THE EDITORIAL MARKET FOR ECONOMIC RESEARCH. A STUDY OF THE RELATIONSHIP BETWEEN JOURNALS AND SUBJECT MATTERS[*]

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Title: The Editorial Market of Economics Research. A Study of the Relationship Between Journals and Subject Matters.

ABSTRACT

The aim of this paper is to deepen our knowledge of the editorial market for research in Economics. To that end, we construct a database made-up of 55 highly reputed journals in Economics, covering the period 1992-1997. First, we establish the weight that each JEL Classification Number has in each Journal. Secondly, the Journals are ranked from higher to lower concentration with respect to the subject matters. A cluster analysis is then carried out in order to analyze the behavior of these journals with respect to the JEL Numbers. Finally, we report the share of each JEL Number in the total output of Economics for our entire sample.

JEL Classification Number: A11, A13.

Keywords: Editorial Market; Concentration Index; Journals; JEL Classification Numbers

1. INTRODUCTION

The publication of articles in any field of knowledge, which obviously includes that of Economics, is a dynamic process between two agents who theoretically interact in order to achieve a greater scientific advance. These two agents are, on the one hand, the researchers that are offering the contributions and, on the other, the party demanding the paper, with this latter role being played by academic Journals. Their relationship should be one of collaboration[1] and, as occurs in any decision-taking process, transparency and the absence of information asymmetries are desirable properties in order for the resulting decision to be the correct one.

However, from the point of view of researchers, there is sometime a lack of sufficient elements to indicate the appropriate choice of the editorial channel through which their works could emerge. This gives rise to a significant percentage of rejections, which are not necessarily caused by the deficient content of their articles, but rather by an incorrect selection process of the Journal to which they are submitted.

It is clear that if the working area of a researcher is, for example, Urban Economics, then it is improbable that any resultant paper would be submitted to the Journal of Accounting and Economics. However, the dilemma that arises from having to choose between the clearly more appropriate Journal of Urban Economics, Urban Studies or Regional Science and Urban Economics is not one that can be so easily resolved and can tempt the researcher to take the decision based on the naive criteria of trial and error.

[1] Note, however, that this has not always been the case. In this regard, see the curious article of Gans and Shepherd (1994).

From an editorial point of view, it seems reasonable to assume that all Journals are aware of their field of specialization, as well as their aim and target audience. Having said that, it may also be of interest for both Journals and prospective authors to offer the results of a quantitative analysis of those areas of specialization which most frequently appear in such publications, as well as their weight, and to compare this with other areas. This analysis may be quite informative when seeking to obtain a better definition of the sector of the market to which a given Journal belongs, or simply to determine where it may be in dominant position over possible substitutes. Given that these results cannot be provided by a simple qualitative analysis based on the Aims and Scope Section of the Journals, we argue that a more profound investigation may give rise to useful results.

Against this background, the aim of this paper is to at least partially cover this lack of knowledge on the editorial market by offering information that is simple but, at the same time, potentially useful for a high number of prospective users. More precisely, we set out to determine the subject matters that have been effectively defined by the papers devoted to Economic themes that have been published during the period 1992-1997 in 56 highly-reputed economic Journals[2]. To the best of our acknowledgement, this question has not previously been given the quantitative and systematic treatment that it receives in this paper.

The database employed is ECONLIT and we have adopted the 19 characters corresponding to the 19 thematic areas under the JEL Classification Numbers system. Although a greater degree of disaggregation would be interesting, such an approach would increase the complexity and length beyond reasonable limits. In this regard, it

[2] In reality, we have considered 55 Journals; what has occurred is that, in the American Economic Review we have distinguished the volumes of Papers and Proceedings from the rest.

should be borne in mind that if we had considered all the characters plus one digit, for example, this would have implied the presence of 99 different thematic areas.

In this paper, we have set out to provide the following information. First, we offer the weight, in percentages, that each of the 19 JEL characters has within the 56 Journals that make-up our database. Obviously, one can properly assume that the JEL C, which reflects the contributions in Mathematical and Quantitative Methods, should be predominant in the Journal of Econometrics, and that we could also expect the JEL K (Law and Economics) to be the most referred in the Journal of Law and Economics[3]. However, which of these two Journals, or whichever other specialized Journals, is the most dependent on its specialization area? On the other hand, so far is concerned to the general Journals, if we have a paper which presents contribution in Microeconomics, should this be submitted to the American Economic Review or, by contrast, to its homologous equivalent on the other side of the Atlantic, namely the European Economic Review? This first analysis tries to provide an appropriate response to this kind of question.

Secondly, so far as the subject matter is concerned, we rank the Journals according to their degree of concentration by way of Theil relative redundancy index and the Herfindahl index.

Thirdly, we carry out a cluster analysis that allows us to define those Journal families or clubs that exhibit similarities as regards the subject matters covered. Similarly, we identify which of these thematic areas are more distant with respect to what could be understood as the average distribution of topics in the remaining Journals.

[3] We will verify, although it may seem to be surprising, that even this assertion is not true.

