

APPROACHING OR MOVING AWAY? COMPARISON OF POLISH AND HUNGARIAN SCIENTIFIC ASSESSMENT SYSTEMS IN THE FIELD OF SOCIAL SCIENCES

Emese Belényesi 

associate professor, Ludovika University of Public Service,
Faculty of Public Governance and International Studies
H-1083 Budapest, 2 Ludovika tér, Hungary, e-mail: belenyesi.emese@uni-nke.hu

Péter Sasvári 

associate professor, Ludovika University of Public Service,
Faculty of Public Governance and International Studies
H-1083 Budapest, 2 Ludovika tér, Hungary, e-mail: sasvari.peter@uni-nke.hu
associate professor, University of Miskolc, Faculty of Mechanical Engineering and Informatics
H-3515 Miskolc-Egyetemváros, Hungary

Abstract

The aim of our research paper is to investigate and compare the evaluation system used to assess the quality of the scientific activity defined by the decree of the Polish Ministry of Science and Higher Education, with the currently used evaluation system of the Hungarian Academy of Sciences in the field of social science. We used comparative approach; statistics describing the Journal Assessment System applied by the Polish Ministry of Science and Higher Education were analysed, which we compared with the International Journal List of the IX. Section Of Economics and Law of Hungarian Academy of Sciences. As a result, we found that a uniform assessment system has the advantage of ensuring transparency and interoperability. To enhance transparency, a website has been created to showcase the scientific performance of Polish higher education, alongside a range of other scientific content. Categories A, B and C have been removed from the evaluation of journals and replaced by a 7-score scale (5, 20, 40, 70, 100, 140, and 200). The new scale scores differentiate better between categories, which seems to be a good tool for assessing publication performance. If we compare the journals used in the field of social sciences with the list used in Poland, a substantial overlap can be found in most of the committee lists applied by the IX. Section of Economics and Law of Hungarian Academy of Sciences.

Keywords: *scientific performance, Poland, Hungary, social sciences*

1. Introduction

Employers (public servants) have a legitimate need to have at least some approximate information about the performance of their employees. Many employees also want their results to be quantifiable and comparable, so that they can expect higher positions and better pay for better results. Measuring the performance of science professionals is the subject of much debate and often results in controversial procedures. Publishing new results is one of the manifestations of scientific creative work. The best-known science metrics attempt to quantify the quantity, quality, and impact of publications.

The purpose of scientific writing is to present the results of a particular field of science or to present your own research and its results. The aim may be to demonstrate the ability to independent scientific

work in the context of a doctoral degree, or to demonstrate the ability to teach high quality research and the transfer of its results in the context of a habilitation (Hornycsek, 2014: 224).

1. We recognised that the pursuit of truth and the transmission of knowledge from generation to generation is a particularly noble human activity. We also saw that science has a fundamental role to play in the creation of civilisation, in the functioning of higher education and in scientific activity. The following principles apply:
2. the duty of authorities to create optimal conditions for freedom of scientific research and artistic creation, freedom of education and the autonomy of the scientific community,
3. all scientists are responsible for the quality and reliability of the research they carry out and for educating the younger generation,
4. “universities and other research institutes have a mission of paramount importance for the state and the nation: they make a major contribution to innovation in the economy, to the development of culture and to the moral formation of public life”—Polish Act of 20 July 2018 on Higher Education and Science.¹

According to the Science Ethics Code of the Hungarian Academy of Sciences (HAS), “only scientific publications published in a recognised scientific journal or book, in print or electronically, with an independent editorial board, are considered scientific publications” (MTA, 2010)

The Polish Act on Higher Education and Science defines:

- the role of the higher education and science system,
- the principles governing the establishment, organisation, operation, and liquidation of the university (including its governing bodies),
- the principles of conducting studies,
- the rights and obligations of students (including the rules on providing scholarship and loans),
- rules on the organisation of student councils and other student organisations,
- the employment rules, rights, and obligations of university staff,
- principles of the commercialisation of scientific activities and know-how,
- the principles of postgraduate studies, vocational training, and other forms of education,
- the principles of the establishment and operation of an association of higher education and science,
- the principles governing the award of academic degrees and titles and the operation of the doctoral schools,
- the operating principles of the Council for Scientific Excellence,
- principles for quality assessment of education, doctoral schools, and scientific activity (including the functioning of the Polish Accreditation Committee),
- rules on the disciplinary liability of lecturers, students, and doctoral candidates,
- the principles of education and participation of foreigners in scientific activities,
- the rules on operation of the representative institutions of the higher education and science system (including the Central Council for Science and Higher Education and the Students’ Parliament of the Republic of Poland) and the subsidiary bodies of the Minister of Science and Higher Education,
- the principles of operation of higher education and scientific IT systems,
- the rules of the awarding of scholarships and prizes by the Minister of Science and Higher Education and the Prime Minister's awards,

¹ Polish Act of 20 July 2018 on Higher Education and Science, 2018. 1 <https://sip.lex.pl/akty-prawne/dzuziennik-ustaw/prawo-o-szkolnictwie-wyzszym-i-nauce-18750400>.

- the principles of financing the higher education and scientific system and the management of universities,
- principles of oversight of the higher education and science system,
- the specific operating rules of certain universities (including military and arts universities), and
- the rules on the processing of personal data in the higher education and scientific system.

The scoring scale to be used for assessing the quality of academic activity shall be laid down by the Minister of Science and Education in a decree.

In order to determine the academic performance of Polish higher education, a uniform, centralized assessment system has been introduced for the evaluation of journals, publishers and conferences, which is reviewed every year. A uniform assessment system has the advantage of ensuring transparency and interoperability. To enhance transparency, a page has been created to demonstrate the scientific performance of Polish higher education, along with a range of other scientific content (Figure 1).



