



DATA NOTE

**UPDATE** Journal subscription expenditure of UK higher education institutions [version 3; referees: 4 approved]

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**Abstract**

The academic libraries of higher education institutions (HEIs) pay significant amounts of money each year for access to academic journals. The amounts paid are often not transparent especially when it comes to knowing how much is paid to specific publishers. Therefore data on journal subscription expenditure were obtained for UK HEIs using a series of Freedom of Information requests. Data were obtained for 153 HEIs' expenditure with ten publishers over a five-year period. The majority of institutions have provided figures but some are still outstanding. The data will be of interest to those who wish to understand the economics of scholarly communication and see the scale of payments flowing within the system. Further research could replicate the data collection in other jurisdictions.

**Open Peer Review**

**Referee Status:**

	Invited Referees			
	1	2	3	4
<b>UPDATE</b> version 3 published 06 Jul 2015			 report	
<b>REVISED</b> version 2 published 28 Nov 2014		 report	 report	 report
<b>version 1</b> published 13 Nov 2014	 report			

- Theodore Bergstrom**, University of California Santa Barbara USA
- Subbiah Arunachalam**, Centre for Internet and Society India
- John Dupuis**, York University Canada
- Jingfeng Xia**, Indiana University USA

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Comments (1)

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**Grant information:** The author(s) declared that no grants were involved in supporting this work.

**Competing interests:** Stuart Lawson works for Jisc Collections, a library consortium which is involved in negotiations with publishers. Jisc Collections was not involved in this research.

**First published:** 13 Nov 2014, **3**:274 (doi: [10.12688/f1000research.5706.1](https://doi.org/10.12688/f1000research.5706.1))

**UPDATE** Updates from Version 2

This version includes updates to the figures due to new data being included in the dataset, particularly regarding three additional publishers for which new FOI requests were sent (Nature Publishing Group, Royal Society of Chemistry, and Institute of Physics Publishing). It also includes a clarification of the way that VAT is recorded in the data, using a method which has changed since the previous version of this article.

**See referee reports**

## Introduction

The amount of money paid by higher education institutions (HEIs) to access academic journals is of high interest to the academic community, and academic libraries in particular as they are responsible for the vast majority of journal purchases. In light of current trends within academic publishing towards open access models rather than subscription models, the economics of the publishing industry have come under increasing scrutiny, but accurate data about the flow of money within the system is difficult to come by. Libraries do not usually publish details of their expenditure with individual publishers and there is no official source of these data. This situation led to undertaking this research to make journal subscription expenditure openly available.

Freedom of Information (FOI) requests were sent to HEIs to obtain the data. While the authors considered using a diplomatic approach and asking individual libraries to publish their data, this would have taken a considerable amount of time, and while some libraries may have been happy to publish the data themselves, others may not have seen the value in it. The situation is also complicated by the fact that some publishers insist on having non-disclosure clauses in their contracts with libraries, which prohibit them from disclosing some aspects of the deals. The UK's [Freedom of Information Act \(2000\)](#) overrides these clauses and allows full data to be obtained by sending FOI requests.

It is hoped that the data contained within this [dataset](#) will contribute to a better informed discussion surrounding the issue of how scholarly communication could or should be funded. Further research could undertake a similar endeavour in the 100 other countries ([McIntosh, 2014](#)) which have FOI laws, in order to work towards understanding the costs of scholarly communication on a global scale.

## Materials and methods

A list of HEIs was created based on UK institutions which the Higher Education Statistics Agency ([HESA, n.d.](#)) collects data about. In order to obtain data which cover the majority of HEI journal expenditure, ten of the largest publishers of academic journals were chosen (Elsevier, Wiley, Springer, Taylor & Francis, Sage, Nature Publishing Group, Oxford University Press, Cambridge University Press, Institute of Physics Publishing, and Royal Society of Chemistry).

Each institution was then sent four separate FOI requests via the website [whatdotheyknow.com](#), which sends FOI requests on behalf

of UK citizens. The site was chosen because it places all correspondence in the public domain indefinitely, thus ensuring that the data will be verifiable. The four requests were grouped as follows: Group 1 - Wiley, Springer, OUP; Group 2 - Taylor & Francis, Sage, CUP; Group 3 - Elsevier; Group 4 - Nature Publishing Group, RSC, IOP. The groupings were chosen to ensure that each request would not be too onerous for an HEI to respond to, as stipulated under the UK's FOI law. Elsevier data were requested separately because the nature of their contract with libraries means that the institution must contact Elsevier when it receives a request, thus increasing the time burden on institutions. An individual known to the authors sent similar requests to Russell Group universities for Wiley, Springer, and OUP expenditure earlier in 2014, so these requests were not duplicated and the data obtained by them ([Brook, 2014](#)) have now been incorporated into the main dataset.

