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The Evolution of Open Access Journal Publishing 2010-2016

A Closer Look at Journals Indexed in Scopus

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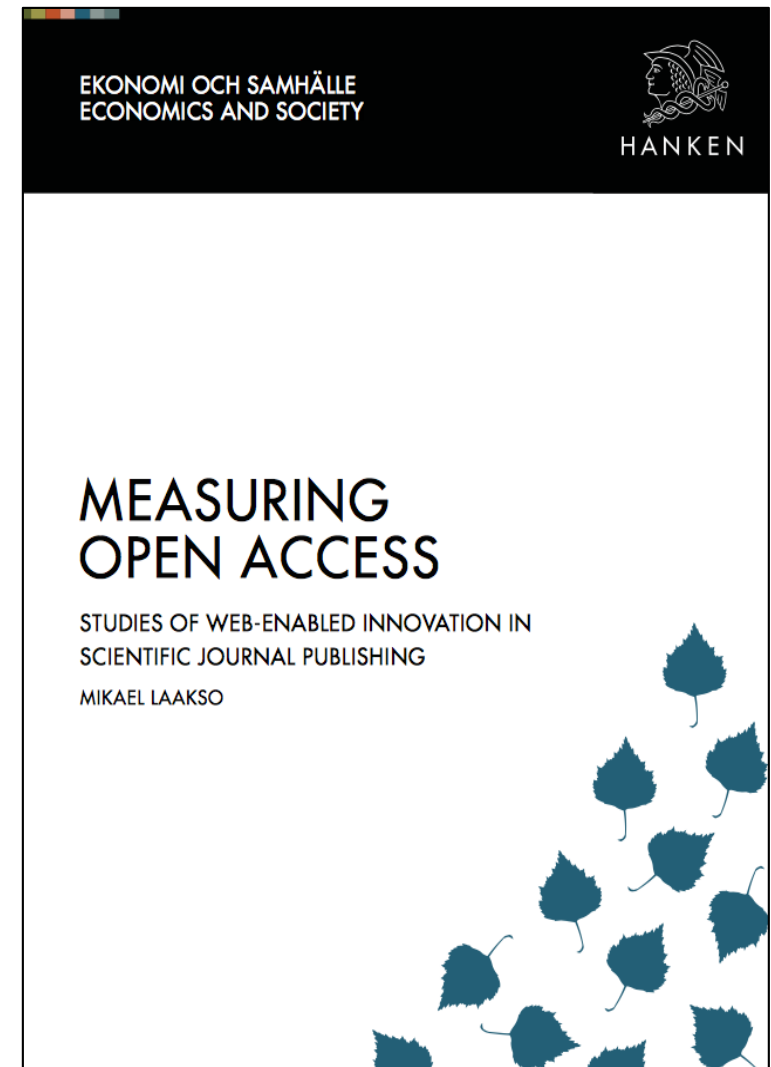
COASP 2017 // 21.9.2017



My background and perspective



- » Research has been focusing on how OA has been introduced and changed the scholarly journal publishing industry.
- » Chairman of FinnOA, an unofficial working group for advancing open access to research publications in Finland.
- » Member of the strategy group for journal publisher negotiations on behalf of the Finnish university library consortium (FinElib).



<http://hdl.handle.net/10138/45238>



Disclaimer



This is work-in-progress

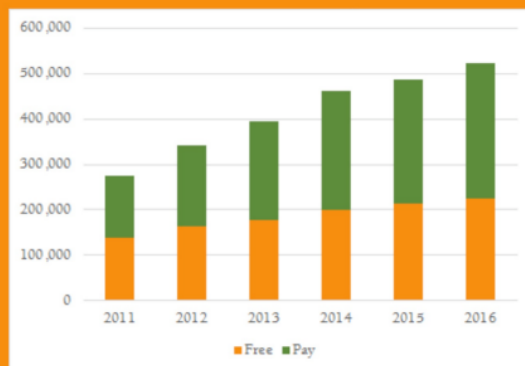
- » Preliminary intermittent results, adjustments to data coding still pending. Metadata entry still missing for ~1% of included journals.
- » Final results will be submitted for peer-review and journal during October 2017. Preprint likely.
- » All feedback welcome (mikael.laakso@hanken.fi)

Background

What do we know? About the growth of Open Access



GOAJ2 Gold Open Access Journals 2011-2016



Walt Crawford

<https://waltcrawford.name/goaj2.pdf>

PeerJ Preprints

NOT PEER-REVIEWED

The State of OA: A large-scale analysis of the prevalence and impact of Open Access articles

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<https://peerj.com/preprints/3119/>



What do we know? About converting journals to OA



Converting Scholarly Journals to Open Access: A Review of Approaches and Experiences

By David J. Solomon, Mikael Laakso, and Bo-Christer Björk

With interpolated comments from the public and a panel of experts

Edited by Peter Suber

Published by the Harvard Library
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This entire report, including the main text by David Solomon, Bo-Christer Björk, and Mikael Laakso, the preface by Peter Suber, and the comments by multiple authors is licensed under a *Creative Commons Attribution 4.0 International License*.

