

Towards a 'Book Publishers Citation Reports'. First approach using the 'Book Citation Index'

Hacia un ranking bibliométrico de editoriales científicas de libros. Primera aproximación utilizando el 'Book Citation Index'

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La ausencia de libros y capítulos de libros en los índices de citas presentes en las bases de datos de la Web of Science ha sido tradicionalmente una de sus más importantes debilidades. Sin embargo Thomson Reuters en Octubre de 2010 lanzó el Book Citation Index, un nuevo índice de citas que contaba con 29.618 libros y 379.082 capítulos de libros. Este producto ha abierto nuevas posibilidades para el análisis bibliométrico de campos como las Humanidades y las Ciencias Sociales. Precisamente el objetivo principal de esta nota es analizar a través de diferentes indicadores las editoriales de los ámbitos de Humanidades y Ciencias Sociales indexadas en el Book Citation Index durante los años 2006-2011. Más concretamente se ha probado la posibilidad de desarrollar un ranking de editoriales de libros basado en la citación y la producción de las mismas. Para ello se presentan una colección de rankings con seis indicadores bibliométricos para un total de 19 disciplinas científicas.

The absence of books and book chapters in the Web of Science Citation Indexes (SCI, SSCI and A&HCI) has always been considered an important flaw but the Thomson Reuters 'Book Citation Index' database was finally available in October of 2010 indexing 29,618 books and 379,082 book chapters. The Book Citation Index opens a new window of opportunities for analyzing Humanities and Social Sciences from a bibliometric point of view. The main objective of this article is to analyze different impact indicators referred to the scientific publishers included in the Book Citation Index for the Social Sciences and Humanities fields during 2006-2011. This way we construct what we have called the 'Book Publishers Citation Reports'. For this, we present a total of 19 rankings according to the different disciplines in Humanities & Arts and Social Sciences & Law with six indicators for scientific publishers.

Libros, Monografías, Book Citation Index, Análisis de Citas, Thomson Reuters, Journal Citation Reports, Evaluación de la Investigación, Humanidades, Ciencias Sociales, Editoriales, Comunicación Científica.

Books, Monographs, Book Citation Index, Citation Analysis, Thomson Reuters, Rankings, Journal Citation Reports, Research Evaluation, Social Sciences, Humanities, Publisher, Scientific Communication.

1. Introduction

The absence of books and book chapters in the Web of Science Citation Indexes (SCI, SSCI and A&CI) has always been considered an important flaw when using this database for bibliometric purposes and especially when assessing fields such as Social Sciences or Humanities in which this publication type plays a major role. In this sense, Eugene Garfield as creator of the citation indexes was well aware of this shortcoming and insisted on the necessity of developing a further citation index that would cover this important loophole when stating:

"From the perspective of the social scientist or humanities scholar, the failure to include monographs as sources in the ISI citation indexes may be a drawback in drawing conclusions about the impact of certain work. Nevertheless, the inclusion of books as cited references in ISI's citation indexes has permitted studies of most-cited books to be accepted as reasonable surrogates for more comprehensive studies that might have included books as sources. Undoubtedly, the creation of a Book Citation Index is a major challenge for the future and would be an expected by-product of the new electronic media with hypertext capability!" (Garfield, 1996).

In May 2010 Thomson Reuters, intending to put an end to this long criticism, announced at the Frankfurt Book Fair the launch of the long-awaited Book Citation Index (hereafter BKCI) and by the way, getting in ahead of the field. The database was finally available in October of that same year indexing 29,618 books and 379,082 book chapters and covering a time period from 2005 to the present (currently it goes back to 2003) (Giménez-Toledo and Torres-Salinas, 2011). The emergence of such a product is of great interest not just as an information retrieval tool for Social Sciences and Humanities researchers who finally have an information source to which turn to. But also to bibliometricians and scientific publishers who now have a new tool that includes a long neglected but important publication type such as books which meant a great shortcoming in their studies (Glänzel and Schoepflin, 1999). The important role books play in Social Sciences and Humanities meant a great threat to any type of approach for research evaluation in these fields as no reliable information source covered them (Hicks, 2004) and therefore, were not even considered. The BKCI opens a new window of opportunities for analyzing these fields from a bibliometric point of view (Leydesdorff and Felt, 2012).

