

A Citation Analysis of ‘Economic Theory’ Journal

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ABSTRACT

In this paper I have done the citation analysis of the journal named “Economic Theory”, for the published issues of the five years from 2014 to 2018. I have found the ranked list of journals used in the Economic subject. I also calculated the degree of collaboration of the cited authors. The chronological distribution of the cited materials according to their type is also studied.

Keywords: Citation Analysis, Economic Theory, Bibliometrics

INTRODUCTION

In this paper I have done the citation analysis of the journal entitled “Economic Theory” for the five years, 2014-2018. Economic Theory is a peer-reviewed academic journal that focuses on theoretical economics, particularly social choice, general equilibrium theory, and game theory. The journal is the official journal of the Society for the Advancement of Economic Theory.¹

REVIEW OF LITERATURE:

Mahajan Sangeeta and Patil Daya (2015)², carried out citation study of the issues of the Indian Bar Review (IBR) – a law Journal published during 2006-2010. It emphasizes on the key role played by the Indian Judiciary and its journal in the dissemination of cases and their information in India. A list of thirty one core journals and news papers were identified based on the citation analysis of the journal. Authorship pattern and ranked list besides with document type were studied and investigated. The ratio of single authorship is more compared to others. In the ranking of journals and periodicals, researcher found the dominance of periodicals. Being a law journal cases were highly cited which is more than three times than books, journals, periodicals and other forms of documents.

Nagarkar Shubhada, Veer Chaitanya and Kumbhar Rajendra (2015)³, analyzed research productivity of life sciences faculty members at the Savitribai Phule Pune University (SPPU), Maharashtra, India. The research is conducted with the intention to know the research productivity over 15 years (1999-2013), the citations received, collaborations, and authorship patterns. Web of Science (WoS) database was used for the bibliographic and citation

data. Data were analyzed by using bibliometric techniques and software such as HistCite, Intcoll, and Pajek. Results show that the research productivity of faculty members is increasing, their publications are getting good citations and thereby their journals have better Impact Factor. The faculty members have collaborated with prominent international researchers and have extended interdisciplinary research. The paper is based on empirical data exclusively gathered for this research. Faculty members have published total 690 papers in 362 journals and have received 6210 citations. When cumulated in five years the highest numbers of papers, i.e., 415 were published during 2009-2013 in various interdisciplinary areas. Current Science published in India is the first choice of faculty members. Considering the countries publishing journals which are preferred by the life scientists of SPPU, USA, the Netherlands and UK are predominant. More than 300 papers are published in the field of biology but it is also noticed that half of the papers in the collection are interdisciplinary and biotechnology is the dominant one. The authorship pattern varies from 2 to 53 authors and there are very few papers by a single author. Three and four-author papers have received more citations.

Bemke-Świtilnik Magdalena and Drabek Aneta (2015)⁴, analyzed Polish mining sciences journal (Prace Naukowe GIG. Górnictwo i Środowisko; title in English: Research Reports of the Central Mining Institute. Mining and Environment; acronym in English [RRCMIME]). The analysis is based on data from the following sources: the Web of Science (WoS), Scopus, BazTech (a bibliographic database containing citations from Polish Technical Journals), and Google Scholar (GS). The data from the WoS and Scopus were collected manually as RRCMIME is not indexed in these sources. GS does index BazTech; however, research shows that only 84% of BazTech citations are available through GS. Therefore, this may suggest that the most recommended sources for the bibliometric analyses of domestic journals, which are not indexed in international databases, are national data sources.

Khandare Rahul B. and Sonawane Shashank S. (2014)⁵, have analyzed the citations appended in theses submitted to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. The study analyses 3514 citations appended to 30 theses submitted during 1999-2009 to the university in the discipline of History. The study covers: subject wise & form wise distributions, authorship pattern, ranking of author cited, ranking of journals & books, geographical distribution of book & journals and chronological, language wise distribution of citations etc.

Prithvi Raj KR and Sampath Kumar BT (2012)⁶, reported a qualitative citation analysis of use of URL citations in Indian LIS scholarly communication. A total of 1678 citations from 193 articles published in NACLIN conference proceedings are collected, of which 57.86% of citations are print sources and 42.13% of citations are URL sources. Average URL citations per article ranged from a low of 2.28 in 2001 to a high of 4.7 in 2004. The average number of URL citations per paper is 3.66 across all articles published during 2001-2005. Among the URL citations collected, organizational domains (.org) consisted of larger percentage (29.13%) followed by .edu (20.36%) and .com (16.83%). Among the 707 web sources only 5.23% had complete bibliographic information and 53.32% of them had only URL citations.

