

The objectives, design and selection process of the Flemish Academic Bibliographic Database for the Social Sciences and Humanities (VABB-SHW)

Frederik Verleysen^{*1}, Pol Ghesquière^{†2} and Tim Engels^{‡3}

^{*}Centre for Research and Development Monitoring (ECOOM), University of Antwerp, Belgium, [†]Research Coordination of the Social Sciences and Humanities Group, KU Leuven, Belgium, and [‡]Department of Research Affairs and Centre for Research and Development Monitoring (ECOOM), University of Antwerp, Belgium

Introduction

The present chapter introduces the goals, design and procedure of the VABB-SHW (Vlaams Academisch Bibliografisch Bestand voor de Sociale en Humane Wetenschappen/Flemish Academic Bibliographic Database for the Social Sciences and Humanities). After briefly sketching the background and history of the systems for university funding in Flanders (Belgium) and other European countries, we discuss the design and procedure of the VABB-SHW itself. By highlighting some major publication patterns in the SSH (social sciences and humanities) as reflected by the data contained in the VABB-SHW, we thereafter illustrate how the Flemish database is adapted to, and further evolving towards, reliably capturing the diverse publication output of the SSH as practised at Flemish universities. Finally, focusing on book publications, we make a comparison with the selection process in the Scandinavian countries.

Over the last two decades, several European countries have developed systems for measuring research performance in the natural, technical and biomedical sciences, as well as in the social sciences and humanities. In order to improve the quality of research, PRFSs (performance-based research funding systems), with incentive structures linking output ‘quality’ to funding, have been developed [1]. In the U.K., the RAE (Research Assessment Exercise) (now Research Excellence Framework) has used peer review by disciplinary panels to evaluate the quality of the self-selected top outputs of research units. In Norway, Denmark, Finland and Flanders, a different route was chosen. In these four countries, full coverage bibliographic databases have been developed in order to monitor the academic and scientific production of university scholars. The best-known example of such

¹Email: frederik.verleysen@uantwerpen.be

²Email: pol.ghesquiere@ppw.kuleuven.be

³Email: tim.engels@uantwerpen.be

a database is CRISin (Current Research Information System in Norway), which collects all bibliographic information from universities and university colleges, research institutes and hospitals in Norway [2–4]. Having led the way in Europe, CRISin shares some important characteristics with the information systems of Finland, Denmark and Flanders: first, the whole peer reviewed publication output is taken into account for calculation of research funding distribution; secondly, both WoS (Web of Science)-indexed and non-WoS publications are taken into account; and thirdly, evaluation is performed foremost at the level of the publication channel instead of that of the individual publication. Besides similarities, there are also differences between these national systems. The major similarities and differences will be addressed in the present chapter.

In Flanders, the Dutch-speaking region of Belgium, the development of a regional PRFS has come a long way. It was first made possible through the devolution of education and research policy from the federal government to the regions in 1988. From the 1990s onwards, regional authorities in Belgium have played a major role in distributing university funding. Having inherited from the federal state a mixed funding model of both input and output parameters [5], the Flemish government gradually developed its own system for university research. Over the years, this system has become more strongly determined by output-parameters, including publications and citations. Funding of Flemish universities is currently based on four pillars: (i) the block grant for academic education, research, scientific and social services, (ii) parallel government financing for basic research [amongst which is included the BOF (Bijzonder Onderzoeksfonds/University Research Fund)], (iii) other financing sources for research (e.g. the European Union), and (iv) third-party financing of university contract research. The BOF, in particular, has provided the Flemish universities with a tool for shaping their own research policies for basic research. In 2013, the BOF accounted for some €140 million, distributed across the five universities. Over the years, the BOF distribution key has become the standard for setting up funding mechanisms. Most modifications or additions were first implemented as one of several revisions of the BOF key and then later implemented in other funding mechanisms as well [6].

