

Price transparency: let's make it simple

Hybrid and subscription journals are a persistent feature of the scholarly communication landscape. Pricing for such journals, however, is based on old print rates and associated with above-inflation price increases, a lack of transparency and concerns about double-dipping. This article proposes that paywalled content be repriced based on a fixed fee per paywalled article. This proposed nominal read fee offers simple, transparent pricing that eliminates the opportunity for double-dipping.

Keywords

double-dipping; nominal read fee; open access; price transparency; subscription pricing

Print-first pricing

The scholarly communication community has for years spoken of the 'serials crisis', in which journal pricing increases far beyond inflation. Any consideration of subscription pricing needs to start with contextualizing this issue. According to Tufts University:¹

'Rapidly rising journal subscription prices have severely eroded the ability of libraries, universities, and scholars to purchase the publications necessary for research and education. While the [consumer price index] CPI increased 73% between 1986–2004, research library expenditures for serials increased 273%.'

Using the period set out in the quote above (1986 to 2004): if we assume a hypothetical journal with a subscription price of £1,000 in 1986, an increase of 73% in line with CPI would yield a price of £1,730 in 2004, where a 273% increase would set the price at £3,730.

We must consider, however, that research output increases every year, driven partly by increases in global research and development investment as well as a cultural drive within academia to publish more articles.² Using the free component of the Dimensions database, we can ascertain that research output in the form of journal articles increased from 910,923 articles in 1986 to 1,740,980 articles in 2004, or a 191% increase. Had pricing been set per article, our hypothetical £1,000 journal subscription in 1986 would have increased to £2,911 in 2004, or 68% above CPI.

To add one further layer of complexity, we need also consider that from 1977 to the middle of the 2010s there was consistent growth in the number of titles to which a library might subscribe of around 3.2% per year.³ Putting that in context, 100 journals in 1986 would have grown to 176 journals by 2004. If a library collection increased at the same rate as journal growth, the price for our £1,000 journal in 1986 would be £2,116 in 2004, or 22% above CPI.

Since the mid-1990s publishers have invested heavily in digital technologies, initially as a complement to print processes and latterly in digital-first workflows, consistently adding new functionality to meet scholars' needs as well as digitizing and re-digitizing archives to preserve and disseminate scholarly history. One hangover of the print world, however, is the mechanism by which publishers price their subscriptions. In many cases digital was initially bundled alongside a print subscription; over time, print may have disappeared from the bundle without that change being reflected in the subscription price. This has created



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2 a situation whereby there is little correlation between a journal's research output and its pricing, and even less transparency about how a publisher has set that pricing. We can see some of this in *The International Journal of Plant Sciences*, which in 2003 cost the University of Nebraska-Lincoln a subscription price of US\$587⁴ and published 122 articles. The 2021 subscription rate for a 'Large Higher Education institution', according to the University of Chicago Press website,⁵ is £1,378 for e-only access – an increase of 235%. In 2020, according to Dimensions, the journal published only 66 articles.

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Price inflation beyond CPI and beyond even research output has continued into the present: this information is not presented to excuse such behaviour, but to provide context for the proposed change in pricing methods.

Double-dipping

In May 2020 cOAlition S announced their price transparency requirements for open access (OA) publication fees,⁶ offering publishers the choice of two approved frameworks for demonstrating transparent pricing. These frameworks require publishers to show how an OA fee is broken down across a series of services (Figure 1).⁷

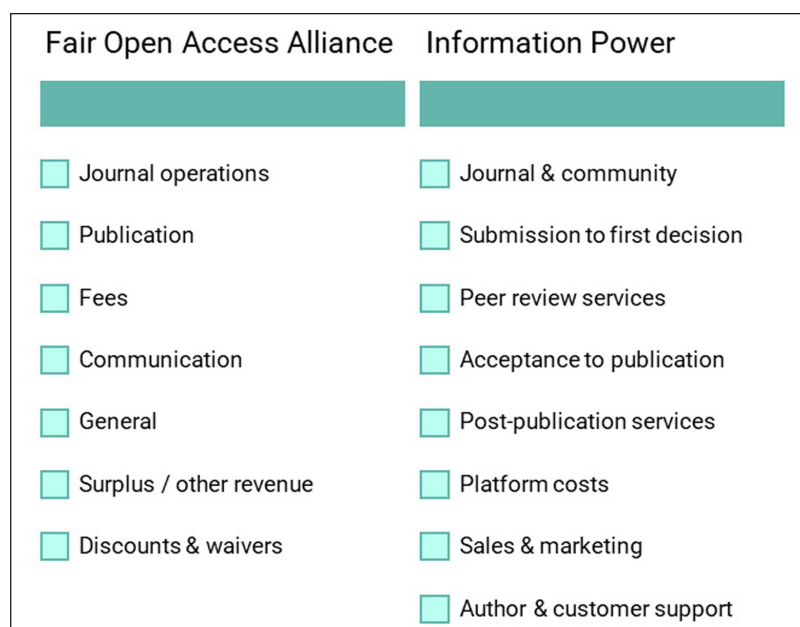


Figure 1. A comparison of the service breakdown required by the approved cOAlition S price transparency frameworks

