

o p e n a c c e s s

2 0 2 0



What will it take to secure open access to today's scholarly journals?

Colleen Campbell, Open Access 2020 Initiative
Max Planck Digital Library

Citizen Science, Research Data, Access to Knowledge, and Beyond
Vienna – 20.11.2017

Der Abbau bisher bestehender Zugangsbeschränkungen wird zu einer Beschleunigung von Forschung und zu verbesserten (Aus-) Bildungsmöglichkeiten beitragen, zum wechselseitigen Lernen der "Armen" von/mit den "Reichen" und der "Reichen" von/mit den "Armen". Er wird dazu verhelfen, dass wissenschaftliche Literatur tatsächlich so breit wie möglich genutzt wird, und er wird auf diese Weise auch dazu beitragen, Grundlagen für den Austausch und für das Verstehen auf der Basis eines geteilten Wissens zu legen, die weit über die Wissenschaften hinaus bedeutsam und wirksam sein werden.

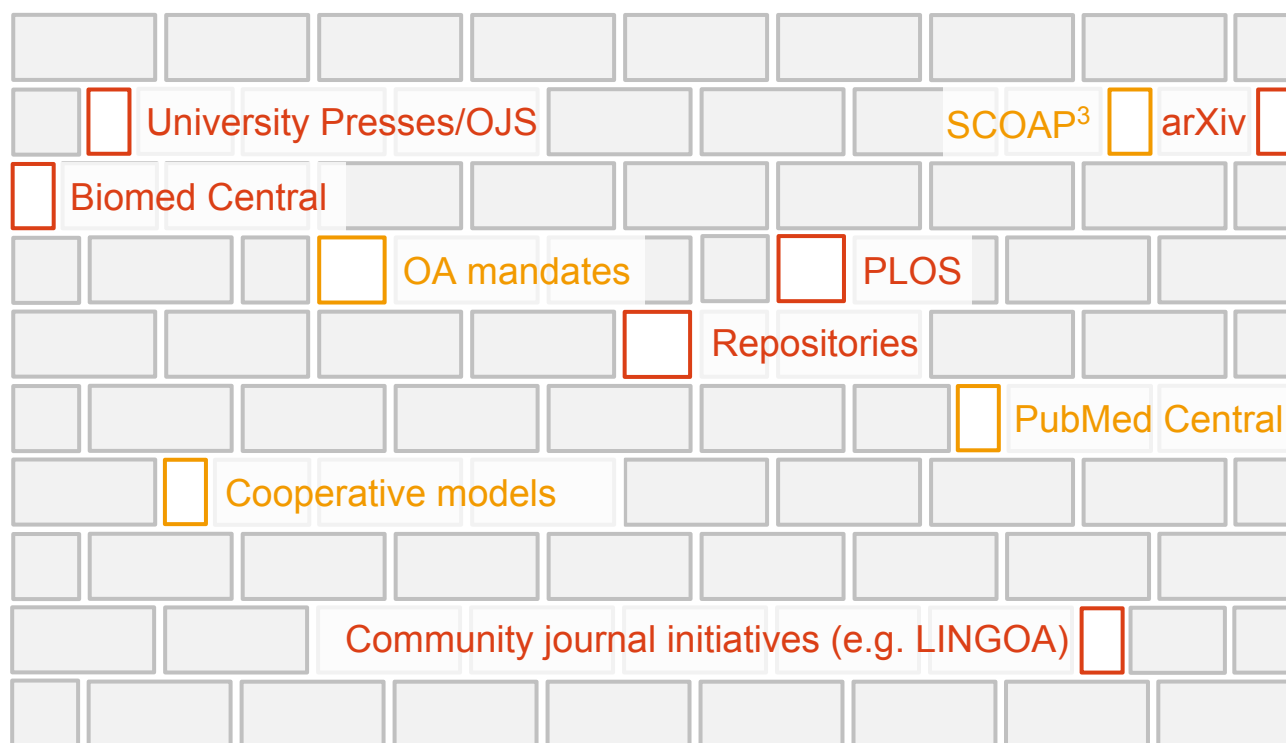
Vision of open access

Der Abbau bisher bestehender Zugangsbeschränkungen wird zu einer Beschleunigung von Forschung und zu verbesserten (Aus-) Bildungsmöglichkeiten beitragen, zum wechselseitigen Lernen der "Armen" von/mit den "Reichen" und der "Reichen" von/mit den "Armen". Er wird dazu verhelfen, dass wissenschaftliche Literatur tatsächlich so breit wie möglich genutzt wird, und er wird auf diese Weise auch dazu beitragen, Grundlagen für den Austausch und für das Verstehen auf der Basis eines geteilten Wissens zu legen, die weit über die Wissenschaften hinaus bedeutsam und wirksam sein werden.

Budapest Open Access Initiative
14 February 2002

What progress have we made in the last 15 years?

With an annual growth rate of just 1%, Open Access publishing accounts for ~15% of the scholarly publishing market.



And as for publisher revenues, Open Access accounts for just 4%; the remaining 96% of comes from subscriptions.

What is holding back the large-scale shift to OA?



Porter's 5 Forces framework

analyzes the sources of competitive pressure in a market.

- When the 5 competitive forces are weak, the industry becomes very lucrative.
- When competitive pressure is high, this creates the opportunity for a shift in the market.

Bo-Christer Björk has applied this model to understand why OA publishing has not achieved a greater market share.

Scholarly journal publishing in transition - from restricted to open access

Bo-Christer Björk,, Hanken School of Economics, Helsinki, Finland

The International Journal on Networked Business

Special issue on "Transformation of the academic publishing market"

Published online, 19.2.2017, DOI: 10.1007/s12525-017-0249-2

Porter's 5 Forces and Scholarly Publishing



Suppliers

Authors, editors, reviewers

- give their articles and services for free, receiving social capital in return, ie reputation.
- total lack of monetary transaction obliterates their bargaining power.

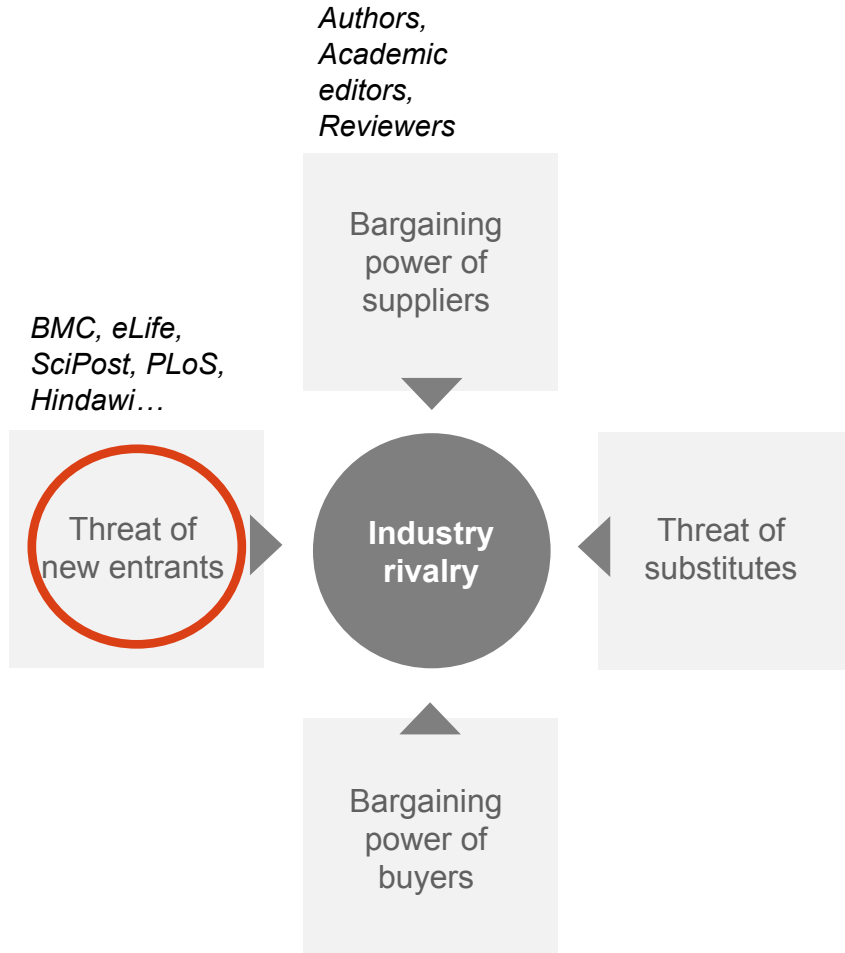
Scholarly journal publishing in transition– from restricted to open access

Bo-Christer Björk,, Hanken School of Economics, Helsinki, Finland

The International Journal on Networked Business

Special issue on “Transformation of the academic publishing market” Published online, 19.2.2017, DOI: 10.1007/s12525-017-0249-2

