



SUSTAINING THE KNOWLEDGE COMMONS:

APC, SUBJECT, CONTENT & IMPACT FACTOR

Sustaining the Knowledge Commons

sustainingknowledgecommons.org

A SSHRC Insight Development Project

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(presenters)

with Jihane Salhab & Alexis Calvé-Genest

CAIS Conference, June 4 2015, Ottawa Ontario

Université d'Ottawa | University of Ottawa

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ABOUT SUSTAINING THE KNOWLEDGE COMMONS

- Knowledge commons
- Macro transition to OA
- OA APCs
- Resource Requirements for small scholar-led publishers



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OA APCS PROJECT OVERVIEW

- Purpose: Assisting university libraries to take better decisions.
- Directory of Open Access Journals (DOAJ) 10 K+
- Data collected in Dec 2013 (pilot), May 2014 and May 2015
- OA APC article published in February 2015 on the Multidisciplinary Digital Publishing Institute (MDPI)



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OA APCS PROJECT OVERVIEW

- 2/3 of OA journals do not charge OA APCs
- 1/3 of journals listed in DOAJ do have APCs
- Average APC of \$964 / mode APC of \$0
- 61% of publishers are commercial in nature
- 80% offer one or more variations on pricing
-



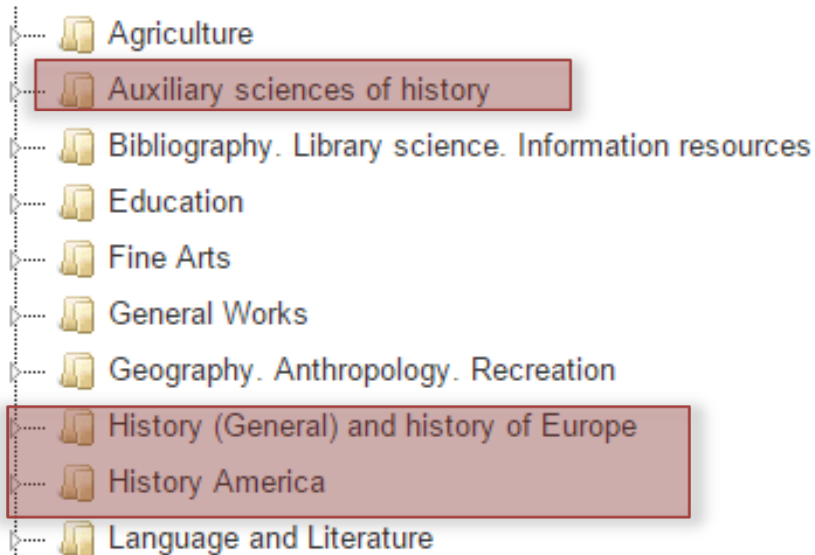
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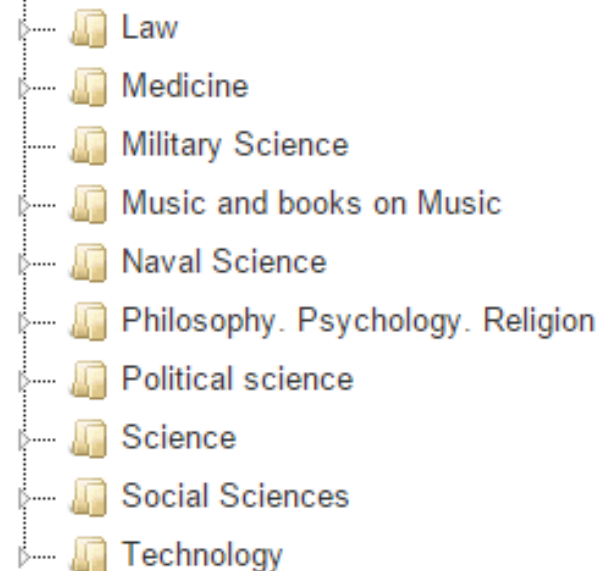
SUBJECT CORRELATION