- | | | | |
|---|--|--|--|
| <p>1. Research Infrastructure</p> <ul style="list-style-type: none"> A. Research groups B. Research equipment C. Laboratories | <p>2. Departmental sites</p> <ul style="list-style-type: none"> A. Journals B. Publishers C. Conferences | <p>3. Scientific activity</p> <ul style="list-style-type: none"> A. Researchers, lecturers B. Projects C. Inventions | <p>4. Data archives</p> <ul style="list-style-type: none"> A. Publications B. Repository Open Access C. Open research data |
| <p>5. Other</p> <ul style="list-style-type: none"> A. E-learning courses B. Events C. Digital pathology | | | |

Figure 1. The structure of The Bridge of Knowledge (MOST Wiedzy) website.

Source: MOST Wiedzy, <https://mostwiedzy.pl/en/>

The Bridge of Knowledge (MOST Wiedzy in Polish) is a Polish national website launched to monitor scientific performance and promote public transparency.

The website aims to provide free access to the knowledge assets created and collected by universities. The website brings together data from different databases into a single platform, creating an open access repository of scientific results.

The initiative offers multidisciplinary and cross-cutting services to the scientific, business, and public communities. The user-friendly navigation, the attractive and clear layout, and the intelligent search system make the portal easy and convenient to use. After registering, anyone can present their research and work. The portal is supported by all browsers, allowing you to speed up the spreading of research results on a global scale. And the open access publication can increase the citation rate. The portal is free to use. (Lakatos, 2022)

The active link to the journals can be found under the points on The Bridge of Knowledge page. Here you can perform a search on the journals evaluated by the ministry by discipline, by scientific category, by ministry score, by ISSN number, by journal name and by model (e.g., hybrid, open access).

2. The Polish Journal Assessment System

In recent years, as in our country, a global trend in science policy in Poland has been to assess and compare researchers and institutions on the basis of scientometrics and bibliometric indicators. Science, Gordin argues, is international by nature (Gordin, 2015: 225). In contrast, the social sciences and humanities are more often classified as national, since they are highly dependent on the society, culture, and language (Kyvik, 1988; Nederhof et al., 1989). For practitioners in these disciplines, this dichotomy manifests itself as a phenomenon of “distorted universality” in their work, meaning that there is both a compulsion to publish internationally with a view to academic promotion and a focus on specific topics that depend on the social context (Keim, 2008).

However, many Polish researchers have criticised in interview surveys that the “benchmark” institutions are often the British institutions and their high rankings in international university rankings. In connection with this, there is the linguistic advantage of Anglo-Saxon researchers, who can write in their mother tongue and by today, English has become the dominant language in academia. In Poland, only 11.8% of social sciences and humanities publications in 2009–2014 were published in English, while 82.7% were published in Polish (Kulczycki, 2017). In addition to language skills, especially in the social sciences and humanities, the local or regional focus of research topics is also a difficulty, because topics with only Polish attachments (as in other Central and Eastern European countries) are often not considered “noteworthy” enough by internationally recognised and leading scientific journals. In this regard, Polish social scientists have pointed out that although the Polish academic performance assessment system is for Polish researchers, it encourages international publication and a shift away from locally focused topics (Kulczycki et al., 2019; Kulczycki et al., 2017). Researchers can maximise the scores they earn by publishing in the journal with the highest score according to the journal ranking system, usually in the US or UK. However, Polish social scientists have explicitly stressed the importance of local knowledge creation (Burawoy, 2011). In extreme cases, they have been identified as the “Anglicisation” of the Polish academy (Boussebaa & Brown, 2017).

This is why a national evaluation system used by Polish policy makers is needed, one of the pillars of which is a uniform ranking and scoring of Polish and foreign journals in the framework of the Polish Journal Ranking (PJR). In Poland, the Polish Scholarly Bibliography collects and organises the scientific works of Polish researchers (similar to the Hungarian Scientific Bibliography), which was launched in 2009 at the same time as the higher education assessment system. The Polish performance-based assessment system, like other national performance assessment systems, plays an important role in local higher education management and research governance, as its results influence the funding and prestige of institutions. At the same time, however, the focus is shifting away from international expectations towards compliance with national assessment criteria for researchers who seek to meet them in their scientific work (Mouritzen & Opstrup, 2020). The problem with this is that today, in the context of international competitiveness and institutional internationalisation, universities, and through them national higher education policy, have to compete in international rankings and cannot allow parallel “realities” to emerge because of national regulation (Cai, 2010).

The Polish journal evaluation system ranks and scores journals across all disciplines, which also form the basis for researchers’ salaries and other benefits in the performance-based compensation system. It is worth pointing out here that journal evaluation is carried out in many countries and can basically follow one of two procedures: peer review and ranking or reference-based evaluation. Based on the international literature, the two methods provide the best ranking technique with complementarity, as Vieira and Gomes write that the reference-based (bibliometric) method is linked to the peer review technique in three aspects (Vieira & Gomes, 2016):

- bibliometric tools should be used to prepare the peer review,
- it is worth using bibliometric tools to complement peer review,
- peer review provides a correction for bibliometric measurements.

With regard to the theoretical approaches, the Polish Journal Ranking (PJR) system was evaluated by Kulczycki and Rozkosz in a paper (Kulczycki & Rozkosz, 2017). Their results showed that, although the Polish journal evaluation system is a good initiative to measure the performance of researchers adapted to local publishing habits, it has some room for improvement and development:

- the evaluation of journals should only be based on indicators that are accessible to the journal evaluation committee and members of the Polish scientific community,
- the peer review must be carried out according to a predefined set of criteria,
- the PJR system should be developed to be able to respond to the language of publication and to the publishing habits of the field of science and discipline.

3. Methodology – Descriptive Statistics about the Polish Ministry of Science and Higher Education Journal List

In 2022, the number of conferences evaluated was 1701, the number of publishers² 966 and the number of journals 32,676. In all cases, all conferences, publishers and journals were ranked on a 7-score scale of 5, 20, 40, 70, 100, 140 and 200.³

The list of scored journals has been published annually by the Ministry since 2019. Previously, between 2008 and 2018, categories (A, B, C) were defined and⁴ journals were classified into these categories (A was the most favourable). We could not find 5-score journals in the table or database mentioned as a source in the above-mentioned communication, but we did on *The Bridge of Knowledge* page.

