



#### Authors' correspondence

<sup>1</sup> Federal University of São Carlos  
São Carlos, SP - Brasil  
[Fatima.mdoamaral@gmail.com](mailto:Fatima.mdoamaral@gmail.com)

<sup>2</sup> Federal University of São Carlos  
São Carlos, SP - Brasil  
[chloe@ufscar.br](mailto:chloe@ufscar.br)

## Business models for publishing open access books used by Brazilian university presses

Fatima Beatriz Manieiro do Amaral<sup>1</sup> Chloe Furnival<sup>2</sup>

### ABSTRACT

**Introduction:** There is a growing trend among Brazilian University Presses (BUPs) to publish scientific and academic books in open access, making them available online. To this end, the BUPs adopt one or more business models, especially focussed on how to finance the publishing of books. **Objective:** The research here presented aimed to describe the business models and sources of funding used by the BUPs to fund the publication of academic and scientific e-books in open access. **Methodology:** Document research was carried out to survey the editorial policies accessible from the websites of 92 BUPs of Brazilian public higher education institutions. In most cases, after analysing the documents available on the websites, it was possible to identify the business models adopted for open access publishing. A questionnaire was also applied to the BUPs to identify, from the semi-structured questions, other details on the business models, which supplemented information not found on the university press websites. **Results:** The results reveal that 94.6% of participating BUPs publish books in open access, exclusively or associated with print book sales. The following business models adopted to finance editorial activities and open book publications were identified: institutional funding, cross-subsidies, grants, shared infrastructure, partnerships with university libraries, donations, book processing fees, release, hybrid and embargo period publishing. **Conclusion:** The research shows that, by aligning themselves to the open science movement in general and open access movement for book publishing specifically, BUPs adopt innovative editorial practices, but face challenges in terms of their financial sustainability.

### KEYWORDS

University press. Open access. Books. Business Models.

## Os modelos de negócio para a publicação de livros em acesso aberto por editoras universitárias brasileiras

### RESUMO

**Introdução:** existe crescente tendência entre as Editoras Universitárias Brasileiras (EUB) publicar livros científicos e acadêmicos em acesso aberto, disponibilizando-os *on-line* como *e-books*. Para tal, as EUB adotam um ou mais modelo de negócio, especialmente focados na forma de financiar a editoração e publicação de livros em acesso aberto. **Objetivo:** Descrever os modelos de negócio utilizados pelas EUB para a publicação de *e-books* acadêmicos e científicos em acesso aberto.

**Metodologia:** Foi realizada pesquisa documental com levantamento das políticas editoriais dispostas nos *websites* de 92 EUB de instituições de ensino superior públicas brasileiras. Na maioria dos casos, a partir da leitura e análise dos documentos e informações disponíveis nos *websites*, foi possível identificar os modelos de negócio adotados. Também foi aplicado um questionário às EUB para captar alguns dados sobre os modelos adotados, que suplementaram as informações não encontradas nos *websites* das editoras; foram retornados 36 questionários preenchidos. **Resultados:** Foi identificado que 94,6% das editoras participantes publicam livros em acesso aberto, exclusivamente ou associado às vendas de livros (impressos e *e-books*). Verificou-se modelos de negócios adotados para subsidiar as atividades editoriais e para as publicações abertas: financiamento institucional, subsídios cruzados, concessão de financiamento de pesquisa e/ou bolsas, infraestrutura compartilhada, parcerias com bibliotecas universitárias, doações financeiras, taxa de processamento de livro, liberação, híbrido e período de embargo. **Conclusão:** A pesquisa aponta que, ao aderirem-se ao movimento da ciência aberta e acesso aberto para a publicação de livros, as EUB adotam práticas editoriais inovadoras, mas enfrentam desafios no que tange à sua sustentabilidade financeira.

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JITA: IN. Open science.



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## 1 INTRODUCTION

Open access to all types and formats of scientific literature is one of the main pillars of Open Science, referring to the wide availability of scientific research results on the internet without access costs, research that is often financed with public funds. In this way, researchers, professors, students and any interested person can read, download, print, distribute, search, (re)use to promote other research, translate, carry out text mining, migration to new media, long-term archiving, among other operations with such publications without financial barriers or restrictive licenses (BOAI, 2002; SUBER, 2012). Open access, then, creates conditions for researchers to seek, access and (re)use the information resources necessary in the course of the investigations undertaken, in addition to guaranteeing conditions for the rapid circulation of results among researchers around the world (LEITE; COSTA, 2016).

