

The Bibliometric Analysis of Economics and Business Research Trends in Vietnam

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Abstract

The study applies the bibliometrics method to analyze 5,389 publications of research institutions in Vietnam for the economic and business field in the Scopus database.

The results of the study provide an overview of publishing trends in the business and economic field in Vietnam such as the most cited articles, the network of these publications, the most productive authors, the most influential journals, the keywords co-occurrence network and the research cooperation between Vietnam and other countries.

The purpose of this study is to provide a comprehensive picture of the current state in the field of economics and business research in order to suggest future research directions.

Key-words: Bibliometrics Analysis, Business, Economics, Vietnam.

JEL Classifications: C10, C88, D80, M21, G30.

1. Introduction

In recent years, research in the field of business and economics in Vietnam has increased rapidly, especially in the period 2014-2021. Table 1 shows the number of publications by year in Vietnam growing between 1992 and 2021. Most of the increase in the number of publications was 2014, particularly, in 2020 the number of publications increased by more than 100% compared to 2019 with the absolute number of 940 publications.

Table 1 - Number of Documents Published in Business and Economics per year in Vietnam

Year	Documents
2021	627
2020	1831
2019	895
2018	577
2017	319
2016	233
2015	173
2014	145
2013	99
2012	106
2011	86
2010	66
2009	64
2008	31
2007	25
2006	26
2005	20
2004	16
2003	14
2002	7
2001	5
2000	2
1999	5
1998	4
1997	4
1996	3
1995	2
1994	2
1993	1
1992	1

Source: Scopus, accessed May 11, 2021

The study analyzed bibliometric dataset originating from 5,389 research publication records extracted, selected and refined from Scopus databases for business and economics research in the period 1992-2021 to analyze the current situation as well as current research topics of interest in Vietnam.

2. Methodology

The method of biometric analysis was first introduced by Pritchard (1969), so far this method has become a popular analytical method to understand the trend of development over time of the research field from the perspective of multidisciplinary (Donthu et al., 2021; Saheb et al., 2021).

Bibliometrics analysis is the application of statistical methods to produce analysis and trend identification of scientific production such as articles, books, conference papers and other publications. Biometric methods are increasingly being applied in many multidisciplinary research fields. Bibliometric analysis is applied in this paper as a useful quantitative tool to map the trend of knowledge production within the specified time frame 1992–2021.

Biometric analysis helps to generalize comprehensive knowledge of a research area, establish connections between studies, the most influential authors in the field of research, indicate new directions for future research (Donthu, Reinartz, et al., 2021). In this study, bibliometric analysis is carried out using co-occurrence, network analysis. It also uses bibliometric indicators to represent bibliographic data such as the total number of articles and citations.

There is much software to facilitate bibliometric analysis such as Bibexcel, VOSviewer[®], Gephi, CiteSpace and GraphPad Prism. In this study, VOSviewer[®] (Van Eck & Waltman, 2010) were used to analyse, filter, clean, process and illustrate the bibliometric data.

This study used ‘advance search’ in the Scopus database with query string “(AFFILCOUNTRY (Vietnam) AND (LIMIT-TO (SUBJAREA,"BUSI") OR LIMIT-TO (SUBJAREA,"ECON"))) AND (LIMIT-TO (LANGUAGE, "English")) AND (EXCLUDE (PUBYEAR,1974)))” to search for all publication types between 1992 and 2021 with at least one author based in Vietnam. The raw bibliometric data has been downloaded from Scopus, which provides robust and inclusive source data. All scientific publications of Vietnam were refined by Scopus to the “Economics, Econometrics and Finance” and “Business, Management and Accounting” categories, with English being the language employed. After the definition of Scopus’ search strings, the dataset of this paper has obtained 5,389 publication records for economics and business research in Vietnam.

The dataset of this study is presented as a bibliometric dataset originated from 5,389 research publication records extracted, selected and refined from Scopus databases. This dataset is composed of two categories, including raw and analyzed. The raw category is available at <http://dx.doi.org/10.17632/63vbkndns.3>. The raw category has all 5,389 bibliographic research records on categories of economics and business in Vietnam, as detailed in Table 2.