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<https://dash.harvard.edu/handle/1/27803834>

What do we not know?



Lack of a recent unified study that would incorporate

- » How open access journal publishing has developed longitudinally relative to subscription content, including relative share of delayed open access (and hybrid open access).
- » A differentiation between journals that have started as OA from the start and journals that have converted to OA .
- » APC prevalence and APC levels of OA journals based on the OA “origin” of the journal.

Methodology

*Inclusion criteria:
Scopus-indexed journals included in
either DOAJ or ROAD*

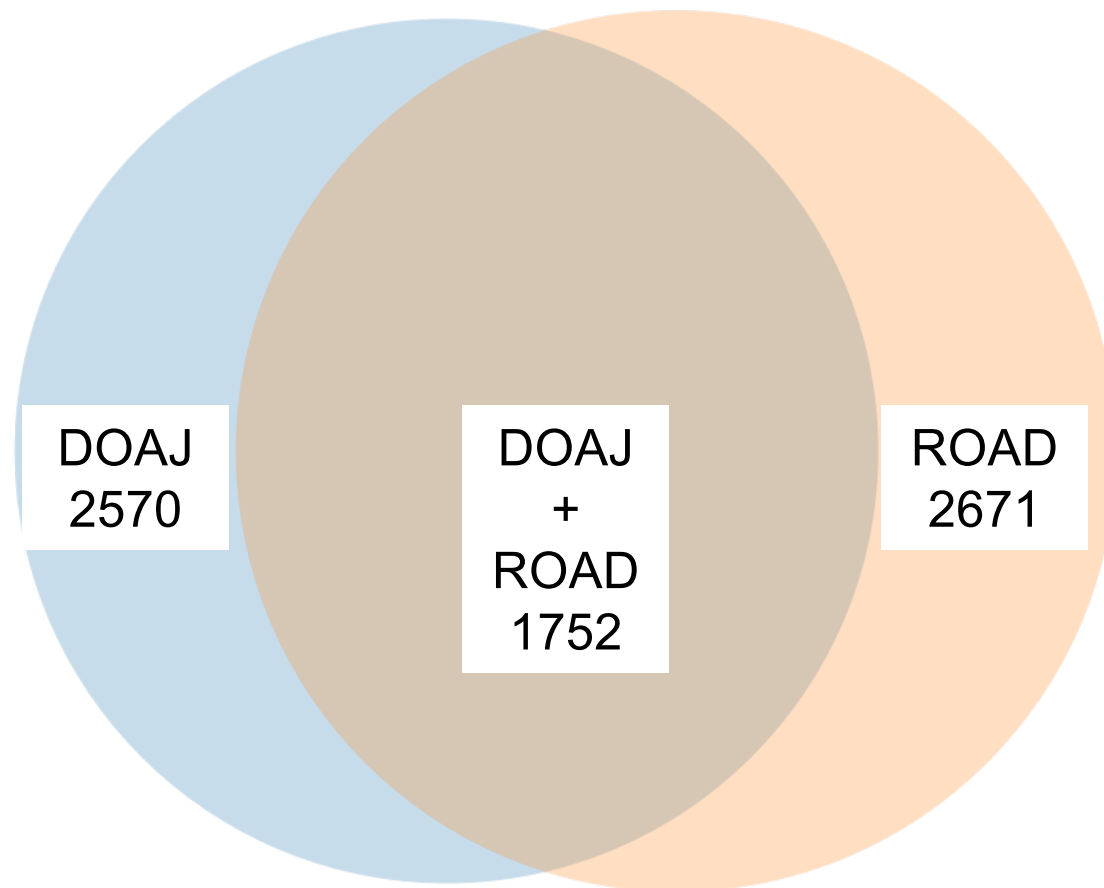


Scopus[®]

DOAJ DIRECTORY OF
OPEN ACCESS
JOURNALS

ROAD DIRECTORY
OF OPEN ACCESS
SCHOLARLY
RESOURCES

How many Scopus-indexed journals (published >0 documents in 2016)



In either:
3489

In neither:
17210

Work-in-progress, please do not cite

Some pre-existing data could be leveraged



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Journal of Informetrics

journal homepage: www.elsevier.com/locate/joi

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Journal of Informetrics

A longitudinal comparison of citation rates and growth among open access journals

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ABSTRACT

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1. Introduction

About 20 years ago it became feasible to distribute digital versions of scholarly journals over wide area networks. Digital distribution dispenses with the incremental costs of printing and delivery, enabling dissemination of scientific publications at no charge while funding the “first copy costs” of publication via other means. A core concept of open access (OA) journal publishing is a transition from subscription fees to alternative ways of funding publication (BOAI, 2002). OA has challenged the established business models and stakeholder relationships in the scientific publishing industry, the implications of which have been debated and benefits argued at length (see e.g. Suber, 2012; Willinsky, 2006).

