

# The Market Power of Global Scientific Publishing Companies in the Age of Globalization. An Analysis Based on the OCLC Worldcat

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# The Market Power of Global Scientific Publishing Companies in the Age of Globalization. An Analysis Based on the *OCLC Worldcat*

#### **Arno Tausch**

#### Abstract:

This article evaluates tendencies and trends of the global academic publishing industry, vital for any reasonable long-term publication strategy planning in research. Such analyses are made possible today by the OCLC Worldcat. Our multivariate attempt, combining Worldcat global library circulation figures of publisher companies with results from earlier publisher ranking studies, is based on factor analysis of 32 variables, and our promax factor analytical model establishes that there are eight factors of global publisher impact, explaining almost 86% of total variance:

- 1. overall global standing of the company
- 2. company as a factor on the market
- 3. company impact on the global political and economic debate
- 4. successfully distributing best-sellers
- 5. impact on the scholarly community
- 6. successfully distributing production to more than 50 global Worldcat libraries
- 7. output during the last 5 years
- 8. outstanding academic quality

Of the 51 companies with complete data under investigation here, the following companies are classified in the upper half: Oxford University Press; Springer; Cambridge University Press; Routledge; World Bank; Princeton University Press; Elsevier; CRC Press; University of Chicago Press; University of California Press; Palgrave Macmillan; MIT Press; Yale University Press; University of North Carolina Press; De Gruyter; Wiley-Blackwell; Kluwer Academic Publishers; University of Pennsylvania Press; Johns Hopkins University Press; Brill; Nova Science Publishers; University of Illinois Press; Duke University Press; University of Washington Press; and Edward Elgar. Scientists, wanting to get global audiences, are well advised to publish with those companies; and journal editors, wanting to get a global distribution for their journals, are equally well advised to cooperate with them.

**Keywords:** Role of Economics; Role of Economists; History of Thought: Individuals; Entertainment; Media (Performing Arts, Visual Arts, Broadcasting, Publishing)

**JEL-codes:** A11; B 31; L82

#### **Introduction**

The global library network *OCLC Worldcat* was founded in 1967 at the Ohio College Library Center as a federation of just only 54 Ohio colleges while today it already brings together 16,548 libraries in 124 countries. Thus, it is by far the largest library network in the world and it offers unique opportunities for academic "marketing research" in all disciplines, including globalization studies. Its full version, *OCLC First Search*, is an indispensable tool for academic research, analysis and academic strategy planning. But even open access versions of the *Worldcat* already contain vital informations for the producers and consumers of global social science, including globalization studies, alike.

## OCLC Worlcat – a necessary compass in the world of globalized social science

Our article attempts to provide some basic ideas about the globalized publishing industry, the tool to transport globally academic findings, and it does so with the help of *OCLC* tools, like *OCLC First Search*, but also the open access portals *OCLC Classify*, *OCLC advanced search*, and *TE PUNA* (the New Zealand Library catalogue) on *OCLC*, which already offers freely enormous opportunities for the global research community (https://tepuna.on.*Worldcat*.org/discovery).

The basic idea of the project, which was founded by Frederick Kilgour (1914 - 2006), was to unite the knowledge of humanity available in libraries. Today, the catalog ranges from the University of Alaska in Fairbanks, Alaska to the Universidad de Concepción in Southern Chile, and from Tromsö University in Northern Norway to the University of Cape Town, South Africa, and is now expanding into the Asia-Pacific region as well into the Middle East, and *Worldcat* now integrates major libraries in the BRIICS countries. It will be difficult to find a university library from one of the top 100 universities in the world, classified under the Shanghai University Ranking<sup>1</sup> System or the *SCIMAGO SIR* University and Research Institute ranking,<sup>2</sup> based on *SCOPUS* indexed publications<sup>3</sup> that is not a member of the *OCLC Woldcat*. Virtually all major libraries in Western Europe are also members of the *OCLC Worldcat* today, for example 428 in Germany, 1212 in France and 261 in Italy.

Can any reputable academic research library now afford to remain outside this vast global network? With 389 million entries in 491 languages, with over 40 million daily accesses worldwide? Reasons for membership are manifold: to make the knowledge of teachers and students stored at local libraries globally more visible, provide scientists and students with an important navigation aid in the international science market *et cetera*.

<sup>&</sup>lt;sup>1</sup> http://www.shanghairanking.com/ARWU2017.html

<sup>&</sup>lt;sup>2</sup> http://www.scimagoir.com/

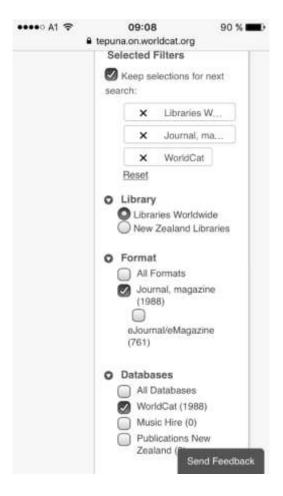
<sup>&</sup>lt;sup>3</sup> https://www.elsevier.com/solutions/scopus

# <u>The OCLC Worldcat – designing scientific publication strategy and assessing global scientific impact on your smartphone or at a mouseclick</u>

Even on a smartphone, and even the open access the New Zealand *TE PUNA on Worldcat* offers enormous research opportunities, for example the ranking of all the 1988 global journals by global library presence corresponding to the keyword "globalization" (see Image 1).

Image 1: Ranking the global library presence of globalization-related scientific journals with the open-access *Worldcat* version available from the New Zealand catalogue TE PUNA on a smartphone

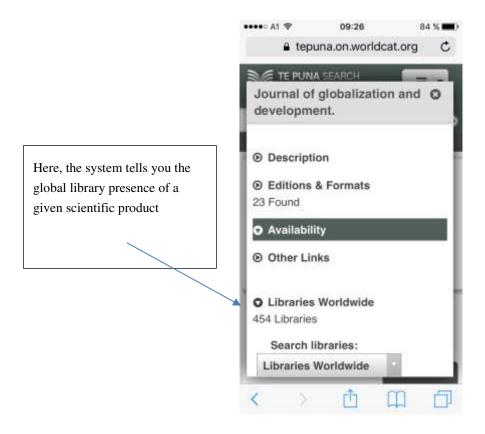
"TE PUNA on Worldcat"



In image 2, we show the global library outreach of the journal best corresponding to the profile of the present journal, the "Journal of Globalization Studies". Pure and simple, the list of global libraries cataloguing this competing journal (the "Journal of Globalization and

*Development*" published by Berkeley Electronic Press), <sup>4</sup> shows the current maximum market for any competing globalization studies journal, and this market consists of only 454 libraries around the world.

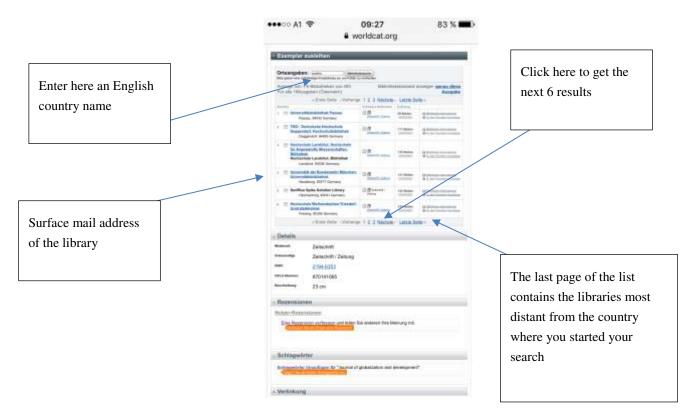
Image 2: The library impact of the globalization studies journal with the highest global library impact



The publishers and the editors of the present journal now can compare their own global distribution figures with those of the Berkeley "Journal of Globalization and Development", and target the directors of the libraries, already subscribed to "Journal of Globalization and Development" and not yet subscribed to the "Journal of Globalization Studies" with subscription offers.

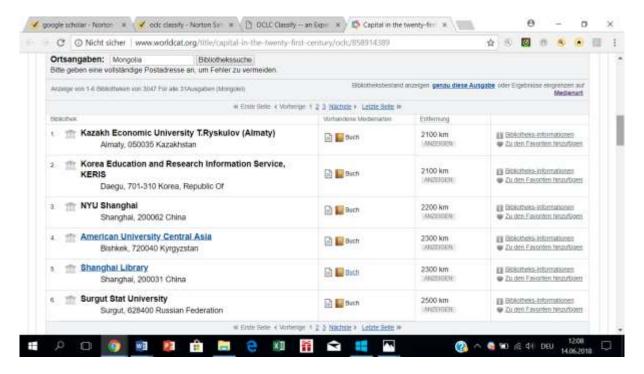
<sup>&</sup>lt;sup>4</sup> The journal is indexed in *SCOPUS*, see: https://www.scimagojr.com/journalsearch.php?q=19900191475&tip=sid&clean=0

Image 3: the address lists of libraries subscribed to a competing journal in the field of globalization studies on a smartphone



Further questions that can be answered with the *OCLC Worldcat First Search* are, for example: how efficiently does your country's or your city's or your University's science reach a geographically extremely disperse audience? *OCLC Classify* even answers the understandable query by any scientific author whether his or publications are available at Harvard and Yale, Oxford and Cambridge, at the Nehru University in Delhi, at the Ben Gurion University in Bersheba, Israel, and in Sao Paulo? And in Morocco and Jordan, in Ghana, in Ulan Bator and in Beijing? In Sydney and in Singapore? Malaysia or Botswana? And all this is made visible today with a single mouse click on your computer or with the touch of your thumb on your smartphone! Here, show to our readers the readership of Piketty's classic (2014) in the geographical region of Central and East Asia:

Image 4: Searching for global library presence with the Open Access Version *OCLC* Classify: the presence of Piketty's classic (Piketty, 2014) in Central Asia



# Why you should phone your chief librarian today, telling him/her that your library must become immediately a member of the OCLC Worldcat system

So, what are the general benefits of *OCLC Worldcat*?