Since 2003, the monitoring of the Flemish universities' research publications has come to the forefront in determining the allocation of funding, especially the BOF [7]. As the Flemish government wanted to give the interuniversity allocation of research funding a more competitive character, distribution of means was increasingly determined on the basis of publications and citations. The growing orientation towards performance-based funding intended to reward the quality of the research performed. In order to distribute the BOF yearly, an accurate counting of publications and citations for all disciplines is essential. During the years 2003–2010, the databases for journal articles and conference proceedings comprised in Thomson Reuters' WoS were used for this purpose. The publications by academics working in Flanders indexed in the WoS were counted and used as a proxy for the total academic output. This way of counting was, however, strongly criticized by the scholarly community in Flanders, among other things because it was considered biased towards the natural and biomedical sciences [8]. The WoS has a low coverage of journals for many disciplines within the SSH [9]. In 2008, the Flemish government amended the BOF regulation in order to make possible

the construction of a bibliographic database for registration of publications in the SSH, the VABB-SHW. The primary goal of the VABB-SHW is to allow the inclusion of a specific SSH publications parameter (based on SSH publications that are not included in the WoS) in the calculation of the BOF key. Hence, by enacting a legal framework for the VABB-SHW, the government explicitly recognized that publication cultures in the SSH differ greatly from those in the natural and biomedical sciences, amongst other things regarding distribution of publication types, language use and international orientation [10]. In the latest revision of the BOF regulation [11], the government decided to substantially increase the weight of the VABB-SHW from 2.7 to 6.28% of the BOF key in 2013 [6], thus recognizing the importance of the database.

In the next section, we will have a further look at the design of and the decision-making underpinning the VABB-SHW. This is followed by an overview of some publication patterns in Flemish SSH research as reflected by the contents of the third VABB-SHW. To conclude, we contrast some of these results with the situation in the Nordic countries and offer reflections on the selection process for publications in the various countries.

Design and procedure of the VABB-SHW

The VABB-SHW collects all bibliographic references since the year 2000 of SSH publications by scholars affiliated with a Flemish university. In accordance with the stipulations of the BOF regulation, the following five publication types are eligible for inclusion in the VABB-SHW:

- Articles in journals
- Monographs
- Edited books
- Articles or chapters in books
- Proceedings papers that are not part of special issues of journals or of edited books

The BOF regulation further lists a number of basic criteria which outputs eligible for inclusion need to meet:

- Be publicly accessible
- Be unambiguously identifiable by an ISBN or an ISSN number
- Make a contribution to the development of new insights or to applications resulting from these insights
- Have been subjected, prior to publication, to a demonstrable peer-review process by scholars who are experts in the (sub)field to which the publication belongs. Peer review should be carried out by an editorial board, a permanent reading committee, external referees or by a combination of these. The review should contain input from outside the author(s)'s research team and should be independent from the author(s). The author cannot organize the peer review of her or his own draft manuscript

Finally, the BOF regulation mentions the relative weight each publication type is to receive in the calculation of the BOF key:

- Journal article: 1
- Monograph: 4
- Book chapter: 1
- Edited book: 1
- Conference proceeding: 0.5

The Flemish government decided to entrust the co-ordination and technical construction of the VABB-SHW to the Antwerp branch of the inter-university ECOOM (Expertisecentrum Onderzoek en Ontwikkelingsmonitoring/Centre for Research and Development Monitoring). Annually, the five Flemish universities provide ECOOM-Antwerp with bibliographic information of the SSH publications by their researchers that appeared in the previous 2 years. In order to safeguard the academic standards of the VABB-SHW, the Flemish government simultaneously decided to establish a GP (Gezaghebbend Panel/Authoritative Panel), which is composed of 18 professors affiliated with Flemish universities and whose expertise covers the main SSH disciplines. It is the task of the GP, assisted by disciplinary panels, to evaluate which of the journals and book publishers (with whom researchers affiliated with a Flemish university have published at least once in the retrospective 10-year sliding time window used for the BOF key) meet the aforementioned criteria. In accordance with the BOF regulation, WoS-indexed articles, letters, proceedings papers and reviews, as well as their citations automatically contribute to the calculation of the BOF key. One extra criterion for individual publications eligible for inclusion was introduced by the GP: they must be at least four pages long.

In the VABB-SHW, all records are assigned to 16 SSH disciplines and/or one of three general categories on the basis of the author(s)' affiliation(s) with a SSH unit, i.e. the research group, the research centre, the institute or the department in which the author carries out research. This uniform and complete attribution of publications to disciplines allows ECOOM to annually provide the GP with overviews of all publication channels used by researchers affiliated with the Flemish universities. The overviews of journals, book publishers, book titles and proceedings papers are thus provided for the database as a whole and per discipline, thereby facilitating the work of the GP and its disciplinary subpanels. The work of the GP results in separate lists of approved and non-approved publication channels. The GP's judgement is thereafter applied by ECOOM-Antwerp to all individual publications submitted by the universities. The updated version of the VABB-SHW is delivered to the government on 30 June each year, allowing for timely calculation of the BOF key for the following year. The final lists of approved publication channels are made available through the ECOOM website (<http://www.ecoom.be/en/vabb>). Figure 1 shows the annual cycle for updating VABB-SHW.

