

Use of Citation for Journal Evaluation in The Field of Economics

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Abstract - *The present study analyses 17291 citations from 130 doctoral theses submitted to department of economics, Bangalore university during period from 1984-2014. The study reveals that year wise submission of doctoral theses for the award of degree, average number of citations distribution in each Theses, Bibliographic Form wise cited documents, Ranking of Most highly cited Journals, and to verify Country-wise publication of cited Journals.*

Keywords: Citation analysis; Journal evaluation; Economics Journal; Ranking of Journals

Introduction

The purpose of any higher education institutions and universities are to teaching and research. In India there are 967 universities and institutions established at Central, State, Deemed and private levels. These institutions were produce researchers in almost all the disciplines. Bangalore university new campus at Jnana Bharathi established in the year 1964-65. The Department of Economics started both PG and Ph.D programme. The researchers were mainly referred primary periodicals, Text books and other related resources. The main objectives of libraries are to provide right information to the right readers and at the same time good collection development to the user. In order to understand the relevant documents to the user the citation analysis tool useful for subscription of library material to the librarian and users.

Review of literature

The collection of review of literature related to present study helps to the researchers to understand the research trends in subject and at the same time. To know the different parameters used in the subject by researchers, the following literature reviews were presented.

Gupta and Sandeep (2018). they analyse 8061 citations appended in 38 theses of the Economics discipline submitted to the Panjab University, Chandigarh from 2004-2014. The study revealed that journals were the highest used source material, accounts with (41%) of citations, followed by text books with (15%) citations. Among the journals ranking "Economic and Political Weekly" highly referred with 612 citations followed by 'Indian Journal of Agricultural Economics' with 113 citations and American Economic Review with

87 citations and respectively. **Nayak and Patil (2017)** they analyzed 1190 citations from 16 Ph.D. Theses of Economics submitted in the Department of Economics, Gulbarga University, Kalaburagi, Karnataka. Their findings of the study shows that text books were highly cited with (51.76%) followed by Journals with (38.32%) of the total citations, reports cited with (6.97%), and Theses (1.34%) citations. **Trayambakrao and Sonwane (2012)** their research articles revealed that 2876 citations from 34 Ph.D. theses of economics. Their findings of the study shows that 1664 (57.86%) citations were from text books, whereas reports 552 (19.19%), Journals 394 (13.70%), Government Publication 117 (4.07%) and remaining citations were collected from Theses, News Papers, web sites, and gazetteers. Most of the authors or researchers depends up on the book's literature for their study. **Tyagi and Krishan (2017)** they studied 2192 citations appended from 22 doctoral theses submitted to the Department of Political Science at Chaudhary Charan Singh University Meerut, Uttar Pradesh from 2010-2015. Their study shows that the highest number of citations (61.1%) were from books, followed by journal articles. In the County-wise distribution of citations India (51.6%), followed by U.S.A. with 325 (14.8%) and U.K. with 172 (7.8%). The analysis of citations indicated that most cited authors in the theses were Indian authors (64.8%) and foreign authors are (35.2%). **Mandloi and others (2016)** their study is based on 234 citations, appended to the 47 Ph.D theses of Sociology submitted to Devi Ahilya Vishwavidyalaya, Indore during the period 2000-2006. The main purpose of their study was to investigate the subject areas of research in sociology. They identified language wise, country wise and age wise distribution of the citations and authorship pattern and forms of literature cited. In the ranking of journals study Kurukshetra occupies the first rank as the most preferred journal having been cited 89 times. Yojna scores the second highest with 37 citations, followed by third and fourth rank Pratijogita Darpan 13 citations and India today with 10 citations. The first ten journals in the rank list together accounts for (57.41%) of the total citations. **Thamaraiselvi and others (2016)** their research paper deals with the citation analysis of doctoral theses of library and information science submitted to the Alagappa University with the special reference to Shodhganga website. This study is based on 674 total citations in the 6 doctoral theses. They identified that (79.91%) of total citations are cited by the journals followed by websites with (6.39%) citations. The Electronic Library journal has ranked first with 74 citations with (13.83%) of total citations and (5.98%) of citations of Annals of Library and Information Studies was ranked second. **Veerabasavaiah and Padmavathi (2014)**. They analyses 6688 citations in 42 doctoral theses and analysed the year wise submission of theses and identified that highest number of theses submitted in 2009. 12 (28.57%), 11 theses submitted in 2010 (26.19%); 5 (11.91%) in 2004; 4 (9.53%) in 2003; 3 (7.14%) in 2011 and 2012; and 2 (4.76%) in 2005 and 2008. they analysed bibliographic-form-wise distribution of citations. 2637 (39.43%) citations from journals, 2537 (37.93%) from books, followed by other sources. In the ranked list, Journal of Applied Psychology occupied the first rank, accounting to 137 (5.20%) citations, followed by Indian Educational Review with 97 (3.68%) and the Journal of Educational Research with 75 (2.85%) citations. **Sheshrao and Khaparde (2011)** in their study they found 5726 Citations from 30 Ph.D. theses of Physics and identified that 4413 (77.07%) citations were from journals, so it can be said that the most of the authors or researchers depends up on the journal literature for their study, whereas books 719 (12.56%), Conference proceeding 141 (2.46%), theses 75 (1.31%) and remaining citations were collected from treatise, academic publication, symposium, letters, conference, review, web-sites, yearbooks, monograph, report, patent, dictionary, guide, encyclopaedia, government publication. **Ullah and Kumar (2004)** carried out a study on 20,046 citations mentioned in 777 scientific and technical reports published by National Institute of Hydrology, Roorkee, since its inception - December 1978. A ranked list of 56 most important journals related with hydrology and water resources were prepared. Journals covered (92.7%) of the total journal citations. The top ranking