- Access to data on library holdings and services with 2 billion holdings
- Library-centered research that draws members' attention to important topics and trends, including access to reports from *OCLC* Research

In the following I present what are *OCLC Worldcat's* main application areas for scientific strategy development in a global world market for science products today:

- 1) Determination of the global library impact of individual scientists, but also institutes, universities, the provision of objective criteria for the assessment of the effect of book or journal publications
- 2) Book Publication Impact Monitoring, also for impact studies of books, studies and journals written at your research center on a global level and in individual regions of the world, even over time

- 3) Quick selection of the most suitable publishers for future academic book publications which have the highest global readership for specific topics over the last few years and which have made the works of researchers available to a maximum of libraries worldwide.
- 4) Academic publishers based in your country would be able to search specifically for global libraries that already represent a true comparable market for products produced at your company in comparison to existing market leaders.
- 5) Which libraries worldwide are buying products from, say, Austrian, Australian, Brazilian, Chinese, Russian *et cetera* publishers? How does it compare to the distribution figures for competing publishers with a similar profile from, say, Scandinavia, the Netherlands, etc., discipline for discipline?

## The harsh realities of global academic publishing

Worldcat is not only your publisher's marketing department's dream, and a powerful tool of scientific impact research, suitable for Vice-Deans, Vice-Presidents of Universities etc. OCLC Worldcat tells us also a lot about the harsh realities of the globalization of science today.

We can estimate from the *OCLC* data that of the more than 300 million books held in global libraries, more than 120 million books were published in English, 43 million in German, and around 31 million in French. Especially German as a scientific language is tremendously on the retreat over the last decades. Of the 20.8 million books published in the last 5 years, 45% were published in English, and in the field of political science, for example, this share was even 55%. The concentration of the publication process on a global scale is enormous. In the field of political science alone, 13 leading publishers with an output of more than 400 political science books during the last 5 years published none the less than 38% of the 1.7 million English language political science titles during the last 5 years.

Table 1 summarizes this global concentration process and the global maximum library outreach of these companies:

Table 1: The global main publishers of political science during the last 5 years<sup>5</sup>

	Publisher	OCLC WC number of political science books published in the last 5 years	political science book (last 5 years) with the highest global library circulation rate	political science book (last 5 years) with the 50th highest global library circulation rate	continuity of performanc e - top 50 political science books (last 5 years)	share of political science titles per total titles, last 5 years
1	Routledge	14552	681	224	32,89	5,25
2	Palgrave Macmillan	10949	1310	166	12,67	9,08
3	Springer	10083	692	305	44,08	1,97
4	Oxford University Press	6759	873	397	45,48	5,16
5	Cambridge University Press	5236	807	230	28,50	5,20
6	Princeton University Press	1405	1321	622	47,09	6,29
7	Brill	838	846	85	10,05	1,89
8	Edward Elgar	813	236	54	22,88	4,22
9	University of Pennsylvania Press	672	1297	427	32,92	8,74
10	De Gruyter	582	1283	42	3,27	0,77
11	University of Chicago Press	484	624	141	22,60	3,95
12	Yale University Press	408	832	186	22,36	3,09
13	Nova Science Publishers	402	695	458	65,90	2,43

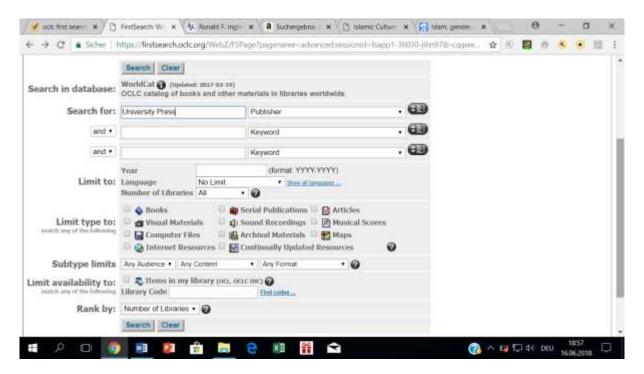
<sup>&</sup>lt;sup>5</sup> Calculated with <a href="https://tepuna.on.Worldcat.org/discovery">https://tepuna.on.Worldcat.org/discovery</a> - books only

We also have to emphasize that authors publishing only in Russian, German or in other languages other than English find it much harder to reach global markets than authors, who presented their works in English in the first place. A good work published with a leading Russian or German language book company will often reach only 40, 50, or 100 global libraries as a maximum. But even high-quality English language books might find it sometimes hard to find an appropriate library outreach of more than 50 libraries, especially if the price of a book is high or if your publisher's marketing facilities are not so well developed. A global social scientific star, sociologist Prof. Ronald T. Inglehart, reached with an American University Press publisher (Abramson and Inglehart, 2009) 1235 global libraries, while with a renown Canadian publisher (Inglehart, 2002) only global 175 libraries. It would be sheer nonsense to believe that book number 1 by colleague Inglehart is 7 times "better" or "more important" than book number 2, because it achieved 7 times more library holdings.

If even a flagship foreign language publication like the Russian language "Mirovaia ekonomika i mezhdunarodnye otnosheniia", which was studied in the days of the Cold War by hundreds of Western security and defense experts, only makes it to 125 global libraries, then it's not scientific quality or political importance, which matter, but that the journal is a foreign language product on the Anglo-American dominated market, pure and simple. Seen in such away, a library outreach of 100 libraries for a scientific publication published in a country like Russia is not a defeat but a victory. Still, the publishers of "Mirovaia ekonomika" can compare the holdings of their journal with the maximum circulation of any Russian language journal in the world today, the "Obshchestvo: Politika, ekonomika, pravo = Society: politics, economics, law." published in Krasnodar by the LLC Publishing House 'HORS', [according to OCLC First Search at 676 global libraries]. These 676 global libraries can safely be assumed to constitute the maximum library outreach of any social science publication published in the language of Alexander Sergeyevich Pushkin.

As we show in the following, there are severe international market constraints even for English language academic publications, printed at any of the University Presses of the world today:

Image 5: Searching for the University Press publication with the highest global outreach on *OCLC First Search* 



Only 1.93% of the global University Press publications of the last 5 years reached more than 500 global libraries, and the record holder was not unsurprisingly the work by Piketty (2014). Piketty's global audience is a good indication of the maximum market of an English language book or journal on globalization.

# <u>Libcitation – a new scientific tool to assess academic marketing success, based on OCLC</u> <u>Worldcat data</u>

Usual attempts in the field of bibliometry are centered on the concept of citation patterns, while the globalization of book production has seldom been studied in its totality. And yet, it is evident that in the fields of social sciences and the humanities, where book production is still considered to be a major channel of scientific output, such attempts must and should be made.

The present article attempts then to apply so-called *Libcitation* measurement techniques, recently developed in the context of the Excellence in Research for Australia program. *Libcitation*, a term first coined in a published article by Howard D. White et al., is a measure designed to estimate the global or also regional presence of authors, universities, research institutes or an entire scientific community on different markets:

[The] [...] measure introduced here is called the Libcitation. [...] It is made on books. For a particular book (i.e., edition of a title), it increases by 1 every time a different library reports acquiring that book in a national or an international union catalog. Readers are invited to think of union catalogs in a new way: as "librarians' citation indexes." The idea is that, when librarians commit scarce resources to acquiring and cataloging a book, they are in their own fashion citing it, just as scholars do when they refer to it in new works of their own; both are engaged in bibliographic speech acts. As these "librarians' citations" accrue differentially to different books in union catalogs, we gain data for a new indicator. The number of libraries holding a book at a given time constitutes its Libcitation count.

Counting the presence of author's or even publishing companies' outputs in Union catalogues is a straightforward methodology to ascertain something like the "real market weight". White et al. point to the fact that:

"Whereas traditional citation counts reflect judgments by authors' peers on publications useful to them, Libcitation counts reflect judgments by librarians on the usefulness of publications for their various audiences of readers. The Libcitation measure thus resembles a citation impact measure in discriminating values of publications on a defined ground. It rewards authors whose books (or other publications) are seen by librarians as having relatively wide appeal. A book's absolute appeal can be determined simply by counting how many libraries hold it, but it can also be gauged in relation to other books in its subject class."

Since there is a very close working relationship between scholarly and teaching activities and the respective libraries at Universities around the world, we can only emphasize the point made by White et al.