These mechanisms, combined with ever-present concerns about double-dipping (where publishers do not offset the revenues from OA articles against subscription pricing), sparked conversations within the scholarly communication community about price transparency for content published behind a paywall.

'concerns about double-dipping sparked conversations ... about price transparency'

One excellent demonstration of an anti-double-dipping policy is the Royal Society, who have used a transparent pricing mechanism for several years.⁸ Key features of the Royal Society model are that journal pricing accounts for:

- the percentage change in the number of paywalled articles over rolling three-year periods
- price changes are capped at ±15% to protect both libraries and the Royal Society itself from sudden, radical changes
- inflation is based on the UK Retail Price Index (RPI).

3 The Royal Society reports that the model is well-liked by librarians, but it carries two drawbacks: first, pricing was established from a baseline created during the print era, before the invention of the transparent pricing model and second, the price per article varies quite significantly between journals (Table 1). The first issue may well be a red herring: the costs of publishing digital content are not wildly dissimilar from the costs of distributing print,⁹ but the variation in per-article pricing is hard to justify given the uniformly high editorial effort and production standards within the portfolio.

	2017–2019 total			Median paywalled articles in period	2021 subscription price	Price per article
	All articles	Paid OA articles	Paywalled articles			
Biology Letters	618	80	538	179	£935	£5.22
Interface Focus	232	45	187	62	£1,055	£17.02
Interface	819	225	594	198	£2,526	£12.76
Notes and Records	83	1	82	27	£99	£3.67
Proceedings A	758	122	636	212	£1,733	£8.17
Proceedings B	1,768	368	1,400	467	£1,594	£3.41
Philosophical Transactions A	1,025	143	882	294	£2,676	£9.10
Philosophical Transactions A	1,240	303	937	312	£2,963	£9.50

Table 1. The correlation between paywalled publications and per-article pricing in Royal Society journals¹⁰

The Royal Society journals display a per-article price range of £13.60 (median £8.64, standard deviation £9.62), though even the highest per-article prices are, in my view modest. This is a portfolio of only eight titles, from a publisher who makes their publication rates and pricing openly available, which makes such a comparison simple to do. A next step would be to run such calculations for larger publishers and those who do not provide such information.

Nominal pricing

The ESAC registry reveals that several of the current crop of transformative deals make use of so-called ‘nominal’ article processing charges (APCs) – that is, what the Publish and Access Agreement between Wiley and Projekt DEAL calls ‘the per article publish and read fee’, which in that instance was set at €2,750.¹¹ One benefit is that libraries can easily compare these nominal APCs in transformative deals from different publishers. A second benefit is that, where the deal places a cap on the number of articles that may be published OA and indicates the nominal APC, this provides an indication of where the cap sits.

Taking these factors into consideration – subscription pricing based on old print rates, concerns about double-dipping and the existence of nominal APCs – the question should be asked: can and should publishers create nominal read pricing? By nominal read, the author simply means this: that publishers would price the subscription component of their portfolios based on a fixed fee per paywalled article, which would then change each year based on publication rates.

‘can and should publishers create nominal read pricing?’

Publishers’ costs increase over time in the form of services (e.g. full-text mark-up), technology (e.g. hosting platforms), staffing and other aspects of the publishing process. CPI is used throughout this article as a proxy for such cost increases.

Nominal read fees: a worked example

Let us work with the example of a publisher offering three titles: Journals A, B and C, publishing 600, 200 and 1,200 paywalled articles respectively in the period 2017–2019. In our hypothetical scenario all three titles attracted the same subscription price in 2021 of £1,730. Table 2 indicates the relative price per paywalled article for each journal, as well as at the level of the portfolio.