Finally, we present aggregated data (for the whole set of Journals considered as well as for a subset that includes those Journals which can be considered as having a general thematic) on the weight of the different JELs within the total production in Economics for the period under consideration. Here, we should note that the JEL D (Microeconomics) is clearly broader in its scope and that there are more researchers dedicated to this thematic, implying the generation of a higher number of pages than those corresponding, for example, to JEL P (Economic Systems). However, we still think that the reporting of purely numeric data remains of interest in this regard.

The paper is structured as follows. Section 2 is devoted to a detailed explanation of the database and the criteria that have been followed in constructing it. Section 3 reports the results, whilst Section 4 closes with a summary of the most important conclusions.

2. THE DATABASE

As mentioned earlier, the database used is the ECONLIT and the sample covers the period 1992-1997. As some authors have pointed out, (in this regard, see Dusansky and Vernon, 1998), the information contained in the ECONLIT is not easy to handle, with a long and costly refinement and correction process being necessary in order to achieve an operative database for computing purposes.

Thus, bearing in mind the marks used by the ECONLIT to separate the different fields of information, we extracted only the contents that were relevant to the objectives of this study, namely the journal, the first and final pages and the JEL Classification. Computer-based controls were then established in order to detect errors or deficiencies that were corrected by hand. This process has allowed us to determine the thematic of the 17,084 articles that were published in the 56 Journals making-up our sample during the period under consideration.

The JEL Classification divides Economic issues by adopting a branch and sub-branch form. That is to say, a first character (out of a total of 19 different categories, which are reported in Table 1) locates the first main branch; for example JEL D reflects a contribution in Macroeconomics. If a more exact classification of the paper is required, then a digit is added to the character thereby allowing the sub-branch of the particular thematic to be more precisely identified; thus, JEL D1 identifies contributions in Household Behavior and Family Economics. This character plus digit format leads to a total of 99 different sub-areas. This process can be extended by considering a second digit, which again divides these sub-areas into even more specific areas, in such a way that there is a final total of some 638 different JEL Classification Numbers. However, and as we have mentioned earlier, the dictates of complexity and space are such that our study focuses on the Classification only as far as the initial 19 character level, without admitting a higher degree of disaggregation. Against this background, the next problem we have to solve is to answer the question of how the pages of an article are to be distributed when two or more JELs appear. If they all begin with the same character, then the solution is trivial. However, let us imagine that an article reports the following JELs: C31, F15 and F17. In this case, and bearing in mind that the JEL Classification follows a branch pattern, the criteria we have adopted is to assign one half of the pages to C and the other to F. This example is quite illustrative of all the possible cases that may appear.

So far as the selection of the Journals is concerned (in this regard, see Table 2), we have taken into consideration those that appear in the Social Science Citation Index (SSCI). Most of these belong to the SSCI Economics epigraph, although we have also considered journals which have a significant impact factor in closely related areas, such as Business and Finance, Business, Environmental Studies, and Industrial Relations and

Labor. Broadly speaking, the journals chosen are those which have a higher impact factor, although with some exceptions. For example, we have removed those journals that do not have a strictly academic character, such as The Economist. We have also removed those whose articles are, to a greater or lesser extent, published as a result of specific requests or invitations on the part of the editor or editorial board, such as the Journal of Economic Perspectives or the Brookings Papers in Economic Activity. Finally, journals of a highly specialized nature, such as Soviet Economy, have been excluded, even though such a journal is ranked in a leading position on the basis of its impact. In any event, a brief inspection of our database suggests that all the highly reputed journals have been included, and that the range of subjects covered is wide enough to allow us to provide a complete view of the relationship that exists between subject matters and journals. Indeed, these 56 journals[4] include examples that are open to contributions from all fields of Economics, whilst others are more specialized, to a greater or a lesser extent, and as we will see later, in a single field, such as, Finance, Business, Econometrics, Industrial Economics, Labor Economics, Regional and Urban Economics, Health and Education Economics, Economic History, International Economics, Public Economics, Applied Economics, Economic Systems, Mathematical Economics, Agricultural Economics, Microeconomics and Macroeconomics.

3. RESULTS

3.1. Degree of subject specialization of the Journals. Index of concentration.

In this Subsection we show the characteristics of each Journal included in our database as regards the distribution of the different subjects included in it. First, Table 3 offers

[4] The number of Journals being analysed is certainly arbitrary. 56 appears to us to be an adequate number in order to obtain sufficiently representative conclusions of the editorial market for scientific research in economics.

the percentage of the number of pages that each JEL Classification Number represents with respect to the total number of pages published by the corresponding Journal during the period under consideration.

Those Journals with a predetermined subject matter show a significant dependence on the corresponding JEL. Thus, 29 Journals concentrate more than 50% of their production on a single JEL field, with Econometric Theory and Journal of Financial and Quantitative Analysis standing out, in that this percentage exceeds 90%. Other Journals, not so specialized, show more balanced percentages. In this regard, we can cite the Southern Economic Journal, with a maximum value of 15.58%, and the Review of Economics and Statistics, with a maximum percentage slightly higher than 14%. However, the maximum percentage, although of interest, is a mere approximation to the degree of diversity shown by the Journals with respect to their subject matters. In order to quantify such diversity more rigorously, we can use two different concentration indexes, namely the Theil coefficient of relative redundancy and the Herfindahl concentration index.