Figure 2 presents the approval rate of the articles and book publications submitted for inclusion in the VABB-SHW. The approval rates represent the percentage of the articles and book publications, published in a certain year

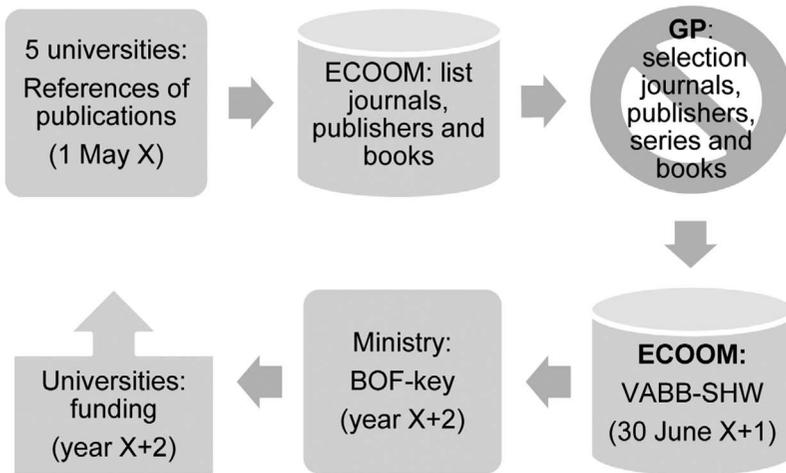


Figure 1

Yearly cycle for updating the VABB-SHW and calculation of the BOF key

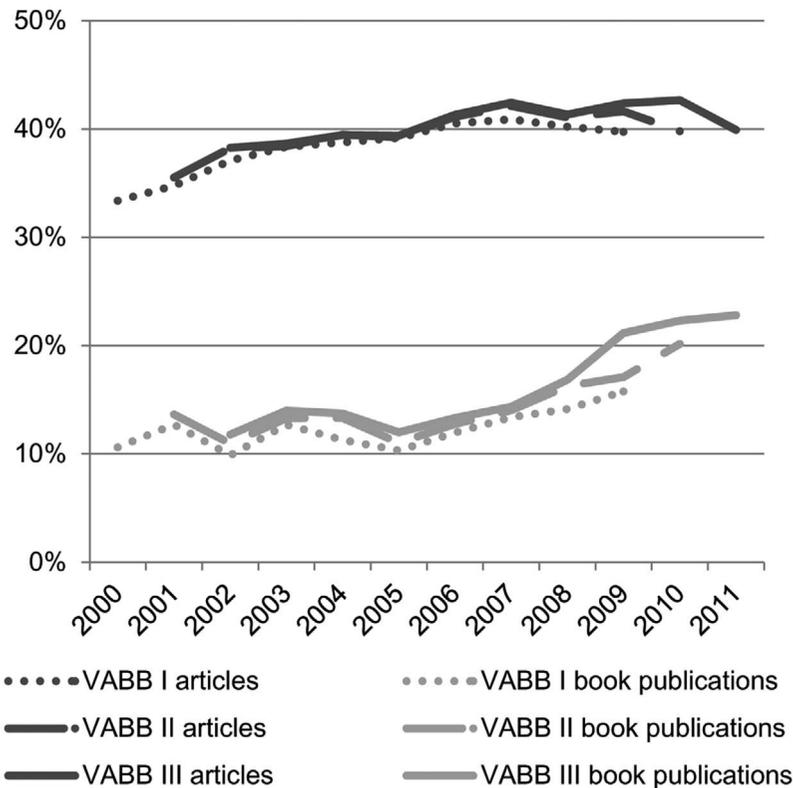


Figure 2

Approval rates for articles and book publications in the versions one (2010) to three (2012) of the VABB-SHW

and included in the first, second and/or third version of the VABB-SHW. The approval rate for book publications in the VABB-SHW is considerably lower than the approval rate for journal articles. As is discussed in the next section, this has consequences for the share of each publication type within the VABB-SHW.

