Coverage of journal articles in social sciences and humanities in Web of Science and their distribution in citation indexes

Michal Petr¹, Tim C.E. Engels ², Emanuel Kulczycki ³, Marta Dušková⁴, Raf Guns², Monika Sieberová¹, Gunnar Sivertsen⁵

¹ petr@rect.muni.cz, sieberova@rect.muni.cz
Research Office, Masaryk University, Zerotinovo namesti 1, 60177 Brno (Czech Republic)

² tim.engels@uantwerpen.be, raf.guns@uantwerpen.be
Centre for R&D Monitoring, Faculty of Social Sciences, University of Antwerp, Middelheimlaan 1, Antwerp,
2020 (Belgium)

3 emek@amu.edu.pl
Scholarly Communication Research Group, Adam Mickiewicz University in Poznań, Szamarzewskiego 69,
Poznań, 60-568 (Poland)

⁴ duskova@cvtisr.sk
Slovak Centre of Scientific and Technical Information, Lamačská cesta 8/A, 811 04 Bratislava (Slovak Republic)

⁵ gunnar.sivertsen@nifu.no Nordic Institute for Studies in Innovation, Research and Education, P.O. Box 2815, Oslo, 0608 Toyen (Norway)

Introduction

The evaluation systems in the Czech Republic (Good at al. 2015) and in Poland (Korytkowski & Kulczycki 2019) favour journal articles indexed in Web of Science (WoS) and Scopus over books and other types of outputs. However, researchers in social sciences and humanities (SSH) in the Czech Republic commonly are of the opinion that they cannot simply publish in WoS journals, due to many (whether real or perceived) issues, e.g. the study of locally relevant topics, language barriers, and lack of journals in their field (Linková 2014, Šima 2017). Many authors in other Central and Eastern European (CEE) countries probably hold similar opinions.

This paper will deal with two questions: 1) whether publication patterns in SSH have changed in favour of WoS-indexed journals (despite the resistance mentioned) and 2) whether the publication patterns have changed in favour of journals ranked higher in the Journal Citation Reports. We analysed the Czech Republic, Slovakia and Poland representing countries with similar cultural and political heritage and compared the patterns with Flanders and Norway representing Western and Nordic countries.

Methods

We used the data in a timeframe 2013–2016 acquired from the national databases as an essential data sources for SSH (Kulczycki et al. 2018, Sīle et al. 2018). First, we analysed the share of journal articles in the total number of SSH peer-reviewed articles in journals, monographs and edited books, and chapters and conference proceedings in national databases. Second, we analysed the proportion of journal articles indexed in WoS (coverage). Third, we analysed the distribution of WoS-indexed articles in WoS citation indexes according to journal indexation, where applicable, with the distinction of quartiles derived from the ranking of journals by the impact factor (JIF).

Preliminary results

The share of journal articles

Flanders and Norway have a higher share of journal articles in the total count of peer-reviewed articles, books, chapters and proceedings in their national databases than the Czech Republic, Poland and Slovakia in both the Social Sciences and the Humanities. In Social Sciences (Figure 1), the shares are rather stable in each of the countries. Poland is the only country where the share is decreasing. In Humanities (Figure 2), the overall share of journal articles is lower than in Social Sciences. Also, fluctuations in Humanities seem somewhat larger than in Social Sciences, where the share of articles is on the rise in the Czech Republic, Slovakia and Flanders yet is decreasing in Poland and fluctuating in Norway. The overall differences between countries seem less pronounced.

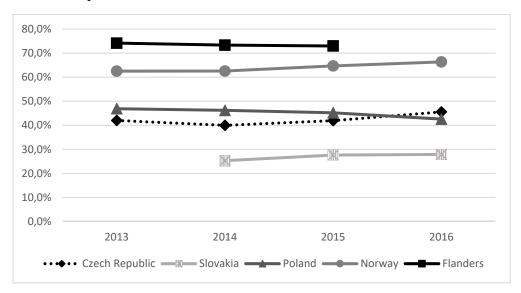


Figure 1. The share of journal articles in Social Sciences.

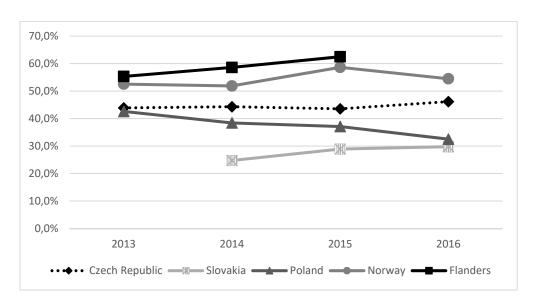


Figure 2. The share of journal articles in Humanities.