Since the early 1990s OA journal publishing has been growing at a far faster rate than traditional subscription journal publishing. This has been particularly true in the Scientific Technical and Medical (STM) fields (Laakso et al., 2011). However OA publishing currently makes up only a small fraction of the total scholarly literature. An estimated 340,000 articles a year are published in OA journals almost evenly split between journals charging an Article Processing Charge (APC) to fund publication and journals that do not (Laakso & Björk, 2012).

There is a great deal of misinformation concerning OA publishing which is often disparaged as lower quality than traditional subscription publishing (Butler, 2008). It is difficult to measure the quality of scholarly journals. Despite their

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Delayed Open Access: An Overlooked High-Impact Category of Openly Available Scientific Literature

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Delayed open access (OA) refers to scholarly articles in subscription journals made available openly on the web directly through the publisher at the expiry of a set embargo period. Although a substantial number of journals have practiced delayed OA since they started publishing e-versions, empirical studies concerning OA have often overlooked this body of literature. This study provides comprehensive quantitative measurements by identifying delayed OA journals and collecting data concerning their publication volumes, embargo lengths, and citation rates. Altogether, 492 journals were identified, publishing a combined total of 111,312 articles in 2011; 77.8% of these articles were made OA within 12 months from publication, with 85.4% becoming available within 24 months. A journal impact factor analysis revealed that delayed OA journals have citation rates on average twice as high as those of closed subscription journals and three times as high as immediate OA journals. Overall, the results demonstrate that delayed OA journals constitute an important segment of the openly available scholarly journal literature, both by their sheer article volume and by including a substantial proportion of high-impact journals.

By “open access” to this literature, we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full text of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited.

The BOAI definition is rather liberal in that it grants users a great deal of freedom to do what they want with the published content. OA is, however, not a simple on-off phenomenon in which a publication either is OA or is not. Ideally, an article is open from day one, directly through the publisher’s own website and provided with extensive and well-defined usage rights (known as *libre OA*), which are often defined by referring to a Creative Commons license. Less ideal forms restrict specific usage of the published content (e.g., no redistribution, human reading only), limit openly available copies to nonfinal manuscript versions, or delay the open availability through an embargo period. In an attempt to provide an overview of the key variables involved, Figure 1 lists some criteria according to which OA can be classified. The categories applicable to this study are listed in italics.

Earlier efforts at identifying and labeling different aspects of OA have been made; recognizing the complexity of the phenomenon is nothing new. In his seminal book, Willinsky (2005) describes 10 flavors of OA, including delayed OA. Figure 1 includes within its scope both what in the OA debate is commonly called *gold OA* (provided by the publisher) and *green OA* (manuscript copies provided by the author and other parties). Interestingly, *gold OA* is by definition always immediate, whereas *green OA* includes delayed articles, resulting from publisher embargoes or delays in self-archiving. Thus *gold* and *green OA* are not two opposite concepts; rather, *gold* + *delayed OA* should be contrasted with *green OA*.

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JOURNAL OF THE AMERICAN SOCIETY FOR INFORMATION SCIENCE AND TECHNOLOGY, 64(7):1323–1329, 2013

Data 2017, 2(2), 13; doi:10.3390/data202013

Open Access

Data Descriptor

Open Access Article Processing Charges (OA APC) Longitudinal Study 2016 Dataset

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Abstract: This article documents Open access article processing charges (OA APC) Main 2016. This dataset was developed as part of a longitudinal study of the minority (about a third) of the fully open access journals that use the APC business model. APC data for 2016, 2015, 2014, and 2013 are primarily obtained from publishers’ websites, a process that requires analytic skill as many publishers offer a diverse range of pricing options, including multiple currencies and/or differential pricing by article type, length or work involved and/or discounts for author contributions to editing or the society publisher or based on perceived ability to pay. This version of the dataset draws heavily from the work of Walt Crawford, and includes his entire 2011–2015 dataset; in particular Crawford’s work has made it possible to confirm “no publication fee” status for a large number of journals. DOAJ metadata for 2016 and 2014 and a 2010 APC sample provided by Solomon and Björk are part of the dataset. Inclusion of DOAJ metadata and article counts by Crawford and Solomon and Björk provide a basis for studies of factors such as journal size, subject, or country of publication that might be worth testing for correlation with business model and/or APC size.