Since 2020, the list of journals has been based on the following international categorisation databases:⁵

1. journals indexed in at least one of the five selected international databases [Scopus (1) or a journal from one of the Web of Science (WoS) databases: Science Citation Index Expanded

² A communication from the Polish Minister of Science and Education on the list of publishers of peer-reviewed scientific monographs (<https://www.gov.pl/web/edukacja-i-nauka/komunikat-ministra-edukacji-i-nauki-w-sprawie-wykazu-wydawnictw-publikujacych-recenzowane-monografie-naukowe>).

³ The list of Polish scientific journals in 2022 (<https://www.gov.pl/web/edukacja-i-nauka/komunikat-ministra-edukacji-i-nauki-z-dnia-1-grudnia-2021-r-w-sprawie-wykazu-czasopism-naukowych-i-recenzowanych-materialow-z-konferencji-miedzynarodowych>).

⁴ The list of journals scored by the Minister of Science and Education (<https://biblioteka.umb.edu.pl/index.php/lista-czasopism-punktowanych-mnisw/>):

- Category A: scientific journals with an Impact Factor (IF) from the Journal Citation Reports (JCR) database,
- Category B: scientific journals without Impact Factor (IF), included in the European Reference Index for the Humanities (ERIH) database,
- Category C: other scientific journals.

⁵ Jogtudományi Közlöny [Law Gazette] 2020, Item 349, communication of the Minister of Science and Higher Education of 12 February 2020 on the publication of the consolidated text of the Regulation of the Minister of Science and Higher Education on the preparation of abstracts of scientific monographs and scientific journals and the edited proceedings of international conferences. (<http://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20200000349>).

- (2), Social Sciences Citation Index (3), Arts & Humanities Citation Index (4), Emerging Sources Citation Index (5)],
2. scientific journals selected for the ministerial programme,
3. foreign scientific journals included in the European Reference Index for the Humanities and Social Sciences (ERIH+) international database.

The Web of Science (WoS) is one of the world's most trusted publisher-independent global reference databases. The *WoS* is a website (formerly known as the Web of Knowledge) that provides subscription-based access to multiple databases that provide comprehensive reference data across a wide range of disciplines. Originally produced by the Institute for Scientific Information, it is now owned by Clarivate (formerly Thomson Reuters Intellectual Property and Science). The WoS contains over 171 million records and 1.9 billion references.⁶

Scopus is Elsevier's abstract and reference database, launched in 2004. In particular, it collects journals, books, conference papers and patents and creates a reference and abstract database for them. Scopus contains bibliographic data and abstracts of more than 75 million articles from over 25 000 peer-reviewed journals. Scopus considers publications from more than 7000 international publishers and maps 1.7 billion citations between documents.⁷

For both WoS and Scopus, data is automatically uploaded for specific journal articles, books, book chapters and conference proceedings, with only the possibility for the author to correct the data.

The ERIH+ (originally known as the European Reference Index for the Humanities or ERIH) is an index of bibliographic information on scholarly journals in the humanities and social sciences (SSH). The index goes beyond commercial indexing services by providing comprehensive coverage of scholarly communication and publication in the specialization, allowing researchers to disseminate their work in national and international languages more easily (Lavik & Sivertsen, 2017). As of 1 July 2021, the ownership of the ERIH+ was transferred to the newly created Norwegian Directorate for Higher Education and Training.

The scores of journals are determined using the scientometric indicators listed below.

1. In the case of Scopus⁸
 - a. Source Normalized Impact per Paper (SNIP) (it measures citation impact by weighting citations by the total number of citations in a given topic),
 - b. CiteScore (it is a metric that reflects the average number of citations per year to recent articles published in a journal),
 - c. Scimago Journal Rank (SJR) (it is a measure of scientific impact, which refers both to the number of citations received by a journal and the importance or prestige of the journals from which the citations are derived).
2. For WoS
 - a. Journal Impact Factor (it is a measure that reflects the average number of citations per year of articles published in a journal over the past two years),
 - b. Article Influence (journals are ranked by the number of citations received, with citations from highly ranked journals weighted to contribute more to the own factor than citations from poorly ranked journals),

⁶ Web of Science (<https://clarivate.com/webofsciencegroup/solutions/web-of-science/>).

⁷ Scopus provides unmatched content and data quality, with superior search and analytical tools, (<https://www.elsevier.com/solutions/scopus/how-scopus-works>).

⁸ A similar proposal can be found at: Dobos & Sasvári (2022).

- c. Category Normalised Citation Impact (it is calculated by dividing the actual number of cited items by the expected citation rate for documents of the same document type, year of publication and subject matter).

More than a third of journals were 20-score, a fifth were between 40 and 70-score, a seventh were 100-score, 7% were 140-score and 3% were 200-score in 2022 (Figure 2).

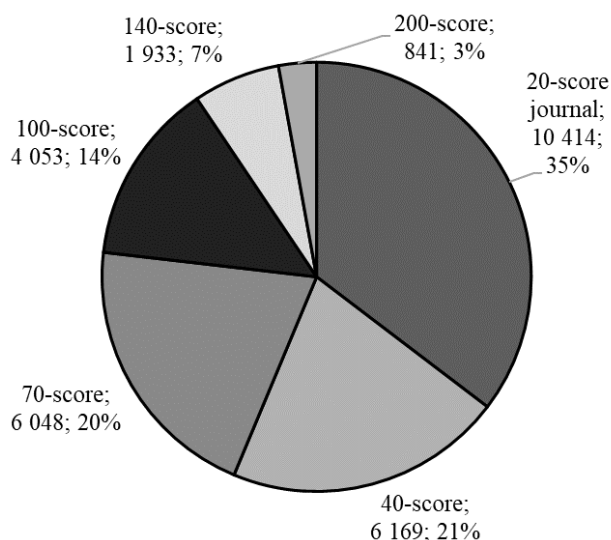


Figure 2. Distribution of scored journals

Source: Own editing based on the list of Polish scientific journals

The journals are grouped into 8 disciplines, which are:

1. Arts (1 science category),
2. Agricultural Sciences (5 science categories),
3. Humanities (7 science categories),
4. Engineering and Technology (8 science categories)
5. Medical and Health Sciences (4 science categories),
6. Social Sciences (11 science categories),
7. Theology (1 science category),
8. Natural Sciences (7 science categories).

