any of those schools of economics. The data presented shows that Italian journals are not connected to the cores of the various schools operating at an international level, with only one exception: the history of economic thought. A research field, according to (2007b) “largely over-represented” in Italy, but where Italian journals have a leading role at an international level.

References

- Addis, E., and Villa, P. (2003). The Editorial Boards of Italian Economics Journals: Women, Gender, and Social Networking. *Feminist Economics* **9**, 75-91.
- Baccini, A., and Barabesi, L. (In press). Interlocking Editorship. A Network Analysis of the Links Between Economic Journals. *Scientometrics*.
- Baccini, A., Barabesi, L., and Marcheselli, M. (In press). How are statistical journals linked? A network analysis. *Chance*.
- Batagelj, V., and Mrvar, A. (2006). Pajek. Lubjana.
- Braun, T. (2004). Keeping the gates of science journals. In *Handbook of Quantitative Science and Technology Reserach*, H. F. Moed, W. Glanzel, and U. Schmoch (eds), 95-114. Dordrecht: Kluwer Academic Publisher.
- Braun, T., and Diospatonyi, I. (2005). The counting of core journal gatekeepers as science indicators really counts. The scientific scope of action and strength of nations. *Scientometrics* **62**, 297-319.
- Braun, T., Diospatonyi, I., Zádor, E., and Zsindely, S. (2007). Journal gatekeepers indicator-based top universities of the world, of Europe and of 29 countries — A pilot study. *Scientometrics* **71**, 155-178.
- Cainelli, G., De Felice, A., Lamonarca, M., and Zoboli, R. (2006). The Publications of Italian economists in ECONLIT. Quantitative Assessment and Implications for Research Evaluation. *Economia Politica* **XXIII**, 385-423.
- Checchi, D. (1999). Tenure. An appraisal of a national selection process for associate professorship. *Giornale degli Economisti e Annali di Economia* **58**, 137-181.
- CNRS (2007). Categorization of Journals in Economics and Management.
- Colander, D., Holt, R., and Rosser, B. (2004). The changing face of mainstream economics. *Review of Political Economy* **16**, 485 - 499.
- de Nooy, W., Mrvar, A., and Batagelj, V. (2005). *Exploratory social network analysis with Pajek*. Cambridge: Cambridge University Press.
- Frey, B. S., and Rost, K. (2008). Do Rankings Reflect Research Quality? : Institute for Empirical Research in Economics - IEW.
- Goodfriend, M. (2007). How the World Achieved Consensus on Monetary Policy. *Journal of Economic Perspectives* **21**, 47-68.
- Hodgson, G. M., and Rothman, H. (1999). The editors and authors of economics journals: a case of institutional oligopoly? *The Economic Journal* **109**, 165-186.
- Lippi, M., and Peracchi, F. (2007a). Il primo esercizio italiano di valutazione della ricerca: una prima valutazione *Rivista Italiana degli Economisti*, 267-276.
- Lippi, M., and Peracchi, F. (2007b). Il primo esercizio italiano di valutazione della ricerca: una prima valutazione. In *Valutazione della ricerca: esperienze e metodi a confronto*. Ancona: Società Italiana degli Economisti.
- Marcuzzo, M. C., and Zacchia, G. (2007). L'ECONLIT e gli strumenti per la valutazione della ricerca economica in Italia *Rivista Italiana degli Economisti*, 277-306.
- Mizruchi, M. S. (1996). What do interlocks do? An analysis, critique, and assessment of research on interlocking directorates. *Annual Review of Sociology* **22**, 271-298.
- Nisonger, T. E. (2002). The relationship between international editorial board composition and citation measures in political science, business, and genetics journals. *Scientometrics* **54**, 257-268.
- Perotti, R. (2002). The italian university system: rules vs. incentives. In *Monitoring Italy, ISAE*. Roma.
- Perotti, R. (2002-2006). Il Bollettino dei Concorsi. Milano: IGIER-Bocconi.
- Perotti, R. (2008). *L'università truccata*. Torino: Einaudi.

Wasserman, S., and Faust, K. (1994). *Social Network Analysis: Method and Application*. Cambridge: Cambridge University Press.

Zuckerman, H., and Merton, R. K. (1971). Patterns of evaluation in science: Institutionalisation, structure and functions of the referee system. *Minerva* **9**, 66-100.