SSH publication characteristics reflected in the VABB-SHW

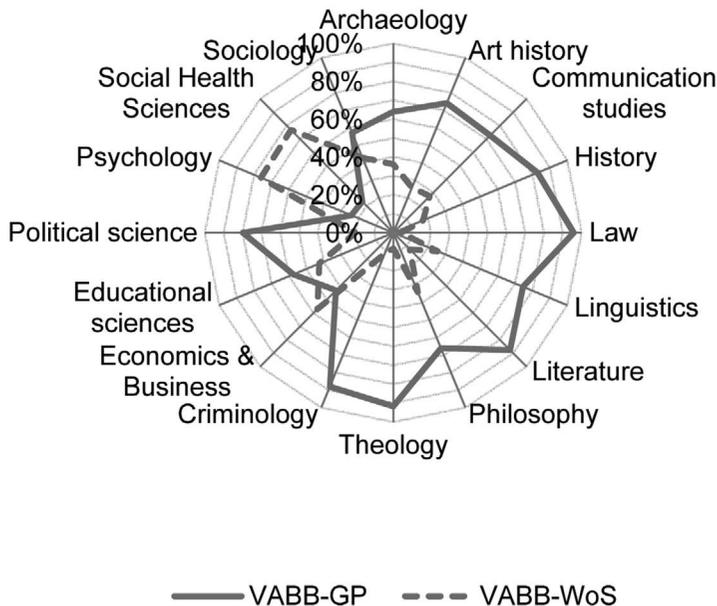
The VABB-SHW has succeeded in realizing a more balanced output measurement for the SSH than the previous system which only took into account the WoS-indexed publications. This is apparent from the distribution between the WoS-indexed (VABB-WoS) and the non-WoS, but GP-approved, publications (VABB-GP) included in the database (Figure 3).

For most SSH disciplines, VABB-GP publications outnumber VABB-WoS by a great margin. Only in three social science disciplines, i.e. economics and business, psychology, and social health sciences, does VABB-WoS account for a larger share than VABB-GP (Figure 3). This observation is to be expected, as these disciplines are known to be well covered by the WoS [3,9,12].

This more balanced measurement achieved by the VABB-SHW is also reflected by the distribution of publication languages (Figure 4).

Although English has become the dominant publication language in all but two disciplines, Dutch and other languages still account for a sizeable share of Flemish SSH publication output. This is more so the case for the humanities than for the social sciences. Those SSH disciplines that study more regional topics