The 8 scientific classifications have been further broken down into 44 scientific categories as described above. There are some interesting differences compared to the Hungarian classification:

- Public Administration is classified as Political Sciences, not as Legal and Political Sciences (IX. Section of HAS).
- Psychology is included in the Social Sciences, in our country the II. Section of Philosophy and Historical Sciences of HAS has such a committee.
- Education and Pedagogy are included in the Social Sciences, and in Hungary the II. Section of Philosophy and Historical Sciences of HAS has such a committee.
- Communication and Media Studies is included in the Social Sciences, and in Hungary it is covered by the Interdepartmental Standing Committee on Communication and Media Studies.

Most journals are in the fields of Biomedicine (11 252), Health Sciences (9605) and Medical Sciences (9139) (Table 1). The 32676 journals are listed in 125837 scientific categories, which means that on average a journal appears in nearly 4 categories.

Table 1. Number of journals per science category

Source: Own editing based on the list of Polish scientific journals

Nrr	Science category	Number of journals (pcs)	Nr	Science category	Number of journals (pcs)
1	Veterinary Science	2589	23	Environmental Engineering, Mining and Energetics	3651
2	Animal Husbandry and Fishery	1187	24	Economics and Finance	1951
3	Material Technology	2645	25	Culture and Religion	4044
4	Archaeology	972	26	Mathematics	1302
5	Automation, Electronics and Electrotechnology	2017	27	Structural Engineering and Transportation	3090
6	Biological Sciences	5394	28	Management and Quality Sciences	3947
7	Security Science	2229	29	Agriculture and Horticulture	4070
8	Astronomy	560	30	Technical Informatics and Telecommunications	2577
9	Health Science	9605	31	Arts	1382
10	Church Law	1009	32	Linguistics	1706
11	Food and Nutrition Technology	1838	33	Education	1788
12	Architecture and Urban Planning	2669	34	Biomedicine	11252
13	Forest Science	1837	35	Medicine	9139
14	Philosophy	1449	36	Political Science and Public Administration	1615
15	Physical Sciences	1654	37	Psychology	1394
16	Earth and Environmental Sciences	1523	38	Sociological Sciences	3583
17	Mechanical Engineering	3320	39	Social Communication and Media Studies	1020
18	Pharmaceutical Sciences	8461	40	Socioeconomic Geography and Land Management	1631
19	Information Technology	1675	41	Theological Sciences	763
20	Literary Studies	2494	42	History	3547
21	Law	1763	43	Wellness Science	1232
22	Chemical Sciences	3008	44	Chemical Engineering	1255

In the Polish list of journals, there are 12 journals that do not belong to any of the scientific categories (all of them published in Poland) and 29 that are eligible for all categories—44 in total. For comparison,

if we look at the Scimagojr 2020⁹ list, we quickly see that out of the 27 categories, a maximum of 13 fields are covered by a given journal. In 2020, Scimagojr lists 25231 journals, with an average of 2.4 categories per journal. (Figure 3).

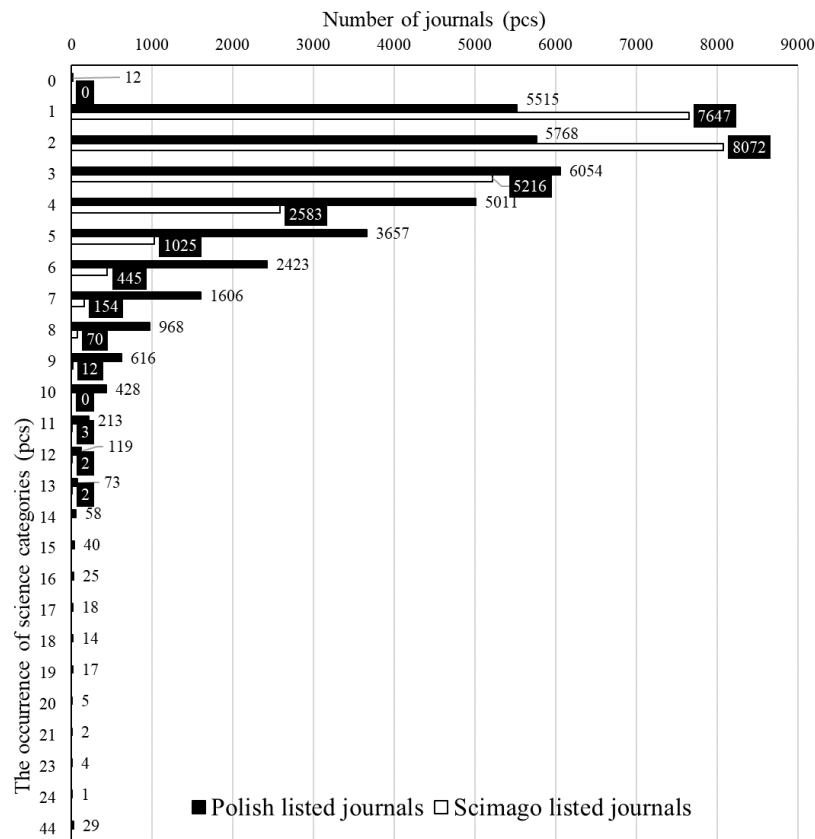


Figure 3. The occurrence of Polish and Scimago listed journals by scientific category
Source: Own editing based on the list of Scimago and Polish scientific journals