- DOAJ uses Library of Congress Classification

20 main subjects



- 📁 Agriculture
- 📁 Auxiliary sciences of history
- 📁 Bibliography. Library science. Information resources
- 📁 Education
- 📁 Fine Arts
- 📁 General Works
- 📁 Geography. Anthropology. Recreation
- 📁 History (General) and history of Europe
- 📁 History America
- 📁 Language and Literature



- 📁 Law
- 📁 Medicine
- 📁 Military Science
- 📁 Music and books on Music
- 📁 Naval Science
- 📁 Philosophy. Psychology. Religion
- 📁 Political science
- 📁 Science
- 📁 Social Sciences
- 📁 Technology

<https://doaj.org/subjects>

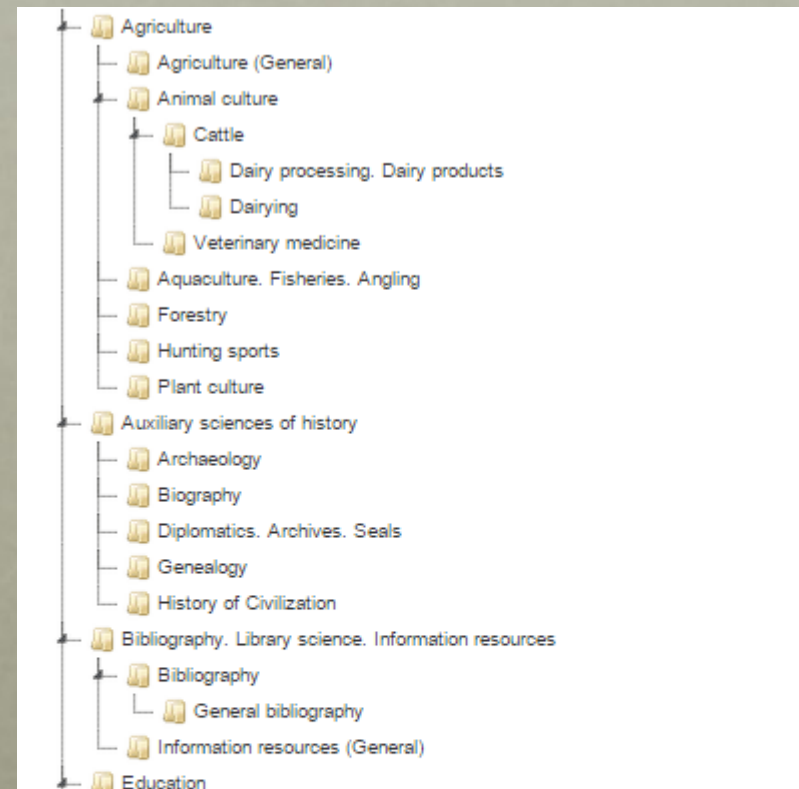


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SUBJECT CORRELATION - CESAR

- DOAJ Journals have 400+ sub classifications
- 94% of the DOAJ journals have at least two subjects assigned (main and sub classification)
- 10% have more than 6 subjects



<https://doaj.org/subjects>



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SUBJECT CORRELATION - CESAR

- Conducted an analysis of subjects in DOAJ using Statistic Frequency and Coding
- 985 distinct or unique combination of subjects
- Top 10

