

Analysis of Open Access Publications of Researchers from Slovenia: Economics and Quality

MIRO PUŠNIK, MAJA VIHAR, CENTRAL TECHNOLOGICAL LIBRARY AT THE UNIVERSITY OF LJUBLJANA

STAFF TRAINING DAYS AT THE UNIVERSITY OF LJUBLJANA, 15-18 MAY 2017

ACADEMIC LIBRARIES' SUPPORT FOR OPEN SCIENCE IN THE EUROPEAN RESEARCH AREA

Motivation

➤ On short term period:

- to have a list on OA publications;
- to have an insight on sum of APCs;
- Total Cost of Publication analyses;

➤ on long term period:

- to put and to assess Slovenian contribution to STM publishing in a context of STM publishing economy;
- to identify some patterns of Slovenian researchers publications;
- to identify critical points in a research publication workflow in SICRIS from publishing via bibliographic record to open access.

Methodology

- identification of all Slovenian publications and Slovenian gold open access publications published in 2015 with the use of SCOPUS database;
- identification of Slovenian open access publications in hybrid journals with retrieving information from publishers' databases;
- determination of the journal impact with the use of SNIP and SRA methodology in SICRIS based on researcher's bibliography in COBISS.SI bibliographic system;
 - A", A': above-average scientific excellence in SICRIS evaluation methodology

Key Data

- we have found 5.061 scientific publications in Scopus, where one of the authors was from Slovenia and publication was published in 2015 (AFFILCOUNTRY = Slovenia, March 2016);
- With the above mentioned methodology we discovered 1.065 Slovenian OA, all published in 2015 (March 2016).
- OA publication output sample: 1.065 Slovenian open access articles, published in 2015.
- Total publication output sample: 5.062 where one of the authors was from Slovenia and publication was published in 2015.

OA Articles by Business Model

- 864 articles were published in gold open access journals:
 - For 431 articles one had to pay APC;
 - 433 articles were published in OA without APC charge.
- 201 articles were published in hybrid journals (payment of APC);
- Altogether 632 APCs were paid (431 for gold + 201 for hybrid);

Costs for APCs

- For each article in each journal we checked the APC prices (publisher's list price catalogue); APCs can vary on the type of document within the same journal;
- For all 631 articles 1.016.916 EUR for article processing charges were paid (APC);
- The average APC was 1.609 EUR;
- On the basis of the publisher's information and co-authorship analysis we estimate that approximately 60 % of the above mentioned sum was paid by Slovenian authors for the open access of their articles, this is approximately 600.000 EUR.

Costs for APCs 1

	Calculated sum of APCs (EUR)	No. of APCs	Average APC (EUR)
All OA articles	1.016.916	632	1.609
Hybrid OA articles	446.019	201	2.219
Gold OA articles	570.897	431	1.324

The Impact of journals, where Slovenian OA articles were published

5.061 articles (Total publication output sample)	1.065 OA articles (gold + hybrid)
A' = 2.617 articles or 51,7 %	A' = 420 articles or 39,6 %
A'' = 493 articles or 9,7 %	A'' = 31 articles or 2,9 %
Average SNIP = 1,10	Average SNIP = 0,92
Average no. of citations = 3,8	Average no. of citations=3,2