Brazilian university presses/publishers (BUPs) are important agents in the dissemination of intellectual – scientific and artistic – output by researchers and writers, focussing especially on the publication of books and book collections. These publishers are inserted in the context of the national educational and scientific system, affiliated to Higher Education Institutions (HEIs) which are mostly maintained with public resources. They have committees generally made up of academics from the HEI in question, and they incorporate the institution's mission and values, signalling their commitment to teaching, scientific-technological, artistic-cultural output and outreach, through publications that dialogue with the areas of knowledge relevant to the HEIs, focussing on the Institution's internal and external public (BUFREM, 2015).

The publication of academic and scientific books plays a vital role in building academic careers, as it provides a space for the development of sophisticated structures of reflection with the possibility of expanding the authors' writing skills (EVE, 2014; HILL, 2020). This is particularly the case for the areas of Social Sciences and Humanities in which the book, unlike the journal article, is seen as a more significant publication format in which the extensive writing process constitutes the means of developing the research itself, and not merely the means of communicating it (MEADOWS, 2009).

Editing and publishing books incur costs for publishers since the production chain involves different human and technological resources in the publishing process. The services provided by publishers generally include the selection of manuscripts for possible publication, management of the peer review process, editorial support which in turn includes editing, revision, graphic design, output of editions in several formats, registration, authority and metadata production, marketing and book promotion, distribution for sale and to libraries, archiving, providing usage and impact metrics (THATCHER, 2007; WITHEY et al., 2011; OAPEN, 2021). Thatcher (2007) emphasizes that all these steps are expensive, especially when performed to attain the level of excellence in scientific publishing usually associated with university presses.

It is because of such high costs of the book publishing process, along with the need to remain a financially viable business to cover them (including for paying staff salaries when these are outsourced), that university presses have not managed to be as expeditious in embracing open access book publishing when compared to scientific journals. In fact, in the first ten years of the open access movement, there was almost exclusive mention of the “two routes” to attain open access to scientific articles: the green route (repositories) and the gold one (open access journals), being that the repositories were generally seen as the places to deposit preprints of articles submitted to a journal or articles already published, possibly after an embargo period stipulated by the journal.

Suber (2012) recognized that the OA movement has focused on journal articles because journals do not pay authors for their articles, but that book authors can earn royalties, even though these for most academic monographs range between zero and a meagre amount. In this

sense, continues Suber (2012), the authors of these books have little to lose in financial terms, and much to gain in terms of their expanded reach and impact if they are published in open access. Evidently, there is a large corpus of literature in book format, in the public domain, and which, therefore, do not need permission (from authors and publishers) to digitize them and make them available online, as witnessed by projects such as Project Gutenberg and on the Public Domain website of the Brazilian Ministry of Education. Suber (2015, p.111) states that, even though digitizing these books is a “titanic technical undertaking”, it is a minor problem compared to the resistance faced by editors, journal publishers and even authors to obtain permission to make scientific articles available in open access.

As of 2006, the portion of open access academic books available online surpassed the printed portion available in university libraries (SUBER, 2015), and today, the ecosystem of publishers, platforms, repositories and digital libraries that provide access to books in open access is healthily diverse. Among the components of this ecosystem, the Directory of Open Access Books (DOAB) stands out. Sister database to the Directory of Open Access Journals (DOAJ), DOAB provides access to 66,000 open access books that have gone through the peer review process, plus metadata records in Dublin Core. Also worth mentioning is the open software for publishing open monographs - OMP - from the Public Knowledge Project (PKP). In addition to these, there is a plethora of open access book publishers around the world, including: SciELO Books, Open Book Publishers, Bloomsbury Publishing, MDPI Books, IntechOpen, OpenEdition Books and De Gruyter. DOAB is maintained by Open Access Publishing in European Networks (OAPEN) which also operates two other platforms: OAPEN Library, which hosts and disseminates open books, and the OAPEN Open Access Books Toolkit, a set of resources on open access book publishing for authors. It is important to recognize that today, many traditional commercial publishers also offer services for publishing books in open access, for example: Springer Open, Palgrave Macmillan, Oxford University Press, Taylor & Francis.

By facilitating the findability of research, the benefits of open access even extend to increased transparency, integrity, and scientific rigor; encourages innovation and promotes public involvement, improving the efficiency of the scientific research process (TICKELL, 2016). Other benefits of open access books relate to the reach of books that, when published through the traditional publishing model, are accessible exclusively to readers of institutions whose libraries manage to obtain a copy of the book: by guaranteeing equity of access, an open access title extends its reach to readers, for example, in less developed countries. Consequently, it will receive a greater number of traditional and social network citations (DOS SANTOS RIBEIRO, 2018).