The Theil coefficient of relative redundancy can be defined as follows:

$$T_j = \frac{\log N - E_j}{\log N} \qquad (1)$$

where N is the number of categories, in our case, 19 distinct subject matters, and E_j is the entropy index of the j-th Journal. This index is defined as follows:

$$E_j = -\sum_{i=A}^{Z} s_{ij} \log s_{ij} (2) \qquad (2)$$

with s_{ij} being the share that the i-th subject matter (i=A, B, …, R, Z) represents in the j-th Journal. This coefficient, commonly referred to as T_j, takes values in the (0,1) interval, with the highest value of this interval implying absolute concentration.

The Herfindahl index for the j-th journal is defined in the following way:

$$H_j = \sum_{i=A}^{Z} s_{ij}^2 \qquad (3)$$

The highest value of this index is 1, which corresponds to the maximum concentration.

Table 4 shows the values of the Theil coefficient for the 56 Journals considered. These Journals are ranked according to this coefficient, in such a way that the higher the position in the ranking, the higher the concentration shown by this Journal. The Herfindahl index was also calculated, but we have chosen not to report it given that it offers no additional information to that already provided by T_j. In order to verify this last assertion, it is suffice to note that the Spearman correlation coefficient between the ranking obtained according to these two concentration indexes is 0.9883

A study of the contents of Table 4 allows us to confirm that the Journals with a general subject matter show a lower concentration index. Thus, the 25 most concentrated Journals are devoted to a specialized subject matter, although we should note that there are significant differences so far as the degrees of dependence are concerned. In this line, the first two Journals in the ranking of Table 4 show a Theil coefficient close to 0.9, whilst the rest exhibit a value of this coefficient hovering around 0.5. On the other hand, the 16 lowest concentrated Journals, from Economics Letters to the Journal of

Economic Literature (with this latter being the most diversified), correspond to those which do not present a pre-determined field of specialization.

Some surprising results are produced for the 15 intermediate Journals, that is to say, those from the Journal of Economic Theory to the Journal of Law and Economics. First, publications such as the Journal of Economic Theory or Econometrica, which are not devoted to any specialized field[5], nevertheless show a concentration index which is significantly higher than that of other Journals, such as the Journal of Public Economics or the Journal of Economic Dynamics and Control, which, a priori, should focus on a more specialized subject matter. On the other hand, Economic Geography and the Journal of Law and Economics exhibit a relatively low concentration level, in spite of their dependence on a particular area. The case of this last Journal is of special interest, in that its highest level of production does not occur, as should be expected, in the K epigraph (Law and Economics), but rather in L (Industrial Organization).

3.2. A Cluster Analysis

The aim of this Section is to carry out a hierarchical cluster analysis that allows us to group the Journals into different sets that exhibit similar common characteristics. This procedure is based on the percentages dedicated by each Journal to the different subject matters, as reflected in Table 3. Thus, the clustering process divides the 56 Journals into as many groups as we want, in such a way that the distances within groups are minimized, whilst those between groups are maximized. Specifically, we have chosen

[5]The classification of a Journal into general or specialised has been carried out by reference to the "Aims and Scope" epigraph of the Journals. Thus, the Journal of Economic Theory "publishes original research on economic theory and emphasizes the theoretical analysis of economic models", which implies that its field of specialisation is open. Similarly, Econometrica "publishes original articles in all branches of economics". In spite of these statements, both Journals concentrate around 75% of their total production is just two different JELs, namely C (Mathematical and Quantitative Methods) and D (Microeconomics).

to use the Euclidean distance, given this is the most standard, although our results are robust to the use of alternative measures.

Table 5 reports the results that we have obtained. The starting point of the procedure is the total set of 56 Journals. In a first iteration, when we ask the cluster analysis to form two different groups, we find that Econometric Theory and the Journal of Econometrics are separated from this initial set; if we impose the existence of 3 different groups, we find that a new group, made-up of Economic History and the Journal of Economic History, is then added to the previous two, and so on. This procedure was repeated up to a total of 20 different groups. The limit was chosen at this figure because a larger number of groups did not improve the results reported in Table 5 and, furthermore, the intuitive interpretation of these results was not easy.

Two main conclusions can be drawn from the analysis of this Table. First, we can coherently define some families of Journals by reference to their field of specialization. Thus, Journals devoted to econometrics are the first to be separated from the main group, followed by economic history Journals, those devoted to finance, etc. In this way, we can characterize the different groups of Table 5 by considering that a JEL Classification number shows a clear predominance in each of these groups. Secondly, the rhythm at which these different groups are formed is interesting in itself, and can provide useful information, given that it is not the same to be separated from the main group in the first iteration as in the eighth one. The set of Journals separated in the first iteration is the most idiosyncratic, in the sense that it exhibits the biggest difference with respect to the main group. On the other hand, the set separated in the eighth iteration has belonged to the average during most iterations and, as a consequence, its differences with respect the mean behavior of the Journals are lower. Thus, the Journals which exhibit a greater difference with respect to the average distribution of subject matters of

the other Journals[6] are, following this order, those which focus on Econometrics (JEL C), Economic History (N), Financial Economics (G), Health Economics (I), Labor Economics (J), Educational Economics (A), Agricultural Economics (Q), International Economics (F), Urban and Regional Economics (R), Accounting (M), Public Economics (H), Microeconomics (D), Macroeconomics (E), and Industrial Organization.

