

6th Annual

Global TechMining Conference

2016.09.13 • València, Spain

Early insights of Emerging Sources Citation Index (ESCI): a bibliometrics analysis and overlap mapping method

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Introduction



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THOMSON REUTERS

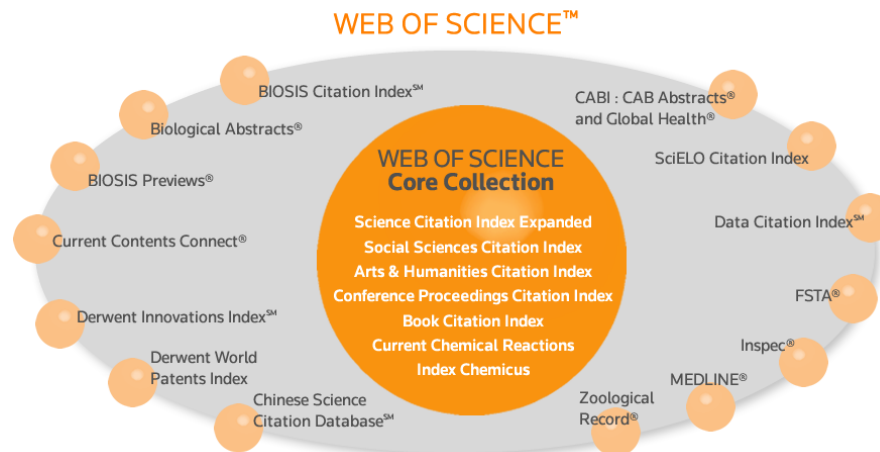
July 11, 2016, Thomson Reuters announced that it has entered into a definitive agreement to sell its Intellectual Property & Science business to private equity funds affiliated with Onex Corporation (“Onex”) and Baring Private Equity Asia (“Baring Asia”) for **\$3.55 billion** in cash.

- The Intellectual Property & Science business provides ***comprehensive intellectual property and scientific information, decision support tools and services*** that enable the lifecycle of innovation for governments, academia, publishers and corporations to discover, protect and commercialize new ideas and brands.

Introduction

With the rapid development of advanced science and technology, new journals emerge in large numbers.

- The journals offer more **valuable data source** for bibliometrics scholars to accelerate research, scientific discovery and Intellectual Property innovation;
- How to pick up the peer-reviewed publications of regional importance and in emerging research fields becomes an essential issue for funders, key opinion leaders, and evaluators.



Introduction



Emerging Sources Citation Index (ESCI) is designed to extend the universe of publications in Web of Science with additional high-quality, peer-reviewed publications of regional importance and in emerging research fields.

Discover new insights from research emanating from emerging countries while making connections to the broader research landscape for a more complete global picture.

WEB OF SCIENCE™
RELEASE NOTES v5.20

ESCI added more content to the funders, evaluators, and partners:

- (1) more data to support research assessment and analysis;
- (2) more coverage of local content with significant regional importance;
- (3) earlier visibility of emerging fields and trends.