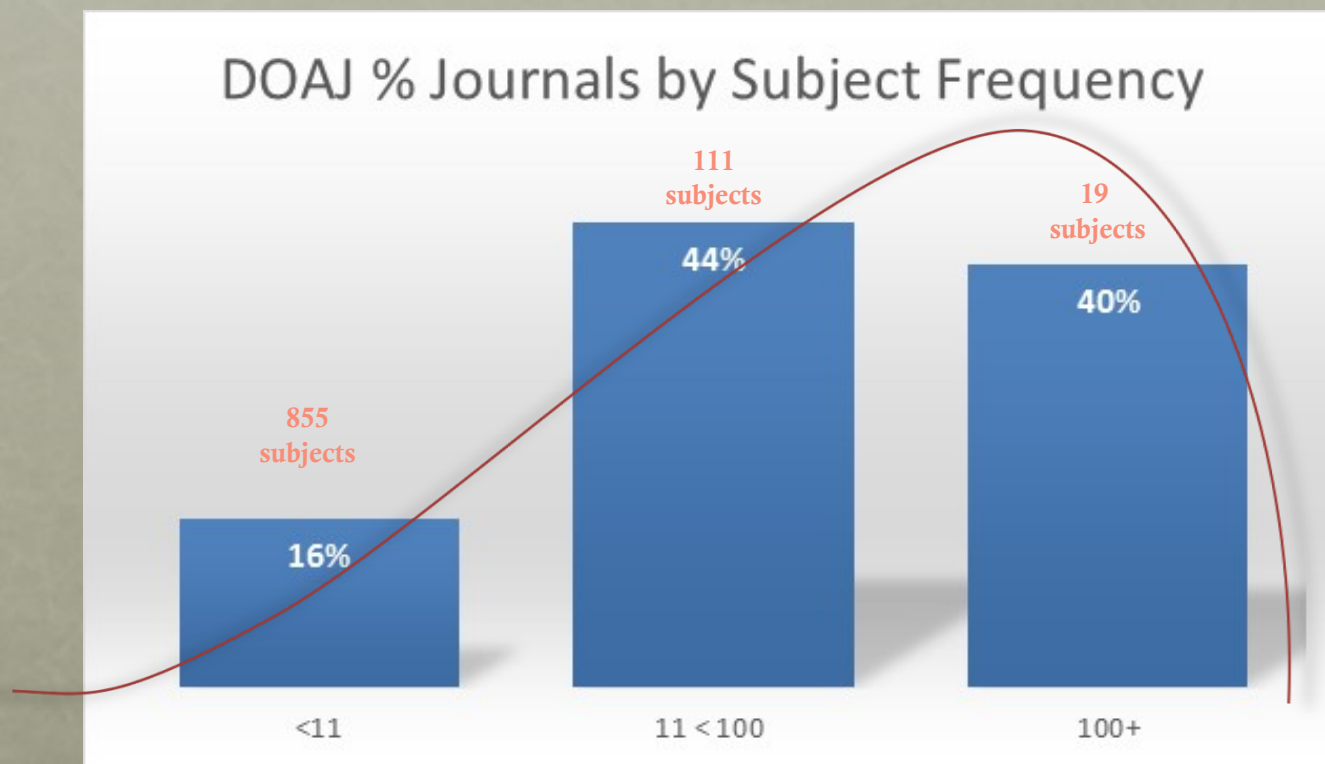
Subject	# of Journals
General Works	502
Medicine (General),Medicine	487
Education (General),Education	290
Electronic computers, Computer science,Instruments and machines,Mathematics,Science	264
Social sciences (General),Social Sciences	250
Mathematics,Science	225
Biology (General),Science	193
Public aspects of medicine,Medicine	183
Business,Commerce,Social Sciences	178



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SUBJECT CORRELATION - CESAR



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SUBJECT CORRELATION

- Analyzed other subject classifications of DOAJ subjects
 - 17 subjects, Recoded into 8 subjects (Solomon & Björk, 2012)
 - 28 subjects (Crawford, 2014)
- Compared with other classification of disciplines
 - Complete JACS (Joint Academic Classification of Subjects) from Higher Education Statistics Agency (HESA) in the United Kingdom. Retrieved from:
https://www.hesa.ac.uk/dox/jacs/JACS_complete.pdf
 - Outline of academic disciplines. Retrieved from:
http://en.wikipedia.org/wiki/Outline_of_academic_disciplines