Porter's 5 Forces and Scholarly Publishing

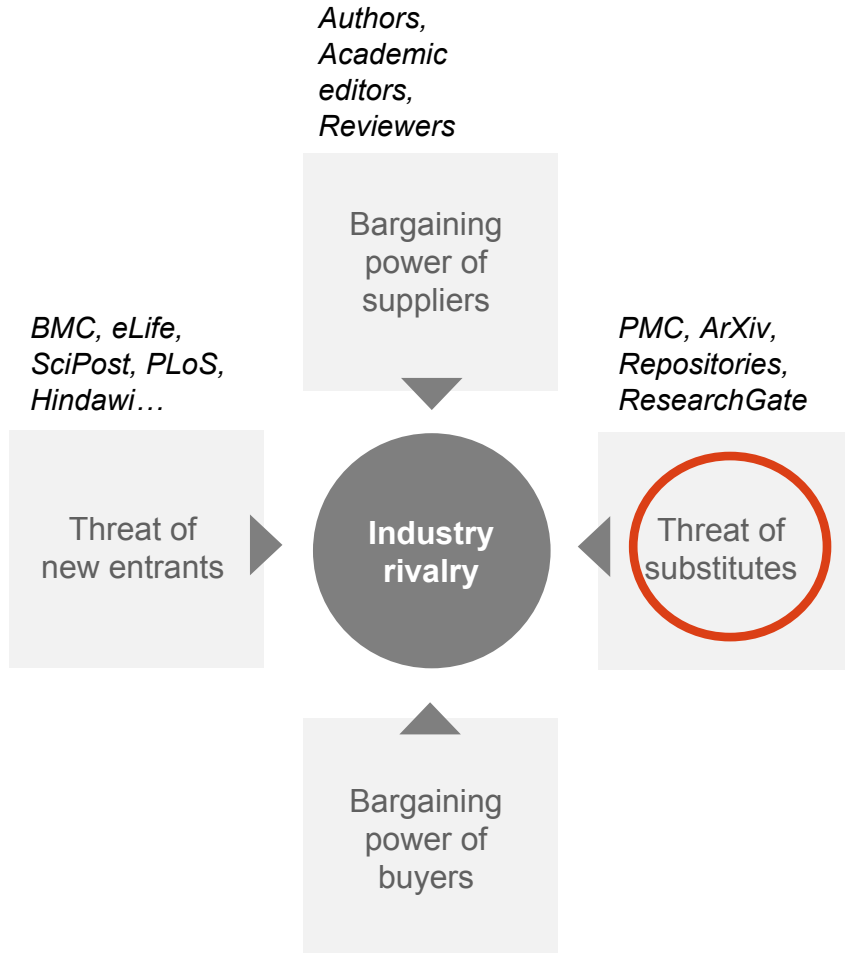


New entrants

Pure OA publishers

- “Big deal” journal packages drain library budgets
- Journal reputations take time to build

Porter's 5 Forces and Scholarly Publishing

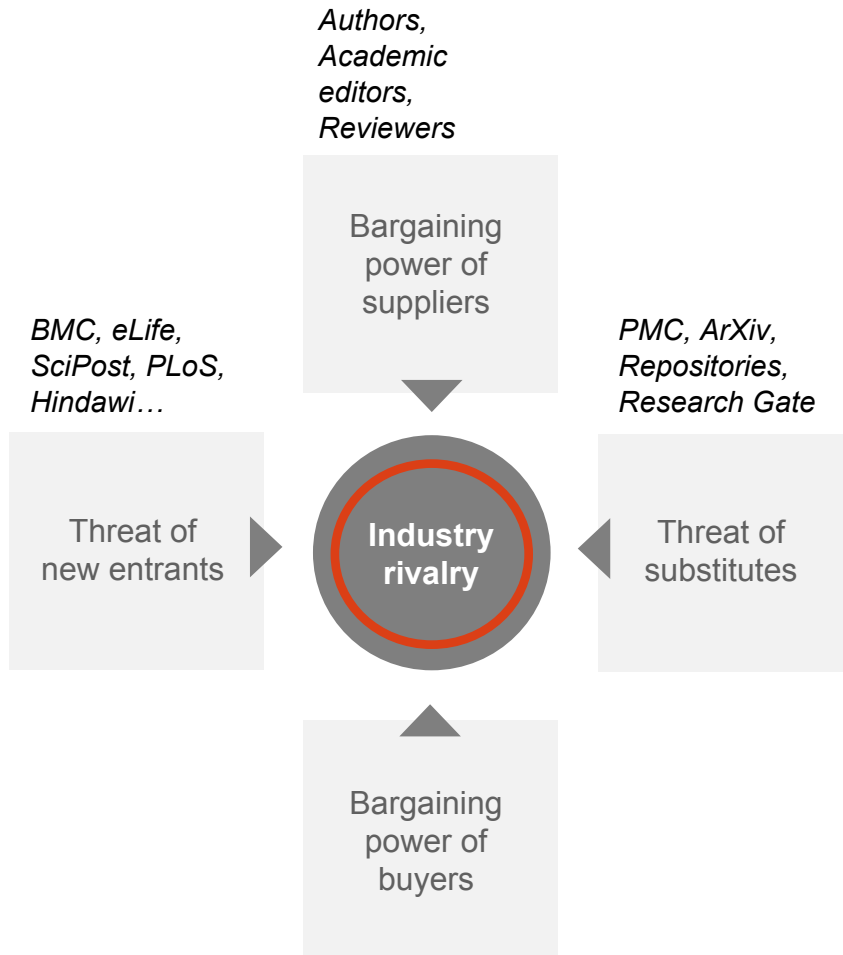


Substitutes

Pre-print archives, IRs and sharing sites

- Hampered by embargo periods, low deposit rates and the threat of legal action against piracy.
- Libraries cannot fully rely on freely available copies as an alternative to subscriptions.

Porter's 5 Forces and Scholarly Publishing

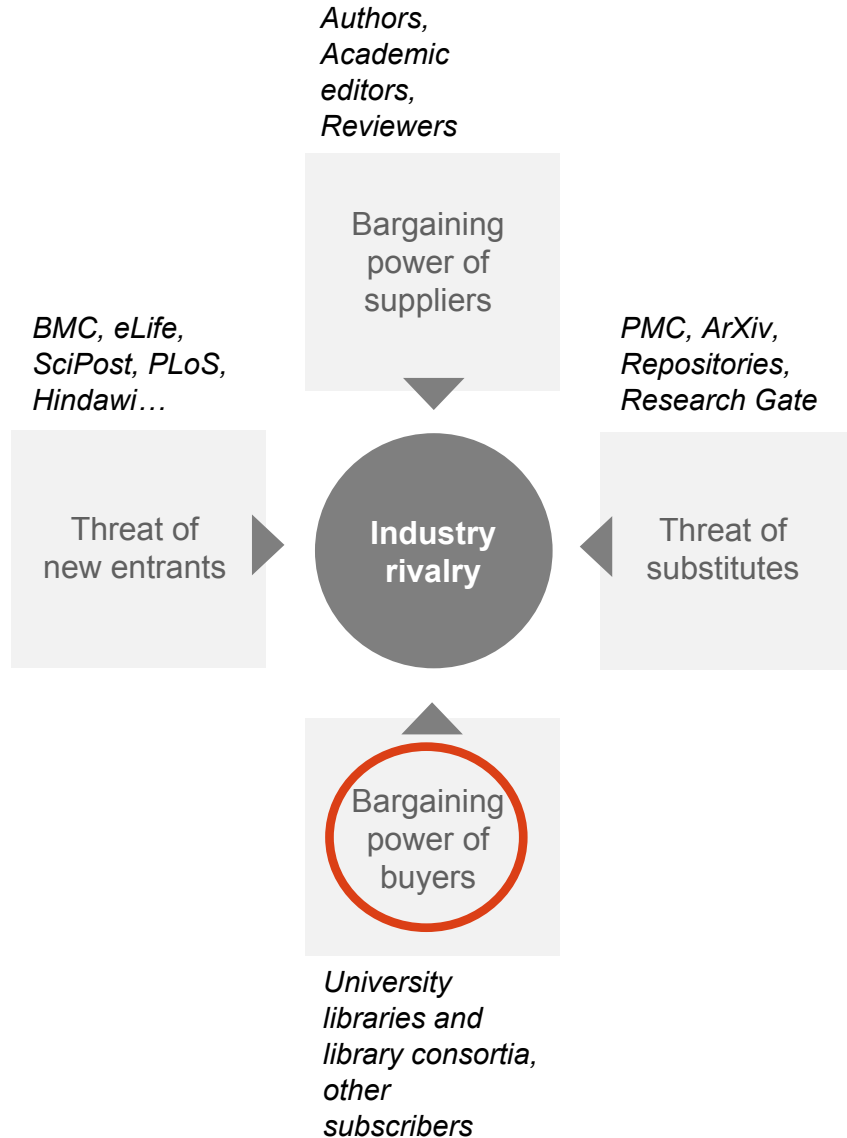


Industry rivalry

Commercial publishers

- handful of large commercial publishers control highly diversified portfolios of respected journals and do not compete on price.
- libraries cannot choose one over another but must purchase from all of them.

Porter's 5 Forces and Scholarly Publishing



Buyers

Libraries, consortia

- prices hidden by non-disclosure agreements and based on historic print spend
- prices based not on actual cost of publishing but rather the customer's "willingness to pay".
- users, who might exert some pressure, are shielded from any cost considerations

Lack of competitive pressure

“So far, green OA has not threatened the profits of the leading subscription publishers.

