

## DOAJ 2018 APCs: an overview

by Heather Morrison

### Abstract

The purposes of this small study are to determine the extent to which the longitudinal open access article processing charges (OA APC) project can rely on DOAJ APC data rather than individual journal lookup, to capture some highlights of DOAJ APC data as of January 31, 2018, and compare these with our 2014 survey of DOAJ journals charging APCs. Selected findings: **71% of the 11,001 journals listed in DOAJ do not charge APCs** [emphasis added to avoid adding to conflation of OA with APC]. For most journals, a URL as to where this information can be found is provided, indicating that DOAJ staff have verified that there are no publication charges. 28% do charge APCs, and the remainder have no information on APCs. The average price converted to USD is nearly identical in 2014 and 2018, however the reader is advised to read the details and limitations, as this must be interpreted with caution. Of the 3,131 journals with APCs, 37 different currencies are listed. A few currencies dominate, particularly USD at nearly half of the journals. A breakdown of average prices and range of prices by currency are presented. The most remarkable finding is the range; on average the highest APC for a given currency is close to 4,000 times higher than the lowest APC. This tends to support our 2014 conclusion of a volatile APC market. In conclusion, DOAJ metadata is very useful for the OA APC study, and in particular can be considered a reliable source for journals with no publication charges.

### Method

On January 31, 2018 the DOAJ metadata set was downloaded from <https://doaj.org/faq#metadata>, saved in .csv format, opened in Open Office in Unicode to retain non-English characters, and saved as .ods and .xls. The excel file is used for data processing, and the other formats are retained as backups. APC amounts were converted to USD using the XE currency converter web service \* as of January 31, 2018, the date of data collection.

### Results

As of January 31, 2018, the DOAJ metadata file included 11,001 journals. DOAJ now includes some ceased journals, for example the Hindawi ISRN series which has been collapsed into a single journal, a good practice because content in these journals is still valuable and should not be removed from the primary journal directory in the area of open access. However, there is no indication in the metadata regarding ceased journals; although the vast majority are still active, the actual number of active journals listed in DOAJ does not appear to be possible to discern.

Of the 11,001 journals, the response to the question: "Does the journal have article processing charges?" (Journal article processing charges is the column name in the metadata spreadsheet) is:

	Number of journals	% of total (rounded)
No	7,766	71%
Yes	3,131	28%
No information	104	1%
Total	11,001	100%

Of the 7,766 journals indicating “no” to the APC question, 7,438 have a URL listed in the column “APC information URL”. According to DOAJ Operations Manager Dominic Mitchell (2018), when a URL is listed in this column, it means that DOAJ staff have verified the information. This means that when DOAJ metadata says “no” to the APC question and an “APC information URL” is listed, one can be quite confident that the journal does not have an APC, at least not at the time of checking. That’s 68% of the total journals listed in DOAJ that have been vetted and found not to have publication charges. For the purposes of the longitudinal study, these journals will be identified as “no publication charge” for 2018. A random sampling of these journals might be advisable in the future to view whether APC charging status has changed.

In response to the question, “Does the journal have article submission charges?” there were 212 “yes” responses, a bit less than 2% of the journals listed in DOAJ. All journals with submission charges also have APCs listed. Submission charge data are noted for the purpose of completeness; they are not considered in the following results and discussion, as there is no indication in DOAJ as to whether submission charges are deducted from the APC if an article is accepted for publication.

### Currency

Of the 3,131 journals listed as having an APC, a total of 37 currencies are listed. USD accounts for nearly half of the total. USD, GBP, and EUR together account for about 80% of the total. Chart 1 below illustrates the frequency of currencies representing over 1% of the total APC-charging journals.