	Paywalled articles 2017–2019	Average paywalled articles per year	Price per paywalled article
Journal A	600	200	£8.75
Journal B	200	67	£26.25
Journal C	1,200	400	£4.38
Portfolio*	2,000	667	£7.88
Portfolio mean	667	222	£13.13

Table 2. Price per paywalled article varies with publication rates, in a portfolio where all titles are charged at £1,750 per year

*Article numbers are total, price per paywalled article therefore reflects the portfolio median

	Paywalled articles 2018–2020	Average paywalled articles per year	Subscription price: nominal read £7.94	Subscription price: nominal read £13.22
Journal A	600	200	£1,588	£2,644
Journal B	200	67	£532	£886
Journal C	1,200	400	£3,176	£5,288
Portfolio total	2,000	667	£5,296	£8,818

Table 3. Scenario one

Scenario one: no change in paywalled article output

This scenario assumes that the publisher adopts nominal read fees for 2022 and that each journal published the same number of articles in 2018–2020 as they did in 2017–2019. The publisher tests pricing at the portfolio median (£7.88) and the portfolio mean (£13.13), in both cases applying inflation based on CPI in January 2021 of 0.7%¹² (Table 3). For ease of comparison, the same rate of inflation would result in the old £1,750 subscription rate increasing to £1,762.

Compared with using an inflation rate increase on the original pricing of the journals, Journal B decreases substantially whether priced at the portfolio median or the portfolio mean, Journal A decreases when priced at the portfolio median and Journal C increases when priced at either the median or the mean. The implementation of nominal read fees thus shifts the pricing of individual journals. The use of the portfolio median price per paywalled article, however, would result in a portfolio price of £5,296, compared with £5,286 if all three titles were taken at a subscription of £1,762 each. This suggests that at the portfolio level publishers who adopt the median price per article per year for their complete portfolio will create minimal overall changes.

Scenario two: variations in paywalled article output

This scenario is based on the same 2022 pricing as scenario one but reflects the effects of changes in article output (Table 4). In this case, Journals A and C have published fewer paywalled articles and thus attract smaller subscription fees than in scenario one, while Journal B has grown its output considerably and this is reflected in higher subscription fees. The total paywalled output of the portfolio remains the same, but the distribution of subscription fees shifts to reflect the distribution of the articles.

'the distribution of subscription fees shifts to reflect the distribution of the articles'

	Paywalled articles 2018–2020	Average paywalled articles per year	Subscription price: nominal read £7.94	Subscription price: nominal read £13.22
Journal A	550	183	£1,453	£2,419
Journal B	360	120	£953	£1,586
Journal C	1,090	363	£2,882	£4,799
Portfolio total	2,000	666	£5,288	£8,804

Table 4. Scenario two

Pros of nominal read

No double-dipping

Nominal read fees offer no opportunity for double-dipping as publishers would be able to charge only for paywalled articles. OA articles – whether paid for by APCs, read and publish models, or any other mechanism – would similarly not be subsidized by paywalled content.

Risk sharing

It could be argued that using retrospective numbers of articles to set pricing could result in libraries paying over the odds in a year where paywalled publications drop significantly, increasing price per article, and that publishers should share this risk. However, there is a similar risk to publishers that paywalled publications will increase significantly, creating a real price per article far lower than anticipated. The use of rolling three-year periods to calculate pricing was intended precisely to smooth out fluctuations of this kind, reducing the risk for both sides of an unexpected spike or slump in pricing.

Ease of comparison

While libraries must select journals based on faculty demand, where there are decisions to be made about which of the many titles on the market should be retained within a library collection a comparison of nominal read fees would provide another data point to help in decision-making. This upfront comparison of nominal read fees could be complemented by reviewing usage statistics to determine whether the nominal read fee offers true value for money. As a member of the COUNTER Executive Committee, the author suggests the use of the COUNTER Code of Practice Release 5 metric 'Unique_Item_Requests' as the best mechanism for like-for-like comparisons of usage across platforms.¹³

'This upfront comparison of nominal read fees could be complemented by reviewing usage statistics'

Ease of calculation

Offsetting and similar arrangements have been suggested as mechanisms for avoiding double-dipping.¹⁴ There are two issues with such arrangements: first, they are not easy to calculate and second, the publication of paywalled articles usually changes independently of fluctuations in OA articles. The Royal Society's transparent pricing mechanism accounts for both difficulties, but still requires a slightly complex calculation (change in paywalled output over consecutive three-year periods, plus inflation). Nominal read, by contrast, is a very simple equation: the number of paywalled articles multiplied by nominal read fee.

Transparency

The introduction of nominal read does not preclude publishers from providing transparency about the services they offer. This could be through one of the cOAlition S price transparency frameworks, albeit modified to reflect nominal read rather than OA fees. The addition of this information about quality and service offering may be a valuable addition for libraries wishing to compare journals.

Cons of nominal read

Historic basis

One of the concerns expressed earlier in this article related to subscription pricing being based on historic print rates. It could well be argued that the same applies to nominal read fees, as publishers will derive their nominal read pricing from their existing subscription rates. This is true, but much as publishers have started to coalesce around APC price banding¹⁵ (with certain notable exceptions) the author suspects that a range of 'acceptable' nominal read fees would develop over time.