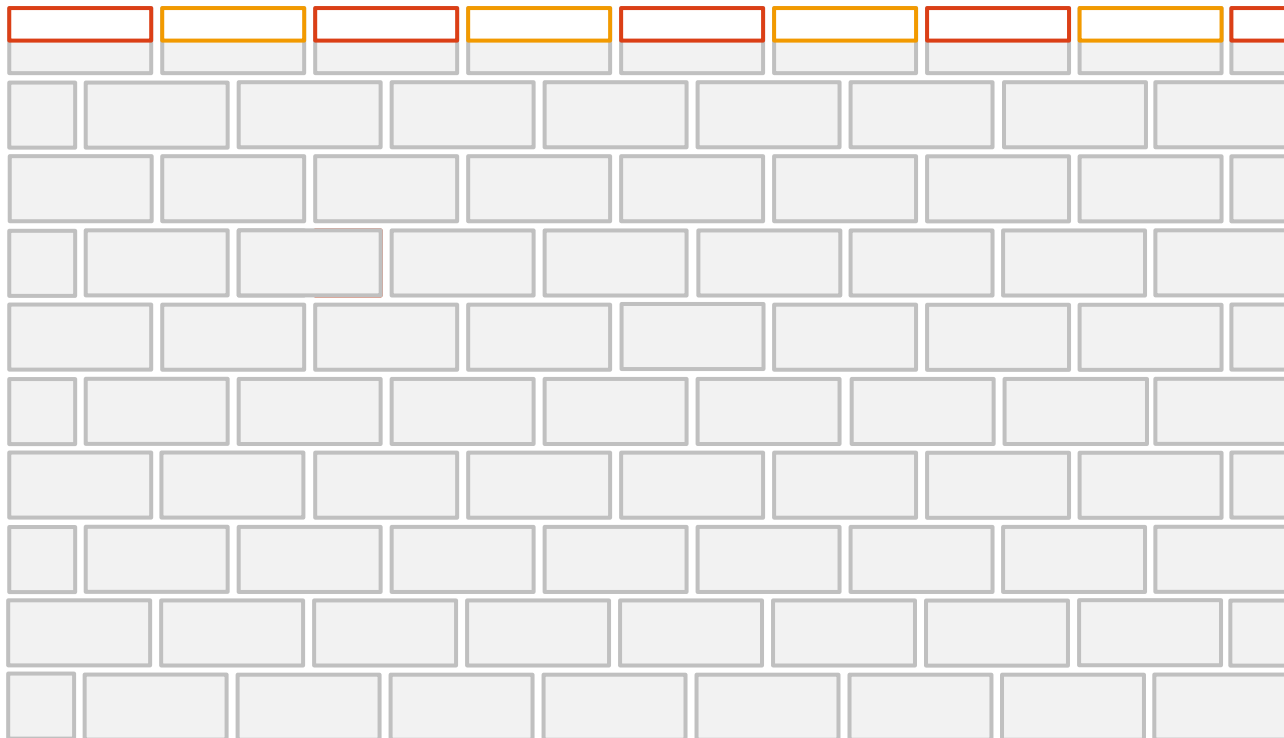
...the lack of competitive pressure in this industry, leads to high profit levels of the leading publishers”

According to Björk’s analysis, the large subscription publishers firmly **hold the scholarly publishing market in a deadlock.**

This allows them to continue to extract **high profit margins** and impeding the shift to open access.

The paywall system is as prosperous as ever

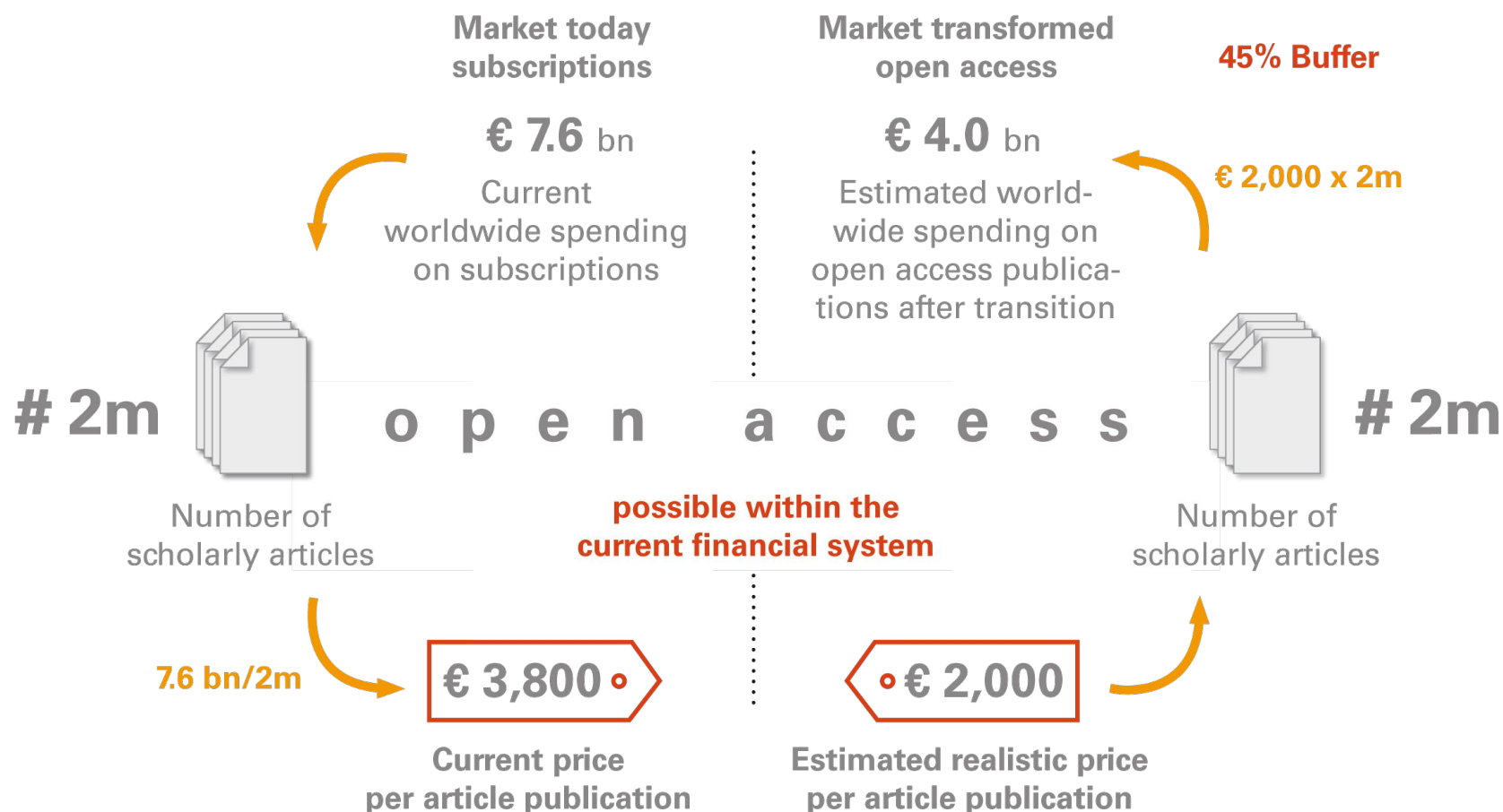
Subscription prices have increased by 60% in the past decade and are projected to rise 25% in the next five years.



Large subscription publishers continue to extract high profit margins, raising and fortifying the paywall.

More than enough money in the system

Worldwide Publishing Market



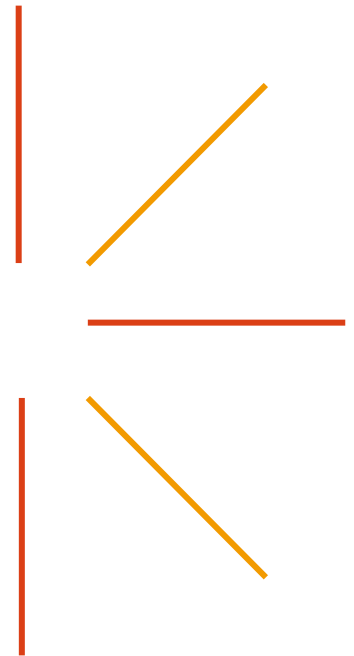
Money as leverage to bring down the paywall

By virtue of our own **spending decisions** we can drive Open Access into the system.

We don't need further mandates for researchers

we need a

mandate for our money



TODAY'S SCHOLARLY JOURNALS OPEN, RE-USABLE, SUSTAINABLE

vision

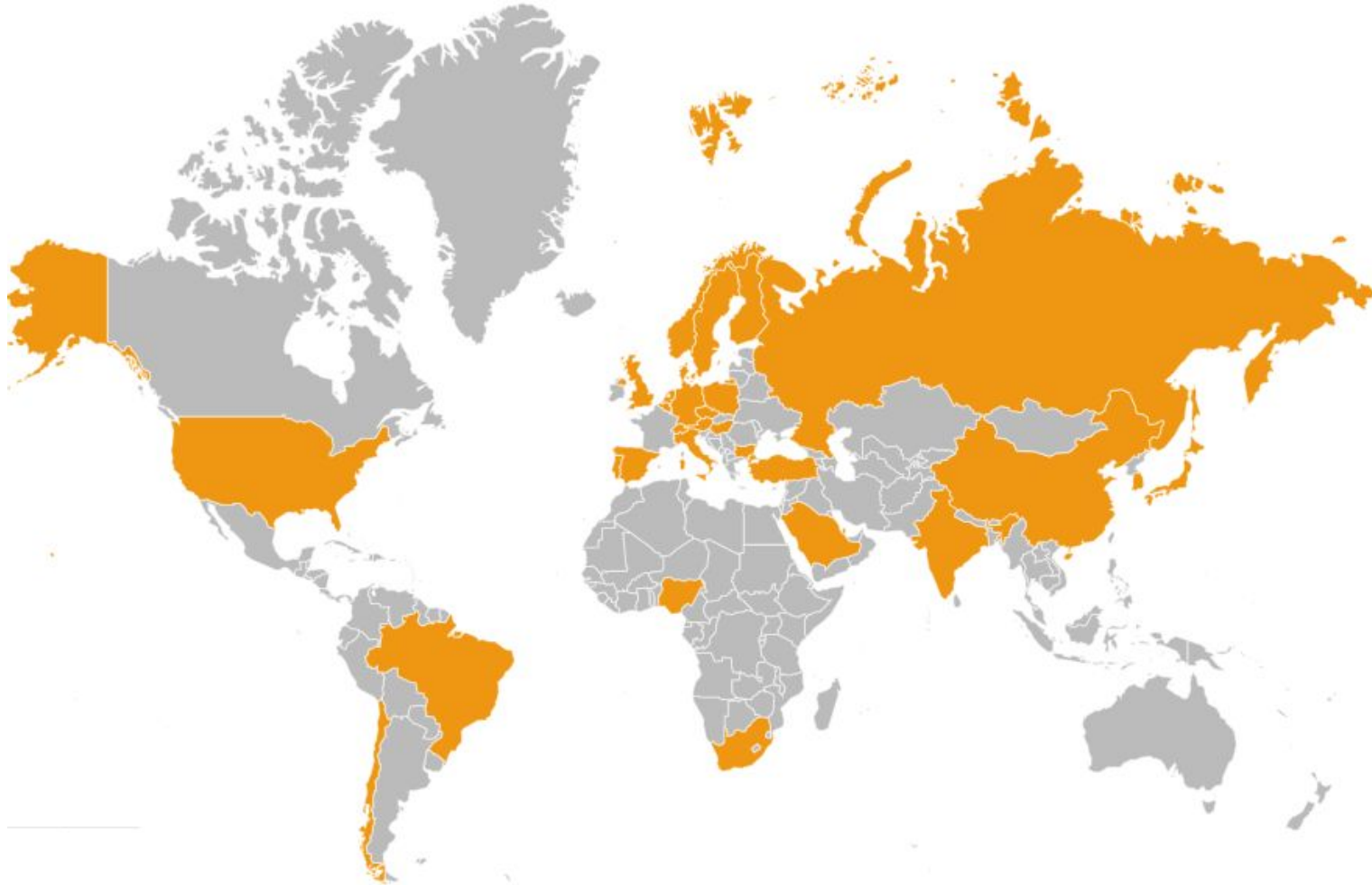
OA2020 IS A GLOBAL ALLIANCE COMMITTED TO
ACCELERATING THE **TRANSITION** OF TODAY'S
SCHOLARLY JOURNALS **TO OPEN ACCESS.**