"We anticipate the cry, "But librarians aren't like citers; they don't know anything!" It is true that librarians rarely make new knowledge claims and are seldom considered the peers of the scientists and scholars who do. Nevertheless, what they acquire and record in union catalogs involves the wide cultural literacy that is at the heart of librarianship. On the service front, Libcitations reflect librarians' knowledge of audiences—their approximate sizes, the topics that interest them, their degrees of expertise, and their localized concerns (e.g., what is important to Australians as opposed to non-Australians). On the book front, Libcitations reflect what librarians know about the prestige of publishers, the opinions of reviewers, and the reputations of authors. The latter may be colored by, for example, authors' academic affiliations, previous sales, prizes, awards, distinguished appointments, mass media coverage, Web presence, and citedness. All of these are signals of what readers are likely to want, and librarians must be attuned to them. A book's Libcitation count is thus its holdings count in a union catalog seen in a different light. Holdings counts are an unobtrusive measure that cannot be altered by researchers changing their behavior. They cannot easily be "gamed," assuming current standards of record keeping. They may change over time, but data on them already have accumulated for many years in several union catalogs, and millions of them are by now quite stable."

Even if we could theoretically assume that "non-scientific, non-market pressure" by scientists could influence the book ordering policies of a few departments or libraries, a strong position of a given scientist or journal or publication in the library holdings of tens of thousands of libraries around the globe cannot be the product of coincidence or collusive pressure alone. Librarians, first of all, listen to the ordering wishes from the respective faculties and academic departments at their institutions, secondly, they, for themselves, also evaluate the current literature reviews and even international press articles to round up their opinions on the developments of a given discipline and their implications for catalogue development.

Zuccala et al. (2015) already established that there is a close correlation between Scopus-Indexed publications and global library presence in *Worldcat*. Our chosen indicators take into account the all-too-well-known fact that the global audiences in the social sciences are hardly known. Usual attempts at citation-based rankings try to measure the standing of scientists with other members of the science community, and hardly with the global public at large.

At the same time, this way of measurement is much more market-decision based than analyses based on citation patterns, which tell us hardly anything about the geographical aspects of the world distribution of knowledge. A librarian or a library community, in addition, has to spend scarce resources on each purchased book, and their decision to buy an academic title, often at the price of 70\$, 80\$, or more, is a real decision to devote scarce resources.

Since publishers, with justification, regard global and geographically broken-down sales figures as a well-guarded secret, available only to the publisher(s) and their author(s), and since the usual alternative - available bestseller rankings from Internet bookstores - are but a very unreliable indicator of the development of the global publishing market, and change frequently over time, we are practically left to work only with this relatively new methodology. We round up our methodology by the yearly download figures of the respective articles on the analyzed companies contained in *Wikipedia*.

## Rankings of book publishers

In the past, there were several attempts to rank book publishers by qualitative methods. The Dutch Research Consortium SENSE <sup>6</sup> used five categories. This ranking was based on the subjective opinion of the scientists working for this important consortium in the field of environmental studies in the Netherlands:

I refereed book publications:

A: Refereed book publications published by the world top of publishers

B: Refereed book publications published by the world's semi-top of publishers

C: Refereed book publications published by other publishers

12

<sup>&</sup>lt;sup>6</sup> http://www.sense.nl/organisation/documentation

II non-refereed book publications

D: published for an academic public (professional publications)

E: mainly published for a non-academic (general) public

Their ranking reached the following conclusion about the global top players in the field of global academic publishing:

### A-publishers (a few top-notch international publishers)

Cambridge University Press
Columbia University Press
Harvard University Press
John's Hopkins University Press
MIT Press Cambridge, Massachusetts
Oxford University Press
Princeton University Press
Stanford University Press
University of Chicago Press
Yale University Press

An influential study by the Universidad de Granada <sup>7</sup> was based on the Clarivate Analytics **"Book Citation Index"** <sup>8</sup> and ranked Springer, Palgrave Macmillan, Routledge, Cambridge University Press, Elsevier, Nova Science Publishers, Edward Elgar, Information Age Publishing, Princeton University Press and University of California Press as the global leading academic publishers.

The University of Groningen in the Netherlands, one of the world's 100 top Universities, now runs a system by which researchers and students from around the world can find complete informations on the book and journal publishing companies, chosen by the staff of one of the world's leading Universities for their scientific publications. <sup>9</sup> This complete documentation system, currently listing more than 233.000 scientific publications, informs us for example that in view of the list reproduced in Table 1 of this essay, there were 657 Groningen publications with Routledge, 170 publications with Palgrave, but 2120 publications with Springer and 48 publications with Nova Science Publishers, the last of the mentioned 13 companies in our Table 1. 5903 publications by the Groningen University researchers took place in the context of any University Press around the world; and one essay, van der Vliet (2008), was published with Uchitel, the publishing company of the present journal.

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<sup>&</sup>lt;sup>7</sup> Torres-Salinas, D., Robinson-García, N., Campanario, J.M. & Delgado López-Cózar, E. (2013). Coverage, specialization and impact of scientific publishers in the Book Citation Index. Online Information Review, 38(1) und

https://www.researchgate.net/publication/267869924\_Bibliometric\_Indicators\_for\_Publishers\_Data\_processing\_indicators\_and\_interpretation. See also http://wokinfo.com/products\_tools/multidisciplinary/bookcitationindex/

<sup>8</sup> http://wokinfo.com/mbl/publishers/

<sup>&</sup>lt;sup>9</sup> https://www.rug.nl/research/portal/publications/search.html

#### Methods for the empirical analysis of publisher market power

Now, this essay builds on a bibliometric analysis of 57 major book publishing companies, for which there are complete available data for both the above-mentioned SENSE Index and the book-citation related study by Torres-Salinas et al., 2012, 2013, and 2014a, 2014b, referred to here as the "*Granada studies*" in bibliometrics (Tausch, 2017).

With the data, now available from *OCLC*, the author calculated or collected the following variables in addition to the comprehensive Tausch, 2017 study:

- % of titles with an *OCLC Worldcat* circulation between 50 and 500 global libraries 10
- % of titles with an *OCLC Worldcat* circulation of less than 50 global libraries<sup>11</sup>
- % of titles with an *OCLC Worldcat* circulation of more than 500 global libraries<sup>12</sup>
- book (last 5 years) with the 50th highest *OCLC Worldcat* circulation rate<sup>13</sup>
- book (last 5 years) with the highest *OCLC Worldcat* circulation rate<sup>14</sup>
- continuity of performance 50<sup>th</sup> best circulated book compared to the top circulated book (last 5 years) <sup>15</sup>
- *OCLC* WC number of book titles published in the last 5 years (*TE PUNA* on *Worldcat*) <sup>16</sup>
- Recent titles with more than 50 OCLC Worldcat circulation<sup>17</sup>
- Recent titles with more than 500 OCLC Worldcat circulation <sup>18</sup>
- total number of recent titles (not just books; OCLC First Search) 19
- Wikipedia monthly downloads of articles featuring the company over last year (English sites only)<sup>20</sup>

In view of the importance of the social media and the Internet for company reputation today, we also included data about *Wikipedia* monthly downloads of articles featuring the company

https://tepuna.on.worldcat.org/advancedsearch?databaseList=

https://tepuna.on.worldcat.org/advancedsearch?databaseList=

<sup>&</sup>lt;sup>10</sup> OCLC First Search, by courtesy of OCLC Company

<sup>&</sup>lt;sup>11</sup> OCLC First Search, by courtesy of OCLC Company

<sup>&</sup>lt;sup>12</sup> OCLC First Search, by courtesy of OCLC Company

<sup>&</sup>lt;sup>13</sup> TE PUNA on Worldcat, available at: https://tepuna.on.worldcat.org/advancedsearch?databaseList=

<sup>&</sup>lt;sup>14</sup> TE PUNA on Worldcat, available at: https://tepuna.on.worldcat.org/advancedsearch?databaseList=

<sup>&</sup>lt;sup>15</sup> Calculated from *TE PUNA* on *Worldcat*, available at:

<sup>&</sup>lt;sup>16</sup> Calculated from TE PUNA on Worldcat, available at:

<sup>&</sup>lt;sup>17</sup> OCLC First Search, by courtesy of OCLC Company

<sup>&</sup>lt;sup>18</sup> OCLC First Search, by courtesy of OCLC Company

<sup>&</sup>lt;sup>19</sup> OCLC First Search, by courtesy of OCLC Company

 $<sup>^{20}</sup>$  http://tools.wmflabs.org/pageviews/?project=en.wikipedia.org&platform=all-access&agent=user&range=latest-20&pages=Cat|Dog

over last year. These data also reflect, as the rest of our indicators, the element of the standing of a company with the general publics and not just the academic community alone.

