

# Citation analysis of Ph.D. Theses in Economics submitted to University of Gulbarga, Karnataka during 1984-2002

## Shashiraj C. Nayak and D.B. Patil

Dept of Library & Information Science Gulbarga University, Kalaburagi, Karnataka, India nayakshashiraj.03@gmail.com

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#### Abstract

1190 citations in the Doctoral Theses submitted in the Department of Economics, Gulbarga University, Kalaburagi, Karnataka, India. The present study 16 Ph.D. Theses of Economics were chosen as a sample from the year 1984-1985 to 1989-2002. The data was collected from the bibliographical entries listed at the end of the Theses, which was used by the researchers for completing the Theses. A citation analysis of Ph.D. Theses submitted to Gulbarga University, Kalaburagi Library was performed as a way of determining the use of information sources made by the scholars of the university. The citations were photocopied and the data was collected. Citation analyses have been carried out to find the types of cited document, the chronological distribution of cited documents, to find out the authorship pattern of cited document. Data were analysed to ascertain the authorship patterns, country wise book citation, and ranking of journals by citation frequency. It is found that books and journals are the most dominant form in which information is communicated in economics. And the single authorship prevails in the citations.

Keywords: Citation analysis, Bibliometrics, Ph.D. Theses, Economics, Books, Gulbarga University. Karnataka.

## Introduction

Diodato defined citation as "A wide-ranging area of bibliometrics that studies the citations to and from documents<sup>1</sup>. Such studies may focus on the documents themselves or on such matters as their authors; the journals (if the documents are journaling articles) in which the articles appear; the organisations or countries in which the documents are produced; the purpose of the citations". Citation analysis is a worthwhile area of research in the domain of library and information science field. Liu asserted that knowledge providers in library and information have been at the forefront of citation analysis research. Citation analysis is a major area of bibliometrics research, which uses various methods to establish the relationship between authors and their work<sup>3</sup>.

Citation analysis is one of the popular methods employed in recent years for identification of core documents and complex relationship between citing and cited documents for a particular scientific community in a geographical proximity. The purpose of the present study is to investigate the use pattern of authorship as revealed through the citation analysis of the doctoral dissertations submitted between 1984-85 to 1989-2002 in the Department of Economics, Gulbarga University Kalaburagi (GUK), Karnataka, India<sup>4</sup>.

**Review of Literature:** Various studies have been carried out on citation analysis. For the present study, the following studies have been reviewed in the light of the topic.

Zafrunnisha found that foreign journals were the most cited sources as compared to Indian journals. In authorship pattern, collaborative authorship is high as compared to single-authored papers<sup>5</sup>.

Jadhav et al. in their study reveals that books were most cited documents 1549 (29.39 %), and maximum number 3675 (62.61 %) of citations were from India. It was found that single authorship is dominant<sup>6</sup>.

Jan found that books received more citations as compared to journals, and female (52.34 %) contributed more than male  $(47.66 \%)^7$ .

Deshmukh reveals that journals were the most cited form of literature. In authorship pattern single authored papers dominated over another type of authorship<sup>8</sup>.

Chikate and Patil<sup>9</sup> in their study reveal that journal articles were found highly cited followed by books and web resources and single authored papers were highly cited. Pillai<sup>8</sup> observed that journal articles were found to be the most frequently cited bibliographic items. The USA was the leading cited country and Elsevier Science is the leading cited publisher.

Okay found that most students in education used more textbooks (60.3%) than other forms of documents <sup>10</sup>.

Harwade and Dankhade in their bibliographic form-wise distribution of citations showed that books accounted for

42.77% of citations, followed by journals (32.81%), Ph.D. theses (14.70%), newspapers (4.50%) and others (5.22%). The results also revealed that the single authored papers were the highest in number and half-life period for journals was found to be 22 years<sup>11</sup>.

Buttlar observed that about 80 % of the citations were of single-authored papers, also journal articles were cited more than books, book chapters, proceedings, theses, and other print resources. The most cited journals were College and Research Libraries and Journal of the American Society for Information Science<sup>12</sup>.

