

The role of higher education institutions in scholarly publishing and communication

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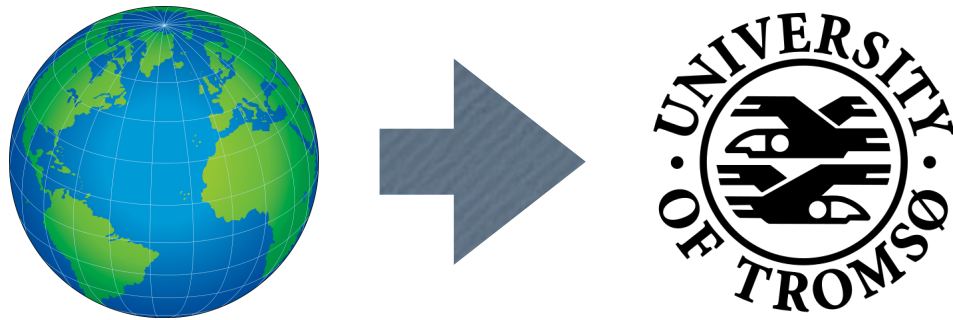
Stipulations

Toll-access (subscription) journal system is dysfunctional

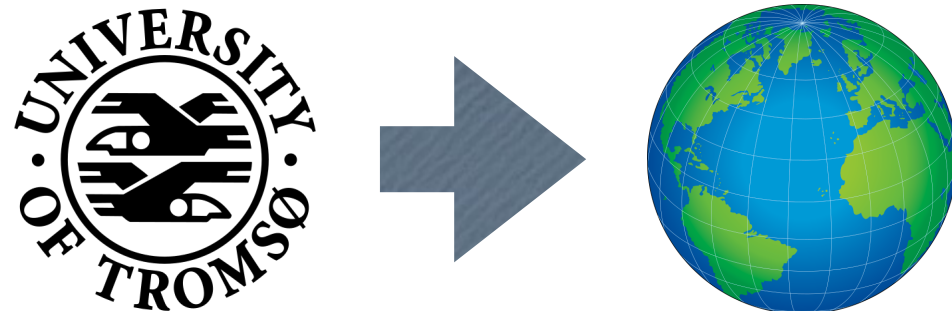
Open-access (article-processing fee) journal system is preferable

The two roles of higher ed institutions

Provision of results to local researchers



Communication of results to the public



The two roles of higher ed institutions

Provision of results to local researchers

“Implement a Harvard Library collection and content development strategic plan in support of University-wide research, teaching and learning for today and the future.”

Communication of results to the public

“Enable effective access to the world of knowledge and data through intuitive discovery, networks of expertise and global collaborations.”

The two roles of higher ed institutions

Provision of results to local researchers

journal subscriptions and collecting



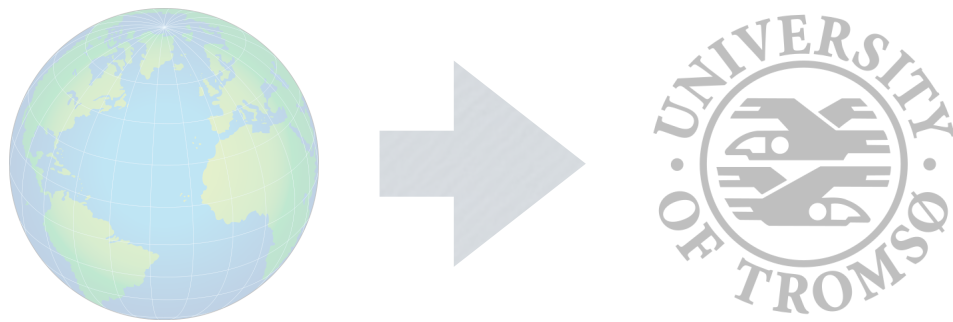
Communication of results to the public

scholarly publishing and dissemination

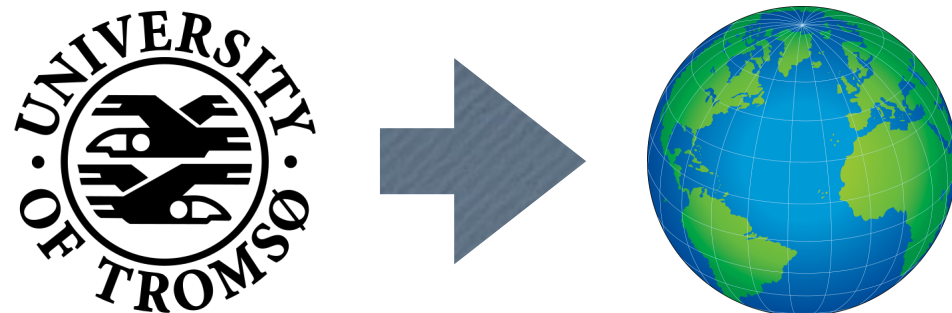


The two roles of higher ed institutions

Provision of results to local researchers



Communication of results to the public



Communication of results to the public

Green open access:

- Rights retention through open-access policies
- Repository distribution

Gold open access:

- Journals provide immediate online access
- Funding via author-side article-processing charges

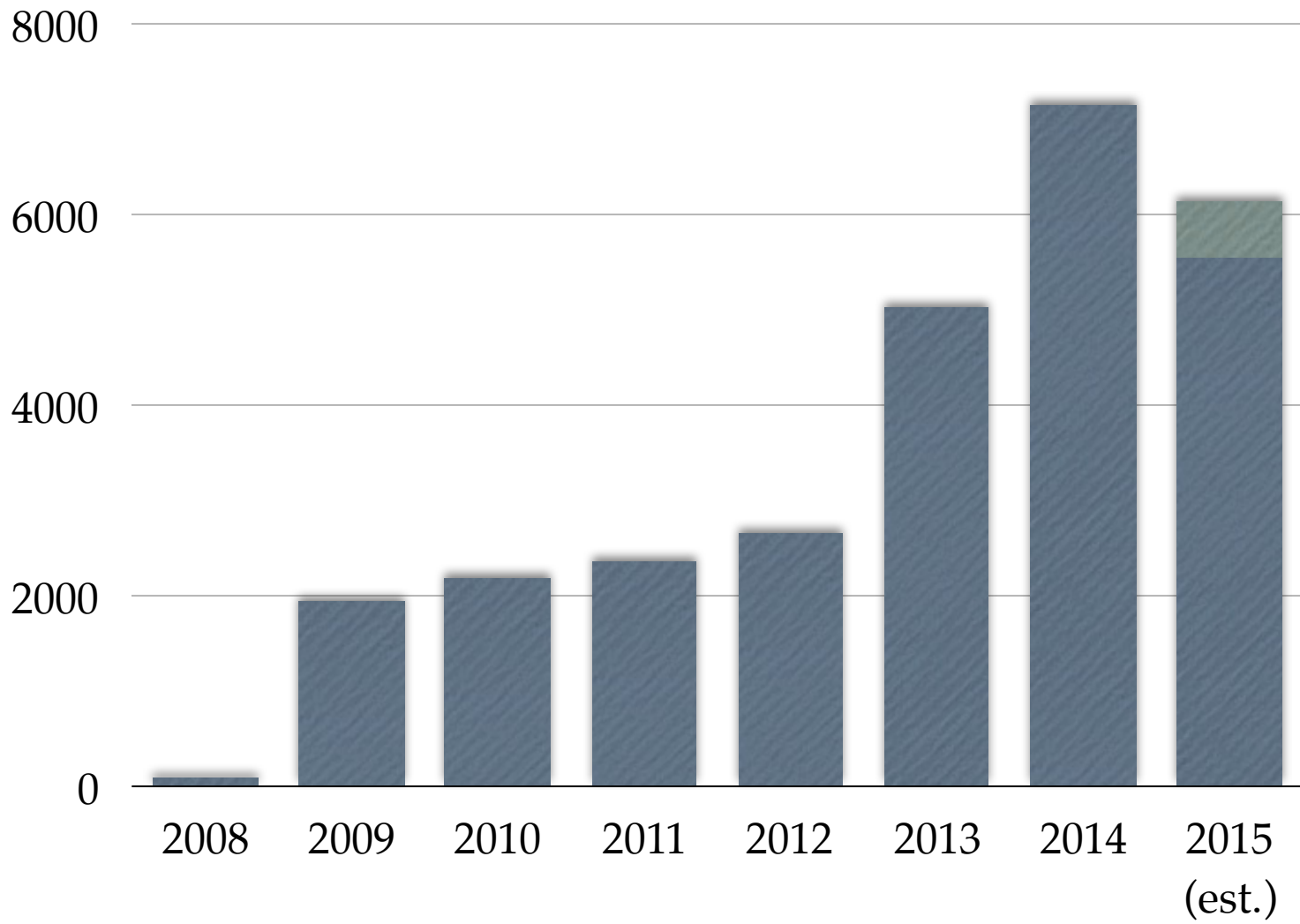
The Harvard rights-retention open-access policy