Thanuskodi S (2012)⁷ took a sample for this study is 9316 citations that figured in 56 doctoral dissertations accepted by Annamalai University till the end of 2010. These citations pertained to journals, books conference proceedings and theses. Purpose of topic was to identify the forms of documents mostly used. Find out a ranked list of highly cited title of journal and the country of publication of the most cited journals. The researcher found that the study reveals that journal is the most preferred by the researcher in the field of library and information science for

accounting for 63.55% of total citations. The study and authorship pattern reveals that majority of the contribution are from two authors. Researchers of Annamalai University are cited United States and Indian journals mostly.

OBJECTIVES OF THE STUDIES:

The major objectives of the present study are:

1. To find the number of articles and number of citations received during the period under study, 2014-2018, for the 'Economic Theory' Journal
2. To find out the type and distribution of citations (pattern of references) according to their type (forms).
3. To study the authorship pattern of cited authors during the period under study.
4. To find the Chronological Distribution of citations.
5. To find ranking of most cited Journals.

SCOPE & LIMITATIONS:

The scope of our study is to perform citation analysis of the articles published in the "Economic Theory" journal published during the five consecutive years: 2014-2018 only (vol. 55 to vol. 66).

RESEARCH METHODOLOGY:

Citations Analysis is the research method used for this study, which is the branch of Bibliometric method of research. Data was collected systematically through observation of the articles published in the journal under study during the period 2014-2018. Descriptive approach is adopted for this study.

DATA COLLECTION AND ANALYSIS:

The basic data relating to total publications during 2014-2018, was collected from internet through the website <https://link.springer.com/journal/199/volumes-and-issues> .

The downloaded files were in HTML format. The citations were typed in MS Excel application software and then the data is organized, analysed and interpret in the form of tables, graphs and charts.

1. Volume wise Distribution of Total Articles and Total Citations:

Table 1: Volume-wise Distribution of Total Articles and Total Citations

YEAR	Volume	Issues	No. of Articles	Cumulative No. of Articles	No. of citations	Cumulative No. of Citations	% Citations	Cumulative % cit.	Citations Per Article
2014	3	9	73	73	2207	2207	20.15%	20.15%	30.23288
2015	3	9	59	132	2121	4328	19.36%	39.51%	35.94915
2016	2	7	63	195	1872	6200	17.09%	56.60%	29.71429
2017	2	8	69	264	2228	8428	20.34%	76.93%	32.28986
2018	2	8	71	335	2527	10955	23.07%	100.00%	35.59155
TOTAL	12	41	335		10955		100.00%		32.70149

From Table 1 it is cleared that Total 10955 citations were appended to the total 335 articles published in the 'Economic Theory' journal, during years 2014-2018.

Therefore, Average Citation per Article = $10955/335 = 32.70$.

It means that there are about 32 citations per article of Economic Theory during the period under study (2014-2018).

2. Form-wise distribution of Citations:

Table 2: Bibliographic form of citations

Year	Journal	Book	Proceedings	Website	Others	Total Citations	Yearwise Contribution (%)
2014	1634	316	13	39	205	2207	20.15%
2015	1585	238	18	26	254	2121	19.36%
2016	1364	211	31	54	212	1872	17.09%
2017	1568	262	17	103	278	2228	20.34%
2018	1795	354	14	91	273	2527	23.07%
TOTAL	7946	1381	93	313	1222	10955	100.00%
% Doc	72.53%	12.61%	0.85%	2.86%	11.15%	100.00%	

Table 2 shows that, among 10955 citations, Journals got the maximum 7946 citations (72.53%), while the proceedings got least 93 citations (0.85%). This proves that authors of articles in "Economic Theory" journal prefers journals as majority reference material

3. Authorship Pattern for cited authors:

Table 3: Authorship Pattern cited authors

No. of Authors	Total	Contribution (%)
Single	4392	40.09%
Two	4293	39.19%
Three	1479	13.50%
Four	312	2.85%
Five	68	0.62%
Six	59	0.54%
More than 6	352	3.21%
TOTAL	10955	100.00%

From Table 3, it is clear that in total the single authors contribute 4392 citations, while the multiple author citations are 6563. So we can analyse that, the degree of collaboration for the Economic Theory Journal cited authors is, $C = N_m / (N_m + N_s) = 6563 / 10955 = 0.5991$.