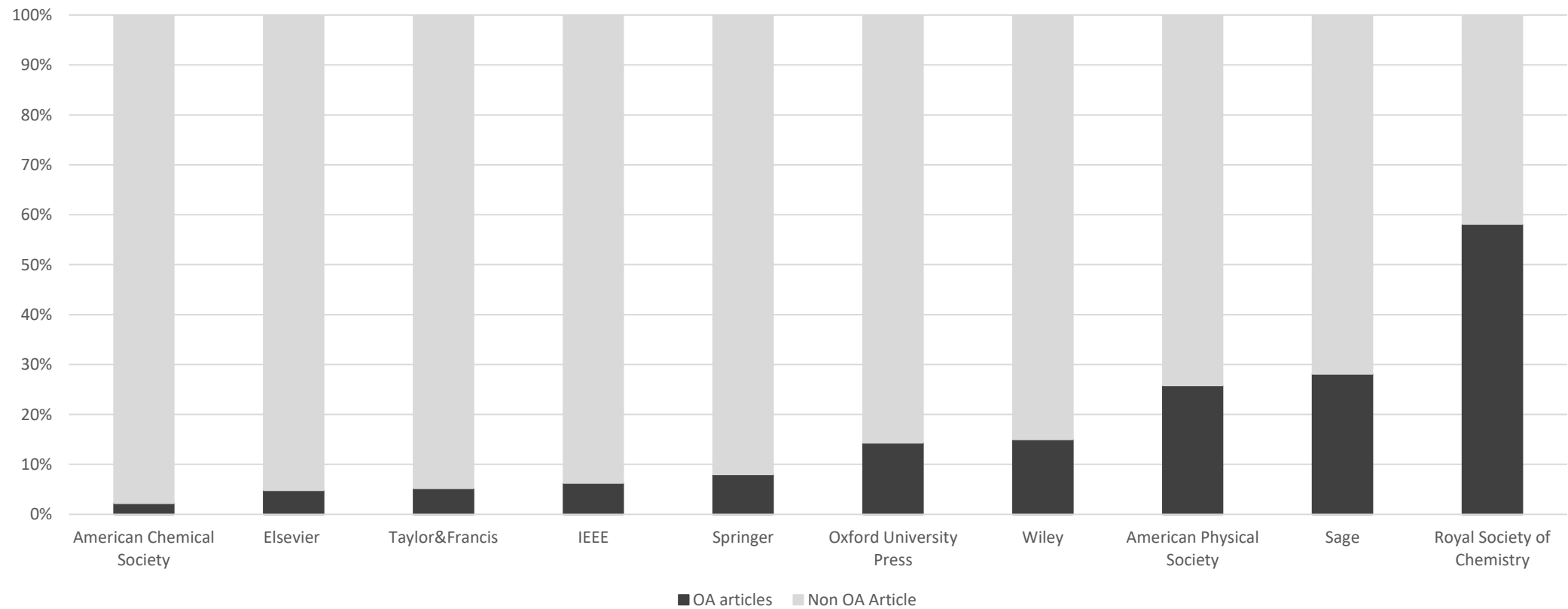


201 OA articles in hybrid journals	864 articles in gold OA journals	431 articles in gold OA journals with APC
A' = 111 articles or 55 %	A' = 309 articles or 35,8 %	A' = 195 articles or 48,8 %
A'' = 16 articles or 8 %	A'' = 15 articles or 1,7 %	A'' = 9 articles or 2,08 %
Average SNIP = 1,22	Average SNIP = 0,85	Average SNIP = 1,08
Average no. of citations = 8,03	Average no. of citations = 2,44	Average no. of citations = 3,45

Articles per Publisher

	No of all articles	No. of APCs paid	Share of APCs (%)	Calculated sum of APCs (EUR)	Average APC (EUR)	SNIP of OA articles (average)	No. of OA articles categorized as A'	No. of OA articles categorized as A''
American Chemical Society	90	3	3,3	5.580	1.860	1,62	3	1
American Physical Society	128	33	25,7	63.147	1.913	1,46	33	12
BioMed Central	55	55	100	97.795	1.778	1,11	20	0
Elsevier	983	47	4,8	102.348	2.177	1,4	42	1
Hindawi	13	13	100	64.774	1.619	0,63	0	0
IEEE	48	3	6,25	5.250	1.750	3,22	2	1
Oxford University Press	42	6	14,3	12.694	2.115	2,14	5	4
Public Library of Science	71	71	100	102.127	1.483	1,09	70	0
Royal Society of Chemistry	43	25	58,1	43.548	1.741	1,08	11	0
Sage	32	9	28,1	21.757	2.417	0,91	6	2
Springer	462	37	8	75.780	2.048	0,94	18	2
Taylor&Francis	174	9	5,17	18.664	2.074	0,77	8	0
Wiley	274	41	15	114.726	2.798	1,22	26	3

Share of OA Articles in Hybrid Journals



Analysis by research fields

Research field	No. of OA publication	Average no. of citation	Average no. of citation in gold OA	Average no. of citation in hybrid OA	No. of hybrid OA with exclusively Slovenian authorship	Average no. of citation in hybrid OA with exclusively Slovenian authorship	No. of hybrid OA with international authorship	Average no. of citation in hybrid OA with international authorship
Biochemistry, Genetics and Molecular Biology	201	4,01	3,27	7,41	14	7,14	22	7,59
Medicine	270	4,42	3,35	9,97	18	5,5	25	13,2
Social sciences	118	0,82	0,73	2,0	6	2,33	2	1,0

Conclusions

- The average APC for Slovenian OA publications is slightly lower than in other countries due to higher share of gold OA publication and due to lower share of OA publications in general.
- Current absence of a sustainable funding system in Slovenia.
- A suitable offset licensing model can be the base for an effective support of OA publishing.
- Significant differences between publications in gold and hybrid journals (regarding SNIP average, number of citation average, articles treated as of above-average scientific excellence).
- Articles in international co-authorship are cited more than articles in exclusively Slovenian co-authorship.
- Hybrid? Gold? Both? Third way?