mission

WE COLLABORATE TO TRANSFORM THE CURRENT
PUBLISHING SYSTEM, **REPLACING THE SUBSCRIPTION
BUSINESS** MODEL WITH NEW MODELS THAT ENSURE
THAT OUTPUTS ARE **OPEN AND RE-USABLE** AND THAT
THE COSTS BEHIND THEIR DISSEMINATION ARE
TRANSPARENT AND **ECONOMICALLY SUSTAINABLE.**

<https://oa2020.org/>

The power of collective action



We will pursue this transformation process by converting resources currently spent on journal subscriptions into funds to support sustainable OA business models

Opportunity to redesign scholarly communications



“**OA2020** is a step in the right direction to free knowledge...and to establish a fair, just, and sustainable scholarly communications ecosystem”

Prof. Yiqi Peng

Director of China's National Science and Technology Library



“...to build an open science environment to support better research”

Prof. Huizhou Liu

Director of the National Science Library, Chinese Academy of Sciences

OA2020 Roadmap to open access

Sign the OA2020 Expression of Interest

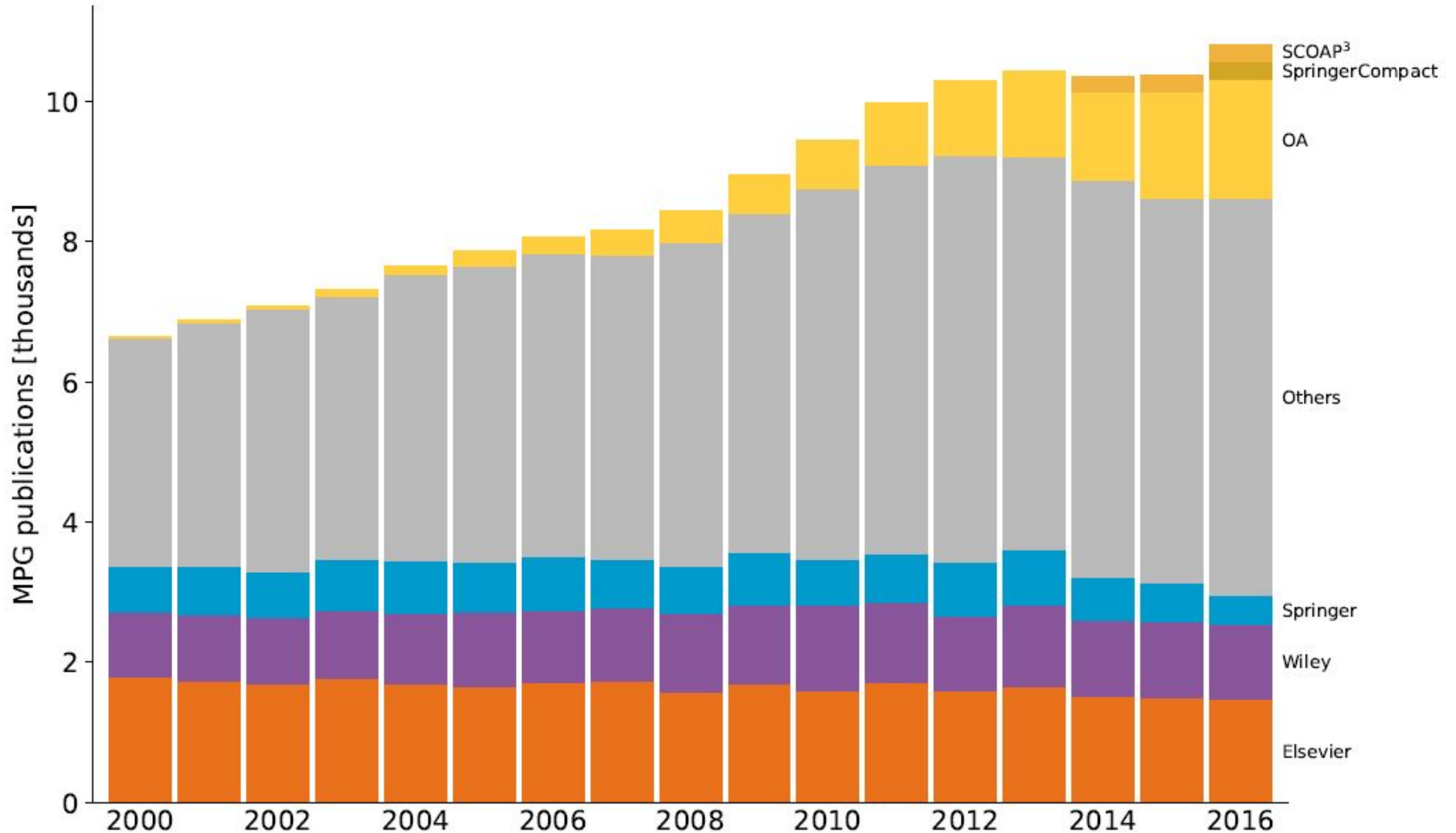
- Transform a majority of today's scholarly journals from subscription to OA publishing in accordance with community-specific publication preferences.
- Pursue this transformation process by converting resources currently spent on journal subscriptions into funds to support sustainable OA business models.

Create your local OA2020 Roadmap

- Assess your leverage power (publication & financial data)
- Engage Ministries / University Rectors / Research Funders
- Prepare a transformation strategy to divest of subscriptions
- Pilot and support new and alternative OA models
- Collaborate with OA2020 Community and other initiatives

Assessing value

Where do our researchers choose to publish?



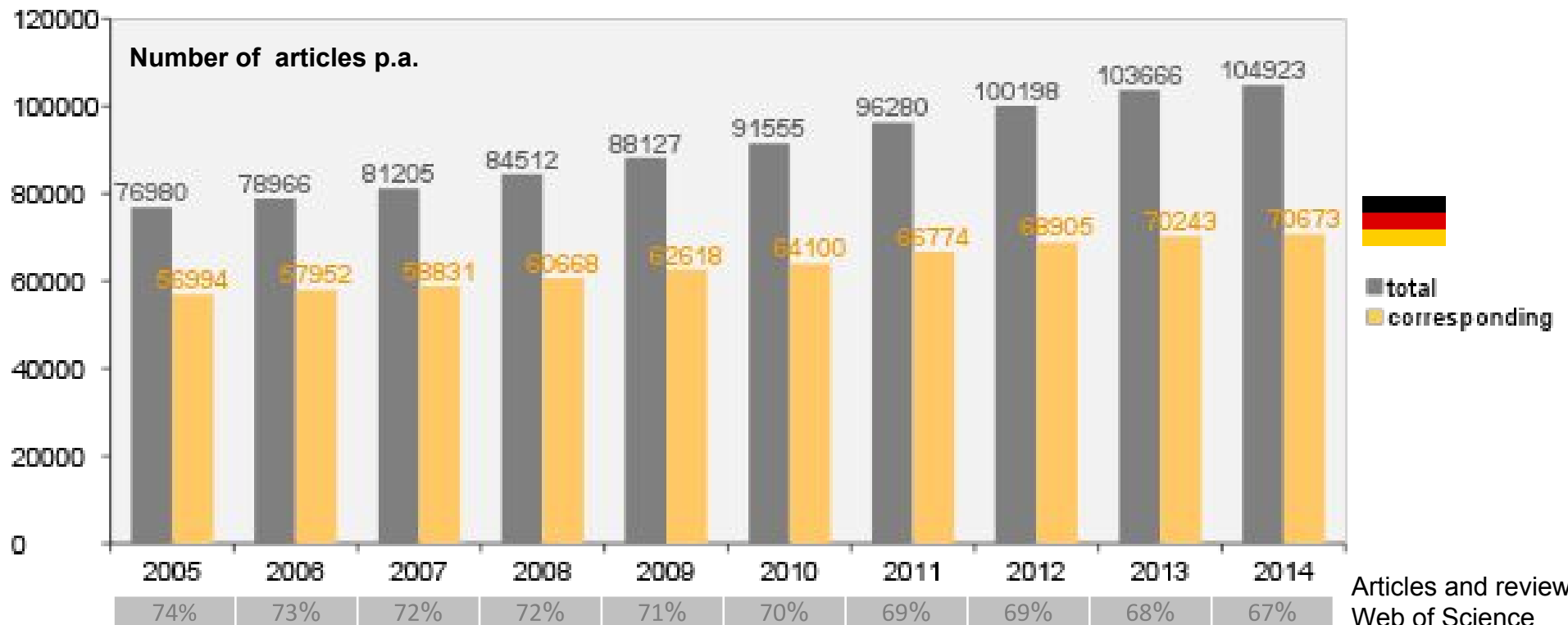
Assess current and projected costs

What should we aim for in terms of cost?

open access
2020

70,673 corresponding author papers x estimated per-article cost of 1,300 € = ~ **91.9m €**

70,673 corresponding author papers x estimated per-article cost of 2,000 € = ~ **141.3m €**



Prepare and execute a transformation strategy

Divest of subscriptions, for example...