6 Shifts in subscription pricing

As shown in scenario one there is potential for subscription prices for some journals to increase significantly, where journals publishing large volumes have historically attracted low or average subscription rates. The author would argue that this suggests these journals have been historically under-priced, but acknowledges that this could well be problematic for libraries even where they are able to make significant cost savings on journals at the other end of the scale (i.e. journals with low publishing rates attracting average or high subscription rates). Where this is the case publishers may need to consider initially setting a nominal read for such journals lower than their portfolio median, increasing slowly over a period of several years to bring the journal up to the same rate as other titles.

'publishers may need to consider initially setting a nominal read ... lower than their portfolio median'

Conclusion

Hybrid and subscription journals are not going to disappear in the next few years, much as funders, librarians and indeed publishers might wish them to. As such, we need to find better, fairer ways to price such journals. The concept of a nominal read fee offers one route by which we might do so, offering a simple pricing calculation and at the same time responding to valid concerns about double-dipping.

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Abbreviations and Acronyms

A list of the abbreviations and acronyms used in this and other *Insights* articles can be accessed here – click on the URL below and then select the 'full list of industry A&As' link: <http://www.uksg.org/publications#aa>.

Competing interests

The author has declared no competing interests.

References

1. "The 'Serials Crisis' Explained," Tufts University, <https://sites.tufts.edu/scholarlycommunication/open-access/the-serials-crisis-explained/> (accessed 28 May 2021).
2. "Gross Domestic Spending on R&D," OECD, <https://data.oecd.org/rd/gross-domestic-spending-on-r-d.htm> (accessed 28 May 2021).
3. Michael Mabe, "The Growth and Number of Journals," *Serials* 16, no. 2 (2003): 191–197, DOI: <https://doi.org/10.1629/16191> (accessed 28 May 2021).
4. Richard Edwards and David Shulenburg, "The High Cost of Scholarly Journals (And What To Do About It)," *KU ScholarWorks*, (2009), <https://core.ac.uk/download/pdf/213403203.pdf> (accessed 28 May 2021).
5. "University of Chicago Press Journals. Institutional Rates," University of Chicago Press, <https://www.journals.uchicago.edu/inst/rates> (accessed 28 May 2021).
6. "Plan S Price Transparency Frameworks: guidance & requirements," *coalition S*, <https://www.coalition-s.org/principles-and-implementation> (accessed 28 May 2021).
7. "FOAA Breakdown of Publication Services and Fees," *Fair Open Access Alliance*, <https://www.fairopenaccess.org/foaa-breakdown-of-publication-services-and-fees/> (accessed 28 May 2021); "Price and Service Transparency Presentation," Information Power, <https://www.informationpower.co.uk/price-and-service-transparency-presentation/> (accessed 28 May 2021).
8. "Transparent Pricing," *Royal Society*, <https://royalsociety.org/journals/librarians/purchasing/packages/transparent-pricing/> (accessed 28 May 2021).
9. Donald W. King, "The cost of journal publishing: a literature review and commentary," *Learned Publishing* 20, no. 2 (2007): 85–106, DOI: <https://doi.org/10.1087/174148507X183551> (accessed 28 May 2021).
10. Royal Society, "Transparent Pricing".
11. "ESAC Transformative Agreement Registry," *ESAC*, <https://esac-initiative.org/about/transformative-agreements/agreement-registry/> (accessed 28 May 2021).
12. "Consumer Price Inflation, UK: January 2021," *Office for National Statistics*, <https://www.ons.gov.uk/economy/inflationandpriceindices/bulletins/consumerpriceinflation/january2021> (accessed 28 May 2021).
13. Tasha Mellins-Cohen, "The Friendly Guide to Release 5 for Librarians," *Project COUNTER*, last modified May 2019, https://www.projectcounter.org/wp-content/uploads/2019/05/Release_5_Librarians_20190509-Revised-Edition.pdf (accessed 28 May 2021).
14. Liam Earnay, "Offsetting and its discontents: challenges and opportunities of open access offsetting agreements," *Insights* 30, no. 1 (2017): 11–24, DOI: <https://doi.org/10.1629/uksg.345> (accessed 28 May 2021).
15. "News & Views: Open Access Charges – Consolidation, Increases, and Breaking Through the \$10k Barrier," *DeltaThink*, <https://deltathink.com/news-views-open-access-charges-consolidation-increases-and-breaking-through-the-10k-barrier/> (accessed 28 May 2021).

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