Economic analysis of business models for open access monographs

Annex 4 to the Report of the HEFCE Monographs and Open Access Project

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Summary

London Economics were commissioned by the Higher Education Funding Council for England (HEFCE) to undertake an analysis of business models for open access (OA) monographs. The fundamental aims and objectives of the research involved assessing various factors relating to OA publishing, but in particular issues relating to cost recovery, quality control, and the incentives for authors and publishers. The research is also aimed at providing a better understanding of whether different business models operate more or less effectively depending on the nature of the publications under consideration, as well as whether recent innovations in OA publishing shed further light on both emerging publishing processes and innovation, as well as the outcomes of different approaches.

Approach

This report is based on:

- a review of available evidence, including academic, industry and policy publications, as well as promotional material provided by various OA operations; and
- in-depth interviews with 14 experts in OA monograph publishing (two of whom assisted the project as expert advisors).

The expert interviews provided insights into the context of OA publishing and the state of academic publishing in the humanities and social sciences more broadly. In addition, these in-depth interviews advanced the discussion of the rationale for OA in academic publishing, as well as the strengths and weaknesses of the individual operations that are currently active in this market. The focus of the report is on English-language publishing.

The evidence presented in the report is qualitative and reflects theoretical considerations as well as the subjective views of the individuals who were interviewed over the course of the research. A lack of operation-level data means that more formal quantitative modelling is not feasible at this stage: specifically, commercially sensitive financial data are not accessible and many of the organisations active in OA monograph modelling have to be considered in some senses experimental.

Business models

After careful review of existing OA operations six fundamental business models were identified based on the functions (i.e. elements in the chain of activities involved in OA publishing) that are carried out and the funding approach. The following business models were identified:

- traditional publisher;
- new university press;
- mission-oriented OA;
- freemium OA;
- aggregator/distributor; and
- author payment model.
In general, existing OA operations align more or less closely with one of these business models, although many combine aspects of two or more models. The business models are therefore to be understood as abstractions chosen to highlight the features that have an impact on performance.

**Performance**

**Criteria**

The performance of the different business models for OA monograph publishing can be judged qualitatively based on the experience of extant incarnations and theoretical considerations. We assess the business models in two dimensions. The criteria by which an individual OA publishing operation can be judged are:

- quality;
- sustainability; and
- dissemination.

From a system perspective, the relevant factors are:

- diversity;
- innovation; and
- integrity.

The report discusses the performance of the individual business models along these dimensions based on expert consultations. The result is a qualitative discussion of emerging evidence and a summary of key considerations for policy on OA monograph publishing. The key considerations are summarised below.

**Summary of performance considerations**

**Quality**

Quality is taken very seriously by OA publishers, reflecting academic standards prevalent in the sector and the need to demonstrate credibility as an alternative to the traditional publishers. However, the author payment model could offer an incentive to trade quality for quantity if not constrained by other institutional factors. Insecure and limited funding may limit the resources allocated to quality assurance for some of the smaller, mission-oriented OA publishers. University presses and individual authors (in author payment models) might be tempted to engage in vanity publishing.

**Sustainability**

Sustainability is a function of the stability of revenue streams. As such, all OA publishers are under pressure, as the OA model entails a deliberate rejection of most reader-side revenues. Operations relying on a single source of revenue are inherently more unstable. Access to cross-subsidies and to reader-side revenues (freemium/value-added services) contribute to sustainability.
Summary

Dissemination

Many OA operations have no strong incentive to reach non-traditional audiences. This is often justified by a belief that making books available online for free is sufficient to maximise dissemination. The scholar-led efforts in OA publishing also tend to prioritise traditional dissemination channels, above all libraries. The incentives for maximising dissemination are singularly strong in the freemium model: each new reader is a potential buyer of premium features and hence a source of net revenue (as marginal costs tend towards zero). However, there is a risk that dissemination efforts will be targeted at customer segments where there is most demand for premium features but where the benefits of knowledge dissemination are comparatively low.

Diversity

Diversity is a feature of the current publishing landscape. This is likely to be maintained. Aggregators - organisations that are not involved in publishing, but perform a variety of functions around funding, access, quality control and discoverability that help to overcome coordination failures in the market - play an important enabling role for smaller publishers and therefore have potentially a crucial function in maintaining diversity. However, the presence of network effects (which favour the concentration of market share in the hands of a dominant platform) may lead to a loss in diversity at the aggregator level (with potential knock-on effects for the system as a whole, since aggregators’ functions include standard-setting and enforcement).

Innovation

Overall, the sector tends to favour conservative approaches, reflecting the preferences of key participants. There is considerable potential for innovation in business models. Economic incentives are crucial for innovation, which suggests that a diversity of funding mechanisms and the potential for profit-making will be key to unlocking the potential.

Integrity

Being embedded in various ways in the academic community ensures that OA publishing enjoys the support of its key constituency: academically affiliated authors and readers. Aggregators and distributors are likely to play a special role through their ability to uphold standards.
1 Framework for analysis

1.1 Business models for OA publishing

The **function of publishing** is turning manuscripts into books that are to be read. Open Access (OA) publishing occurs if the books are, at least at one point in time (e.g. after an embargo period), available online free of charge. Our definition of OA is not a universal one. It glosses over questions of **copyright** (How can the content be used once published?), **functionality** (What is an OA ‘book’?), other important questions of **access** (Is the book only available for free for a limited time? Or only after a certain amount of time has elapsed since publication?), and, perhaps most crucially, the question of to what extent the fact that a book is available in some form for free and accessible over the internet translates into **better access** to the book in terms of a **greater readership** and greater impact.

Scholarly book publishing has a number of secondary functions, above all to aid the production and dissemination of knowledge, but also to aid the research community in other ways, in particular as an accepted means of signalling academic merit and status. Monograph publishing in the humanities and social sciences has therefore never been understood by the people involved as a purely profit-oriented activity and, perhaps as a consequence, has not historically been seen as a source of substantial profits for publishers.

By a **business model** we mean a combination of actors and processes (including flows of funds) that carry out the publishing function in a replicable manner at some scale. In other words, to qualify as a business model, the operation has to be a serious attempt to produce books on an ongoing basis for a sizeable readership. Given the fragmentation and specialised nature of many of the research areas in which monographs are published, it has to be understood that production runs for books may not exceed single figures in any given year, and that purchases may number only in the hundreds for a publishing operation to be considered viable and worthwhile.

The relatively small market (number of actors) in academic monograph publishing has a further implication: individual models of operating have the potential of quickly and profoundly altering the functioning of the market as a whole. While this is a feature in general of markets that are small and/or dynamic (or that exhibit considerable network economies), some OA approaches seem to suggest a need for substantial reconfiguration of the current market structure (e.g. through the pooling of certain functions). A systems perspective on business models (i.e. an understanding of how individual business models may affect the whole publishing environment) is therefore necessary.

1.2 Performance dimensions

Business models can thus be assessed in two dimensions:

- First, individually: the crucial criteria by which an OA publishing operation can be judged are **quality**, **sustainability** and **dissemination**.
  - **Quality** refers to the publisher’s ability to produce books that reflect and advance the state of knowledge in the respective field of scholarship. Quality is bound up with the editorial acquisition process (including commissioning, scholarly review, and the publishing decision itself), as well as editing tasks of varying scope, and is dependent on the relationship between the publisher and the author, and to a certain extent, the embeddedness of the publisher in the academic community more broadly.
Sustainability refers to the publisher’s ability to fulfil its function on an ongoing basis. This has two aspects: the first and most crucial one relates to financial viability in the sense that the funds available are sufficient to sustain the activities carried out on an ongoing basis over a reasonable time (e.g. the time it takes to establish the systems that are needed to produce and disseminate books and to forge relationships with authors, service providers and clients). In addition to this, it is desirable for an academic publisher to establish long-term relationships with its authors (this feeds back into quality), as well as clients/service users including libraries and universities, where established relationships/mutual knowledge lead to reduced transaction costs.

The second aspect is more technical and refers simply to the ability of the publisher to ensure long-term access to its books. In a situation where OA monographs would need to be produced in electronic formats (which are threatened with obsolescence at a rate much faster than the publishing industry is used to), and where access depends on various intermediaries (e.g. ISPs), the issue of long-term access is challenging and acute and has the potential of causing considerable damage. However, technical issues around the sustainability of e-book publishing do not necessarily translate into unsustainable OA. The adoption of open standards (e.g. BITS-XML) can side-step the obsolescence issues around proprietary formats. The sustainability of given OA publishing models therefore depends on the adoption of open standards.

While the first two criteria apply equally for any publisher of electronic monographs, the last one, dissemination, is specific to OA. In fact, it appears essential to the viable operation of OA that OA achieves greater dissemination of monographs than the for-profit model, either in the sense of simply reaching a wider audience, or gaining readers in communities currently excluded from access. Judging what constitutes ‘greater’ dissemination is difficult as reliable metrics of readership (much less impact and knowledge dissemination) are not currently available. Moreover, the picture is blurred by the pervasive view that the availability of monographs through the traditional library-based distribution model is under threat (from reduced funding) and that just achieving dissemination at the current rate requires OA. According to this view, it is less about engaging a new readership or realising untapped external benefits, than simply maintaining the status quo.

Secondly, from a system perspective, the relevant factors are diversity, innovation and integrity.