Figure 3



Shares of VABB-WoS and VABB-GP in the third version of the VABB-SHW

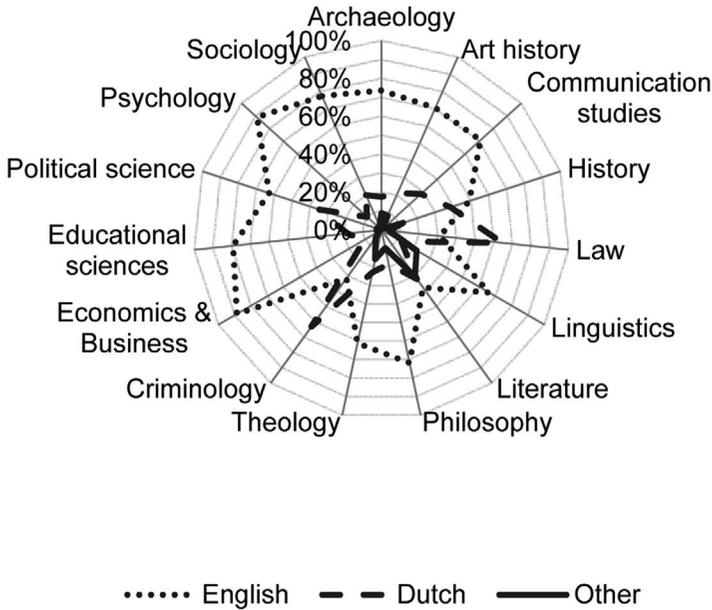


Figure 4

Publication languages in the third version of the VABB-SHW

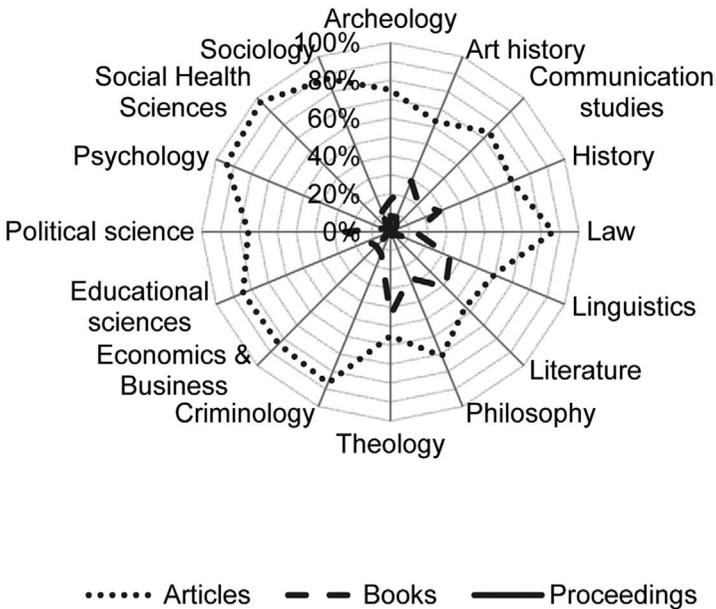


Figure 5

Publication types in the third version of the VABB-SHW

(such as political science, history, literature, law and criminology) also seem to publish more in regional journals and with regional publishers, which adhere more frequently to Dutch as a publication language. Especially in the humanities, the choice for Dutch and other publication languages as opposed to English is determined by both research topic and target audience [10].

Above, we pointed out that lower acceptance rates for books have a consequence for the distribution of the various publication types. In the VABB-SHW (third version, 2012), journal articles account for 69.2%, book publications (monographs, edited books and chapters together) account for 28.6% and conference proceedings account for 2.2% (Figure 5).

Despite the dominance of the journal article, book publications represent a considerable share in most disciplines, especially in the humanities. Yet, the distribution between publication types for the VABB-SHW differs substantially from the one in the comparable Norwegian CRISTin database. There, book publications account for 50.8% in the social sciences and for 61.0% in the humanities [3,13]. How is such a large difference in the share of book publications possible? As trends in journal publication patterns of SSH scholars in Flanders and Norway have been shown to be rather similar [12], difference in publication cultures is not a sufficient explanation. Part of the explanation can be found in the different selection process for book publications in both countries. We discuss these procedural differences and the resulting decisions in the next section.

VABB-SHW book publisher selection compared with Denmark, Finland and Norway

For each version of the VABB-SHW, the main task of the GP is to evaluate which publication channels (journals and publishers) meet the criteria stipulated in the BOF regulation. For book publishers, the selection for the first version of the VABB-SHW was based on the level-2 list of top-rated international scientific publishers who (i) target a mainly scientific readership, (ii) apply rigorous external peer review, (iii) publish in the major language(s) of each discipline, and (iv) attract an international authorship with no more than two-thirds of the authors coming from one and the same country. This list had been identified in an earlier similar exercise for the construction of CRISTin in Norway. This level-2 list also served as the basis of the publisher selection in Denmark and Finland. In Norway and Finland, the level-2 list was supplemented by more sizeable level-1 lists, containing many other publishers for which authors declared that peer review of their own publications with these publishers had taken place. Level-1 list publications are also included in the national bibliographic databases of Norway and Finland. Yet, for the calculation of research funding in the Nordic PRFSs they carry less weight than the level-2 publications (e.g. 5 publication points as opposed to 8 for level-2 monographs in Norway) [2]. Denmark uses no level distinctions for publishers, but groups all publishers in one list. By contrast, in Flanders, the GP decided that only the Norwegian level-2 list of 82 publishers would serve as the initial basis of the publisher selection for the VABB-SHW, and that no level-1 list would be added. The GP concurred, however, that at a later stage the VABB-SHW publisher

list would be expandable [14]. Consequently, the list of approved publishers has grown for the subsequent versions of the VABB-SHW: three publishers were added in 2011, 33 in 2012 and another 23 in 2013.