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SUBJECT CORRELATION

- Phase 1: Code 130 distinct subjects
 - 19 subjects were coded in 17 subject categories
 - Used the 17 subject classification to code 111 subjects
 - Reorganized and grouped subjects in 13 categories
- Phase 2: Code 855 distinct subjects using the 13 categories
- Reorganized and grouped subjects in 11 categories



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SUBJECT CORRELATION

Final subject classification available

<http://dataverse.scholarsportal.info/dvn/dv/oaap>

#	Subject	# Journals	%
1	Medicine	2,235	23.02%
2	Social Sciences	1,984	20.44%
3	Humanities	1,360	14.01%
4	Technology and Engineering	970	9.99%
5	Physical Sciences and Math	666	6.86%
6	Biology and Life Sciences	664	6.84%
7	Education	596	6.14%
8	General Works	502	5.17%
9	Agriculture	414	4.26%
10	Law	183	1.89%
11	Science General	134	1.38%



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CONTENT CORRELATION

- Why? Not necessary economies of scale – introductory pricing
- DOAJ article content 2004 – 2013 strong positive correlation with amount of APC *but*
- DOAJ article count and actual article count bear little resemblance *and* getting worse in the short term *and*
- Crawford actually counted the articles (English-language) – early work available – *weak* positive correlation



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IMPACT FACTOR (IF) AND DOAJ

- 11,619 journals in Journal Citation Reports (JCR) as of May 3, 2015
- 10,532 journals in DOAJ May 15, 2015
- 1,146 journals in DOAJ with IF
- 10.8% of journals in DOAJ have IF
- 9.8% of journals in JCR are DOAJ journals



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PILOT: 50% OF DOAJ JOURNALS WITH IF

- 572 journals (selected alphabetically)
- 169 matched May 2014 APC sample
 - May 2014 APC sample 1,432 / 2,567 APC journals = 55% of total
 - Estimated APC journals of 572: 229 (169 / .55)
- Estimated 40% of IF journals in DOAJ with APC
- Compare with 30% of DOAJ journals with APC



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AVERAGE APC MAY 2014

- overall average: \$964 USD (Morrison et al. 2015)
- average IF journal \$1,948 USD



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APCS OF IF JOURNALS

	APC 2010 USD *	APC 2013 USD	APC 2014 USD
Max	2,165	2,420	2,650
Min	500	-	-
Min greater than zero	500	200	198
Median	1,825	2,060	2,215
Mode	1,825	2,060	2,215
Average	1,637	1,808	1,948