The coverage of journal articles in WoS

Tables 1–2 show the number and the percentage of articles in WoS-indexed journals in SSH. In Social Sciences (Table 1), the Czech Republic and Slovakia display high dynamics in increasing the share of articles in WoS-covered journals. In Flanders, the percentage is also increasing but reaches higher orders than in CEE countries. In Humanities (Table 2), the changes are happening slowly. In all SSH, Norway has a stable proportion of articles in WoS-covered journals. The coverage of journal articles from Poland is low and the growth is moderate.

Table 1. Coverage – Social Sciences.

	2013		2014		2015		2016	
	#	%	#	%	#	%	#	%
Czech Republic	775	17.7%	864	20.1%	1066	24.6%	1144	26.0%
Flanders	1632	60.3%	1753	61.3%	1689	64.4%		
Norway	2102	64.1%	2223	64.9%	2374	65.1%	2591	64.9%
Poland	1402	7.2%	1683	8.0%	2070	10.2%	1994	10.8%
Slovakia			302	10.7%	336	11.5%	529	17.9%

Table 2. Coverage – Humanities.

	2013		2014		2015		2016	
	#	%	#	%	#	%	#	%
Czech Republic	465	15.7%	531	16.0%	531	16.7%	554	18.2%
Flanders	639	57.7%	633	54.3%	507	54.1%		
Norway	402	34.0%	405	30.8%	491	34.5%	490	40.7%
Poland	796	8.2%	779	7.7%	856	8.4%	756	9.3%
Slovakia			177	14.7%	188	13.9%	236	18.1%

The distribution of journal articles in citation indexes in WoS

Figures 3–8 show the share of articles in particular WoS citation indexes relative to all WoS-indexed articles. Most articles were assigned to the Science Citation Index and Social Sciences Citation Index (Q1–Q4), Arts & Humanities Citation Index (AHCI) and the Emerging Sources Citation Index (ESCI). Category "other" represents a minority of journal articles included in Book Citation Indexes, Conference Proceedings Citation Indexes and journals without JIF.

In Social Sciences, we find an increasing proportion of ESCI-indexed journals in each country except Poland, but most obviously in Slovakia. A similar trend of a growing proportion of articles in Q1 and Q2 is observed in the Czech Republic and Poland, whereas in Flanders and Norway is rather stable yet the overall percentage is higher.

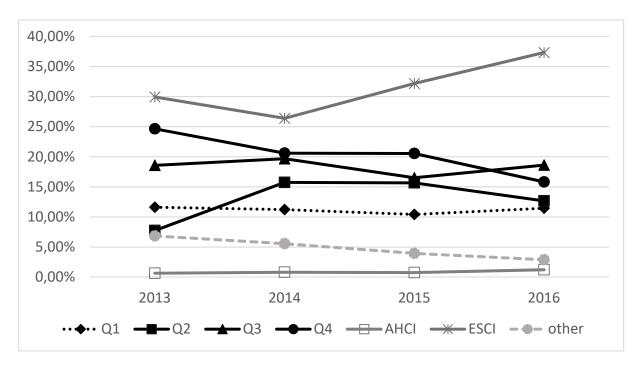


Figure 3. Czech Republic – Social Sciences.

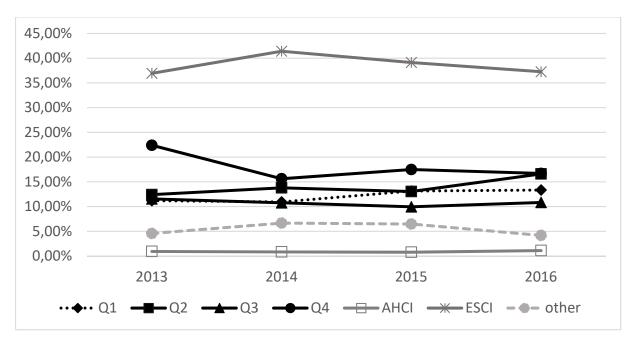


Figure 4. Poland – Social Sciences.

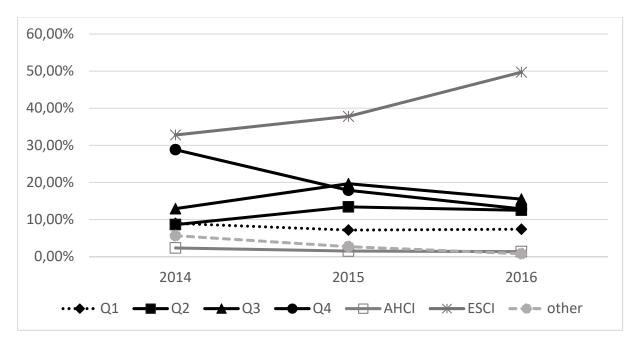


Figure 5. Slovakia – Social Sciences.