Schneder found that Bibliometrics is the most active field of library and information science. Citation analysis study is the major portion of it. Bibliometrics is a subfield of the information science – Bibliometrics is the study of documents and their bibliographic reference and citation structure. Bibliometrics methods have been successfully applied to examine the intellectual structure of several disciplines<sup>13</sup>.

Citation represents the pool of archival knowledge from which authors retrieve established ideas and, in turn, generate new research ideas. This knowledge may be disseminated; within an area and across disciplinary boundaries<sup>14</sup>. Citation count and Impact factors can be easily manipulated<sup>15</sup>. Citation impact can be used as a measure of the impact an article has within its particular field. An article is widely read and cited is an indication that it has had influence with other researchers within the field<sup>16</sup>.

Tang and Sharif studied citation analysis investigated the relationship between the cited documents to express in the cited references on that study<sup>17</sup>.

The scope of the Study: The present study is based on 1190 citations appended at the end of 16 Ph.D. theses on economics, submitted to Gulbarga University, Kalabuargi, Karnataka. The span of 18 years was taken into consideration that is from 1984-1985 to 1989-2002. The main purpose of the study is to find out the current citation trends of the doctoral thesis in the economics department. For this purpose, each book and journal cited are taken for analysis <sup>9,18</sup>.

**Objectives of the Study:** The main intention of this paper is to find out the resources used in Ph.D. doctoral theses in Gulbarga University from 1984-1985 to 1989-2002 of Economics Department.

The main objectives of the study are as follows: i. To find out the yearly distribution of theses submitted to economics department in the study area. ii. To discover the authorship pattern in citation analysis. iii. To identify the chronological distribution of citations in Economics Department. iv. To assess the allocation of documents, in accordance with their country of origin. v. To organise the rank list of journals in the categorization of their occurrence of citation.

# Methodology

For the present study obtained 16 Ph.D. theses of Economics were chosen as a sample from the year 1984-1985 to 1989-2002, there are in all 1190 citations appended in 16 theses. The data was collected from the bibliographical entries listed at the end of the theses, which was used by the researchers for completing the theses. The citations were photocopied and the data was collected tabulated mode and SPSS. The analysis was completed by using various parameters and the data expand to meet up the construed objectives of the proceeding study.

#### **Results and discussion**

The below table discussed the year wise distribution of theses submitted to the Gulbarga University Kalaburagi, Karnataka. The highest number of 6 (37.5 per cent) theses have been submitted in the year 2006 followed by 5 (31.3 per cent) theses in 1986-88 and 1989-2002 and 5 (31.3 percent) thesis in each year.

**Table-1:** Yearly Distribution of Theses.

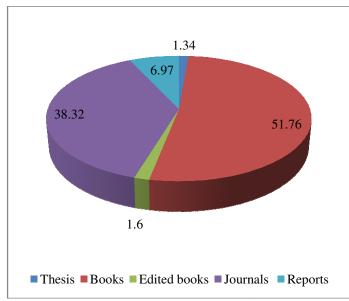
Year	Frequency	Percent
1984-85	6	37.5
1986-88	5	31.3
1989-02	5	31.3
Total	16	100.0

**Table-2:** Distribution of Citations According to Bibliographic Format.

Details	Frequency	Percentage
Thesis	16	1.34
Books	616	51.76
Edited books	19	1.60
Journals	456	38.32
Reports	83	6.97
Total	1190	100.00

Table and Figure-1 show the Allotment of Citations format in the field of economics. It is evident from the above table that,

Firstly, the highest number of the contributor of the citation was booked i.e., 51.76. It indicates that books are most of the time cited in almost all theses.



**Figure-1:** Allotment of Citations.

Secondly, Journals are the second most cited source accounting for 38.32 percent of the total citations. In other words, journals and books jointly contribute 90.08 percent of the total number of citations. It was observed from the above table that books and journals are the most predominant sources of information in this study.

Thirdly, the next preferred source of information for economics department research students was edited books i.e., 6.97 percent.