journals were Water Resources Research with 1278 citations, Journal of Hydrology with 903 citations and Journal of Hydraulic Engineering with 508 citations. **Gobbur and others (2003)** they did citation analysis of English doctoral dissertations of Gulbarga University. They found 2198 citations from 10 dissertations. They analyzed distribution of citation by forms of documents, distribution by subject, core journals, country and subject wise distribution of journal articles and books cited. The study revealed that books forms the most preferred sources of information used by the researchers in the field of English accounting for (83.25%) and essay was the most popular literary form than any other literary forms. Journal of Indian writing in English had ranked the highest with 13 citations accounting to (3.95%) while (98.21%) documents were emerged from three major countries namely UK, India and USA.

Objectives of the study

- To understand year wise submission of doctoral theses for the award of degree
- To identify the average number of citations distribution in each Theses
- To know the Bibliographic Form wise cited documents
- To identify Ranking of Most highly cited Journals
- To verify Country-wise publication of cited Journals

Scope and limitations of the study

The present study is confined to 130 Ph.D. theses in economics submitted to Bangalore University, Bangalore. during the period from 1984-2014 for the award of Ph.D. degree. The bibliographical references of each theses were considered as main sources used for data collection.

Methodology of data collection

The present study is mainly used citation analysis technique. Data collection tools used as Bangalore University Library OPAC, Library records at Department of Economics and Shodhganga repository. The title of theses and its references were entered into the MS Excel Spread sheets according to AACR-II catalogue code.