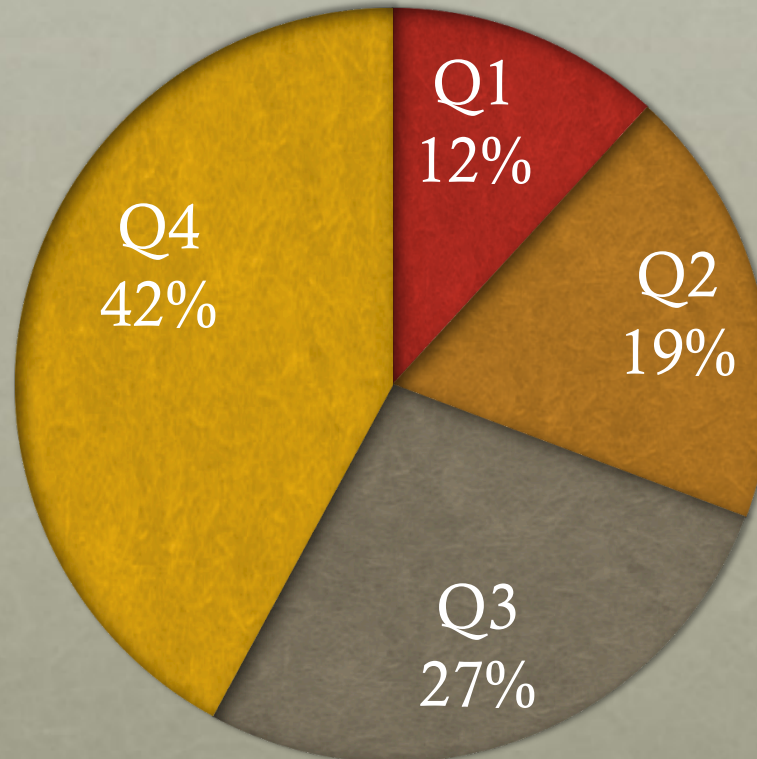
* 2010 data courtesy Solomon & Björk



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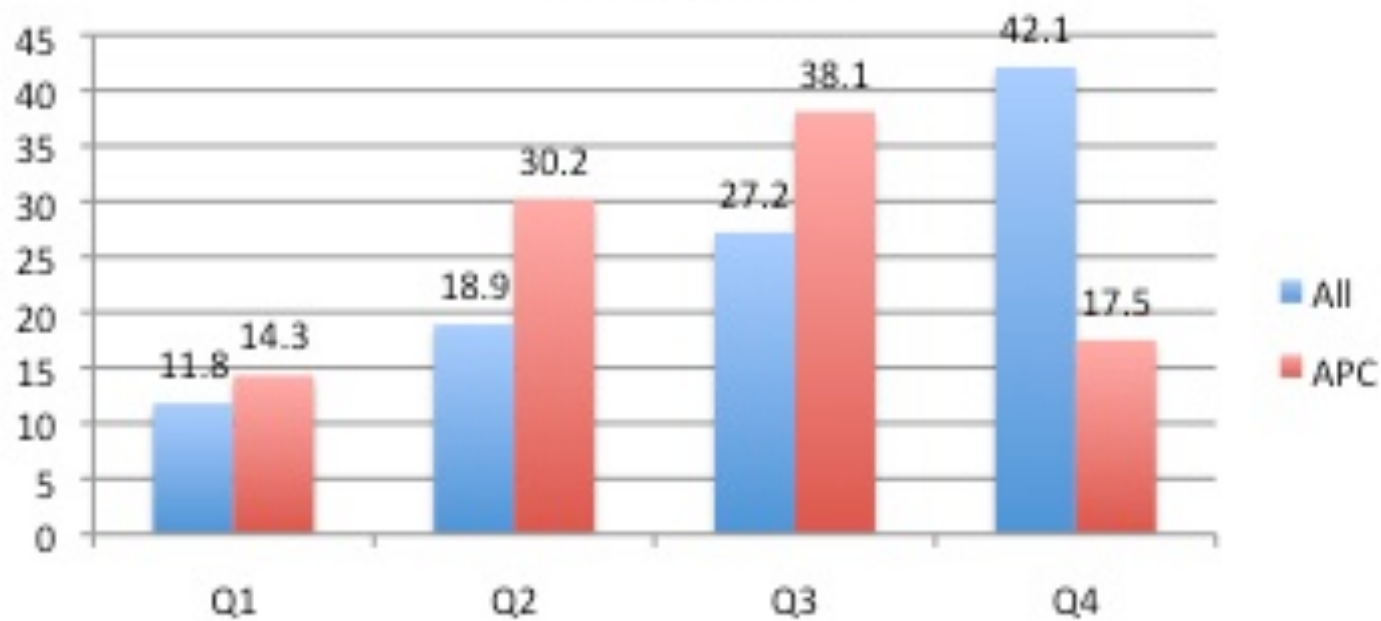
DOAJ IF journals May 2015 by quartile (pilot - half data)