The figures should include payments made directly to the publishers as well as any payments made to subscription agents or intermediaries for the purchase of, and/or access to, the publishers' academic journals. Institutions were asked to provide data for the payment for journal packages such as Jisc Collections' NESLI agreement, as well as for individual journals, and to include VAT where possible. Since the authors are relying solely on data provided by the HEIs it is not possible to independently verify whether all of these aspects of the requests have been adhered to. While this may result in some inaccuracies in individual figures, the authors do not consider that the overall scale will be unduly affected.

Data were requested for five calendar years (2010–14). Some institutions provided data in financial years, which for UK academic institutions is from August–July. In these cases the financial year was mapped on to the second of the two years, for example 2009–10 was mapped on to 2010. This is because although during the financial year 2009–10 it is possible that the money was actually transferred during 2009, it will have been used to pay for subscriptions for 2010. Amounts paid in currencies other than GBP have been converted into GBP based on the exchange rate on 1 January of the year in question. Most figures included VAT, and although in early versions of the dataset VAT was added to those figures which excluded it (at UK rates of 17.5% in 2010 and 20% in 2011–14), this is no longer the case. In the UK, VAT is only applied to electronic and not print publications. Since it is not usually clear what proportion of the expenditure is on print and what is on electronic subscriptions, VAT has not been added to the figures. The resultant figures are therefore slightly lower than they should be but it was felt that this is preferable to the risk of unduly inflating them.

Caution must be exercised when comparing the amount that an institution pays to the amount paid by other institutions, because it is likely that they are not purchasing access to exactly the same 'package' of content. In some cases institutions pay for large bundles of titles, and in other cases they pay for individual titles. We did not ask institutions to provide precise details of what they purchased because we believed that doing so could add significantly to the time it would take for them to produce responses to the requests, which may well have led to refusals. A few institutions did provide this level of detail in their response.

The **dataset** is now well-populated with over £430m of expenditure but it is still incomplete because at the time of writing, out of the 589 FOI requests that were sent there are still 28 outstanding for which data has not yet been provided. Further data will be incorporated into the **dataset** as it becomes available.

#### Journal subscription costs - FOIs to UK universities

<http://dx.doi.org/10.6084/m9.figshare.1186832>

#### Data availability

Data can be accessed directly via Figshare at [http://figshare.com/articles/Journal\\_subscription\\_costs\\_FOIs\\_to\\_UK\\_universities/1186832](http://figshare.com/articles/Journal_subscription_costs_FOIs_to_UK_universities/1186832), <http://dx.doi.org/10.6084/m9.figshare.1186832> (Lawson & Meghreblian, 2014).

Data were obtained from each institution sending separate FOI requests via the website [whatdotheyknow.com](http://whatdotheyknow.com). Requests can be

viewed individually at [https://www.whatdotheyknow.com/user/stuart-lawson#foi\\_requests](https://www.whatdotheyknow.com/user/stuart-lawson#foi_requests) and [https://www.whatdotheyknow.com/user/ben\\_meghreblian#foi\\_requests](https://www.whatdotheyknow.com/user/ben_meghreblian#foi_requests).

#### Author contributions

Stuart Lawson authored the data note and designed, carried out, and recorded the data collection. Ben Meghreblian designed, carried out, and recorded the data collection.

#### Competing interests

Stuart Lawson works for Jisc Collections, a library consortium which is involved in negotiations with publishers. Jisc Collections was not involved in this research.

#### Grant information

The author(s) declared that no grants were involved in supporting this work.

## References

Brook M: **Wiley, Springer and Oxford University Press journal subscription figures - Russell Group Universities (2010 – 2014)**. *Figshare*. 2014.  
[Publisher Full Text](#)

**Freedom of Information Act 2000**.  
[Reference Source](#)

Lawson S, Meghreblian B: **Journal subscription costs – FOIs to UK universities**.

*Figshare*. 2014.  
[Data Source](#)

McIntosh T: **'Paraguay is 100th nation to pass FOI law, but struggle for openness goes on'**. *The Guardian*. 2014.  
[Reference Source](#)

**'Overview'**. HESA. 2014.  
[Reference Source](#)

# Open Peer Review

Current Referee Status:



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## Version 3

Referee Report 08 July 2015

doi:10.5256/f1000research.7255.r9342



**John Dupuis**

Steacie Science & Engineering Library, York University, Toronto, ON, Canada

I approve of the current revisions to this article.

**I have read this submission. I believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.**

**Competing Interests:** No competing interests were disclosed.

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## Version 2

Referee Report 20 January 2015

doi:10.5256/f1000research.6300.r7247



**Jingfeng Xia**

Department of Informatics and Computing, Indiana University, Indianapolis, IN, USA

Data sharing is critical for decreasing duplicated work and increasing the possibility of comparative analyses. Researchers and practitioners will be able to develop diverse thinking and design appropriate collaborations based upon existing data. Data sharing will also allow others to validate one another's discoveries so as to encourage research accountability and transparency.

Stuart Lawson and Ben Meghreblian made a great effort to open their data on the subject of journal subscription expenditure. Their research design for collecting such data looks sound. People can expect to examine their data and make possible comparisons across libraries.