Data analysis and Interpretation

Table-1. Year wise submission of Ph.D Theses in Economics

Sl. No.	Year	No. of Theses submitted	No. of Citations	%	Cumulative	
					Citations	%
1	1984	1	168	1.0	168	1.0
2	1986	1	250	1.4	418	2.4
3	1989	2	423	2.4	841	4.9
4	1990	1	180	1.0	1021	5.9
5	1991	1	90	0.5	1111	6.4
6	1992	4	692	4.0	1803	10.4
7	1993	6	1565	9.1	3368	19.5
8	1994	7	1013	5.9	4381	25.3
9	1995	3	414	2.4	4795	27.7

10	1996	3	294	1.7	5089	29.4
11	1997	6	838	4.8	5927	34.3
12	1999	4	553	3.2	6480	37.5
13	2000	7	968	5.6	7448	43.1
14	2001	8	982	5.7	8430	48.8
15	2002	8	707	4.1	9137	52.8
16	2003	1	51	0.3	9188	53.1
17	2004	5	923	5.3	10111	58.5
18	2005	4	572	3.3	10683	61.8
19	2006	10	1264	7.3	11947	69.1
20	2007	11	1245	7.2	13192	76.3
21	2008	5	972	5.6	14164	81.9
22	2009	8	656	3.8	14820	85.7
23	2010	6	628	3.6	15448	89.3
24	2011	2	167	1.0	15615	90.3
25	2012	8	946	5.5	16561	95.8
26	2013	3	299	1.7	16860	97.5
27	2014	5	431	2.5	17291	100.0
Total		130	17291	100		

The above table-1 shows the year-wise submission of Ph.D. Theses in Economics during the period from 1984 to 2014. The highest 11 (8.5%) theses submitted in 2007. Followed by 10 (7.7%) Theses submitted in 2006, 8 (6.2%) in 2001, 2002, 2009 and 2012, 7 (5.4%) in 1994 and 2000, 6 (4.6%) in 1993, 1997 and 2010 and respectively.

Table-2. Average number of citations distribution in each Theses

No. of Theses	No. of Citations	Average no. of Citations in each Theses
130	17291	133.01

Table 2 presents the average number of citations per theses and it can be calculated as 133.01 citations per theses.

Table-3. Bibliographic Form wise cited documents

Rank No.	Bibliographic Form wise cited documents	No. of Citations	%	Cumulative Citations	Cu %
1	Journal articles	6011	34.8	6011	34.8
2	Text Books	4522	26.2	10533	60.9
3	Reports	3841	22.2	14374	83.1
4	Newspapers and Magazines	916	5.3	15290	88.4
5	Conferences/Seminars/symposia/workshops	591	3.4	15881	91.8
6	Working and discussion papers	399	2.3	16280	94.2
7	Theses and Dissertations	381	2.2	16661	96.4
8	E-resources	231	1.3	16892	97.7
9	Reference Sources (Dictionaries/Encyclopaedias/Yearbooks /Handbooks and Monographs)	168	1.0	17060	98.7
10	News Letters and Bulletin	148	0.9	17208	99.5
11	Incomplete references	72	0.4	17280	99.9
12	Abstracts	11	6.0	17291	100.0
Total		17291	100		

The above table 3 represents Bibliographic form-wise cited documents. Journal are the highest 6011 (34.08%) cited by researchers and followed by Textbooks with 4522 (26.2%) citations. Next to this Reports with 3841 (22.2%), Newspapers and Magazines 916 (5.3%), Conferences/Seminars/symposia/workshops proceedings 399 (2.3%), theses and dissertation cited with 381 (2.2%). E-resources with 231 (1.3%), Reference Sources 168 (1%), News Letters and Bulletin 148 (0.9%), Incomplete references 72 (0.4%), and Abstracts references with 11 (6%).

