

Scientometric analysis and dimensions on international business literature

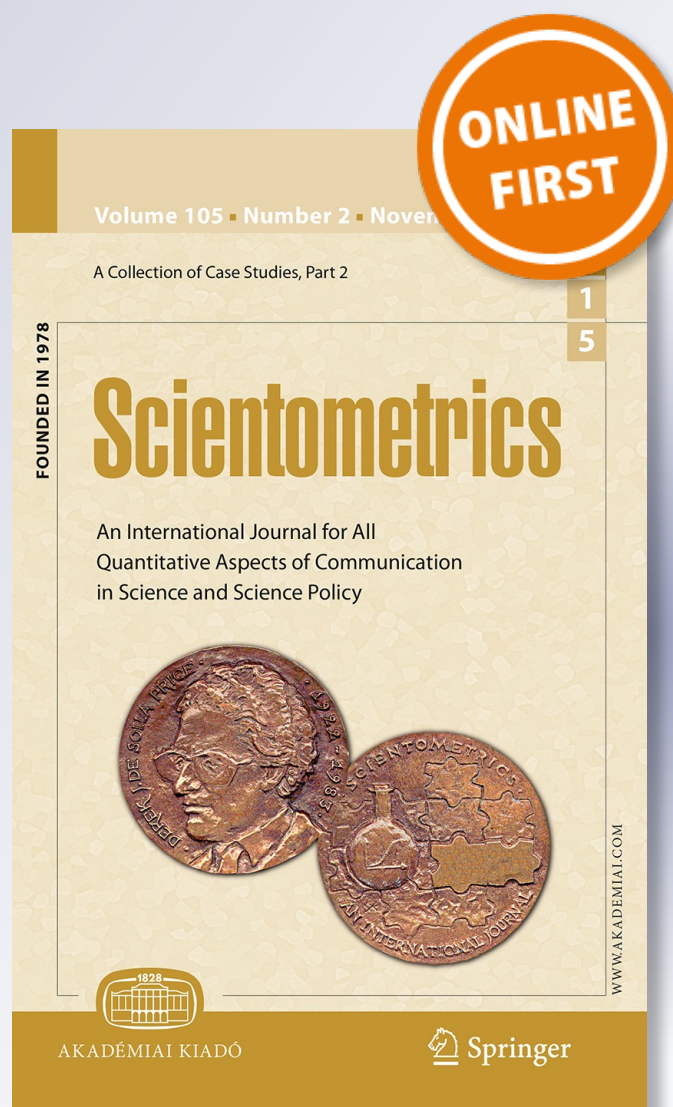
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Scientometric analysis and dimensions on international business literature

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Abstract The paper discusses the trend of world literature on “International Business” in terms of the output of research publications as indexed in the Social Sciences Citation Index during the period from 2004 to 2013. A total of 3131 journals and 1623 papers were indexed on international business in the database during the 10 year study period. The average number of papers published per year was 162.30. The highest numbers of papers, i.e., 268 (16.513 %) were published in the year 2010. The author Eden L and Causgil ST have shared the top position who wrote the highest publications, i.e., 13 (0.801 %) each. The source title Journal of International Business Studies contained the highest number with 359 (22.12 %) publications. The most popular research area is Business Economics in which the highest number of publications, i.e., 1442 (88.848 %) counted. The United States contributed highest number of publications, i.e., 616 (37.954 %) among the total of 62 countries who contributed on the subject. Most productive institution was University of Leeds, which contributed a total of 28 (1.1164 %) publications among the total of 513 organizations. Articles amounted to 1329 (81.885 %) of the literature on international business. The study will help researchers and authors who can identify the most appropriate, influential journals in which to publish, as well as confirm the status of journals in which they have published (Hasan et al. in Proceedings of the fourth international conference of the digital libraries, 27–29 November 2013 New Delhi, India. TERI, New Delhi, pp 319–329, 2013). It will help professors, academicians and students who can discover where to find the current reading list in their respective fields (Krishna and Kumar in SRELS J Inf Manag 41(2):229–234, 2004). The publishers and editors can determine journals’ influence in the marketplace and review editorial functions (Chuang et al. in Scientometrics 87(3):551–562, 2011). The educational institutions, business groups, to look into the trends and make appropriate policies related to international business on the basis of inferences depicted from the analysis. The administrators, policy and planning

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makers can track bibliometric and citation patterns to make strategic and funding decisions (Arora et al. in *Curr Sci* 104(3):307–315, 2013). The librarians and information analysts can support selection or removal of journals from their collections, and determine how long to keep each journal in the collection before archiving it (Trivedi in *Libr Philos Pract*, 1–6, 2010).

Keywords International business · Content analysis · Web of science · Social sciences citation index · Mapping research · Research output · Scientometric analysis · Scholarly output · Authorship pattern · Citation pattern · Reference pattern

Abbreviations used

AI	Article Influence
ABDC	Australian Business Deans Council
ABS	Association of Business Schools
BCI	Book Citation Index
CSCD	Chinese Science Citation Database
CR	Cited References
EF	Egiefactor
FA	First Author
IF	Impact Factor
ISI	Institute for Scientific Information
JCR	Journals Citations Index
NR	Cited Reference Count
SJR	SCImago Journal & Country Rank
TC	Times Cited Count (WoS—Core collection)
TP	Total Publications
WoS	Web of Science
Z9	Total Times Cited Count (WoS, BCI, and CSCD)

Introduction

The area as International Business does not needs any introduction. It is the most popular area not only in India but also in the world. There are many renowned businesses and management institutions worldwide where international business is very popular topic and they publish many scholarly documents every year. The international business reflects in other subject areas of knowledge, i.e., economics and business, finance, banking and accounting, organizational behavior and human resource, quantitative techniques and operations, international business and communication, computer science and information technology and marketing, etc. The international business is very vast area where many new concepts, approaches, and theories came out every year in different areas of knowledge.