Default rights retention

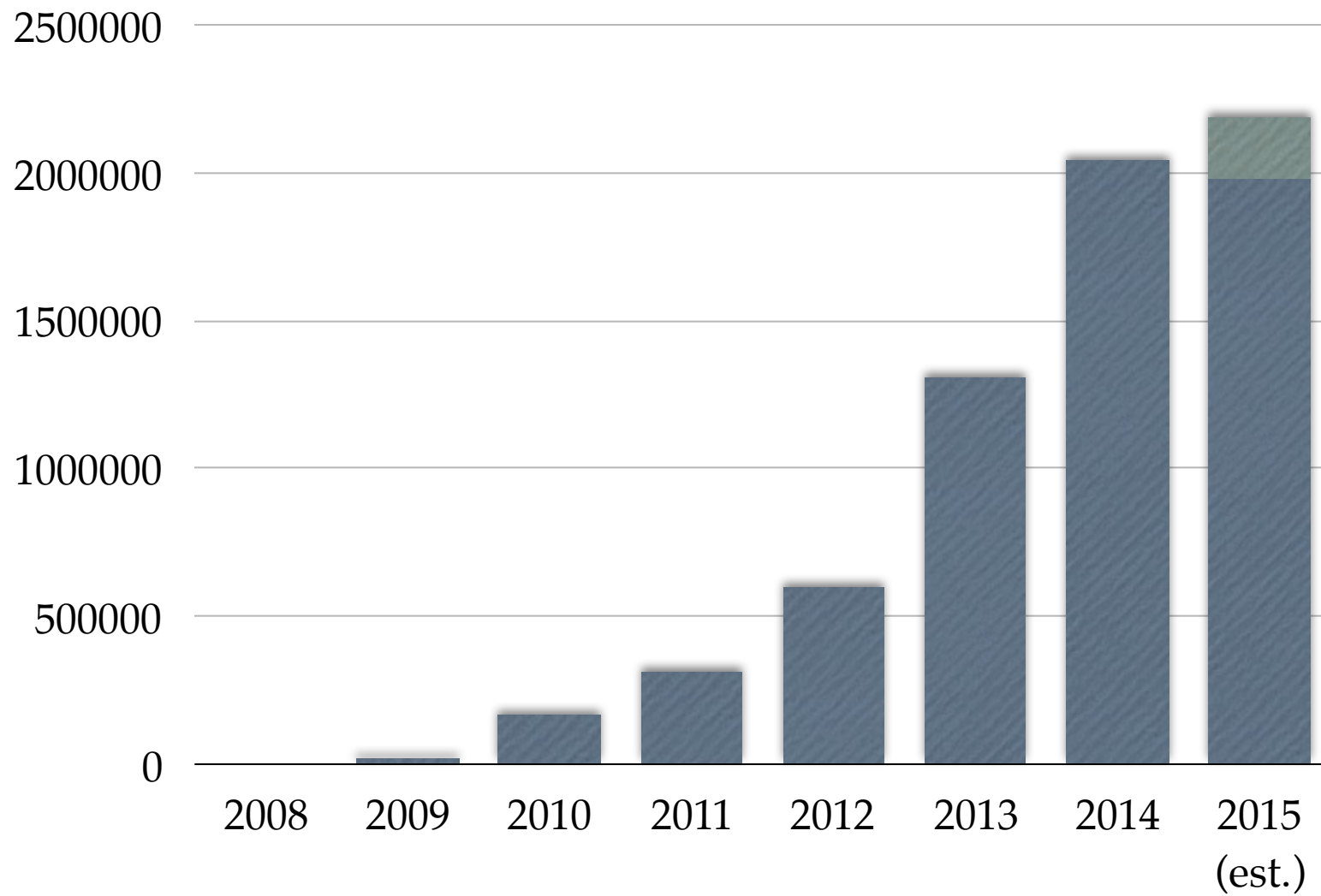
- “Each Faculty member grants to the university permission to make available his or her scholarly articles and to exercise the copyright in those articles.”
- “The Dean or the Dean's designate will waive application of the policy for a particular article upon express direction by a Faculty member.”

Commitment to deposit:

- “Each Faculty member will provide an electronic copy of the author’s final version of each article no later than the date of its publication.”



Articles posted in DASH repository per year



Articles downloaded from DASH repository per year



Good Practices for University Open-Access Policies

Edited by Stuart Shieber and Peter Suber

*Produced by the Harvard Open Access Project and the
Berkman Center for Internet & Society at Harvard University.*

The wiki for this document, which should be considered the most up-to-date and authoritative version, is available at
http://cyber.law.harvard.edu/heap/Good_practices_for_university_open-access_policies or bit.ly/goodoa

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Association of Research Libraries (ARL)
Australasian Open Access Support Group (AOASG)
Coalition of Open Access Policy Institutions (COAPI)
Confederation of Open Access Repositories (COAR)
Electronic Information for Libraries (EIFL)
Enabling Open Scholarship (EOS)
Harvard Open Access Project (HOAP)
Library and Information Association of South Africa (LIASA)
Mediterranean Open Access Network (MedOANet)
Oberlin Group
Open Access Directory (OAD)
Open Access Policy Alignment Strategies for European Union Research (PASTEUR4OA)
Open Access Scholarly Information Sourcebook (OASIS)
Right to Research Coalition (R2RC)
Scholarly Publishing and Academic Resources Coalition (SPARC)
SPARC Europe
UK Open Access Implementation Group (OAIG)

<http://bit.ly/goodoa>

Communication of results to the public

Green open access:

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Sample university

Publishing: 8,000 articles per year

Sample university

Publishing: 8,000 articles per year

Open-access APC: \$3,000 per article

“Subsequent reports also suggest that the costs for open access journals average between £1.5k and £2k.”

— Finch Group, Report of the Working Group on Expanding Access to Published Research Findings, 2012

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PLoS Biology	\$2,950
Science Advances	\$3,000 (\$4,000)
typical hybrid fee	\$3,000

Sample university

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Total outlay: \$24,000,000

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Total outlay: \$24,000,000

Subscription outlay: \$5,000,000

Cost increase: ~5 times

“Our Task Force has concluded that what appears at present to be the most viable route for sustaining Open Access to peer-reviewed scholarship – *a model in which institutions pay for their faculty to publish in refereed OA journals – would not bring about cost savings* for Cornell. In fact, taking into account the number of articles published by Cornell researchers each year and the average cost to publish a single refereed article, *CUL would likely see its serial expenditures rise significantly if the library used its current subscription funds to pay for author fees instead* – even in scenario in which the majority of publishers switch overnight to a producer-pays OA business model.”

— Report of the CUL Task Force on Open Access Publishing, 2004

The macro view

Industry revenue: \$9.4 billion

Industry articles published: 1.8 million

Average revenue per article: \$5,222

(Data from Outsell for 2011, via Nature News)

