

**Complementary article dissemination via  
journals and repositories:  
economic evidence from the PEER project**

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# Introduction

Complementary article dissemination via journals and repositories: economic evidence from the **PEER project**

-**PEER:** Publishing and the Ecology of European Research, is a **collaborative project** involving publishers, repositories and the research community, investigating the **effects of large-scale, systematic depositing** of authors' final peer-reviewed accepted manuscripts on journals and on the **wider ecology of scientific research in Europe**.

Supported by the EC eContent*plus* programme, PEER runs from 2008 to 2012.

## **PEER Observatory:**

>30,000 manuscripts provided by publishers and processed by central 'PEER Depot'  
~12,000 eligible EU manuscripts after processing  
~7,400 embargo expired and available via participating repositories

Three commissioned areas of research:

**Behavioural:** Authors and Users vis-à-vis Journals and Repositories (Dept Info Soc & LISU, Loughborough Uni)

**Usage:** Journals and Repositories (CIBER, UCL)

**Economics:** Deposit and Access at Journals and Repositories (ASK Bocconi)



# PEER participants

**PEER Executive:** International Association of Scientific, Technical and Medical Publishers (STM), European Science Foundation, Göttingen State and University Library, Max Planck Society, INRIA and **Technical Partners:** SURF Foundation and University of Bielefeld

**STM publishers:** BMJ Publishing Group; Cambridge University Press; EDP Sciences; Elsevier; IOP Publishing; Nature Publishing Group; Oxford University Press; Portland Press; Sage Publications; Springer; Taylor & Francis Group; Wiley-Blackwell

**PEER repositories:** eSciDoc.PubMan.PEER, Max Planck Digital Library (MPDL), Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V. (MPG); HAL, CNRS & Institut National de Recherche en Informatique et en Automatique (INRIA); Göttingen State and University Library (UGOE); Kaunas University of Technology, Lithuania; University Library of Debrecen, Hungary; SSOAR (GESIS – Leibniz Institute for the Social Sciences); TARA - Trinity College Dublin (TCD), Ireland



## The arguments for OA

a) Research outcomes is a public good → cost of its dissemination and preservation may or should be covered by public funding.

b) OA allows faster circulation of ideas and has a higher research impact than content published in journals

c) OA content is cheaper to publish than content published by commercial publishers (Houghton et al 2009 on Tenopir & King 2000; Fisher 2008; Swan 2008)