TABLE A1 About here

Table A1. Centrality rankings of the economic journals

Table 1

	N. of Journals	Seats available	Editors	Seats per Journal	Seats per editor	Links	Density
ECONLIT	746	21.525	15.921	28,9	1,35	6.407	0,023
ITALIAN NETWORK	102	2.123	1.808	20,8	1,17	364	0,071
COMPLETE NETWORK	818	23.007	17.031	28,1	1,35	6.938	0,021

Figure 1

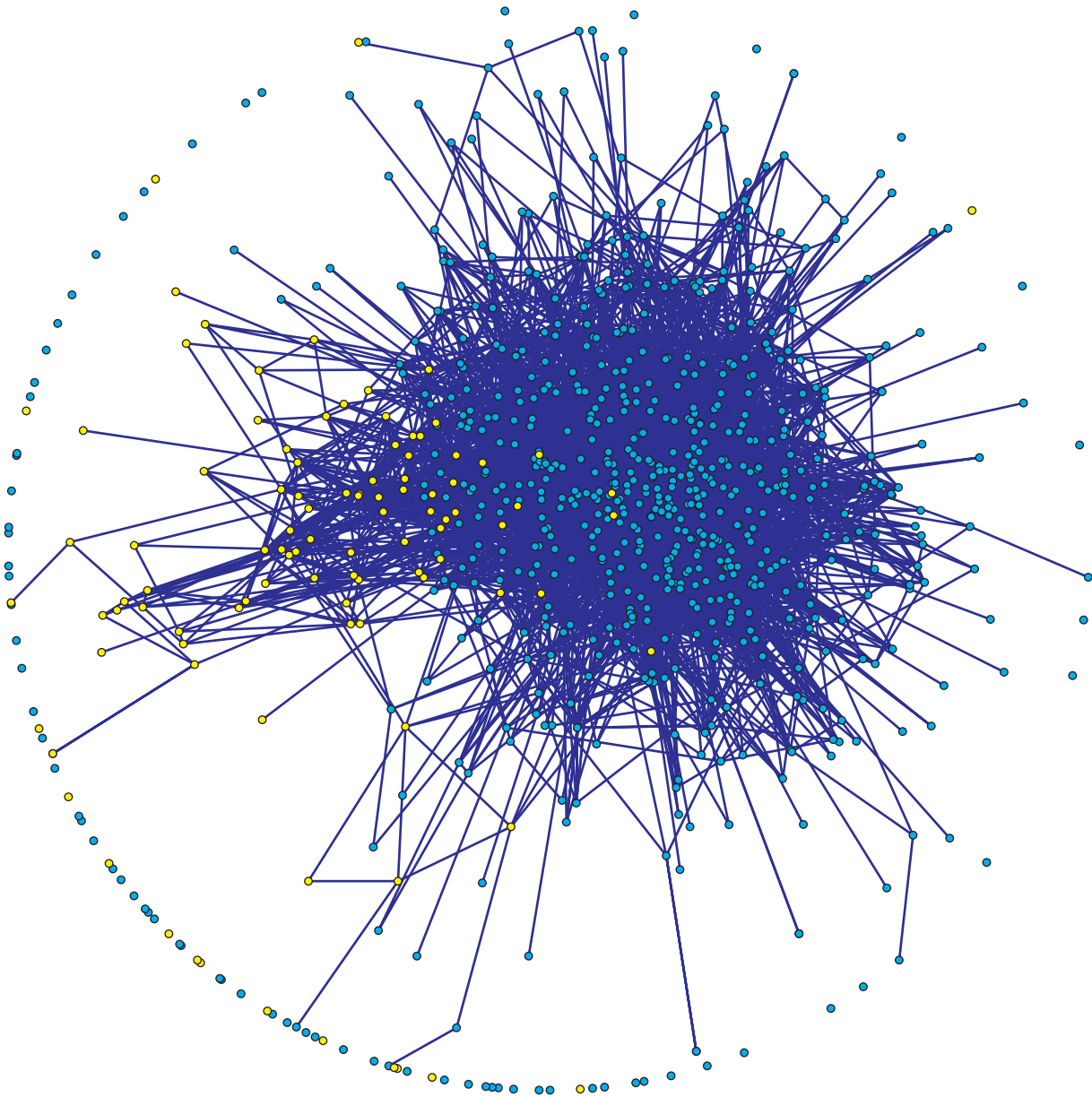


Figure 2

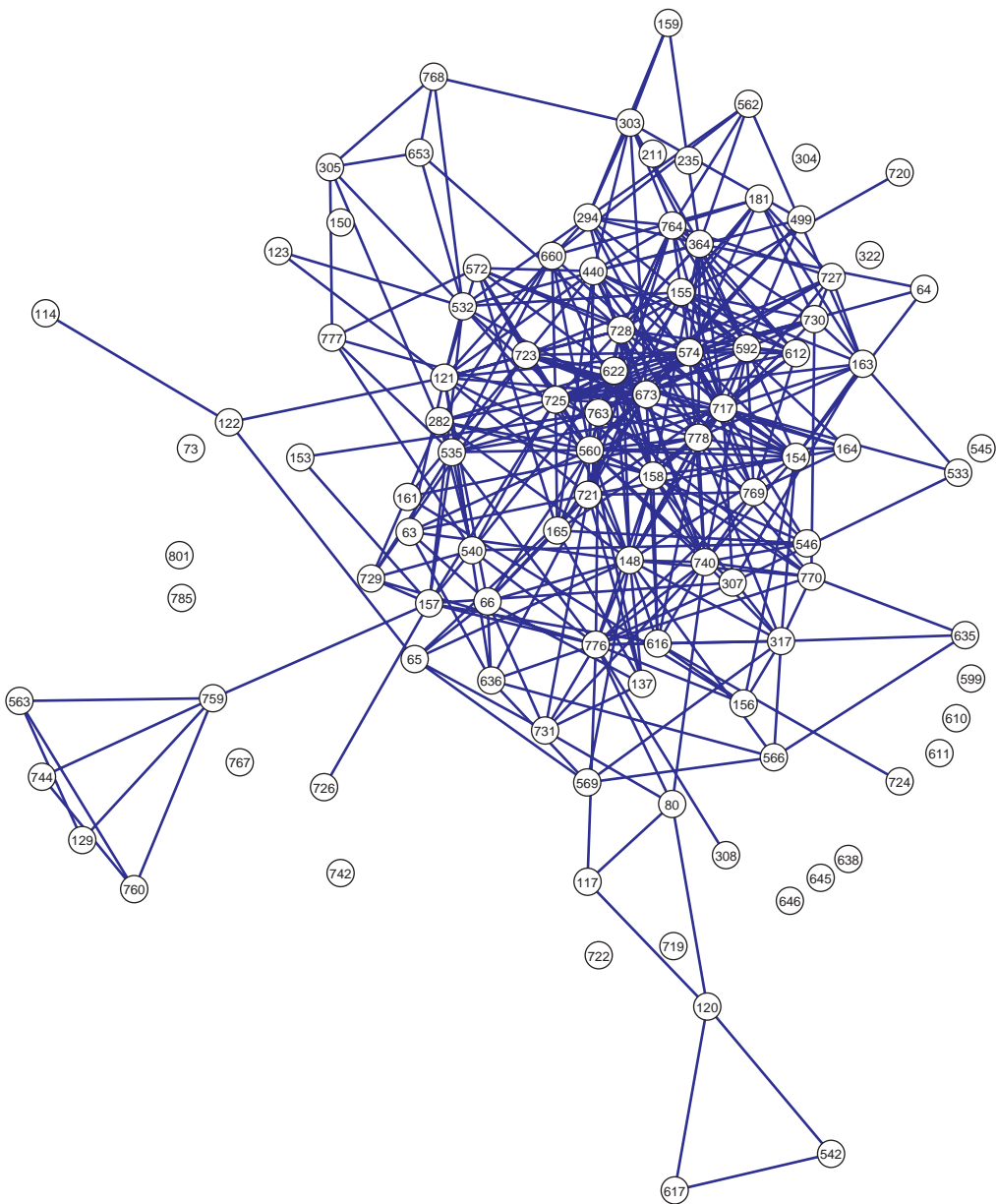


Figure 3

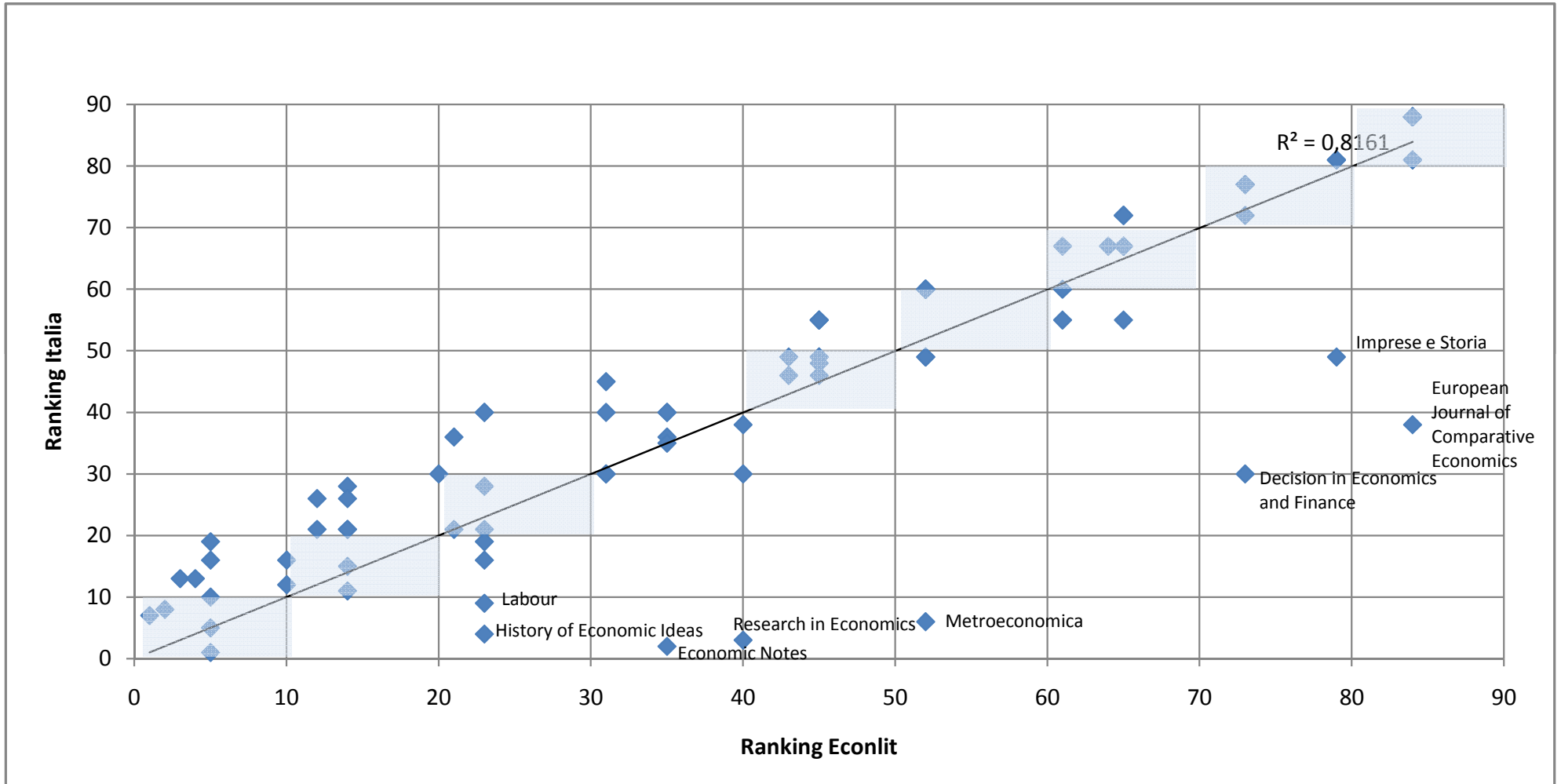


Figure 4

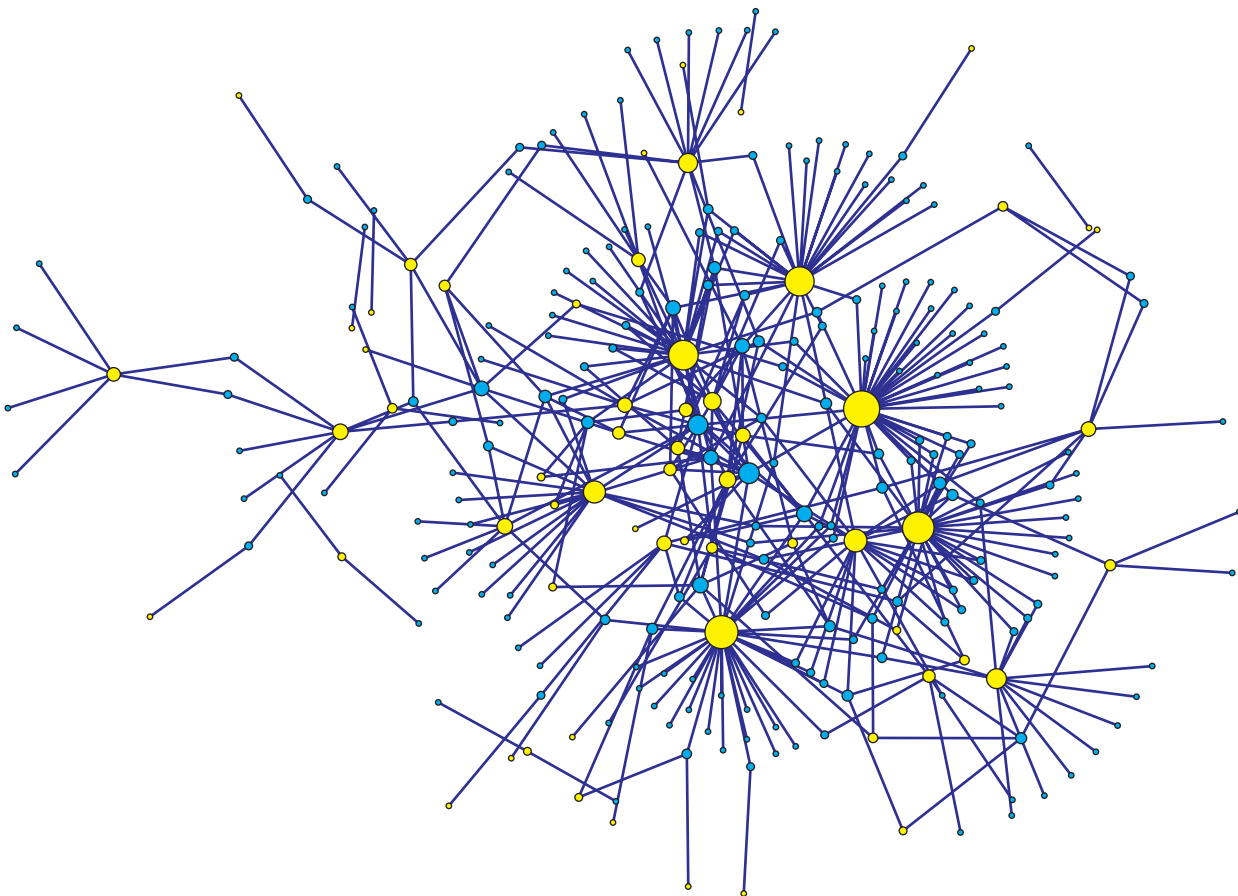


Figure 5

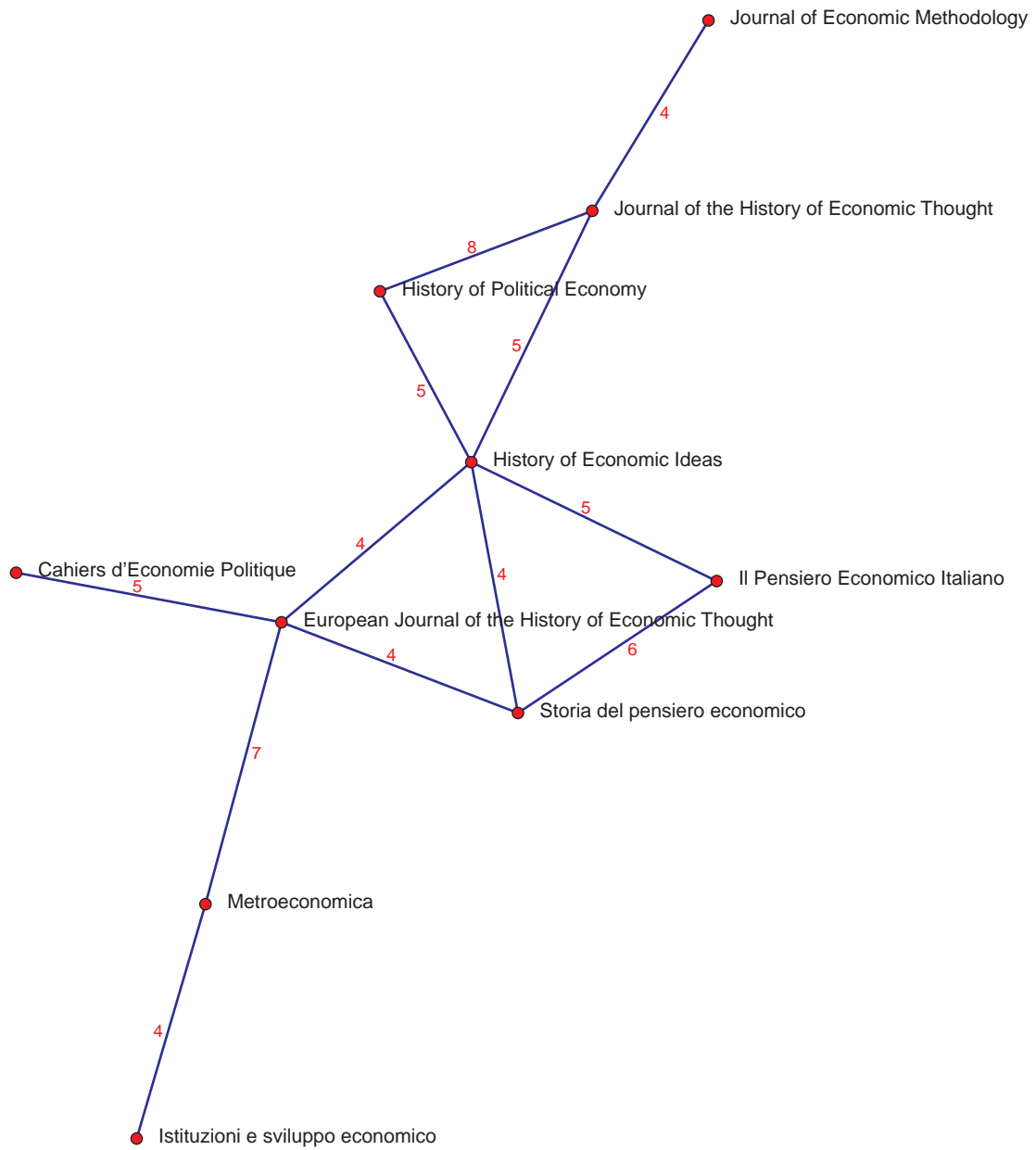


Figure 6

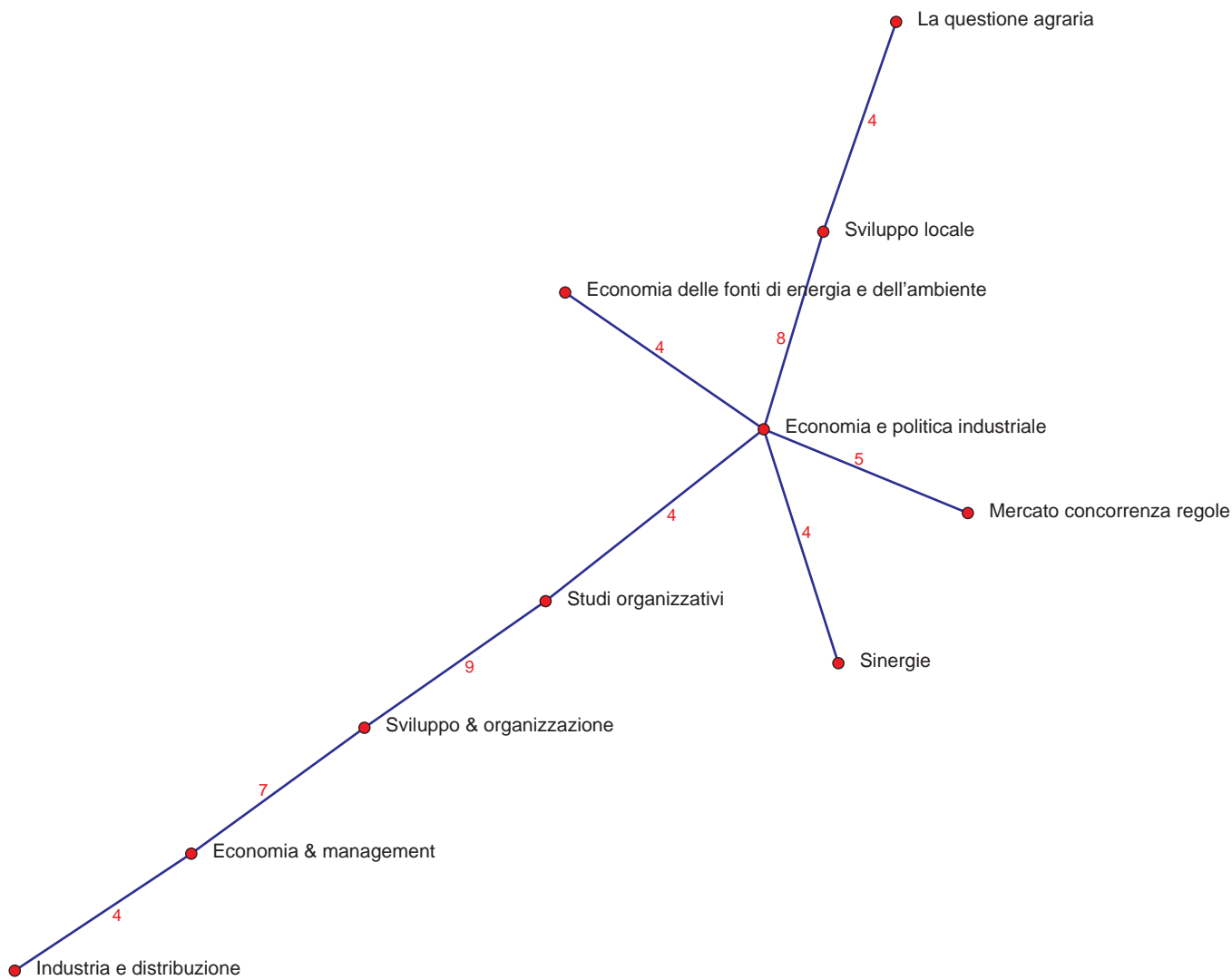


Table A1

LABEL	Journal	ECONLIT	Degree	Normalized degree	Closeness centrality	Rank degree	Rank in worldwide network (closeness centrality)	Rank in worldwide network (Italian journals only)	Rank in Italian network (closeness centrality)
63	Banca impresa società	0	7	0,008567931	0,281675049	495	532	49	45