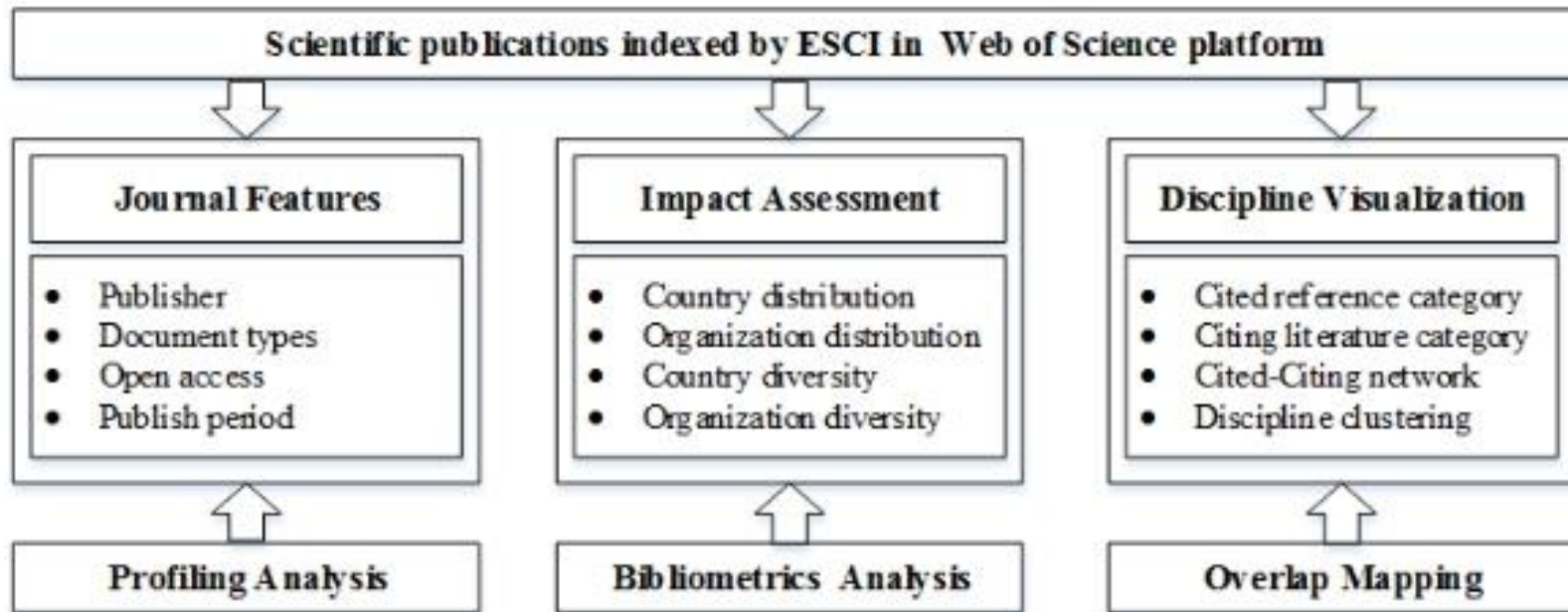
Research Questions

As an emerging citation index, ESCI remains large space for researching. We want to carry out our study in the following three aspects:

- ❑ **Conduct the research profiling of the journals indexed in ESCI to explore publish activity characteristics;**
- ❑ **Evaluate the influence of the journals indexed in ESCI in accelerating regional communication and expanding global collaboration;**
- ❑ **Visualize the discipline distributions of the publications indexed in ESCI, especially in the emerging fields.**



Framework and Data



- We focused on the publications published in 2015;
- Retrieval date is April 20, 2015 (keeping updating)
- Ultimately, **87065 records** are obtained.

Results

Journal features-Publisher distribution

NO	Records	Publisher	Country	Journals
1	2904	ROUTLEDGE JOURNALS, TAYLOR & FRANCIS LTD	UK	214
2	2847	ELSEVIER SCIENCE BV	Netherlands	72
3	2283	WILEY-BLACKWELL	USA	103
4	1423	MDPI AG	Switzerland	43
5	1404	SPRINGER HEIDELBERG	Germany	58
6	1281	SPRINGER	Netherlands	40
7	1163	INT UNION CRYSTALLOGRAPHY	UK	1
8	1150	MEDKNOW PUBLICATIONS & MEDIA PVT LTD	India	30
9	1130	EMERALD GROUP PUBLISHING LIMITED	UK	77
10	1107	SAGE PUBLICATIONS LTD	UK	43

Results

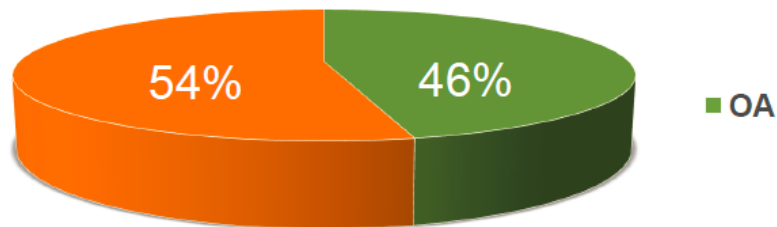
Journal features-Document types

NO	Document Types	Records	NO	Document Types	Records
1	ARTICLE	65926	11	FILM REVIEW	24
2	EDITORIAL MATERIAL	8088	12	TV REVIEW RADIO REVIEW	16
3	BOOK REVIEW	6625	13	BIBLIOGRAPHY	16
4	REVIEW	4230	14	DATABASE REVIEW	14
5	LETTER	1043	15	REPRINT	11
6	CORRECTION	300	16	FICTION CREATIVE PROSE	8
7	NEWS ITEM	264	17	THEATER REVIEW	7
8	BIOGRAPHICAL ITEM	241	18	SOFTWARE REVIEW	1
9	POETRY	187	19	SCRIPT	1
10	ART EXHIBIT REVIEW	54	20	DANCE PERFORMANCE REVIEW	1