Lastly, 1.34 percent of the citation documents was the thesis. Thus, another new source of information for the present study was web resources it is also found a place in the bibliographic formats.

Table-3: Authorship Pattern of Journal and Books Citations.

Authorship	Journals		Books		
details	Frequency	Percent	Frequency	Percent	
Single Author	363	79.6	493	80.0	
Two Authors	80	17.5	117	19.0	
Three Authors	11	2.4	06	1.0	
Four Authors	1	.2	00	0.0	
Six Authors	1	.2	00	0.0	
Total	456	100.0	616	100.0	

Table-3 clearly discussed that the authorship pattern of journals out of the total number of 456 citations, 363 (79.6 percent) are sole author, 80 citations contributed by two authors (17.5 percent), 11 journals are cited three authors, more than three authors cited 1 journal<sup>19</sup>.

By discussing the Table-3, it was revealed that majority of the cited books were by single author i.e., 80.0%, 19 percent of the books cited by two authors and barely 1 percent cited above five authors in the present study.

**Table-4:** Chronological Distribution of Books Citations.

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Period of publication	Frequency	Percent	Cumulative Percent
1920-45	17	2.8	2.8
1946-59	51	8.3	11.0
1960-75	169	27.4	38.5
1976-80	120	19.5	58.0
1981-85	107	17.4	75.3
1986-90	124	20.1	95.5
1991-00	28	4.5	100.0
Total	616	100.0	

Table-4 evaluated the sequential distribution of books in citation analysis field. The maximum number of citations, i.e. 169 (27.4 percent) were to the period of 1960-1975, followed by 1986-1990 accounting for 124 (20.1 percent), 120 (19.5 percent) cited in 1976-80, 107 (17.4 percent) cited in 1981-1985, 51 (8.3 percent) cited in 1946-59, 28 (4.5 percent) cited in 1991-2000 and 1920-1945 this accounts for only 17 citations. Study obviously indicated that a fresh insight is essential for the economics department research students in Gulbarga University, Kalaburagi, Karnataka.

To explore the scattering of the citations according to the country, the authors have used the country of publication of the source item as the basis of citation<sup>20</sup>.

Analysis of data indicates that 616 citations were scattered in publications that were published from more than 12 countries. Among them, India ranked first with 76.6% citations followed by UK (10.9%), USA (8.6%) and Germany (1.3%). Publications from these countries received about 97.4% of the citations and only 2.6% citations were from the remaining countries (Table-5).

Table-5: Country-Wise Citations

Countrywide publication	Frequency	Percent	Cumulative Percent
India	472	76.6	76.6
United Kingdom	67	10.9	87.5
USA	53	8.6	96.1
Germany	8	1.3	97.4
Japan	5	.8	98.2
France	1	.2	98.4
Russaia	3	.5	98.9
Brazil	2	.3	99.2
Switzerland	1	.2	99.4
Turkey	1	.2	99.5
Bangaladesh	2	.3	99.8
Sri Lanka	1	.2	100.0
Total	616	100.0	

Table-6: Country-wise citations of Edited Books.

Country	Frequency	Percent
India	16	84.2
USA	3	15.8
Total	19	100.0

Similar to the country-wise distribution of citations, an attempt has been made to identify the top ten cities of the world in terms of contribution of citations.

It indicates that India ranked first having 84.2% citations and the USA with 15.8%. City-wise publications listed in Table-6 constitute about 61% of citations<sup>21</sup>.

Table-7: Chronological Distribution of Journal Citations.

Year	Frequency	Percent	Cumulative Percent
1952-62	17	3.7	3.7
1963-73	94	20.6	24.3
1974-84	131	28.7	53.1
1985-95	206	45.2	98.2
1995-01	8	1.8	100.0
Total	456	100.0	

Table-7 discussed the chronological distribution of cited journal. Out of 456, the majority of the citations, i.e. 206 (45.2 percent) were in the period of 1985-1995, followed by 1974-1984 accounting for 131 (28.7 percent), 94 (20.6 percent) cited in 1963-73, 17 (3.7 percent) citation in 1952-62 and the 1995-2001 it accounts only for 8 citations.