Diversity means that the system caters to the needs of scholars in different fields, at different stages in their career, at different institutions and at different positions in the academic hierarchy, with different approaches to scholarship (digital humanities as well as traditional fields) and different preferences regarding intellectual property rights, output and dissemination formats etc. Diversity is also of value from the reader-side, again concerning different formats, different service levels, different distribution channels etc.: “Books are varied, and authors want different things from their publishers. Some will want to experiment with open peer review and new ways of exposing the process of writing a book; others will be keen to integrate different types

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1 In fact, it is unclear that developments in bibliometrics will have the impact that some expect. The view that “raw metrics will never be enough to tell us about the success or failure of a piece of scholarship” (Kathleen Fitzpatrick, Planned Obsolescence, p.193) is widespread and well-founded when in HSS.
of content such as data, video, text. Others are going to be more concerned about brand and reach."²

- **Innovation** refers to the ability of the system to expand the possibilities of academic monograph publishing in ways that benefit users. One aspect (bound up with dissemination) is the overall enhanced distribution of knowledge, including better discoverability, indexing etc., and better solutions for end users (delivery models, ‘super journals’, package deals, cross referrals etc.). The other is innovation that advances scholarship and the production of knowledge itself, e.g. through digitally enabled research approaches (digital humanities), comprehensive hyperlinking of relevant texts, tagging at the concept level etc., and new approaches to academic working practices (multi-author collaboration, post-publication peer review, etc.). Competition is a tried and tested mechanism to foster innovation, but funder-side incentives have a potentially crucial function too.

- **Integrity** means that the system as a whole is credible, in the sense that actors engaged in scholarly publishing are collectively seen by the relevant communities as capable of meeting the needs of those communities. Ideally, integrity means that the system has self-regulating features, i.e. that individual publishers that don’t meet the required standards are punished. (Note that the simple economic discipline of the market may not be as effective in an OA setting.) In some sense, the integrity of the system is the outcome of positive developments in the other performance dimensions. However, given the perceived fragility of the academic monograph publishing eco-system, it is important to consider system integrity as a separate issue, namely because heavy-handed intervention in the market risks disturbing what at least in part is felt by some to represent a finely balanced equilibrium.

### 1.3 Taxonomy of business models

Categorising business models for OA monograph publishing is difficult for the following reasons:

- Fundamentally, there aren’t many business models for OA monographs (publishing or aggregation). This inevitably reduced our ability to discern recurring patterns in their setups and to identify types.

- Of those that do exist, many are relatively new and under development. Experimentation is ongoing and makes it hard to unambiguously pin down a specific model. Many are started with temporary or transitional funding and must make ongoing adjustments to respond to a changing funding situation.

- Operations are often opaque. Operating on shoestring budgets, with a short planning horizon and in a market that is in a very early stage of development, many OA operations do not report or even collect comparable information. Relevant metrics are equally underdeveloped. Reliance on unpaid labour is widespread. Moreover, OA operators often double as advocates for OA and are incentivised to emphasise the uniqueness of their approach, as well as its viability (especially as doubts about their sustainability may reduce credibility with key audiences (authors, libraries) and thereby undermine sustainability further).

In undertaking this research, we adopted a *general-to-specific* approach in which we try to capture the diversity of the models we investigated, while also identifying structural features that can be used to distinguish between them. The criteria we used to achieve this are the *source and type of funding* used by the operation and the *operational setup* (in terms of the functions being carried out within the organisation).

### 1.3.1 Setup

A central challenge for OA business models is to arrange the functions involved in publishing of OA monographs in an efficient manner. It is clear that many OA publishers follow the template set by traditional publishers quite closely. In addition, as in traditional publishing, a number of activities are also undertaken by organisations that specialise in particular stages of the monograph production chain. These can be downstream (i.e. aggregators that make the offering of individual publishers available to intermediaries and end users) or upstream (for instance, a crucial upstream function in the OA context is funding, where organisations like Knowledge Unlatched are pioneering new ways of financing monograph publication in an OA setting). We have summarised the functions that are necessary to turn a manuscript into an accessible OA product in Figure 1.

**Figure 1: OA publishing functions**

<table>
<thead>
<tr>
<th>A. Editorial acquisition</th>
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<tbody>
<tr>
<td>• Commissioning</td>
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<td>• Funding</td>
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<td>• Licence</td>
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<table>
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<tr>
<th>B. Capture</th>
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<tbody>
<tr>
<td>• Manuscript -&gt; product: reviewing, editing, typesetting, formatting</td>
</tr>
<tr>
<td>• Quality assurance</td>
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<tr>
<td>• Illustrations</td>
</tr>
<tr>
<td>• Copyright</td>
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<tr>
<th>C. Delivery</th>
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<tbody>
<tr>
<td>• Different electronic formats &amp; delivery channels</td>
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<tr>
<td>• Aggregation</td>
</tr>
<tr>
<td>• Deposit</td>
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<tr>
<td>• Hosting</td>
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<tr>
<td>• Metadata enhancement</td>
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<tr>
<td>• Collection building</td>
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<table>
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<tr>
<th>D. Awareness building</th>
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</thead>
<tbody>
<tr>
<td>• Marketing, promotion, sales</td>
</tr>
<tr>
<td>• Repositories, directories, library catalogues</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>E. Long-term access</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Digital preservation</td>
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<tr>
<td>• Data archiving</td>
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</table>
All of these functions are present in a traditional publishing setting. However, the demands of OA can considerably change the content and the importance of individual tasks. For example, funding has a quite different role in many OA operations, where the link between revenues and distribution is weak. (A link may be present of course, for example, if funding is conditional on distribution, however measured.) Some OA approaches in fact rely on removing financial risk from publishing by providing a flat, upfront fee for an OA edition.

It is thus important to note that all of the functions listed above are necessary in OA publishing and that, instead of becoming cheaper, some may actually become more complex and costly. In particular, content development (the Capture and Delivery stages) for OA monographs includes the preparation of a monograph in different electronic formats, but also search engine optimisation (SEO), indexing, tagging and other activities that are necessary to ensure that the monograph is not only available, but discoverable.

Management and coordination may also be more involved in an OA world when different kinds of intellectual property rights have to be negotiated (which is a particularly important issue in the case of multi-author publications such as edited volumes and where third party content is involved (video, audio, illustrations)). Such content is crucial to scholarship in many humanities fields and poses special challenges when moving to digital and OA publishing. Some of the anticipated benefits of OA in an academic context arise specifically because electronic publications can be used freely as a resource by other researchers, so that rights management becomes if anything more crucial. The need for third-party IT infrastructure and services also contributes to costs in this area. This is especially true since OA books which do not have freemium additions cannot currently take advantage of the existing commercial infrastructure of information intermediaries (e.g. library jobbers, retailers) that sustain themselves by taking percentages of sales revenue. The potential for further differentiation of functions (e.g. on the distribution side), further increases the demands on the management function to coordinate the activities of the different organisations involved.

The nature of digital publishing in general and the demands of OA publishing in particular suggest scope for increasing differentiation in terms of the functions carried out by ‘the publisher’. It has long been the case that publishers faced a decision whether to handle all functions themselves or to outsource them. “The advantage of outsourcing is that it reduces fixed overheads and increases flexibility for the publisher, but at the same time it may involve some loss of coordination and control.”

Evidence from existing OA projects suggests that non-publishing, ‘outsourced’ functions may in fact be more important for advancing the OA paradigm for monographs than publishers themselves. Since funding and accessibility are the key differences between OA and traditional publishing, operations focusing on these functions have a critical role to play, to the extent that it may be more appropriate to talk of funding operations ‘outsourcing’ the publishing function, for example.

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3 Digital media are felt to differ in important respects from traditional monographs, or at least provide new opportunities: “Digital texts are interlinked in a way that printed books are not: they form part of a network and boundaries between texts can be fuzzy. (...) The internet offers new multimedia tools, including the use of videos and images, audios and blogs as a way of expressing thoughts instead of, or in conjunction with, words. In this we need to reconsider our notion of a linear, purely verbal text in favour of a complex entity embracing multiple forms.” (http://www.timeshighereducation.co.uk/418126.article)

The sales and marketing functions may also be undergoing a profound alteration. This is because of the central importance of a large(r) readership in the (normative and efficiency-based) arguments for OA. There is, on the face of it, little evidence of an existing, large, pent-up demand for scholarly monographs. Instead, there is good reason to believe that any additional readership will be increasingly more difficult to find and engage, precisely because it includes audiences that don’t demand monographs in the economic sense of a willingness and ability to pay.

As a result, it seems likely that there is a clear correlation between the effort put into marketing and the dissemination (and hence impact) achieved by an OA monograph. While evidence from case studies shows that OA books achieve download numbers much greater than expected print sales and discovery tools are constantly improving, active measures continue to be required to make good on the promise of OA of making monographs available to a greater audience.

In many OA models, sales continue to be a very important function, as they contribute to the publisher’s ability to provide OA monographs in a sustainable manner. In addition, there might be scope for new approaches, not necessarily by the publisher, to distribute books to readers (including for profit\(^5\)).

### 1.3.2 Funding

Business models can further be distinguished by the way the publishing operations are funded.

- **Author side:** This includes all instances in which funding is channelled through the author. This includes predominantly publication grants from universities\(^6\) and, increasingly, research funders with OA mandates, e.g. Wellcome Trust, Austrian Science Fund (FWF), Netherlands Organisation for Scientific Research (NWO), Swiss National Science Foundation (SNF). Although actual sources of funding and allocation mechanisms vary, the key feature is that the publisher is accountable to the author and that the author can exercise some choice when it comes to selecting a publisher. Author-side funding means that monograph publishing is responsive to what is arguably going to remain its most important constituency: academics affiliated to higher education research institutions.

- **Reader side:** Libraries acting as intermediaries on the reader side are a central pillar in the funding structure of many OA operations. Through print on demand and other value-added services, individual users or other organisations (e.g. public sector bodies, think tanks, research firms) also provide reader-side funding.

- **Third party:** Third-party funding is channelled directly to the OA publisher. Various examples exist, and may include government funding in support of OA, philanthropic funding, crowd-funding for individual OA projects, etc. The important feature is not the source of funding (the same funder may provide author-side, reader-side and third-party funding), but the fact that the funding is not for actual services rendered (the publication of monographs), but for the publishing operation as a whole. The importance of this point lies in the different incentives that are generated: a funding institution may make a grant for publishing books in a certain academic field; the publisher is then incentivised to

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\(^5\) An example of such a development is the flat-rate subscription service for e-books that has recently been launched by Amazon. See http://amzn.to/1q0IpC1 [accessed 08 August 2014].