In this sense, the introduction of books in the Web of Science platform could lead to some kind of Book Publishers Citation Reports in which scientific publishers would be ranked according to some bibliometric indicator similarly to what the Journal Citation Reports does. This would provide another perspective for assessing publishers to those previously presented, for instance analyzing their visibility through their presence in library catalogues (Torres-Salinas and Moed, 2009) or through surveys to researchers (Giménez-Toledo and Tejada-Artigas, 2012). In this line of thought, in this paper we present the possibility of drawing an analogy between the evaluation of journals and scientific publishers. To that effect, the main objective is to analyze different bibliometric indicators referred to the scientific publishers included in the BKCI for the Social Sciences and Humanities fields. This way we construct what we have called the 'Book Publishers Citation Reports'. For this, we present a total of 19 rankings according to the different disciplines in Humanities & Arts and Social Sciences & Law with six indicators for scientific publishers.

We believe that databases such as the BKCI may lead to the development of new bibliometric tools in order to improve research evaluation exercises. Specially regarding scientific publishers where no tools can be found for measuring objectively and quantitatively their impact within the research community or their level of specialization. In this sense, the 'Book Publishers Citation Reports' could be hypothetically used similarly in the same way than the current 'Journal Citation Reports', that is, directed to:

- Librarians for facilitating their acquisition process. We must not forget that this was Eugene Garfield's original purpose when he created the Journal Impact Factor (Archambault and Larivière, 2009). These ranking help librarians to differ the core literature in certain disciplines and maximize their budget.
- Researchers for orientating them within the scientific literature. These rankings allow them to rapidly locate which journals have more visibility and therefore are a good tool when choosing where to send their manuscripts for publication.

- Research managers and bibliometricians as they are powerful tools for research evaluation purposes. In this sense, the impact of journals is used as a proxy for measuring the capability of researchers for instance; to publish in highly demanded journals, as those which have a greater Journal Impact Factor are considered as more competitive.

2. Methodology

Here we present an analysis of the impact of the scientific publishers included in the Book Citation Index for Arts & Humanities and Social Sciences & in the 2006-2011 time period. From the total of documents assigned to the *Book Citation Index - Social Science & Humanities* within the study time period, they represent around 78% of the total records indexed. We analyzed a total of 19 scientific disciplines which correspond to 40 subject categories assigned by Web of Science or correspond to the aggregation of different subject categories (Table I).

Table I. Set of discipline of Humanities & Arts and Social Sciences & Law selected for the creation of publisher rankings

Disciplines used in this study	Web of Science Category assigned
Anthropology	Anthropology
Archeology	Archaeology
Area & Cultural Studies	Cultural Studies Social Issues Area Studies Asian Studies
Arts	Art
Communication	Film, Radio, Television Communication
Economics & Bussiness	Industrial Relations & Labor Business, Finance Business Economics
Education	Education & Educational Research Education, Scientific Disciplines Education, Special Psychology, Educational
Geography	Geography Demography
History	History
History & Philosophy of Science	History & Philosophy Of Science
Information Science & Library Science	Information Science & Library Science
Languague & Linguistics	Language & Linguistics Linguistics
Law	Law
Literature	Literature, American Poetry Literature, Slavic Literature, Romance Literature, British Isles Literature, African, Australian, Canadian Literature Literature, German, Dutch, Scandinavian
Management	Management
Philosophy & Ethics	Ethics Philosophy
Political Science & International Relations	International Relations Political Science
Religion	Religion
Sociology	Sociology

Regarding data collecting and processing, in May 2012 the BKCI was downloaded and introduced into a relational database where data were processed and indicators calculated. Publishers' names were normalized as many had different variants according to their various headquarters in each country. For instance, for Springer we found variants such as: Springer-Verlag Wien, Springer-Verlag Tokyo, Springer Publishing Co, etc. In table II we include the indicators used in our study.

Table II. Set of bibliometric indicators for analyzing the production and impact of publishers included in the Book Citation Index.