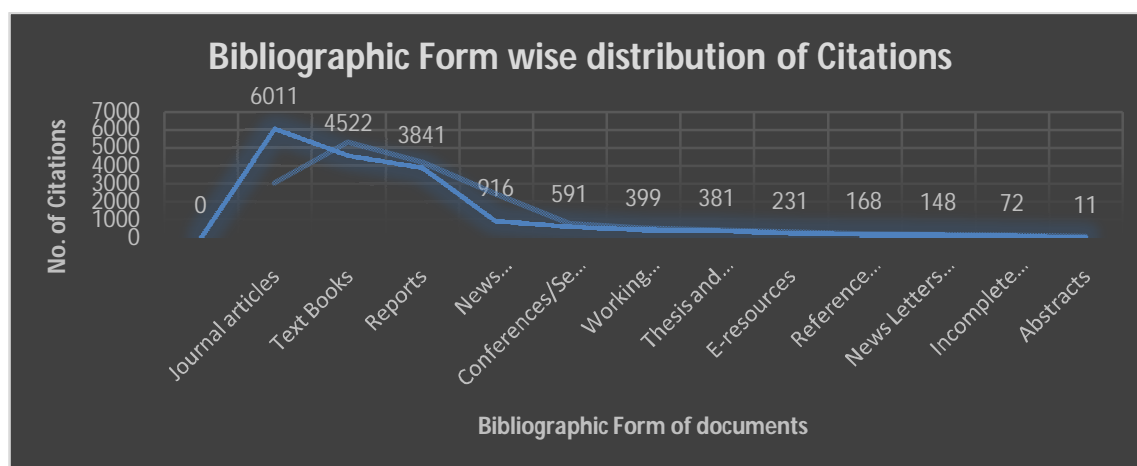


Chart-1

Table-4. Ranking of Most highly cited Journals

Sl. No	Rank No.	Name of Journals	No. of citations	%	Cu. Citations	Cu. %	Country
1	1	Economic and Political Weekly	1053	17.52	1053	17.52	India
2	2	Indian Journal of Agricultural Economics	522	8.68	1575	26.20	India
3	3	Southern Economist	153	2.55	1728	28.75	India
4	4	American Economic Review	137	2.28	1865	31.03	USA
5	5	Agricultural Situation in India	130	2.16	1995	33.19	India
6	6	American Journal of Agricultural Economics	124	2.06	2119	35.25	USA
7	7	World Development	122	2.03	2241	37.28	UK
8	8	Indian Journal of Labour Economics	119	1.98	2360	39.26	India
9	9	Journal of Political Economy	86	1.43	2446	40.69	USA
10	10	Indian Economic Journal	84	1.40	2530	42.09	India
11	11	Indian Cooperative Review	76	1.26	2606	43.35	India
12	11	Indian Silk	76	1.26	2682	44.62	India
13	12	Economic Journal	73	1.21	2755	45.83	UK
14	13	Indian Journal of Industrial Relations	65	1.08	2820	46.91	India
15	14	Review of Economics and Statistics	64	1.06	2884	47.98	USA
16	15	International Labour Review	63	1.05	2947	49.03	Switzerland
17	16	Journal of Rural Development	60	1.00	3007	50.02	India
18	17	Khadi gramodyog	59	0.98	3066	51.01	India
19	18	Journal of Development studies	56	0.93	3122	51.94	UK
20	19	Indian Economic Review	55	0.91	3177	52.85	India
21	20	Artha Vijnana	54	0.90	3231	53.75	India
22	21	Economic Development and Cultural Change	53	0.88	3284	54.63	USA
23	21	Indian Forester	53	0.88	3337	55.51	India