\(^6\) "The OAPEN-UK HSS Researcher Survey examined the source of funding for research underpinning authors’ last HSS monograph and found that only 22% came from research council grants, whereas 62% came from core university funds or self-funding." (Oberlin Report, p. 7)
actively seek out authors in this field, potentially lowering the average quality of the resulting monographs. Overall impact may also be reduced if the impact of another field which hasn’t received such funding is greater. Of course, a sophisticated funder would want to provide funds in areas that are underexposed and whose impact is expected to increase through OA, but the difference in terms of whose objectives the publisher responds to can have consequences.

- **Cross-subsidies and ancillary services:** Many publishers (OA and traditional) have other income streams not directly related to the (monograph) publishing function. Often, monograph publishing is cross-subsidised by other, more profitable segments of academic publishing (journals, textbooks). Moreover, OA publishers may sell ancillary services, such as IT platforms, software, publishing-related services and training, archiving etc. to other (OA) publishers and libraries.

- **Contingent vs. lump sum funding:** A potentially important issue besides the sources of funding is to what extent funding is automatically scalable; how important depends on the development stage of the operation and its cost structure. For example, it is likely that the evolution of costs for an OA operator exhibits inflection points where substantial (non-linear) investments are needed to fund an increase in the number of titles above a certain point (additional staff, IT infrastructure, etc.). Where such ‘lumpy’ expenditures are important (as in the case of early stage publishers, where the initial setup might only support a certain number of titles, or operations specialising in the capital-intensive parts of the production chain, namely aggregators who need a lot of computing infrastructure), access to lump sum funding, block grants etc. is an important determinant of sustainability (and quality). At the same time, funding that increases with the number of titles that are processed (sales revenues etc.) is an important source of sustainability in an environment where institutional funding may be time-limited as well as giving the operation independence from individual large backers.
2 Business models

After careful review of existing OA operations, six business models were identified:

- traditional publisher;
- new university press OA;
- mission-oriented OA;
- freemium OA;
- aggregator/distributor; and
- author payment model

Although in some cases we give examples, the six models are not intended to fully characterise particular organisations currently active in OA publishing of monographs. Rather, what we call a business model represents an abstraction, highlighting typical features and economic incentives present in the setup described. The focus here is strictly on Anglophone monograph publishing and the evidence comes predominantly from our interviews with individuals active in the field.

2.1 Traditional publisher

2.1.1 Overview

This model is discussed briefly in order to provide a baseline. The ‘traditional model’ is perceived to have been in crisis for many years and arguably has lost its normative status for the industry as a consequence of what are felt to be dwindling revenues from traditional channels and a slow response to the possibilities of electronic publishing. Certain voices within the academic community express concerns that the publishing market currently is characterised by a cartel-like arrangement that impedes change, thereby exacerbating the crisis in monograph publishing. Traditional publishers, especially the most prestigious university presses, are felt by some to have an undue influence on academic life that is not warranted by the value they add through the publishing process.

However, diversity is characteristic of this model and the most famous names (Oxford, Cambridge and Harvard university presses) are arguably in a league of their own. It is also important to note that what we call ‘traditional’ is unusual on an international scale, in particular because English language UK and American publishers have reached a scale (and in some cases profitability) that is exceptional when looking at the industry from a global perspective.

In addition, the current situation demonstrates a precarious balance. Publishers’ book publishing divisions are reportedly only marginally profitable at best, and many continue to engage in monograph publishing either because it is part of their remit (university presses) or for idealistic reasons. (However, note that increasing access through OA is a legitimate objective even if monograph publishing is a highly profitable activity for commercial publishers). Traditional publishers are perfectly adapted to this world and manage to produce high quality work on very limited budgets.
Moreover, the position of the leading academic presses is arguably historically deserved and reflected in their performance, and continues to manifest itself in lower transaction costs. While their merit is recognised by academics, for whom they remain the preferred outlet for their work, smaller, often discipline-specific presses complete the picture and are indeed often preferred to the big names. Within this environment, authors’ decisions about whom to publish with are driven by many factors, including ease of engagement, past experience, page charges, the role of learned societies in a particular discipline, etc. although prestige is clearly the pivotal factor.

The business model capitalises on its advantages through a finely honed marketing approach targeted almost exclusively at university libraries and academics (involving extensive list-building). Exponents of this business model have a very good understanding of the market and are deeply embedded in the ecosystem of Anglophone academia.

### 2.1.2 Economic implications

Unlike the OA models discussed later on, the traditional model is focused on selling books for profit. This encourages an entrepreneurial approach across the publishing value chain, from manuscript acquisition to list-building, marketing and dissemination. There is thus a clear economic incentive to maximise sales, i.e. to distribute books as widely as possible among people who can pay for them (and who are willing to pay an amount at least equal to the price).

Only economic demand (in the sense of a willingness and ability to pay) provides incentives, which inherently limits the circle of customers to the traditional academic community in well-funded institutions. The focus on economic demand thus leads to a dissemination approach that is almost exclusively targeted at research institutions and librarians.

While this means that traditional publishers reach only a part of the potential audience (how small is essentially uncertain, but the experience with OA to date suggests that the potential readership is indeed larger than the book-buying population), the fact that this focus has evolved over a very long period should give pause for thought for those arguing that a large untapped market for humanities monographs exists outside academia. It also highlights the fact that providing books for free to users who are currently willing to pay for them represents a pure economic transfer from producers to consumers. To justify this in economic terms one needs to assume a positive externality (i.e. an overall benefit from disseminating books that is not reflected in individual users’ willingness (or ability) to pay), for reasons of imperfect information (potential users don’t know the benefit) or inefficient funding arrangements (e.g. allocation of funds within universities).

It is undeniable that traditional publishers, especially the most prestigious ones, have a great appeal to authors: they are recognised widely as providing quality signals (and possibly quality itself in terms of the editorial process). The prestige bestowed by publication with a top publisher is moreover apparently institutionalised in formal evaluation criteria etc. and thus have a direct bearing on careers. Academics are thus invested in the traditional publishing industry in a way that is not quite reflective of the intrinsic value of monographs. The point here is that not all the functions that monographs are endowed with under the current system are being paid for. The

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7 Learned societies’ book series are often mobile between presses.

8 However, even if the interest of the general reader should not be overestimated, OA may still result in large benefits if it increases readership among individuals most likely to benefit.
economic consequence of this is lower transaction costs for the publishers: they get the best manuscript and have the best people undertaking peer review.

As long as the monograph divisions of traditional publishers stay marginally profitable (and have access to cross-subsidies, typically from journal publishing), the situation may still be an equilibrium. However, reports of declining revenues (and the growth of the OA paradigm) suggest that the situation is unstable, and that traditional publishers need to redefine their role in a more diverse publishing landscape.

2.2 New university press OA

2.2.1 Overview

The ‘new university press (NUP)’ model (which also includes so-called library publishers) is currently responsible for most OA monograph publishing (next to institutional publishers such as OECD publishing). The precise model depends on the level of institutional support and the level of integration with the library/university and can range from dedicated, mission-driven OA to a more traditional model similar to for-profit publishers (in the case of large established university presses). The common element is that author-side funding is provided by the institution (from library or from research funds) for academics within the institutions (on the condition that their work meets common quality criteria).

By updating the approach taken by the successful traditional university press model, the NUP model goes furthest in recognising the role of monograph publishing in academia and bringing it closer to the core constituency of institutionally affiliated academics. In particular, it sees as important the function of providing an outlet for certain types of research (especially in the humanities and social sciences) and enabling academics to take part in the communication and dissemination activities of the research community through monographs, while making it easier for them to do so through institutional support. The cost-savings achieved through electronic publishing\(^9\) lower the threshold for institutions that want to operate their own press.

Moreover, operating an NUP is an entrepreneurial move for universities, who benefit from a publishing operation in two distinct ways:

- Firstly, publishing generates revenues from authors, as authors outside the home institution are typically charged a publication fee. Other funding streams could be envisaged, notably freemium.
- Secondly, the NUP acts as an outreach channel for the sponsoring institutions, not just in terms of the propagation of valuable research, but also as publicity for the university itself (given that free books are likely to circulate more widely on the internet). Publications increase the institution’s exposure, which can have positive effects on funding (both public and through donations), and attract students, researchers and collaborators.

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\(^9\) Cost savings would be possible due to a number of factors including: the zero marginal cost of reproduction; no requirement for storage and shipping, limited use of physical inputs; and potentially lower capital costs.
In terms of functions carried out, NUPs are close to traditional publishers, with a strong focus on the classical production stages (from acquisition of monographs to list-building), with less emphasis on dissemination outside the traditional channels.

**Selective OA**

Some university presses (e.g. Michigan, Purdue, California, Cornell) adopt a selective approach to OA. The distinguishing feature is that the publisher sells monographs in line with traditional practice, but chooses to make certain selected works available OA. The model is interesting in that it most explicitly recognises the need for active measures to achieve impact, rather than simply relying on books being available for free. More precisely, the model assumes that: a) some books are more likely to benefit from OA distribution than others; and b) these books can be identified by the publisher, who deploys its resources (including revenues from its non-OA operation) to maximise the impact of its portfolio overall.

### 2.2.2 Economic implications

Embedding the publication function within the university reflects the underlying assumption that the university is where publishing matters most. The appeal of this approach for the institution is easy to see, as a lot of the production as well as consumption of research monographs takes place within universities. Keeping the publishing function institutionally close to producers and consumers (often the same people) is likely to have efficiency advantages. An NUP is likely to be very responsive to the needs of its constituency, first within the university, but, given the essential similarity in terms of functional setup of higher education institutions worldwide, the academic community as a whole. There is no visible incentive (apart from strategic commitments of the institutions\(^{10}\)) to maximise dissemination beyond the core constituency.

This responsiveness to researchers’ needs can provide a strong incentive to innovate, especially in institutions where novel approaches to research collaboration, textual form etc. are prevalent on the research side. The strong link to the research community is also likely to be reflected in the approach to quality control.