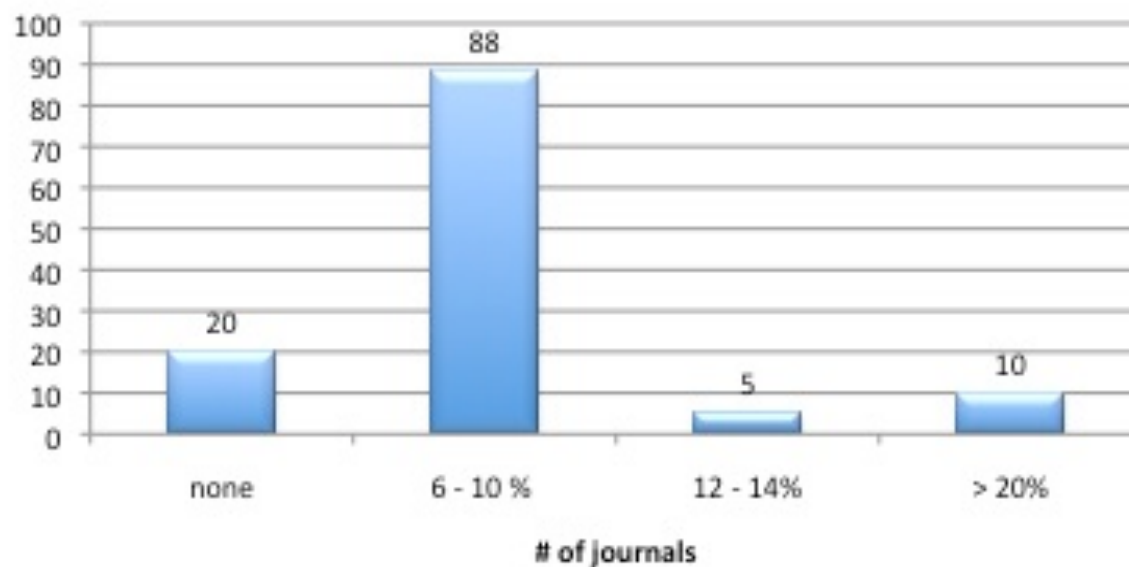
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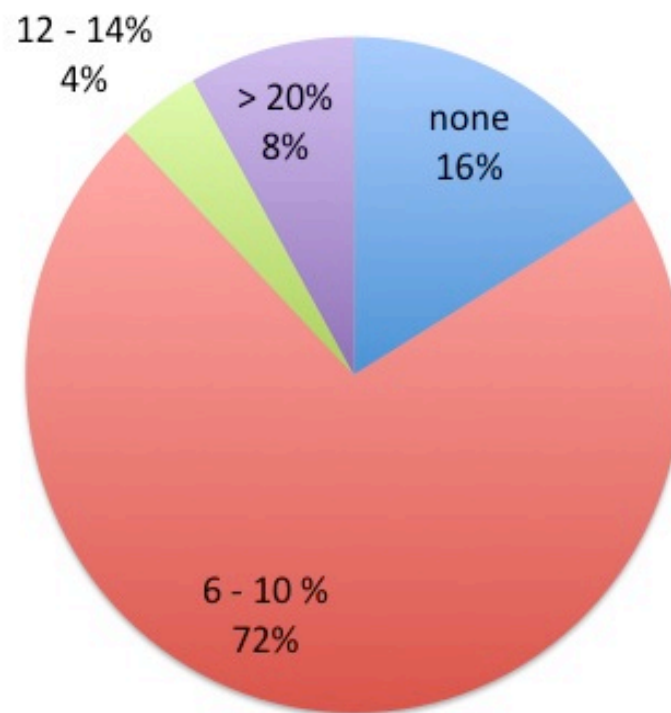
DOAJ IF Journals - all and APC (pilot, half data)



**DOAJ IF / APC journal by % APC increase
Dec. 2013 - May 2014 (pilot)**



DOAJ IF APC Journals by 2013-14 price increase



SUMMARY IMPACT FACTOR (IF)

- 10% of journals in JCR are DOAJ journals
 - 10% of journals in DOAJ have IF
 - Both APC and non-APC journals with IF
 - IF journals charging APC charge 2X average
 - IF APC journals: price increases substantial; 6 – 10%
- Dec. 2013 – May 2014 typical



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