Data Set: <http://dx.doi.org/10.5683/SP/KC2NBV>

Scopus title list



DIRECTORY
OF OPEN ACCESS
SCHOLARLY
RESOURCES

DOAJ DIRECTORY OF
OPEN ACCESS
JOURNALS



SCImago
Journal & Country
Rank

However, a lot was collected by visiting each journal website

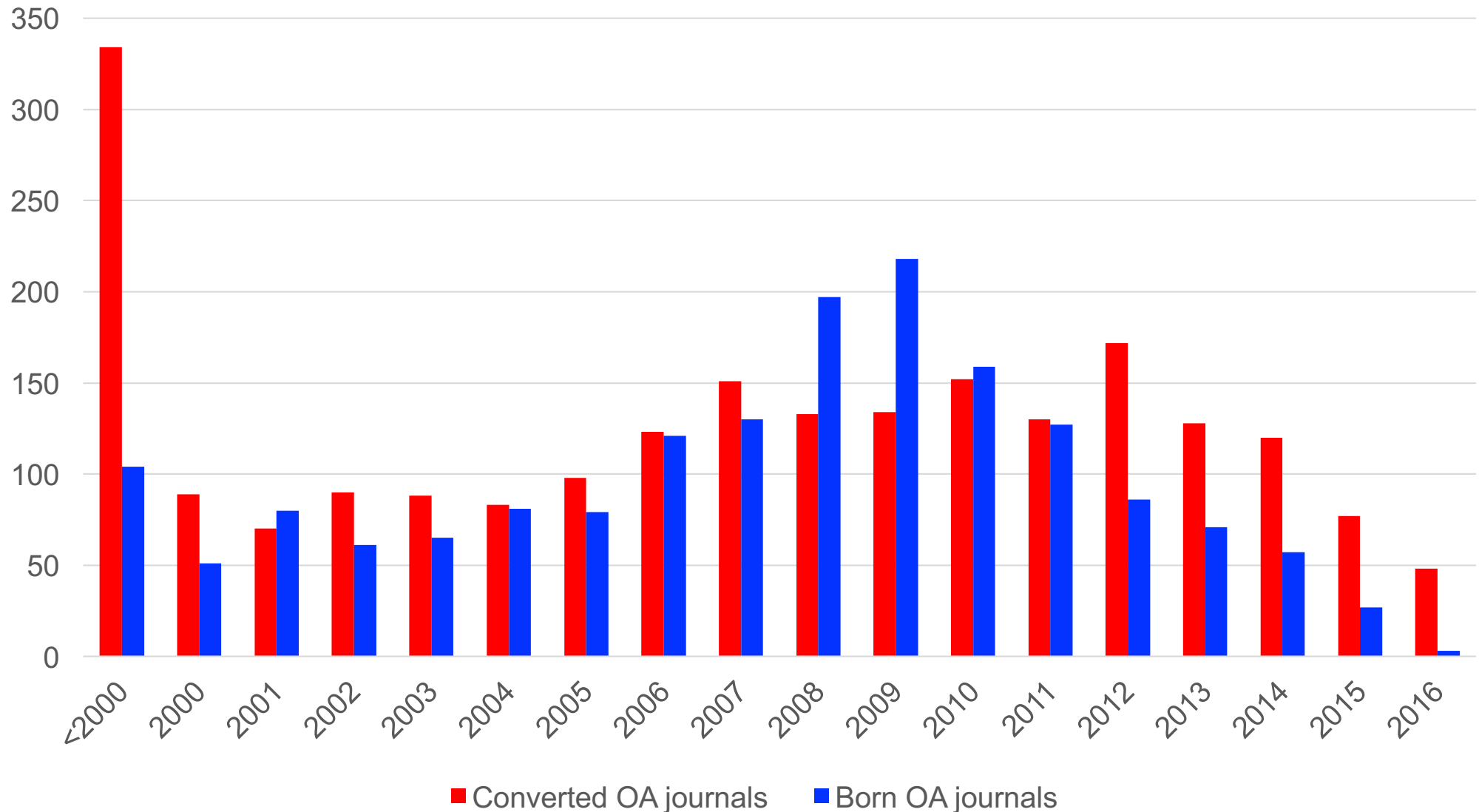


- » **Collecting missing APC data**
- » **Classifying journals as either Born OA/Converted OA**
- » Year added to DOAJ/ROAD
- » DOAJ metadata "Year open access content began"
- » Editorials, text on website
- » Year of website creation
- » Publisher change, license change
- » Year of initial PDF metadata