Table 2 - The Features of Publications Contained in the Scopus Dataset

Feature	Description
Authors	The authors of a publication
Title	The title of a publication
Year	The date of publication of a publication
Source title	The name of source where a publication was published
Cited by	The number of citations of a publication
DOI	The DOI of a publication
Link	The link of a publication in the Scopus database
Affiliations	The authors affiliations' information of a publication
Abstract	The abstract of a publication
Author Keywords	The author keywords of a publication

Source: Scopus, accessed May 11, 2021

The analyzed category contains systematic overview information on research trends in the economic business sector in Vietnam such as number of publications by year, document types, number of documents per country, most cited articles, keyword analysis, top citations journal, co-occurrence network, most influential authors, most frequent keywords, top research organizations in economics and business, bibliometric mapping and clustering analysis. The dataset is available at <http://dx.doi.org/10.17632/63vhbkndns.3>.

3. Results and Discussion

In this section, we discuss the results in detail, including the trends in citations and publications on business and economics research, the keywords analysis, and the co-occurrence network analysis. A total of 5,389 publications were extracted and uploaded on VOSviewer® software (Van Eck & Waltman, 2010). By the VOSviewer® software, the systematic information review on economic and business research in Vietnam is extracted. All 5,389 publications were written by 8,652 authors from 113 countries. All publications were cited 34,917 times, published in 1,157 source titles. Classified by document type, nearly 87% of the total number of published publications are articles, following conference paper and book chapter (Table 3).

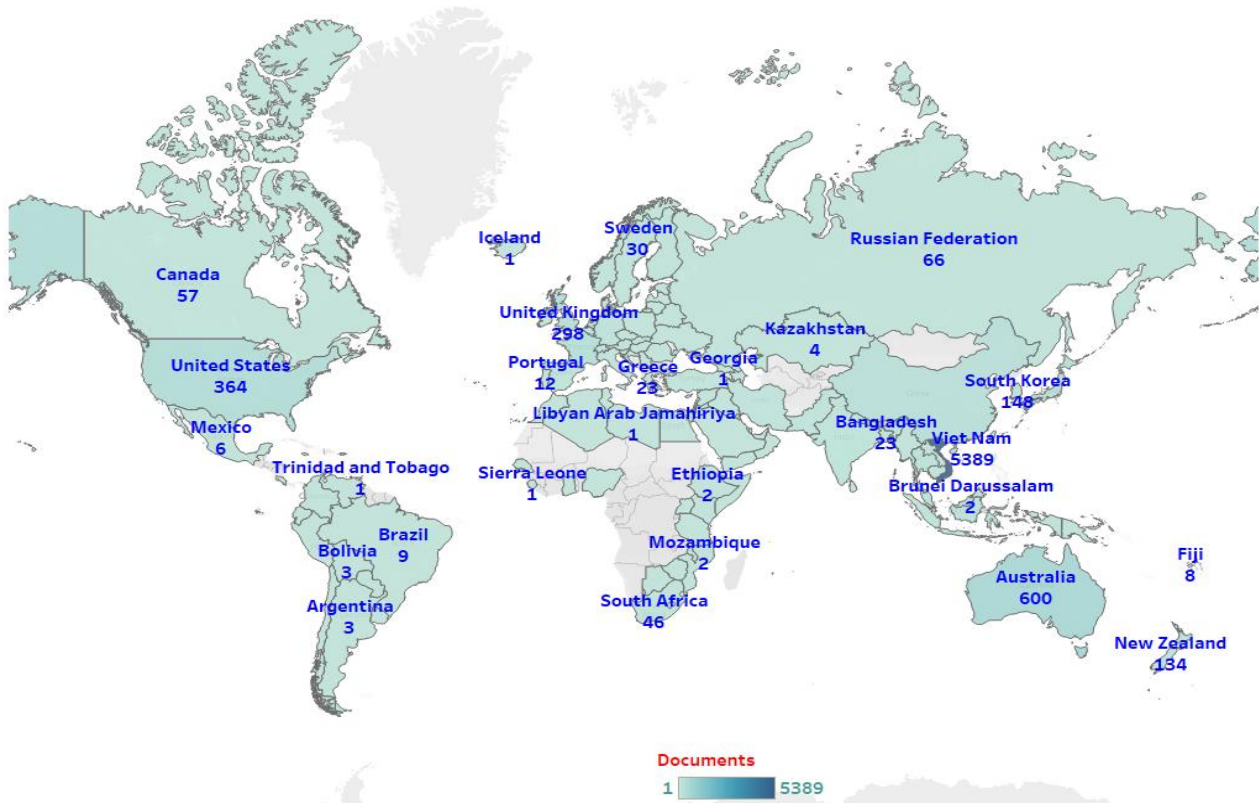
Table 3 - Distribution of Document Types

