

Mapping of Citation Analysis in Economic Journals

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Abstract – This paper describes about the bibliometric study on citations in Economic Journals. A Total of 6 Volumes of Journals in Economics subject has been taken from 2000 to 2010 for the study. It includes 2326 articles and 82464 citations. The study included in analyzing the Year-Wise and Volume-Wise Distribution of Citations, Number of Citations in Articles, Quantitative Growth Articles by Volume, Cited Documents in the Journals, Authorship Patterns of Citations (Volume-Wise) etc. The result of the study reveals that the general publication of articles in citation of the journals take the predominant representations role.

Keywords: Bibliometric study, Citations , Economic Journals

I. INTRODUCTION

The term bibliometric was initially used by Pritchard (1969) and defined as the application of mathematical and statistical methods to books and other media of communication. Bibliometric studies have done in a variety of subjects. Nicholas and Ritche divided bibliometric studies in to two broad groups; one describing the characteristic features of body of literature (i.e. descriptive studies) and the other examining the relationship formed between components of a literature (i.e. behavioral studies). Behavioral studies are commonly referred to as ‘Citation studies’ which relates what the authors cite. Citation analysis is very useful to the librarians to evaluate library collections and services. It is also a tool to analyze the research activity. Citation analysis is defined as an activity involving analysis of the citations or references, which forms a part of the primary scientific communication. When the scientific paper makes mention of or makes reference to another scientific paper, the latter has been cited by the former as a source of information as the support for the points of view as authority for the statements of facts etc. The Citations also reveal the nature of literature in a subject.

There are mainly three application areas in citation analysis: They are

- a) Quantitative and qualitative evaluation of Scientists, publications and scientific institutions;
- b) Modeling of the historical development of science and technology;
- c) Information search and retrieval.

Thus citations are used to access the value, quality, and impact penetration originality, visibility of individual and corporate performance within and across disciplines.

II. OBJECTIVES OF THE STUDY

The following objectives are formed for this study.

- a) To find out the growth pattern of citation.
- b) To reveal the citation analysis in journals.
- c) To find out the form of documents most cited.

III. SOURCE JOURNAL

The researcher has taken six economic journals which carry 2326 articles for a period of ten years from 2001 to 2010. The following journals were taken for analysis and the abbreviations are used wherever necessary.

- a) Bulletin of Economic Research (BER).
- b) *Economica* (ECO).
- c) *Journal of Economics* (JOE).
- d) *Journal of Finance* (JOF).
- e) *Journal of Economic Literature* (JOEL).
- f) *Quarterly journal of Economics* (QJE).

IV. METHODOLOGY

The analysis is based on only research articles published in these journals during 2001 to 2010 excluding editorials, personal notes tributes etc. The data were downloaded using EBSCO database. The percentage, cumulative index were used to calculate the data for analysis.

V. ANALYSIS OF THE STUDY

TABLE I YEAR-WISE DISTRIBUTION OF ARTICLES (2001-2010)

Year	BER		ECO		JOE		JOF		JOEL		QJE	
	Article	%	Article	%	Article	%	Article	%	Article	%	Article	%
2001	24	10.71	28	8.02	25	7.48	80	9.43	20	12.5	42	10.21
2002	21	9.37	32	9.16	40	11.97	90	10.61	16	10.00	40	9.73
2003	26	11.68	33	9.45	32	9.58	93	10.96	19	11.87	40	9.73
2004	26	11.68	35	10.02	31	9.28	90	10.61	18	11.25	40	9.73
2005	22	9.82	36	10.31	35	10.47	86	10.14	13	8.12	40	9.73
2006	19	8.48	32	9.16	36	10.77	87	10.25	9	5.62	38	9.24
2007	19	8.48	40	11.46	35	10.47	82	9.66	15	9.37	44	10.70
2008	20	8.92	41	11.74	34	10.17	80	9.43	16	10.00	41	9.97
2009	24	10.71	45	12.89	42	12.57	78	9.19	17	10.62	43	10.46
2010	23	10.26	27	7.73	24	7.18	82	9.66	17	10.62	43	10.46
Total	224	100	349	100	334	100	848	100	160	100	411	100

Table I shows the year-wise distribution of articles of the six economic journals from 2001-2010 and percentage of articles. The distribution of articles and percentages for BER, ECO, JOE, JOF, JOEL and QJE for a period of 10 years. In all the six journals there is no constant increase in the number of articles. Out of 224 articles in BER, the maximum number of articles was in 2003 and 2004 showing 11.68%. In Economica (ECO) the maximum number of publications is in the year 2009, which has 12.89%. The JOE shows a maximum number of publications in the year 2009 which has 12.57%. There is an increased publication in JOF in the year 2002 and 2004 which has 10.61%. In JOEL, the maximum

numbers of articles are in the year 2001 which has 12.5% and in QJE it is in the year 2007 maximum number articles are published and has 10.7 %.

The six journals selected for study contains 2326 articles and 82464 citations .The average rate of citation per article was (C/A) 35.45. But the rate of citation varied from 21.14 to 35.45. The names of individual journals along with the total articles published, total citations appended in the articles and the rate of citation per article are provided in the Table II . Among the journals, the Journal of Finance contains highest number of citation per article (93.16) and the lowest rate was observed in Bulletin of Economic Research (C/A) (21.14).