64	Banca Nazionale del Lavoro Quarterly Review	1	4	0,004895961	0,270576281	579	599	67	65
65	Bancaria	1	6	0,007343941	0,232736145	520	689	55	45
66	Banche e banchieri	0	10	0,012239902	0,261571537	430	628	45	31
73	Bollettino economico	0	0	0	0	732	732	88	84
80	Budget	0	5	0,006119951	0,228257317	545	698	60	52
114	Concorrenza e mercato	0	1	0,00122399	0,174661155	685	729	81	79
117	Contabilità finanza e controllo	0	3	0,003671971	0,222876465	610	703	72	65
120	Controllo di gestione	0	5	0,006119951	0,252656628	545	652	60	61
121	Cooperazione di credito	0	16	0,019583843	0,284624526	317	519	28	14
122	Credito cooperativo	0	3	0,003671971	0,2170191	610	711	72	65
123	Credito popolare	0	2	0,00244798	0,227858684	646	699	77	73
129	Decisions in Economics and Finance	1	13	0,018359853	0,01980198	331	328	30	73
137	Dirigenza bancaria	0	6	0,007343941	0,258155684	520	639	55	45
148	Economia & management	0	23	0,028151775	0,307281872	228	400	13	3
150	Economia agro-alimentare	0	1	0,00122399	0,218692395	685	708	81	84
