Open Access Publishing Cost Models

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Open is Good, but Not at any Cost



My background and perspective



- » Research has been focusing on how OA has been introduced and changed scholarly journal publishing.
- » Member of the strategy group coordinating open science policy development in Finland.
- » Member of the strategy group for journal publisher negotiations on behalf of the Finnish university library consortium (FinElib).



https://doi.org/10.2777/836532

Vision - ten principles



Maximizing accessibility

Maximizing usability

Supporting an expanding range of contributions

A distributed open infrastructure

Equity, diversity & inclusivity

Community building

Promoting high-quality research & its integrity

Facilitating evaluation

Promoting flexibility & innovation

Cost-effectiveness



Open = *less expensive?*



- » So far **definitely no!**
- » There are various types of aggressive profit-maximisation tactics happening.
- » There has been a persistent lack of one, or even a few, big and obvious "models" to bet on substantially. Scarce resources are now spread out too thin.



Market control is not on the buyer side



- » Still mostly non-transparent pricing and contract terms.
- » Each journal (and thus publisher) essentially a monopoly.
- » Pricing extrapolated from historical spending.
- » De-synced international negotiation schedules.
- » Content supply disconnected from purchasing decision.
- » Publication outlet rank deeply entangeled in academic merit systems.
- » Decoupled buyer and primary end-customer.
- **»**

The five largest publishers publish around half of all scholarly journals





SPRINGER NATURE

WILEY





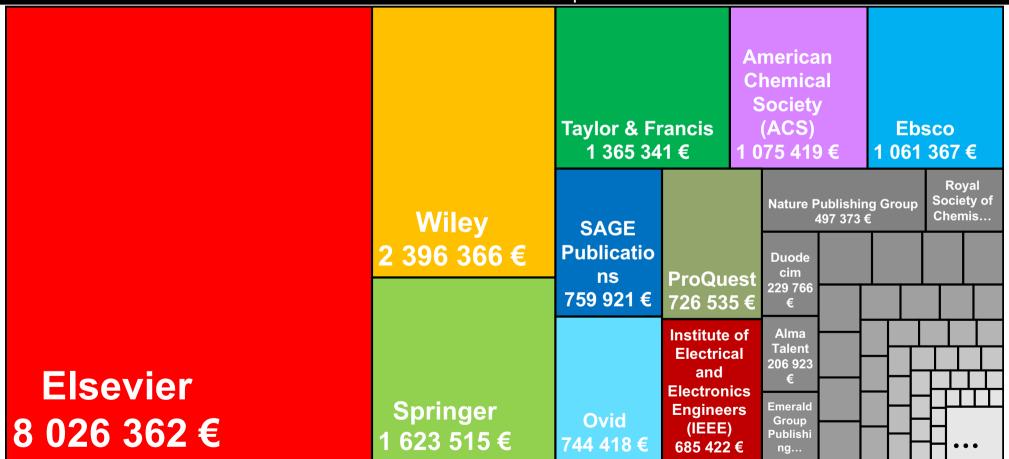
Currently
1/5th of these
journals are
Open Access

Amounts paid by FinElib 2017



https://avointiede.fi/tiedonkeruu2018

HANKEN



A hard fact



- » Commercial companies, particularly publicly traded, are out to increase profits and seek growth.
- » That is what makes shareholders happy and the leadership of the companies keep their jobs.
- » This growth can come from expanding business into new areas, or it can come from increasing market share and/or prices in existing segments.

» There is evidence of both strategies happening.

Some commercial actors already cover large parts of the cycle





https://www.elsevier. com/connect/theinformation-systemsupporting-research

In what ways can libraries/universities fund open access publishing?



A useful differentiation:

» Front end funding (Supporting the system from the front)



» Back end funding (Supporting the system from the back)







» Going through the front one usually has to pay whatever the market price is for services fully provided by an external party.

» APCs

» Paying APCs for full open access journals and hybrid OA a'la carte.

» Read-and-publish agreements

» Pay up-front for both subscription access and either full or partial right to publish works of affiliated researchers OA.

Costs transparency is good, but is not an automatic enabler of change





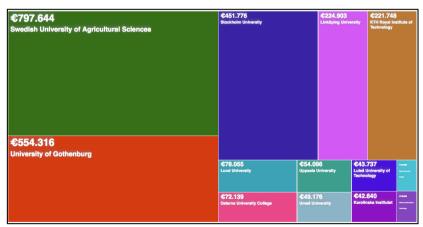




https://openscience.fi/-/transparency-and-openness-to-scientific-publishing-the-finnish-research-organisations-pay-millions-of-euros-annually-to-the-large-publishers



https://treemaps.intactproject.org/apcdata/openapc/#institution/ country=SWE



Affordability of the APC model put under doubt





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Article Processing Charge Hyperinflation and Price Insensitivity: An Open Access Sequel to the Serials Crisis

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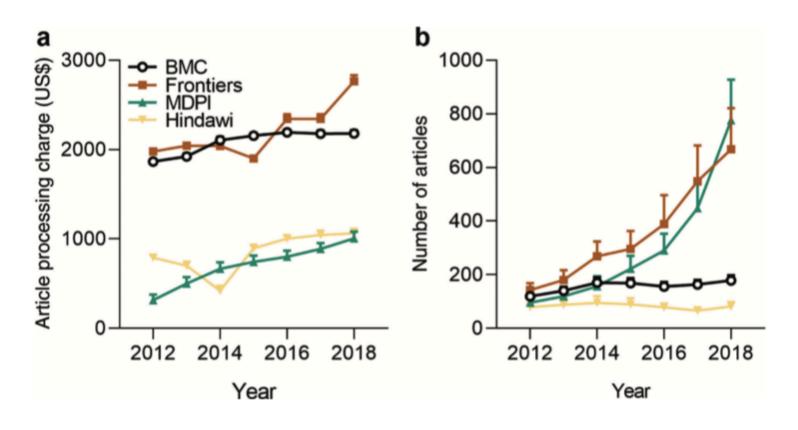
"APC hyperinflation is not suppressed through market competition and author choice."