From the 15th iteration onwards, some subdivisions appear in the previously defined groups. Thus, the Microeconomic group is divided into Public Choice and Social Choice and Welfare, on the one hand, and into Econometrica, the Journal of Economic Theory and the Journal of Mathematical Economics, on the other. The main difference between the first sub-group and the second (in this regard, see the Table 3) is the limited importance of JEL C in the former. In the 17th iteration, Economic Geography is separated from the Regional group, which could be explained by taking into account that this Journal is clearly less dependent on JEL R than the other Regional Journals. Finally, in the 19th iteration, the Journal of Law and Economics, a publication with marked peculiarities, is broken off from the Industrial Organization group, and constitutes a new group.

At the end of the 19th iteration, 18 Journals still remain together, forming what we could refer to as the average and showing a highly diversified distribution of subject matters. These Journals, whose behavior we can view as being general in nature, are American Economic Review, American Economic Review Papers and Proceedings, Economic Inquiry, Economic Journal, Economica, Economics Letters, European Economic Review, International Economic Review, Journal of Economic Behavior and

[6] We should note that what is understood as the average distribution changes in each iteration, although these changes may be slight

Organization, Journal of Economic Dynamics and Control, Journal of Economic Literature, Journal of Political Economy, Oxford Economic Papers, Quarterly Journal of Economics, Review of Economics and Statistics, Review of Economic Studies, Scandinavian Journal of Economics, and Southern Economic Journal. These Journals almost exactly coincide with the 18 Journals that show a lower degree of concentration (in this regard, see Table 4), which reinforces the strength of the results presented in this Section, as well as their robustness to the use of alternative statistical methods.

3.3. An aggregated analysis of the research areas in Economics

Up to now, our study has focused on analyzing a set of Journals. However, we lack an aggregated analysis that determines the weight of the different subject matters within Economic Scientific Production. Table 6 provides this information. The second column reports the percentage that each JEL Classification Number represents with respect to the total number of pages of the 56 Journals considered[7]. Therefore, this column reflects those fields to which a higher proportion of total economic research is directed, at least in our sample of Journals. The third column offers identical information, but now using the 18 Journals that the cluster analysis described in the previous Section indicated as being the most diversified or having with a wider spectrum of areas.

We can draw a first conclusion from the analysis of these two columns, one that rests on the significant divergences in the importance of each subject matter. We should consider that a perfectly equitable distribution would assign 5.26% of the total production to each field. Thus, a simple comparison of the real percentages of deviation from this figure would lead us to appreciate the importance of these divergences. The

[7] In order to compare pages with a different number of characters according to the Journal in question, we have homogenised the pages of all the publications to their equivalent in size of one page of the American Economic Review.

four most represented fields involve around 50% of the total production, whilst the weight of those which exhibit a lower representation is negligible. In both columns, and when the information on all 56 Journals is used, the most frequent JEL Classification Number is D (Microeconomics), followed by G (Financial Economics), C (Mathematical and Quantitative Methods) and J (Labor and Demographic Economics). If we consider only the 18 most diversified Journals, the second position is occupied by E (Macroeconomics and Monetary Economics), followed by J (Labor and Demographic Economics) and F (International Economics).

The discrepancies shown by these results allow us to classify the subject matters into two separate groups (specialized and general). We will consider a subject matter as being specialized when it loses participation when passing from the widest ranking (which combines both specialized and general Journals) to the restricted ranking (where only general Journals are considered). If it gains participation, then we will consider this subject matter as being general. According to this criterion, we consider as being specialized the following JEL Classification Numbers: G (Financial Economics), Q (Agricultural and Natural Resource Economics), C (Mathematical and Quantitative Methods), R (Urban, Rural, and Regional Economics), and N (Economic History). By contrast, E (Macroeconomics and Monetary Economics), D (Microeconomics), F (International Economics), O (Economic Development, Technological Change, and Growth) and J (Labor and Demographic Economics) can be considered as being more general. There are 9 subject matter areas that have not been included in any of the above groups, given the similarity of their values in the 2nd and 3rd columns.

4. CONCLUSIONS

This paper has established a relationship between 56 Academic Economic Journals and the subject matter areas as represented by the 19 characters of the JEL Classification Numbers for a sample covering the period 1992-1997. Some concentration indexes have been calculated for each of the 56 Journals. Furthermore, a cluster analysis has also been carried out in order to analyze the behavior of these Journals with respect to the JEL Classification Numbers. Three main conclusions emerge from this study.