	INDICATOR	ACRONYM	DEFINITION
PRODUCTION	Number of items indexed	Total Items	Total records indexed in the Book Citation Index. That is the sum of records indexed as 'book' and 'book chapter'.
	Number of books indexed	Books	Records indexed as document type 'book' in the Book Citation Index
	Number of book chapters indexed	Chap	Records indexed as document type 'book chapter' in the Book Citation Index
IMPACT	Total citations received by all items	Total Citations	Total citations received by all records included in the Book Citation Index.
	Average citations per item	AvgCit	Average of citations items receive. That is, the result of dividing Total Items between Total Citations.
	Percentage of non cited items	NonCit	Percentage of items indexed as document type 'book' or 'book chapter' that have received no citations

3. Results

The whole BKCI has a total of 396,421 records divided in 367,616 book chapters and 28,805 books for the 2006-2011 time period, averaging 12 chapters per book. Considering only the Humanities & Arts and Social Sciences & Law fields, they are a total of 17,005 books and 202,830 chapters, averaging 11 chapters per book. This means that Humanities and Social Sciences represent 55% of the total Book Citation Index. In table III we offer a general perspective of the analyzed disciplines and their production and impact indicators. In this sense, Economics & Business, Education and History are the ones with more items indexed and also, and probably as a consequence, the fields with more citations received along with 'Sociology. On the other side, Anthropology has the highest citation average with 1.68. The non-cited rate ranges from 91% in Arts to 74% in Archeology.

Table III. Output and impact indicators for the main disciplines in Social Sciences and Humanities included in the Book Citation Index

	Production			Impact		
	Total Items	Books	Chap	Total Citations	AvgCit	NonCit
Economics & Business	35129	2577	32552	24498	0,70	86%
Political Science & Inter. Relations	31790	2750	29040	26851	1,08	84%
Education	21068	1416	19652	10360	0,49	84%
History	20346	1643	18703	12067	0,59	89%
Area & Cultural Studies	15029	1273	13756	7572	0,50	88%
Philosophy & Ethics	12392	944	11448	6887	0,56	87%
Literature	11654	1026	10628	3689	0,32	90%
Language & Linguistics	11468	760	10708	7932	0,69	83%
Law	9824	772	9052	3922	0,40	88%
Sociology	9080	707	8373	13464	1,48	78%
Communication	8703	596	8107	4462	0,51	85%
Religion	8684	721	7963	3795	0,44	91%
Management	7597	543	7054	4389	0,58	84%
History & Philosophy of Science	5819	446	5373	3081	0,53	88%
Information Science & Library Science	4235	267	3968	1745	0,41	85%
Anthropology	3146	234	2912	5280	1,68	75%
Geography	2670	215	2455	2754	1,03	79%
Archeology	2336	154	2182	2367	1,01	74%
Arts	1932	140	1792	514	0,27	91%

Finally, in table IV we show as an example, the ranking and bibliometric indicators of scientific publishers for Information Science & Library Science. The other 18 analyzed disciplines which would complete this first approach to a 'Book Publishers Citation Reports' are available in a working paper indexed in ArXiv (Torres-Salinas, Robinson-García and Delgado, 2012). As observed, all book publishers' rankings per discipline are ordered according to the total number of items indexed (books and book chapters) per publisher. In the case of Information Science & Library Science, the most productive publisher according to the Book Citation Index is Chandos Publishing (1456 items), followed by IOS Press (760 items) and Springer (653 items). However, it is worth noting that, while the total items list correlates to a great extent with the number of books (0.9) there are some unexpected results. The most significant is that of IOS Press which, according to the Book Citation Index, has only 4 books indexed with 756 book chapters, which means an average of 189 chapters per book. The publishers which have received a higher number of citations are Chandos Publishing (502), Springer (353) and IOS Press (202); clearly, those with a higher output are also the most cited. However, when analyzing the average of citations per item the whole picture changes with Elsevier leading the rank with 5.12 citations per item. Finally, regarding the rate of uncitedness, ME Sharpe and Emerald show significant results as, despite occupying the 5th and 12th position respectively regarding output, they show rates of 71% and 75% of uncited items.