153	Economia della cultura	0	3	0,003671971	0,26801948	610	609	72	73
154	Economia delle fonti di energia e dell'ambiente	0	18	0,022031824	0,307861922	295	398	21	14
155	Economia e ambiente	0	11	0,013463892	0,300349638	408	437	40	31
156	Economia e diritto del terziario	0	5	0,006119951	0,247199474	545	664	60	52
157	Economia e Lavoro	1	11	0,013463892	0,287383001	408	507	40	23
158	Economia e politica industriale	0	24	0,029375765	0,336788546	217	230	12	10
159	Economia e società	0	3	0,003671971	0,258770096	610	638	72	65
161	Economia Internazionale/International Economics	1	4	0,004895961	0,244695954	579	669	67	64
163	Economia Politica	1	20	0,024479804	0,333517082	262	248	16	23
164	Economia pubblica	0	7	0,008567931	0,279622552	495	545	49	45
165	Economia società e istituzioni	0	13	0,015911873	0,317295434	368	340	36	35
181	Economic Notes	1	52	0,063647491	0,374919203	41	51	2	35
211	EM: Economia montana	0	0	0	0	732	732	88	84
235	European Journal of Comparative Economics	0	12	0,014687882	0,318224104	392	335	38	84
282	Giornale degli Economisti e Annali di Economia	1	15	0,018359853	0,31348362	331	368	30	40
294	History of Economic Ideas	1	39	0,047735618	0,353966041	101	133	4	23
303	Il Pensiero Economico Italiano	1	11	0,013463892	0,284624526	408	519	40	35
304	Il Politico	1	1	0,00122399	0,24757473	685	663	81	84
305	Il Risparmio	1	5	0,006119951	0,261886557	545	625	60	52
307	Impresa sociale	0	8	0,009791922	0,288399387	473	504	48	45
308	Imprese e storia	0	7	0,008567931	0,294386017	495	466	49	79
317	Industria e distribuzione	0	13	0,015911873	0,276775313	368	569	36	21
322	Industrie alimentari	0	0	0	0	732	732	88	84
364	Istituzioni e sviluppo economico	0	25	0,030599755	0,331820658	209	260	11	14
440	Journal of European Economic History	1	18	0,022031824	0,295988844	295	457	21	14
499	Journal of Public Finance and Public Choice/Economia Delle Scelte Pubbliche	1	7	0,008567931	0,293459025	495	471	49	52