The Tausch, 2017 variables, again used in the present study were:

Quantity Indicator - number of books and book chapters in the Clarivate Analytics (formerly Thomson-Reuters) Book Citation Index <sup>21</sup>

Citations of books and book chapters in the Clarivate Analytics (formerly Thomson-Reuters) Book Citation Index <sup>22</sup>

Harvard Library number of titles (books only) <sup>23</sup>

number of references about the company in books – Questia <sup>24</sup>

# Publishing the results of science

average citations - books and book chapters <sup>25</sup>

standard deviation citations books and book chapters <sup>26</sup>

Sense Quality Indicator for multivariate analysis <sup>27</sup>

Harvard HOLLIS ratio of books checked out per total holdings (books only) 28

http://hollis.harvard.edu/primo\_library/libweb/action/search.do?mode=Advanced&ct=AdvancedSearch&dscnt=0 &dstmp=1444746207332&vid=HVD

http://hollis.harvard.edu/primo\_library/libweb/action/search.do?mode=Advanced&ct=AdvancedSearch&dscnt=0 &dstmp=1444746207332&vid=HVD

<sup>&</sup>lt;sup>21</sup> Torres-Salinas, D., Robinson-García, N., Campanario, J.M. & Delgado López-Cózar, E. (2013). Coverage, specialization and impact of scientific publishers in the Book Citation Index. Online Information Review, 38(1)

https://www.researchgate.net/publication/267869924\_Bibliometric\_Indicators\_for\_Publishers\_Data\_processing\_ indicators and interpretation

<sup>&</sup>lt;sup>22</sup> Torres-Salinas, D., Robinson-García, N., Campanario, J.M. & Delgado López-Cózar, E. (2013). Coverage, specialization and impact of scientific publishers in the Book Citation Index. Online Information Review, 38(1)

https://www.researchgate.net/publication/267869924\_Bibliometric\_Indicators\_for\_Publishers\_Data\_processing\_ indicators\_and\_interpretation

<sup>&</sup>lt;sup>24</sup> https://www.Ouestia.com/

<sup>&</sup>lt;sup>25</sup> Torres-Salinas, D., Robinson-García, N., Campanario, J.M. & Delgado López-Cózar, E. (2013). Coverage, specialization and impact of scientific publishers in the Book Citation Index. Online Information Review, 38(1)

https://www.researchgate.net/publication/267869924\_Bibliometric\_Indicators\_for\_Publishers\_Data\_processing\_ indicators\_and\_interpretation

<sup>&</sup>lt;sup>26</sup> Torres-Salinas, D., Robinson-García, N., Campanario, J.M. & Delgado López-Cózar, E. (2013). Coverage, specialization and impact of scientific publishers in the Book Citation Index. Online Information Review, 38(1)

https://www.researchgate.net/publication/267869924\_Bibliometric\_Indicators\_for\_Publishers\_Data\_processing\_ indicators\_and\_interpretation

<sup>&</sup>lt;sup>27</sup> http://www.sense.nl/organisation/documentation

average citations - books in the Clarivate Analytics (formerly Thomson-Reuters) book citation index  $^{29}$ 

number of references about the company in scholarly journals – Questia <sup>30</sup>

# Citations, impact and standing in the academic community

Japanese NACSIS top library outreach (books only) 31

Japanese NACSIS 200th library outreach (books only) 32

Swedish LIBRIS top library outreach <sup>33</sup>

Swedish LIBRIS 50th library outreach <sup>34</sup>

# Market penetration in industrialized Western countries

Items in ECLAS catalogue oft he European Union in Brussels 35

Items in World Bank/IMF JOLIS library catalogue Washington (books only) <sup>36</sup>

# Attention given to the books by the international decision makers

Items in the IndCat (India) Union catalog <sup>37</sup>

# **Market penetration in developing countries**

number of references about the company in magazines – Questia <sup>38</sup>

number of references about the company in newspapers – Questia <sup>39</sup>

# Attention given to the books in the international media

It was expected that all quality and quantity criteria correlate very highly with each other. For that reason, the author chose the factor analytical model of promax factor analysis (see Tausch, 2015). The factor analytical results were also used to arrive at a combined index of publisher market power. This index combines the factor scores for each derived factor,

<sup>&</sup>lt;sup>29</sup> Torres-Salinas, D., Robinson-García, N., Campanario, J.M. & Delgado López-Cózar, E. (2013). Coverage, specialization and impact of scientific publishers in the Book Citation Index. Online Information Review, 38(1) und

https://www.researchgate.net/publication/267869924\_Bibliometric\_Indicators\_for\_Publishers\_Data\_processing\_indicators and interpretation

<sup>30</sup> https://www.Questia.com/

<sup>31</sup> http://ci.nii.ac.jp/books/

<sup>32</sup> http://ci.nii.ac.jp/books/

<sup>33</sup> http://libris.kb.se/form\_extended.jsp?f=ext

<sup>34</sup> http://libris.kb.se/form\_extended.jsp?f=ext

<sup>35</sup> http://ec.europa.eu/eclas/F

<sup>&</sup>lt;sup>36</sup> http://external.worldbankimflib.org/uhtbin/webcat/

<sup>&</sup>lt;sup>37</sup> http://indcat.inflibnet.ac.in/

<sup>38</sup> https://www.Questia.com/

<sup>39</sup> https://www.Questia.com/

weighted by the Eigenvalues (see, for an extensive debate about these procedures, Tausch, 2015)

# Results

Table 2, Table 3, Table 4, and Table 5 are reprinted here for the specialists, and they should describe the most important aspects of our factor analytical model of publisher market power in a globalized world of science.

Table 2: the multivariate promax factor model of publisher market power - variance explained

	Variance explained
Wikipedia monthly downloads, English, last year	0,643
OCLC WC number of books published in the last 5 years	0,971
book (last 5 years) with the highest global library circulation rate	0,735
book (last 5 years) with the 50th highest global library circulation rate	0,958
continuity of performance - top 50 books (last 5 years)	0,807
Quantity Indicator - number of books and book chapters in the Clarivate Analytics (formerly Thomson-Reuters) Book Citation Index	0,848
Citations of books and book chapters in the Clarivate Analytics (formerly Thomson-Reuters) Book Cittation Index	0,940
average citations - books and book chapters	0,765
standard deviation citations books and book chapters	0,904
Sense Quality Indicator for multivariate analysis	0,665
Harvard Library number of titles (books only)	0,852
Harvard HOLLIS ratio of books checked out per total holdings (books only)	0,839
average citations - books in the Clarivate Analytics (formerly Thomson-Reuters) book citation index	0,856
Japanese NACSIS top library outreach (books only)	0,843
Japanese NACSIS 200th library outreach (books only)	0,925
Swedish LIBRIS top library outreach	0,707
Swedish LIBRIS 50th library outreach	0,765
number of references about the company in books - Questia	0,843

number of references about the company in scholarly journals - Questia	0,938
number of references about the company in magazines	0,946
- Questia number of references about the company in	0,932
newspapers - Questia	0.000
Items in ECLAS catalogue Brussels Items in World Bank/IMF JOLIS library catalogue	0,899
Washington (books only)	0,930
Items in the IndCat (India) Union catalog	0,886
total number of recent titles	0,968
Recent titles with more than 50 circulation	0,978
Recent titles with more than 500 circulation	0,727
% of titles with a circulation of more than 500	0,823
% of titles with a circulation between 50 and 500	0,914
% of titles with a circulation of less than 50	0,969

 $\begin{tabular}{ll} Table 3: the multivariate promax factor model of publisher market power-cumulative percentage of total variance explained and $\it Eigenvalues$ \end{tabular}$ 

	Eigenvalues	% of variance explained	Cumulated percentage of variance explained
overall global standing of the company	10,156	33,855	33,855
company is a factor on the market	3,471	11,569	45,424
company impact on the global political and economic debate	3,012	10,041	55,465
successfully distributing best- sellers	2,570	8,567	64,032
impact on the scholarly community	2,193	7,309	71,341
successfully distributing production to more than 50 libraries	1,689	5,628	76,970
output during the last 5 years	1,587	5,291	82,261
outstanding academic quality	1,105	3,684	85,945

**Table 4: Factor loadings** 

	overall global standing of the company	company is a factor on the market	company impact on the global political and economic debate	successfull y distributin g best- sellers	impact on the scholarly community	successfull y distributin g production to more than 50 libraries	output during the last 5 years	outstandin g academic quality
Wikipedia monthly downloads, English, last year	0,775	0,284	0,118	0,304	0,312	0,062	-0,067	0,044
OCLC WC number of books published in the last 5 years	0,514	0,974	0,262	0,274	0,067	0,233	0,017	0,049
book (last 5 years) with the highest global library circulation rate	0,509	0,124	0,010	0,808	0,084	0,297	-0,034	-0,008
book (last 5 years) with the 50th highest global library circulation rate	0,459	0,226	0,081	0,969	0,201	0,134	-0,003	0,080
continuity of performance - top 50 books (last 5 years)	0,352	0,243	0,287	0,863	0,223	0,115	0,072	0,136
Quantity Indicator - number of books and book chapters in the Clarivate Analytics (formerly Thomson-	0,376	0,873	0,189	0,253	0,049	0,456	0,131	0,093