Table IV. Output and Impact indicators for publishers in the Information Science & Library Science discipline according to the Book Citation Index

Information & Library Science Publishers	Production			Impact		
	Total Items	Books	Chap	Total Citations	AvgCit	NonCit
CHANDOS PUBL	1456	125	1331	502	0,34	89%
IOS PRESS	760	4	756	202	0,27	84%
SPRINGER	653	44	609	353	0,54	81%
WALTER DE GRUYTER & CO	318	18	300	87	0,27	88%
M E SHARPE INC	252	15	237	175	0,69	71%
BAYWOOD PUBLISHING CO INC	154	13	141	34	0,22	85%
EMERALD GROUP PUBLISHING LIMITED	144	13	131	61	0,42	75%
ROUTLEDGE	101	6	95	14	0,14	93%
PALGRAVE	100	4	96	7	0,07	96%
MIT PRESS	47	4	43	34	0,72	87%
WOODHEAD PUBL LTD	41	4	37	10	0,24	90%
NOVA SCIENCE PUBLISHERS, INC	28	3	25	0	0,00	100%
CAMBRIDGE UNIV PRESS	26	2	24	18	0,69	92%
TMC ASSER PRESS	26	1	25	0	0,00	100%
ELSEVIER	25	2	23	128	5,12	92%
EDWARD ELGAR PUBLISHING LTD	23	2	21	31	1,35	91%
CABI PUBLISHING-C A B INT	21	1	20	50	2,38	48%
WORLD SCIENTIFIC PUBL CO PTE LTD	18	1	17	8	0,44	89%
UNIV ADELAIDE PRESS	9	1	8	0	0,00	100%
UTAH STATE UNIV PRESS	9	1	8	1	0,11	89%
CRC PRESS-TAYLOR & FRANCIS GROUP	8	1	7	0	0,00	100%
UNIV CALIFORNIA PRESS	8	1	7	27	3,38	75%
WILFRID LAURIER UNIV PRESS	8	1	7	3	0,38	75%

4. Concluding remarks

In this paper we present a descriptive bibliometric analysis of the scientific publishers indexed in the Book Citation Index in the 2006-2011 study time period for 19 disciplines in the fields of Social Sciences and Humanities. Our aim is to demonstrate that it is possible to develop a so-called 'Book Publishers Citation Reports' based on the Book Citation Index similarly to the 'Journal Citation Reports' for scientific journals. Therefore our main conclusion is that it is indeed technically possible; however, we must emphasize different problems we have encountered that warns us against the use of such a tool for evaluating purposes. The results offered by the Book Citation Index are not valid or reliable for bibliometric use, although they may be a good tool for academic librarians.

The issues we have encountered which affect to all 19 analyzed disciplines can be resumed in the following way:

- There is a clear dominance of English-language publishers with a commercial profile. When observed, practically all rankings are led by international commercial publishers such as Springer, Routledge or Palgrave. The main reason for this is that most of the publishers included in the Book Citation Index are commercial and therefore, there is a poor presence of university presses. Only those from Princeton, Cambridge, California or the Australian National University have a notable presence.

Torres-Salinas, D., Robinson-García, N., Jiménez-Contreras, E. y Delgado López-Cózar, E. (2012). Towards a 'Book Publishers Citation Reports'. First approach using the 'Book Citation Index'. *Revista Española de Documentación Científica*, 35(4), 615-620

- There is almost no representation of those countries with an important scientific background in the Humanities and Social Sciences such as Italy, France or Germany. In fact, France for instance has no publishers indexed, neglecting Editoriales Presses Universitaires de France. In the case of Spain, publishers such as Ariel or Alianza for example, which are greatly considered by Spanish researchers as shown in the Scholarly Publishers Indicators project are omitted (Giménez-Toledo y otros, 2012). Therefore, they have not even considered introducing the most important publishers per region or country.

- There is a surprising absence or limited presence of globally important publishers such as Peter Lang, Pearson, Macmillan or of specialized publishers such as John Benjamins for Linguistics, Giuffrè for Law or Archaeopress for Archeology.