Scientometric, as a measure of scientific performance, has been widely applied to research evaluation for a long period (Pillai 2007). It has been employed to evaluate various researches. In existed bibliometric analyses, the analyzed aspects usually covering languages, annual publication outputs, journals, categories, and contributing countries and institutions (Gupta and Kaur 2013). In recent years, keywords which could provide a reasonably detailed picture of the article's subject have been quantitatively analyzed to figure out the research

emphases and trends. To analyze these aspects, the common evaluation indicators number of publications and their publication share were utilized. Impact factor was introduced by Garfield and Sher (1963) to help select additional source journals using the recent citations received from other journals, and has been also widely used to rank and evaluate journals. In particular, the five indicators including total, independent, collaborative, first author, and corresponding author articles have been used to compare the publication performance of countries and institutions (Borgman 1999). In addition, rankings are useful indicators, especially in terms of institutions and researchers in urgent demand. These indicators including number of publication, publication share, impact factor, rankings as indicators were utilized for the evaluation of International Business research (Kademani et al. (1994). Citations are part of the formal accounting process of science, documenting the origin and evolution of research streams over time (Judge et al. 2007).

Objectives of the study

The research work aims to Scientometric study on International Business Literature. The aim of this research work was to systematically evaluate not only the publication characteristics of languages, annual publication outputs, journals and Web of Science categories, and national and institutional contributors (Kademani 2006). The present research objective is to study on International Business literature and its trends of world literature from 2004 to 2013. The major objectives of scientometric assessment study are to identify and carry out the following factors:

1. Figure out the annual output of publications on international business;
2. Count the geographical distribution of publications;
3. Mapping of authorship by records;
4. Measure the organizational distribution;
5. Quantum of form-wise, Language-wise distribution and subject dispersion;
6. Assess the indications of research on the thrust areas;
7. Reflect critically on these findings and raise the discussions.

Selection of parameters of study

This study has its own limitations. To make the study proper and more result oriented, there were some parameters set forth. The following guidelines were taken into consideration for making the study more focused.

- The study was confined to the specific subject “international Business” as identified as research topic.
- The database named SSCI of WoS has been selected for retrieving the bibliographical records.
- The study was limited to the specific period under which the data was collected, i.e., from 2004 to 2013 for 10 years to access the proper trends and indications of the research.
- The publications published during 2004–2013 were considered for the data collection and analysis.
- The highest number of publications and figures of the related objectives have been tabulated to display the required results.

- The data records have been presented in the form of textual, tables and graphs at appropriate place.
- The complete data records have been tabulated or graphed wherever it was necessary to display the required results.
- The data obtained was actual and truly indicative under the parameters selected for study.

Methodology

Data with the keyword “international business” was collected from the online WoS—SSCI database. This database was chosen as it is most reputed and very comprehensive database covering all aspects not only of subject under study but also covering most of the subject areas of knowledge. It facilitates quick, powerful access to the bibliographic and citation information on world scientific literature. The Web of science was preferred because it is considered a quality database in selection of resources for coverage of the subject (Mahesh and Wadhwa 2013). The database helps in analyzing research performance, identifying significant trends in the sciences and social sciences, determining research output and impact in specific fields of research. The WoS also rank top countries, journals, scientists, papers, and institutions by field of research. It indexes more than 6650 major journals across 150 scientific disciplines and includes all cited references captured from indexed articles. (<http://apps.webofknowledge.com>). The data retrieved from SSCI have been downloaded in excel files with XLS extension.

The downloaded data records were in raw format. The same have been filtered, sorted and presented by the author in tables, graphs and textual form as per the research requirement. The data was manipulated to facilitate chronological analysis, author analysis, country of origin, contributing institutions, subject-wise classification and sources preferred for publication of papers, etc.

Publication output, data interpretation and analysis of literature

The international business literature amounted to 2448 publications under the topic option contributed from 62 countries of the world by default period from 1975 to 2014. After filtering the search, total of 1623 records were retrieved for the period from 2004 to 2013 for 10 years.

The average number of publications produced per year was 162.30. The literature data which has been fetched from WoS—SSCI have been interpretation and analysis on different aspects, i.e., publication output, most prolific authors with ranking, measurement of publications by number of author, geographical distribution of publications, most productive institutions, document form-wise distribution, most preferred sources and journals for publishing research papers, language-wise distribution of publications, subject wise dispersion, top cited titles with their quality assessment & ranking, and range & citations pattern received by publications, status and range of references cited in publications.

Publications output during the study period

The highest number of publications 268 (16.513 %) were produced in 2010. Table 1 provides annual growth rate on international business and highlights increasing trend from

Table 1 Trend of publication output during 2004–2013

Publication years	Records	% of 1623	Change in no. of publication	% change over year
2013	224	13.802	11	5.1643
2012	213	13.124	−36	−14.4578
2011	249	15.342	−19	−7.0895
2010	268	16.513	62	30.0970
2009	206	12.693	55	36.4238
2008	151	9.304	53	54.0816
2007	98	6.038	21	27.2727
2006	77	4.744	3	4.0540
2005	74	4.559	11	17.4603
2004	63	3.882	–	–

Data Source: WoS-Social Sciences Citation Index (SSCI)