Reuters) Book Citation								
Index								
Citations of books and	0,413	0,942	0,223	0,280	0,182	0,422	0,006	0,111
book chapters in the								
Clarivate Analytics								
(formerly Thomson-								
Reuters) Book Cittation								
Index								
average citations - books	0,232	0,126	0,181	0,093	0,852	0,027	-0,117	0,208
and book chapters								
standard deviation	0,458	0,214	0,502	0,353	0,845	0,221	-0,074	0,235
citations books and book								
chapters								
Sense Quality Indicator	0,705	0,120	0,066	0,504	0,082	0,370	-0,077	0,038
for multivariate analysis					0.100			
Harvard Library number	0,751	0,777	0,282	0,314	0,102	0,241	-0,085	0,010
of titles (books only)	0.051							2.2.5
Harvard HOLLIS ratio of	0,064	-0,038	-0,029	0,105	0,233	0,194	-0,025	0,865
books checked out per								
total holdings (books								
only)	0.000	0.100	0.000	0.25	0.040	0.000	0.117	0.042
average citations - books	0,398	0,130	0,230	0,265	0,910	-0,003	-0,115	-0,043
in the Clarivate Analytics								
(formerly Thomson-								
Reuters) book citation								
index	0.017	0.224	0.071	0.404	0.445	0.101	0.110	0.400
Japanese NACSIS top	0,816	0,334	0,271	0,494	0,445	0,181	-0,119	0,400
library outreach (books								
only)	0.041	0.527	0.215	0.400	0.201	0.160	0.000	0.077
Japanese NACSIS 200th	0,941	0,536	0,315	0,489	0,381	0,168	-0,090	0,067
library outreach (books								
only)								

Swedish LIBRIS top	0,809	0,390	0,333	0,509	0,239	0,122	0,021	0,179
library outreach	0,000	0,620	0,000	3,2 32	0,20	0,1	0,021	0,179
Swedish LIBRIS 50th	0,716	0,462	0,333	0,715	0,151	0,216	0,134	-0,067
library outreach	ŕ	ŕ	ŕ		ŕ	, in the second second	ŕ	·
number of references	0,886	0,196	0,302	0,426	0,284	0,192	-0,034	-0,035
about the company in								
books - Questia								
number of references	0,759	0,350	0,795	0,313	0,295	0,114	0,020	0,009
about the company in								
scholarly journals -								
Questia								
number of references	0,295	0,232	0,953	0,165	0,317	-0,043	0,004	0,003
about the company in								
magazines - Questia								
number of references	0,261	0,761	0,752	0,175	0,139	0,080	0,036	0,046
about the company in								
newspapers - Questia		2.2.7	0.00					2 2 4 7
Items in ECLAS	0,298	0,937	0,208	0,175	0,080	0,214	-0,080	0,045
catalogue Brussels								
Items in World Bank/IMF	0,270	0,207	0,948	0,100	0,306	-0,052	0,015	0,009
JOLIS library catalogue								
Washington (books only)								
Items in the IndCat	0,855	0,556	0,379	0,204	0,257	-0,011	-0,008	0,001
(India) Union catalog								
total number of recent	-0,073	-0,008	0,034	0,014	-0,137	-0,077	0,982	-0,093
titles								
Recent titles with more	-0,036	0,031	0,056	0,042	-0,109	0,025	0,986	-0,074
than 50 circulation								
Recent titles with more	0,078	0,046	0,643	0,059	-0,141	0,233	0,219	0,484
than 500 circulation								

% of titles with a	0,154	0,206	0,185	0,106	-0,153	0,571	-0,281	0,778
circulation of more than								
500								
% of titles with a	0,165	0,338	0,032	0,170	0,057	0,932	0,013	0,221
circulation between 50								
and 500								
% of titles with a	-0,188	-0,350	-0,088	-0,177	0,003	-0,965	0,082	-0,442
circulation of less than 50								

Table 5: correlations between the factors of publisher market power

Component	overall global standing of the company	company is a factor on the market	company impact on the global political and economic debate	successfull y distributin g best- sellers	impact on the scholarly community	successfull y distributin g production to more than 50 libraries	output during the last 5 years	outstandin g academic quality
overall global standing of the company	1,000	0,417	0,319	0,493	0,304	0,196	-0,055	0,064
company is a factor on the market	0,417	1,000	0,295	0,223	0,109	0,251	0,004	0,061
company impact on the global political and economic debate	0,319	0,295	1,000	0,160	0,209	0,056	0,063	0,128
successfully distributing best-sellers	0,493	0,223	0,160	1,000	0,194	0,229	0,036	0,075
impact on the scholarly community	0,304	0,109	0,209	0,194	1,000	-0,046	-0,105	0,043
successfully distributing production to more than 50 libraries	0,196	0,251	0,056	0,229	-0,046	1,000	-0,043	0,328
output during the last 5 years	-0,055	0,004	0,063	0,036	-0,105	-0,043	1,000	-0,088
outstanding academic quality	0,064	0,061	0,128	0,075	0,043	0,328	-0,088	1,000

Table 6 now lists the final outcome of our study. It is based on the factor analytical results described above. According to our results, any scholar or journal, publishing with Oxford University Press, Springer, Cambridge University Press, Routledge, World Bank, Princeton University Press, Elsevier, CRC Press, University of Chicago Press, and University of California Press is on the "safe side", and these companies belong to the global top 20% of the book publishing industry.

Table 6: the final classification of global publishers' market power according to our promax factor analytical model (factors weighted according to their *Eigenvalues*)

	Overall Quality Indicator	Rank	precentile performance
Oxford University Press	45,538	1	1,961
Springer	43,102	2	3,922
Cambridge University Press	38,126	3	5,882
Routledge	33,592	4	7,843
World Bank	24,110	5	9,804
Princeton University Press	23,341	6	11,765
Elsevier	20,351	7	13,725
CRC Press	14,633	8	15,686
University of Chicago Press	14,564	9	17,647
University of California Press	10,678	10	19,608
Palgrave Macmillan	10,546	11	21,569
MIT Press	10,527	12	23,529
Yale University Press	9,289	13	25,490
University of North Carolina Press	5,686	14	27,451
De Gruyter	5,571	15	29,412
Wiley-Blackwell	4,036	16	31,373
Kluwer Academic Publishers	2,081	17	33,333
University of Pennsylvania Press	1,751	18	35,294
Johns Hopkins University Press	1,416	19	37,255
Brill	1,396	20	39,216
Nova Science Publishers	0,958	21	41,176
University of Illinois Press	-0,753	22	43,137
Duke University Press	-1,034	23	45,098
University of Washington Press	-2,144	24	47,059
Edward Elgar	-5,559	25	49,020
Rodopi	-5,772	26	50,980

Edinburgh Hairranity Dusca	6.666	27	52.041
Edinburgh University Press	-6,666	-	52,941
Island Press	-7,005	28	54,902
World Scientific and	-7,197	29	56,863
Engineering			
IEEE	-7,492	30	58,824
John Benjamins	-7,562	31	60,784
CABI	-7,806	32	62,745
University of New Mexico	-8,674	33	64,706
Press			
Ios Press	-8,882	34	66,667
Karger	-9,509	35	68,627
L'Harmattan	-11,850	36	70,588
Earthscan Publications Ltd.	-12,054	37	72,549
Catena Verlag	-12,446	38	74,510
Transaction Publishing	-12,674	39	76,471
Channel View Publications	-12,776	40	78,431
(UCB) University of British	-12,866	41	80,392
Columbia Press			
Wilfrid Laurier University Press	-13,277	42	82,353
ASM Press	-13,632	43	84,314
IWA Publishing	-13,722	44	86,275
Woodhead Publishing	-14,552	45	88,235
Equinox	-14,931	46	90,196
Wageningen	-14,961	47	92,157
Resources for the Future	-16,757	48	94,118
Ateneo de Manila University	-17,857	49	96,078
Nottingham University Press	-20,384	50	98,039
WIT Press	-20,495	51	100,000

## **Conclusions**

This article evaluated tendencies and trends of the global academic publishing industry, vital for any reasonable long-term publication strategy planning in research. Such analyses are made possible today by the *OCLC Worldcat*. This combined global library catalogue (union catalogue) *OCLC* was founded in America in 1967 and today integrates library collections ranging from northern Norway to Chile, and from California to Europe and Africa on to the Asia Pacific Region, including an ever-growing number of libraries in the BRIICS countries. Comparisons based on the wealth of these data can even be accessed via the freely available versions of the *OCLC "Worldcat"*, such as "*OCLC Classify*" or the New Zealand Library Portal "*TE PUNA*" ("*TE PUNA on World Cat*"), or by the full subscription-based "*OCLC First Search*" version of the *OCLC Worldcat*.

Based on *OCLC Worldcat* data, recent contributions in the expanding discipline of scientometry and bibliometrics have started to study the global presence of publications in global libraries, which are the main buyers of our academic publications in the world today. Such methods are absolutely necessary to design successful academic strategies to distribute effectively scientific knowledge in the age of globalization around the globe.

We can estimate from the *OCLC* data that of the more than 300 million books held in global libraries, more than 120 million books were published in English, 43 million in German, and around 31 million in French. Especially German as a scientific language is on the retreat over the last decades. Of the 20.8 million books published in the last 5 years, 45% were published in English, and in the field of political science, for example, this share was even 55%. The concentration of the publication process on a global scale is enormous. In the field of political science alone, 13 leading publishers with an output of more than 400 political science books during the last 5 years published none the less than 38% of the 1.7 million English language political science titles during the last 5 years.