24	22	Energy policy	49	0.82	3386	56.33	UK
25	23	IMF Staff Papers	48	0.80	3434	57.13	USA
26	24	Energy for sustainable development	43	0.72	3477	57.84	India
27	25	Journal of Development Economics	42	0.70	3519	58.54	USA
28	26	The Cooperator	41	0.68	3560	59.22	India
29	27	International Journal of Social Welfare	40	0.67	3600	59.89	UK
30	28	Oxford Economic Papers	38	0.63	3638	60.52	UK
31	29	Public Finance Review	37	0.62	3675	61.14	USA
32	30	Journal of Farm Economics	35	0.58	3710	61.72	USA
33	31	Productivity	33	0.55	3743	62.27	India
34	32	Manpower Journal	30	0.50	3773	62.77	India
35	32	Urban Studies	30	0.50	3803	63.27	India
36	33	Indian dairyman	28	0.47	3831	63.73	India
37	33	Indian Journal of Regional Science	28	0.47	3859	64.20	India
38	33	Quarterly Journal of Economics	28	0.47	3887	64.66	UK
39	34	Econometrica	27	0.45	3914	65.11	USA
40	35	Agricultural Economics Research Review	24	0.40	3938	65.51	India
41	35	Indian Journal of Fertilisers	24	0.40	3962	65.91	India
42	36	Reserve Bank of India Occasional Papers	23	0.38	3985	66.30	India
43	37	Development and Change	22	0.37	4007	66.66	UK
44	37	Economic Affairs	22	0.37	4029	67.03	India
45	37	IBA bulletin	22	0.37	4051	67.39	India
46	37	Journal of Indian School of Political Economy	22	0.37	4073	67.76	India
47	37	National Tax Journal	22	0.37	4095	68.13	USA
48	37	Public Finance/ Finances Publiques	22	0.37	4117	68.49	Germany
49	38	Asian Economic review	21	0.35	4138	68.84	India
50	38	Journal of Agricultural Economics	21	0.35	4159	69.19	USA
51	39	Indian Journal of Dairy Science	20	0.33	4179	69.52	India
52	39	Prajnan	20	0.33	4199	69.86	India
53	40	Indian Journal of Social Work	19	0.32	4218	70.17	India
54	40	Margin: The Journal of Applied Economic Research	19	0.32	4237	70.49	India
55	41	Finance and Development	18	0.30	4255	70.79	USA
56	41	Indian Journal of Forestry	18	0.30	4273	71.09	India
57	41	Indian Journal of Public Administration	18	0.30	4291	71.39	India
58	41	Journal of Monetary Economics	18	0.30	4309	71.69	USA
59	41	World Bank Research Observer	18	0.30	4327	71.98	UK
60	42	Journal of Institute of Public Enterprise	17	0.28	4344	72.27	India
61	42	Mainstream	17	0.28	4361	72.55	India
62	42	Regional Development Dialogue	17	0.28	4378	72.83	Japan
63	43	Monthly Commentary on Indian Economic Conditions	16	0.27	4394	73.10	India
64	43	Social Action	16	0.27	4410	73.37	India
65	43	Social change	16	0.27	4426	73.63	India
66	44	International Economic Review	15	0.25	4441	73.88	UK
67	44	Journal of Banking and Finance	15	0.25	4456	74.13	Netherlands
68	44	Oxford Bulletin of Economics and Statistics	15	0.25	4471	74.38	UK
69	45	Journal of Economics	14	0.23	4485	74.61	UK
70	45	Small Ent. Dev. Mgt & Ext. Journal (SEDME)	14	0.23	4499	74.85	India
71	46	Fertiliser Marketing News	13	0.22	4512	75.06	India
72	46	Journal of Economic Literature	13	0.22	4525	75.28	USA