In addition to the continuing expansion of the list of approved publishers, from the second version of the VABB-SHW onwards, arrangements have been made by the GP for the inclusion of a selection of individual book publications that meet the criteria of the BOF regulation. Starting in 2010, a quality label for peer-reviewed books was created by the VUV (Flemish Publishers' Association). This GPRC (Guaranteed Peer Reviewed Content) label can be attached to individual books pending GP approval, which thus are also included in the VABB-SHW [15]. In addition, the GP decided to screen recent book publications in order to be able to identify foreign published records that meet the BOF criteria. Moreover, starting in 2013, peer-reviewed series of books have been included as well. These more fine-grained selection processes for book publications allow the VABB-SHW to capture the peer-reviewed research outputs published by scholars affiliated with the Flemish universities more and more reliably. Moreover, an appeals procedure yearly allows authors of publications that have not been accepted for inclusion in the VABB-SHW to prove that peer review has actually taken place, leading the GP to revise their decision so that the publication can be included in the next version of the VABB-SHW.

Let us now return to the difference in share of book publications in the VABB-SHW and CRISin respectively. The primary cause for this divergence seems to be the difference in selection mechanism. Whereas in Flanders, decision-making is centralized with the GP, in Norway, it is the researchers and their departments who have to indicate whether a publication has been the subject of peer review prior to publication. Only when this is contested is discussion at a more distant, i.e. more centralized, level to take place. Yet, it may also occur that publishers are judged differently in Flanders as compared with Denmark, Finland and/or Norway.

To analyse the occurrence of diverging judgement at the publisher level, we examined the occurrence on the Nordic level-2 and level-1 lists of the 118 approved and the 1747 non-approved publishers that occur in the VABB-SHW database (third version, 2012). For now, such a publisher matching is only possible at the level of publisher names, as only in Flanders algorithmically derived ISBN prefixes are uniformly implemented as a unique publisher ID.

The result of this matching can be grouped in four categories:

- (a) Publishers approved in Flanders, as well as in the Nordic countries
- (b) Publishers approved in Flanders, but not occurring on the list of approved publishers in any of the Nordic countries
- (c) Publishers approved in the Nordic countries, but not approved in Flanders
- (d) Publishers with a different approval result in at least two of the four countries

Starting with category (a), the large majority of the publishers approved in Flanders occur on the lists of approved publishers in the Nordic countries as well. The percentage to be found on the Danish publisher list is 83.0%, with 86.1% for the Finish list and 86.8% for the Norwegian list. In the case of Finland and

Norway, most of the publishers approved in Flanders are actually on level 2 (65.9 and 61.2% respectively).

In category (b), six publishers were found to be approved in Flanders, but not in the Nordic countries. In category (c), 188 publishers (10.8% of 1747) are not approved in Flanders, but are approved in Denmark (no levels) and approved at level 1 in Finland and Norway. Nineteen publishers not approved in Flanders (1.1% of 1747) are approved at level 2 in Finland and/or Norway. For some of these publishers, the GP has identified peer-reviewed book series or individual books that have been peer reviewed, but the majority of the book publications with these publishers have not been included in the VABB-SHW for lack of evidence of peer review. Finally, in category (d), six publishers were not approved in Flanders and were judged differently in Norway (level 1) and Finland (level 2). This result illustrates that, in addition to differences in perception regarding the implementation of peer review, differences in the perception of the standing of publishers also occur.

Overall, our analysis illustrates that there is both considerable agreement as well as divergence regarding the inclusion of publishers in the performance-based research funding systems of Denmark, Finland, Flanders and Norway. This illustrates the general agreement on what constitutes the international layer of social sciences and humanities publications, but the lack of such agreement with regard to the publications that are more culturally embedded, focus more on local issues and/or primarily target a national or local audience. The latter publications, however, are an essential part of social sciences and humanities academic output. This illustrates that although the inclusion of book publications in performance-based funding systems is a huge improvement over systems that include articles only, issues remain for SSH scholars [16].

