Analysis of Jisc Collections' APC data

In early 2014, Article Processing Charge (APC) data was collected by Information Power Ltd (IPL) on behalf of Jisc Collections. This contains the number of APCs and the total APC expenditure of 24 UK higher education institutions over the period 2010-2014 (for 2014, the first two months of the year only). The following analysis is based on the aggregated and anonymised data of these 24 institutions.

Number of APCs

The number of APCs paid by these institutions, and the total costs of these payments, has been growing very quickly since 2012:

Total APC expenditure 2010—14

£12,000,000

£10,000,000

£8,000,000

£4,000,000

£2,000,000

£2,000,000

455

2012

2013

2014

2015

Fig. 1

(Source: Jisc Collections/IPL)

2009

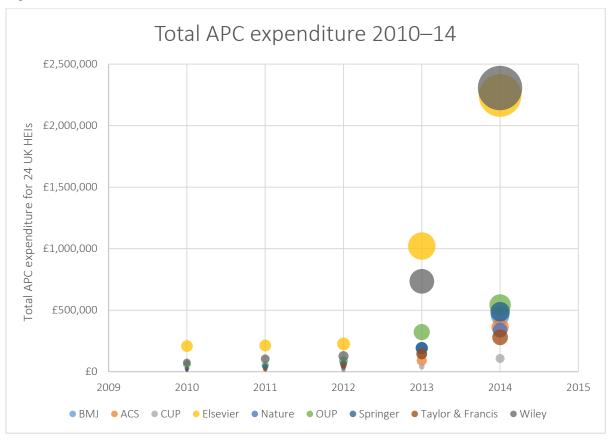
Some publishers received much more of these APCs than others, in particular Elsevier and Wiley:

375

2011

312

Fig. 2



(Source: Jisc Collections/IPL)

In the preceding two graphs (Figs. 1 and 2), the 2014 figures are estimates based on data from the first two months of the year. The following graph (Fig. 3) is based on actual data from those two months.

In the following graphs, the category 'Other' contains a number of smaller publishers who each had received only a few APCs from the participating institutions. Oxford University Press are notable for receiving significantly more than all commercial publishers with the exception of Wiley and Elsevier. This correlates with the high number of APCs paid to OUP from Wellcome Trust open access funds (see Wellcome Trust APC spend 2012-13: data file).

Fig. 3 (Source: Jisc Collections/IPL)

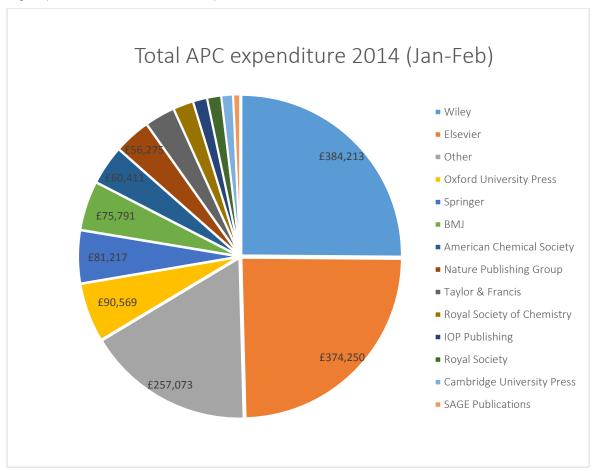
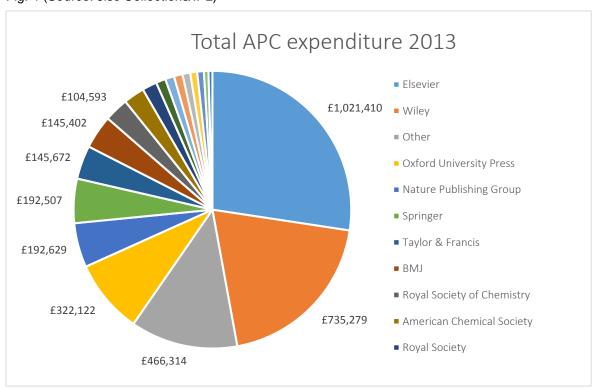


Fig. 4 (Source: Jisc Collections/IPL)



APC price

The data allows us to see the average APC price paid to specific publishers. The following analysis was first published in an earlier report on APC pricing (Lawson 2014, <u>APC pricing</u>). It is provided with the caveat that the price of APCs reported by institutions is unlikely to be 100% accurate.

Average APC price £3,000 £2,500 -BMI American Chemical Society £2,000 Cambridge University Press Elsevier £1,500 Nature Publishing Group Oxford University Press £1,000 Springer Taylor & Francis Wiley £500

2013

2014

Fig 5.

(Source: Jisc Collections/IPL)

2010

2011

2012

f0

This graph shows convergence between the APC prices of different publishers. In 2010 and 2011 the average APC price ranged fairly evenly between £1,500 and £2,500. This is much higher than the 900 USD average APC reported by Solomon and Björk for 2010 (Solomon and Björk 2012, A Study of Open Access Journals Using Article Processing Charges); one possible explanation for this is that biomedical journals tend to charge higher APCs than other disciplines (Solomon and Björk 2012, A Study of Open Access Journals Using Article Processing Charges) and in the UK prior to 2012 biomedical research was more likely to receive funding to pay for APCs. From 2012, publishers began to have much more similar prices, with the average APC for 2014 being between £1,730 and £2,000 for each of these publishers with the exception of Nature Publishing Group. The 2014 prices are estimates based on data gathered from the first two months of the year.

Even the highest estimate given by a large-scale study of the average cost of an APC in a hybrid journal from a commercial publisher was approximately £1,600 (2,727 USD – Björk and Solomon 2014, <u>Developing an Effective Market for Open Access Article Processing Charges</u>). This is lower than the average APC paid by the sample of UK universities, which once again can most likely be explained by a higher proportion of biomedical articles.

This data shows that while APC pricing varies tremendously between different types of publishers, and there are a very wide variety of APCs on the market, the last couple of years have seen a convergence on a narrower price range (£1,700-2,000) for hybrid journals from subscription publishers. This stability has most likely been influenced by the publication of the Finch Report in 2012 which stated an average APC price of £1,500-2,000 – a figure which was false at the time but may have become a self-fulfilling prophecy.

This shows how flexible APC prices are depending on market conditions. The level is set depending on what the market can bear, rather than the actual cost of the work involved in publishing an individual article. Therefore publishers have a lot of leeway to offer discounts and reductions on APCs.

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Original data collection: Information Power (http://www.informationpower.co.uk/)

Supplementary data is available at: http://dx.doi.org/10.6084/m9.figshare.1060243



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