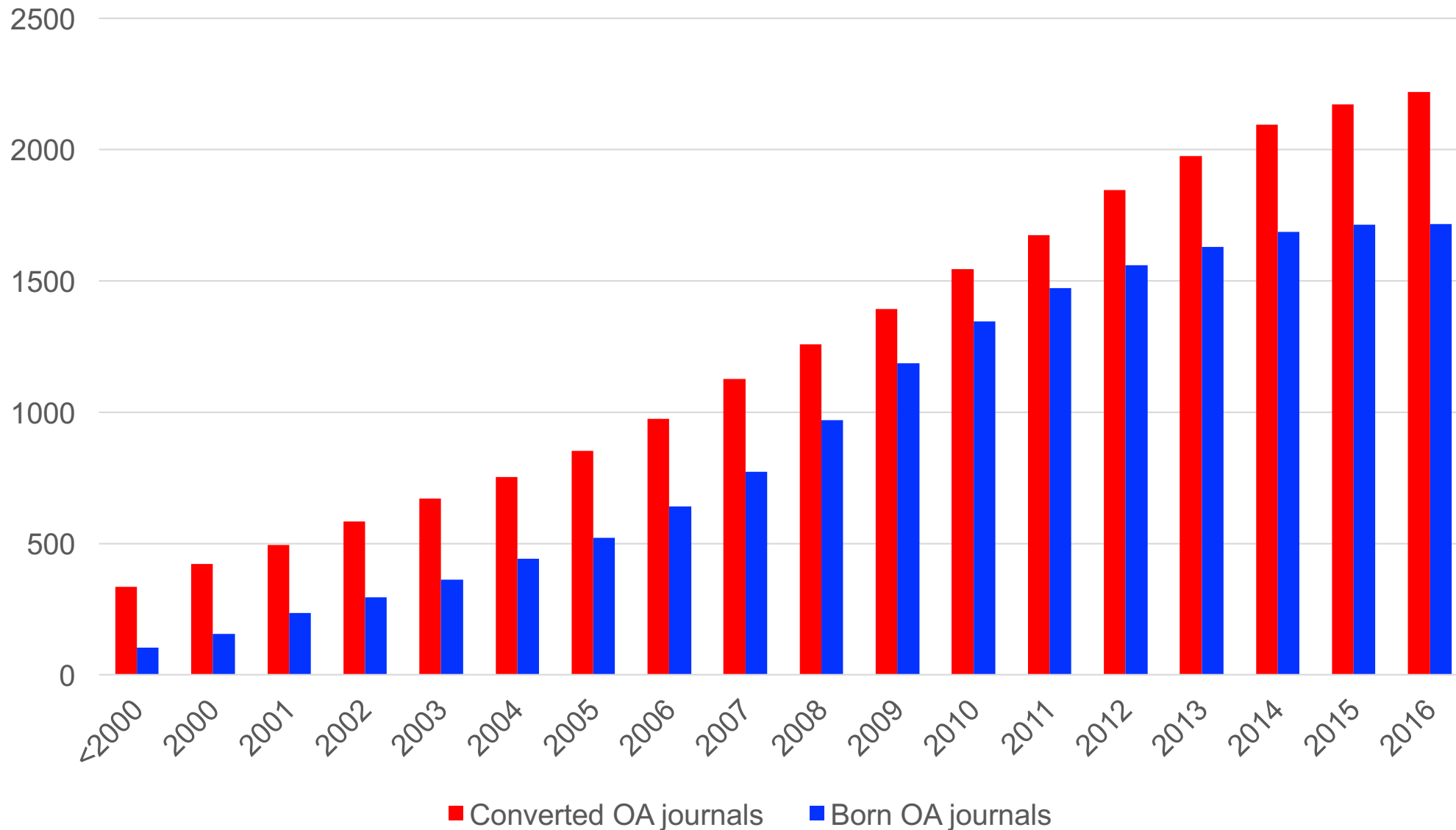
Results

When did journals start OA publishing?



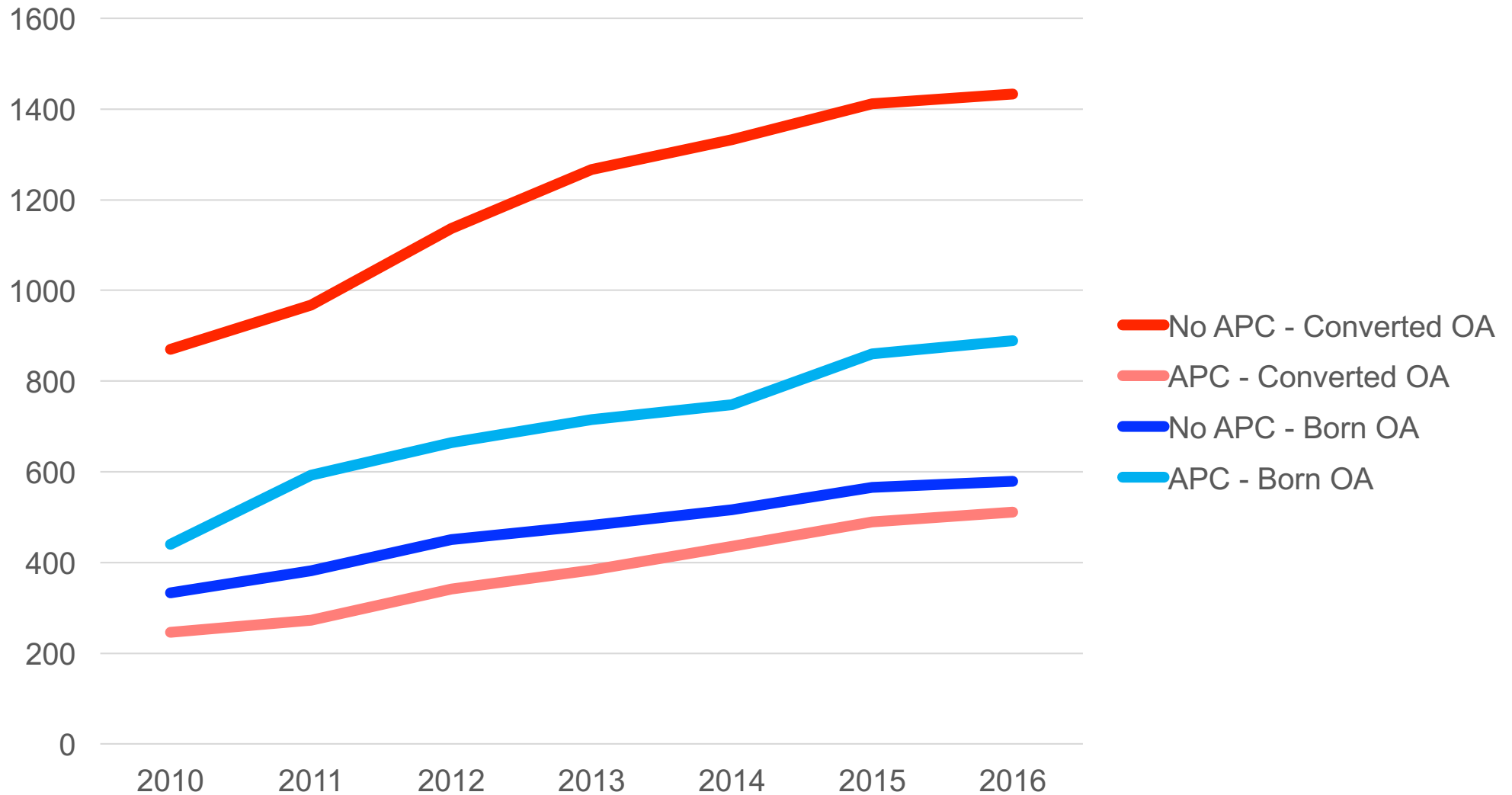
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When did journals start OA publishing? (Cumulative)