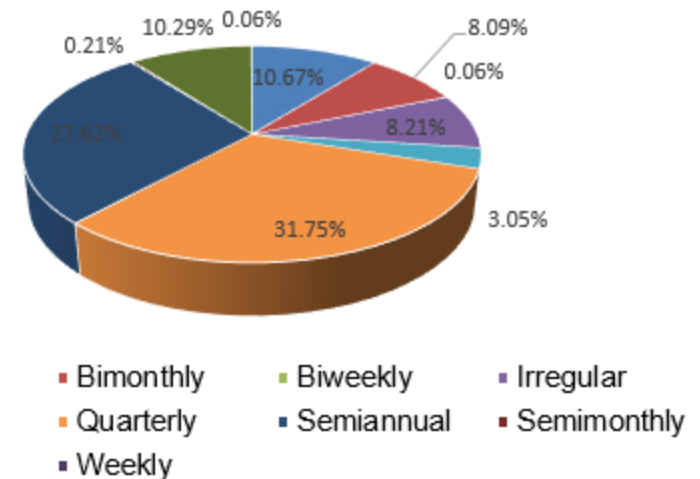
Results

Journal features-Open access

□ Open access



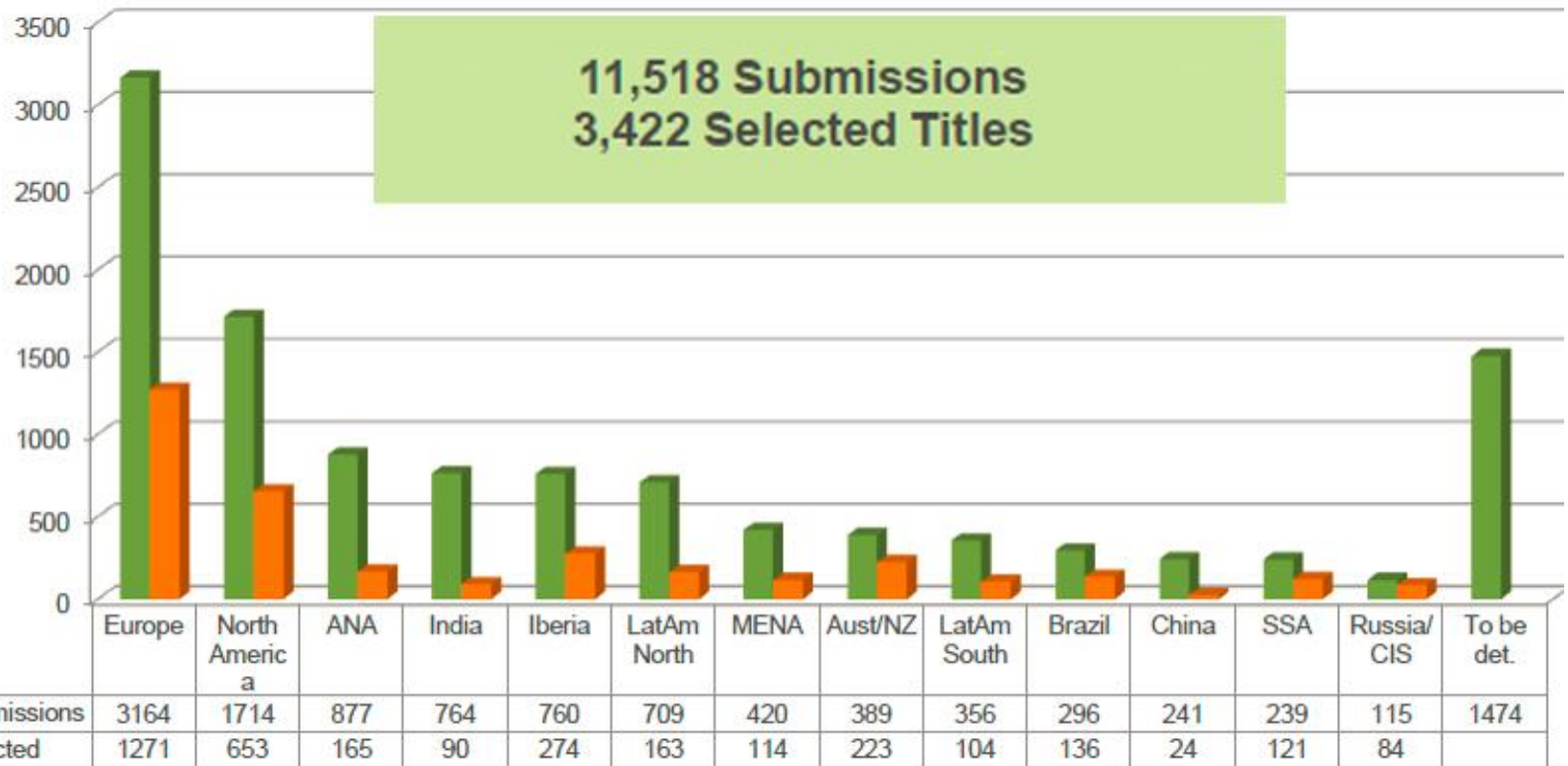
The ESCI launches with a balance of open access and proprietary journals.