First, there are significant differences with respect to the weight that each JEL shows within total Economic Production. Whilst some subject matters are quite well represented, others have an almost negligible participation. This information may help the individual researcher to better appreciate the degree of editorial acceptance shown to his/her field of specialization.

Secondly, there is also a significant difference with respect to the degree of dependence or concentration exhibited by the Journals as regards the subject matters of the papers that are published in them. Thus, the most concentrated Journals are Econometric Theory, the Journal of Financial and Quantitative Analysis and Social Choice and Welfare, which exhibit a value of the Theil redundancy relative index greater than 0.8. By contrast, the Journals with a lower level of concentration are the Journal of Economic Literature, American Economic Review Papers and Proceedings and Southern Economic Journal, with all of these having a Theil index lower than 0.15.

Finally, a cluster analysis has allowed us to define families or clubs of Journals that present common characteristics with respect to their distribution of subject matters.

Here, we have ranked these families in accordance with their distance to the average distribution of the other Journals.

5. REFERENCES

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Table 1. The JEL Classification

A	*General Economics and Teaching*
B	*Methodology and History of Economic Thought*
C	*Mathematical and Quantitative Methods*
D	*Microeconomics*
E	*Macroeconomics and Monetary Economics*
F	*International Economics*
G	*Financial Economics*
H	*Public Economics*
I	*Health, Education and Welfare*
J	*Labor and Demographic Economics*
K	*Law and Economics*
L	*Industrial Organization*
M	*Business Administration and Business Economics, Marketing and Accounting*
N	*Economic History*
O	*Economic Development, Technological Change, and Growth*
P	*Economic Systems*
Q	*Agricultural and natural Resource Economics*
R	*Urban, Rural and Regional Economics.*
Z	*Other Special Topics*

Source: Classification System for Journal Articles, Journal of Economic Literature.