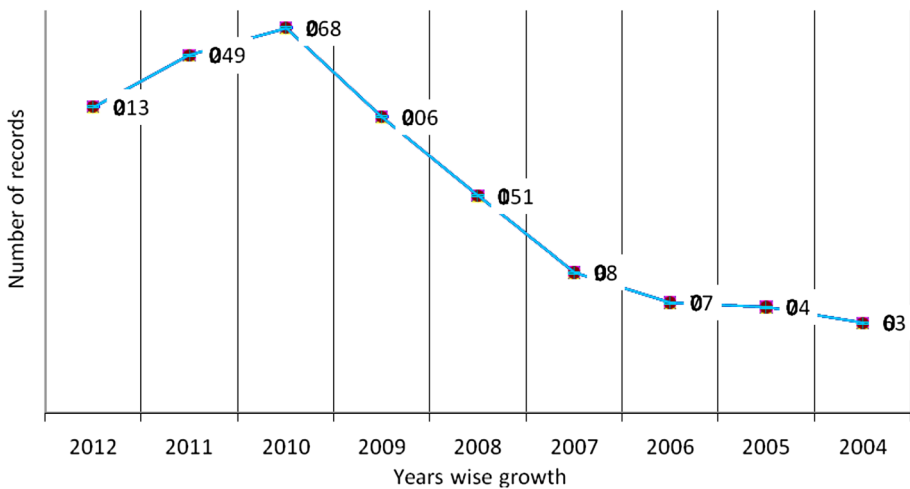


Fig. 1 Trend of publication output during 2004–2013

2004 to 2010 but decreased in 2011 to 249 by −7.08955 %, further decreased in 2012–213 by −14.4578 % but increased in 2013 to 224 by 5.164319 %. The table depicts changing percentage of publications reported during 2004–2013. An annual average growth in publication is by 17.0007 % (Fig. 1).

$$\text{Annual average growth} = \frac{\sum \text{of \% change over year}}{\text{Number of years}}$$

Most prolific author

Pattern of authorship trends on international business literature have been provided in the below Table 2 which depicts that Eden Lorraine of Texas A&M University and Cavusgil S Tamer of Georgia State University, USA are the highest contributors with 13 publications

Table 2 List of top ten authors during 2004–2013

Author	Affiliation	FA/TP	% of 1623	Rank	NR/Av	TC/Av	Z9/Av
Eden Lorraine	Texas A&M University, USA	8/13	0.801	1	462/35.5384	350/26.9230	355/27.3076
Cavusgil S. Tamer	Georgia State University, Atlanta, USA	0/13	0.801	2	996/76.6151	516/39.36923	534/41.0769
Meyer, Klaus E.	University of Bath, Sch Management England	5/12	0.739	3	1161/96.75	515/42.9166	552/4350
Buckley, Peter J.	University of Leeds, Sch Business, England	9/11	0.678	4	820/74.5454	382/34.72	390/35.4545
Rugman, Alan M.	University of Reading, England	6/10	0.616	5	593/59.30	348/34.80	350/35.00
Peng, Mike W.	University of Texas Dallas, USA	5/9	0.555	6	764/84.8888	586/65.1111	604/67.1111
Mudambi, Ram	Temple University, Philadelphia, USA	4/9	0.555	7	572/63.5555	184/20.4444	185/20.5555
Griffith, David A.	Michigan State University USA	3/9	0.555	8	677/75.2222	219/24.3333	222/24.6666
Wright, Mike	University of London England	1/9	0.555	9	714/79.3333	154/17.1111	155/17.2222
Filatovchev, Igor	City University London, England	2/8	0.493	10	525/65.6250	112/14.00	1113/14.1250

Data Source: WoS-Social Sciences Citation Index (SSCI)

each followed by Meyer Klaus E with 12 publications. The contributors appeared as first author (FA) in their publications have also been counted and mentioned in the third column FA/TP (Fig. 2).

Measurement of publications by number of author

The below Table 3 reflects the publication trend by authorship. The two authors have written highest number, i.e., 13 publications, followed by one author who have written 12, 11, 10 papers each and 1080 authors have written one publication each. The total 2553 authorship have been counted in participation of 1623 publications.

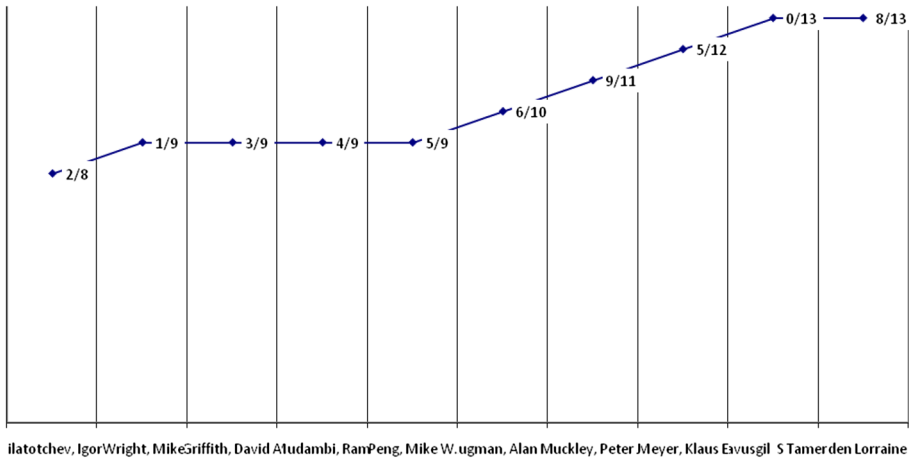


Fig. 2 Ranking in order with FA/TP

Table 3 Measurement of publications by number of author

No. of publications	No. of authors	% of 1623	Total authorship	% of 2553
13	2	0.1232	26	1.0184
12	1	0.0616	12	0.4700
11	1	0.0616	11	0.4308
10	1	0.0616	10	0.3916
9	4	0.2464	36	1.4101
8	3	0.1848	24	0.9400
7	5	0.3080	35	1.3709
6	7	0.4313	42	1.6451
5	15	0.9242	75	2.9377
4	46	2.8342	184	7.2072
3	102	6.2846	306	11.9859
2	356	21.9346	712	27.8887
1	1080	66.5434	1080	42.3031

Geographical distribution of publications

Top ten highly productive countries out of 62 countries that contributed considerable amount of publications have been listed in the following Table 4. The USA is at the top position by contributing 616 (26.1127 %) publications, followed by England with 275 (11.6574 %), Canada with 145 (6.1466 %), Peoples R China with 138 (5.849936 %), Australia with 123 (5.21407 %), Netherlands with 99 (4.1966 %), and Germany with 87 (3.6880 %) out of 2359 publications on international business literature. The table also depicts the number of publication counted year wise (Fig. 3).