The ESCI tends to index some high-quality journal published Quarterly and Semiannually.

Results

Country distribution



Results

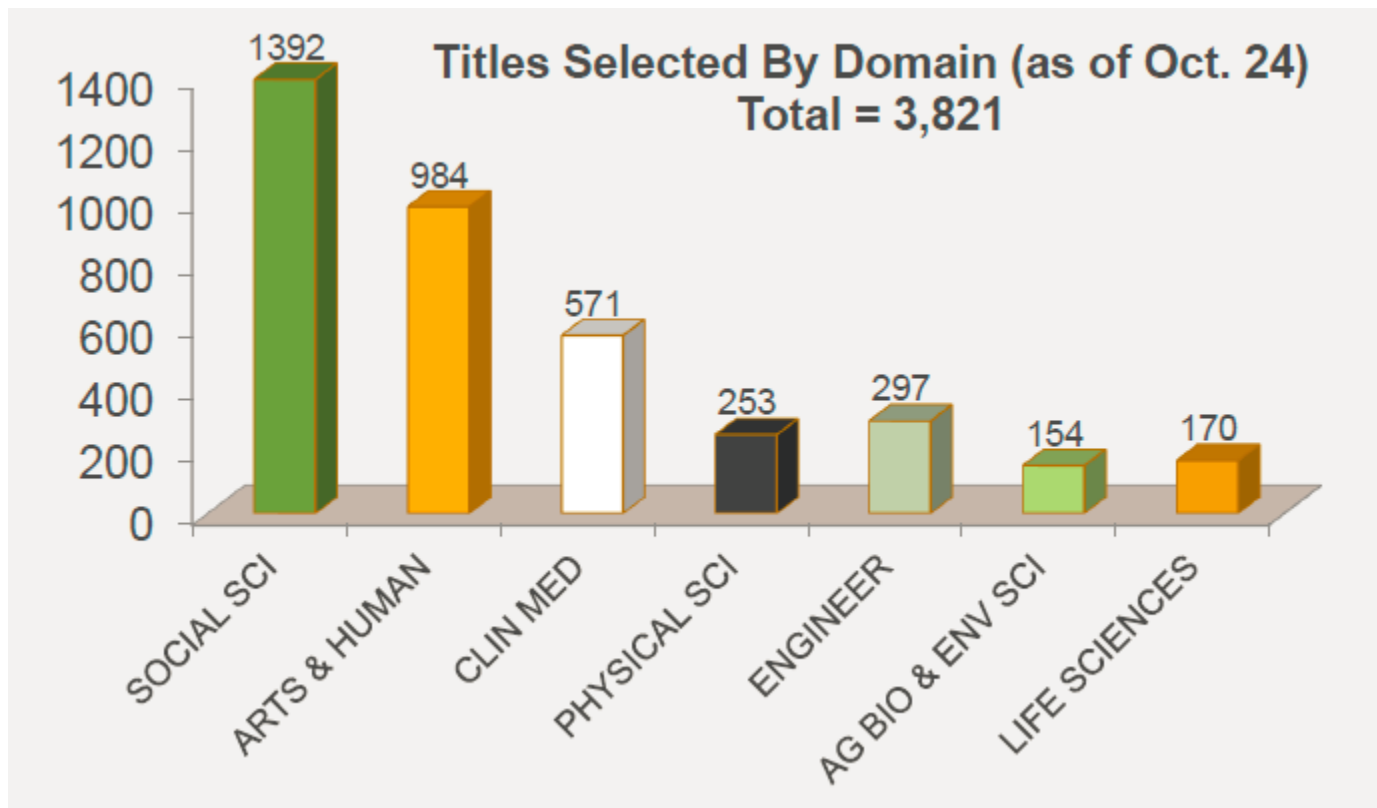
Country distribution

Country	Authors	Rate	1st Author	Rate	Corresp. Author	Rate	Ranking*
USA	12316	17.56	10866	15.49	10949	15.61	1/1/1
India	5345	7.62	5144	7.33	5096	7.26	2/2/2
UK	4738	6.75	3761	5.36	3758	5.36	3/3/3
Brazil	3476	4.95	3294	4.70	3230	4.60	4/4/4
Australia	3465	4.94	2986	4.26	3007	4.29	5/7/7
China	3445	4.91	3130	4.46	3111	4.43	6/5/5
Spain	3406	4.85	3063	4.37	3064	4.37	7/6/6
Italy	2947	4.20	2583	3.68	2587	3.69	8/8/8
Canada	2768	3.95	2338	3.33	2344	3.34	9/9/9
Germany	2430	3.46	1909	2.72	1930	2.75	10/12/12
Iran	2108	3.00	2042	2.91	2026	2.89	11/10/10
Turkey	2041	2.91	1941	2.77	1933	2.76	12/11/11
Total	54082	77.09	52086	74.24	51410	73.28	

* Ranking is ordered by All/1st/Corresponded

Results

Journal Research Area



Results

Category distribution

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	78.617	37.979	37.979	78.617	37.979	37.979	62.014	29.959	29.959
2	47.411	22.904	60.883	47.411	22.904	60.883	36.614	17.688	47.647
3	23.615	11.408	72.291	23.615	11.408	72.291	20.138	9.728	57.375
4	14.104	6.814	79.105	14.104	6.814	79.105	19.216	9.283	66.658
5	8.651	4.179	83.284	8.651	4.179	83.284	14.955	7.224	73.882
6	5.639	2.724	86.008	5.639	2.724	86.008	14.763	7.132	81.015
7	5.182	2.503	88.511	5.182	2.503	88.511	8.001	3.865	84.880
8	4.433	2.141	90.653	4.433	2.141	90.653	6.886	3.327	88.206
9	2.569	1.241	91.894	2.569	1.241	91.894	4.701	2.271	90.477