These results elaborate that recent information is very important for the economics department research students in Gulbarga University, Karnataka<sup>22</sup>.

Those journals which are highly cited in the text, that journal is most important to keep in the library sources, for that reason Journal ranking is very necessary for the librarian as well as research students<sup>23</sup>.

Table-8 discuss that total 53 journals with 456 citations arranged in the order of decreasing number of their rank.

The journal with the top most number of citations possess the top most rank and it was found that the most important journal in the field of economics, like that the least important titles are positioned at the underneath of Table-8. Economic and Political Weekly got the first rank and it is a most important journal in social science research having been cited 79 times.

Indian Journal of Agricultural Economics 13.6 percent got the second rank getting 62 citations, monthly Yojana occupied in third ranks getting 57 citations, Southern Economist occupied in fourth place getting 54 citations, SBI Monthly Review got fifth ranks and own 39 citations, Indian Cooperative Review occupies the sixth rank getting 18 citations and least was journal of Penuin Modern Economic Readings occupies the last rank i.e. 16.

Table-9 discussed the distribution of types of reports citations. The majority of the citations made national reports i.e. 45.8 percent, secondly, equal citations i.e., 25.3 percent of the citations have from internationals and state and only 3.6 percent citation from District in the present research<sup>24</sup>.

Table-8: Rank Wise Journals in Economics.

Journals	Rank	Frequency	Percent	Valid Percent	Cumulative Percent
Economic and Political weekly	1	79	17.4	17.4	27.7
Indian Journal of Agricultural Economics	2	62	13.6	13.6	100
Yojana	3	57	12.5	12.5	86.4
Southern Economist	4	54	11.9	11.9	69.7
SBI Monthly Review	5	39	8.6	8.6	57.8
Indian cooperative Review	6	18	4	4	32.7
Annual Commerce and Management Journal	7	15	3.3	3.3	9
Indian Journal of Agricultural Marketing	8	13	2.9	2.9	3.1
The Journal of IIBs	9	11	2.4	2.4	72.1
Kurukshetra	9	11	2.4	2.4	43.3
RBI Bulletin	10	7	1.5	1.5	48.8
National bank news review	10	7	1.5	1.5	45.1
Journal of Rural Development	11	6	1.3	1.3	40.7
Quarterly Journal of Economics	12	5	1.1	1.1	47.3
Indian Journal of Regional Science	12	5	1.1	1.1	36.3
Indian Journal of Marketing	12	5	1.1	1.1	35.2
American Journal of Agricultural Economics	13	4	0.9	0.9	5.7
American Economic Review	13	4	0.9	0.9	4.8
Agricultural Situations in India	13	4	0.9	0.9	4
World Academic Research in Sociology	13	4	0.9	0.9	73.4
Journal of income and wealth	14	3	0.7	0.7	38.7
Indian Journal of economics	14	3	0.7	0.7	33.4
Journal of Political Economy	15	2	0.4	0.4	39.3
Journal of banking studies	15	2	0.4	0.4	37.8
World Bank Research Observer	15	2	0.4	0.4	73.8
Indian Economic Review	15	2	0.4	0.4	33.8
Economic Times	15	2	0.4	0.4	28.1
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Journals	Rank	Frequency	Percent	Valid Percent	Cumulative Percent
Arthavijnana	15	2	0.4	0.4	9.9
Indian Journal of Labour Economics	15	2	0.4	0.4	36.7
Productivity	15	2	0.4	0.4	45.9
Monthly Public opinion Survey	16	1	0.2	0.2	43.5
Khadi Gramodyog	16	1	0.2	0.2	40.9
Journal of Industrial Relations	16	1	0.2	0.2	38.9
Journal of Farm Economics	16	1	0.2	0.2	38.0
Journal of Social Issue	16	1	0.2	0.2	37.4
ISEC Journal	16	1	0.2	0.2	37.1
World Bank Economic Review	16	1	0.2	0.2	72.3
Financial Express	16	1	0.2	0.2	28.8
Economic Development and Cultural Change	16	1	0.2	0.2	28.4
Asian Express	16	1	0.2	0.2	10.3
Asian Economic Review	16	1	0.2	0.2	10.1
Artha Vikas	16	1	0.2	0.2	9.5
Anveshak	16	1	0.2	0.2	9.2
Federal Reserve Bulletin	16	1	0.2	0.2	28.6
Indian institute of Management	16	1	0.2	0.2	34.1
International Labour Review	16	1	0.2	0.2	36.9
Review of Agriculture	16	1	0.2	0.2	49
University of Agricultural Science, Bangalore	16	1	0.2	0.2	72.5
Sarvekshna	16	1	0.2	0.2	49.2
Agricultural Economics	16	1	0.2	0.2	0.2
Progress and Human Geography	16	1	0.2	0.2	46.2
Pigmy Economic Review	16	1	0.2	0.2	45.5
Penuin Modern Economic Readings	16	1	0.2	0.2	45.3
Total		455	100	100	