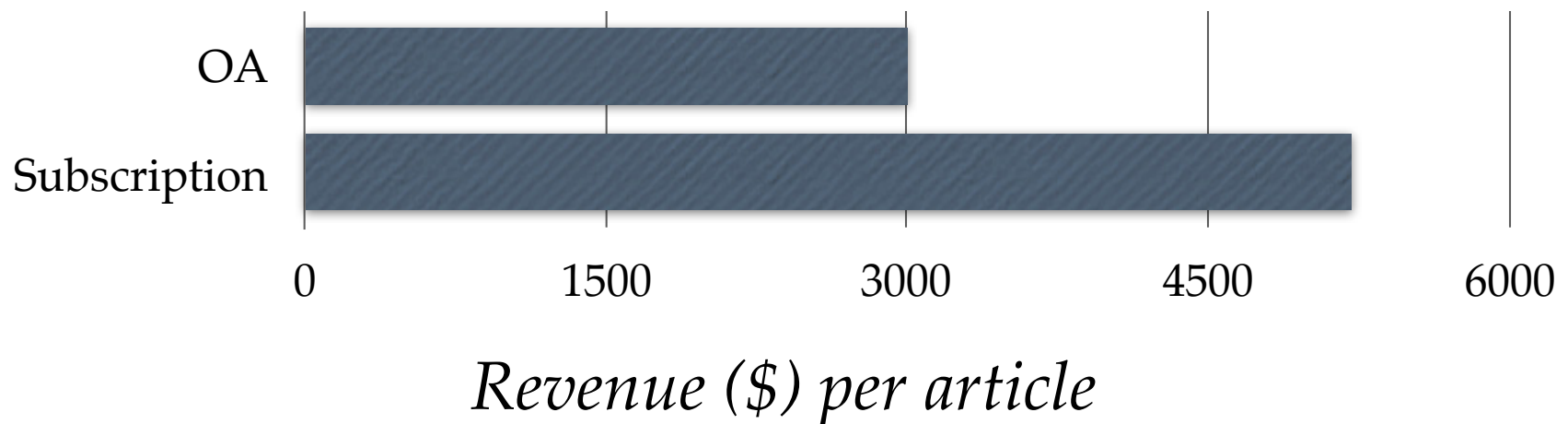
The macro view

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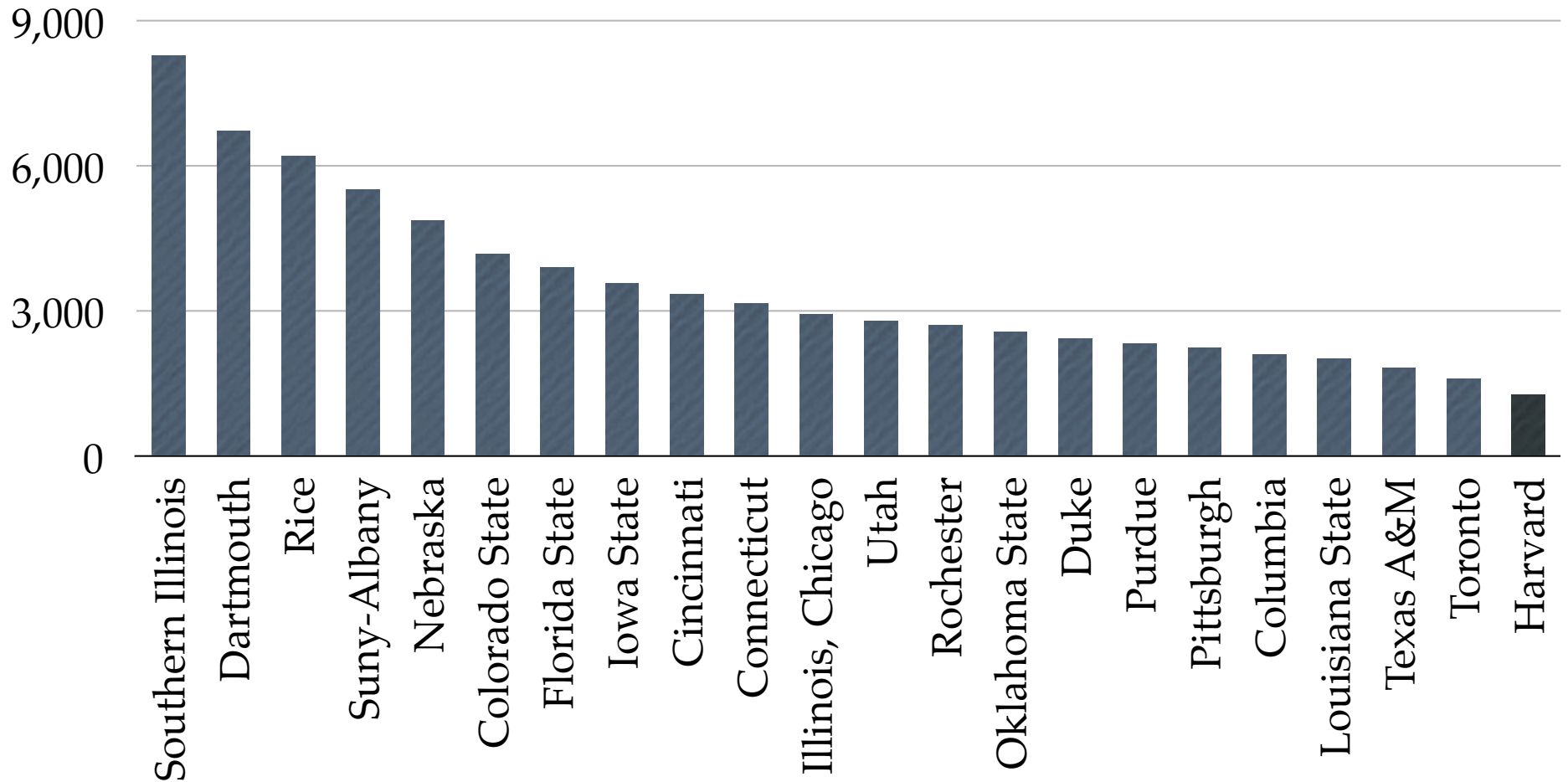
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1. Readers vs. writers



Serials expenditure (\$) per published article

2. Who should fund?

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A Principle:

Dissemination is an intrinsic part of the research process.

Those that fund the research should be responsible for funding its dissemination.

2. Who should fund?

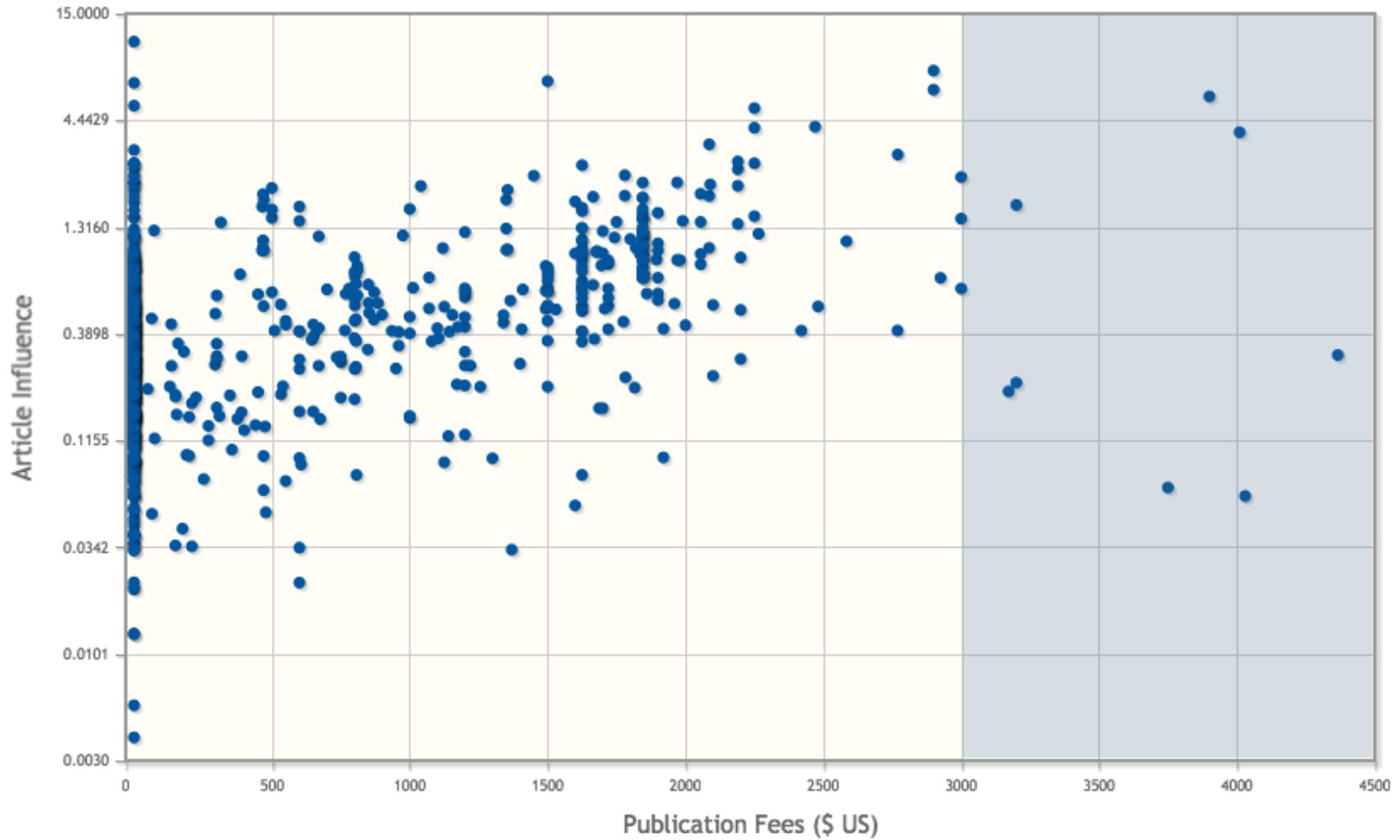
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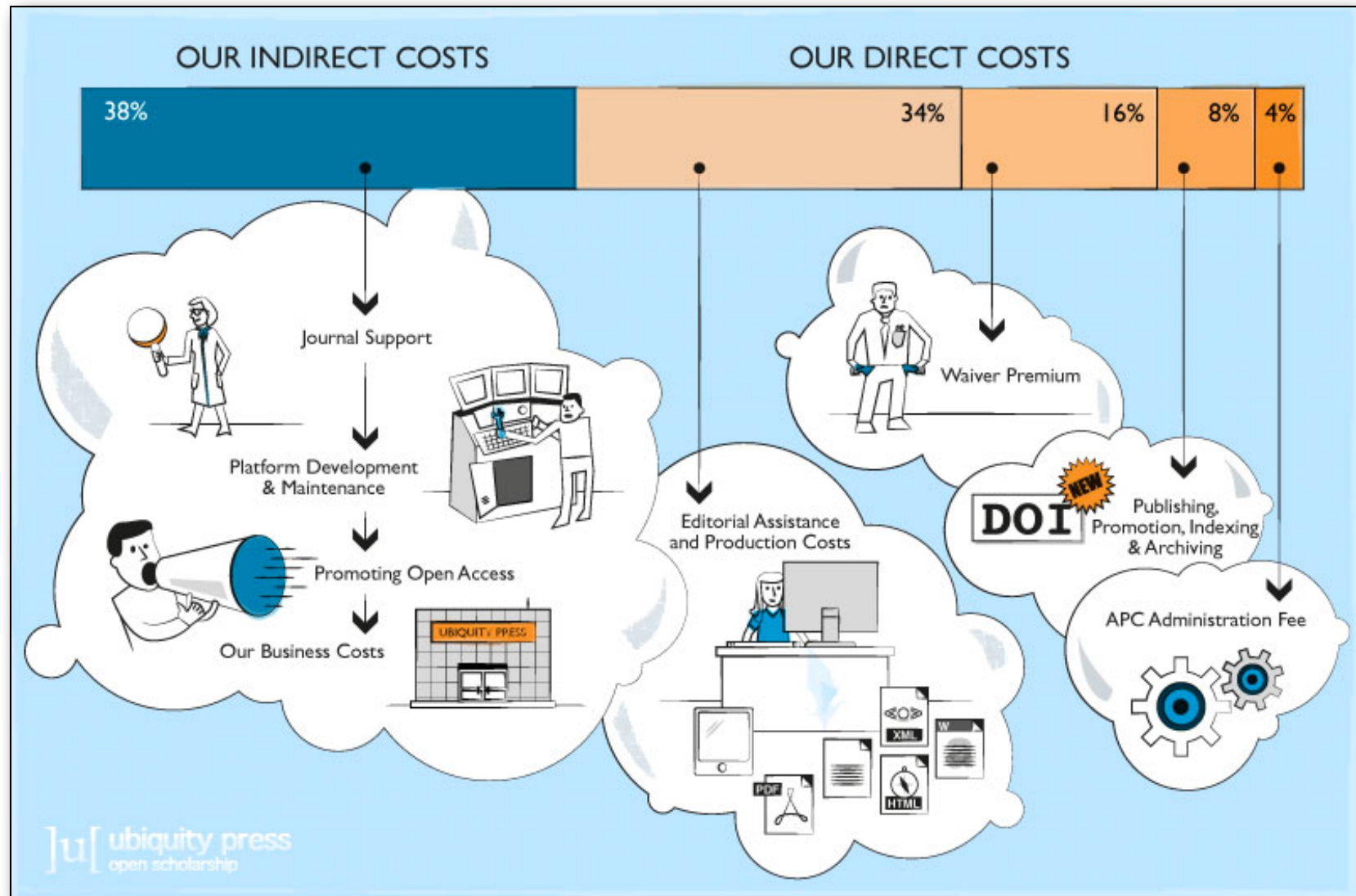
Those that fund the research should be responsible for funding its dissemination.