532	La questione agraria	0	18	0,022031824	0,298699365	295	444	21	21
533	La rivista della cooperazione	0	4	0,004895961	0,275257136	579	578	67	65
535	Labour	1	27	0,033047736	0,349415861	187	166	9	23
540	Lavoro e relazioni industriali	0	11	0,013463892	0,292406729	408	483	40	35
542	Le società	0	2	0,00244798	0,197087436	646	725	77	73
545	L'Impresa	1	0	0	0	732	732	88	84
546	L'Industria, Nuova Serie	1	6	0,007343941	0,266813666	520	613	55	45
560	Mercato concorrenza regole	0	33	0,040391677	0,342805787	135	198	7	1
562	Metroeconomica	1	34	0,041615667	0,358045781	130	116	6	52
563	Metron	0	6	0,007343941	0,268681801	520	607	55	65
566	Micro & macro marketing	0	5	0,006119951	0,236533507	545	682	60	52
569	MK	0	5	0,006119951	0,236791076	545	681	60	52
572	Mondo bancario	0	15	0,018359853	0,305697944	331	402	30	31
574	Moneta e Credito	1	29	0,035495716	0,334714938	162	238	8	2
592	Nuova economia e storia	0	17	0,020807834	0,314238638	308	359	26	14
599	Osservatorio ISFOL	0	0	0	0	732	732	88	84
610	Parma economica	0	0	0	0	732	732	88	84
611	Pavia economica	0	0	0	0	732	732	88	84
612	Pensiero economico moderno	0	18	0,022031824	0,331315091	295	262	21	23
616	Piccola impresa	0	15	0,018359853	0,303846955	331	417	30	31
617	PMI	0	2	0,00244798	0,197087436	646	725	77	73
622	Politica Economica	1	20	0,024479804	0,314845277	262	355	16	10
635	Problemi di gestione	0	3	0,003671971	0,2344087	610	684	72	65
636	Problemi di gestione dell'impresa	0	9	0,011015912	0,289808713	453	492	46	43
638	Psicologia e lavoro	0	0	0	0	732	732	88	84
645	Quaderni di economia del lavoro	0	0	0	0	732	732	88	84
646	Quaderni storici	1	1	0,00122399	0,179515524	685	728	81	84
653	Rassegna Economica	1	4	0,004895961	0,236190953	579	683	67	61
660	Research in Economics	1	41	0,050183599	0,366494052	85	78	3	40
673	Review of Economic Conditions in Italy	1	18	0,022031824	0,302718985	295	423	21	12
717	RISEC: International Review of Economics and Business	1	54	0,066095471	0,381719961	38	32	1	5