The close association between NUPs and libraries (sometimes NUPs are based in the library and run by library personnel) is likely to increase the efficiency of the operation when it comes to achieving discoverability and accessibility through library resources.

However, the NUP model replicates the patterns observed in traditional publishing, where quality signals are strongly linked with institutional prestige: a ‘good’ university is going to have a much easier time recruiting authors and disseminating books, independent of the inherent qualities of the publisher.

A special consideration arises if the publicity function of the NUP is an important part of the institution’s publishing strategy. In this case, there seems to be an incentive to keep the quality threshold low in order to maximise output and visibility (subject to some quality constraints). In fact, the incentive for vanity publishing appears to be relatively strong for OA publishers given the lower cost compared with print publishing.

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\(^{10}\) Many institutions for example are formally committed to serving their local community. The NUP would presumably share this mission and tailor its dissemination efforts accordingly.
The NUP has an incentive to encourage the academics at the parent institution to publish with the press, not least because of the potentially adverse effect on quality perceptions if academics from the sponsoring institution are seen to shun its own NUP. However, conversely, to maintain its appeal to scholars from other institutions, NUPs will also wish to avoid an impression of favouritism towards affiliated researchers. While it was strongly denied that this was a consideration in practice (much less that there was any pressure on academics), the concern that there might be a source of friction can’t be altogether dismissed. However, obligations to publish in-house are common across think tanks and research institutions such as the OECD, without any reported adverse consequences other than the disappointment of some researchers, who could have placed their work with a ‘better’ publisher.

It is likely that external factors, especially the quality of the research conducted at the institution, will ultimately determine the strategy adopted by an NUP.

2.3 Mission-oriented OA

2.3.1 Overview

By ‘mission-oriented OA’ we mean OA publishing projects that are animated by a sense of idealistic or disruptive purpose, sometimes felt to be connected with the wider goals of the ‘digital humanities’. Emphasis is placed on openness, exemplified by a commitment to open licensing of publications, typically under a CC BY licence. Publishers operating this model are typically ‘pure’ OA publishers in the sense that they publish monographs only in OA variants. The available formats are basic (.html, .pdf) and few value-added services are available.

Mission-oriented OA often goes hand-in-hand with a belief that the crisis in monograph publishing calls for intervention of some form, either simply in the form of funding for OA, or structural intervention (e.g. by addressing the role of monographs in tenure decisions etc.). OA is seen as necessary for levelling the playing field. OA is the future of academic publishing, for monographs as well as for journals. There is vast potential for OA to trigger new types of scholarship and new ways of working in academia, to reduce the power of in-groups in the research community, and to reconnect the humanities and social sciences with an alienated public. The result of this stance is often a ‘purist’ attitude to OA, including scepticism towards restrictive licensing of IPRs and business models that place a lot of emphasis on monetisation (‘freemium’, embargo periods etc.).

There is a ‘by-academics-for-academics’ flavour to many of the examples in this category. While there is a wide variety of approaches, all are aiming to achieve full OA for all their publications. Institutionally, mission-oriented OA publishers are mostly library publishers and scholar-led presses.

In terms of functions carried out, the focus is on the production of monographs. Quality assurance is a primary concern, chiefly because of the need to establish credibility within the academic community. Mission-oriented OA publishers typically opt for a low-cost approach, looking for funding from different sources. This includes print on demand, but generally freemium services are seen as incompatible with the mission-oriented approach.

Less emphasis is placed on functions lower down the production chain, including dissemination, marketing and preservation. It can be inferred that the OA user in this setup is conceptualised as an engaged consumer, quite possibly actively participating in the production of scholarship, who is
willing and able to discover OA monographs without intermediaries if necessary (and probably to judge quality as well).

2.3.2 Economic implications

Many examples in this category are run by (or with significant involvement of) academics, who often contribute free labour to the project. This institutional embeddedness places academic credibility at the forefront of the operation’s concerns, which is reflected in high standards for submissions and peer review (on a par with established academic publishers).

The absence of a clear funding mechanism is the main weakness of the mission-oriented model as it exists in practice, although this should be understood as being not by design, but as an outcome of the ecosystem in which OA is taken up as a cause by certain strands within the academic community, who see it as a disruptive challenge to the status quo in academic publishing.

However, the consequence of this is that the sustainability of the model is questionable, in particular as the ‘OA ethos’ may prevent publishers in this category from making the best use of available funding opportunities (even if profit maximisation or even cost-recovery is not seen as part of the original mission).

A weak financial basis has adverse effects across the board. It puts pressure on quality control mechanisms, raises doubt about long-term viability (which in turn makes efforts to build a brand/collections more difficult and acts as a deterrent for authors to submit their manuscripts), and leads to sub-optimal funding for outreach, dissemination and preservation activities.

While voluntary work by academics has always been a part of the academic publishing landscape (and sustains the whole edifice in many ways), it is nonetheless clear that funding is necessary to ensure OA is not only open, but accessible. For this, mission-oriented OA typically relies heavily on complementary services, both internally in terms of the systems used and externally by using aggregators.

This potentially enhances the efficiency of the system overall by reducing duplication of effort and allowing aggregators to reap economies of scale.

However, achieving efficient scale is often problematic for publishers operating under severe financial constraints: while low-cost/open-source software and retail hardware can be used to great effect in a small operation, considerable investment is necessary to scale up once capacity constraints hit. In other words, while starting an OA publishing operation is relatively easy, growing it into a sustainable operation (that can realise economies of scale, but also deliver benefits such as brand recognition) is not.

The insistence on very permissive licences might limit the appeal to some researchers, especially established researchers (who have other outlets for their research) who are important for establishing the credibility of the OA model. On the other hand, the low participation threshold and the community aspect of this type of OA are likely to appeal strongly to certain researchers.

In particular, the research approaches that are summarised under the heading ‘digital humanities’ have a natural affinity with the OA model. To the extent that such approaches gain traction in the research community, ‘purist’ OA will also expand its influence within academia. In the meantime, it seems inevitable that mission-oriented approaches either evolve, or disappear (although how long
this might take is uncertain, given that the exit mechanism for academics operating on a shoestring budget can take a considerable time to run).

An additional consideration occurs with respect to long-form scholarly publications other than monographs: catalogues and other multi-author publications may be less well served by the small-scale publishers that predominate in this area as long-term projects require greater security of funding and continuity. Moreover, rights management may become more complicated in edited volumes, catalogues etc. as compatibility with permissive licences (CC BY) may be problematic due to the inclusion of material whose rights are owned and managed by third parties.

## 2.4 Freemium OA

### 2.4.1 Overview

In this business model, OA versions of monographs are made available alongside premium versions that offer better functionality in some respect for a price (e.g. searchable online versions, copy-and-paste function, indexing, better resolution/image quality, print on demand, normal print runs in paperback or hardcopy). This means that the quality of the available OA books in the freemium model may be exactly the same as in other OA models (i.e. to the reader interested only in a basic online version that can be accessed free of charge the difference between freemium and other models doesn’t matter and may be invisible).

The ‘freemium’ model for OA publishing mirrors other business models in online services/software as a service (SaaS), which also have to square the circle of providing a free service to as many people as possible while also generating revenues.

The distinction between what is core and what is premium is not fixed. What is and isn’t a premium feature is a subject for debate and likely to change over time and with technology. While it is easy to define print on demand as a premium feature, the provision of which has a cost for the publisher, in other instances it is actually the restriction of a feature that is costly (producing different file types/restricting access, putting in place security to prevent copying etc.)

Print on demand as the most common type of ‘add-on’ available for users of OA books shows that there are certain aspects of a ‘book’ (in this case the availability of a physical print version) that can be separated from the OA version and sold to recover costs. Figure 2 below is an attempt to fix the current consensus on what is ‘core’ when it comes to monographs. The arrows indicate current trajectories: while the availability of hard copy books is no longer generally seen as a necessary feature of a monograph, the availability of social features and hypermedia functions are not yet seen as integral, but may become so in the future.
The principle, that there are certain functionalities that are seen as essential to the monographs, while others count as luxuries, is important to keep in mind when evaluating this business model\textsuperscript{12}. It is likely that functions that are seen as core are going to increase in number over time, but that at the same time, new premium features will become available, which some users will pay for in the same way that some users currently choose to pay for print on demand. Freemium OA is thus a moving target: how much selling goes on (and what is being sold) in an OA environment is difficult to predict, but it seems clear that the potential to make a profit from selling value-added services (as technology evolves and the market becomes more diverse) is likely to increase. This may open up space for increased differentiation of functions in the realm of OA publishing, with some organisations specialising in the range of products recognised at that point in time as suitable for full OA and others specialising in the commercial provision of value-added services (including services for researchers, readers and libraries).

Other aspects of freemium:

- The cost of providing the free service must be paid- or. In a ‘pure’ freemium business, the cost of free provision is paid for by income received from the premium service. This implies that the income from the premium service must be large enough to cover the

\textsuperscript{11} We don’t differentiate here between the needs of libraries and readers, which are different (metadata for example is only of indirect importance for most readers).

\textsuperscript{12} Currently, all the real freemium initiatives (sharing a focus on reader-side revenue through premium services) provide the basic OA version online only. This means discovery/dissemination and reading are facilitated, but not re-use. Also premium is protected through CC-BY-NC licenses.
provision of both the premium service and the free service. It also means that if the premium service fails to attract sufficient income, the free service becomes unsustainable.

- Conversion rates free-to-premium are usually low so a freemium business model has to assume that a large free audience can be created for there to be a chance that a sufficient number of premium customers are found to generate the income needed.

- Because the free-to-premium conversion rate is low, freemium forces a publisher to invest in building a large audience. This contrasts with other OA models, like ‘green’ and ‘gold’, where there is no direct incentive to build an audience.

- Freemium could be combined with gold OA. If a funder pays for the free service, any premium services could be charged for at a lower price because income is no longer needed to cover the cost of both the free and the premium service.