10	1.971	.952	92.846	1.971	.952	92.846	2.895	1.398	91.876
11	1.760	.850	93.697	1.760	.850	93.697	2.719	1.313	93.189
12	1.367	.661	94.357	1.367	.661	94.357	2.067	.998	94.188
13	1.112	.537	94.894	1.112	.537	94.894	1.463	.707	94.894
14	.951	.459	95.354						
15	.861	.416	95.770						

Conclusions

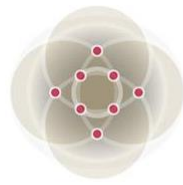
Based on the above analysis, we come to some findings:

- ❑ Journals in ESCI have passed an initial editorial evaluation and can continue to be considered for inclusion in products such as SCIE, SSCI, and A&HCI, which have rigorous evaluation processes and selection criteria.
- ❑ ESCI present a positive effective on expending research assessment and expediting scientific collaboration. However, it still cannot bring much attempt to promoting the inferior role of non-English countries and regions.
- ❑ How to balance the journal selection of different research domains and then facilitate cross-disciplinary research still need further efforts.

Future Plan

Based on current research, future studies could be improved in at least these two fields.

- ❑ First, seek further relationships between the papers indexed in ESCI and the papers indexed by Science Citation Index Expanded (SCI-EXPANDED), Social Sciences Citation Index (SSCI) and Arts & Humanities Citation Index (A&HCI).
- ❑ Second, update the overlap mapping of ESCI publications, and attempt to build the another overlay map including the major non-active fields of science.



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**Thanks for your attentions!
Questions & Comments**