4. Results – The Scored Journals of the Polish Ministry of Science and Higher Education and the International List of the IX. Section of Hungarian Academy of Sciences

In Hungary, the IX. Section of Economics and Law of HAS (hereinafter: GJO) deals with Social Sciences. The GJO works with the help of 8 committees. These are the following:

- Committee on Legal and Political Sciences (ÁJB),
- Doctoral Qualification Committee on Economic Science (GMB),
- Committee on Military Science (HTB),
- Doctoral Committee on World Economics and Development Studies NFDB),
- Committee on Political Science (PTB),

⁹ Scimago Journal & Country Rank, 2020 (<https://www.scimagojr.com/journalrank.php?type=j>).

- Committee on Regional Studies (RegTB),
- Scientific Committee on Sociology (SZOC), and
- Interdepartmental Standing Committee on Demography (DEM).

Only works published in widely available, edited and peer-reviewed journals and by recognised publishers, and listed in the Hungarian Scientific Bibliography (HSB) on the date of application, will be considered for the HAS doctoral habitus examination. Only publications (articles, abstracts, essays) and references longer than 3 journal pages (including spaces, 11.5 thousand characters) published in internationally registered scientific journals with ISSN number and references will be evaluated (MTA, 2019).

Journals compiled by the committees may include:

- domestic or international,
- Categories A, B, C, and D, with category A being the most valuable.

The listed journals of the Polish Ministry of Science and Higher Education Science (Polish list for short) can be matched per scientific categories with the lists of the Hungarian committees. There are 7 Polish science categories associated with GJO (Section of Economics and Law) committees:

1. *Law* with ÁJB,
2. *Economics and Finance* with GMB,
3. *Management and Quality Sciences* with GMB,
4. *Political Science and Public Administration* with the PTB,
5. *Sociological Sciences* with SZOC,
6. *Social Communication and Media Studies* with SZOC,
7. *Socioeconomic Geography and Land Management* with RegTB.

The Polish category *Management and Quality Sciences* has the largest number of journals (3947), while *Social Communication and Media Studies* has the smallest number (1020) (Figure 4).

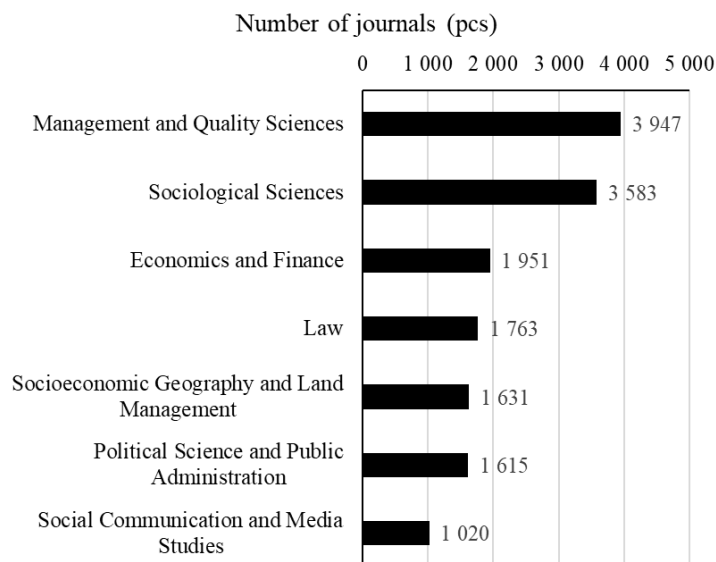


Figure 4. List of Polish science categories and number of journals associated with GJO
Source: Own editing based on GJO committees and Polish scientific categories journal lists

The scientific categories of Polish journals can be further broken down by the scores of the Ministry (Table 2). It can be clearly seen that for the different scientific categories, 33–46% of journals are in the 20-score category, 18–20% in the 40-score category, 18–21% in the 70-score category, 11–14% in the 100-score category, 4–9% in the 140-score category and 2–4% in the 200-score category.

Table 2. List of Polish disciplines and number of journals associated with the GJO, broken down by scores
Source: Own editing based on the Polish scientific categories journal lists

Description/Number of scores/Number of journals (pcs)	20		40		70		100		140		200		Grand Total	
	-score (pcs)	%	-score (pcs)	%	-score (pcs)	%	-score (pcs)	%	-score (pcs)	%	-score (pcs)	%	(pcs)	%
Law	812	46%	317	18%	314	18%	186	11%	93	5%	41	2%	1763	100%
Economics and Finance	794	41%	372	19%	376	19%	224	11%	129	7%	56	3%	1951	100%
Management and Quality Sciences	1294	33%	788	20%	832	21%	553	14%	336	9%	144	4%	3947	100%
Political Science and Public Administration	707	44%	314	19%	306	19%	177	11%	67	4%	44	3%	1615	100%
Sociological Sciences	1372	38%	692	19%	754	21%	462	13%	223	6%	80	2%	3583	100%
Social Communication and Media Studies	450	44%	188	18%	177	17%	113	11%	70	7%	22	2%	1020	100%
Socioeconomic Geography and Land Management	655	40%	315	19%	310	19%	205	13%	109	7%	37	2%	1631	100%

Ratio 12% of the GJO's domestic journals and 71% of its international journals are on the Polish list. (Table 3, the detailed list is in the Appendix) The national list only includes 5-, 20- and 40-score journals. For the international list, 3493 journals had a score, with the highest number of 70-score (945) and 100-score (692) journals.