- Implement a step-wise reduction in subscription expenditure
- Negotiate transitional agreements (e.g. read & publish, offsetting)
- Engage in subscription reviews and cancellations of “big deals”

Invest in Open Access, for example...

- Promote pure open access journals and publishers
- Negotiate pay to publish agreements
- Divert funding to open access publishing models (cooperative publishing, institutional publishing initiatives, memberships, etc.)

The significance of OA publishing

Top 20 journals by article output – World (2016)

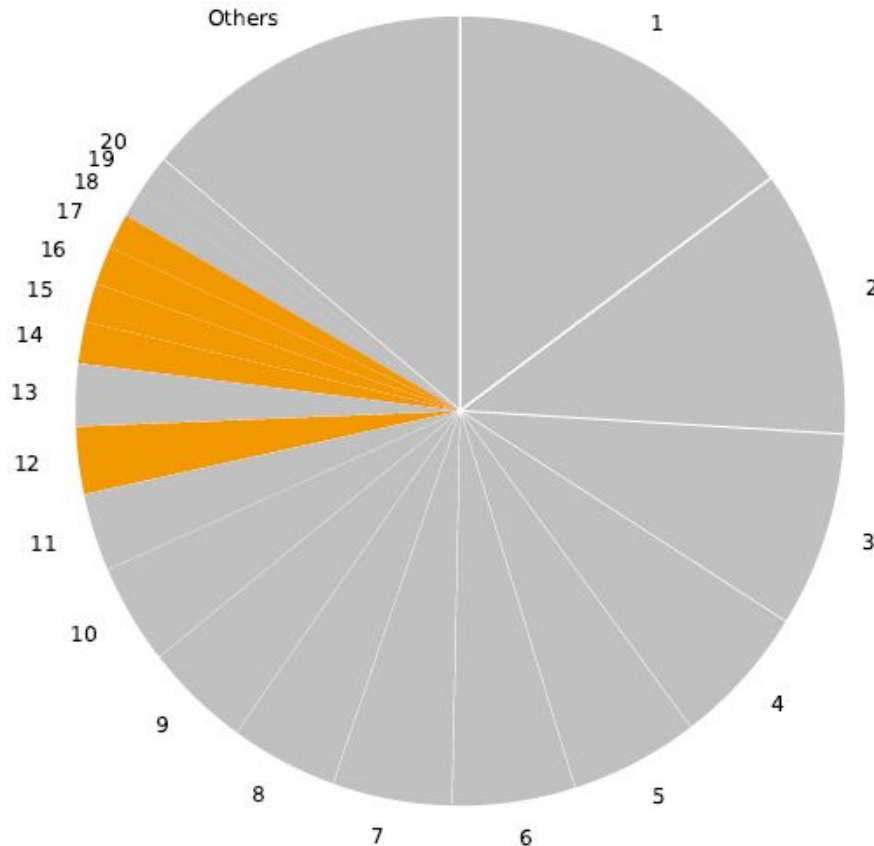
Publisher	Title	2016
PLOS	PLoS ONE	22091
NPG	Scientific Reports	20546
RSC	RSC Advances	13274
Impact	OncoTarget	6625
APS	Physical Review B :: Condensed Matter and Materials Physics	5345
ACS	ACS Applied Materials and Interfaces	4057
NPG	Nature Communications	3537
RSC	Physical Chemistry, Chemical Physics	3503
APS	Physical Review D :: Particles, Fields, Gravitation, and Cosmology	3390
Elsevier	Medicine	3275
Elsevier	Journal of Alloys and Compounds	3243
ACS	The Journal of Physical Chemistry C :: Nanomaterials and Interfaces	3241
OUP	Monthly Notices of the Royal Astronomical Society	3208
NAS	Proceedings of the National Academy of Sciences of the United States of America	3183
AIP	Applied Physics Letters	3047
ecentury	International Journal of Clinical and Experimental Medicine	3005
RSC	Chemical Communications	2967
OSA	Optics Express	2903
AAS	The Astrophysical Journal	2812
Desalination	Desalination and Water Treatment	2762

MPDL strategy guided by data analysis

Max Planck Society publications by publisher / OA Gold

articles and reviews in Web of Science 2015

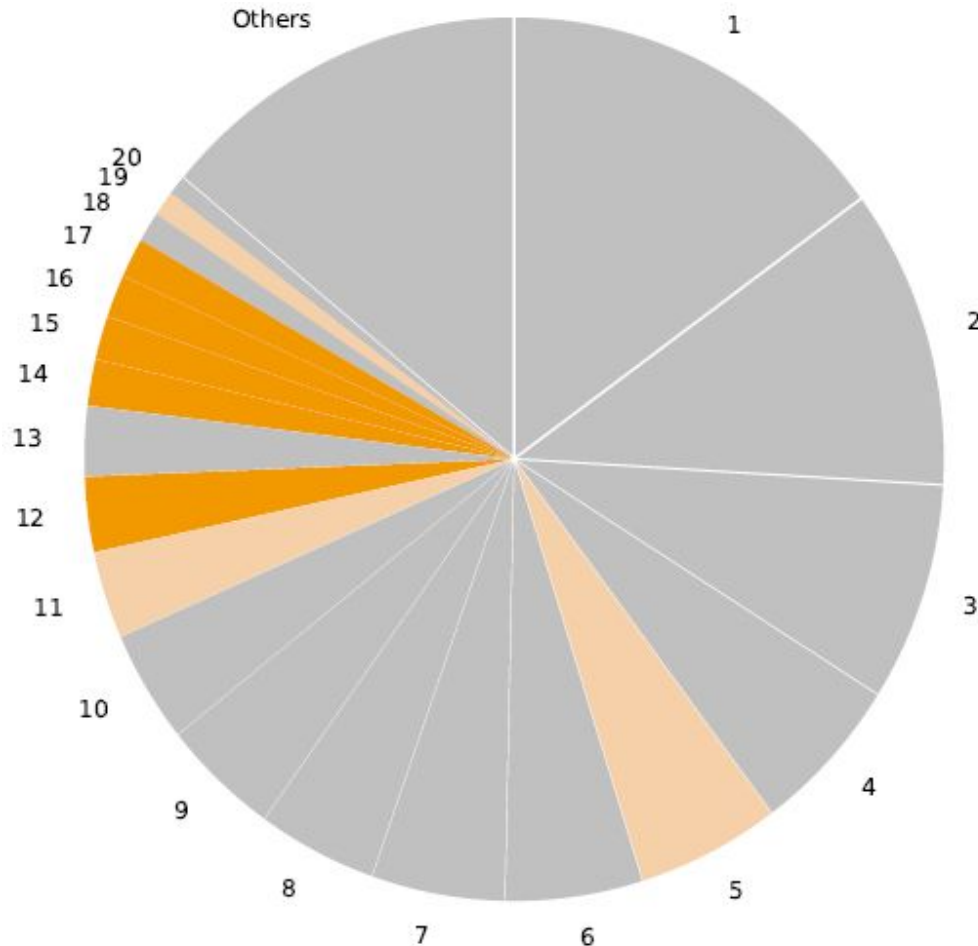
Subscription publisher
OA publisher



More than 80% of the total article output of the Max Planck Society is published in journals from **20 key publishers.**

5 out of the 20 publishers are already pure OA publishers.

Effects of transformational agreements (2017)