- Granting agencies and foundations
- Other universities (on behalf of coauthors)

3. High-end is above average



4. Ceteris non paribus



4. Ceteris non paribus

Thousands of researchers from around the world have joined PeerJ.

Stanford University, THE UNIVERSITY OF MELBOURNE, 東京大学 THE University of Tokyo, KINGS College LONDON

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Submit now and pay during or after peer review. A one-off payment for lifetime publishing.

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Review

Publishing: 8,000 articles per year

Open-access APC: \$1,000 per article

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Open-access APC: \$1,000 per article

Not externally funded: 25%

Review

Publishing: 8,000 articles per year

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Not externally funded: 25%

Internal authors: 60%

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Total outlay: $8,000 \times \$1,000 \times .25 \times .6 = \$1,200,000$

Review

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Total outlay: $8,000 \times \$1,000 \times .25 \times .6 = \$1,200,000$

Subscription outlay: \$7,200,000

Review

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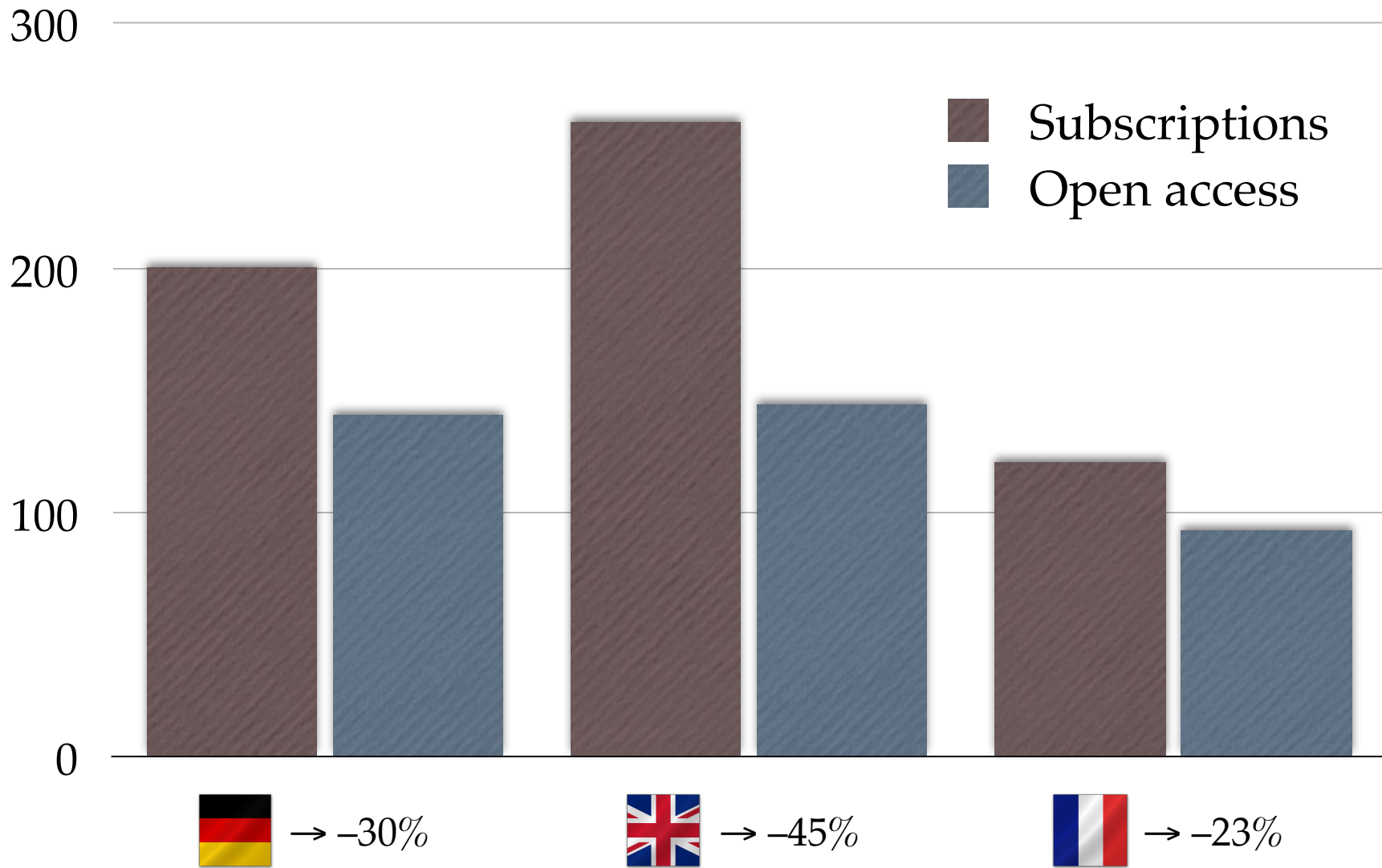
Not externally funded: 25%

Internal authors: 60%

Total outlay: $8,000 \times \$1,000 \times .25 \times .6 = \$1,200,000$

Subscription outlay: \$7,200,000

Cost decrease: 6 times



Expenses (millions €) per country

After MPDL analysis of spring 2015, corrected as per Ralf Schimmer, pc.

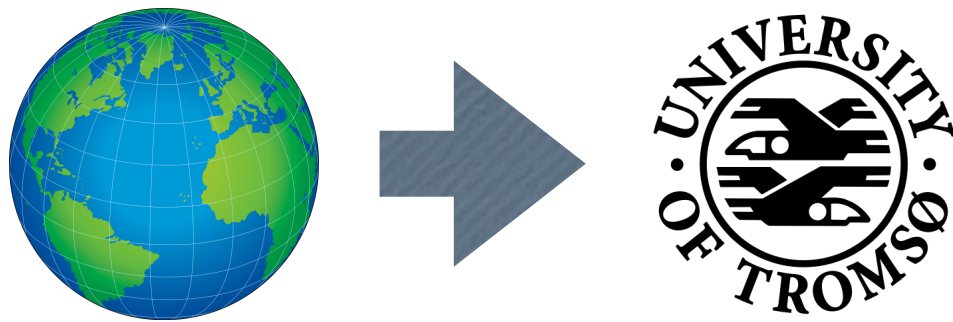
Flag icons CC by-nc-nd 3.0 courtesy of Alpak <http://alpak.deviantart.com/art/European-Flags-91396569>

Promoting the long-term transition

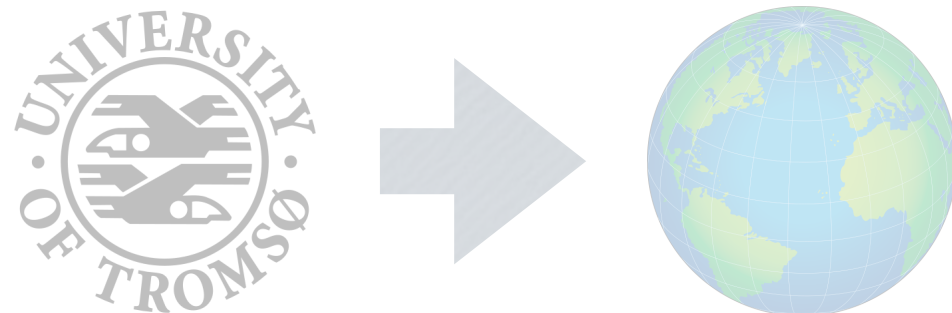
1. Our goal should be to *establish an environment in which publishers are enabled to change their business model* from the unsustainable toll-access model based on reader-side fees to a sustainable open-access model based on author-side fees.
2. Dissemination is an intrinsic part of the research process. *Those that fund the research should be responsible for funding its dissemination.*

The two roles of higher ed institutions

Provision of results to local researchers



Communication of results to the public



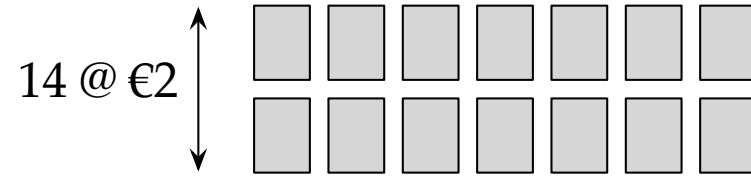
Allocating resources optimally

Subscriptions purchase download access

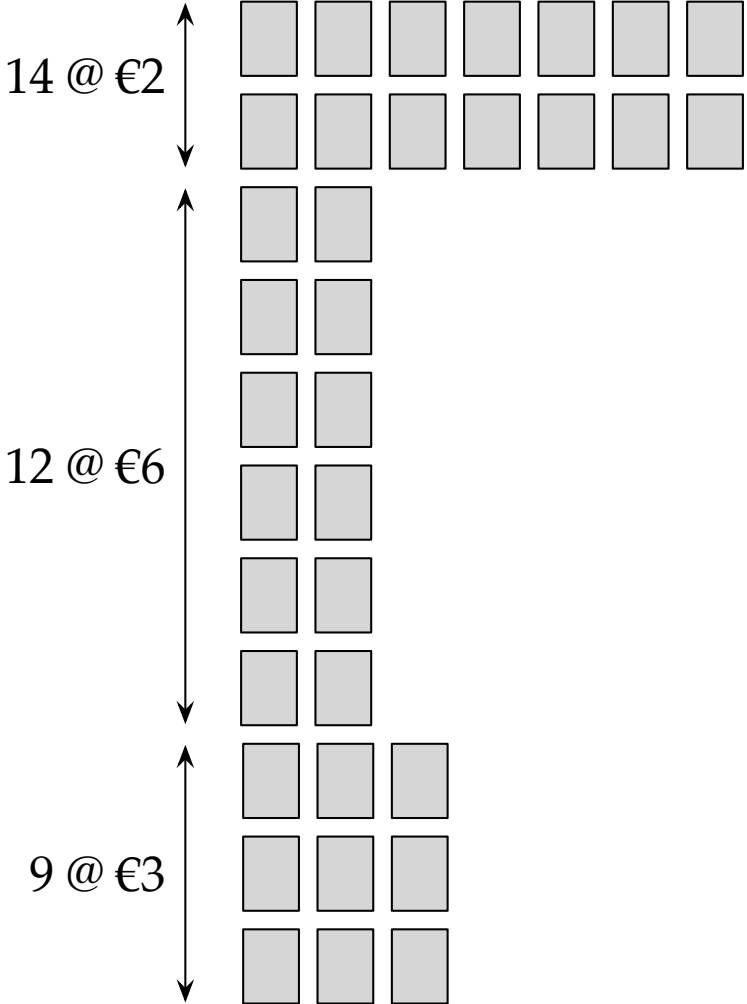
Goal:

- Maximize downloads covered under a fixed budget

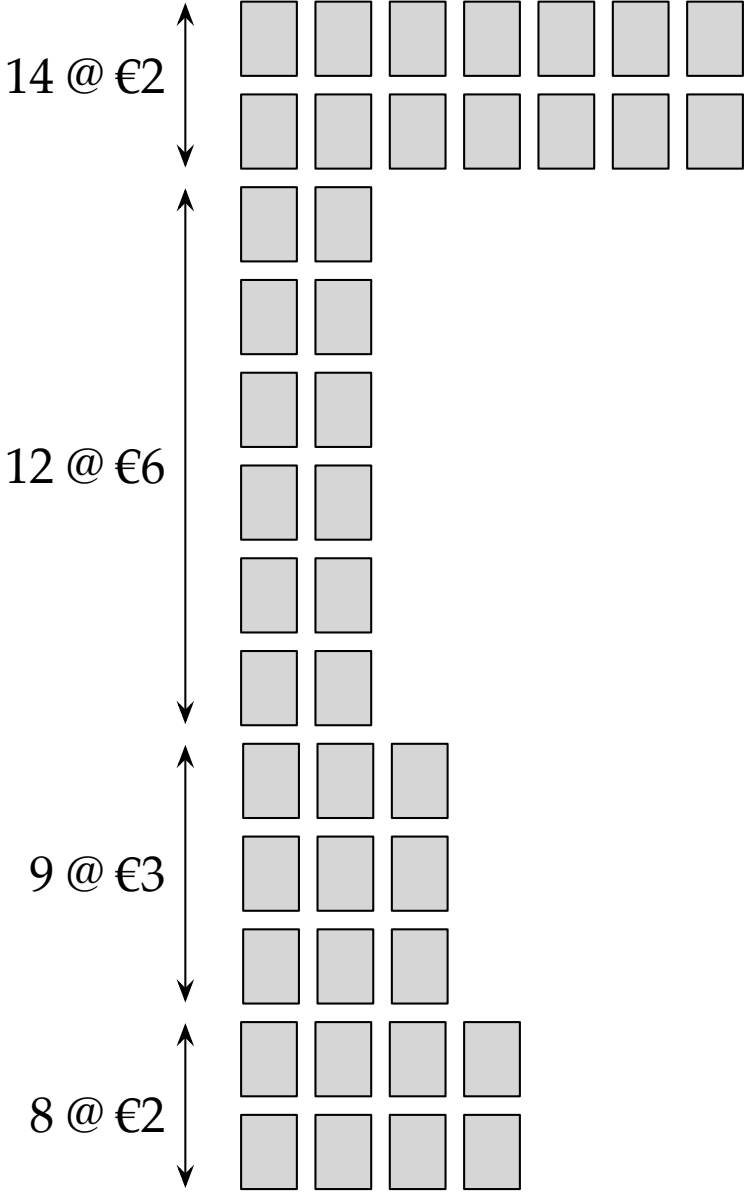
ranking by
downloads



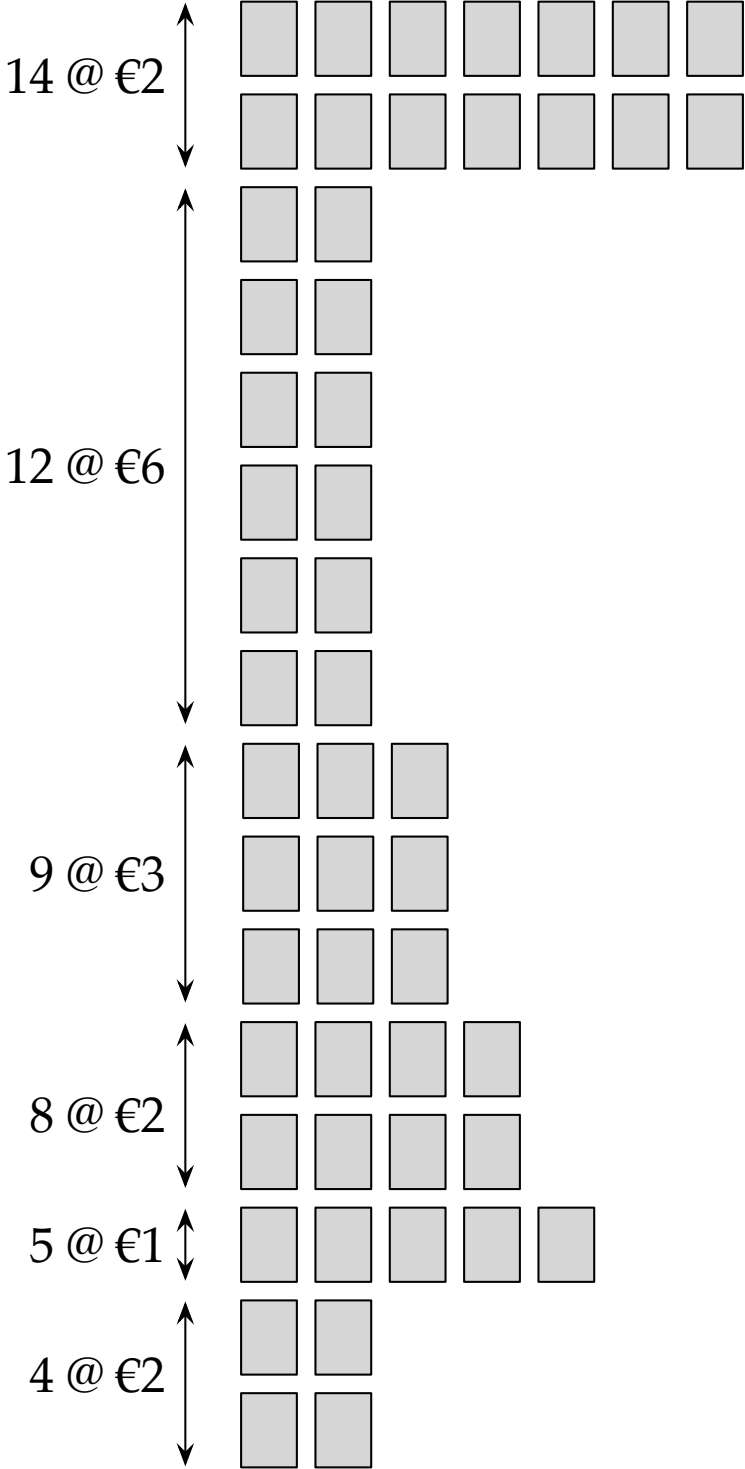
ranking by downloads



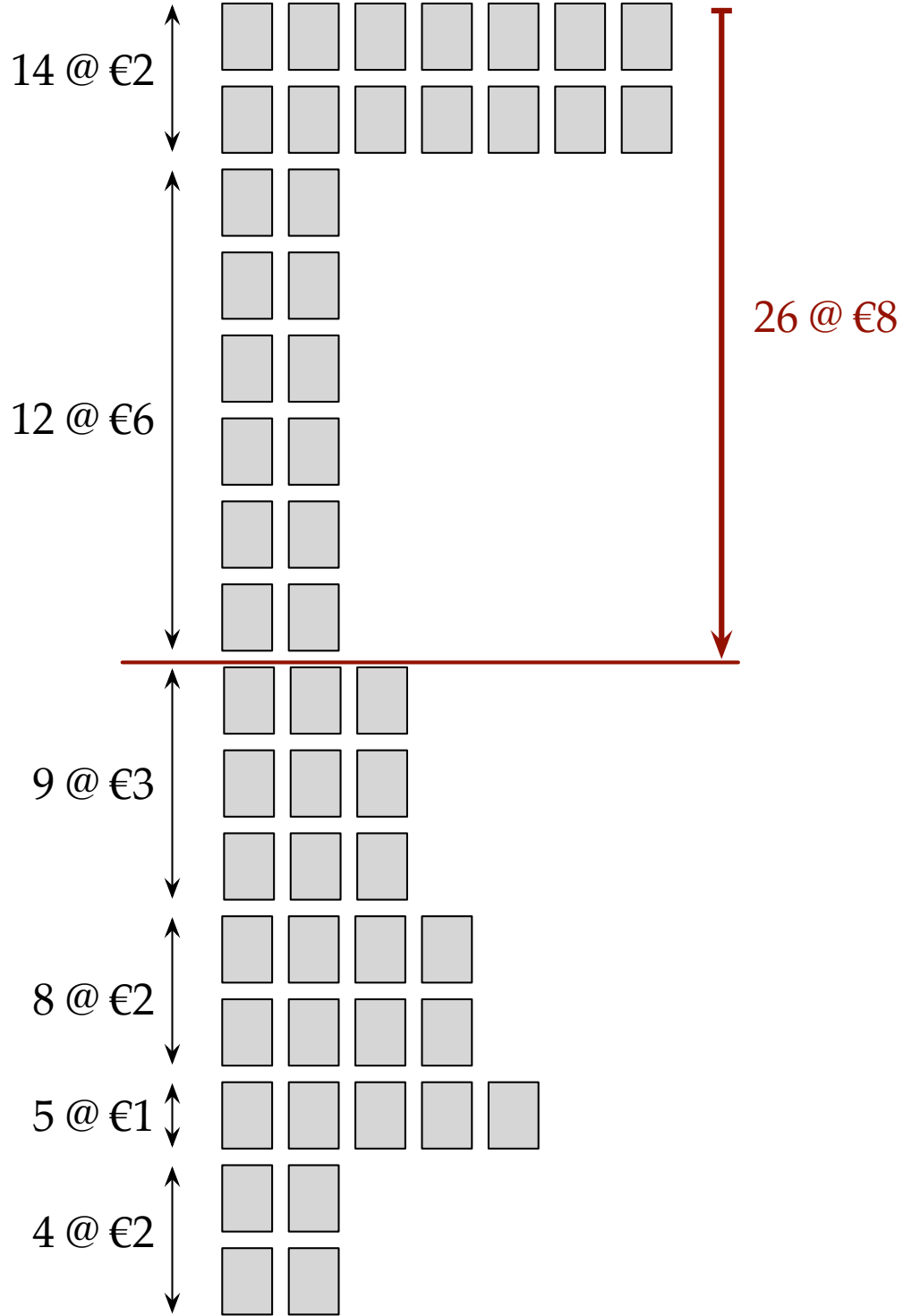
ranking by downloads



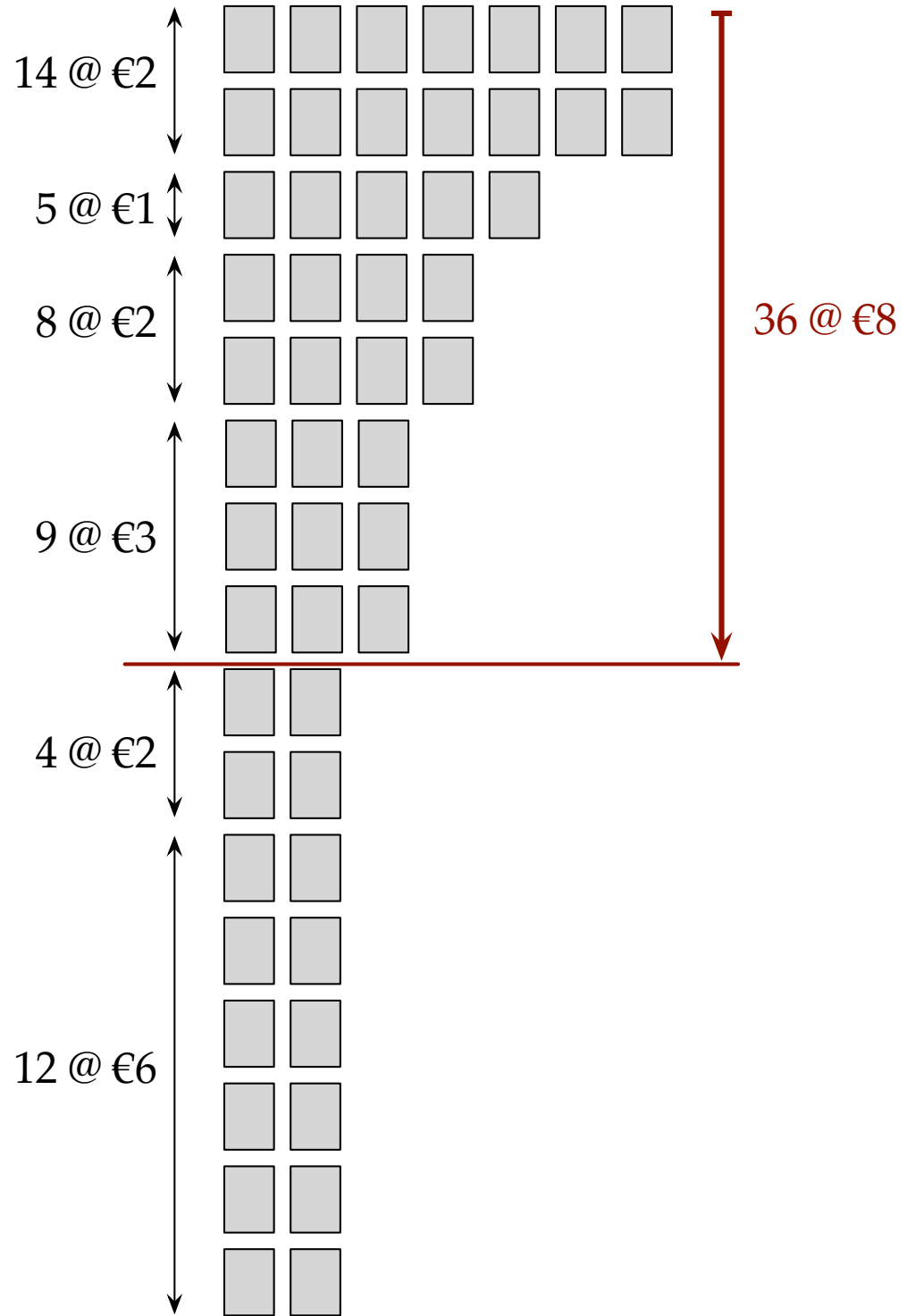
ranking by downloads



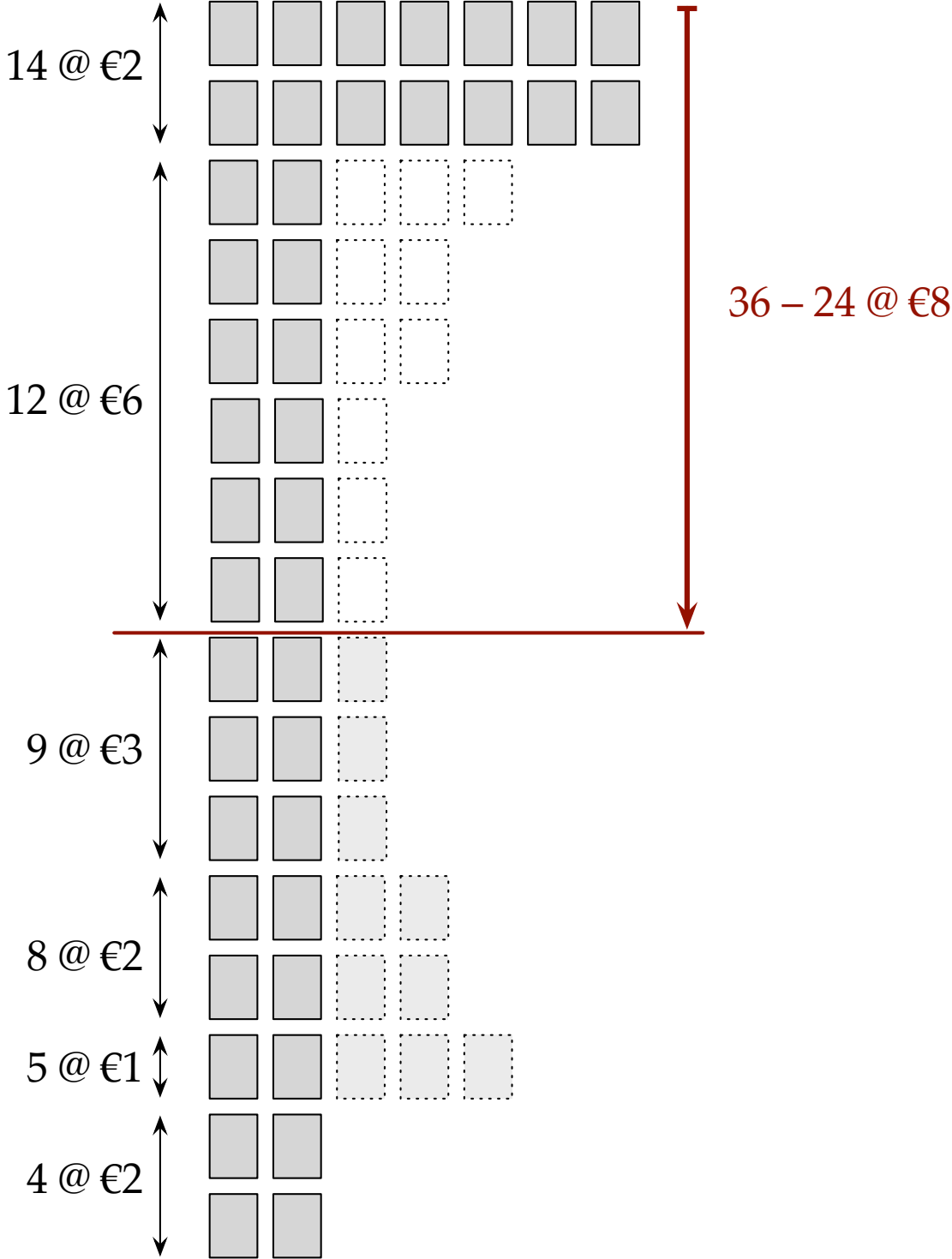
ranking by downloads



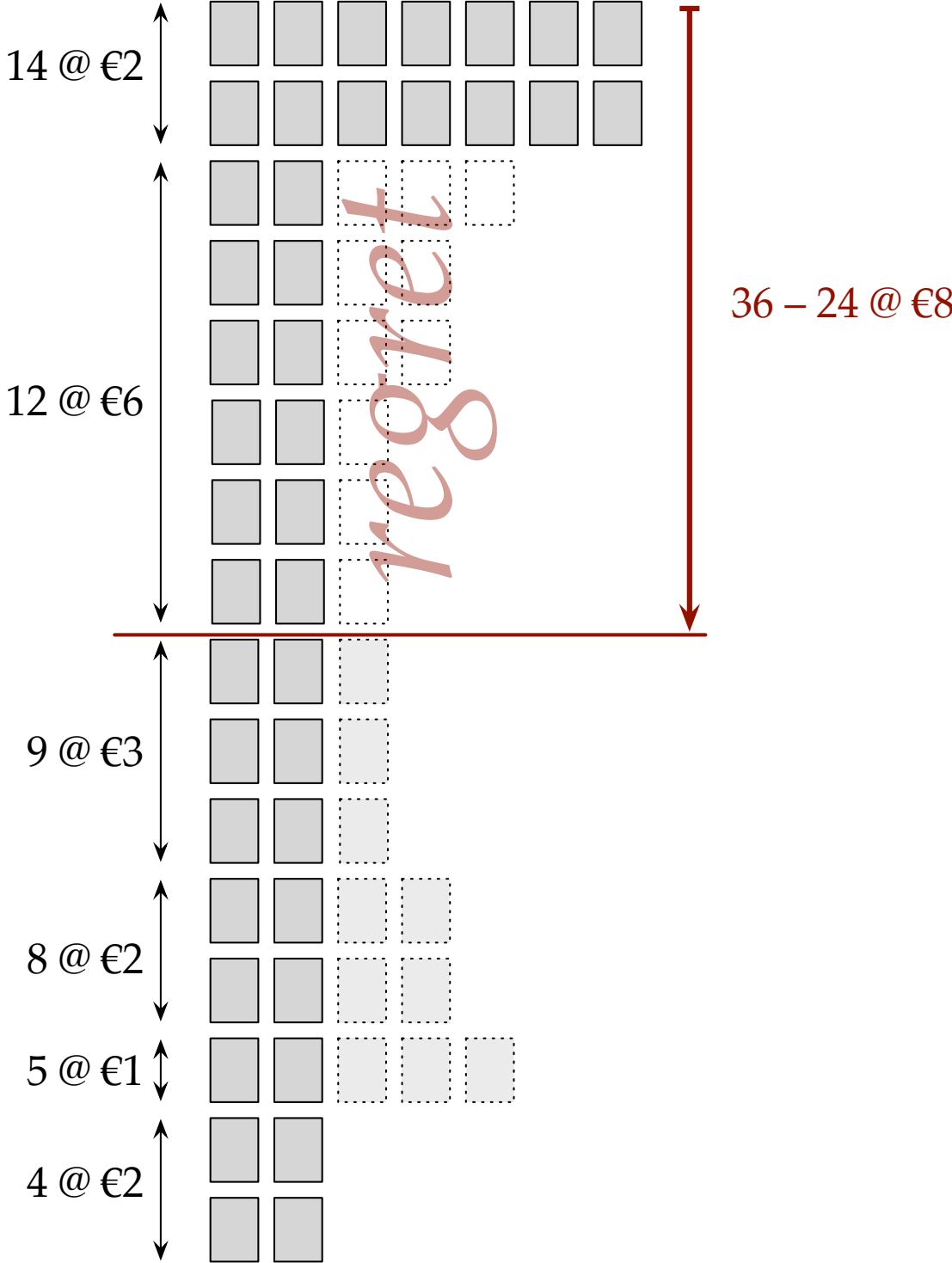