Khoo (2019)

http://doi.org/10.18352/lq.10280

Prices of APC OA journals have increased as publication volumes have increased





Khoo (2019)

What does publishing actually cost?



Peer Preprints

NOT PEER-REVIEWED

Assessing the size of the affordability problem in scholarly publishing

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Abstract

For many decades, the hyperinflation of subscription prices for scholarly journals have concerned scholarly institutions. After years of fruitless efforts to solve this "serials crisis", open access has been proposed as the latest potential solution. However, also the prices for open access publishing are high and are rising well beyond inflation. What has been missing from the public discussion so far is a quantitative approach to determine the actual costs of efficiently publishing a scholarly article using state-of-the-art technologies, such that informed decisions can be made as to appropriate price levels. Here we provide a granular, step-by-step calculation of the costs associated with publishing primary research articles, from submission, through peer-review, to publication, indexing and archiving. We find that these costs range from less than US\$200 per article in modern, large scale publishing platforms using post-publication peer-review, to about US\$1,000 per article in prestigious journals with rejection rates exceeding 90%. The publication costs for a representative scholarly article today come to lie at around US\$400. We discuss the additional non-publication items that make up the difference between publication costs and final price.

Peer/ Preprints | https://doi.org/10.7287/peeri.preprints.27809v1 | CC BY 4.0 Open Access | rec: 18 Jun/2419, publ: 18 Jun 2019

"[...] we provide a granular, step-by-step calculation of the costs associated with publishing primary research articles, from submission, through peer-review, to publication, indexing and archiving."

Grossmann & Brembs (2019)

https://doi.org/10.7287/peerj.preprints.27809v1

Journal production activities



- 1. Content acquisition
 - a. Searching and assigning reviewers
 - b. Communication with reviewers
 - c. Communication with authors
 - d. Handling of re-submission process
 - e. Plagiarism check
 - f. Online submission system
 - g. CrossRef Similarity Check
 - h. CrossRef DOI for article
 - i. CrossRef DOI for 2 or more reviews
 - APC collection

- 2. Content preparation (production)
 - a. Manuscript tracking system
 - b. Production system check-in
 - c. Technical checking of manuscript
 - d. Copyediting
 - e. Language editing
 - f. Typesetting
 - g. Formatting figures/graphs/tables
 - h. Altmetric badge
 - i. XML and metadata preparation
 - j. Handling author corrections
- 3. Content dissemination/archiving
 - a. Web OA platform and hosting
 - b. CLOCKSS/Portico
 - c. OAPEN
 - d. Upload to Scopus, PMC, etc.

Grossmann & Brembs (2019)





"The publication costs for a representative scholarly article today come to lie at around **US\$400**."

Grossmann & Brembs (2019)

Back-end funding



- » As the main value contributors to scholarly content, it would make sense for universities to not have to buy back content through the front.
- » Back-end solutions enable more control, and enable competetiveness in purchased services.

» Library-consortia funding models

- » Libraries paying annual fees to a consortium which enables member journals to publish OA without the need for any APCs in these journals.
- » University presses/Scholar-ran journals
- » Funding for support of journals outside of the commercial realm

Examples of initiatives and organisations active in this space















Encourage and provide funding mechanisms for journals to transition to OA



It's ultimately the scholars that have the power for enabling change but coordinated effort is needed.

The renaissance of university presses







Lund University Press

WELCOME TO LUND UNIVERSITY PRESS – AN ACADEMIC PUBLISHER FOR THE 21ST CENTURY







open access research in action















- » Only investing heavily into offsetting agreements with major publishers is not the optimal solution for diversifying the scholarly communication landscape and reducing the pricing power of publishers.
 - » List prices for APCs and hybrid fees have had a tendency to increase rather than decrease
 - » Publishers create new OA journals instead of converting old subscription ones

Not just universities and libraries- The importance of national science policy









Need for collective action – nationally and internationally



» The Dilemma of Collective Action (Wenzler 2017)

"For academic libraries to continue to achieve their traditional role of storing, organizing, preserving, and providing access to the scholarly record, they increasingly will have to take responsibility for the entire cycle of scholarly communication from publishing and editing through preservation, but it is unlikely that they will succeed in doing so through the uncoordinated actions of individual institutions and will require new experiments in cooperation and coordination."



» The 2.5% Commitment (Lewis 2017)

- » "...every academic library should commit to contribute 2.5% of its total budget to support the common infrastructure needed to create the open scholarly commons."
- » "...if we don't collectively invest in the infrastructure we need for the open scholarly commons, it will not get built or it will only be haphazardly half built. "

Key takeaways



- » The transition to open access calls for brave steps forward, not moving sideways and thus prolonging this unfavorable state of transition.
- » Subscription-based publishers want to have their cake and eat it too, and commercial born-OA publishers are increasingly expensive to publish in.
- » Co-ordination is needed to make change happen, funders, universities and national consortia should collaborate to push towards the common goal of open access.
- » Drive for systematic change, which includes support for substitute alternatives to established outlets.

Want to know more about this topic?







https://youtu.be/3rmbeWGgrWE

Reading





Articles in Journals (GOA4)



Walt Crawford

- » Free e-book by Walt Crawford
- » 194 pages of bibliometric & economic analysis of all journals in the DOAJ
- » Open dataset

https://waltcrawford.name/goa4.pdf