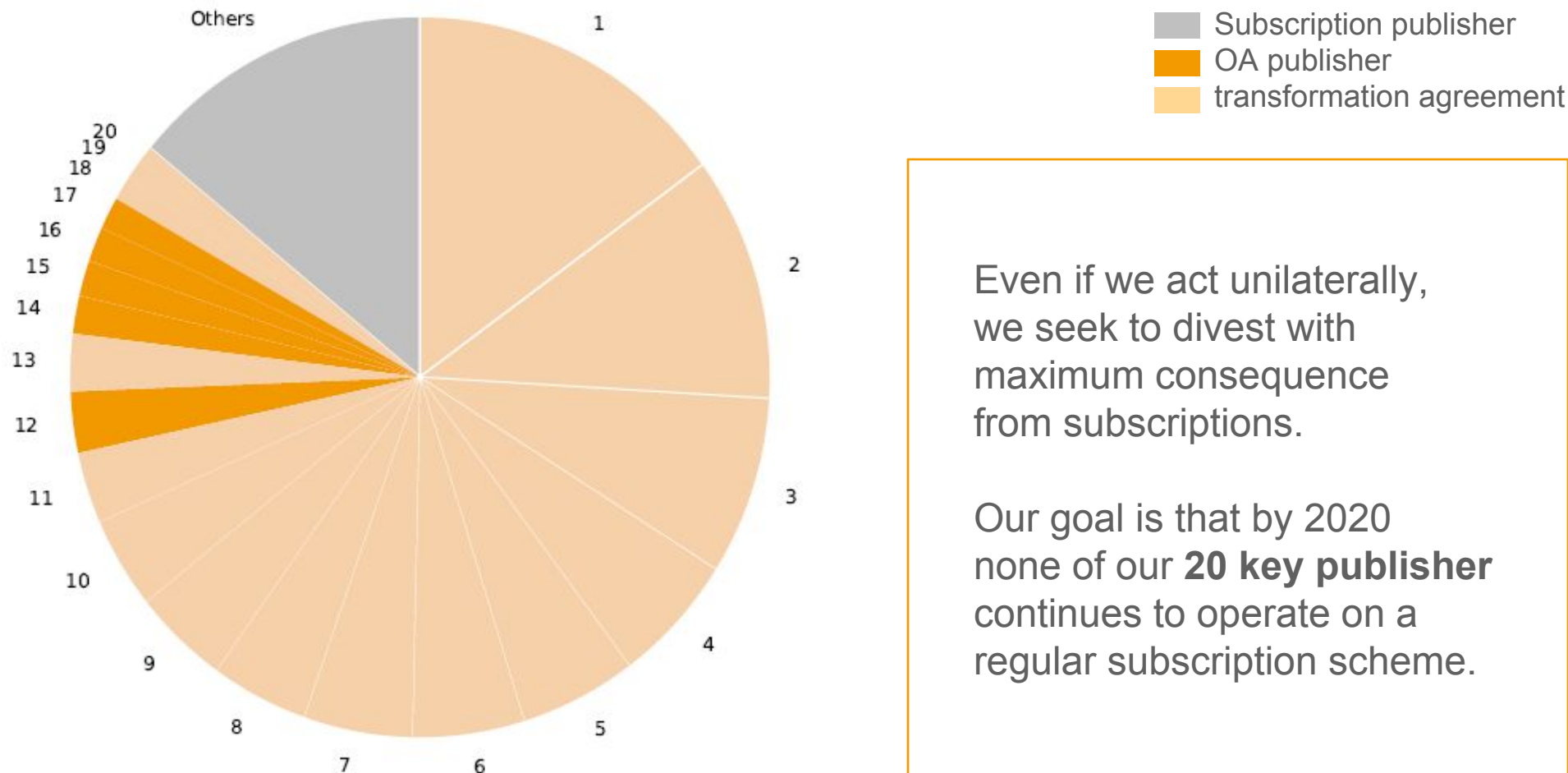


With our transformation agreements we have started to divest from subscriptions and increased our OA share.

This approach will be further extended as soon as the next license agreement is up for renewal.

Our goal:

Maximum divestment from subscriptions by 2020





Transformational Agreements negotiated by KEMÖ

- Read and Publish (Springer Compact, Emerald, RSC)
- Offsetting (IoP, T&F, Sage)
- Next...Wiley

Streamlining workflows Austrian Transition to Open Access: AT2OA

- Analysis of impact of OA
- Funding transitional business models
- Establish and expand OA publication funds
- Support OA publications and alternative OA publishing models



All German Research organizations have signed up for OA2020

National **DEAL** negotiations an expression of collective demand for more OA in the publishing system in Germany

PAR model (Publish & Read)

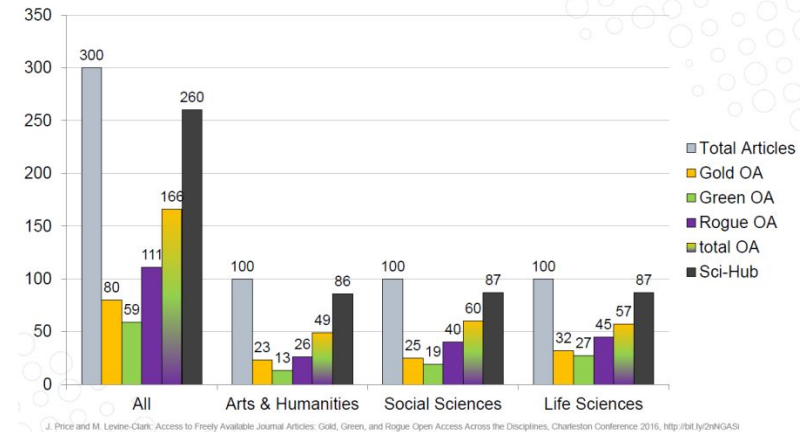
- Publish component: All publications by corresponding authors of eligible institutions become open access immediately upon publication (CC-BY)
 - Read component: DEAL institutions obtain perpetual access to the complete e-journal portfolio of the publisher
-

Alternative access strategies

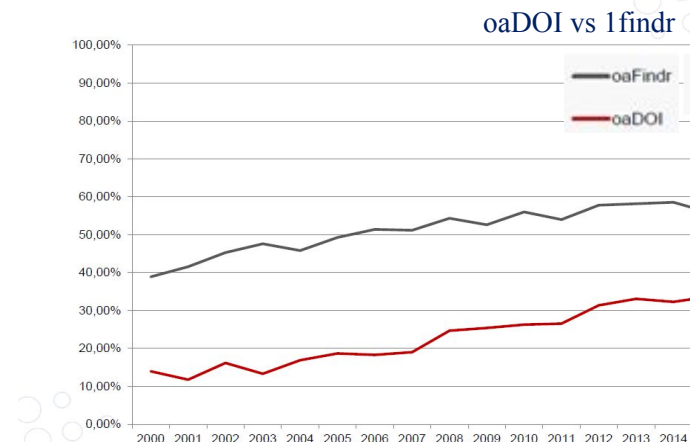
Stepping away from the table is increasingly a viable option

- Increasing amount of scholarly output is available for free (20-60%)
- OA tools (ie oaDOI, 1findr) can be integrated into library systems
- Strategy being adopted in many contexts

2016 study by Levine-Clark, Price, etc. (SCELC)



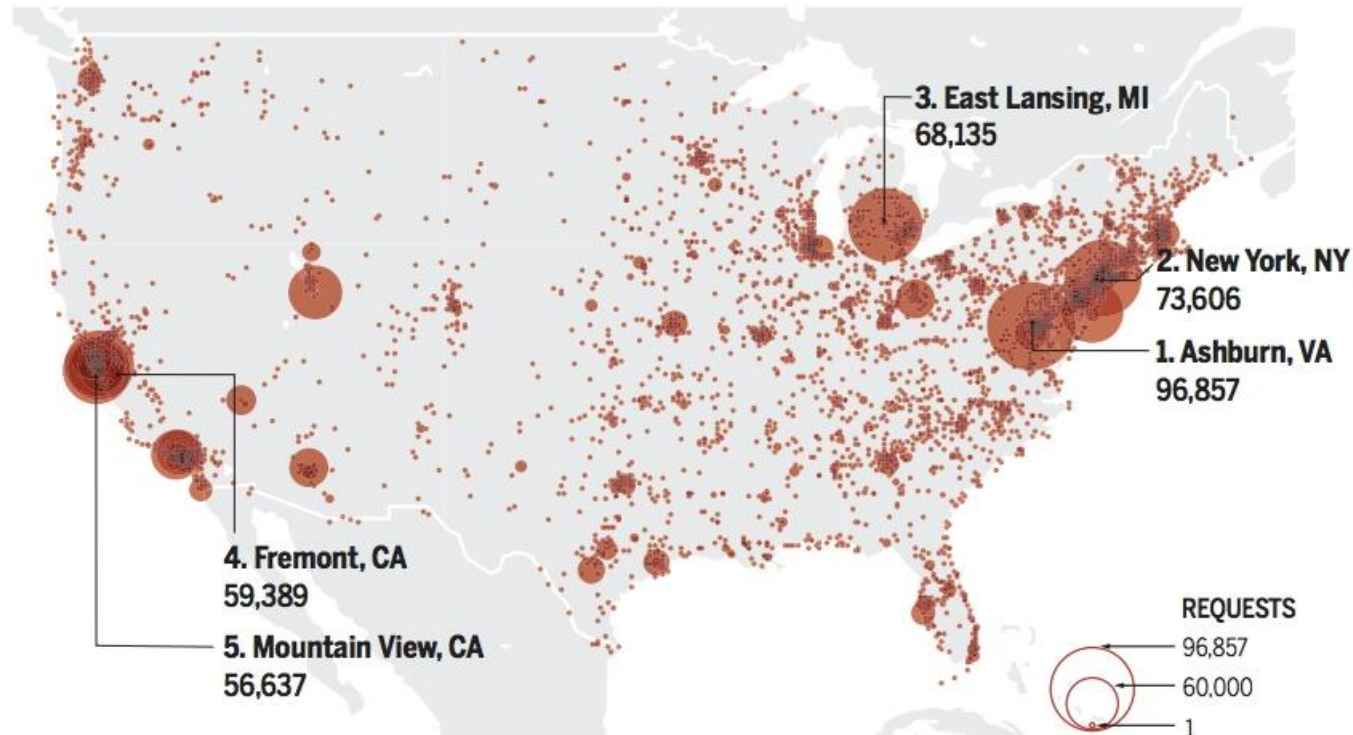
2017 homemade analysis (MPDL)



What lesson can we learn from SciHub?

Going to SciHub is not only an act of necessity, it is an expression of convenience!