Table 2. Journals included in the Database

American Economic Review

American Economic Review -Papers and Proceedings

American Journal of Agricultural Economics

Econometric Theory

Econometrica

Economic Geography

Economic History Review

Economic Inquiry

Economic Journal

Economica

Economics Letters

European Economic Review

Industrial and Labor Relations Review

International Economic Review

International Journal of Industrial Organization

Journal of Accounting and Economics

Journal of Business

Journal of Business and Economic Statistics

Journal of Comparative Economics

Journal of Econometrics

Journal of Economic Behavior and Organization

Journal of Economic Dynamics and Control

Journal of Economic Education

Journal of Economic History

Journal of Economic Literature

Journal of Economic Theory

Journal of Environmental Economics and Management

Journal of Finance

Journal of Financial and Quantitative Analysis

Journal of Financial Economics

Journal of Health Economics

Journal of Human Resources

Journal of Industrial Economics

Journal of International Economics

Journal of Labor Economics

Journal of Law and Economics

Journal of Mathematical Economics

Journal of Money, Credit, and Banking

Journal of Monetary Economics

Journal of Political Economy

Journal of Public Economics

Journal of Regional Science

Journal of Urban Economics

Land Economics

National Tax Journal

Oxford Bulletin of Economics and Statistics

Oxford Economic Papers

Public Choice

Quarterly Journal of Economics

Rand Journal of Economics

Regional Science and Urban Economics

Review of Economic Studies

Review of Economics and Statistics

Scandinavian Journal of Economics

Social Choice and Welfare

Southern Economic Journal

Table 3. Percentage distribution of the subject matters by Journal

Journals	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	Z
American Economic Review	0.61	0.35	4.08	19.45	15.29	9.47	7.48	3.40	2.89	12.17	0.93	7.52	0.87	2.58	6.74	0.91	3.43	1.62	0.19
A. E. R. (Papers and Proceedings)	7.36	2.28	1.25	10.73	7.39	12.34	2.03	7.22	8.45	15.95	1.21	3.68	0.65	2.02	9.22	4.53	2.09	1.59	0.00
American Journal of Agricultural Economics	2.97	0.64	3.27	9.19	0.00	2.60	3.12	0.57	1.44	2.60	0.00	4.28	0.48	0.10	3.18	1.03	63.24	1.28	0.00
Econometric Theory	0.00	1.98	93.30	2.49	0.99	0.00	1.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Econometrica	0.00	0.39	44.46	32.42	2.96	0.66	4.12	0.98	1.11	4.28	0.00	4.53	0.40	0.00	2.40	0.19	0.78	0.30	0.00
Economic Geography	0.00	0.42	0.00	1.29	0.00	10.16	3.25	2.91	2.00	5.32	0.00	11.98	2.62	1.76	12.66	1.07	13.83	30.75	0.00
Economic Inquiry	3.41	2.51	1.26	17.11	16.86	2.80	4.27	4.01	3.83	13.65	4.38	12.42	0.47	3.47	2.64	0.86	3.66	2.21	0.18
Economic Journal	1.09	5.22	5.68	15.11	16.09	11.01	6.92	3.04	2.64	12.39	0.40	6.22	0.61	0.20	7.79	1.54	2.42	1.64	0.00
Economica	0.00	0.30	0.78	16.43	12.00	8.74	6.17	2.92	2.70	23.97	0.96	7.22	0.34	1.87	7.29	2.50	3.55	2.26	0.00
Economics Letters	0.00	0.00	25.12	21.50	9.36	8.06	8.13	3.44	1.36	8.31	0.36	5.60	0.25	0.37	5.16	0.07	1.79	1.13	0.00
European Economic Review	0.22	0.50	1.57	12.75	21.52	14.98	10.64	4.97	0.74	9.94	0.54	7.57	0.85	0.74	7.28	2.53	1.15	1.20	0.31
European Historical Review	0.46	0.77	2.81	0.43	1.35	0.69	0.62	0.00	0.93	1.85	0.21	1.53	0.92	83.98	1.77	0.26	0.78	0.62	0.00
Industrial and Labor Relations Review	0.21	0.00	0.00	0.85	0.19	0.96	1.89	0.00	3.55	83.15	0.96	5.78	0.67	0.00	0.42	0.69	0.00	0.68	0.00
International Economic Review	0.04	0.00	9.79	23.14	9.76	17.63	4.49	3.33	0.79	6.78	0.12	10.22	0.22	0.28	8.99	0.42	2.69	1.30	0.00
International Journal of Industrial Organizat.	0.00	0.00	1.39	12.04	0.58	3.33	2.46	0.41	0.00	1.63	0.26	53.94	3.69	0.54	16.73	0.15	0.92	1.93	0.00
Journal of Accounting and Economics	0.12	0.00	0.20	3.50	0.00	0.22	28.16	1.47	0.65	4.60	1.37	2.76	53.30	0.00	3.43	0.22	0.00	0.00	0.00
Journal of Business	0.49	0.00	2.07	5.32	5.86	2.24	64.03	0.91	0.49	3.16	0.00	7.63	6.79	1.03	0.00	0.00	0.00	0.00	0.00
Journal of Business and Economic Statistics	1.88	0.15	43.06	7.21	13.66	3.51	10.96	0.81	1.96	5.78	0.11	3.77	2.78	0.00	0.77	0.00	2.26	1.33	0.00
Journal of Comparative Economics	0.30	0.11	0.34	11.12	6.76	3.41	3.72	0.78	0.27	10.09	0.00	10.49	0.59	0.46	8.12	40.02	2.06	1.02	0.35
Journal of Econometrics	0.00	0.67	76.46	3.93	4.38	1.29	3.03	0.26	1.60	4.14	0.00	1.83	0.11	0.00	1.20	0.00	0.80	0.31	0.00
J. Economic Behavior and Organization	1.85	0.66	10.42	36.63	7.81	0.74	5.05	2.19	1.71	5.52	1.35	13.70	1.93	1.04	5.27	0.78	2.78	0.14	0.45
Journal of Economic Dynamics and Control	0.19	0.15	18.31	18.35	25.76	3.95	14.11	2.68	0.00	1.82	0.22	1.14	0.11	0.36	9.46	0.31	2.16	0.92	0.00
Journal of Economic Education	69.34	0.13	2.10	8.04	3.81	1.74	0.86	0.88	5.75	3.18	0.15	1.29	0.00	0.91	0.45	0.00	1.21	0.18	0.00
Journal of Economic History	0.05	0.26	0.00	1.17	3.75	0.68	2.70	1.48	0.84	6.04	0.46	2.52	0.42	75.06	2.41	0.24	1.25	0.67	0.00
Journal of Economic Literature	9.83	6.21	4.14	10.57	12.56	6.08	2.65	3.25	4.95	16.34	0.38	3.12	0.66	1.97	7.01	4.05	4.50	0.94	0.81
Journal of Economic Theory	0.00	0.32	24.17	49.66	6.34	0.98	6.90	2.47	0.06	1.06	0.00	2.65	0.26	0.00	4.61	0.00	0.21	0.29	0.00
J. Environmental Economics and Management	0.00	0.00	0.89	6.02	0.47	1.16	0.19	3.85	0.57	0.72	0.57	3.72	0.09	0.00	2.71	0.00	76.85	2.19	0.00
Journal of Finance	0.94	0.11	0.07	0.88	2.92	1.75	87.44	1.17	0.08	0.00	0.18	2.18	1.14	0.19	0.44	0.00	0.38	0.12	0.00
Journal of Financial and Quantitative Analysis	0.00	0.00	0.00	1.11	2.12	0.87	92.67	0.28	0.00	0.00	0.00	0.99	1.50	0.00	0.47	0.00	0.00	0.00	0.00
Journal of Financial Economics	0.95	0.00	1.80	0.99	2.97	1.39	81.52	0.70	0.00	0.00	0.44	3.72	4.18	0.07	0.82	0.43	0.00	0.00	0.00
Journal of Health Economics	0.03	0.06	0.27	3.26	0.00	0.00	1.91	2.92	77.28	9.12	0.51	3.30	0.23	0.00	1.09	0.00	0.00	0.00	0.00
Journal of Human Resources	0.00	0.00	1.17	4.12	0.00	0.11	0.00	1.18	22.68	64.69	0.91	1.03	0.59	0.00	2.83	0.25	0.00	0.43	0.00
Journal of Industrial Economics	0.00	0.00	0.00	8.46	0.44	3.26	9.28	0.64	0.58	0.78	0.47	62.23	2.67	0.42	8.08	0.00	1.12	1.59	0.00