- Freemium potentially offers a better user experience than green open access. With green OA, publishers typically only allow for another version of paywalled content to be made freely available in a repository, sometimes after an embargo has expired. For a user without access to the paywall version of record, there is (a) the potential challenge of locating the free version since there may not be a link on the paywall and (b) the uncertainty of knowing if there is a difference, if any, between the free version and the final, paywalled, version. There is also the uncertainty of knowing which version to cite. With freemium, the final version of record is made available at the same time as the premium version from the same website and there is only one citation record. If green open access were to offer a comparable experience to freemium, these issues would need to be addressed.

The current prime examples of the ‘freemium’ model in OA are Open Edition, Open Book Publishers and OECD Publishing. In these examples, the differences between them in some dimensions are greater than the similarities (functions, institutional setup, funding,), and demonstrate that the freemium model is extremely flexible in terms of what functions in the OA publishing process are carried out and what premium services are provided.

### 2.4.2 Economic implications

Entrepreneurial risk-taking is present in and indeed central to this business model. Since publications are expected to earn a return, an assessment of the commercial viability of each title or series of monographs is necessary and guides the acquisition process (even if the objective is not profit-maximisation, but simply a contribution to the operating costs). A further implication is that since authors’ IPRs are potentially valuable (as individual titles generate different levels of revenue), a robust rights management approach is needed.

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13 ‘Green’ and ‘gold’ OA refer to the two primary routes for delivering OA to research publications. Green OA is delivered by authors uploading publications onto repositories or personal websites. Gold OA is delivered by publishers providing access to publications on their own websites.

14 Compatibility with CC BY is a bigger question since re-uses can be among the most valuable premium services.

15 [http://www.openedition.org](http://www.openedition.org)


17 [http://www.oecd.org/about/publishing/](http://www.oecd.org/about/publishing/). In the case of OECD an important part of the premium is providing access to everything on a subscription model (available alongside per-title payment): the premium isn’t tied to single products, but to the entire collection.
The economic implication of reader-side funding is that selective OA provides a strong feedback loop between the provider and the readership (part of which are paying customers) that is not present in other OA models. The most important consequence of this is that outreach and dissemination of monographs become a necessary priority for the provider. This is a very important difference to the other business models, where dissemination is either assumed to happen more or less by itself, or has to be funded out of income that doesn’t intrinsically depend on the number of readers achieved.

The product development process is more central than in other models: since the product is not simply ‘a book’, but a set of functions that can be packaged in at least two versions (a premium and a standard version), a careful product strategy is necessary along with the design and production activities found in all publishing models.

The proliferation of different electronic formats and delivery channels (with no standardisation in sight) means that discoverability by diverse user groups (through SEO in the broadest sense, i.e. including the configuration of content, indexing, tagging, keywords etc.) requires substantial technical and business skills to maximise dissemination, which are largely outside the skill-sets of traditional publishing operations (albeit common to all e-publishing).

The existence of premium versions and paying customers increases the incentive to invest in long-term access (and in fact, long-term access is itself a possible premium feature).

### 2.5 Aggregator/distributor

#### 2.5.1 Overview

Not all actors in OA monograph publishing are publishers. Aggregators and distributors play an important role in the OA landscape by concentrating on some of the more technical aspects of distribution, specifically the interface between books and users, both readers and intermediaries (libraries). Our usage of the term aggregator differs from the colloquial usage in the publishing industry: by ‘aggregation’ we mean a function that combines in some form the output of different publishing operations (using publishers as input providers). Such functions include:

- aggregation;
- deposit;
- quality assurance;
- hosting;
- metadata enhancement;
- dissemination;
- discovery; and
- preservation.

Arguably, the primary aim of aggregation is to increase availability and discoverability of OA books. The collection and creation of metadata central to this task as harvestable metadata (that can be processed by libraries and search engines) is necessary to maximise dissemination, visibility
and impact\textsuperscript{18}. Aggregators work with other aggregators and service providers (including commercial ones) such as Ex Libris, Europeana and OCLC, as well as libraries, who can integrate the records in their own services and catalogues.

Aggregators also take on a quality assurance function. In some cases, an essential part of the service is to ensure that the listed books are indeed OA and conform to academic standards. Publishers are typically screened for their peer review procedures and licensing policies. The Directory of Open Access Books\textsuperscript{19} (DOAB), for example is developing requirements for publishers to be listed in cooperation with Open Access Scholarly Publishers Association\textsuperscript{20} (OASPA) which conform to OASPA membership guidelines for book publishers.

A different approach to using aggregation in an OA publishing context is on the funding side. Knowledge Unlatched aggregates funding from libraries from around the world to pay publishers to make new titles that have been peer reviewed, are under contract and just about to be published available OA. This reduces the cost of e-books for the participating libraries as well as the title-specific risk taken by the publisher. As a funding arrangement (including additional roles in quality assurance and dissemination), Knowledge Unlatched does not fit neatly into the aggregator category, but represents an innovative approach to overcoming the coordination failure that limits OA funding from academic institutions.

Dedicated OA aggregators are mostly supported by the academic community, through membership schemes or direct subsidies\textsuperscript{21}. Primary funding sources include academic institutions, especially research funders, who provide both direct subsidies but also are the main consumers of aggregators’ services (including add-on services, training etc.). However, the expectation is that aggregators can achieve sustainability (in the sense of recovering operating, if not capital, costs) within a relatively short timeframe through the revenues generated from services provided.

\subsection{2.5.2 Economic implications}

The main economic feature of the aggregator is the potential for economies of scale and network effects, which are prevalent in platform-based online services more generally and are likely to be equally important for OA operations. As long as discoverability through search (where it doesn’t matter exactly where a monograph is available on the internet) is flawed (which it currently is), aggregation is necessary to ensure that OA books can be found and accessed.

However, aggregation, like online platforms more generally, can be a ‘tipping market’ in the sense that the presence of network effects (more participants make the platform more attractive) means that they are prone to becoming dominated by a single platform (e.g. Google for search, Facebook for social networking, etc.), which is then difficult to dislodge. This has potential negative consequences for competition, innovation and responsiveness of the sector. The extent to which this is a problem with OA aggregators is not clear at present, and the existence of pre-existing

\textsuperscript{18} Supplying high-quality metadata for OA books is a highly technical process. OAPEN, for example, provides daily metadata feeds in various formats (ONIX 2.1 and 3.0, MARC XML, CSV, MARC 21 in preparation) for libraries and their service providers. OAPEN works with the main library suppliers, such as ProQuest (Serial Solutions), ExLibris (Primo Central) and Ebsco. The publications are integrated in WorldCat (OCLC) and BASE; OAPEN acts as aggregator for Europeana. Libraries and aggregators can also harvest the metadata using the OAI harvesting protocol. OAPEN.org is optimised for search engines (using site map and schema.org for books).

\textsuperscript{19} \url{http://doabooks.org/}

\textsuperscript{20} \url{http://oaspa.org/}

\textsuperscript{21} OpenEdition, which uses a freemium approach, is also community supported and receives funding from the French government.
standards (bibliographic standards, CC licences) would seem to militate against some of the adverse consequences of network effects (consumer lock-in, barriers to entry).

It is important to note that aggregation complements publishing. By providing a specialist service that begins where the production of the monograph ends, aggregators in fact enable OA publishing to expand beyond the cottage industry it would otherwise be. Start-ups and community-based projects in OA monograph publishing rely especially heavily on aggregators to be able to present the end user with a complete product (i.e. a book that is not only in theory available for free on the internet, but can in fact be found and accessed through a variety of channels, including libraries, which are still crucial as intermediaries for scholarly monographs).

Furthermore, aggregators have an important function as standard setters for the industry, including in relation to licensing arrangements and technical standards (including metadata requirements), but also in relation to quality assurance (e.g. through peer-review requirements). OAPEN, for example, reviews publishers to ensure all publications are peer reviewed according to academic standards and publishes peer review procedures on its website.

In relation to licence agreements, the policies adopted by aggregators reveal a pragmatic approach to OA licences: DOAB, for example, which screens publishers for their licensing policies before admitting them, includes works without CC licences in almost a quarter of cases (although CC licenses are the majority and 50% are CC BY-NC-ND). These licenses are developed by the publishers and generally allow non-commercial re-use and sharing. In practical terms, this means that OA aggregators include both pure OA publishers and those that select which books they make OA.

On a functional level, aggregators and distributors are more IT-heavy than other parts of the value chain. This gives them very specific requirements in terms of personnel and infrastructure, resulting in a quite different cost structure compared with the publishing side. Specifically, the capital-intensive nature of the aggregating function brings with it a greater need for upfront block funding, in particular to cover the substantial set up costs required to operate at scale. This makes aggregators dependent on external funders to a great extent. Income generated by an aggregator (e.g. through selling ancillary services to libraries, or even through book author charges) may eventually cover the operational costs, but is unlikely to be able to fund the infrastructure costs.

Financial incentives are concentrated on the author/research funder and intermediary (library) side, with no economic voice for readers. This reduces incentive to maximise dissemination directly to readers and might lessen the impact on readers not already affiliated to research libraries. On the other hand, the fact that many more libraries, including less well funded institutions, can access monographs for free by using the services of aggregators makes them (potentially) extremely effective in increasing dissemination among those readers most likely to benefit (namely researchers) from greater access to books.

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22 OAPEN recommends the use of CC licenses, especially CC BY and CC BY NC for books. However in practice OAPEN does accept CC BY-NC-ND and free-to-read books, in the interest of building a relevant collection of freely accessible monographs at an early stage.


24 OAPEN is transforming from a subsidy-based model to a service-based model. Services are packaged as a centralised deposit service for OA monographs, aimed at primarily research funders and universities. The business plan is to achieve sustainability in two years (2016). Currently around 40% of budget is covered by revenues from services.
2.6  Author payment

2.6.1  Overview

At the heart of this model is a straightforward reversal of the traditional model: in keeping with most OA approaches, cost recovery does not happen from the reader side. Instead its costs are recovered from authors (or their sponsors) through author publication charges.

