Strategic Open-Access Business Models:
The British Approach

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UK Developments

• **R&D initiatives 2000 onwards**, e.g. **ePrints software, SHERPA initiative etc**, *(part-*)**funded by Jisc**
• **House of Commons Select Committee Report, 2004**
• **Wellcome Trust policy, 2005**
• **etc.**
• Finch Report, 2012
• Research Councils UK policy (RCUK) – initial version, 2012
• Charity funders: Charity Open Access Fund (COAF), Wellcome Trust and other medical research charities, 2014
• Higher Education Funding Councils policy for the Research Excellence Framework (REF), 2014
• Ongoing activity by Jisc and other national agencies
• Increasing numbers of institutional mandates
UK OA Policy Landscape

- Research Councils UK (RCUK)
- Wellcome Trust and other medical charities (COAF)
- Higher Education Funding Council for England (HEFCE) and others (REF)
- Some institutions

Gold OA emphasis

Green OA emphasis
# Key Features of Policies

<table>
<thead>
<tr>
<th>Policy</th>
<th>Research Councils UK and Medical charities (COAF)</th>
<th>HEFCE Research Excellence Framework (REF)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Focus</strong></td>
<td>Gold-centric</td>
<td>Green-centric</td>
</tr>
<tr>
<td><strong>Scope</strong></td>
<td>Requirements for all outputs arising from grants</td>
<td>Requirement for all REF submissions</td>
</tr>
<tr>
<td><strong>Monitoring</strong></td>
<td>Include monitoring and sanctions</td>
<td>Monitoring through institutional reporting</td>
</tr>
<tr>
<td><strong>Funding</strong></td>
<td>Funded by institutional block grants (based on overall research spend)</td>
<td>Not accompanied by specific funding</td>
</tr>
<tr>
<td><strong>Requirements</strong></td>
<td>Allow payment of APCs for fully-OA and hybrid journals</td>
<td>Requires deposit in an IR within 3 months of acceptance (or 3 months of publication until 2018)</td>
</tr>
<tr>
<td></td>
<td>Funding can be used for other OA support activities</td>
<td>Allows for embargoes in timing of release of outputs</td>
</tr>
</tbody>
</table>
Some Propositions

• The policies differ in emphasis… …but are not incompatible

• Complying with the policies can be confusing for users (‘mandate messiness’)… …but creates a useful Gold-Green balance (synergy?) in the overall policy position

• The policies can be implemented by institutions with different emphases… …but have contributed to rising OA awareness and adoption levels

• Those adoption patterns have created challenges… …but work is ongoing to address them (even if solutions are still unclear)

Adoption ➤ Challenges ➤ Solutions
OA Adoption: UK and Global

Journal publishing models employed by Global and UK authors

The moved from below to above the global average of Gold OA take up, 2012-14
“…the UK’s profile of OA take-up is significantly different from the global averages: its use of OA in hybrid journals is two and half times the world average…”

Authors’ Take-Up of OA Options

Articles at a global level:
19% OA immediately:
23% OA by 6 months,
29% OA by 12 months
34% OA by 24 months

For articles published by UK authors, the proportions were higher:
22% OA immediately
28% OA by 6 months
38% OA by 12 months
43% OA by 24 months

For articles published 2012-2014

(Jubb, M., et al., 2015)
The HEFCE REF policy came into force in April 2016
Universities are now proactively encouraging and monitoring compliance

Early evidence suggests a rise in deposits in UK institutional repositories

Deposits into the White Rose repository (the universities of Leeds, Sheffield, York) 2004-16
APC Expenditure: Longitudinal Analysis

- Centrally-managed APC expenditure (from a sample of 23 HEIs) rose, particularly since 2012
- This represents a rise in actual expenditure but also a shift from distributed to centralised accounting (Jubb et al, 2015; Pinfield et al, 2017)

- The rise continued in 2015 (based on a sample of 13 institutions) (Shamash, 2016)
There has been growth in APC expenditure growth across all HEIs since 2010.

One HEI accounts for nearly a third of expenditure in 2014.

21 HEIs experienced growth of APC expenditure 2013-2014: 12 of more than 100% in a year.

(Pinfield, Salter & Bath, 2016)
Top Publishers by APC Payments

<table>
<thead>
<tr>
<th>Publisher</th>
<th>Articles in Fully-OA Journals</th>
<th>Articles in Hybrid Journals</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elsevier</td>
<td>20</td>
<td>906</td>
<td>926 (19.1)</td>
</tr>
<tr>
<td>Wiley</td>
<td>25</td>
<td>709</td>
<td>734 (15.1)</td>
</tr>
<tr>
<td>Springer</td>
<td>8</td>
<td>329</td>
<td>337 (6.9)</td>
</tr>
<tr>
<td>PLOS</td>
<td>322</td>
<td>-</td>
<td>322 (6.6)</td>
</tr>
<tr>
<td>BioMed Central</td>
<td>290</td>
<td>-</td>
<td>290 (6)</td>
</tr>
<tr>
<td>Oxford University Press</td>
<td>28</td>
<td>202</td>
<td>230 (4.7)</td>
</tr>
<tr>
<td>BMJ</td>
<td>80</td>
<td>138</td>
<td>218 (4.5)</td>
</tr>
<tr>
<td>Taylor &amp; Francis</td>
<td>1</td>
<td>167</td>
<td>168 (3.5)</td>
</tr>
<tr>
<td>Frontiers</td>
<td>140</td>
<td>-</td>
<td>140 (2.9)</td>
</tr>
<tr>
<td>Nature Publishing Group</td>
<td>34</td>
<td>106</td>
<td>140 (2.9)</td>
</tr>
<tr>
<td>Others</td>
<td>232</td>
<td>1116</td>
<td>1348 (27.8)</td>
</tr>
<tr>
<td>Total</td>
<td>1180</td>
<td>3673</td>
<td>4853</td>
</tr>
</tbody>
</table>