Journal	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	Z
Journal of International Economics	0.00	0.00	0.17	2.64	6.65	69.23	3.55	1.05	0.14	1.63	0.00	5.08	0.00	0.46	8.08	0.21	0.39	0.72	0.00
Journal of Labor Economics	0.00	0.41	0.00	2.68	1.51	0.63	0.14	3.36	4.22	79.36	0.00	3.25	0.75	0.12	2.79	0.00	0.25	0.17	0.36
Journal of Law and Economics	1.97	0.19	0.00	9.86	0.19	0.92	13.80	3.71	5.94	3.68	20.15	28.59	0.92	3.52	1.01	0.21	4.59	0.73	0.00
Journal of Mathematical Economics	0.00	0.00	31.28	58.57	2.18	0.00	4.13	0.80	0.00	0.00	0.00	0.13	0.00	0.00	2.91	0.00	0.00	0.00	0.00
Journal of Monetary Economics	0.00	0.90	0.93	3.60	55.28	8.37	11.14	2.31	0.18	0.94	0.00	1.57	0.23	2.20	10.69	0.00	0.61	1.05	0.00
Journal of Money Credit and Banking	0.00	0.35	0.09	3.47	54.23	6.28	25.78	1.18	0.12	0.21	0.00	0.83	0.00	3.48	3.28	0.24	0.46	0.00	0.00
Journal of Political Economy	0.85	2.17	1.55	23.84	9.58	4.39	9.15	3.80	4.10	13.50	1.90	6.29	3.80	2.98	5.34	0.85	3.92	1.98	0.00
Journal of Public Economics	0.21	0.00	0.18	16.98	3.98	3.74	2.32	40.07	6.74	6.81	0.85	5.71	0.59	0.00	3.05	0.65	5.76	2.35	0.00
Journal of Regional Science	0.14	0.14	4.11	2.63	0.15	0.98	1.16	2.25	1.94	1.77	0.00	8.09	0.00	0.00	1.49	0.00	3.97	71.18	0.00
Journal of Urban Economics	0.00	0.00	0.00	3.15	0.00	0.60	3.36	8.47	1.66	3.95	0.18	2.02	0.00	0.92	0.26	0.17	1.23	74.01	0.00
Land Economics	0.52	0.34	1.58	3.62	0.00	0.44	0.34	4.13	0.22	0.68	0.45	8.59	0.00	0.00	1.24	0.28	66.13	11.45	0.00
National Tax Journal	0.00	0.23	0.13	3.15	2.52	1.05	2.71	67.73	9.67	3.14	2.35	1.67	0.00	0.00	0.90	0.20	1.50	3.06	0.00
Oxford Bulletin of Economics and Statistics	0.00	0.00	23.83	3.55	15.14	5.73	4.77	0.88	2.71	27.94	0.00	5.55	0.76	0.00	4.77	0.00	2.55	1.82	0.00
Oxford Economic Papers	0.38	0.18	1.83	8.08	15.45	12.21	7.63	3.18	0.57	23.47	0.00	5.56	0.53	0.77	8.91	2.05	8.07	1.13	0.00
Public Choice	0.72	0.17	1.12	58.72	4.24	3.12	1.03	11.43	2.97	1.99	2.60	4.36	0.00	0.88	2.53	0.85	2.02	1.09	0.14
Quarterly Journal of Economics	0.00	0.00	2.92	18.32	11.56	3.50	12.71	1.67	4.32	19.46	1.81	7.15	1.27	1.17	9.55	0.64	0.95	2.99	0.00
Rand Journal of Economics	0.00	0.09	1.29	22.31	0.43	0.00	6.38	2.93	4.48	1.38	3.79	39.55	2.79	0.46	7.99	0.12	4.60	1.17	0.26
Regional Science and Urban Economics	0.34	0.00	3.26	7.39	1.12	3.70	4.13	12.11	0.00	2.00	0.30	5.43	0.00	0.00	2.03	0.18	1.76	56.24	0.00
Review of Economic Studies	0.00	0.00	16.72	28.02	14.73	4.43	9.23	1.35	1.25	8.33	0.00	7.97	1.00	0.00	5.05	0.96	0.97	0.00	0.00
Review of Economics and Statistics	0.00	0.00	10.57	10.27	12.14	7.64	6.85	3.74	7.06	14.14	0.90	12.24	1.00	0.60	6.14	0.47	3.89	2.35	0.00
Scandinavian Journal of Economics	0.58	3.89	0.91	11.36	18.65	12.95	6.75	9.43	1.87	13.90	0.00	2.93	0.00	0.00	10.93	0.83	4.36	0.66	0.00
Social Choice and Welfare	0.00	0.42	5.10	88.60	0.00	0.00	0.36	3.95	0.52	0.00	0.00	0.18	0.00	0.00	0.36	0.16	0.36	0.00	0.00
Southern Economic Journal	1.85	1.13	1.33	12.26	14.17	8.71	5.63	6.94	4.76	12.34	0.85	15.58	0.68	0.73	5.36	0.84	3.57	2.88	0.38