Top ten prolific institutions

The top ten ranked institutions have been listed in following Table 5 based on their contribution towards international business literature. The institutions from UK performed excellent. Most productive institution was University of Leeds which contributed 28 (1.1164 %) publications followed by Chinese University of Hong Kong, Michigan State University, York University with 25 (0.9968 %) each as 2nd, 3rd and 4th positions respectively. The ranking order is unchanged as it has been provided in WoS (Fig. 4).

Document form-wise distribution

The publications have been contributed in a variety of formats. The following Table 6 depicts that 1329 (81.8854 %) of the literature have been published in the form of journal articles followed by reviews with 94 (5.79174 %), Book reviews with 76 (4.6826 %), editorial material with 58 (3.57363 %), proceeding papers with 57 (3.5120 %), reprints with 5 (0.3080 %), biographical items with 2 (0.1232 %), correction and Meeting Abstract with 1 (0.0616 %) each (Fig. 5).

Sources preferred for publishing

The following Table 7 illustrates the distribution of publications on international business spread out in 150 sources ranging to journals, conference proceedings, book reviews, editorial materials, etc. The most preferred journal by authors for their research papers was the journal named, Journal of International Business Studies with 359 (22.12 %) followed by International Business Review with 92 (5.669 %), International Marketing Review with 82 (5.052 %), Journal of Business Ethics with 59 (3.635 %), Journal of World Business and Management International Review with 43 (2.649 %), Journal of International Management with 33 (2.033 %), Journal of Business Research with 28 (1.725 %), Journal of International Economics with 20 (1.232 %) and Management Decision with 18 (1.109 %) publications. The ranking have been provided to assess the quality of the journals. The journals mentioned in the below Table 7 have been listed in the leading quality assessor databases, i.e., ISI-JCR-SSCR-2012-Business, SCImago, Egienfactor, ABDC and ABS. All assessors have provided the different assessments on different scales. It is remarkable that majority of the journals have been published from England, followed by Netherlands, USA and Germany.

Language-wise distribution

The following Table 8 presents the distribution of publications according to language used for writing. The maximum authors have contributed predominantly in English language

Table 4 Geographical distribution of publications

Countries	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Records	% of 2359	Ranking
USA	29	37	33	36	62	81	96	91	77	74	616	26.112	1
England	10	14	13	15	22	35	49	41	38	38	275	11.657	2
Canada	4	5	6	5	12	18	36	22	20	17	145	6.1466	3
Peoples Republic China	5	3	5	4	11	11	25	24	24	26	138	5.8499	4
Australia	1	9	8	9	5	19	15	18	19	20	123	5.2140	5
Netherlands	2	4	1	6	6	15	21	15	15	14	99	4.1966	6
Germany	3	2	3	3	3	11	9	18	20	15	87	3.6880	7
Spain	3	1	5	4	6	8	5	13	8	18	71	3.0097	8
France	1	3	1	2	4	9	12	7	10	6	55	2.3314	9
Sweden	3	1	4	4	3	7	12	9	8	4	55	2.3314	10

Data Source: WoS-Social Sciences Citation Index (SSCI)

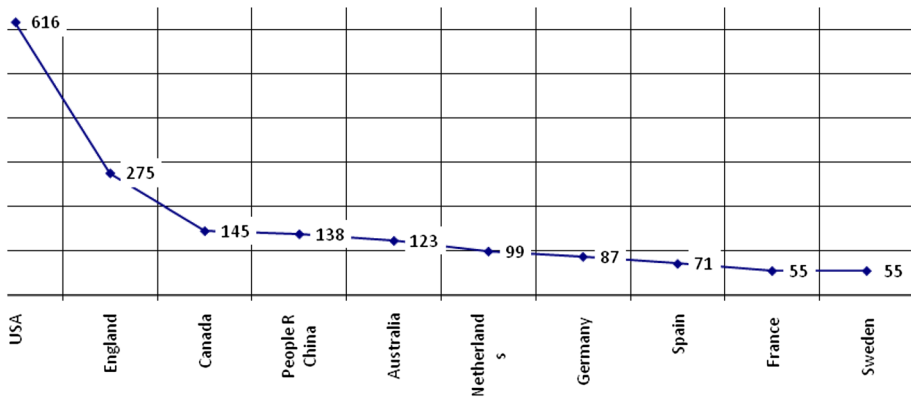


Fig. 3 Number of publications during 2004–2013

Table 5 Ten prolific institutions

Organizations	Country	Records	% of 2508	Ranking
University of Leeds	UK	28	1.1164	1
Chinese University of Hong Kong	Peoples R China	25	0.9968	2
Michigan State University	USA	25	0.9968	3
York University	Canada	25	0.9968	4
Indiana University	USA	23	0.9171	5
National University of Singapore	Singapore	23	0.9171	6
Erasmus University	Netherlands	22	0.8772	7
University of Queensland	Australia	22	0.8772	8
University of Manchester	UK	21	0.8373	9
University of New South Wales	Australia	21	0.8373	10

Data Source: WoS-Social Sciences Citation Index (SSCI)