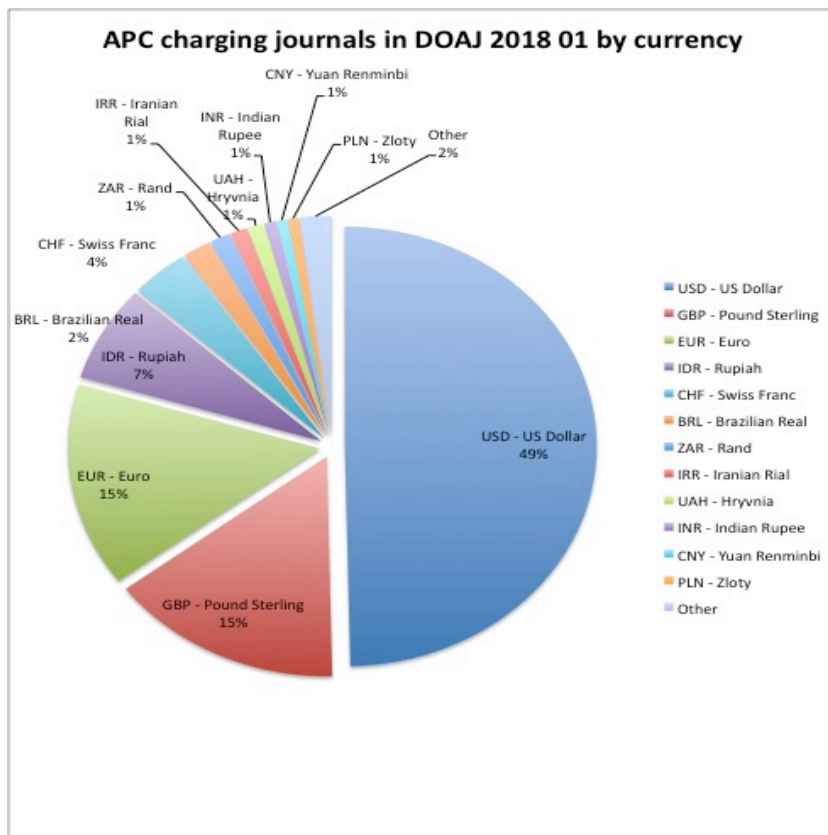


Chart 1: APC charging journals in DOAJ January 2018 by currency

Table 1 below lists APC averages, range, and range ratio by currency. The range ratio is included to illustrate the wide spread of APCs within currencies. No range is provided by currencies with just one journal. The average range ratio is 3,781; in other words, on average the highest APC for a given currency is close to 4,000 times higher than the lowest APC. The range in USD is \$1 - \$5,000. In EUR, it's 10 - 3,300.

**DOAJ APC-charging journals as of January 31, 2018**

**APC average, range and range ratio by currency**

<b>Currency</b>	<b># journals</b>	<b>APC average</b>	<b>Range - low</b>	<b>Range - high</b>	<b>Range ratio high / low</b>
ARS - Argentine Peso	6	2,504	26	5,000	192
AUD - Australian Dollar	6	460	120	2,000	17
BRL - Brazilian Real	57	540	12	3,000	250
CAD - Canadian Dollar	3	327	30	750	25
CHF - Swiss Franc	116	710	156	2,080	13
CNY - Yuan Renminbi	22	1,583	100	4,900	49
COP - Colombian Peso	2	90,000	30,000	150,000	5
CZK - Czech Koruna	1	8,000			
EGP - Egyptian Pound	4	1,288	750	2,000	3
EUR - Euro	465	581	10	3,300	330
GBP - Pound Sterling	467	1,272	100	3,150	32
IDR - Rupiah	219	568,842	50	5,000,000	100,000
INR - Indian Rupee	23	4,030	50	17,500	350
IQD - Iraqi Dinar	6	43,363	50	125,000	2,500
IRR - Iranian Rial	34	5,916,176	250	150,000	600
JPY - Yen	6	98,333	5,000	135,000	27
KRW - Won	8	221,500	42,000	300,000	7
KZT - Tenge	1	2,000			
MDL - Moldovan Leu	5	250	250	250	1
MXN - Mexican Peso	4	2,070	150	5,600	37
MYR - Malaysian Ringgit	1	250			
NGN - Naira	2	5,500	5,000	6,000	1