Table 3. Distribution of domestic and international journals belonging to the GJO according to the Polish scoring system. Source: Own editing based on GJO committees and Polish scientific categories journal lists

Type	Number of scores	5	20	40	70	100	140	200	N.A.	Grand Total	Overlap between the two lists
Domestic	(pcs)	9	20	7	0	0	0	0	273	309	12%
	ratio	3%	6%	2%	0%	0%	0%	0%	88%	100%	
International	(pcs)	82	537	658	945	692	388	191	1422	4915	71%
	ratio	2%	11%	13%	19%	14%	8%	4%	29%	100%	
Grand Total	(pcs)	91	557	665	945	692	388	191	1 695	5224	68%
	ratio	2%	11%	13%	18%	13%	7%	4%	32%	100%	

Finally, we compare the Polish list with the international journal lists of the GJO committees (Table 4). The rates indexed by Scopus and WoS are known from previous papers (Sasvári et al., 2021). Our guess was that where Scopus and WoS indexation is higher, the coverage of the Polish list will be higher as well. Of the GJO committee lists, the SZOC international list has the highest overlap (96%) with the Polish list. The smallest overlap is found between the HTB (38%) and the SJB (33%) lists.

Table 4. Ratio of international journals and Polish, Scopus and WoS-listed journals falling under the GJO
Source: Own editing based on GJO committees and Polish scientific categories journal lists

Committee	Number of internationally listed journals (pcs)	Of which number of journals on the Polish list (pcs)	Polish-list ratio	Scopus-list ratio	WoS-list ratio
ÁJB	1295	423	33%	27%	23%
DEM	108	91	84%	80%	72%
GMB	1742	1512	87%	84%	72%
HTB	63	24	38%	29%	24%
NFDB	592	474	80%	75%	65%
PTB	782	635	81%	75%	65%
RegTB	273	218	80%	72%	69%
SZOC	1559	1495	96%	97%	92%

For the category-by-category analysis, we assume (Tables 5 and 6 in the Annex) that you can find journals.

- 200- and 140-score for category A,
- 100-score for category B,
- 70- and 40-score for category C,
- 20- and 5-score for category D.

International category A journals are 75% of the list for the HTB and 73% for the NFDB, consisting of 200- and 140-score journals. For category B journals, 38% of the PTB and 37% of the NFDB are 100-score journals. The GMB is made up of 52% and the DEM 50% of 40- and 70-score journals in respect of international category C.

5. Conclusions

The Bridge to Knowledge website covers the collection, verification, systematization, organisation, and presentation of information on higher education and research.

The website's databases are designed to

- make the information available to other persons,
- find information quickly,
- gather information from everywhere, comment on it, and link it to references,
- the selective transmission of information, and
- the availability of the most accurate, self-explanatory data possible.

The Polish ministry has introduced a unified system for evaluating journals, publishers, and conferences, which could form the basis for a uniform and comparable evaluation of science and the interoperability of doctoral schools.

For the evaluation of journals, categories A, B and C have been removed and replaced by a 7-score scale (5, 20, 40, 70, 100, 140, and 200). The new scale scores differentiate better between categories, which seems to be a good tool for assessing publication performance.

Our analysis covers the Polish and Hungarian scientific assessment systems in the field of social sciences, the scope of the analysis is worth being extended. If we compare the journals used in the field of Social Sciences in Poland with the Polish list, we find a large overlap in most of the commission's lists. The results have the potential to give an applicable systemic approach to the method of uniform and comparable science performance in the region. E.g. the Polish Ministry's journal, publishing and conference assessment system improves the interoperability of doctoral schools within the two countries.

Acknowledgments

The research was supported by the Network Science Research Group at the Ludovika University of Public.

References

- [1] Boussebaa, M. & Brown, A. D. (2017). Englishisation, Identity Regulation and Imperialism. *Organisation Studies*, 38(1), pp. 7–29, <https://doi.org/10.1177/0170840616655494>
- [2] Burawoy, M. (2011). The last positivist. *Contemporary Sociology*, 40(4), pp. 396–404. <https://doi.org/10.1177/0094306111412512a>
- [3] Cai, Y. (2010). Global Isomorphism and Governance Reform in Chinese Higher Education. *Tertiary Education and Management*, 16(3), pp. 229–241. <https://doi.org/10.1080/13583883.2010.497391>
- [4] Dobos, I. & Sasvári, P. (2022). Javaslat nemzetközi folyóiratlisták összeállítására az MTA IX. Osztály Gazdaságtudományi Doktori Minősítő Bizottság példáján. (A proposal for the compilation of international journal lists based on the example of the IX. Section of Qualifying Committee for Doctoral Studies in Economics of the HAS.) *Magyar Tudomány*, 183(4), pp. 495–508, <https://doi.org/10.1556/2065.183.2022.4.9>
- [5] Gordin, M. D. (2015). *Scientific Babel. How Science Was Done Before and After Global English*. University of Chicago Press, <https://doi.org/10.7208/chicago/9780226000329.001.0001>
- [6] Hornyacsek, J. (2014). *A tudományos kutatás elmélete és módszertana*. (Theory and methodology of scientific research.) Nemzeti Közszerkeleti Egyetem, Hadtudományi és Honvédtisztképző Kar. <https://hhk.uni-nke.hu/document/hhk-uni-nke-hu/Teljes%20sz%C3%B6veg!.pdf>
- [7] Keim, W. (2008). Distorted Universality: Internationalization and Its Implications for the Epistemological Foundations of the Discipline. *Canadian Journal of Sociology*, 33(3), pp. 555–574. <https://doi.org/10.29173/cjs4154>
- [8] Kulczycki, E. & Rozkosz, E. A. (2017). Does an expert-based evaluation allow us to go beyond the Impact Factor? Experiences from building a ranking of national journals in Poland. *Scientometrics*, 111(1), pp. 417–442, <https://doi.org/10.1007/s11192-017-2261-x>