Document Type	Documents
Article	4678
Conference Paper	288
Book Chapter	245
Review	111
Book	18
Editorial	17
Note	14
Erratum	7
Short Survey	6
Letter	1
Undefined	4

Source: Scopus, accessed May 11, 2021

Figure 1 simulates the number of publications published by country. The data shows the trend of research cooperation between Vietnam and other countries. Australia has the strongest research collaboration with Vietnam with 600 publications, the following countries in turn include United States (364), United Kingdom (298) and France (246).

Figure 1 - World scaled by number of documents per Country



Source: Scopus data visualised through Tableau

Table 4 - The 15th most Cited Articles

Authors	Cited by
Keh H.T. (2007)	397
Meyer K.E. (2005)	393
Meijer S.S. (2015)	214
Nguyen L.D. (2004)	204
Ngo D.-H. (2012)	171
Trung D.N. (2005)	143
Dhir A. (2018)	141
Leisch H. (2002)	136
Nguyen C.H. (2018)	133
Luu V.T. (2009)	130
Pomeroy R. (2007)	130
Sheikholeslami M. (2020)	122
Thien Thu C.T. (2012)	115
Nguyen T.T. (2012)	114
Van Huy L. (2012)	114

Source: Scopus, accessed May 11, 2021

Table 4 shows the top 15 papers with the most citations from the total of 5389 collected publications to investigate the most influential publications on economics and business research in Vietnam. The most cited article was written by Keh et al. (2007) (Keh et al., 2007), it has 394 citations. The paper of Meyer et al. (2005) (Meyer & Nguyen, 2005) has the second highest number of citations with 391 citations. Furthermore, cooperation among multiple authors has been becoming more popular. The most influential articles with the highest citation quantity were written by more than one author.