Currency	# journals	APC average	Range - low	Range - high	Range ratio high / low
NOK - Norwegian Krone	5	9,800	4,000	14,000	4
PKR - Pakistan Rupee	3	1,667	1,000	3,000	3
PLN - Zloty	21	531	40	1,230	31
RON - New Romanian Leu	3	217	150	300	2
RSD - Serbian Dinar	1	15,000			
RUB - Russian Ruble	16	6,359	300	19,000	63
SAR - Saudi Riyal	1	1,093			
THB - Baht	1	243	120	450	4
TRY - Turkish Lira	4	2,500			
TWD - New Taiwan Dollar	3	2,333	1,000	3,000	3
UAH - Hryvnia	33	542	40	2,000	50
USD - US Dollar	1,539	1,035	1	5,000	5,000
VEF - Bolivar	1	7,500			
XAF - CFA Franc BEAC	1	100,000			
ZAR - Rand	41	4,776	200	10,550	53
Total (journals); average (range ratio)	3,131				3,781

Table 1. APC average, range and range ratio by currency

### Average APC in USD

The average APC in USD was \$937; the median (mid-point) and mode (most common APC) were both \$600.

In comparison with our 2014 survey of journals listed in DOAJ with APCs (Morrison et al, 2015):

- the percentage of journals listed in DOAJ that charge APCs is nearly identical (26% in 2014, 28% in 2018)
- the average (mean) APC in USD is nearly identical \$964 in 2014 versus \$937 in 2018 (see limitations)
- the mode (most common) APC was reported as \$0 in 2014 and is \$600 USD in 2018 (see limitations)

The wide range of APC within most currencies lends support to the conclusion of our 2014 APC survey (Morrison et al, 2015) that the APC market at the current time is volatile. This

makes prediction of future trends, necessary for budgeting purposes for those support this model, difficult.

### **Limitations**

2014 data is drawn from publisher websites rather than DOAJ. The finding of a mode of \$0 in 2014 was based on inclusion of APC-based publishers who are planning to charge APCs, but had not yet begun to do so. In 2018, it is not clear how or if this model would be captured by DOAJ metadata. For this reason, the significance of the difference in mode and the near identical APC amounts in USD should be interpreted with caution.

DOAJ metadata on APCs reflects a necessary simplification of complex data. DOAJ has 2 fields for publication costs, APC and submission fees, and one currency listing. However there are a wide variety of publication fee models in use, including per-page rather than per-article costs. Many journals still publish in print and have print-based publication costs such as extra charges for images and/or colour. Multiple prices including pricing in different currencies is common, as is different pricing based on such factors as type or length of article, discounts for developing countries, for society or institutional members; the wide variety of models was covered in some detail in Morrison et al. (2015). It is not clear how often DOAJ metadata on APC amounts is updated, and there could be differences between journals and publishers with respect to the frequency of updates. For this reason collecting data from journal and publisher websites will continue to be necessary for the OA APC project.

\* in previous years Bank of Canada rates were used, however currently currency conversion options for previous years seem to be limited.

### **References**

Mitchell, D. (2018). Personal e-mail. February 2, 2018

Morrison, H.; Salhab, J.; Calvé-Genest, A.; Horava, T. (2015). Open Access Article Processing Charges: DOAJ Survey May 2014. *Publications* 3, 1-16.

### **Biographical information and acknowledgements**

Heather Morrison is an Associate Professor at the University of Ottawa's School of Information Studies <http://arts.uottawa.ca/sis/> and Principal Investigator of the *Sustaining the Knowledge Commons* (SKC) [sustainingknowledgecommons.org](http://sustainingknowledgecommons.org) research program sponsored by Canada's Social Sciences and Humanities Research Council (SSHRC) via an Insight Grant (2016 – 2021). Heather is an open access advocate, and the purpose of the SKC project is to facilitate the economics of transition of scholarly publishing to support a sustainable global open access knowledge commons. Thanks to the SKC and DOAJ teams who do most of the work that makes this research possible.