

'Budget Cuts? Time for an Open Access Revolution'

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If the cabinet wants higher education to spend less money, there's a logical place to start: spending on scientific publications. Switch from commercial publishers with enormous profits to a model supported by universities themselves, argue Wim Pouw (Radboud University) and Bert Bakker (UvA). Strategic policy and collective action are essential for this, they explain.

Budget cuts in research and education are on the horizon. The amounts are estimated at a structural 1 billion euros, a tenth of the total budget. A budget the size of 'one large or two small universities,' as the chairman of the Dutch universities' association recently stated. Academics are sounding the alarm: What now?

As an alternative to random budget cuts, we have an idea how the cabinet can spend less, but time through innovative policy. Why not cut from the roughly 64 million euros in publication costs that annually go to commercial publishers like Elsevier, Frontiers, MDPI, PLOS, Springer Nature, and Wiley, and invest a fraction of that in innovation in alternative publication models?

There is indeed an alternative: publishing in so-called Diamond Open Access journals.

7.7 billion euros per year to publishers

What's the problem? Researchers write papers and textbooks that need to be peer-reviewed for quality. After receiving approval, papers need to be made readable through copy-editing and formatting, then archived so the paper remains findable long-term.

This is now completely organized by commercial services. The estimated cost for a well-archived publication is around 400 euros. However, the costs for publications in commercial open access journals are around 2,300 euros, with outliers up to 5,000 euros. That's more than a monthly salary of a PhD student or junior postdoc.

These exorbitant margins come from the lucrative business model of commercial publishers. Researchers aren't paid for the content they provide to the publisher, peer reviewers who do quality checks aren't paid, and editors who organize the quality checks are paid little or nothing. Furthermore, archiving and formatting costs are minimal in the digital world.

The commercial academic publishing business therefore sells a product back to the university without adding value, with profit margins of 30-40 percent. These margins are many times larger than those of profitable tech giants. It becomes even more painful when we consider that the aforementioned top-5 publishers had a combined revenue of 7.74 billion euros in 2023.

Open Access to prevent universities from paying for nothing

The mentioned costs in the form of researchers' time providing services to commercial publishers are thus paid by the university, and then sold back to that same university. This includes publications that serve education, and are therefore partly funded by students who buy textbooks for their bachelor's or master's programs. The total costs are thus much

higher than the 64 million euros mentioned earlier; the estimated costs also include university FTEs and costs for textbooks and reviews.

Fortunately, there are alternatives. Diamond Open Access is a publication model where the publisher is part of the university itself, or a non-profit scientific organization with transparent financial operations, where neither the reader nor the author pays. Organizations like UNESCO state that much more should be invested in Diamond Open Access instead of for-profits like Elsevier. From an international perspective, this makes perfect sense when we consider that researchers from less privileged research institutes often cannot afford the costs for open access publishing.

Incentives are misaligned

Now one might think: how convenient that academics are realizing they need to manage their money better just as budget cuts are looming. This is incorrect. Researchers have been calling for years for top-down policy, and multiple initiatives worldwide have been set up to curb unlimited profit margins through collective action – for example, the petition by freeourknowledge.org, which commits researchers to submit a publication to a Diamond Open Access publisher within five years.

Yet the call for individual action by researchers is problematic. Researchers find themselves in a catch-22. Publishing with emerging Diamond Open Access publishers is risky because profit-driven publishers still have more prestige. Nobody publishes in journal X because of its low recognition because nobody publishes in journal X: here's the catch-22 – including for the authors of this article.

If a researcher nevertheless publishes in journal X, their CV will generally suffer compared to their colleagues. If a researcher makes good choices, it thus comes at the cost of job security and the chance to maintain grants. Petitions like those from freeourknowledge.org try to circumvent this catch-22 by only committing researchers when the petition is signed by more than 500 colleagues. So: individual action only when collective action is assured.

Invest in Diamond Open Access

What we propose policy-wise isn't easy. It requires collective action and strategic policy from the government and research funders like NWO to invest less in commercial publishers and invest a fraction of that in Diamond Open Access. Currently, there are too few Diamond Open Access Journals and too little enthusiasm among researchers to break the catch-22. Individual action is indeed too risky for researchers who depend annually on publications in prestigious journals. Strategic top-down policy is thus really necessary.

Investing in support for universities to set up Diamond Open Access journals can solve this and remove the aforementioned prestige problem. NWO Open Science recently announced a fund to help editorial boards and journal titles – currently under commercial publishers' management – transition to Diamond Open Access publication models. This also transfers prestige. Ironically, the new cabinet has decided to severely cut NWO Open Science's budget. They're thus cutting strategic policy that could lead to major cost savings.

Save money and lead the way

Cabinet Schoof 1 calls on science to make radical choices. Many scientists are uncomfortable with current publication norms and the so-called 'publish or perish' culture. If we switch now, we make knowledge public and publication resources globally accessible, and taxpayers' money won't flow into the pockets of a few large publishers. In other words, we can make more knowledge public with less money.

The Netherlands can take a leading role and start an open access revolution that could lead to a cascade of innovation in international developments around research publications. Through healthier competition from non-commercial providers alone, we could reduce the 7 billion euros in global costs by 10 to 20 percent – for example during a transition phase where researchers publish in both for-profit and Diamond Open Access journals. That makes a significant difference in costs.

140 **Diamond Open Access is a good intermediate station**

This open access revolution we envision takes time and certainly has pitfalls during the transition phase from for-profit to Diamond Open Access. PhD students and postdocs, for example, need to find permanent positions, sometimes outside the Netherlands, where perhaps less progressive publication norms apply. Wouldn't the 'academically young, early career' researchers therefore draw the short straw if we switch to Diamond Open Access?
150 Investing in new journals that can compete in prestige with commercial services can address these concerns, we think.

Good examples already exist in psychology, such as MIT's Diamond journal OpenMind, which matches comparable commercial journals like Cognition

(Elsevier) in impact factor. Additionally, Diamond Open Access isn't the final destination: eventually, academics must critically re-evaluate terms like 'impact factor' and 'prestige'. Until then, however, a
160 Diamond Open Access alternative is a good intermediate station.

Now that the need is high, we must have the courage as the Netherlands to take an important leading role in an issue that has been ongoing for a long time. This should resonate well with the new cabinet, since this leading role also saves costs.

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170 a member of an editorial board of Diamond Open Access publisher Radboud University Press and a member of action group freeourknowledge.org.*