- [9] Kulczycki, E. (2017). Assessing publications through a bibliometric indicator: The case of comprehensive evaluation of scientific units in Poland. *Research Evaluation*, 26(1), pp. 41–52. <https://doi.org/10.1093/reseval/rvw023>
- [10] Kulczycki, E., Engels, T. & Nowotniak, R. (2017). Publication patterns in the social sciences and humanities in Flanders and Poland. In *16th International Conference on Scientometrics and Informetrics 16–20 October, 2017* (pp. 95–104). Wuhan University. https://www.issi-society.org/proceedings/issi_2017/2017ISSI%20Conference%20Proceedings.pdf
- [11] Kulczycki, E., Rozkosz, E. A. & Drabek, A. (2019). Internationalisation of Polish Journals in the Social Sciences and Humanities: Transformative Role of The Research Evaluation System. *Canadian Journal of Sociology*, 44(1), pp. 9–38, <https://doi.org/10.29173/cjs28794>
- [12] Kyvik, S. (1988). Internationality of the social sciences: the Norwegian case. *International Social Sciences Journal*, 40(1), pp. 163–172, <https://unesdoc.unesco.org/ark:/48223/pf0000078650>
- [13] Lakatos, P. (2022). *A tudás hidja – A tudományos és (felső)oktatási tevékenység támogatása Lengyelországban* (The Bridge of Knowledge— Supporting science and (higher) education in Poland) [Working Paper].
- [14] Lavik, G. A. V. & Sivertsen, G. (2017). Erih Plus – Making the Ssh Visible, Searchable and Available, *Procedia Computer Science*, 106, pp. 61–65. <https://doi.org/10.1016/j.procs.2017.03.035>
- [15] Mouritzen, P. E. & Opstrup, N. (2020). *Performance Management at Universities. The Danish Bibliometric Research Indicator at Work*. Springer, <https://doi.org/10.1007/978-3-030-21325-1>
- [16] MTA. (2010). *A Magyar Tudományos Akadémia tudományetikai kódexe*. (Science Ethics Code of the Hungarian Academy of Sciences.) https://mta.hu/data/dokumentumok/english/background/Science_Ethics_Code_English.pdf
- [17] MTA. (2019). *Az MTA Gazdaság- és Jogtudományok Osztályának doktori követelményrendszere*. (The Doctoral Requirements of the Section of Economics and Law of the Hungarian Academy of Sciences.) https://mta.hu/data/dokumentumok/doktori_tanacs/IX.%20Osztyaly/2019/9GJO_Doktori_MinimumkovetelmenyekTara_20190628tol.pdf
- [18] Nederhof, A. J., Zwaan, R. A., De Bruin, R. E. & Dekker, P. J. (1989). Assessing the usefulness of bibliometric indicators for the humanities and the social and behavioural sciences: A comparative study. *Scientometrics*, 15 (5–6), pp. 423–435, <https://doi.org/10.1007/bf02017063>
- [19] Vieira, E. S. & Gomes, J. A.N.F. (2016). The bibliometric indicators as predictors of the final decision of the peer review. *Research Evaluation*, 25(2), pp. 170–183. <https://doi.org/10.1093/reseval/rvv037>

Legal Resources:

- [1] 2020-as Jogtudományi Közlöny, 349. tétel. A Tudományos és Felsőoktatási Miniszter 2020. február 12-i közleménye a tudományos monográfiák és tudományos folyóiratok jegyzékeinek, valamint nemzetközi konferenciák lektorált anyagainak készítéséről szóló tudomány és felsőoktatási miniszter rendelet egységes szövegének közzétételéről, <http://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20200000349>.
- [2] Lengyel 2018. július 20-i törvény a felsőoktatásról és a tudományról, 2018. 1. <https://sip.lex.pl/akty-prawne/dzu-dziennik-ustaw/prawo-o-szkolnictwie-wyzszym-i-nauce-18-750400>.
- [3] Ministra Edukacji i Nauki [Oktatási és Tudományos Miniszter]. (2021a). *Komunikat w sprawie wykazu wydawnictw publikujących recenzowane monografie naukowe* [Közlemény a lektorált

- tudományos monográfiákat kiadó kiadók listájáról] (Publication of the list of publishers of peer-reviewed scientific monographs). <https://www.gov.pl/web/edukacja-i-nauka/komunikat-ministra-edukacji-i-nauki-w-sprawie-wykazu-wydawnictw-publikujacych-recenzowane-monografie-naukowe>.
- [4] Ministra Edukacji i Nauki [Oktatási és Tudományos Miniszter]. (2021b). *Komunikat w sprawie wykazu czasopism naukowych i recenzowanych materiałów z konferencji międzynarodowych* [Közlemény a tudományos folyóiratok listájáról és a nemzetközi konferenciák lektorált anyagairól] (Publication of the list of scientific journals and reviewed papers of international conferences). <https://www.gov.pl/web/edukacja-i-nauka/komunikat-ministra-edukacji-i-nauki-z-dnia-1-grudnia-2021-r-w-sprawie-wykazu-czasopism-naukowych-i-recenzowanych-materialow-z-konferencji-miedzynarodowych>.

Appendix

Table 1. Number of international and Polish journals on the GJO list by category
Source: Own editing based on the GJO and the Polish journal list