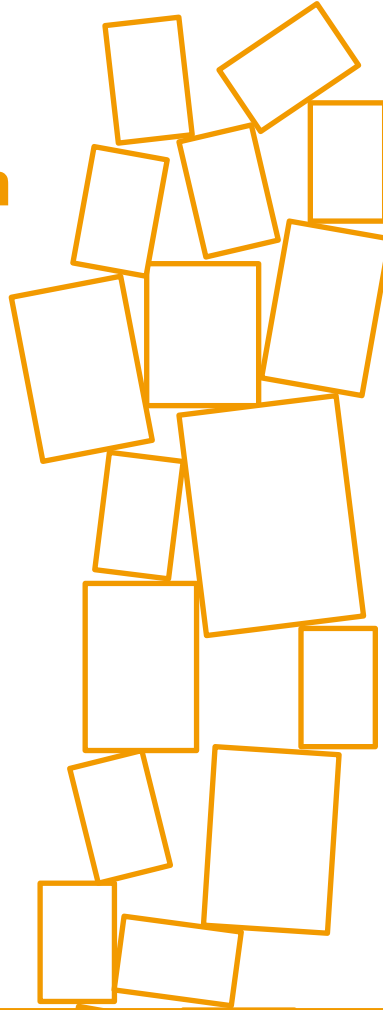
Sci-Hub users in the United States seem to congregate near universities and likely have institutional access to the articles they request. This map excludes 27,000 download requests from anonymous U.S. IP addresses.



SciHub, ResearchGate, Unpaywall et al.

The publishing system

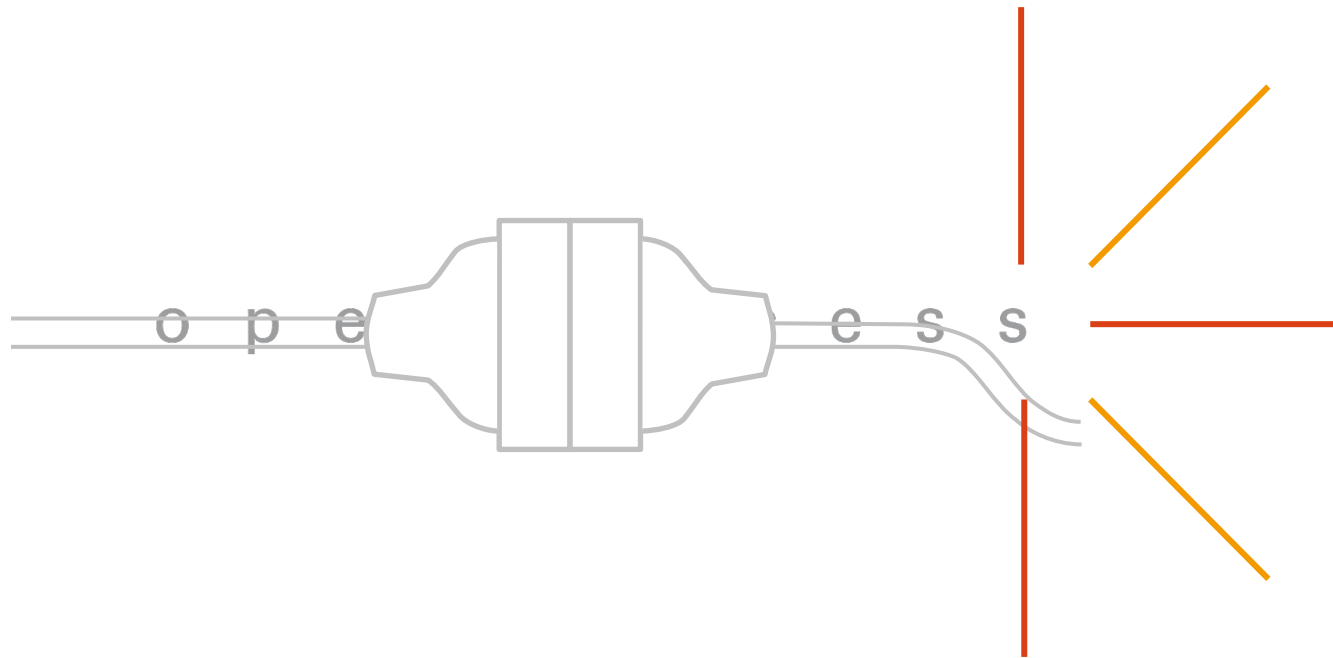
as we know it



**The current paywall system does not meet
the demands of 21st century research**

It is time to pull the plug on the paywall system

We need to discontinue the subscription system and
find new ways to finance the publishing services
that are wanted and needed in the 21st century



o p e n a c c e s s

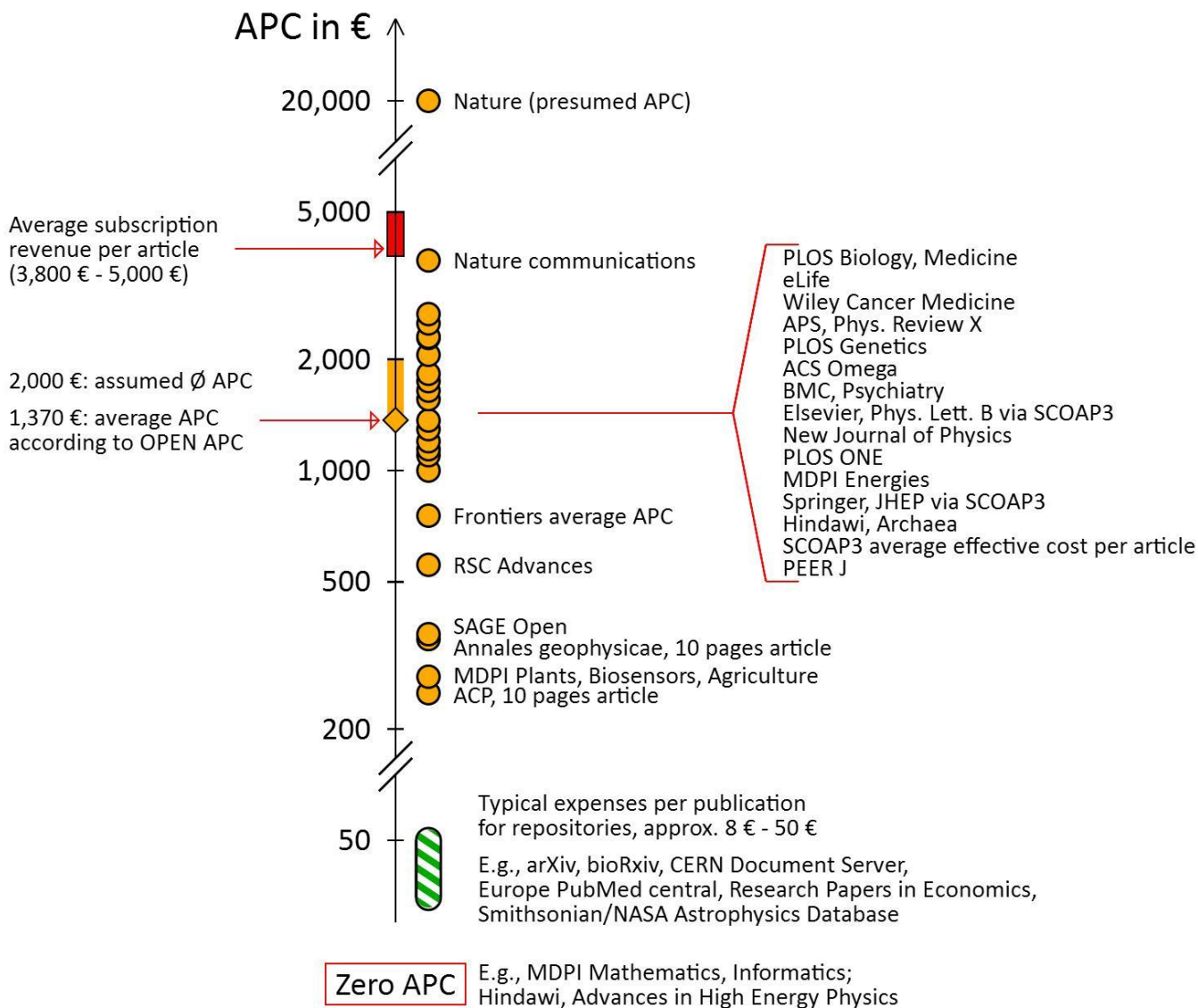
2 0 2 0



Visit oa2020.org

Thank you!

Cost stratification in the publishing system



Rare high budget publications

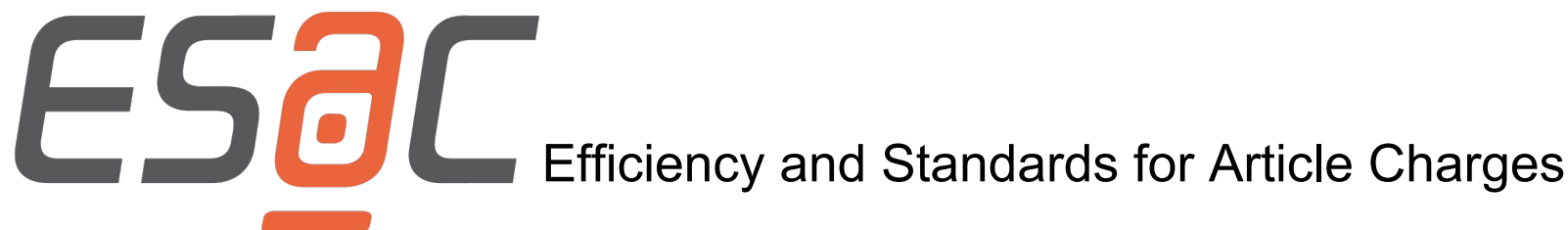
- Enhanced marketing
- Enhanced branding
- Digests (press releases)
- Presentation in social media

- State-of-the-art indexing, keywording, formatting
- Image editing
- Basic marketing

- Organization of proper review
- Technical platform
- Archiving

Frequent low cost publications

Practical support – Offsetting Agreements



<http://esac-initiative.org/offsetting/>

- Agreement matrix
- Joint Understanding of Offsetting (March 2016)
- Customer Recommendations for Article Workflows and Services (March 2017)