73	46	Journal of Labour Economics	13	0.22	4538	75.49	USA
74	46	Journal of Peasant Studies	13	0.22	4551	75.71	UK
75	46	World Bank Economic Review	13	0.22	4564	75.93	UK
76	47	Economic Bulletin for Latin America	12	0.20	4576	76.13	USA
77	47	Indian Journal of Economics	12	0.20	4588	76.33	India
78	47	Kyklos	12	0.20	4600	76.53	UK
79	47	Maharashtra co-operative quarterly	12	0.20	4612	76.73	India
80	48	Australian Journal of Agricultural Economics	11	0.18	4623	76.91	Australia
81	48	Developing Economies	11	0.18	4634	77.09	USA
82	48	Finance India	11	0.18	4645	77.27	India
83	48	Indian Journal of environmental protection	11	0.18	4656	77.46	India
84	48	Journal of the Textile Association (JTA)	11	0.18	4667	77.64	India
85	48	Man and Development	11	0.18	4678	77.82	India
86	48	Nagarlok	11	0.18	4689	78.01	India
87	49	Asian Development review	10	0.17	4699	78.17	UK
88	49	Current Anthropology	10	0.17	4709	78.34	USA
89	49	Journal of Human Resources	10	0.17	4719	78.51	USA
90	49	Land Bank Journal	10	0.17	4729	78.67	India
91	49	Land Economics	10	0.17	4739	78.84	USA
92	49	Monthly Bulletin of Agricultural Economics and Statistics	10	0.17	4749	79.01	Italy
93	49	Vikalpa	10	0.17	4759	79.17	India
94-100	50	7 Titles of Journals cited 9 times (7*9=63)	63	1.05	4822	80.22	
101-114	51	14 Titles of Journals cited 8 times (14*8=112)	112	1.86	4934	82.08	
115-126	52	12 Titles of Journals cited 7 times (12*7=84)	84	1.40	5018	83.48	
127-146	53	20 Titles of Journals cited 6 times (20*6=120)	120	2.00	5138	85.48	
147-162	54	16 Titles of Journals cited 5 times (16*5=80)	80	1.33	5218	86.81	
163-199	55	37 Titles of Journals cited 4 times (37*4=148)	148	2.46	5366	89.27	
200-247	56	48 Titles of Journals cited 3 times (48*3=144)	144	2.40	5510	91.67	
248-337	57	90 Titles of Journals cited 2 times (90*2=180)	180	2.99	5690	94.66	
338-658	58	321 Titles of Journals cited 1 times (321*1=321)	321	5.34	6011	100.00	
Total			6011	100.00			

Table-4 shows Ranking of Most highly cited Journals. There are **658 journals** were identified from the study and the journals are ranked up to 10 times referred considered as ranking in the present study with **4759** total of citations. **‘Economic and Political Weekly’** occupied in first rank with 1053 (17.52%) citations, followed by ‘Indian Journal of Agricultural Economics’ second rank with 522 (8.68%) citations. ‘Southern Economist’ third rank with 153 (2.55%) citations and fourth rank is ‘American Economic Review’ with 137 (2.28%) and fifth Rank ‘Agricultural Situation in India’ with 130 (2.16%) and respectively.

Table-5. Country-wise publication of Ranked Most highly cited Journals

Sl. No	Rank No.	Country	No. of Journals	%	No of citations	Cumulative Citations	Cumulative %
1	1	India	50	53.76	3272	68.75	68.75
2	2	USA	21	22.58	811	17.04	85.80
3	3	UK	16	17.20	538	11.30	97.10
4	4	Switzerland	1	1.08	63	1.32	98.42
5	4	Germany	1	1.08	22	0.46	98.89
6	4	Japan	1	1.08	17	0.36	99.24
7	4	Netherlands	1	1.08	15	0.32	99.56
8	4	Australia	1	1.08	11	0.23	99.79
9	4	Italy	1	1.08	10	0.21	100.00
Total			93	100.00	4759	100.00	

Table-5 presents the Country-wise publication of Ranked Most highly cited Journals. The study revealed that India occupied the first place with 50 (53.76%) journal publications. USA got second rank with 21 (22.58%) of total publications followed by UK with 16 (17.20%) and respectively.

Major Findings of the study

1. From the finding of the study in table-1 the highest number of Ph.D. degrees with 11 (8.5%) theses were submitted for award of Ph.D. in economics.
2. It is observed in table-3 that the journals are the higher referred than Textbooks and etc.
3. Table-4 shows that among the ranked journals 'Economic and Political Weekly' ranked first with 1053 citations, followed by 'Indian Journal of Agricultural Economics' second rank with 522 citations. 'Southern Economist' third rank with 153 citations and respectively.
4. In Table-5 found that Indian journals were highly cited than USA and UK journals.

Conclusion

Nowadays Citation analysis technique helps to the librarians, policy makers, information professionals and researchers in selection of important periodicals and other core documents in various subject fields and weeding out of the less used documents from the stock of the library.

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