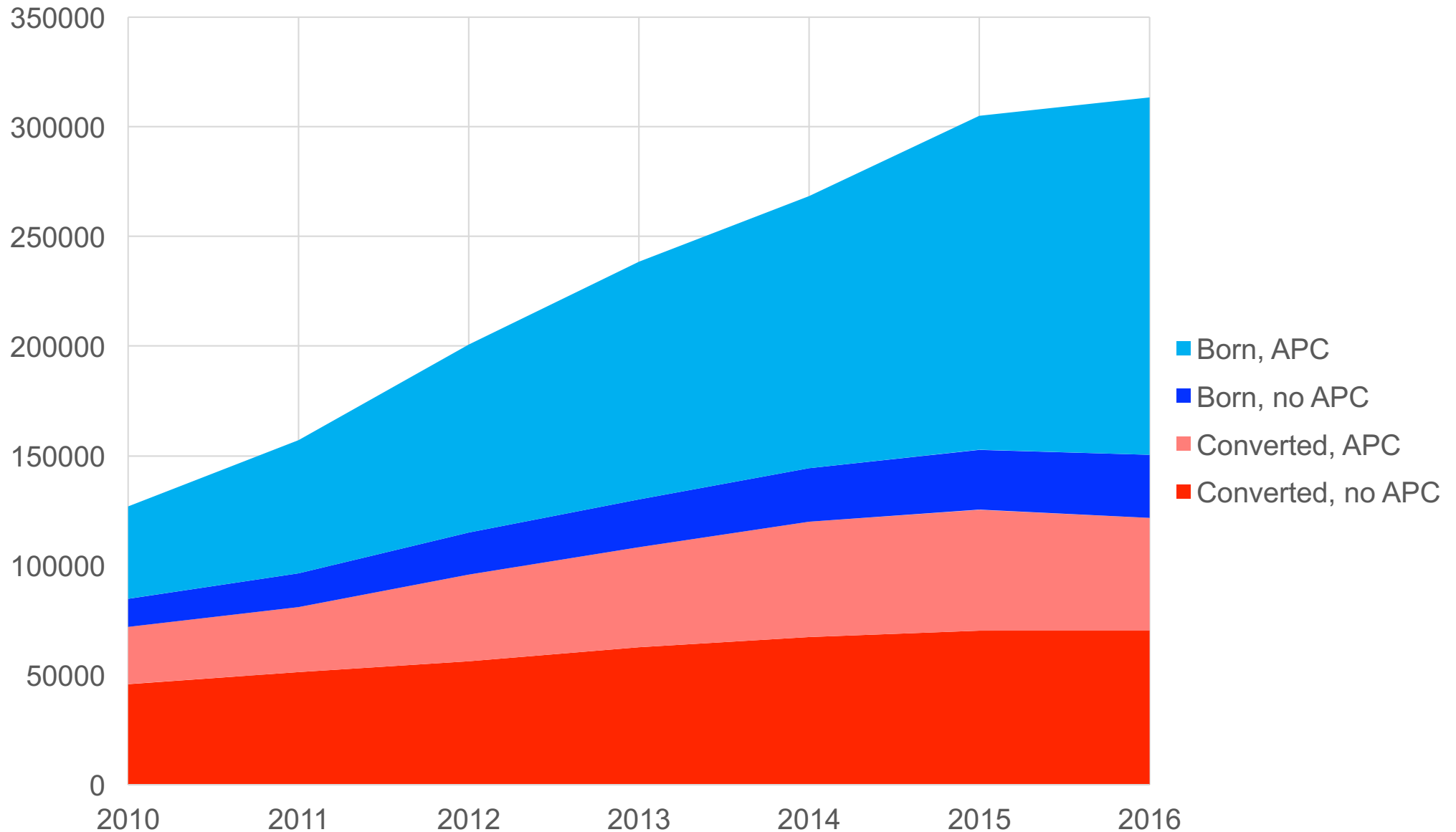
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Actively publishing journals Born OA vs. Converted OA