Our basic idea was simple, not to say downright vulgar. Is a book or a book series or a scientific journal important, it must be surely not only cited internationally, but it must also be physically or electronically present in as many global libraries as possible, because after all: what counts, is global and geographically diverse readership.

Even high-quality English language books might find it sometimes hard to find an appropriate library outreach of more than 50 global libraries, especially if the price of a book is high or if your publisher's marketing facilities are not so well developed. A flagship Russian language publication like "Mirovaia ekonomika i mezhdunarodnye otnosheniia", which was studied in the days of the Cold War by hundreds of Western security and defense experts to find clues as to what "the Soviet Enemy" is planning next, only makes it to 125 global libraries. As we show in our article, there are severe international market constraints even for English language academic publications, printed at any of the University Presses of the world today: only 1.93% of the global University Press output of the last 5 years reached more than 500 global libraries.

In our essay, we compare book company global impact figures with results from an earlier bibliometric study, which already used library presence results from union catalogues with counting procedures, such as in India, Japan, and Sweden (Tausch, 2017). In our essay, we combined the available *OCLC Worldcat* data with results of the Tausch (2017) study, which also used existing rankings of global academic publishing companies published in the literature, and data from the newly created Clarivate Analytics (formerly Thomson-Reuters) "Book Citation Index". Our new multivariate attempt, combining all these data, is based on factor analysis of 32 variables, and our promax factor analytical model established that there are eight factors of global publisher impact, explaining almost 86% of total variance:

- 1. overall global standing of the company
- 2. company as a factor on the market

- 3. company impact on the global political and economic debate
- 4. successfully distributing best-sellers
- 5. impact on the scholarly community
- 6. successfully distributing production to more than 50 global Worldcat libraries
- 7. output during the last 5 years
- 8. outstanding academic quality

Of the 51 companies with complete data under investigation here, the following companies were classified in the upper half: Oxford University Press; Springer; Cambridge University Press; Routledge; World Bank; Princeton University Press; Elsevier; CRC Press; University of Chicago Press; University of California Press; Palgrave Macmillan; MIT Press; Yale University Press; University of North Carolina Press; De Gruyter; Wiley-Blackwell; Kluwer Academic Publishers; University of Pennsylvania Press; Johns Hopkins University Press; Brill; Nova Science Publishers; University of Illinois Press; Duke University Press; University of Washington Press; and Edward Elgar. Scientists, wanting to get global audiences, are well advised to publish with those companies; and journal editors, wanting to get a global distribution for their journals, are equally well advised to cooperate with them.

#### **Literature**

- **Abramson, P. R., & Inglehart, R. F.** (2009). Value change in global perspective. University of Michigan Press.
- **Amsler, S. S., & Bolsmann, C. (2012).** University ranking as social exclusion. British journal of sociology of education, 33(2), 283-301.
- **Andrés, A. (2009).** Measuring academic research: how to undertake a bibliometric study. Oxford: Chandos Publishing.
- Bornmann, L., Mutz, R., & Daniel, H. D. (2013). Multilevel-statistical reformulation of citation-based university rankings: The Leiden ranking 2011/2012. Journal of the American Society for Information Science and Technology, 64(8), 1649-1658.
- **Braun, Tibor et al. (1985).** Scientometric indicators: a 32 country comparative evaluation of publishing performance and citation impact. Singapore; Philadelphia: World Scientific.
- **Dill, D. D., & Soo, M. (2005).** Academic quality, league tables, and public policy: A cross-national analysis of university ranking systems. Higher education, 49(4), 495-533.
- **Donohue, Joseph C. (1974).** Understanding scientific literatures: a bibliometric approach. Cambridge, MIT Press .
- **Drummond, R., & Wartho, R. (2009).** RIMS: the research impact measurement service at the University of New South Wales. Australian Academic & Research Libraries, 40(2), 76-87.
- **Herb, U., Kranz, E., Leidinger, T., & Mittelsdorf, B. (2010).** How to assess the impact of an electronic document? And what does impact mean anyway? Reliable usage statistics in heterogeneous repository communities. *OCLC* Systems & Services: International digital library perspectives, 26(2), 133-145.
- **Hug, Sven E.; Ochsner, Michael; Daniel, Hans-Dieter.** (2013). Criteria for assessing research quality in the humanities: a Delphi study among scholars of English literature, German literature and art history. Research Evaluation. Dec2013, Vol. 22 Issue 5, p369-383. 15p.
- **Inglehart, R. (2002).** Islam, gender, culture, and democracy. Willowdale, ON, Canada: de Sitter.

- **Kousha, K., Thelwall, M., & Rezaie, S. (2011).** Assessing the citation impact of books: The role of Google Books, Google Scholar, and Scopus. Journal of the American Society for Information Science and Technology, 62(11), 2147-2164.
- **Oltersdorf, J. (2013). Publikationen**: Funktion und Repräsentation (Doctoral dissertation, Humboldt-Universität zu Berlin, Philosophische Fakultät I).
- **Piketty, T. (2014).** Capital in the 21st Century, trans. Arthur Goldhammer. Cambridge, MA: Belknap Press: An Imprint of Harvard University Press.
- Rostaing, H., Boutin, E., & Mannina, B. (1999). Evaluation of internet resources: bibliometric techniques applications. cybermetrics, 99.
- **Sadlak, J., & Liu, N. C. (2007).** The world-class university and ranking: Aiming beyond status. Bucharest, Romania/Shanghai, China/Cluj-Napoca, Romania: Unesco-Cepes.
- **Sahel, J. A. (2011).** Quality versus quantity: assessing individual research performance. Science translational medicine, 3(84)
- **Sieber, J., & Gradmann, S. (2011).** How to best assess monographs?. Humboldt University Berlin.
- **Tausch, A. (2011).** On the Global Impact of Selected Social-Policy Publishers in More Than 100 Countries 1. Journal of Scholarly Publishing, 42(4), 476-513.
- **Tausch, A. (2015).** The political algebra of global value change. General models and implications for the Muslim world. With Almas Heshmati and Hichem Karoui. New York: Nova Science Publishers
- **Taylor, P., & Braddock, R.** (2007). International university ranking systems and the idea of university excellence. Journal of Higher Education Policy and Management, 29(3), 245-260.
- Thelwall, M., Klitkou, A., Verbeek, A., Stuart, D., & Vincent, C. (2010). Policy-relevant Webometrics for individual scientific fields. Journal of the American Society for Information Science and Technology, 61(7), 1464-1475.
- **Torres-Salinas, D., Robinson-García, N., & López-Cózar, E. D. (2012).** Towards a Book Publishers Citation Reports. First approach using the Book Citation Index. arXiv preprint arXiv:1207.7067.

- Torres-Salinas, D., Robinson-García, N., Cabezas-Clavijo, Á., & Jiménez-Contreras, E. (2014). Analyzing the citation characteristics of books: edited books, book series and publisher types in the book citation index. Scientometrics, 98(3), 2113-2127.
- Torres-Salinas, D., Robinson-Garcia, N., Miguel Campanario, J., & Delgado López-Cózar, E. (2014). Coverage, field specialisation and the impact of scientific publishers indexed in the Book Citation Index. Online Information Review, 38(1), 24-42.
- Torres-Salinas, D., Rodríguez-Sánchez, R., Robinson-García, N., Fdez-Valdivia, J., & García, J. A. (2013). Mapping citation patterns of book chapters in the Book Citation Index. Journal of Infometrics, 7(2), 412-424.
- **Usher, A., & Savino, M. (2007).** A global survey of university ranking and league tables. Higher Education in Europe, 32(1), 5-15.
- van der Vliet, E. C. L. (2008). The Early State, the Polis and State Formation in Early Greece. In H. J. M. Claessen, R. Hagesteijn, & P. van de Velde (Eds.), Thirty Years of Early State Research. Special Issue (1 ed., Vol. 7, pp. 197 221). (*Social Evolution & History*). Moscow: 'Uchitel' Publishing House.
- **Vinkler, Peter (2010).** The evaluation of research by scientometric indicators. Oxford [England]: Chandos Publishing.
- **Waltman, L., & Schreiber, M. (2013).** On the calculation of percentile-based bibliometric indicators. Journal of the American Society for Information Science and Technology, 64(2), 372-379.
- White, H. D.; Boell, Sebastian K.; Yu, H.; Davis, M.; Wilson, C. S.; Cole, Fletcher T.H. J. (2009) *Libcitations*: A measure for comparative assessment of book publications in the humanities and social sciences. Journal of the American Society for Information Science & Technology. Jun2009, Vol. 60 Issue 6, p1083-1096.
- **Zuccala, A. A., & White, H. D. (2015).** Correlating *Libcitations* and Citations in the Humanities with *Worldcat* and Scopus Data. In A. A. Salah, Y. Tonta, A. A. Akdag Salah, C. Sugimoto, & U. Al (Eds.), Proceedings of the 15<sup>th</sup> International Society for Scientometrics and Informetrics (ISSI), Istanbul, Turkey, 29th June to 4th July, 2015. (pp. 305-316). Bogazici University.
- **Zuccala, A., & Guns, R.** (2013). Comparing book citations in humanities journals to library holdings: Scholarly use versus perceived cultural benefit. In 14th international conference of the international society for scientometrics and informetrics (pp. 353-360).