These three problems are especially severe in the case of Humanities and Social Sciences where there is no international or global scientific community as in Basic and Applied Sciences, but there are many scientific communities dispersed according to national interests, and where English is not considered as the main scientific language. For this reason, when developing a product such as the Book Citation Index, the first thing that its developers should have taken into account is the effect of the national and local factors which would have led them to include publishers from different countries with a long humanistic tradition. This issue has been ignored completely by Thomson Reuters, in fact with simply reading the adverts the company offers one will immediately acknowledge such a fact when they state that they will only include publications in English language 'Because English is the universal language of science at this time, Thomson Reuters will focus on books that publish full text in English' (Thomson Reuters, 2010). In our opinion, this is an unfortunate statement when regarding to these fields.

Finally, we must point out several issues when developing publishers' indicators which must be taken into account if it is decided to develop a final version of what we have called the 'Book Publishers Citation Reports'

1) What must we count, books or book chapters? must we add their citations? Should we count book citations and chapters citations separately? should we distinguish between multi-authored books or single-authored book?

2) What should we do with those monographs which behave more closely to journals than the rest such as book series as Annual Reviews ? Should they be excluded in order to end with their distorting effect?

3) Although this has not been analyzed in this study, which is the most suitable citation window for measuring books' impact? Can we preserve the Journal Impact Factor analogy?

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5. References

Archaumbaldt, E.; Larivière, V. (2009). History of the journal impact factor: Contingencies and consequences. *Scientometrics*, vol. 79 (3), pp. 635-649.

Garfield, E. (1996). Citation indexes for Retrieval and Research Evaluation. *Consensus Conference on the Theory and Practice of Research Assessment*. 7 de Octubre. <http://www.garfield.library.upenn.edu/papers/ciretreseval-capri.html> [Accessed on 20 July 2012]

Giménez-Toledo E.; Tejada-Artigas, C. (2012). Valoración de editoriales especializadas en Comunicación, Biblioteconomía y Documentación: encuesta a profesores e investigadores. *El profesional de la información*, vol. 21 (1), pp. 50-62.

Torres-Salinas, D., Robinson-García, N., Jiménez-Contreras, E. y Delgado López-Cózar, E. (2012). Towards a 'Book Publishers Citation Reports'. First approach using the 'Book Citation Index'. *Revista Española de Documentación Científica*, 35(4), 615-620

Giménez-Toledo, E.; Tejada-Artigas, C.; Mañana-Rodríguez, J. Scholarly Publishers Indicators (SPI). 1º edición 2012. Disponible en: <http://epuc.cchs.csic.es/SPI> [28 de Julio de 2012].

Giménez-Toledo, E.; Torres-Salinas, D. (2011). Book Citation Index: nueva historia sobre Big Science y Little Science. *Anuario Thinkipi*, vol. 5, 203-205.

Hicks, D. (2004). The four literatures of social sciences. En: Moed, H.; Glänzel, W.; Schmoch, U. (editores.) *The handbook of quantitative science and technology research*. Kluwer, Dordrecht.

Glänzel, W.; Schoepflin, U. (1999). A bibliometric study of reference literature in the science and social sciences. *Information Processing & Management*, vol. 35 (1), pp. 31-44.

Leydesdorff, L; Felt, U. (2012). Edited Volumes, Monographs, and Book Chapters in the Book Citation Index (BKCI) and Science Citation Index (SCI, SoSCI, A&HCI). *Journal of Scientometric Research* (In press).

Thomson Reuters (2010). The book selection process for the Book Citation Index in Web of Science. Disponible en: http://wokinfo.com/media/pdf/BKCI-SelectionEssay_web.pdf [28 de Julio de 2012]

Torres-Salinas, D.; Moed, H.F. (2009). Library Catalog Analysis as a tool in studies of social sciences and humanities: An exploratory study of published book titles in Economics. *Journal of Informetrics*, 3(1), pp. 9-26.

Torres-Salinas, D.; Robinson-García, N.; Delgado López-Cózar, E. (2012). Towards a 'Book Publishers Citation Reports'. First approach using the 'Book Citation Index'. *Ec3 Working Papers 7*, arXiv:1207.7067v1. Disponible en: <http://arxiv.org/abs/1207.7067> [31 de Julio de 2012]