In Humanities, country profiles are similar. In all countries, the proportion of ESCI is growing and AHCI is declining in most disciplines. The share of journals with JIF is low and the trend is rather moderate.

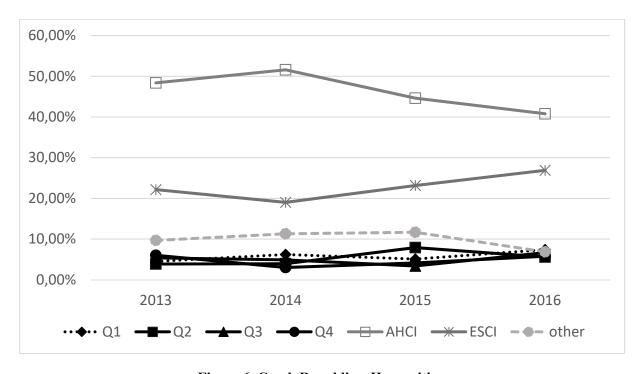


Figure 6. Czech Republic – Humanities.

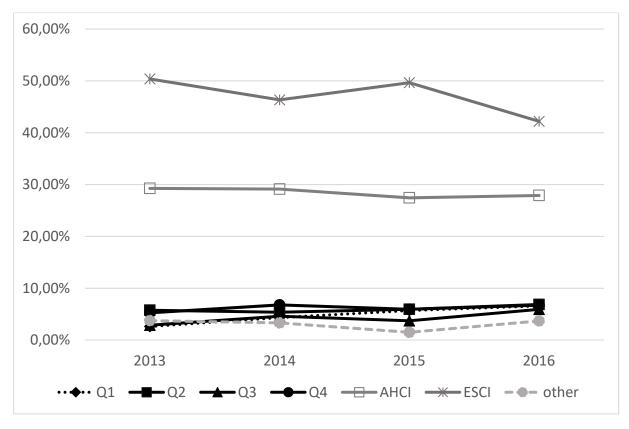


Figure 7. Poland – Humanities.

Preliminary conclusions

Our results show that especially in Social Sciences and in CEE countries publication patterns changed in favour of WoS-indexed journals. Also, the patterns changed towards journals in Q1 and Q2 dynamically in the Czech Republic and Poland. In Humanities, the changes are happening slowly. There are differences between individual disciplines. The finer-grained results will be presented and discussed at the conference.

References

Good, B. Vermeulen, N., Tiefenthaler, B., Arnold, E. (2015), Counting quality? The Czech performance-based research funding system, *Research Evaluation*, 24(2), 91–105, https://doi.org/10.1093/reseval/rvu035.

Korytkowski, P., Kulczycki, E. (2019). Examining how country-level science policy shapes publication patterns: the case of Poland publication patterns: the case of Poland. *Scientometrics*. https://doi.org/10.1007/s11192-019-03092-1.

Kulczycki, E., Engels, T.C.E., Pölönen, J., Bruun, K., Dušková, M., Guns, R., Nowotniak, R., Petr, M., Sivertsen, G., Istenič Starčič, A., Zuccala, A. (2018). Publication patterns in the social sciences and humanities: evidence from eight European countries. *Scientometrics*, 116(1), 463-486, https://doi.org/10.1007/s11192-018-2711-0.

Linková, M. (2014). Unable to resist: Researchers' responses to research assessment in the Czech Republic. *Human Affairs*, 24(1), 78–88, https://doi.org/10.2478/s13374-014-0207-z.

Sīle, L., Pölönen, J., Sivertsen, G., Guns, R., Engels, T.C.E., Arefiev, P., Dušková, M., Faurbæk, L., Holl, A., Kulczycki, E., Macan, B., Nelhans, G., Petr, M., Pisk, M., Soós, S., Stojanovski, J., Stone,

A., Šušol, J., Teitelbaum, R. (2018). Comprehensiveness of national bibliographic databases for social sciences and humanities: Findings from a European survey, *Research Evaluation*, 27(4), 310–322, https://doi.org/10.1093/reseval/rvy016.

Šima, K. (2017). Evidence in Czech research evaluation policy: measured and contested, *Evidence & Policy: A Journal of Research, Debate and Practice*, 13(1), 81-95.