**Zuccala, A., Guns, R., Cornacchia, R., & Bod, R. (2015).** Can we rank scholarly book publishers? A bibliometric experiment with the field of history. Journal of the Association for Information Science and Technology, 66(7), 1333-1347.

**Zuccala, A., Someren, M., & Bellen, M. (2014).** A machine-learning approach to coding book reviews as quality indicators: Toward a theory of megacitation. Journal of the Association for Information Science and Technology, 65(11), 2248-2260.

# Appendix Table 1: Original data used in the multivariate model

Publisher  (UCD) University	Wikiped ia monthl y downlo ads, English, last year	OCLC WC number of books publish ed in the last 5 years	book (last 5 years) with the highest global library circulat ion rate	book (last 5 years) with the 50th highest global library circulat ion rate	continui ty of perfor mance - top 50 books (last 5 years)	y Indicat or - number of books and book chapter s in the Clariva te Analyti cs (former ly Thomso n- Reuters ) Book Citation Index	Citation s of books and book chapter s in the Clariva te Analyti cs (former ly Thomso n- Reuters ) Book Cittatio n Index	citation s - books and book chapter s	standar d deviatio n citation s books and book chapter s	Sense Quality Indicat or for multiva riate analysis	Harvar d Library number of titles (books only)	Harvar d HOLLI S ratio of books checked out per total holding s (books only)
(UCB) University of British Columbia Press	333	127	458	2	0,4	981	475	0,5	1,9	2	844	4,4
Anthem Press		1969	1329	690	51,9	183	16	0,1	0,4	1	300	12,0
ASM Press	42	801	948	291	30,7	20	2	0,1	0,5	2	222	5,9

Ateneo de Manila	83	251	56	14	25,0	201	23	0,1	0,7	2	304	10,9
University												
Brill	576	44343	917	847	92,4	2503	352	0,1	0,9	3	12598	5,7
CABI	449	2693	304	69	22,7	2235	1148	0,5	2	3	204	2,9
Cambridge	13393	100622	1086	448	41,3	17743	13597	0,8	7	4	31265	8,3
<b>University Press</b>												
Catena Verlag	569	149	28	2	7,1	2	5	2,5	3,5	2	27	14,8
Channel View	124	862	652	124	19,0	14	3	0,2	0,8	2	52	9,6
Publications												
CRC Press	4312	8523	931	922	99,0	3661	4621	1,3	9,6	3	3669	71,0
De Gruyter	541	75258	1453	1310	90,2	3909	1931	0,5	3,5	2	12928	4,5
Duke University	1769	5293	609	306	50,2	23	4	0,2	0,7	3	3522	10,7
Press												
Earthscan	580	1109	492	80	16,3	41	6	0,2	0,7	3	1005	5,4
Publications Ltd.												
Edinburgh	957	9	7	0	0,0	2332	373	0,2	1,1	2	2120	11,4
University Press												
Edward Elgar	1731	19257	505	125	24,8	13298	4019	0,3	1,6	3	3412	5,5
Elsevier	23156	89020	1098	887	80,8	16622	10071	0,6	7,8	3	11750	2,8
Equinox	66	1166	385	82	21,3	48	26	0,5	2	1	408	9,6
IEEE	695	41857	632	288	45,6	41	3	0,1	0,3	3	281	2,8
Ios Press	363	2478	1436	902	62,8	155	36	0,2	1	2	350	2,6
Island Press	385	2177	1439	802	55,7	16	5	0,3	0,6	3	1050	2,8
IWA Publishing	18	1552	1004	340	33,9	602	240	0,4	1,7	2	50	6,0
John Benjamins	804	6963	1307	856	65,5	86	42	0,5	1,5	2	1623	6,4
Johns Hopkins	2361	4752	1415	1153	81,5	399	155	0,4	1,3	4	5191	4,1
University Press												
Karger	404	2437	118	62	52,5	460	183	0,4	1,4	3	3006	1,0
Kluwer Academic	67	32501	753	541	71,8	48	107	2,2	6,6	1	6276	3,7
Publishers												
L'Harmattan	355	49148	94	53	56,4	13	0	0,0	0	2	31685	0,4

MIT Press	3671	12436	1152	949	82,4	4629	3825	0,8	6,3	4	6417	7,3
Nottingham	82	4	44	0	0,0	240	32	0,1	0,5	2	30	3,3
University Press												
Nova Science	1794	16574	1075	702	65,3	15727	3953	0,3	1,1	2	1087	4,0
Publishers												
Oxford University	20425	130981	1480	853	57,6	34	33	1,0	4,8	4	55790	5,9
Press												
Palgrave	4708	120585	1310	646	49,3	45306	13352	0,3	1,6	3	14615	10,9
Macmillan												
Praxis Publishing		911	428	37	8,6	43	5	0,1	0,6	1	577	1,0
Ltd.												
Princeton	4255	22344	1589	968	60,9	6207	11254	1,8	16,8	4	9982	6,3
University Press												
Resources for the	720	39	67	0	0,0	36	33	0,9	1,9	2	478	0,6
Future												
Rodopi	721	4042	874	801	91,6	55	11	0,2	0,9	2	3689	3,8
Routledge	1017	277276	726	667	91,9	27511	11585	0,4	3,7	3	35594	8,3
Royal Society of		3761	1271	711	55,9	826	1311	1,6	13,1	3	267	4,1
Chemistry												
Springer	5058	512404	1409	997	70,8	59992	49411	0,8	4,7	3	66365	1,5
Studium Press		80	8	1	12,5	677	119	0,2	0,6	1	1697	1,8
Trans Tech		8240	1294	878	67,9	22	5	0,2	0,7	2	22	9,1
Publications												
Transaction	1221	1823	368	122	33,2	714	124	0,2	0,7	2	3505	6,1
Publishing												
Universidad		4647	163	41	25,2	88	3	0,0	0,3	1	5945	3,5
Nacional												
Autonoma de												
Mexico												
University of	3642	8523	1392	922	66,2	6153	4089	0,7	4,6	4	11693	3,7
California Press												

University of	3752	12261	2362	592	25,1	184	44	0,2	0,9	4	12827	5,6
Chicago Press	3132	12201	2302	392	23,1	104	44	0,2	0,9	4	12021	3,0
	1700	27(0	1 45 1	070	(7.5	2400	704	0.2	1.7	2	(414	2.6
University of	1789	3769	1451	979	67,5	2480	794	0,3	1,7	2	6414	3,6
Illinois Press												
University of New	306	1718	927	566	61,1	12	0	0,0	0	2	2311	2,6
Mexico Press												
University of	1310	4024	1354	840	62,0	2646	1981	0,8	3,1	3	4069	4,8
North Carolina												
Press												
University of	1019	7690	1299	496	38,2	3697	2755	0,8	3	3	5118	4,8
Pennsylvania Press					ĺ			,				ŕ
University of	587	2493	963	808	83,9	661	188	0,3	1,9	2	3342	3,5
Washington Press												
Wageningen	81	9915	328	37	11,3	389	139	0,4	1	1	437	1,1
Wiley-Blackwell	5872	24614	599	517	86,3	3407	849	0,3	2,4	4	30925	3,4
Wilfrid Laurier	255	15	6	0	0,0	496	142	0,3	1,2	2	676	1,3
University Press												
WIT Press	13	2499	720	88	12,2	335	117	0,4	2,1	2	81	0,0
Woodhead	665	5736	892	334	37,4	2998	1018	0,3	2	2	294	1,7
Publishing												
World Bank	66	9299	447	418	93,5	2338	2399	1,0	12,7	2	4368	2,9
World Scientific	1726	20405	1447	1397	96,5	34	12	0,4	0,8	3	2690	6,0
and Engineering												
Yale University	3565	13184	2157	807	37,4	15	11	0,7	2,8	4	11119	5,3
Press												

# **Appendix Table 2: continutation**

Publisher	average citation s - books in the Clariva te Analyti cs (former ly Thomso n-Reuters ) book citation index	e NACSI S top library outreac h (books only)	Japanes e NACSI S 200th library outreac h (books only)	LIBRIS top library outreac h	LIBRIS 50th library outreac h	of referen ces about the compan y in books - Questia	number of referen ces about the compan y in scholarl y journal s - Questia	of referen ces about the compan y in magazi nes - Questia	number of referen ces about the compan y in newspa pers - Questia	Items in ECLAS catalog ue Brussel s	World Bank/I MF JOLIS library catalog ue Washin gton (books only)	the IndCat (India) Union catalog
(UCB) University of British Columbia Press	3,9	121	1	22	17	1206	171	9	1	0	6	43
Anthem Press	0,8	44	1	23	19	108	18	2	6	27	42	130
ASM Press	2,0	87	5	19	6	26	20	0	0	2	2	462
Ateneo de Manila University	1,0	37	3	19	0	228	12	15	1345	1	7	5
Brill	1,4	215	28	32	23	8356	853	508	3311	118	99	3913
CABI	3,2	58	7	30	20	324	40	60	116	84	74	172