**Repositories, toll access journals and open access journals as complementary actors in a platform driven competition**

## The ambiguity of reality

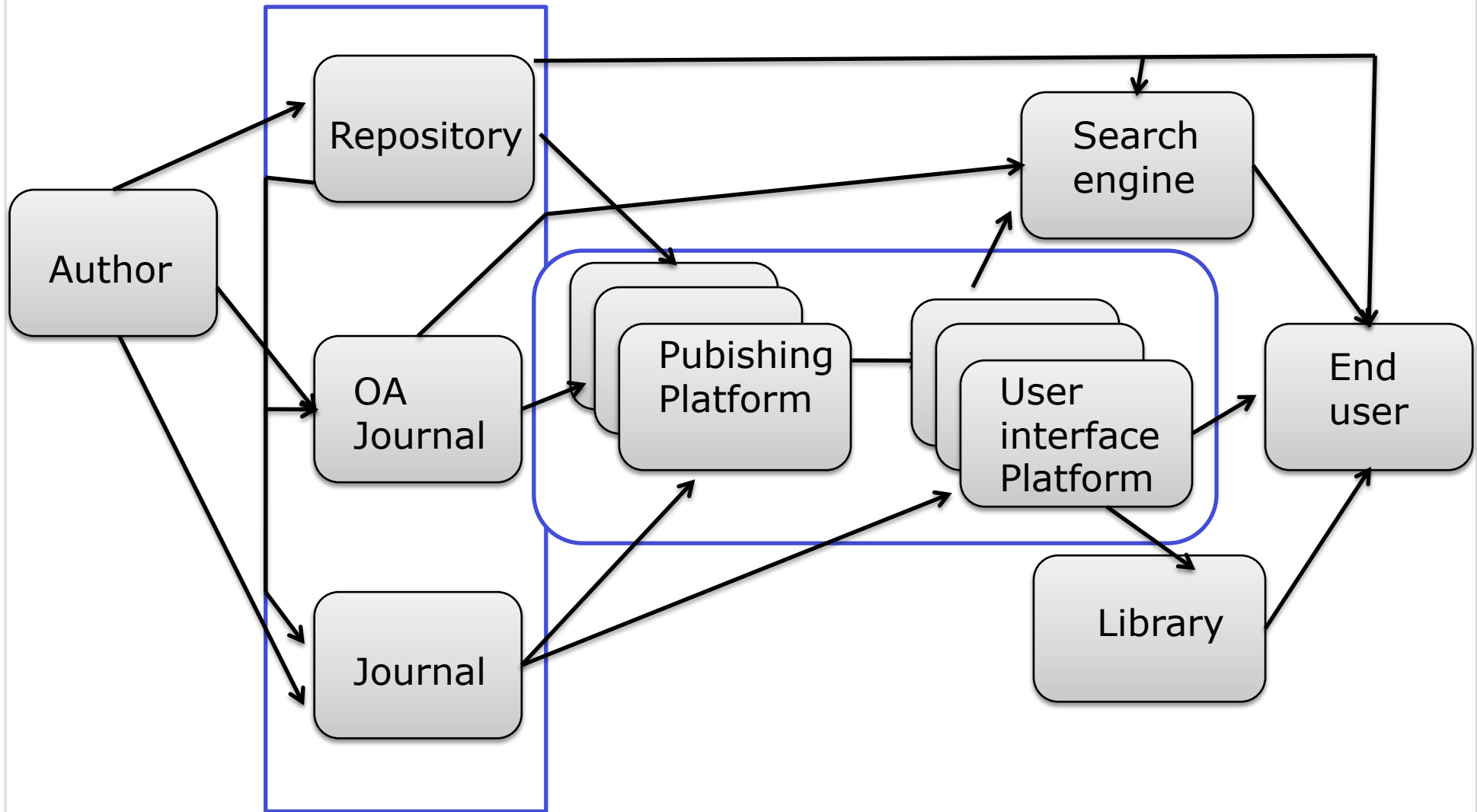
What is the most effective way to spend public money? Cost benefit analysis

There is high impact and low impact content. OA is one condition for research impact

Difficult to say, due to methodological and conceptual difficulties. Cost of publication has decreased, but changes have occurred in the way value is created and distributed among actors



# The research question: value creation and distribution in platform driven competition



# Methodology

- Case based analysis
- 11 publishers,
  - 7 repositories
  - 7 platforms
- End user perspective and identification of key activities driving value;
- Assessment of costs associated with macro activities; direct costing method to ensure comparability of results;
- Identification of conditions for platform sustainability
- Desk analysis + multiple collective, face to face and phone interviews
- comparability of results for 8 publishers and 5 repositories



# Findings

**Platform** set up costs: hard to quantify; huge discrepancies among cases analysed. Order of magnitude: million of USD

Platform maintenance costs: between 170K to 400 k per year



Significant scale effects

Scalability and speed of growth is crucial

	N. of institutions	N.of journals	N.of articles
Dspace	915		
Eprints	366		
Fedora	172		
Jstor	6.425	1.289	3,2 million
Sciverse		2.392	10 milion
Wiley		1.500	4 milion
Springerlink		2.000	4 million

# Value creation on the author and publisher side

- Ownership or management of quality certified content + ownership or management of high volumes of content;
- Services to publishers and editors: streamlining of peer review management; publishing services; platform related services (hosting; maintenance; usage reporting...)



If critical mass is reached, publishing costs can be significantly reduced





# Value creation on the user side

- Careful assessment of needs of bigger communities of researchers (some disciplines are intrinsically bigger than others in terms of number of researchers and research production)

## *Channel management*

- preemption on distribution channels (commercial publishers via industry consolidation; open proponents via mirroring content and metadata harvesting )
- cross distribution and marketing
- multidevice access (tablets / smartphones)

## *Information services*

- extra content availability (multimedia; databases; clinical cases...)
- newsletters, RSS, alerts
- cross referencing
- list of publications from the same author/ on the same topics
- rankings: most downloaded, most cited...



# Value creation on the user side

## *Community services*

- Comments
- Reviews
- Ratings

If critical mass is reached, publishing costs can be significantly reduced



Content impact ... by design



# Platform based competition: key actors

- A handful of publishers
- A handful of very prestigious universities
- A handful of donors



Next challenges:

- Organizational (within universities and research institutions)
- Strategic alliances
- Growth pace





THANK YOU

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ASK Bocconi