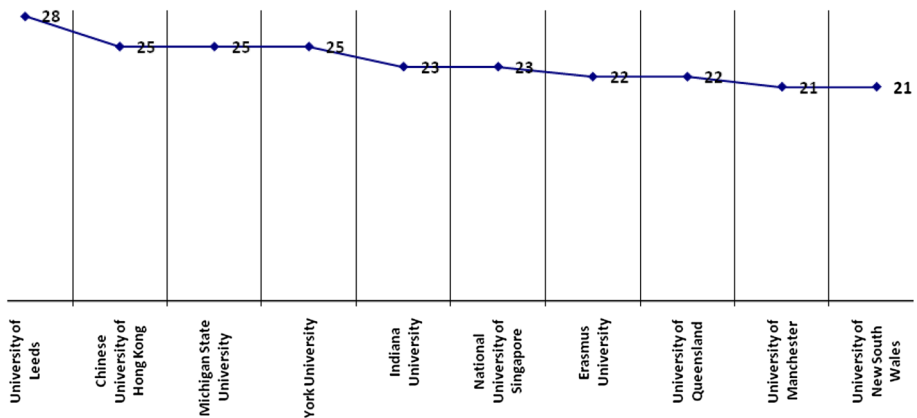


Fig. 4 Ranking in order in terms of publications output

Table 6 Form-wise distribution of publications

S. no	Form of publications	No. of records	% of 1623	NR/Av	TC/Av	Z9/Av
1	Article	1329	81.8854	84,260/63.40	14,583/8.715	11,800/8.878
2	Review	94	5.7917	11,233/119.50	2702/28.7444	2748/29.234
3	Book Review	76	4.6826	191/2.51	4/0.052	4/0.052
4	Editorial Material	58	3.5736	1662/28.6551	628/10.827	634/10.9310
5	Proceedings Paper	57	3.5120	31,883/55.84	1395/24.47	1420/24.91
6	Reprint	5	0.3080	346/69.2	105/21.00	110/22.00
7	Biographical Item	2	0.1232	1/0.50	5/2.50	5/2.50
8	Correction	1	0.0616	1	0	0
9	Meeting Abstract	1	0.06161	0	0	0

Data Source: WoS-Social Sciences Citation Index (SSCI)

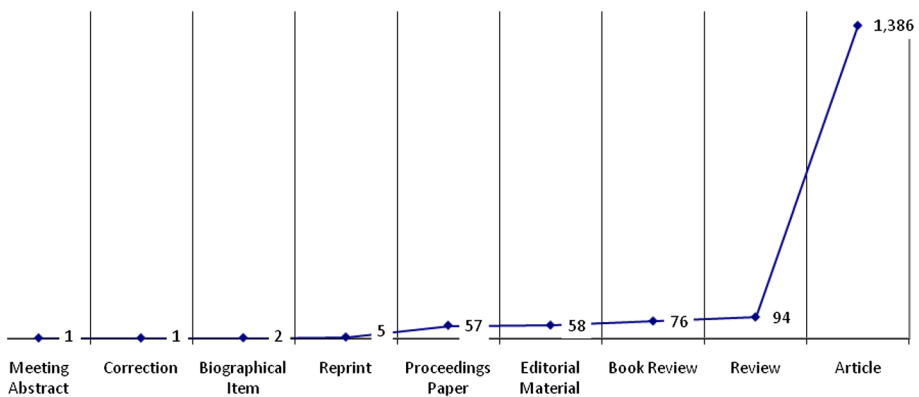


Fig. 5 Document form-wise distribution

with 1593 (98.152 %), followed by Spanish with 9 (0.555 %) publications. The Czech, German, Portuguese, French and Turkish languages follows respectively in order.

Subject dispersion

The subject category is one of the best scientometric indicators to understand and grasp instantaneously the thought content of the papers and to find out the growth of the subject field. The following Table 9 illustrates the distribution of publications on international business spread out in 73 areas of research. Most preferred area of research has been identified as Business Economics with 1442 (88.848 %) records, followed by Social Sciences 131 (8.071 %) records. The top twenty research areas have been listed in order in the following Table 9.

Top ten titles of publications

When analyse the subject category to identify the research indication, the titles which reflects the soul of the subject needs to be studied to understand the idea content output.

Table 7 Top sources preferred for publications

Source document titles	CR	% of 1623	Country of origin	NR/Av	TC/Av	Z9/Av	Quality assessment			ABDC rank-2012	ABS rank-2010
							ISI-JCR-SSCR-2012-business	SCImago rank/SJR 2012	Egiefactor-2011		
Journal of International Business Studies	359	22.12	England	26,090/ 72,6740	7660/ 19,9610	7287/ 20,2980	3,602	3903/3,278	EF = 0.011066(84 %) AI = 1.6853 (92 %)	A *	4
International Business Review	92	5.669	England	6403/ 69,5970	631/ 6,8586	645/ 7,0108	1,849	3375/0,971	EF = 0.4554(46 %) AI = 0.4554 (47 %)	B	3
International Marketing Review	82	5.052	England	5512/ 672,195	861/ 10,50	882/ 10,7560	1,172	6490/0,555	EF = 0.001668(45 %) AI = 0.5831 (57 %)	A	3
Journal of Business Ethics	59	3.635	Netherlands	3608/ 61,2525	514/ 8,711	518/ 8,7796	1,270	4246/0,824	EF = 0.009767(82 %) AI = 0.3155 (34 %)	A	3
Journal of World Business	43	2.649	USA	3063/ 71,2325	653/ 15,1860	665/ 15,4651	2,617	1976/1,356	EF = 0.002776(58 %) AI = 0.8552 (74 %)	A	3
Management International Review	43	2.649	Germany	3288/ 76,4651	162/ 3,7674	164/ 3,8139	1,043	4359/0,807	EF = 0.001863(48 %) AI = 1.0056 (80 %)	A	3
Journal of International Management	33	2.033	England	2371/ 71,8484	281/ 8,5151	285/ 8,6363	2,200	1493/1,592	EF = 0.001506(43 %) AI = 0.7399 (68 %)	B	2
Journal of Business Research	28	1.725	USA	1444/ 51,5714	268/ 9,5714	277/ 9,8928	1,484	2161/1,289	EF = 0.009203(82 %) AI = 0.6352 (61 %)	A	3
Journal of International Economics	20	1.232	Netherlands	773/ 38,65	209/ 10,450	210/ 10,50	2,086	2544/4,108	EF = 0.017672(90 %) AI = 2.801 (97 %)	A *	3
Management Decision	18	1.109	England	930/ 51,6666	82/ 4,5555	87/ 4,8333	3,787	4216/0,829	EF = 0.004559(69 %) AI = 0.6829 (65 %)	C	1