719 Risk Italia	0	0	0	0	732	732	88	84
720 Rivista AIAF	0	1	0,00122399	0,216946928	685	712	81	79
721 Rivista bancaria. Minerva bancaria 1945	0	17	0,020807834	0,270352015	308	600	26	12
722 Rivista della scuola superiore dell'economia e delle finanze	0	0	0	0	732	732	88	84
723 Rivista di diritto finanziario e scienza delle finanze	0	15	0,018359853	0,285246792	331	517	30	20
724 Rivista di economia agraria	0	1	0,00122399	0,226828725	685	700	81	79
725 Rivista di Politica Economica	1	35	0,042839657	0,363431428	123	94	5	5
726 Rivista di statistica ufficiale	0	1	0,00122399	0,217525646	685	710	81	79
727 Rivista di Storia Economica, N.S.	1	12	0,014687882	0,31064734	392	383	38	40
728 Rivista economica del Mezzogiorno	0	20	0,024479804	0,286373755	262	512	16	5
729 Rivista Internazionale di Scienze Sociali	1	9	0,011015912	0,308298399	453	394	46	45
730 Rivista Italiana degli Economisti	1	16	0,019583843	0,330978901	317	265	28	23
731 Rivista italiana di ragioneria e di economia aziendale	0	7	0,008567931	0,231744019	495	694	49	43
740 Sinergie	0	19	0,023255814	0,278191647	281	557	19	5
742 Sistemi & impresa	0	0	0	0	732	732	88	84
744 SMA: Statistical methods & applications	0	2	0,00244798	0,199865016	646	724	77	73
759 Statistica	1	7	0,008567931	0,257138121	495	643	49	52
760 Statistica Applicata	1	4	0,004895961	0,213050102	579	716	67	65
763 Stato e mercato	0	19	0,023255814	0,319627346	281	326	19	23
764 Storia del pensiero economico	0	21	0,025703794	0,320569736	248	319	15	14
767 Studi e note di economia	0	0	0	0	732	732	88	84
768 Studi Economici	1	6	0,007343941	0,277010367	520	568	55	61
769 Studi economici e sociali	0	11	0,013463892	0,276189421	408	571	40	23
770 Studi organizzativi	0	14	0,017135863	0,311240178	351	379	35	35
776 Sviluppo & organizzazione	0	23	0,028151775	0,295854609	228	458	13	4
777 Sviluppo economico	0	5	0,006119951	0,274215811	545	585	60	52
778 Sviluppo locale	0	26	0,031823745	0,313936195	198	364	10	5
785 Tendenze nuove	0	0	0	0	732	732	88	84
801 Ventunesimo Secolo Roma	0	0	0	0	732	732	88	84