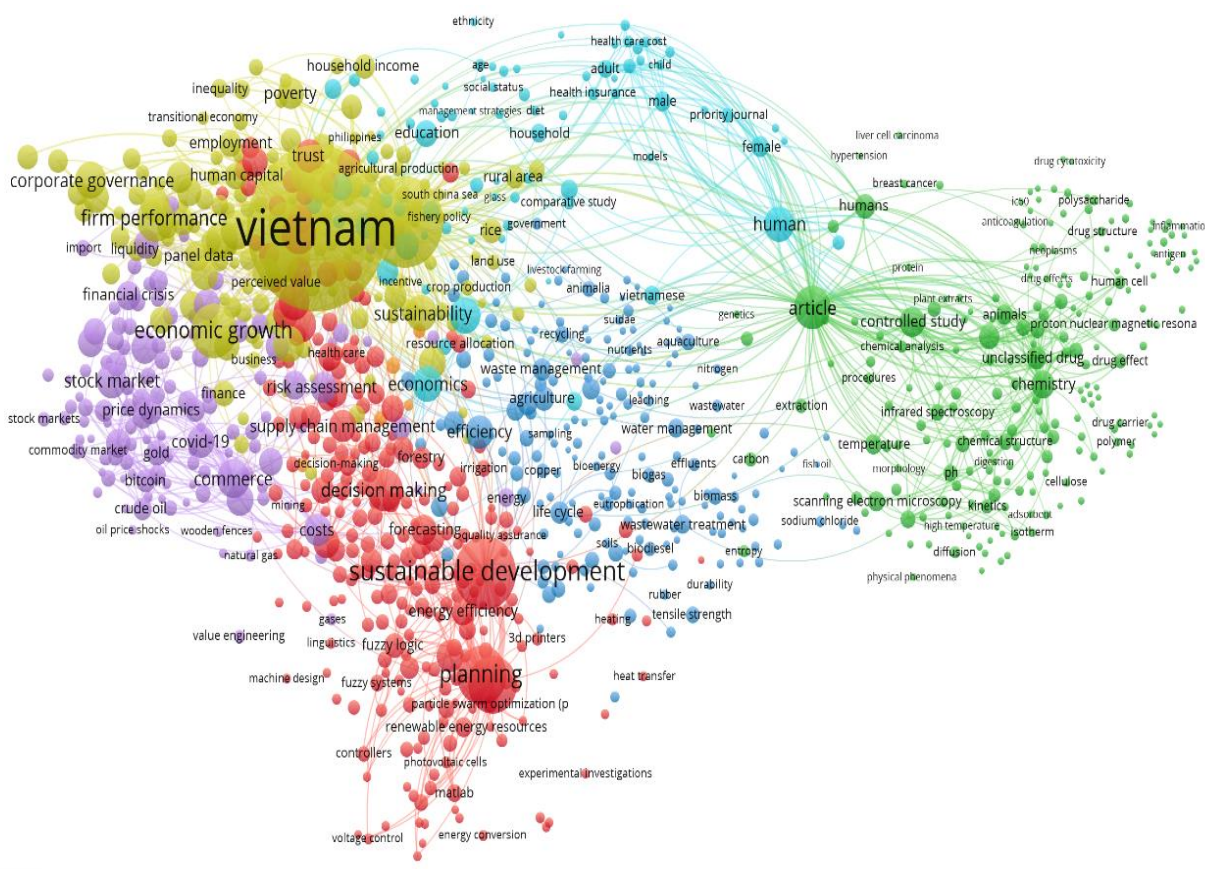
Table 5 - Top 15 Journals with the Highest Number of Citations

Source	Documents	Citations
Journal of Cleaner Production	153	3001
Journal of Asian Finance, Economics and Business	393	1560
Knowledge-Based Systems	54	1081
International Journal of Biological Macromolecules	47	854
Finance Research Letters	60	592
World Development	26	589
Journal of Business Venturing	3	513
Research In International Business and Finance	38	426
Resources, Conservation and Recycling	23	417
Marine Policy	18	415
Asia Pacific Business Review	20	394
Journal of Management Studies	1	393
International Journal of Energy Economics and Policy	50	386
Ecological Economics	19	384
Asia Pacific Journal of Marketing and Logistics	26	354

Source: Scopus, accessed May 11, 2021

Table 5 shows the 15 most influential journals with the highest numbers of citations. Journal of Cleaner Production is the most popular, with 2,913 citations. Journal of Asian Finance, Economics and Business to become the largest producer of publications.

Figure 2 - Keywords co-occurrence network



Source: Scopus data visualized through VOSviewer®

The keyword co-occurrence network map illustrates the core idea of an academic publication (Li et al., 2016). Figure 2 illustrates the keyword co-occurrence network created from VOS viewer software. Each node's size represents its weight. In Figure 2, six separate colors illustrate six clusters of keywords. The yellow cluster is the biggest cluster in the keyword co-occurrence network. The keyword “Vietnam” is the biggest node with the highest frequency in the yellow cluster. The second largest cluster is red. The keywords with high degree centrality in the red cluster are related to “sustainable development” and “planning”. The keyword with the most frequency and the strongest connection strength is “article”, followed by “controlled study” in the green cluster. The purple cluster illustrates the co-citation network in economic psychology for the effects of financial well-

being on the financial market. The purple cluster shows the co-occurrence network on the topic of stock market and commerce. The light blue cluster is a small cluster. The keyword “human” is the node with the highest frequency, the most connected lines and the strongest connection strength in the light blue cluster. The blue cluster is scattered, it is less associated with other clusters. The blue cluster has several nodes mainly included “efficiency” and “agriculture”.