Work-in-progress, please do not cite

Article volumes Born OA vs. Converted OA

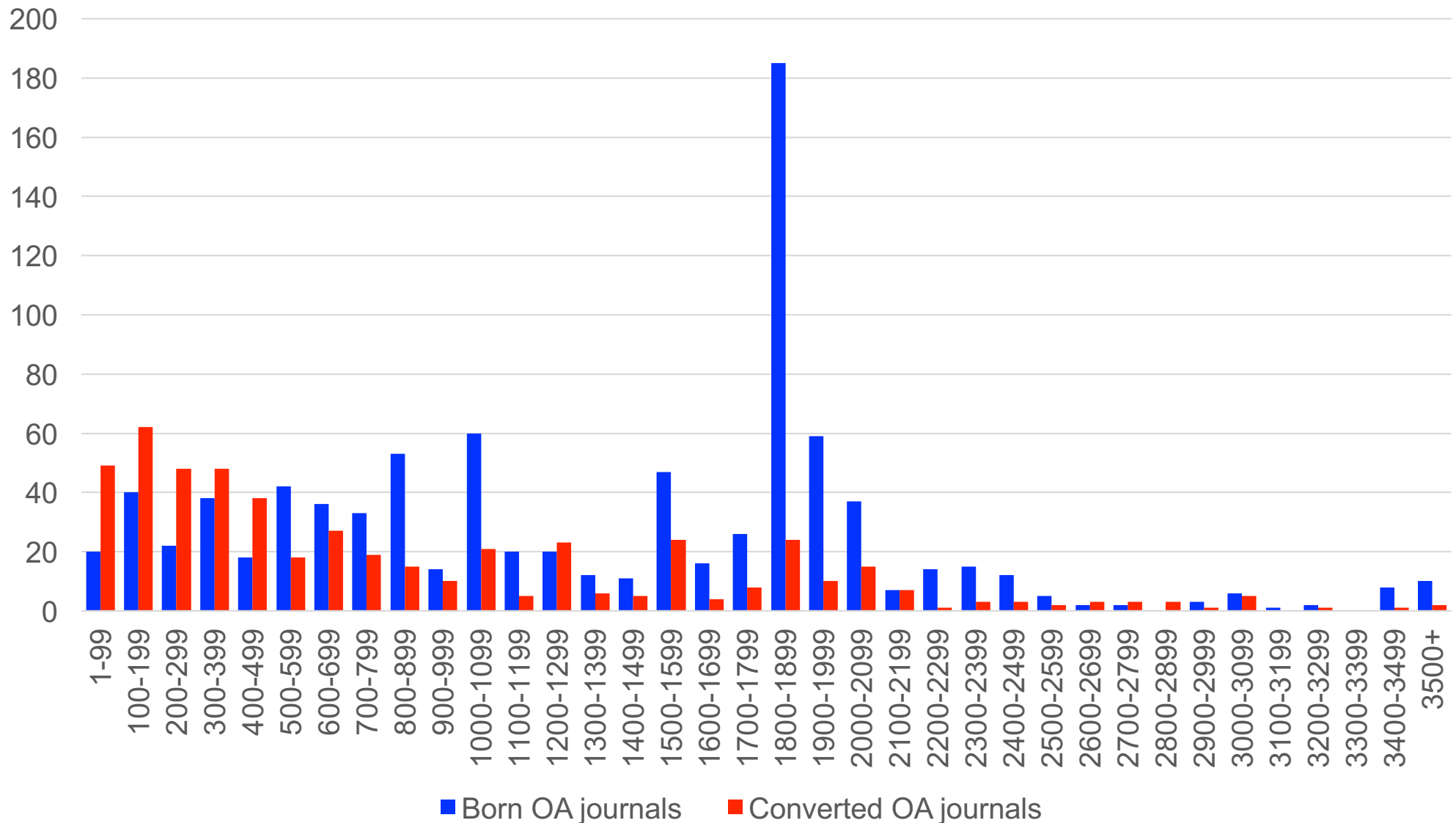


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Journal APCs (in converted USD). 2028 no APC journals not visualised