- Top-10 publishers by numbers of APC payments, 2014 (Pinfield et al, 2017)
- 3 OA publishers in the top 10; the majority are commercial publishers who also dominate subscription publishing
- Shamash (2016) only 3 OA publishers in top-21 publishers for 2015
- Payments for hybrid journals predominate: 76% in 2014 (Pinfield, et al, 2017); 78% in 2014 and 71% in 2015 (Shamash, 2016) – from different samples
• APC ranges charged by the top-10 publishers based on value of APC payments

Journal Types and Price Differentials

- 3 journal types identified by Bjork & Solomon (2014)
- Marked differences between of APCs paid by type, with hybrids substantially more expensive (the hybrid mean is 58% higher than the mean of fully-OA journals from OA publishers)
- Correlation between average APC and average *Field-Weighted Citation Impact (FWCI) score

<table>
<thead>
<tr>
<th>Publisher Type</th>
<th>Mean</th>
<th>Number of journals</th>
<th>Number of articles</th>
<th>Sum</th>
<th>Min</th>
<th>Max</th>
<th>Median</th>
<th>Average FWCI*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hybrid journals – published by ‘subscription publishers’</td>
<td>£1,725</td>
<td>1613</td>
<td>3673</td>
<td>£6,337,723</td>
<td>£0</td>
<td>£4,536</td>
<td>£1,680</td>
<td>1.78</td>
</tr>
<tr>
<td>Fully-OA journals – published by ‘subscription' publishers’</td>
<td>£1,311</td>
<td>74</td>
<td>306</td>
<td>£401,149</td>
<td>£0</td>
<td>£3,810</td>
<td>£1,229</td>
<td>1.49</td>
</tr>
<tr>
<td>Fully-OA journals – published by ‘non-subscription publishers’</td>
<td>£1,094</td>
<td>181</td>
<td>874</td>
<td>£956,469</td>
<td>£0</td>
<td>£2,960</td>
<td>£1,071</td>
<td>1.29</td>
</tr>
</tbody>
</table>

APC Price and Quality

- APC data for 24 HEIs matched to Field Weighted Citation Impact (FWCI) scores in Scopus
- Journals were grouped in 10 different FWCI categories for analysis (each of 10% of the journals with the top two tiers 5%)

- Shows a strong correlation between price and quality (as measured by citation)
- Different possible explanations, including: higher costs of producing higher-quality more selective titles; and/or willingness of authors to pay higher prices for higher-impact titles

Subscriptions

Aggregated subscription expenditure for the 24 HEIs for 7 publishers*, 2011-2014 (including annual % changes)

- Subscription costs rose overall 2011-2014
- Subscriptions costs rose 2013-2014

• Total cost of publication (subscriptions + APCs + APC admin costs) for the sample of 7 publishers*, 2014
• APCs approx. 12% of the total cost of publication

* CUP, Elsevier, OUP, Sage, Springer, Taylor & Francis, and Wiley

UK Landscape and its Challenges

RCUK, COAF etc: Gold-centric policies

HEFCE, etc: Green-centric policies

Jisc and other support agencies

HEI
HEI
HEI
HEI
HEI
HEI
HEI
HEI

National level

Institutional level
UK Landscape and its Challenges

RCUK, COAF etc: Gold-centric policies

HEFCE, etc REF: Green-centric policies

Jisc and other support agencies

Balance/relationship between Gold & Green OA?

‘Hybrid’ journals as a viable transition mechanism?

Shape of ‘offsetting’ arrangements (short & long term)?

Reducing (or eliminating) embargoes?

Greater transparency of data (e.g. subscription)?

Balance between central & institutional activity?

Shape of ‘offsetting’ arrangements (short & long term)?

HEI

HEI

HEI

HEI

HEI

HEI

HEI

HEI

Institutional level

National level
In the UK, Jisc has built on a long history of OA support activity by supporting research funder and HEFCE policies by providing services and support, good practice/pathfinder projects, and negotiating deals with publishers.
Questions and Comments

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References


• Pinfield, S., Salter, J., & Bath, P. A. (2017). A “gold-centric” implementation of open access: Hybrid journals, the “total cost of publication” and policy development in the UK and beyond. *Journal of the Association for Information Science and Technology, (In press).* http://eprints.whiterose.ac.uk/96336/

Box Plot Definition for this Study

- The horizontal bold line in each box represents the median (second quartile) value.
- The bottom and top of each box represent the first and third quartiles respectively.
- The distance between these represents the inter-quartile range (IQR).
- Whiskers represent the lowest datum still within 1.5 IQR of the lower quartile, and the highest datum still within 1.5 IQR of the upper quartile (Tukey boxplot).
- Small circles (○) representing outliers and asterisks (*) extreme values.