ÁJB/score categories ¹⁰	N.A.	5	20	40	70	100	140	200	Grand Total
A International	48	8	9	7	15	28	23	14	152
B International	106	6	18	13	35	24	12	4	218
C International	241	3	49	37	48	26	3	1	408
D International	477	1	21	5	7	5	1	0	517
Grand Total	872	18	97	62	105	83	39	19	1295
DEM/score categories	N.A.	5	20	40	70	100	140	200	Grand Total
A International	0	0	0	0	1	5	9	2	17
B International	1	2	2	3	11	0	1	1	21
C International	0	1	8	7	7	4	1	0	28
D International	16	0	9	8	7	1	1	0	42
Grand Total	17	3	19	18	26	10	12	3	108
GMB/score categories	N.A.	5	20	40	70	100	140	200	Grand Total
A International	3	1	0	1	12	42	47	39	145
B International	42	3	12	34	169	124	90	15	489
C International	60	17	71	126	158	87	18	6	543
D International	125	13	152	138	99	27	9	2	565
Grand Total	230	34	235	299	438	280	164	62	1742
HTB/score categories	N.A.	5	20	40	70	100	140	200	Grand Total
A International	0	0	0	1	0	0	0	3	4
B International	9	0	1	0	1	4	1	0	16
C International	15	0	4	2	1	2	0	0	24
D International	15	0	0	2		2	0	0	19
Grand Total	39	0	5	5	2	8	1	3	63
NFDB/score categories	N.A.	5	20	40	70	100	140	200	Grand Total
A International	0	2	0	0	3	13	24	25	67
B International	9	0	5	9	36	52	21	10	142
C International	61	4	27	34	57	27	6	1	217
D International	48	2	32	34	33	14	3	0	166
Grand Total	118	8	64	77	129	106	54	36	592

¹⁰ Taking into account all journals of the Polish Ministry of Science and Higher Education

PTB/score categories	N.A.	5	20	40	70	100	140	200	Grand Total
A International	0	2	0	1	8	24	32	27	94
B International	7	1	5	18	33	59	23	11	157
C International	53	6	29	42	88	40	6	0	264
D International	87	2	54	47	55	18	2	2	267
Grand Total	147	11	88	108	184	141	63	40	782
RegTB/score categories	N.A.	5	20	40	70	100	140	200	Grand Total
A International	3	2	1	1	5	20	18	7	57
B International	6	1	5	10	15	18	8	4	67
C International	13	1	15	20	11	6	3	2	71
D International	33	2	15	13	7	6	1	1	78
Grand Total	55	6	36	44	38	50	30	14	273
SZOC/score categories	N.A.	5	20	40	70	100	140	200	Grand Total
A International	4	4	0	4	40	113	127	97	389
B International	12	8	3	35	123	124	74	20	399
C International	16	10	38	86	167	72	19	9	417
D International	32	6	82	103	81	43	7	0	354
Grand Total	64	28	123	228	411	352	227	126	1559

Table 2. Proportion of international and Polish journals on the GJO list by category
Source: Own editing based on the GJO and the Polish journal list

SJB/score categories	N.A.	5	20	40	70	100	140	200	Grand Total
A International	32%	5%	6%	5%	10%	18%	15%	9%	100%
B International	49%	3%	8%	6%	16%	11%	6%	2%	100%
C International	59%	1%	12%	9%	12%	6%	1%	0%	100%
D International	92%	0%	4%	1%	1%	1%	0%	0%	100%
Grand Total	67%	1%	7%	5%	8%	6%	3%	1%	100%
DEM/score categories	N.A.	5	20	40	70	100	140	200	Grand Total
A International	0%	0%	0%	0%	6%	29%	53%	12%	100%
B International	5%	10%	10%	14%	52%	0%	5%	5%	100%
C International	0%	4%	29%	25%	25%	14%	4%	0%	100%
D International	38%	0%	21%	19%	17%	2%	2%	0%	100%
Grand Total	16%	3%	18%	17%	24%	9%	11%	3%	100%

GMB/score categories	N.A.	5	20	40	70	100	140	200	Grand Total
A International	2%	1%	0%	1%	8%	29%	32%	27%	100%
B International	9%	1%	2%	7%	35%	25%	18%	3%	100%
C International	11%	3%	13%	23%	29%	16%	3%	1%	100%
D International	22%	2%	27%	24%	18%	5%	2%	0%	100%
Grand Total	13%	2%	13%	17%	25%	16%	9%	4%	100%
HTB/score categories	N.A.	5	20	40	70	100	140	200	Grand Total
A International	0%	0%	0%	25%	0%	0%	0%	75%	100%
B International	56%	0%	6%	0%	6%	25%	6%	0%	100%
C International	63%	0%	17%	8%	4%	8%	0%	0%	100%
D International	79%	0%	0%	11%	0%	11%	0%	0%	100%
Grand Total	62%	0%	8%	8%	3%	13%	2%	5%	100%
NFDB/score categories	N.A.	5	20	40	70	100	140	200	Grand Total
A International	0%	3%	0%	0%	4%	19%	36%	37%	100%
B International	6%	0%	4%	6%	25%	37%	15%	7%	100%
C International	28%	2%	12%	16%	26%	12%	3%	0%	100%
D International	29%	1%	19%	20%	20%	8%	2%	0%	100%
Grand Total	20%	1%	11%	13%	22%	18%	9%	6%	100%
PTB/score categories	N.A.	5	20	40	70	100	140	200	Grand Total
A International	0%	2%	0%	1%	9%	26%	34%	29%	100%
B International	4%	1%	3%	11%	21%	38%	15%	7%	100%
C International	20%	2%	11%	16%	33%	15%	2%	0%	100%
D International	33%	1%	20%	18%	21%	7%	1%	1%	100%
Grand Total	19%	1%	11%	14%	24%	18%	8%	5%	100%
RegTB/score categories	N.A.	5	20	40	70	100	140	200	Grand Total
A International	5%	4%	2%	2%	9%	35%	32%	12%	100%
B International	9%	1%	7%	15%	22%	27%	12%	6%	100%
C International	18%	1%	21%	28%	15%	8%	4%	3%	100%
D International	42%	3%	19%	17%	9%	8%	1%	1%	100%
Grand Total	20%	2%	13%	16%	14%	18%	11%	5%	100%
SZOC/score categories	N.A.	5	20	40	70	100	140	200	Grand Total
A International	1%	1%	0%	1%	10%	29%	33%	25%	100%
B International	3%	2%	1%	9%	31%	31%	19%	5%	100%
C International	4%	2%	9%	21%	40%	17%	5%	2%	100%
D International	9%	2%	23%	29%	23%	12%	2%	0%	100%
Grand Total	4%	2%	8%	15%	26%	23%	15%	8%	100%