TABLE II CITATION ANALYSES

S.No.	Journals	Total No. of Articles	Total No. of Citations	C/A
1	Economica	349	10067	28.85
2	Bulletin of Economic Research	224	4735	21.14
3	Journal of Economics	334	7488	22.42
4	Journal of finance	848	29105	34.32
5	Journal of Economic Literature	160	14906	93.16
6	Quarterly Journal of Economics	411	16163	39.33
	Total	2326	82464	100

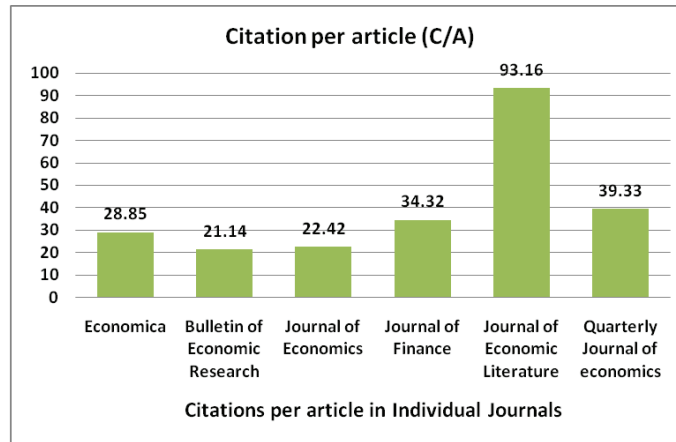


Fig.1 Citations per article in individual journals

TABLE III PERCENTAGE OF CITATIONS PER ARTICLE

S.No.	Journals	Total No. of Citations	Total No. of Citations	Cumulative Percentage
1	Economica	29105	35.3	35.3
2	Bulletin of Economic Research	16163	19.60	54.9
3	Journal of Economics	14906	18.07	72.07
4	Journal of finance	10067	12.21	85.18
5	Journal of Economic Literature	7488	9.08	94.26
6	Quarterly Journal of Economics	4735	5.74	100

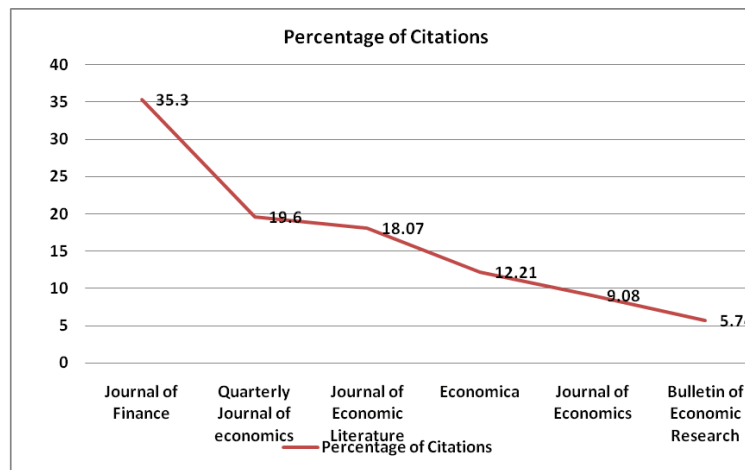


Fig.2 Percentage of citations

The above graphical representation shows clearly the percentage of citations per article. Among the six Economic journals, Journal of Finance contributed maximum number of citations followed by Quarterly journal of Economics. A detailed schedule of citations are given in the Table III and from the graphical representation also it is clear that the highest percentage of citations was in Journal of Finance.

The Table IV describes about the year-wise articles in the journals in citations. The Journal of Economic Literature is the highest among all the other journals which has articles in the citation in all the years. All other journals are followed after this journal. The lowest articles included in the Journal of Economics.

TABLE IV YEAR-WISE DISTRIBUTION OF ARTICLES IN CITAT

Journals	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total Art.
BOE	24	21	26	26	22	19	19	20	24	23	224
ECO	28	32	33	35	36	32	40	41	45	27	349
JOE	25	40	32	31	35	36	35	34	42	24	334
JOEL	80	90	93	90	86	87	82	80	78	82	848
JOE	20	16	19	18	13	9	15	16	17	17	160
QJE	42	40	40	40	40	38	44	41	43	43	411

TABLE V FORMS OF DOCUMENTS

Journals	Articles	Books	Bullitn	Conf.	Report	WK	Unpub.	Worg.	Thesis	Web.
BOE	3891	489	67	21	30	28	1	168	5	35
ECO	7604	1945	6	42	37	0	29	320	27	57
JOE	23600	2630	21	73	46	0	190	2475	24	46
JOEL	11195	2296	17	187	48	27	257	725	11	143
JOE	6013	1303	0	7	9	0	52	104	0	0
QJE	13563	1755	5	46	3	9	149	581	15	37

The Table V shows the various forms of documents cited by the authors. Journals were most cited form of document followed by books. The other forms of document cited were bulletin, Conference Proceedings, workshops, reports, Working Papers, Unpublished papers, Ph.D thesis and web sites. The Journal of finance cited more journals followed by quarterly Journal of economics.

V. CONCLUSION

The analysis of six economic journals gives scope for further research like authorship pattern, doubling time and growth pattern. The study gives a comparative growth of articles published and utilization of cited documents in the six economic journals.

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