More and more APC evidence available



Open APC

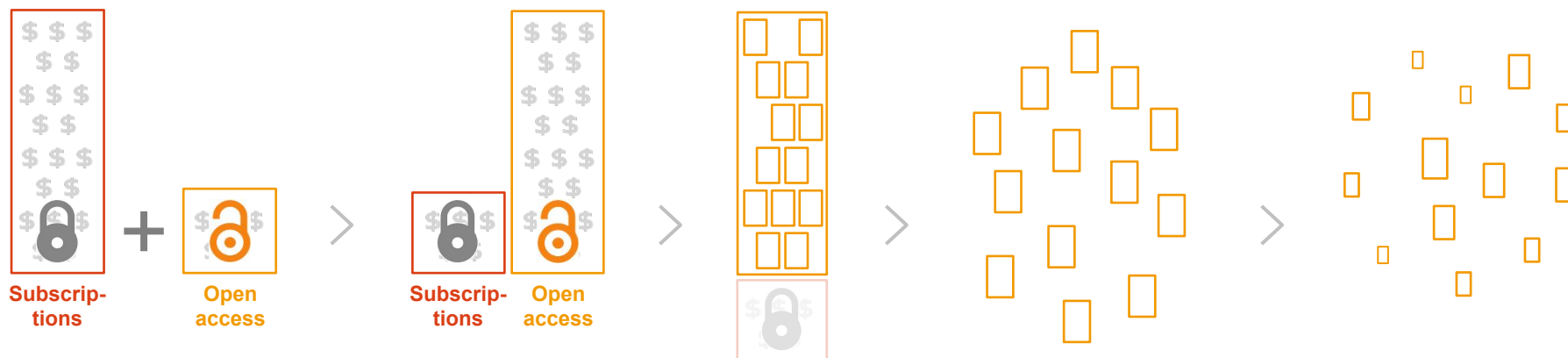
<https://treemaps.intact-project.org/>

Open APC Offsetting data set

<http://treemaps.intact-project.org/apcdata/offsetting/>

Universities and research institutions globally are invited to contribute their APC expenditure data to Open APC in order to build up a comprehensive data set that allows for extensive analyses and fosters transparency on the evolving APC market.

The transformation road via offsetting summarized



Phase 1

How to get in

- Combine subscriptions with OA
- Combine entitlements and shift costs
- Establish OA processes & workflows

Phase 2

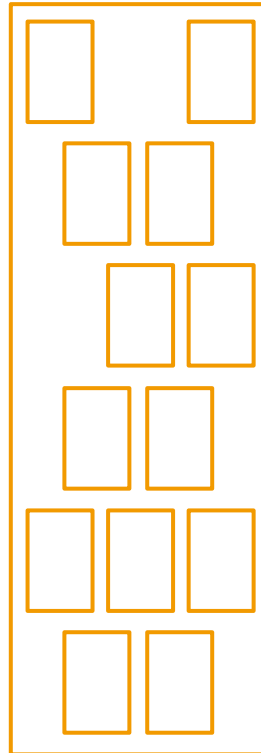
How to get out

- Unbundle the individual publications
- Fade out the reading fee
- Establish differentiated APC pricing

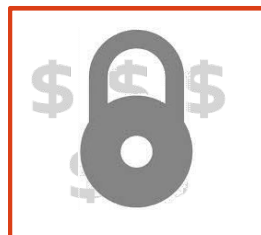
Offsetting is a model dedicated to the transformation; it cannot be a new standard routine. Offsetting has two distinct phases; together they pave the way to an OA market situation.

Step 1: Unbundling the article output

Publication Fee



Reading Fee



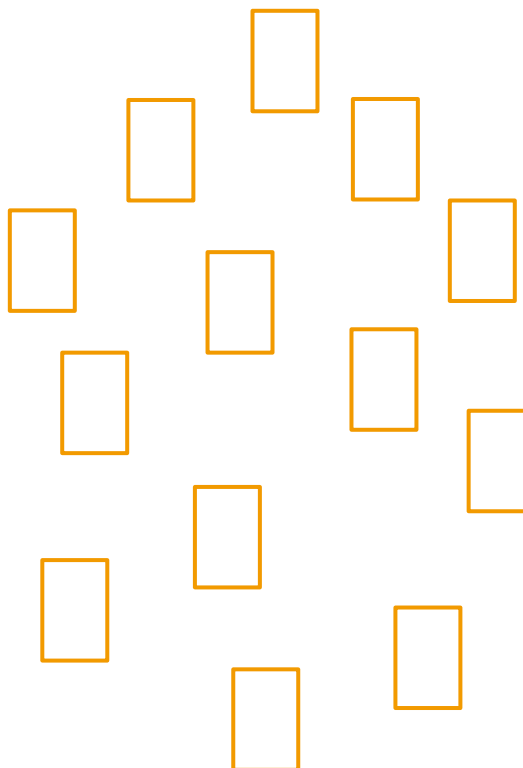
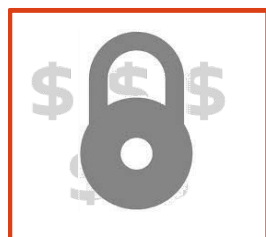
Opening up

- Organize payment according to publishing output without guaranteed fee or capped articles
- Move from lump sum approach to individual invoicing
- Terminate the fixation of the big package deal
- Establish principle of “pay as you publish”
- Essential step towards an open publication market, which must be based on individually customized invoices per publication

Step 2: Fading out the reading fee

Publication Fee

Reading Fee

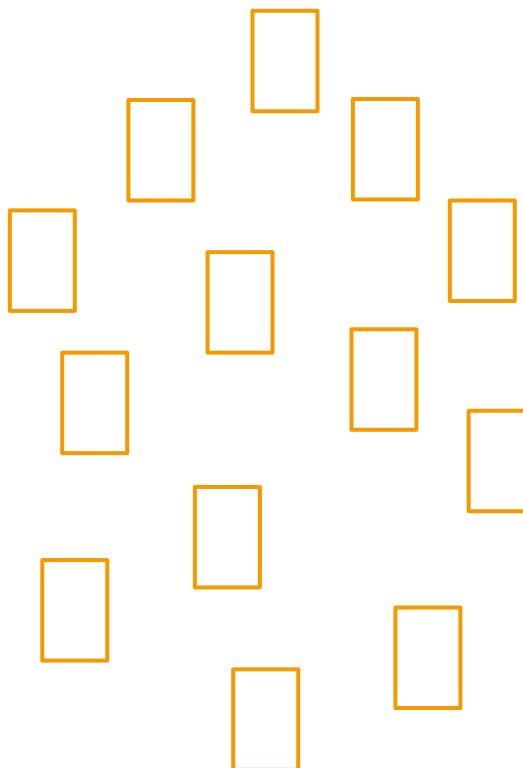


Diminish & remove legacy

- Fade out read-access cost component
- Reading fee is an atavism in an OA business model and needs to be removed as a residual element of the past
- Inevitable target line: zero (to be reached as quickly as possible)
- Hence it is best not to start with such a cost component in an offsetting model

Step 3: Establish differentiated APC pricing

Publication Fee



Reading Fee

Create market conditions

- Depart from “one price fits all” publisher price policy as it has been typical for many hybrid offerings so far
- An individual APC level for each journal is needed
- An OA market system must be based on differentiated pricing (i.e. a stratification of APCs)
- The artificially set hybrid APC price points must be subjected to competition in order to arrive at an harmonized overall OA market

Corresponding author output by country (2015 WoS data)

Countries at B13

Total	y2015RP	Share	Cumulative
United States	297,093	20.2%	20.2%
China	250,375	17.0%	37.2%
Great Britain	69,613	4.7%	41.9%
Germany	68,952	4.7%	46.6%
Japan	60,448	4.1%	50.7%
South Korea	47,900	3.3%	54.0%
Italy	45,835	3.1%	57.1%
France	44,573	3.0%	60.1%
Canada	43,264	2.9%	63.0%
Australia	39,293	2.7%	65.7%
Spain	39,169	2.7%	68.4%
Brazil	32,968	2.2%	70.6%
Russian Federation	25,729	1.8%	72.4%
Netherlands	23,377	1.6%	74.0%
Poland	20,524	1.4%	75.4%
Switzerland	15,150	1.0%	76.4%
Sweden	15,069	1.0%	77.4%
Belgium	12,126	0.8%	78.2%
Denmark	10,139	0.7%	78.9%
Austria	8,144	0.6%	79.5%

Similar to what we have seen with the publisher distribution of our institutional output, we find the 20:80 rule holds true on the global scale:

20 countries account for 80% of the annual global output.

Those 20 are here with us at this conference along with 13 others!

When will OA2020 be ultimately successful?

To be successful OA2020 would need no more than 100 firm supporters, provided that they are among the leading institutions of their countries and geographically distributed

# of institutions	Firm support	Medium	Cumulative
United States	10-20	15	15
China	8-12	10	25
Great Britain	6-8	7	32
Germany	6-8	7	39
Japan	5-7	6	45
South Korea	4-6	5	50
Italy	4-6	5	55
France	4-6	5	60
Canada	4-6	5	65
Australia	4-6	5	70
Spain	4-6	5	75
Brazil	3-5	4	79
Russian Federation	3-5	4	83
Netherlands	2-4	3	86
Poland	2-4	3	89
Switzerland	1-3	2	91
Sweden	1-3	2	93
Belgium	1-3	2	95
Denmark	1-3	2	97
Austria	1-3	2	99

Firm support would not stop with signing the Expression of Interest.

It would mean expressing and demonstrating a commitment to divest the money from the subscription system and to shift budget and all operations to OA related services.

The success formula of OA2020: institutional 20:80 + geographic 20:80 = irreversibility

We need firm institutional commitment **plus** reasonable geographic distribution of supporters to bring the departure from the subscription system to a point of no return