Table 6 - Top 20 Authors with the most Outputs in Citations

Author name	Documents	Citations
Vo X.V.	120	901
Jermittiparsert K.	51	675
Nguyen T.V.	37	665
Nguyen T.T.M.	12	560
Nguyen T.T.	71	515
Nguyen H.V.	20	479
Nguyen L.D.	28	449
Tuan L.T.	37	442
Meyer K.E.	3	418
Keh H.T.	1	397
Ng H.P.	1	397
Pugazhendhi A.	9	373
Lucey B.	21	364
Matsui Y.	14	357
Anwar S.	12	355
Kim S.-Y.	8	354
Napier N.K.	11	349
Corbet S.	15	338
Ogunlana S.O.	2	334
Nguyen T.N.	28	329

Source: Scopus, accessed May 11, 2021

Table 6 shows the top 20 most productive authors. Vo X.V. (University of Economics Ho Chi Minh City) is the author which has published the most articles and the highest citations. Table 7 presents the 20 most popular keywords. The “Vietnam” keyword appeared 1176 times in the; “Viet Nam”, “Sustainable development”, “Planning” and “Environmental technology” appeared 362 times, 234 times, 154 times and 148 times respectively.

Table 7 - 20 most Frequent Keywords

Keyword	Occurrences
Vietnam	1176
Viet Nam	362
Sustainable Development	234
Planning	154
Environmental Technology	148
Economic Growth	128
Firm Performance	87
Article	82
Decision Making	78
Corporate Social Responsibility	75
Innovation	74
Asia	68
Commerce	66
SMEs	63
China	62
Corporate Governance	61
Customer Satisfaction	60
Profitability	60
Sustainability	59
Developing Countries	58

Source: Scopus, accessed May 11, 2021

Table 8 - Top 15 Institutions with the most Prominent Outputs

Affiliation	Documents
University of Economics Ho Chi Minh City	698
National Economics University	468
Ton-Duc-Thang University	406
Viet Nam National University Ho Chi Minh City	368
Vietnam National University Hanoi	275
Ho Chi Minh City Open University	224
Duy Tan University	214
Đại học Công nghệ Thành phố Hồ Chí Minh	208
RMIT University Vietnam	198
Foreign Trade University	153
University of Danang	146
International University, Vietnam National University Ho Chi Minh City	144
Banking University - Ho Chi Minh City	127
Can Tho University	114
Industrial University of Ho Chi Minh City	109

Source: Scopus, accessed May 11, 2021

related publications in economic and business research were retrieved from Scopus from 1992 to 2021 and then inputted in VOSviewer® to visualize the networks and distribution of the data they contained. The results of the study help us to draw four main conclusions.

Firstly, the paper provides 5,389 scientific publications on categories of economics and business from 1992 to 2021 in Vietnam.

Secondly, the study provides an overview of publication trends on economics and business research in Vietnam.

Thirdly, this paper provides a comprehensive analysis of the most popular articles, the most influential journals, the keyword distribution, co-occurrence network, most influential authors, bibliometric mapping and clustering analysis, and top research organizations in economics and business in Vietnam.

Finally, this study can serve as useful reference sources for scholars who want to perform bibliometric analysis of economics and business research trends in Vietnam.

Acknowledgments

The author wishes to acknowledge support from Banking University - Ho Chi Minh City.

Declaration of Competing Interest

The author declares that they have no known competing financial interests or personal relationships which have or could be perceived to have influenced the work reported in this article.

Funding

No funding sources to declare.

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