Conclusion

In the present chapter, we have introduced the VABB-SHW database and have compared its book-selection process with that of the performance-based research funding systems that have been implemented in Denmark, Finland and Norway. In each of these countries, recognition of the diverse publication culture of the SSH has resulted in comprehensive-coverage databases of publications that include book publications. Yet, the percentage of book publications differs considerably, with the percentage in Flanders being lower than in the Nordic countries. This illustrates the lack of standardization of peer review of book publications, if applied at all. In fact, many publishers have thoroughly reviewed series, as well as non-reviewed books in their portfolio, and the peer review may concern book proposals or entire manuscripts [15]. Moreover, there is almost no tradition of selecting publications at the publisher level. With the advent of Thomson Reuters' Book Citation Index and the envisioned addition of 75 000 books to Elsevier's Scopus database, this situation may be changing. Yet, the diversity of publishers is enormous, especially in the humanities, hence necessitating more fine-grained approaches such as selection at the series and even the individual book level.

Acknowledgements

We thank Gunnar Sivertsen, Karen Skytte Larsen, Rolf Halse and Tryuken Ossenblok for their assistance and suggestions.

References

1. Hicks, D. (2012) Performance-based university research funding systems. *Research Policy* **41**, 251–261
2. Schneider, J.W. (2009) An outline of the bibliometric indicator used for performance-based funding of research institutions in Norway. *European Political Science* **8**, 364–378
3. Sivertsen, G. (2009) Publication patterns in all fields. In *Celebrating Scholarly Communication Studies: A Festschrift for Olle Persson at his 60th Birthday* (Aström, F., Danell, R., Larsen, B. and Schneider, J.W. eds). International Society for Scientometrics and Informetrics, Leuven
4. Sivertsen, G. (2010) A performance indicator based on complete data for the scientific publication output at research institutions. *ISSI Newsletter* **6**, 22–28
5. Moed, H.F., Luwel, M., Houben, J.A., Spruyt, E. and Van Den Berghe, H. (1998) The effects of changes in the funding structure of the Flemish universities on their research capacity, productivity and impact during the 1980s and early 1990s. *Scientometrics* **43**, 231–255
6. Spruyt, E.H.J. and Engels, T.C.E. (2013) Nieuwe sleutel verdeling van middelen Bijzonder Onderzoeksfonds. *Thema: Tijdschrift voor Hoger Onderwijs en Management* **13**, 56–61
7. Debackere, K. and Glänzel, W. (2004) Using a bibliometric approach to support research policy making: the case of the Flemish BOF-key. *Scientometrics* **59**, 253–276
8. De Wever, B. (2007) Van A1, A2, A3... Concurrentieverslaving in academia. In *Welke Universiteit Willen Wij (Niet)?* (Loobuyck, P., Vanheeswijck, G., Van Herck, W., Grieten, E. and Vercauteren, K., eds), Academia Press, Gent
9. Archambault, E., Vignola-Gagne, E., Côte, G., Larivière, V. and Gingras, Y. (2006) Benchmarking scientific output in the social sciences and humanities: the limits of existing databases. *Scientometrics* **68**, 329–342
10. Hicks, D. (2004) The four literatures of social science. In *Handbook of Quantitative Science and Technology Research: The Use of Publication and Patent Statistics in Studies of S&T Systems* (Moed, H.F., Glänzel, W. and Schmoch, U., eds), Kluwer Academic, Dordrecht
11. Decision of the Flemish government on the financing of the Special Research Funds at the universities in the Flemish community. <http://go.nature.com/mt9srg> (In Dutch)
12. Ossenblok, T.L.B., Engels, T.C.E. and Sivertsen, G. (2012) The representation of the social sciences and humanities in the Web of Science. A comparison of publication patterns and incentive structures in Flanders and Norway (2005–9). *Research Evaluation* **21**, 280–290
13. Piro, F.N., Aksnes, D.W. and Rorstad, K. (2013) A macro analysis of productivity differences across fields: challenges in the measurement of scientific publishing. *Journal of the American Society for Information Science and Technology* **64**, 307–320
14. Ghesquière, P., Van Bendegem, J.-P., Gillis, S., Willems, D. and Cornelissen, K. (2011) Het VABB-SHW: eerste versie klaar, nu verfijnen. In *Vlaams Indicatorenboek 2011* (Debackere, K. and Veugelers, R., eds), Expertisecentrum O&O Monitoring, Brussels
15. Verleysen, F.T. and Engels, T.C.E. (2013) A label for peer-reviewed books. *Journal of the American Society for Information Science and Technology* **64**, 428–430
16. Hicks, D. (2013) One size doesn't fit all: on the co-evolution of national evaluation systems and social science publishing. *Confero: Essays on Education, Philosophy and Politics* **1**, 67–90