**Table-9:** Distribution of Types of Reports Citations.

Types of Report	Frequency	Percent
International	21	25.3
National	38	45.8
Sate	21	25.3
District	3	03.6
Total	83	100.0

# **Conclusion**

Citation analysis is one of the important and assessable methods to solving the transcend restricted requirements and assures those core collections on behalf of specific disciplines are in the journal bunches of academic libraries. The present paper doctoral thesis in the economics department of Gulbarga University tells that researchers mainly depend on journal sources for their use of academic and research activities. Citation outline of foundation documents described that books citations were quoted more in figure (51.76 per cent), it shows not only their importance in communicating the literature as well as the reliance of researchers on books for their research work. Journals accounting 38.32 per cent, which shows their prime importance in research and academic works. The present study finds out that the journal using a prototype of economics researchers of Gulbarga University, Karnataka fits. Besides this, the following are the major findings of the study<sup>25</sup>.

On the basis of the above study the following conclusions are drawn: i. The present study 1190 citations were analysed from 16 PhD theses in economics department in Gulbarga University, Karnataka. ii. The majority of 6 (37.5%) theses have submitted in the year 2006, 5 (31.3 per cent) theses submitted in 1986-88 and 1989-2002 respectively. iii. The books citation are highest i.e, 51.76 (616) per cent of the total citations. Journals were second most cited source i.e., 38.32 per cent. iv. 363 (79.6 per cent) are by one author in Journal, 80 citations made by two authors (17.5 percent), 11 journals cited three authors, more than three authors cited one journal. v. Scattered publications issue India ranked first with 76.6 % citations followed by UK (10.9%), USA (8.6%) and Germany (1.3%). Publications from these countries received about 97.4 % of the citations and only 2.6 % citations were from the remaining countries. vi. Economic and Political Weekly occupies the first rank, Indian Journal of Agricultural Economics 13.6% occupies the second rank, monthly Yojana occupied in third ranks, Southern Economist occupied in fourth place, SBI Monthly Review got fifth ranks, Indian Cooperative Review occupies the sixth rank and least was journal of Penuin Modern Economic Readings occupies the last rank.

However, present research would have been making clear to the researchers in finding out the main sources of information. This nature will be helpful for the document lists in circulating the importance for the use of latent readers and researcher; it is also to figure out the feedback to the librarians in the selection and attainment of most useful journals within the budget constraints<sup>26</sup>.

During the study it was found the truth that citations are not in standard format but it is very worthwhile method to choose the common tools to collecting the data sources. Researchers have not used any uniform pattern/sequence while citing the research materials. It is observed that somewhere year is missing, somewhere publisher's name and place<sup>27</sup>. This kind of study will definitely help the libraries in selection of useful sources as there is explosion of information and documents in the form of books and journals. The ranking of journals can be used by librarians and researchers to select the journals of greater importance in a particular subject area.

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