ranking by
cost / download



ranking by downloads



ranking by
downloads



Allocating resources optimally

Subscriptions purchase download access

Goal:

- Maximize downloads covered under a fixed budget = *minimize regret*

Method:

- Rank journals by cost per download (cpd)
- Select journals with cpd under a threshold determined by the budget

How to make subscription judgements?

- journal cost
- cost per article
- cost per citation
- cost per download
- past usage
- Impact Factor™
- where faculty publish
- faculty input
- librarian expertise
- pertinence to current research
- predicted future research needs
- prestige of requesting faculty
- frequency of champion's librarian visits

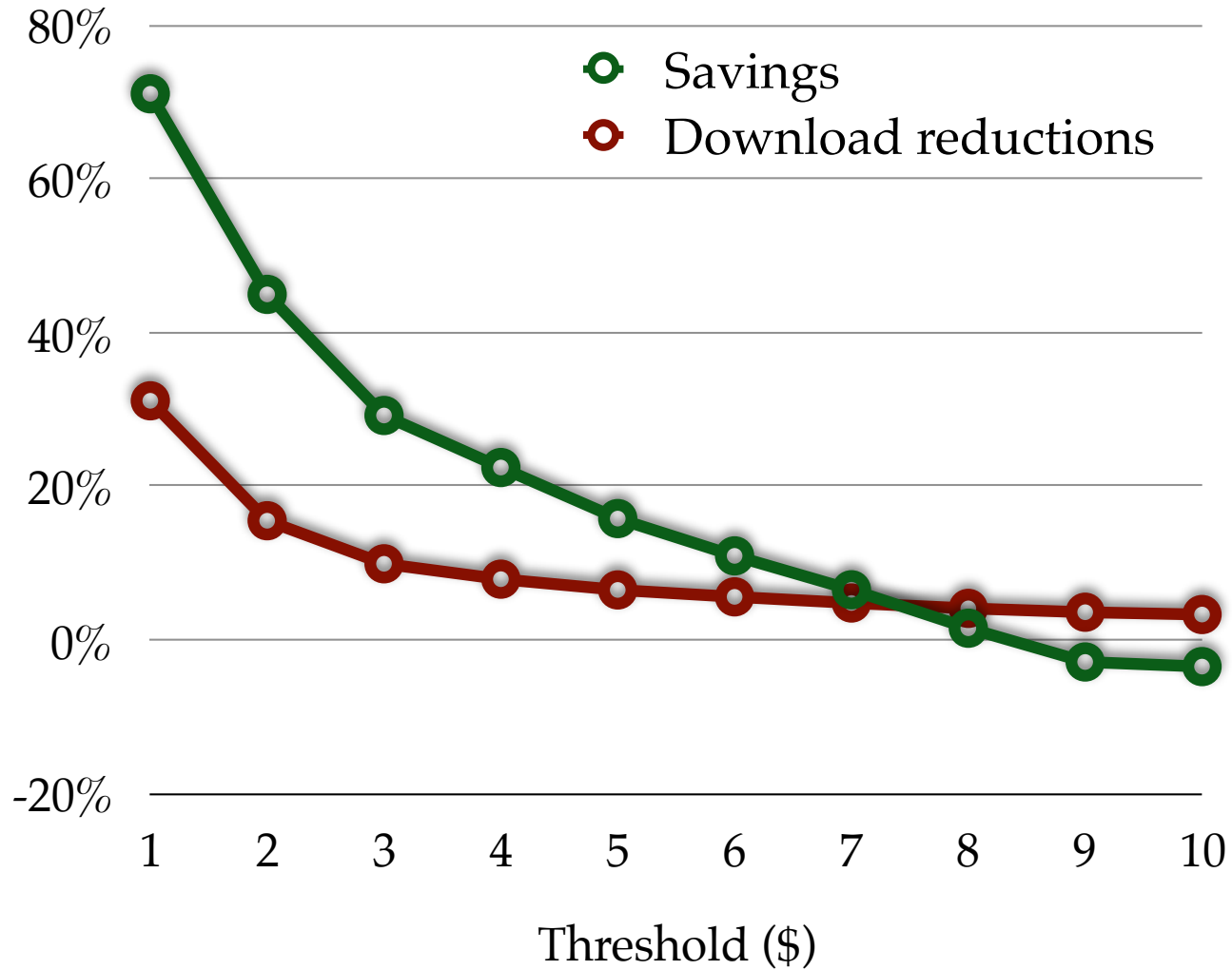
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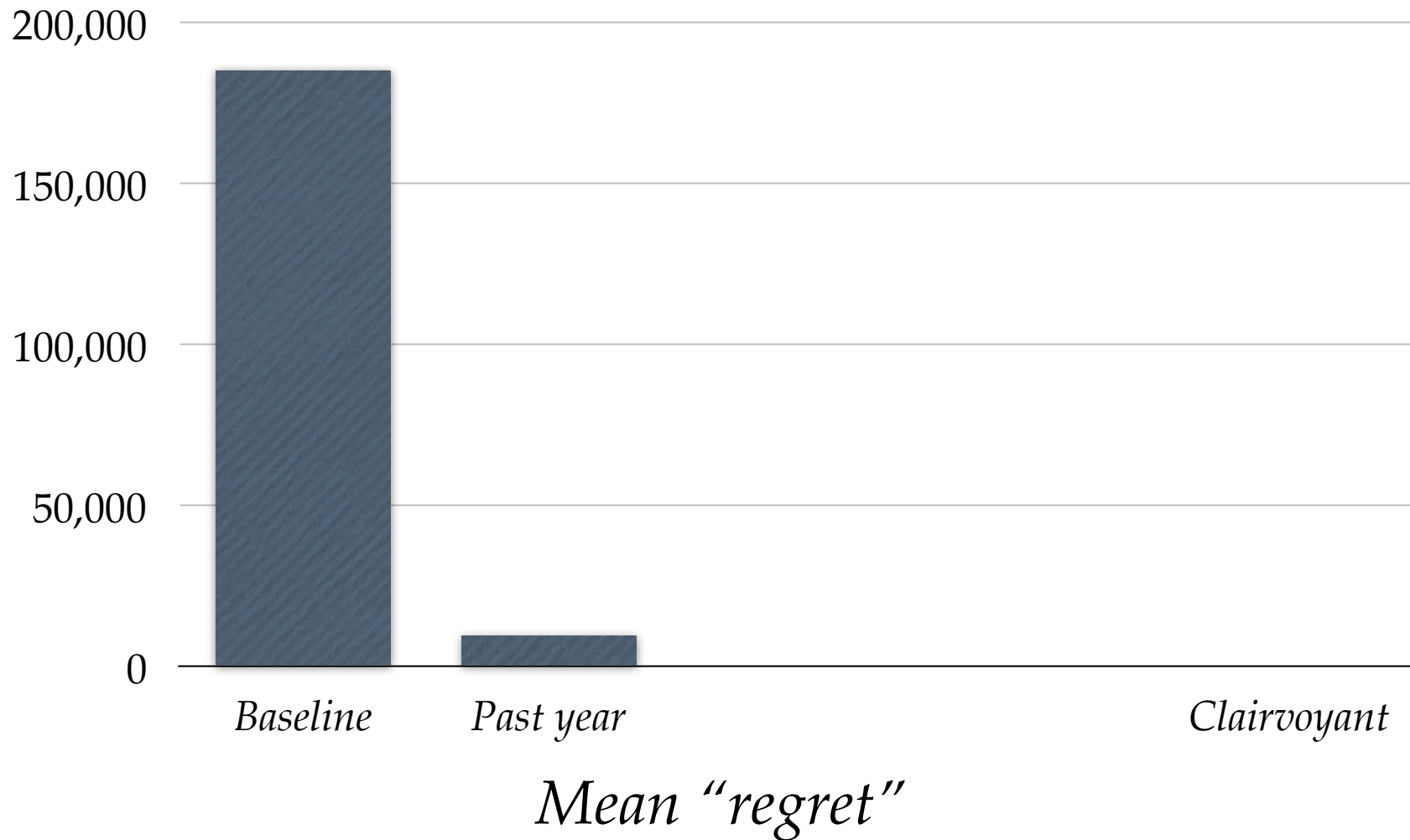