Author payment is a funding mechanism that is employed by different operations in the OA sphere, including:

- the OA arms of traditional publishers (Palgrave Macmillan, De Gruyter Open, etc.);
- funding operations;
- new university presses (who typically request author payment from non-affiliated authors).

In principle, author payment can be integrated into all author-facing operations. This would seem to exclude aggregators that make the offering of individual publishers available to intermediaries and end users.

OA books in this model are treated as a service for authors and funders, and restricted to the books for which the publisher can charge a fee.

The key characteristic of the business model is the strong link to authors, reflecting basic incentive structures in the market: authors want to get their books published. Moreover, most authors producing monographs in a humanities/social science field do not expect lavish royalties and are thus receptive to OA, especially if there are added benefits of exposure (citations etc.). However, financially constrained authors (authors not affiliated to an institution or working for institutions with limited publications funding), are clearly at a disadvantage under this approach.

2.6.2  Economic implications

The key characteristic of the author payment model is that the risk for the publisher is greatly reduced. Rather than having to work to achieve sales, the publisher’s core commercial interest ends with the production of the OA monograph and the release through the relevant channels. This may result in greater financial stability and lower variance in cash flows compared with the traditional model, which in turn improves the efficiency of the publishing operation and could lead to more monographs being published.

Reputation risk aside, for a profit-maximising publisher there is a trade-off between the quality of the monographs accepted and revenues (assuming not all people who would pay to have a monograph published meet the appropriate quality standards).

In fact, the risk of vanity publishing exists just as strongly under this route as it does for university presses. The profit motive works against the quality motive if short-termist approaches are adopted. There is a connected issue that author payment models are therefore much more likely to be acceptable for well-established publishers than for start-ups, because start-ups have to convince the academic community of their ability to put quality assurance ahead of short-term income maximisation.
The coexistence between for-profit and author payment OA can cause friction: it seems clear that the publisher has an incentive to focus on author payment for monographs with low expected sales, while a traditional ‘reader pays’ route would be preferable for monographs that are expected to sell well. In fact, a ‘separating equilibrium’ seems completely plausible if the choice of OA vs. for-profit is unrestricted (i.e. the author or his/her sponsor doesn’t insist on OA).

The fact that actual readership numbers are not directly incentivised (no additional revenues are available if the book is widely distributed) means that dissemination efforts may be less than would be the case in the traditional model. Instead, the marketing effort needs to be focused on authors, who are thus crucial in setting the incentives for the publisher.

The author payment model could be advantageous for multi-author publications as charges can be split across authors.

3 Performance considerations

The previous categorisation shows the variety of current business models, only some of which are currently operating at scale and over a period that suggests viability for the foreseeable future. This means that a final assessment in terms of the performance of the various business models in the relevant dimensions cannot be made with any degree of certainty. However, our analysis reveals certain strengths and weaknesses inherent in the different models and can therefore serve as a basis for a preliminary assessment. A discussion of each of the performance considerations follows; the strengths and weaknesses of the various models are summarised in a table at the end of each section.

3.1 Quality

In terms of quality of inputs, a striking feature of the current landscape is to what extent existing OA models rely on the traditional peer review process. This is driven by the need to gain acceptance from academics and establish credibility. New forms of quality assurance enabled by OA and digital distribution (post-publication peer reviews, crowd-sourcing) are not currently in use in a formal sense with any of the models we looked at.

Any new OA operation finds itself at a disadvantage compared with established academic publishers, especially the most prestigious ones, who enjoy an inherited reputation for quality and therefore face lower transaction costs when it comes to ensuring quality.

All other things being equal, the need of OA publishers to achieve sustainability with more limited financial resources (i.e. with inherently limited sales revenues) can be detrimental to quality. Furthermore, as the benefits from wider distribution are not measured precisely, there seems to be a potential conflict between the incentive to increase the number of OA titles (and downloads) and the incentive to produce quality monographs (both in terms of content and production values).

Quality assurance (of content) seems inherently weaker in distributed models that exclude the editorial acquisition process and lack author-side engagement, although basic academic standards (OASPA) play an important part in the OA landscape.
In a distributed setup that makes funds available to publishers to produce OA monographs (i.e. where the publisher has private information about the expected sales of a book and has the choice of a risk-free payment for making it OA), the outcome is likely to be that books with lower commercial potential will be published OA, whereas previously they would not have been published at all. We have heard evidence from the Netherlands that monographs don’t suffer a decline of print sales when they are made free online, which would mean that monographs with high sales potential are not necessarily less likely to be published OA. However, whether OA is a substitute for or a complement to commercial versions may vary from case to case.

To the extent that commercial value correlates with the value of the content (research quality and impact), this could be problematic, as poor quality books are more likely to end up OA. However, there is likely to be a large number of titles in which this is not the case, so that the net effect on publishers’ finances and access to knowledge may well be positive.

Overall, reputation seems to be a crucial factor that is linked with quality in a feedback loop: a publisher’s reputation for quality itself lowers the cost of producing quality monographs. This is a difficult barrier for new OA publishers to overcome, especially as quality assurance is costly. With lower revenues, OA publishers may be at a double disadvantage.

OA arrangements need to avoid separating equilibria in which the average quality of OA books is lower compared with non-OA books. The issue of relative quality in OA monograph publishing is essentially unresolved and should be a priority area for future research.

The performance of the different business models for OA monograph publishing can be judged only qualitatively, based on the experience of extant incarnations and the theoretical considerations outlined above.
### Table 1: Performance criteria: quality

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional publisher</td>
<td>• Obviously strong, but level of engagement with authors (including copyediting) is often quite low (sometimes outsourced to developing countries).</td>
</tr>
<tr>
<td>New university press OA</td>
<td>• Publisher embedded with/responsive to research community. Strong incentive to establish credibility in the institution. Likely high correlation between quality and institutional prestige. Countervailing incentive to maximise publicity (‘vanity press’).</td>
</tr>
<tr>
<td>Mission-oriented OA</td>
<td>• Usually very conscious of need for quality to succeed, although quality perception among scholarly community may vary considerably. • However, unstable funding and lack of institutional backing cause a disadvantage in this dimension.</td>
</tr>
<tr>
<td>Freemium OA</td>
<td>• The freemium model does not in itself provide incentives or disincentives for quality of the monographs published, although better funding and reader-side feedback could be positive for the quality assurance process.</td>
</tr>
<tr>
<td>Aggregator/distributor</td>
<td>• Very strong potential impact due to standard setting (e.g. peer review standards) and collection-building. Incentive for quality assurance through funding from research institutions and libraries.</td>
</tr>
<tr>
<td>Author payment model</td>
<td>• Similar to traditional publisher. However, there is a quality-quantity trade-off that needs be actively resisted in the author payment mode.</td>
</tr>
</tbody>
</table>

#### 3.2 Sustainability

The question of sustainability of OA business models is unanswered for many of the existing OA operations, which tend to be in the early stages of development\(^{25}\).

The reliance on a significant amount of free academic labour is a feature of the current system for academic monograph publishing\(^{26}\) and continues to be crucial in OA publishing. In itself, this does not suggest that OA publishers are less sustainable as academics are likely to continue to contribute free labour (to peer review etc.) as part of their professional ethos.

However, the link between a publisher’s reputation and engagement on the part of researchers is likely to be strong. Again, overcoming the advantages associated with name-recognition is probably costly and less easy to achieve for OA publishers without access to sufficient funding.

New OA publishers who are able to build on an existing brand (e.g. of a university) are likely to have a cost advantage when it comes to acquiring quality manuscripts and generating attention

---

\(^{25}\) The numbers of monographs that are published as OA are quite small. One of the most established operations, ANU, has published around 500 OA monographs since 2003, while new ones, like the incipient UCL press, plans to publish around ten monographs in its first year.

\(^{26}\) Some publishers provide payment to those undertaking peer review.
from the reader side. Publishers lacking a strong institutional backer are likely to be at a considerable disadvantage.

A difference can be observed between OA operations that work with the grain of the research/publishing eco-system and those that appear to require additional measures to work. In particular, active measures to overcome the cost-advantage of publishers with brand-recognition and their role in the wider academic eco-system (as a universally accepted signal of research quality) would be necessary. The desirability of such measures hinges on the assessment of the status quo as either representing an efficient arrangement reflecting real cost advantages or an artificial barrier to entry.

Moreover, OA publishers that voluntarily abandon potential revenue streams (e.g. the sale of premium services) seem to leave money on the table. We know that there is a willingness to pay for monographs (there is evidence that OA versions continue to be seen as complements, rather than substitutes for print versions, for example). Value-added services for the research community, libraries and readers in general appear to be underdeveloped.

The publishing of OA monographs is not inherently less costly than non-OA publishing. In fact, investment in quality control, discoverability, rights management and marketing may be higher for an OA publisher. Maximising revenues (under the constraint of providing OA) is thus crucial for sustainability, but seems to be neglected by many OA publishers, primarily those with a mission-oriented approach, but also by NUPs.

The free-rider problem in OA operations relying on institutional funding has not been resolved. Institutions that don’t contribute funding still benefit from the availability of OA books. On the face of it, there is a prisoner’s dilemma situation in which institution-level incentives militate against sustainable funding for OA monographs: it is in an institution’s short-term financial interest not to contribute funds, even though an equitable contribution by all benefiting institutions maximises the availability of monographs while keeping the cost per institution small. Punishment mechanisms that could sustain collaboration (e.g. the threat of a large institution to withdraw funding) seem weak, as the status quo still provides many users with many monographs (OA and non-OA).

An important question regarding sustainability is to what extent making monographs OA has a positive effect on monograph sales, i.e. to what extent OA monographs and books sold for profit are complements. If they are (which remains an open question) OA could act as a marketing tool, promoting awareness and allowing user ‘testing’ before purchasing a printed copy. This possibility exists because the functionality of electronic books at present lags behind that of printed books. It is not clear that this will change in the near future, and even if it does, “there lingers a palpable sense of distrust for anything published in digital form.”