Cambridge	6,8	415	143	49	32	39523	2875	699	198	2046	1944	75374
University Press												
Catena Verlag	0,0	20	0	29	1	939	52	16	193	1	0	1
Channel View	3,0	56	0	30	8	21	3	0	0	0	1	6
Publications												
CRC Press	6,8	456	29	36	11	800	89	32	27	218	84	6707
De Gruyter	2,9	187	76	46	22	7040	221	26	3	395	49	1879
Duke University	0,0	137	32	31	12	12734	948	153	30	34	71	1264
Press												
Earthscan	1,3	80	0	24	7	413	17	8	0	7	95	633
Publications Ltd.												
Edinburgh	1,4	99	24	32	21	4852	111	24	16	43	22	1462
University Press												
Edward Elgar	2,4	120	51	21	11	2863	278	125	771	1284	1448	3844
Elsevier	8,4	369	79	36	30	6151	422	1359	1733	1109	335	24199
Equinox	4,3	115	2	23	14	2109	128	315	2014	1	1	36
IEEE	0,0	204	21	27	21	1553	263	525	232	48	5	2004
Ios Press	1,4	66	5	30	22	245	9	14	0	89	31	148
Island Press	1,0	53	8	23	20	1369	161	103	51	87	101	182
IWA Publishing	2,9	14	0	20	3	3	1	0	0	22	32	12
John Benjamins	3,5	162	34	25	21	1498	47	6	0	91	1	1562
Johns Hopkins	2,3	152	40	34	21	19506	607	229	73	130	323	2344
University Press												
Karger	2,4	92	15	33	14	1025	79	34	174	11	3	2171
Kluwer Academic	22,0	162	51	34	19	6872	245	416	122	3047	1352	6508
Publishers												
L'Harmattan	0,0	40	11	20	3	1460	70	2	1	1205	103	0
MIT Press	8,7	297	94	36	23	18155	711	330	63	443	653	5500
Nottingham	0,8	5	0	28	1	20	2	1	1	3	1	2
University Press												

Nova Science	0,6	36	5	23	22	206	16	4	1	17	202	132
Publishers	ŕ											
Oxford University	11,0	399	155	55	33	50233	3523	1710	894	3358	4817	143670
Press												
Palgrave	2,5	172	33	32	20	3632	1076	308	157	1146	1163	2513
Macmillan												
Praxis Publishing	1,7	27	1	19	7	11	0	0	0	7	3	16
Ltd.												
Princeton	18,5	219	79	31	22	32770	1007	522	147	266	481	13972
University Press												
Resources for the	7,0	105	11	17	3	1018	61	74	116	23	83	195
Future												
Rodopi	2,3	63	13	23	22	2127	310	20	6	50	0	135
Routledge	4,1	252	106	55	31	35862	2431	862	7616	2420	1906	78188
Royal Society of	15,1	144	9	29	20	92	18	83	238	70	6	1477
Chemistry												
Springer	4,2	228	117	40	36	11272	1241	1177	13917	30655	1819	64801
Studium Press	0,2	1	0	46	0	0	0	0	0	3	0	15
Trans Tech	0,3	32	3	19	15	0	0	1	0	0	0	142
Publications												
Transaction	1,0	56	17	34	13	2373	116	51	13	46	111	309
Publishing												
Universidad	0,0	17	2	29	2	709	24	115	14	6	40	47
Nacional												
Autonoma de												
Mexico												
University of	6,9	155	63	33	23	31182	1066	412	142	93	137	7332
California Press												
University of	2,1	264	76	39	22	36180	1255	433	153	149	344	12653
Chicago Press												
University of	3,1	149	31	36	21	13980	781	132	42	6	13	905
Illinois Press												

University of New	0,0	94	5	22	20	3934	149	37	13	0	2	143
Mexico Press												
University of	7,1	130	27	36	21	14362	930	113	58	3	14	1092
North Carolina												
Press												
University of	5,8	112	24	32	18	11268	482	50	18	12	68	848
Pennsylvania Press												
University of	2,4	89	22	32	21	5524	253	34	19	23	197	738
Washington Press												
Wageningen	1,7	15	0	30	8	558	19	52	127	158	71	59
Wiley-Blackwell	1,9	105	20	38	29	761	230	78	11	39	41	144
Wilfrid Laurier	2,4	35	1	26	20	21	0	0	0	4	4	31
University Press												
WIT Press	3,1	20	1	5	1	9	11	0	0	15	9	22
Woodhead	2,7	24	1	26	7	17	0	3	2	15	3	237
Publishing												
World Bank	8,6	165	32	34	22	10050	4231	7448	12498	691	16600	19902
World Scientific	2,0	1	0	30	20	4	0	5	0	0	0	0
and Engineering												
Yale University	0,0	141	54	32	20	31640	1024	673	412	140	145	6471
Press												

# **Appendix Table 3: continuation**

Publisher	total number of recent titles	Recent titles with more than 50	Recent titles with more than 500	% of titles with a circulation of more	% of titles with a circulation between 50	% of titles with a circulation of less than
	tities	circulation	circulation	than 500	and 500	50
(UCB) University of British Columbia Press	132	5	0	0,000	3,788	96,212
Anthem Press	2000	282	97	4,850	9,250	85,900
ASM Press	555	79	27	4,865	9,369	85,766
Ateneo de Manila University	242	2	0	0,000	0,826	99,174
Brill	46977	3965	1072	2,282	6,158	91,560
CABI	2857	160	0	0,000	5,600	94,400
Cambridge University Press	111263	10244	38	0,034	9,173	90,793
Catena Verlag	162	0	0	0,000	0,000	100,000
Channel View Publications	812	83	6	0,739	9,483	89,778
CRC Press	64787	6427	5	0,008	9,912	90,080
De Gruyter	80805	3541	660	0,817	3,565	95,618
Duke University Press	6091	1253	6	0,099	20,473	79,429
Earthscan Publications Ltd.	1261	117	0	0,000	9,278	90,722
Edinburgh University Press	8739	1358	284	3,250	12,290	84,460
Edward Elgar	20276	1259	1	0,005	6,204	93,791
Elsevier	171050	7536	164	0,096	4,310	95,594
Equinox	1367	140	1	0,073	10,168	89,759
IEEE	56003	8212	7	0,012	14,651	85,336
Ios Press	3227	306	155	4,803	4,679	90,518
Island Press	2164	265	90	4,159	8,087	87,754

IWA Publishing	1757	164	27	1,537	7,797	90,666
John Benjamins	7488	882	404	5,395	6,384	88,221
Johns Hopkins University Press	4726	1009	255	5,396	15,954	78,650
Karger	4486	165	0	0,000	3,678	96,322
Kluwer Academic Publishers	42480	1395	146	0,344	2,940	96,716
L'Harmattan	51237	141	0	0,000	0,275	99,725
MIT Press	13120	1942	421	3,209	11,593	85,198
Nottingham University Press	6	0	0	0,000	0,000	100,000
Nova Science Publishers	16921	2168	998	5,898	6,914	87,188
Oxford University Press	153901	16876	429	0,279	10,687	89,035
Palgrave Macmillan	118716	16767	85	0,072	14,052	85,876
Praxis Publishing Ltd.	1191	44	0	0,000	3,694	96,306
Princeton University Press	23198	3217	863	3,720	10,147	86,132
Resources for the Future	40	1	0	0,000	2,500	97,500
Rodopi	4242	512	174	4,102	7,968	87,930
Routledge	296550	18376	228	0,077	6,120	93,803
Royal Society of Chemistry	9094	435	164	1,803	2,980	95,217
Springer	573931	44928	423	0,074	7,754	92,172
Studium Press	83	0	0	0,000	0,000	100,000
Trans Tech Publications	6774	819	513	7,573	4,517	87,910
Transaction Publishing	2244	285	0	0,000	12,701	87,299
Universidad Nacional Autonoma de	5677	38	0	0,000	0,669	99,331
Mexico						
University of California Press	8941	1758	432	4,832	14,831	80,338
University of Chicago Press	13052	2786	89	0,682	20,663	78,655
University of Illinois Press	5422	1340	467	8,613	16,101	75,286
University of New Mexico Press	1548	462	60	3,876	25,969	70,155
University of North Carolina Press	4132	1067	247	5,978	19,845	74,177
University of Pennsylvania Press	7894	1445	66	0,836	17,469	81,695
University of Washington Press	2612	565	146	5,590	16,041	78,369

Wageningen	10592	17	0	0,000	0,160	99,840
Wiley-Blackwell	34596	2640	135	0,390	7,241	92,369
Wilfrid Laurier University Press	1111	242	28	2,520	19,262	78,218
WIT Press	1303	12	0	0,000	0,921	99,079
Woodhead Publishing	4339	643	31	0,714	14,105	85,181
World Bank	13304	695	0	0,000	5,224	94,776
World Scientific	22151	1376	634	2,862	3,350	93,788
Yale University Press	13434	2524	300	2,233	16,555	81,212