predicted
future
cost per
download

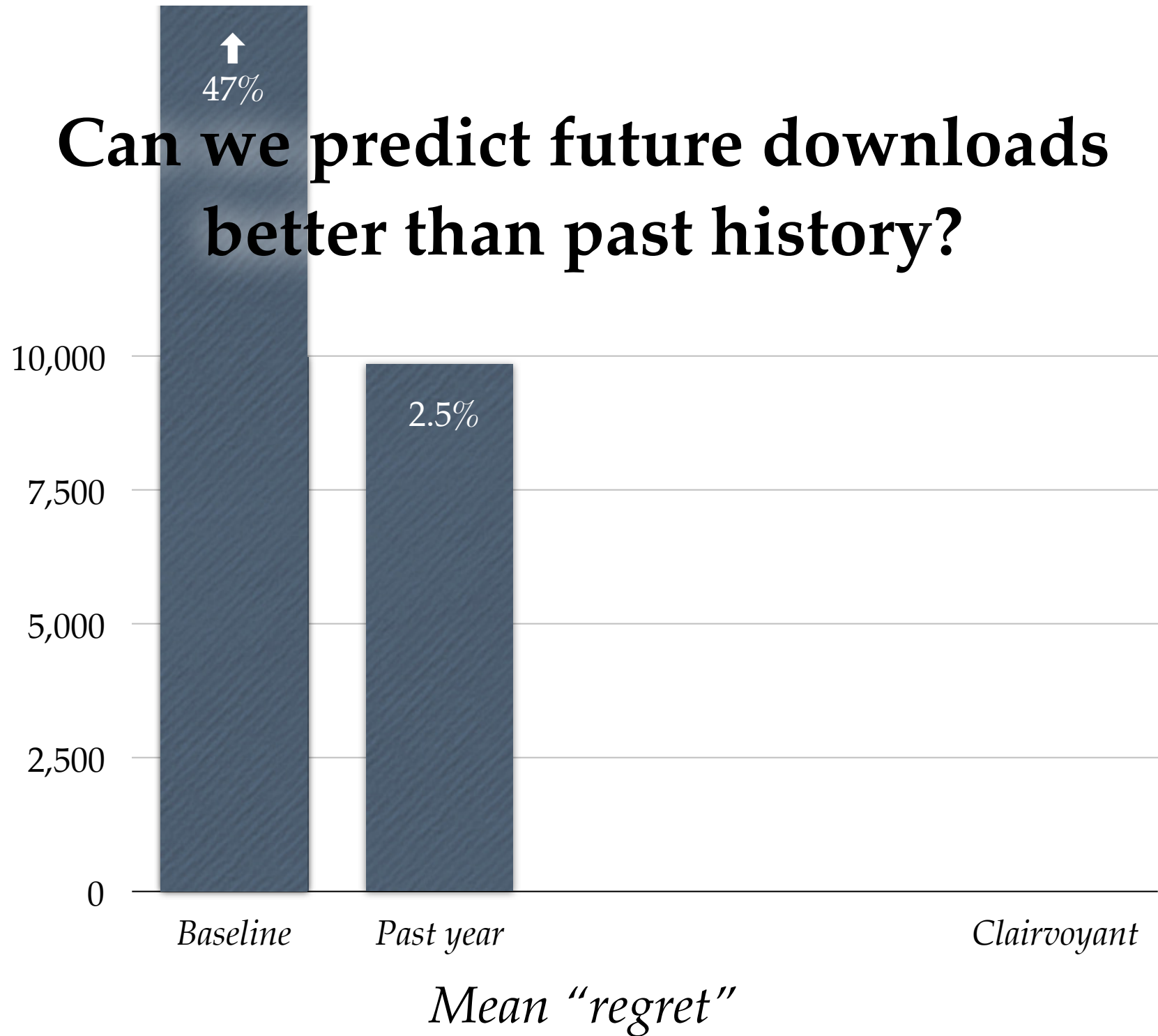
Setting the cpd threshold



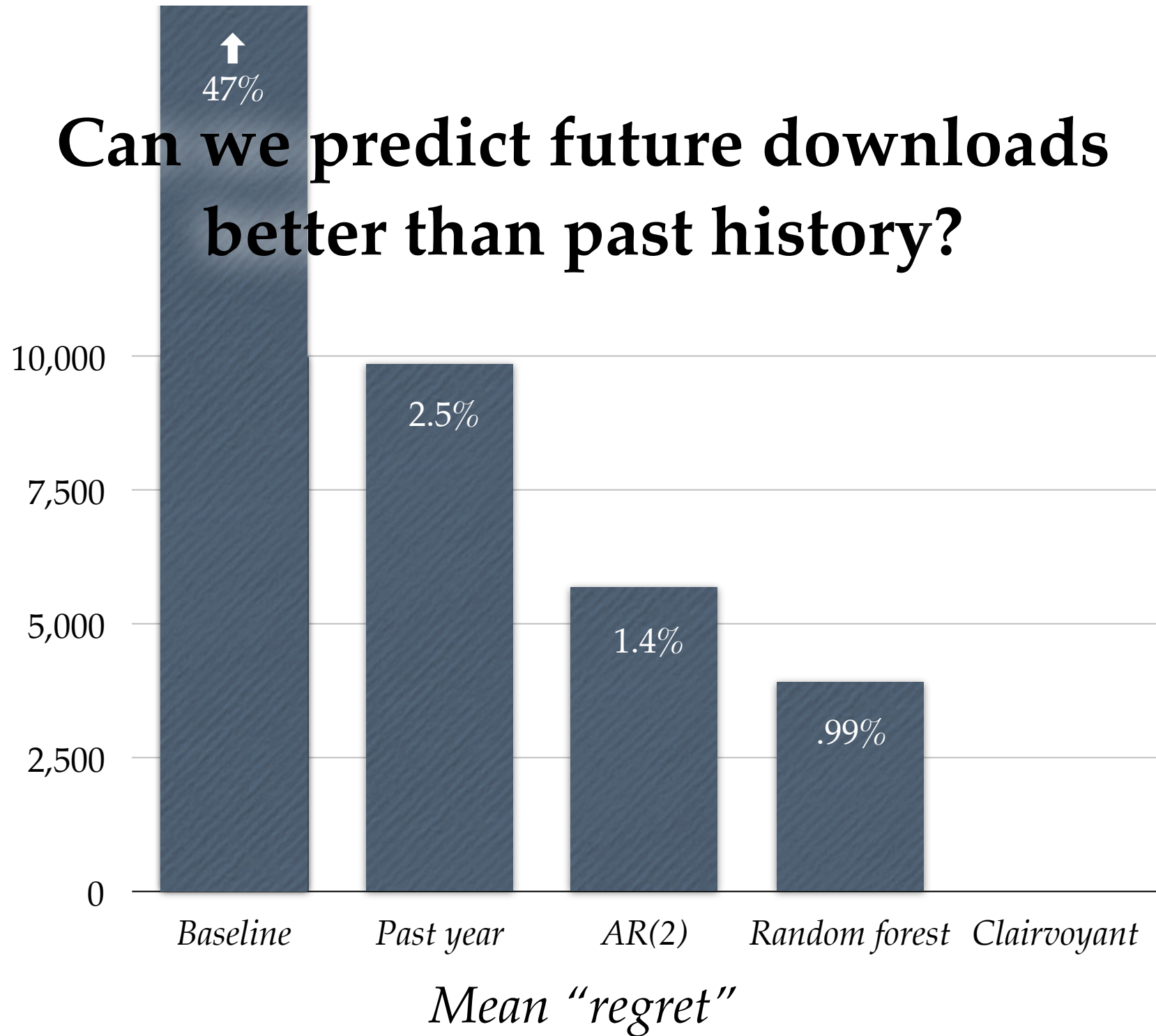
Can we predict future downloads better than past history?



Can we predict future downloads better than past history?



Can we predict future downloads better than past history?



Can we predict future downloads without past history?



Can we predict future downloads without past history?



The two roles of higher ed institutions

Provision of results to local researchers

- optimize subscriptions by predicting future cost per download
- so as to allow canceling journals

Communication of results to the public

- open-access policies and repositories
- underwrite fair share of open-access APCs
- don't support unsustainable models

Harvard Office for Scholarly Communication
osc.hul.harvard.edu

Compact for Open-Access Publishing Equity
oacompact.org

The Occasional Pamphlet
occasionalpamphlet.com