* Depicts ranking of the journal

Table 8 Language-wise distribution of publications on international business

Languages	Records	% of 1623
English	1593	98.152
Spanish	9	0.555
Czech	5	0.308
German	4	0.246
Portuguese	4	0.246
French	2	0.123
Turkish	2	0.123

Table 9 Top subject areas for publications

Rank	Research areas	Records	% of 1623	Rank	Research areas	Records	% of 1623
1	Business Economics	1442	88.848	11	Information Sci. Library Sci.	18	1.109
2	Social Sciences: Other Topics	131	8.071	12	Computer Science	17	1.047
3	Government Law	40	2.465	13	Education Educational Research	17	1.047
4	Psychology	39	2.403	14	Sociology	12	0.739
5	Public Administration	39	2.403	15	Urban Studies	9	0.555
6	Geography	32	1.972	16	Operations Research Management Science	8	0.493
7	Linguistics	31	1.91	17	Communication	7	0.431
8	Environmental Sciences Ecology	29	1.787	18	History	6	0.37
9	Engineering	23	1.417	19	Mathematical Methods In Social Sciences	6	0.37
10	International Relations	21	1.294	20	Transportation	6	0.37

The following Table 10 depicts the top ten titles with their authors, NR, TC, Z9 and average TC per year. The list of titles has been displayed in the order of merit on the basis of citation.

Citation pattern

Table 11 which is available in online supplement of this article provides the pattern of citations received by the publications published on international business during 2004–2013. A total of 16,422 citations were counted from 1623 records during the study period, with h-index as 55 and average citations per item as 10.11.

Among the 1623 papers, 449 (27.6648 %) publications were not cited by other publications and 166 (10.2280 %) were cited 1 time each. However, 134 (8.2563 %) publications were cited two times. The numbers of citations from number of publications have been displayed in following table.

Table 10 Top ten cited titles

Title	Authors	NR	TC	Z9	Average/ year
A perspective on regional and global strategies of multinational enterprises	A. M. Rugman and A. Verbeke	68	306	308	27.82
Innovation, organizational capabilities, and the born-global firm	G. A. Knight and S. T. Cavusgil	85	299	308	27.18
An institution-based view of international business strategy: a focus on emerging economies	Mike W. Peng, Denis Y. L. Wang and Yi Jiang	161	267	276	38.00
Globalisation, economic geography and the strategy of multinational enterprises	P. J. Buckley and P. N. Ghauri	129	228	232	20.73
The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership	Jan Johanson and Jan-Erik Vahlne	155	199	205	33.17
Culture and international business: recent advances and their implications for future research	K. Leung, R. S. Bhagat, N. R. Buchan, M. Erez and C. B. Gibson	123	197	198	19.60
Probing theoretically into Central and Eastern Europe: transactions, resources, and institutions	K. E. Meyer and M. W. Peng	147	160	164	16.00
Perspectives on multinational enterprises in emerging economies	K. E. Meyer	120	152	155	13.82
When Knowledge Wins: Transcending the Sense and Nonsense of Academic Rankings	Nancy J. Adler and Anne-Wil Harzing	90	137	137	22.83
Trade, finance, specialization, and synchronization	J. Imbs	53	123	124	11.18

Table 11 Citation pattern: range and citations received by publications

No. of citations	No. of publications	Citations	% age	No. of citations	No. of publications	Citations	% age
0	449	0	27.6648	51	1	51	0.0616
1	166	166	10.2280	52	2	104	0.1232
2	134	268	8.2563	53	2	106	0.1232
3	115	345	7.0856	54	2	108	0.1232
4	74	296	4.5595	55	3	165	0.1848
5	65	325	4.0049	56	3	168	0.1848
6	55	330	3.3888	57	1	57	0.0616
7	56	392	3.4504	58	1	58	0.0616
8	39	312	2.4030	61	2	122	0.1232
9	43	387	2.6494	62	1	62	0.0616
10	39	390	2.4030	63	2	126	0.1232
11	30	330	1.8484	64	1	64	0.0616
12	29	348	1.7868	65	3	195	0.1848
13	20	260	1.2323	66	1	66	0.0616
14	19	266	1.1707	67	1	67	0.0616

Table 11 continued

No. of citations	No. of publications	Citations	% age	No. of citations	No. of publications	Citations	% age
15	21	315	1.2939	69	1	69	0.0616
16	18	288	1.1091	70	2	140	0.1232
17	16	272	0.9858	73	1	73	0.0616
18	10	180	0.6161	74	3	222	0.1848
19	13	247	0.8010	75	1	75	0.0616
20	9	180	0.5545	76	1	76	0.0616
21	10	210	0.6161	80	2	160	0.1232
22	9	198	0.5545	82	1	82	0.0616
23	8	184	0.4929	83	1	83	0.0616
24	12	288	0.7394	85	1	85	0.0616
25	6	150	0.3697	86	1	86	0.0616
26	5	130	0.3081	87	1	87	0.0616
27	7	189	0.4313	89	2	178	0.1232
28	5	140	0.3081	97	1	97	0.0616
29	6	174	0.3697	99	1	99	0.0616
30	5	150	0.3081	101	1	101	0.0616
31	3	93	0.1848	107	1	107	0.0616
32	3	96	0.1848	109	1	109	0.0616
33	8	264	0.4929	113	1	113	0.0616
34	3	102	0.1848	114	1	114	0.0616
35	3	105	0.1848	115	1	115	0.0616
36	4	144	0.2465	119	1	119	0.0616
37	5	185	0.3081	122	1	122	0.0616
38	2	76	0.1232	123	1	123	0.0616
39	4	156	0.2465	137	1	137	0.0616
40	3	120	0.1848	152	1	152	0.0616
41	6	246	0.3697	160	1	160	0.0616
42	1	42	0.0616	197	1	197	0.0616
43	3	129	0.1848	199	1	199	0.0616
44	2	88	0.1232	228	1	228	0.0616
46	2	92	0.1232	267	1	267	0.0616
47	7	329	0.4313	299	1	299	0.0616
49	4	196	0.2465	306	1	306	0.0616
50	3	150	0.1848				