(Here, N_m = No. of multiple authored citations, N_s = No. of single authored citations, C = degree of collaboration).

The degree of collaboration is a good number 0.60, which shows that there is a multi-authored trend specially two author (39.19%), followed by three authors (13.50%) and onwards in the citations found in "Economic Theory" Journal, in the period under study. Single authored citations are also good in number (40.09%).

4. Chronological Distribution of citations:

Table 4 shows the Chronological distribution of the cited documents for "Economic Theory" Journal. I divided the citations between groups of 10 years (decade). It is clear that the decade 2001-2010 found the major number of 3727 citations (34.02%) followed by the decade 2011-2018 with 25.29% citations and 1991-2000 with 19.65% citations. It is clear that authors prefer to use recent data/references for their study.

Table 4: Chronological distribution of the cited documents

Publication Years	No. of Citations	% Citations
1911-1920	3	0.03%
1921-1930	22	0.20%
1931-1940	15	0.14%
1941-1950	72	0.66%
1951-1960	214	1.95%
1961-70	284	2.59%
1971-80	557	5.08%
1981-1990	1098	10.02%
1991-2000	2153	19.65%
2001-2010	3727	34.02%
2011-2018	2770	25.29%
undefined	40	0.37%
TOTAL	10955	100.00%

5. Top Rank of cited Journals:

The top ranked journals during year 2014-2018 are I) Economic Theory (with 11.55% citations) got the first rank among all the journals followed by II) J. Econ. Theory (9.87% citations) and III) Econometrica (9.09% Citations). The detailed rank list with the rank number, citations and percentage citations are shown below in Table 5.

Table 5: Rank list of cited journals

Rank	Name of Journal	No. of Citations	% Citations
1	Economic Theory	918	11.55%
2	J. Econ. Theory	784	9.87%

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3	Econometrica	722	9.09%
4	Rev. Econ. Stud.	380	4.78%
5	American Economic Review	332	4.18%
6	J. Polit. Econ.	264	3.32%
7	Games Econ. Behav.	177	2.23%
8	J. Math. Econ.	114	1.43%
9	Quarterly Journal of Economics	96	1.21%
10	Economic Letters	91	1.15%
11	Int. J. Game Theory	81	1.02%
12	Economic Journal	74	0.93%
13	Economic Development Quarterly	72	0.91%
14	J. Environ. Econ. Manag.	67	0.84%
15	J. Urban Econ.	65	0.82%
16	Int. Econ. Rev.	58	0.73%
17	J. Pub. Econ.	57	0.72%
17	Soc. Choice Welf.	57	0.72%
18	American Political Science Review	56	0.70%
19	Math. Oper. Res.	55	0.69%
20	Math. Soc. Sci.	54	0.68%
21	Economic Review	53	0.67%
22	Rev. Financ. Stud.	50	0.63%
23 and onward	Journal with less than 50 citations	3269	41.14%
	TOTAL	7946	100.00%

CONCLUSION

- (i) While studying the Year wise distribution of articles in the Economic Theory journal it is observed that, maximum 21.79% articles were present in year 2014, while minimum 17.61% articles in year 2015.
- (ii) Total 10955 citations were appended to the total 335 articles published in the Economic Theory journal, during years 2014-2018. Maximum 23.07% citations were observed in year 2018 while minimum 17.09% citations in year 2016.
- (iii) Average Citation per Article is 32.70. It means that there are 33 citations on an average per article of Economic Theory during the period under study (2014-2018).
- (iv) Among 10955 citations, Journals got the maximum 7946 citations (72.53%), while the Proceedings got only 93 citations (0.85%). So, it is suggested that the other forms of references have also to be increased by the researchers.
- (v). The degree of collaboration found during the period under study is 0.5991 in total, which shows a good number of collaboration between cited authors.
- (vi) . The top ranked journal during year 2014-2018 is Economic Theory with highest 918 citations (11.55%).
- (vii) It is seen that majority of citations are from recent decades. Very less citations are older than four decades & onwards. It means that, researchers prefer the recent data for their research. The demand of older data is less.

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