Table 4. Degree of concentration of the Journals

Journal	Theil index
Econometric Theory	0.886
Journal of Financial and Quantitative Analysis	0.866
Social Choice and Welfare	0.824
Journal of Finance	0.776
Industrial and Labor Relations Review	0.731
European Historical Review	0.711
Journal of Financial Economics	0.703
Journal of Health Economics	0.683
Journal of Labor Economics	0.675
Journal of Environmental Economics and Management	0.649
Journal of Mathematical Economics	0.646
Journal of Econometrics	0.637
Journal of Urban Economics	0.628
Journal of Human Resources	0.619
Journal of Economic History	0.611
Journal of Regional Science	0.585
Journal of International Economics	0.581
Land Economics	0.565
Journal of Economic Education	0.560
National Tax Journal	0.542
Journal of Accounting and Economics	0.536
Journal of Money Credit and Banking	0.532
Journal of Business	0.524
Journal of Industrial Economics	0.516
American Journal of Agricultural Economics	0.481
Journal of Economic Theory	0.476
International Journal of Industrial Organization	0.469
Econometrica	0.468
Journal of Monetary Economics	0.454
Regional Science and Urban Economics	0.449
Public Choice	0.432
Rand Journal of Economics	0.344
Journal of Business and Economic Statistics	0.334
Journal of Comparative Economics	0.320
Journal of Public Economics	0.314
Journal of Economic Dynamics and Control	0.312
Oxford Bulletin of Economics and Statistics	0.300
Review of Economic Studies	0.286
Economic Geography	0.278
Journal of Law and Economics	0.275
Economics Letters	0.258
Journal of Economic Behavior and Organization	0.256
International Economic Review	0.239
Oxford Economic Papers	0.217
Scandinavian Journal of Economics	0.208
Quarterly Journal of Economics	0.205
European Economic Review	0.204
Economica	0.202
American Economic Review	0.161
Review of Economics and Statistics	0.157
Economic Journal	0.153
Journal of Political Economy	0.145
Economic Inquiry	0.145
Southern Economic Journal	0.145
American Economic Review (Papers and Proceedings)	0.121
Journal of Economic Literature	0.106

Table 5. Results of the Cluster Analysis

Step	Journals that are separated from the average distribution
1	Econometric Theory, The Journal of Econometrics
2	Economic History Review, Journal of Economic History
3	Journal of Business, Journal of Finance, Journal of Financial Economics, Journal of Financial and Quantitative Analysis
4	Journal of Health Economics
5	Journal of Human Resources, Journal of Labor Economics, Industrial and Labor Relations Review
6	Journal of Economic Education
7	American Journal of Agricultural Economics, Journal of Environmental Economics and Management, Land Economics
8	Journal of International Economics
9	Economic Geography, Journal of Urban Economics, Regional Science and Urban Economics, Journal of Regional Science
10	Journal of Accounting and Economics
11	Journal of Public Economics, National Tax Journal
12	Econometrica, Journal of Economic Theory, J. of Mathematical Economics, Public Choice, Social Choice and Welfare
13	Journal of Money Credit and Banking, Journal of Monetary Economics
14	International Journal of Industrial Organization, Journal of Industrial Economics, Journal of Law and Economics,
15	Public Choice, Social Choice and Welfare
16	Journal of Comparative Economics
17	Economic Geography
18	Journal of Business and Economic Statistics, Oxford Bulletin of Economics and Statistics
19	Journal of Law and Economics
	American Economic Review, American Economic Review Papers and Proceedings, Economic Inquiry, Economic Journal, Economica, Economics Letters, European Economic Review, International Economic Review, Journal of Economic Behavior and Organization, Journal of Economic Dynamics and Control, Journal of Economic Literature, Journal of Political Economy, Oxford Economic Papers, Quarterly Journal of Economics, Review of Economics and Statistics, Review of Economic Studies, Scandinavian Journal of Economics and Southern Economic Journal

This Table offers the results of the Cluster Analysis. Each row reports the step or iteration number and the Journals that are separated from the average distribution at this stage. The final row includes those Journals that remain together at the final iteration. Therefore, these may be considered as being the less specialized Journals

Table 6. Distribution of the JEL Classification Numbers

	56 Journals	18 less specialized Journals
A	1.21	1.26
B	0.62	1.23
C	10.47	7.37
D	14.68	17.73
E	9.01	14.29
F	5.40	8.35
G	12.20	7.63
H	4.73	3.80
I	3.34	2.88
J	10.03	11.99
K	0.85	0.87
L	7.23	7.77
M	1.46	0.88
N	2.77	1.14
O	4.59	6.96
P	1.08	1.24
Q	6.16	2.94
R	4.08	1.52
Z	0.07	0.13

The values of the second column reflect the distribution of the different JEL Classification Numbers when all the 56 Journals that make-up our database are considered. The third column contains this same distribution, but when only the 18 less specialized Journals are taken into account.