Cited references pattern

Data was analysed to find out the pattern of cited references in publications on international business. Table 12 which is available in online supplement of this article provides the cited reference pattern received by the publications published on international business during 2004–2013. Total counts of cited references were 100,877 appended in the publications as a whole with an average of 6215.465 per publication. Highest 1533 (1.519 %) references

Table 12 Status of references cited in publications

No. of cited references	No. of publications	Total cited references	% age	No. of cited references	No. of publications	Total cited references	% age
1	57	57	0.056504	89	9	801	0.794036
3	5	15	0.01487	90	8	720	0.71374
4	3	12	0.011896	91	9	819	0.81188
5	6	30	0.029739	92	7	644	0.638401
6	9	54	0.053531	93	14	1302	1.290681
7	7	49	0.048574	94	14	1316	1.304559
8	7	56	0.055513	95	8	760	0.753393
9	10	90	0.089218	96	12	1152	1.141985
10	13	130	0.12887	97	11	1067	1.057724
11	9	99	0.098139	98	6	588	0.582888
12	2	24	0.023791	99	11	1089	1.079532
13	5	65	0.064435	100	3	300	0.297392
14	9	126	0.124905	101	7	707	0.700854
15	8	120	0.118957	102	5	510	0.505566
16	5	80	0.079304	103	9	927	0.918941
17	6	102	0.101113	104	9	936	0.927863
18	11	198	0.196279	105	9	945	0.936784
19	8	152	0.150679	106	9	954	0.945706
20	4	80	0.079304	107	7	749	0.742488
21	10	210	0.208174	108	7	756	0.749428
22	10	220	0.218087	109	6	654	0.648314
23	16	368	0.364801	110	4	440	0.436175
24	8	192	0.190331	111	3	333	0.330105
25	11	275	0.272609	112	5	560	0.555131
26	15	390	0.386609	113	6	678	0.672106
27	11	297	0.294418	114	5	570	0.565045
28	20	560	0.555131	115	8	920	0.912002
29	15	435	0.431218	116	5	580	0.574958
30	17	510	0.505566	117	4	468	0.463931
31	13	403	0.399496	118	4	472	0.467897
32	13	416	0.412383	119	3	357	0.353896
33	22	726	0.719688	120	5	600	0.594784
34	16	544	0.539271	121	4	484	0.479792
35	17	595	0.589827	122	4	488	0.483757
36	17	612	0.606679	123	3	369	0.365792
37	17	629	0.623532	124	3	372	0.368766
38	18	684	0.678053	125	5	625	0.619566
39	14	546	0.541253	126	2	252	0.249809
40	12	480	0.475827	127	3	381	0.377688
41	17	697	0.69094	128	2	256	0.253774
42	22	924	0.915967	129	4	516	0.511514
43	21	903	0.89515	130	4	520	0.515479

Table 12 continued

No. of cited references	No. of publications	Total cited references	% age	No. of cited references	No. of publications	Total cited references	% age
44	15	660	0.654262	131	1	131	0.129861
45	25	1125	1.11522	132	4	528	0.52341
46	13	598	0.592801	133	2	266	0.263687
47	18	846	0.838645	134	3	402	0.398505
48	17	816	0.808906	135	4	540	0.535305
49	16	784	0.777184	136	3	408	0.404453
50	19	950	0.941741	137	2	274	0.271618
51	18	918	0.910019	138	1	138	0.1368
52	17	884	0.876315	139	2	278	0.275583
53	19	1007	0.998245	140	1	140	0.138783
54	17	918	0.910019	141	2	282	0.279548
55	14	770	0.763306	142	3	426	0.422296
56	21	1176	1.165776	145	4	580	0.574958
57	26	1482	1.469116	146	5	730	0.723654
58	17	986	0.977428	147	2	294	0.291444
59	22	1298	1.286716	152	1	152	0.150679
60	14	840	0.832697	153	1	153	0.15167
61	13	793	0.786106	155	3	465	0.460957
62	12	744	0.737532	156	1	156	0.154644
63	15	945	0.936784	157	1	157	0.155635
64	16	1024	1.015098	158	2	316	0.313253
65	14	910	0.902089	159	3	477	0.472853
66	20	1320	1.308524	160	2	320	0.317218
67	16	1072	1.06268	161	2	322	0.319201
68	11	748	0.741497	166	2	332	0.329114
69	17	1173	1.162802	169	2	338	0.335062
70	21	1470	1.45722	173	2	346	0.342992
71	14	994	0.985358	179	2	358	0.354888
72	14	1008	0.999237	181	1	181	0.179426
73	21	1533	1.519672	184	1	184	0.1824
74	18	1332	1.32042	186	1	186	0.184383
75	15	1125	1.11522	189	2	378	0.374714
76	11	836	0.828732	192	1	192	0.190331
77	14	1078	1.068628	196	1	196	0.194296
78	19	1482	1.469116	202	1	202	0.200244
79	8	632	0.626506	204	1	204	0.202226
80	19	1520	1.506785	209	1	209	0.207183
81	8	648	0.642366	210	1	210	0.208174
82	15	1230	1.219307	211	2	422	0.418331
83	14	1162	1.151898	234	1	234	0.231966
84	11	924	0.915967	245	1	245	0.24287
85	14	1190	1.179654	262	1	262	0.259722