Special considerations apply to edited collections and other long-term or multiple-author publications. In particular, for publications involving multiple authors it may be easier to cover the costs through author-side funding since the costs are spread over a number of authors. Splitting costs makes it easier to support multi-author publications within this model. On the other hand, such publications might be more costly initially and involve more management capability to

27 See http://www.timeshighereducation.co.uk/418126.article. This ‘distrust’ can be seen, for example, in the ongoing preference for printed volumes e.g. in academic citation standards.
negotiate different rights and coordinate inputs. In addition, OA publishers with unstable funding are probably less likely to engage in long-term publishing projects (decades-long in some cases).

Table 2: Performance criteria: sustainability

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Traditional publisher     | • Doubtful over the longer term; however resilience might be strong.  
                          | • Access to cross-subsidy and embeddedness in the academic community confer stability.                                                    |
| New university press OA   | • This is very varied and tied in with the way NUPs are supported by their institution – in the UK there is little support. In the USA the top NUPs are very well funded. NUPs may be sustainable in the sense that they are embedded, but funding will probably remain limited. |
| Mission- oriented OA      | • Not sustainable, dependent on individual and voluntary efforts. However, this has always been a feature in humanities publishing, so the model is likely to persist in some form. |
| Freemium OA               | • The access to reader-side funding through monograph sales gives operations using this business model an income that other business models deliberately forego. All else being equal (e.g. access to third-party funding, cross-subsidy etc.), such operations should find themselves in a more favourable financial position. Moreover, investment in outreach and marketing can be used to build brand loyalty, further cementing the position.  
                          | • OA operations using the freemium model are more likely to succeed where there is institutional demand, including outside traditional academia. This suggests that monographs meeting the needs of well-funded institutions (e.g. in the fields of policy, economics, public health, defence etc.) will be more sustainable than those serving individuals active in niche research areas. Note that the external benefit of OA in these cases may be rather low as the books would have been purchased anyway.  
                          | • Individual readers as a source of revenue are likely to be under-appreciated in the traditional academic publishing business model and their importance is likely to increase as higher education expands across the world and the knowledge economy places a premium on continuing professional development.  
                          | • The sustainability of the model depends on the continuing willingness of users to pay for premium features. This exposes the business model to risk from an erosion of the value of premium services, e.g. through a lifting of the quality of the standard offer through technological innovation. Note that such challenges don’t have to come from other publishers, but could come from actors outside the publishing space (Google, Amazon etc.). |
3.3 Dissemination

One case for subsidising OA rests on the existence of a market failure in the form of a positive externality: monographs are too expensive to realise their full benefit and a price that is subsidised to zero (on the reader side) will maximise the benefit of research by allowing more people to read the published results. This is essentially unproven for monographs, although publishers we interviewed reported that OA monographs achieve significantly greater dissemination as measured by number of downloads compared with expected sales of the non-OA versions.

However, a certain proportion of academic monographs is unlikely to be of interest to a readership outside a narrow academic circle that is sufficiently served by the current supply arrangement, so that greater efforts in marketing and dissemination may not lead to an expansion of readership or any appreciable additional benefit.

However, well-marketed OA is likely to reach users that are not well served by current supply arrangements, including those outside academia, whose access to books through traditional channels (libraries) is limited, and not just because of the price of books.

A fundamental disagreement exists about the necessity of active measures to disseminate OA monographs. Many OA approaches implicitly rely on free availability via the internet to reach their audience, even though most carry out some active measures to aid dissemination (SEO, promotion via social media). OA approaches that rely on reader-side revenues on the other hand devote much greater attention to dissemination. We have reason to believe that more active measures of considerably greater sophistication than those currently practised by many OA publishers are needed to maximise distribution.

With the improvement of discovery tools (search etc.), the need for active measures is likely to decline over time. However, for the foreseeable future, active measures appear indispensable and many OA operations could maximise their impact by investing more in dissemination and improvements to discoverability.

If the external effects argument for OA is accepted, this implies that OA can’t just mean free, but must also mean the putting in place of active measures. But that also means that revenue streams are important. Here, putting all one’s eggs in one basket seems dangerous. Reader-side funding...
directly incentivises dissemination efforts. The alignment of incentives achieved by tying revenues to dissemination appears to be a strong advantage of the basic OA model.

Additional differentiation of functions, for example in the form of for-profit reader-side distribution services, may be beneficial. Such developments should not be foreclosed by licence terms.

The dissemination objective needs to be backed up with metrics. It is likely that multiple metrics are needed, both qualitative and quantitative. This is not because they are correct or capture the whole picture, but because it forces people to think clearly about what they want to spend money on.

For profitable titles, there is always a trade-off between monetisation and dissemination. You cannot maximise both at the same time. For example, models that require an embargo period before being OA risk diminishing the potential of wider impact of OA monographs. Unless the subsequent release of the material as OA is accompanied by some (extra) marketing efforts, potential readers may not become aware of it. Moreover, the longer the embargo period, the greater the danger that the research will become outdated, therefore limiting its impact potential. Furthermore, embargoes are a restriction on OA publishing and may send out the signal that OA is inferior to traditional publishing or that ‘inferior’ goods are made OA.

The issue of dissemination is related to sustainability: subsidies to OA can be justified if the benefits in terms of greater access and impact outweigh the net costs. In other words, an OA operation that cannot cover its costs from operational revenues may still be efficient if overall impact is taken into account. Again, this underlines the importance of empirical evidence of impact. Actively selecting the books that are published OA appears to be one way to address this issue in that it explicitly addresses the fact that impact differs widely across monographs (as well as potentially whole research disciplines: the classic example of large external effects is governance and public health research relevant to developing countries). However, naive measures of impact should be avoided, given the multi-dimensional nature of impact in many of the research disciplines in question and the time lag after which it can be observed.
### Table 3: Performance criteria: dissemination

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Comments</th>
</tr>
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</table>
| Traditional for-profit publisher | • Almost exclusive focus on economic demand from libraries (and in some cases individuals).  
• No strong incentive to reach non-traditional audiences.                                            |
| New university press OA         | • Varied, generally not well developed. No inherent incentive to reach audiences outside the academic ecosystem. However, NUPs are particularly responsive to incentives for dissemination that also benefits the sponsor institutions (e.g. through conditional research funding). |
| Mission-oriented OA             | • Weak: small operations, typically lacking traditional publishing skills. However, use of aggregators potentially able to compensate.                                                                       |
| Freemium OA                     | • The incentives for maximising dissemination are singularly strong in the freemium model: each new reader is a potential buyer of premium features and hence a source of net revenue (as marginal costs tend towards nil). Freemium only works where there is a very large free audience (because the conversion rate is so low), so a freemium publisher will be interested in building a free audience wherever s/he can. However, there is a risk that dissemination efforts will be targeted at customer segments where there is most demand for premium features but where the benefits of knowledge dissemination are comparatively low. |
| Aggregator/distributor           | • Strong: representing collections and with a focus on effective dissemination. However, no economic incentive to reach out to non-traditional readership/readers unaffiliated to research institutions or libraries. |
| Author payment model            | • Varied: strong for large publishers, integrated with their traditional book programmes.  
• Otherwise, dependent on the incentives set by funders.                                                |

### 3.4 Diversity

On the system level, a diversity of publishing options provides a strong guarantee for academic freedom and is appropriate for the diverse research community found in the humanities and social sciences.

Centralising funding for academic monograph publishing is potentially inimical to this objective. All the funding mechanisms we reviewed contained an element of centralisation compared with the status quo (partly because pooling arrangements can lower costs and therefore take revenue pressures off the OA publishing process). There is no indication that there are acute threats to diversity, but it seems likely that arrangements in which funding comes from different sources (both from the author and the reader side) are more conducive to a diverse publishing landscape overall.
### Table 4: Performance criteria: diversity

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional publisher</td>
<td>• Key contribution to diversity, many specialist operations serving different market segments.</td>
</tr>
<tr>
<td>New university press OA</td>
<td>• The mix of UPs and library publishers provides a diverse landscape. However, potential restrictions on researchers’ ability to choose their own publishers, as authors from other institutions often need to pay a publication fee.</td>
</tr>
<tr>
<td>Mission-oriented OA</td>
<td>• Mission-oriented OA enriches the OA publishing landscape, but they are a small minority.</td>
</tr>
<tr>
<td>Freemium OA</td>
<td>• Freemium is a very flexible approach and is compatible with a number of different setups in terms of functions carried out, premium offered sold and revenue objectives. In fact, a freemium element could be added in virtually all of the extant OA publishing operations (and is in fact present if print on demand is counted).</td>
</tr>
</tbody>
</table>
| Aggregator/distributor    | • Aggregators are focused on providing added value to a community and contribute to diversity of the system. They enable smaller publishing operations to participate in the market.  
                              • While the characteristics of the market (network effects) may lead to a concentration of market power in the hands of a single aggregator, the prevalence of open standards is likely to provide a strong defence against dominance. |
| Author payment model      | • In general, author payment adds another revenue source available to OA operations and therefore allows further market differentiation. |

#### 3.5 Innovation

The promise of OA combined with electronic publication formats in terms of new and improved forms of scholarship and new distribution models enabling greater dissemination of research results is vast.

In this regard, it is striking how much many OA models, especially of the integrated kind, resemble traditional publishers, and how much their product resembles a traditional monograph. We take this as evidence that the process of innovation in monograph publishing is at an early stage, which should be taken into account in the assessment of the performance of the sector as a whole.