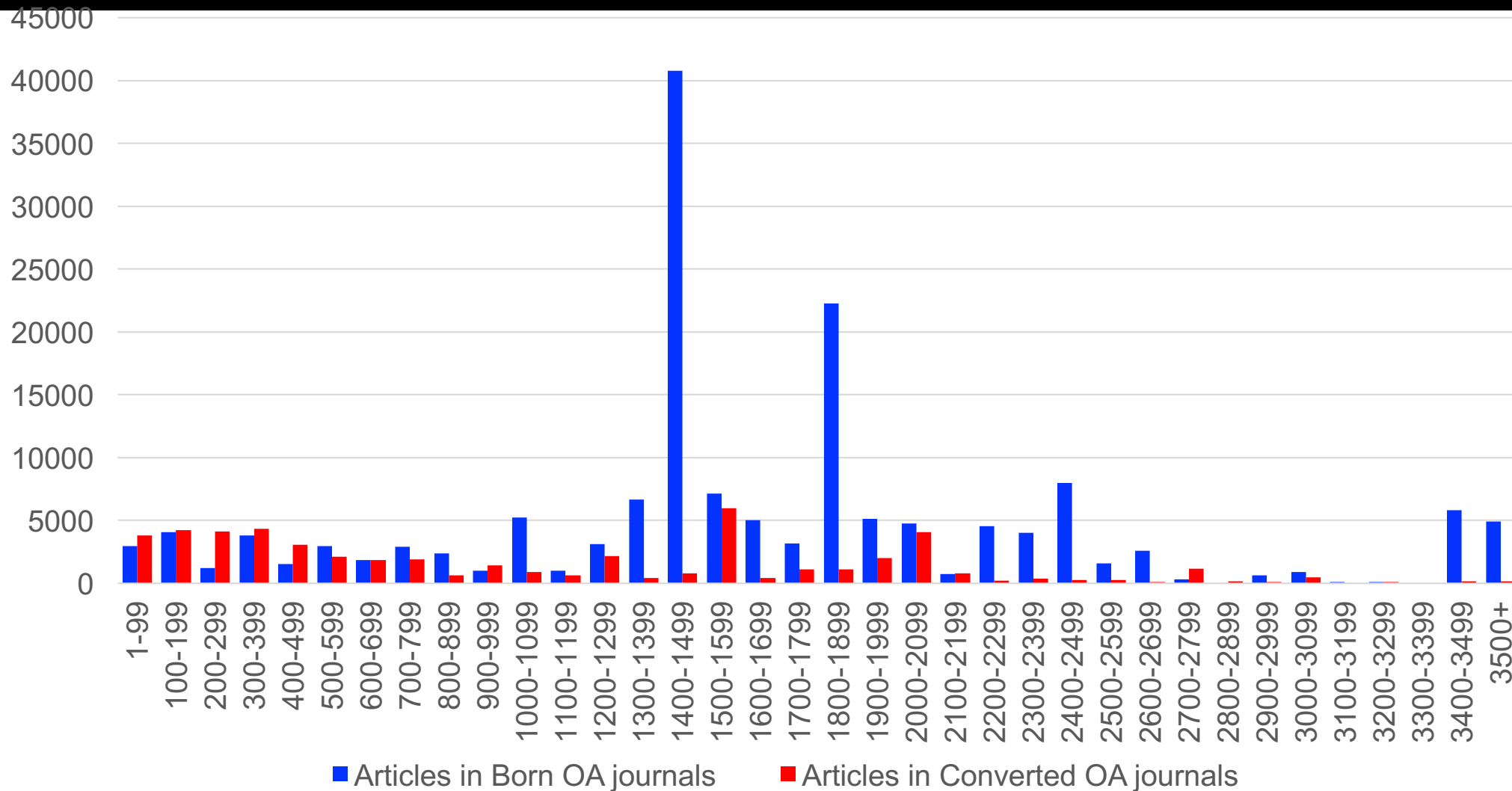


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Journal APCs (in converted USD). 98 904 no APC articles not visualised



Work-in-progress, please do not cite

Full immediate open access in Scopus 2010-2016



	2010	2011	2012	2013	2014	2015	2016
Journals	1934	2261	2640	2898	3082	3375	3457
% of all Scopus	10 %	12 %	13 %	14 %	15 %	16 %	17 %
Articles	129736	161374	203964	241385	271477	308559	317779
% of all Scopus	8 %	10 %	11 %	13 %	14 %	16 %	16 %

Work-in-progress, please do not cite

Conclusions



- » The shift towards OA is strong, and the landscape has completely changed in the last five years.
- » Still a lot of manual work involved to measure the development of OA publishing, however, things have and continue to improve.
- » A lot could still be learnt from taking a closer look at how the thousands of converted OA journals have managed the transition
- » The **ISSN-GOLD-OA 2.0** list is a great resource that should be used for similar studies in the future (<https://pub.uni-bielefeld.de/data/2913654>).
- » The analysis will continue with by including factors like e.g. country and research discipline.

Thank You!

Questions?

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