Table 12 continued

No. of cited references	No. of publications	Total cited references	% age	No. of cited references	No. of publications	Total cited references	% age
86	9	774	0.767271	268	1	268	0.26567
87	17	1479	1.466142	321	1	321	0.318209
88	12	1056	1.046819	322	1	322	0.319201

cited in 21 publications in a range of 73 references followed by 1520 (1.506 %) references cited in 19 publications in the range of 80 references, 1482 (1.469 %) references cited in 26 publications in the range of 57 references and 1482 (1.469 %) references cited in 19 publications in the range of references. Other details on references cited in international business literature have been tabulated below.

Conclusion

This paper has highlighted the 10 year period under study, quantitative growth of research papers was found to be inconsistent and have many ups and downs reflected during 2004–2013 studied through WoS—SSCI database. The evaluation of research performance in terms of research publications is considered as an integral part of science, and important in the scientific community in the field of “international business”. A comparison of leading countries output in relation to the world output has helped in understanding the contribution in a better prospectus. Though the records available in the WoS—SSCI database reveal a small number, it is important that it covers only the peer-reviewed journals.

- The overall trend during the period is in increasing order by approximately 17 %. The paper has carried out an evaluation of publications on “international business” of a decade and some of important findings have been highlighted under conclusion.
- USA is the major contributor with 616 papers to its credit on the subject. Growth of the literature on international business showed encouraging trend during 2004–2013. Only ten countries have contributed 70.53 % of publications.
- Top ten ranked authors contributed 6.34 % publications on international business. A surprising fact came out that the second top ranked author has not appeared as first author even in a single paper out of his total 13 publications.
- Most productive institution was University of Leeds by contributing 28 (1.11 %) publications followed by the Chinese University Hong Kong with 25 (0.99 %). The overall contribution was 9.37 % by ten top organisations.
- The journal articles amounted to 81.88 % of the literature was highest count followed by review with 5.79 % publications. The publications in the form of journal articles received highest citations than other types of publications and the publications in the form of corrections and meeting abstract received the least citations.
- The most two preferred journals by authors for their research papers were found the journals, named “Journal of International Business Studies” with 359 (22.12 %) and International Business Review with 92 (5.669 %) publications.
- The preferred language was English with 98.15 % publications followed by other languages showing high gap, i.e., Spanish with 0.555 %, Czech with 0.308 % and

German with 0.246, etc. The other languages, i.e., Portuguese, French and Turkish have got place down in the line.

- The Business Economics with 88.84 % publications have been identified as the most preferred subject category in which highest papers have been written. It has been followed by other categories, i.e., Social Sciences with 8.071 %, Government Law with 2.403 % and Psychology with 2.403 %, etc.

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Compliance with ethical standards

Conflict of interest None.

References

- Arora, J., Trivedi, K. J., & Kembhavi, A. A. (2013). Impact of access to e-resources through the UGC-INFONET Digital Library Consortium on research output of member universities. *Current Science*, 104(3), 307–315.
- Borgman, C. L. (1999). What are digital libraries? Competing visions. *Information Processing and Management*, 35(3), 227–243.
- Chuang, K. Y., Wang, M. H., & Ho, Y. S. (2011). High-impact papers presented in the subject category of water resources in the essential science indicators database of the institute for scientific information. *Scientometrics*, 87(3), 551–562.
- Garfield, E., & Sher I. H. (1963 & 1998). Letters to the Editor, The Multiple Meanings of Impact Factors. *Journal of the American Society for Information Science*, 49(8), 768. http://www.garfield.library.upenn.edu/papers/multiple_meanings_impfactor.html#garfieldsher_1963. Accessed 30 March 2014.
- Gupta, B. M., & Kaur, Har. (2013). World glaucoma research: a quantitative analysis of research output during 2002–2011. *Annals of Library and Information Studies*, 60, 98–106.
- Hasan, N., & Singh, M. (2013). Digital library literature: A scientometric analysis. In Proceedings of the fourth international conference of the digital libraries, 27–29 November 2013 New Delhi, India: 319–329. New Delhi: TERI
- Judge, T. A., et al. (2007). What causes a management article to be cited—article, author, or journal? *Academy of Management Journal*, 50(3), 491–506.
- Kademani, B. S., et al. (1994). Scientometric portrait of Noble Laureate Dr. C. V. Raman. *Indian Journal of Information Library and Society*, 37(4), 215–249.
- Kademani, B. S., et al. (2006). Scientometric dimensions of nuclear science and technology research in India: A study based on INIS (1970–2002) database. *Malaysian Journal of Library & Information Science*, 11(1), 23–48.
- Krishna, K. M., & Kumar, S. (2004). Authorship trends in agriculture research: A bibliometric analysis. *SRELS Journal of Information Management*, 41(2), 229–234.
- Mahesh, G., & Wadhwa, N. K. (2013). Web of science based ranking of Indian library and information science journals. Collnet Journal of Scientometrics and Information Management. http://www.tarupublications.com/journals/cjsim/FullText/new%20pdf/05_CJSIM6-2.pdf. Accessed on 31 March 2014.
- Pillai, K. G. S. (2007). Journal citation in physics doctoral dissertations of Indian Institute of Science. *Annals of Library and Information Studies*, 54(4), 177–184.
- Trivedi, M. (2010). Digital libraries: Functionality, usability and accessibility. *Library Philosophy and Practice*, 1–6. <http://www.webpages.uidaho.edu/~mbolin/trivedi-diglib.htm>. Accessed 31 March 2014.