Equating OA with ‘free’ risks starving the publishing industry of funds that are needed to drive innovation. Again, funding from different sources is likely to aid innovation, with the source of funding likely to direct innovation in specific areas. For example, author-side funding can be expected to encourage innovation in digital scholarship and improving the monograph as a research tool, while reader-side funding is likely to incentivise accessibility. This suggests a potential for further differentiation of publishing functions. In particular, the axiomatic application of the OA principle across the entire value chain may foreclose the development of business models (especially in the downstream/reader-facing segment) that could be profitable as well as socially beneficial.
Innovation may also occur on the user side. The academic community in the humanities and social sciences uses monographs for a variety of functions outside the core research tool or store of knowledge functions, in particular as signals of academic prestige, as a factor used in the allocation of research funding, positions, etc. These functions are arguably not paid for by their users in the current setup. Divesting monographs of such non-core functions may be one way of alleviating pressure on the publishing system (as more money could be made available for monographs that fulfil a narrower set of functions).

Table 5: Performance criteria: innovation

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional publisher</td>
<td>• Established business model and conservative market resist innovation. Traditional UPs tend to be conservative and protective of their role and position.</td>
</tr>
<tr>
<td>New university press OA</td>
<td>• The relatively new library publishers are looking for new approaches. • Proximity to the research community provides incentives to experiment with formats and functions that meet researchers’ needs (digital humanities, intermediate-length formats, social features).</td>
</tr>
<tr>
<td>Mission-oriented OA</td>
<td>• Clear potential to drive innovation. • Looking at the transition to OA journals, it is interesting to see what happened with PLoS: they were an example of mission-oriented OA. This provided them with an opportunity to try out new models, resulting in PLOS ONE, which has proved to be a highly innovative but successful venture.</td>
</tr>
<tr>
<td>Freemium OA</td>
<td>• The exposure to reader-side preferences incentivises innovation in areas like accessibility and ease-of-use, which are not a priority in author-facing setups. • Moreover, there seems to be an in-built tendency for freemium providers to keep ahead of the curve of technical developments in online media: as ‘premium’ features become standard over time, operations have to innovate to provide value to their readers and maintain reader-side revenues.</td>
</tr>
<tr>
<td>Aggregator/distributor</td>
<td>• Aggregators will concentrate on the new possibilities of OA dissemination and should speed up innovation. A gap in the market may exist for aggregation targeted at readers (rather than institutions).</td>
</tr>
<tr>
<td>Author payment model</td>
<td>• Commercial publishers will not be the driving force in OA, as they need to protect their commercial interests.</td>
</tr>
</tbody>
</table>

3.6 Integrity

The integrity of the publishing eco-system is a crucial factor when assessing OA initiatives from a policy standpoint. OA creates an interesting problem in this regard: as long as OA does not cover all (or at least the most important) new research, it is likely that information access by the public will be determined by availability, not quality. There is a risk that bad information (out of date, not quality-assured) achieves higher visibility and thus greater impact than good (the current peer-reviewed research).
While it is possible that discovery tools will in the future be able to direct readers towards quality information, this is not currently the case. Moreover, there may be an additional market failure at work in which scholars, having access to free information through libraries etc., are not affected by this problem and thus have no incentive to address it.

The possibility of separating equilibria in which the most up-to-date, best quality monographs are less likely to be OA can thus have considerable external costs. In other words, some OA may be worse, in terms of overall benefits, than no OA at all. Selective OA models (as well as small scale or institution-specific full OA models) are thus potentially problematic.

What makes this issue particularly pressing is that the threat is materially present: OA monographs are being published and are having an impact. The resulting priority to get the best scholarship online quickly may be in conflict with publishers’ interest in profit from their best sellers.

### Table 6: Performance criteria: integrity

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional publisher</td>
<td>● Contentious. While generally seen as central to the academic ecosystem, with a strong track record, the influence of the top publishers is seen by some as a threat to the system’s integrity.</td>
</tr>
<tr>
<td>New university press OA</td>
<td>● NUPs contribute towards integrity. They are closely connected to the community and UPs have traditionally been the backbone of monograph publishing. Well placed to achieve buy-in from academics. However, ‘vanity publishing’ is a threat.</td>
</tr>
<tr>
<td>Mission-oriented OA</td>
<td>● Model adds credibility to the OA system. The scholar-led presses have a special opportunity to increase trust among the research community in the humanities. However, relies on the purist OA approach not becoming universal.</td>
</tr>
</tbody>
</table>
| Freemium OA               | ● The customer segmentation that is at the heart of the model can be seen as disadvantaging certain reader groups, especially if the quality/functionality gap between premium and basic features becomes large. There is a potential – if abstract – ethical issue associated with the deliberate restriction of functionalities below what is considered standard to incentivise the sale of premium features. However, the wider availability of OA versions with functionality that is – at least currently – of a high quality compared with the state of the art still represent an improvement on the status quo.  
● The provision of B2B services to other (less well funded) OA publishing operations and other market participants (such as libraries) can contribute to the spread of best practice. |
| Aggregator/distributor    | ● The emergence of aggregators is itself a sign of increasing integrity of OA publishing. Could be described as a requirement for the system.                                                               
● Aggregators make the system more robust by limiting impact of the disappearance of individual OA publishers (books will still be available). |
| Author payment model      | ● The involvement of traditional publishers in OA books increases the credibility of the emerging OA system.                                                                                         |
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Annex 1  Expert interviews

The first part of our approach to analysing Open Access (OA) business models for monographs included the identification of different revenue streams for OA monograph publishing. This was predominantly based on Peter Suber’s OA monograph models classification and SPARC’s ‘Income models for Open Access: An overview of current practice’.

The next step involved consultations with experts in the field of OA publishing, both from academia and the publishing community. The table below lists the individuals that were consulted.

Table 7:  List of consultations (26 August 2014)

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toby Green*</td>
<td>OECD Publishing</td>
</tr>
<tr>
<td>Eelco Ferwerda*</td>
<td>OAPEN Foundation, Directory of Open Access Books</td>
</tr>
<tr>
<td>Dr Martin Eve</td>
<td>University of Lincoln, Open Library of the Humanities</td>
</tr>
<tr>
<td>Dr Rupert Gatti</td>
<td>University of Cambridge, Open Book Publishers</td>
</tr>
<tr>
<td>Colin Steele</td>
<td>Australian National University Press</td>
</tr>
<tr>
<td>Prof Peter Mandler</td>
<td>University of Cambridge, Royal Historical Society</td>
</tr>
<tr>
<td>Dr Paul Ayris</td>
<td>UCL Press</td>
</tr>
<tr>
<td>Charles Watkinson</td>
<td>University of Michigan Press</td>
</tr>
<tr>
<td>Pierre Mounier</td>
<td>Centre for Open Electronic Publishing</td>
</tr>
<tr>
<td>Terry Ehling</td>
<td>Project MUSE, The Johns Hopkins University Press</td>
</tr>
<tr>
<td>Prof John Thompson</td>
<td>University of Cambridge</td>
</tr>
<tr>
<td>Prof Robert Darnton</td>
<td>Harvard University</td>
</tr>
<tr>
<td>Dr Frances Pinter</td>
<td>Manchester University Press, Knowledge Unlatched</td>
</tr>
<tr>
<td>Dr Kathleen Fitzpatrick</td>
<td>Director of Scholarly Communication at the Modern Language Association and Visiting Research Professor of English at New York University</td>
</tr>
</tbody>
</table>

* LE expert advisors

The expert interviews provided further insights into the wider context of OA publishing, the perceived crisis in monograph publishing, its causes, the changes digitalisation brought to the publishing industry, as well as the discussion of the rationale for OA in academic publishing and the individual operations currently present in this market.

Following the consultations, we refined our conception of OA business models for monograph publishing and set up a classification structure that captures the diversity of actors active in OA monograph publishing (not all of whom are ‘publishers’).

Section 2 (p. 12) discusses the features of existing OA business models and attempts a classification of the examples we reviewed according to their observable features. We provide a more detailed discussion of two successful models where detailed insights could be provided by our expert advisors.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2B</td>
<td>Business to business (marketing)</td>
</tr>
<tr>
<td>BITS-XML</td>
<td>Book Interchange Tag Suite – Extensible Markup Language</td>
</tr>
<tr>
<td>CC</td>
<td>Creative Commons</td>
</tr>
<tr>
<td>CC BY</td>
<td>Creative Commons licence with attribution</td>
</tr>
<tr>
<td>CC BY NC</td>
<td>Creative Commons licence with attribution – non-commercial</td>
</tr>
<tr>
<td>CC BY NC ND</td>
<td>Creative Commons licence with attribution – non-commercial – no derivatives</td>
</tr>
<tr>
<td>DOAB</td>
<td>Directory of Open Access Books</td>
</tr>
<tr>
<td>FWF</td>
<td>Austrian Science Fund</td>
</tr>
<tr>
<td>HEFCE</td>
<td>Higher Education Funding Council for England</td>
</tr>
<tr>
<td>HSS</td>
<td>Humanities and Social Sciences</td>
</tr>
<tr>
<td>IPR</td>
<td>Intellectual property rights</td>
</tr>
<tr>
<td>ISP</td>
<td>Internet service provider</td>
</tr>
<tr>
<td>NWO</td>
<td>Netherlands Organisation for Scientific Research</td>
</tr>
<tr>
<td>NUP</td>
<td>New university press</td>
</tr>
<tr>
<td>OA</td>
<td>Open access</td>
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<tr>
<td>OAI</td>
<td>Open Archives Initiative</td>
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<td>OAPEN</td>
<td>Open Access Publishing in European Networks</td>
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<td>OASPA</td>
<td>Open Access Scholarly Publishers Association</td>
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<td>OCLC</td>
<td>Online Computer Library Center Inc.</td>
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<td>PLoS</td>
<td>Public Library of Science</td>
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<td>SaaS</td>
<td>Software as a service</td>
</tr>
<tr>
<td>SEO</td>
<td>Search engine optimisation</td>
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<tr>
<td>SNF</td>
<td>Swiss National Science Foundation</td>
</tr>
<tr>
<td>SPARC</td>
<td>Scholarly Publishing and Academic Resources Coalition</td>
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<td>UP</td>
<td>University press</td>
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