While using their data, one needs to be aware that journal subscriptions are very complicated in library practices. Many variables may potentially affect the pricing and make comparisons tricky. Furthermore, their published data are aggregated, preventing users from drilling down through detailed numbers. However, it is a good start. We look forward to reading more data published for free access.

**I have read this submission. I believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.**

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**Competing Interests:** No competing interests were disclosed.

Referee Report 20 January 2015

doi:10.5256/f1000research.6300.r7246



**John Dupuis**

Steacie Science & Engineering Library, York University, Toronto, ON, Canada

The authors have done an excellent job of gathering and presenting data about journal subscription expenditures in the UK. I have no major suggestions for the current version of the article.

The only minor suggestion I would have is that the authors may have wanted to include more information and links to similar data that has already been collected for both the UK and other countries, such as the data collected by Timothy Gowers or Theodore C. Bergstrom *et al.*

**I have read this submission. I believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.**

**Competing Interests:** No competing interests were disclosed.

Referee Report 13 January 2015

doi:10.5256/f1000research.6300.r7291



**Subbiah Arunachalam**

Centre for Internet and Society, Bangalore, India

Academic and research libraries purchase large number of professional journals from publishers, often in packages (also referred to as bundles). Often publishers insist on non-disclosure clauses in the contracts they sign with subscribing institutions, and they sell journals to different institutions at different prices. Clever negotiators (as those in the University of California system) bargain hard and obtain better deals, but others pay needlessly high prices. Selling the same product at different prices to different consumers is unethical. Till recently it was very difficult or even impossible to obtain information on how much a university pays a (commercial) publisher as subscription to journals. Now people like Lawson and Meghreblian (and Bergstrom, Timothy Gowers) have found a way to overcome this unethical practice of publishers.

This short paper and the data is on how much each university in the UK pays seven publishers by way of subscription to journals. The paper is well written and it makes public the voluminous data they have collected using the Freedom of Information Act.

**I have read this submission. I believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.**

**Competing Interests:** No competing interests were disclosed.

## Version 1

Referee Report 14 November 2014

doi:10.5256/f1000research.6101.r6694

**Theodore Bergstrom**

Economics Department, University of California Santa Barbara, Santa Barbara, CA, USA

The authors have collected a set of data that is likely to be very useful both to researchers who investigate journal pricing and to librarians who want to know more about what others are paying when they make their own bargains with publishers. The methods of collection seem sound and the work appears to be carefully done.

There is one thing that I would like to see clarified. The report states the amounts that are paid to each publisher, but do not make it clear whether all of the reported institutions are buying the same thing from the publishers. For example, Elsevier markets a "Freedom package" which includes a published list of journals constituting most, but not all, of the journals they publish.

They also market a "Complete package" which does not include the entire Freedom package, but basically a set of journals to which the university has previously subscribed. Elsevier also separately markets the Cell Press journals, a "clinical medicine package", a series of monographs called "advances in ...." Some of the contract totals that I have seen include all or some of these.

Similarly, Springer sells not only its journal package, but also a large number of textbooks and monographs. Some libraries' total expenditure with Springer may include these. It would be good to know if your totals are just for the journal bundle.

With some of the other publishers, it also is not entirely clear whether the totals reported are from libraries that do not subscribe to the publisher's entire journal bundle but only to some limited subset. Once again, it would be good to have this clarified.

**I have read this submission. I believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.**

**Competing Interests:** No competing interests were disclosed.

Author Response 17 Nov 2014

**Stuart Lawson,**

Thank you for your comments, you're right that it would be best to clarify what is actually being purchased in each instance, as far as we are able. When one institution pays a different amount to another institution, it is likely that they are not purchasing access to exactly the same 'package' of content. We did not ask institutions to provide this information as part of the FOI requests because we believed that in some cases it would add significantly to the time it would take for them to produce responses, which may have led to refusals. Some institutions did provide this level of details in their response; those who purchase access directly from a publisher rather than through Swets appear to find it easier to provide such data.

One way we could highlight this would be to mark the figures in some way to indicate whether an institution has paid for the complete package of content from a given publisher. However, in order to do this consistently, we would need to contact most or all of the institutions again in order to confirm this with them. For some institutions this information can be gleaned from the original FOI response which is viewable on [whatdotheyknow.com](http://whatdotheyknow.com).

The most accurate way to compare between different institutions would be if we asked for each institution to release the title list of purchased content for each publisher during each year. Through a project I am working on at Jisc Collections, which aims to build an 'entitlement registry' of this information for all UK institutions, I have learned that it may be very difficult for all institutions to provide that data.

**Competing Interests:** No competing interests were disclosed.

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## Discuss this Article

Version 2

Reader Comment 06 Mar 2015

**Peter H Uetz**, Center for the Study of Biological Complexity, Virginia Commonwealth University, USA

There is no real data in this paper. Is there a reason for this? Why is all the data in the supplement? A summary within the paper (i.e. pdf) would have been useful.

**Competing Interests:** none

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