Open access to books refers to the ample availability of e-books (the term for electronic book, understood in this work as synonymous) which are electronic files inscribed in binary codes, displayable through reading software and readable by electronic machines, such as desktop computers, notebooks, smartphones, iPads, tablets or e-readers. At the same time that open access discards conventional business models that entail a financial investment from the reader, it offers opportunities to rethink the ways of financing the dissemination of knowledge in book format.

With regard to open access, the removal of costs focuses exclusively on access to the text for the readers – the knowledge demand side – as they do not need to pay to use the open access text that is freely available on the internet. Open access is an alternative way to distribute access to books that would not necessarily be published for commercial sale by publishers (SNIJDER, 2009). But the costs of book production – the supply side in the circulation of knowledge – are basically the same for the publisher, except for the need for printing because they are electronic books, born digital texts.

The International Federation of Library Associations and Institutions (IFLA) defines open access as a “concept, movement and business model” (IFLA, 2011). Willinsky (2006)

described the “ten flavours or models of open access” based mainly on how each model is funded and the related type of access it provides to the publication. And Collins, Milloy and Stone (2015, p.7) define the green and golden paths of open access as the “[...] underlying business models that support an academic work to become open access.” The concept of business model can be defined as the set of decisions and actions taken by publishers for the production and commercialization of their books (PENIER; EVE; GRADY, 2021). Massa and Tucci (2013, p. 9 apud RITTER; LETTL 2018, p.32) observe that business models constitute the “systemic and holistic understanding of how an organization orchestrates its system of activities to create value.”

It follows that analyzing business models for university presses related to open access scientific and cultural publishing requires attention to editorial policy, structure of invested costs and revenue streams. Thatcher (2007) points out that university presses must be aware of the fact that making books available online in open access requires some potentially costly specific digital tools and, in order to maintain quality, requires the same editorial production used for printed books. Thus, any business model and form of financing must be carefully tested to verify its efficiency and sustainability before long-term changes are undertaken.

In light of the above, the objective of this work is to describe the business models used for the publication of academic and scientific e-books in open access by Brazilian university presses. It is recognized that, in the existing informational ecosystem, such texts constitute important components for the consolidation of Open Science. Given that the intention here is to broaden the discussion on business models that promote the financial sustainability of open access book publishing by university presses in Brazil, the next section of the article presents a brief review of the literature on the business models, before moving on to the presentation of the adopted method, followed by the results and discussion.

## 2 LITERATURE REVIEW

Based on the literature identified from the LISTA and Scopus databases in the CAPES Journals Portal, and in Google Scholar, the following authors and texts were identified that specifically address open access book publishing business models: Withey (2011), Eve (2014), Frosio (2014), Bufrem (2015), Collins, Milloy and Stone (2015), Ferwerda, Pinter and Stern (2017), Hill (2020), Penier, Eve and Grady (2021), Speicher et al. (2018), Snijder (2019) and Roncevic (2023). Based on these texts, a brief description of these business models follows.

- a) Author processing charge (APC), similar to the APC – article processing charge in the field of open access articles for scientific journals that adopt this model. For open access books, this model is sometimes known as the book processing charge (BPC), and it consists of charging a fee that will cover the expenses of publishing an open access book. The fee may be paid by the individual author or by their institution, postgraduate programme or research funding agency. With the adoption of this model, the publisher is guaranteed that the editorial costs of a specific title are covered. Some difficulties presented by this model are: unpopularity among authors; the fact that economic crises generate a negative impact, due to the tendency to cut research funding; and, specifically for the publisher, the fees only cover the publication of a certain book, so that the other activities of the publisher would have to be financed from other sources of funds, so this model would hardly work alone.
- b) The freemium model, whereby a simple version of a given title is made available free of charge in open access, while other premium versions of the

- same title, which contain more content and functionality are not free and are sold in other formats such as print or audiovisual, for example.
- c) Embargoed/delayed open access model, whereby a title is released in open access only after a publisher has had time to earn revenue from selling the title in print or digital format;
  - d) Hybrid model whereby an online and open version of a book already purchased in printed format is made available. This model is very much in line with the *status quo* as it involves the purchase of a commercialized book. The use of this model does not require major changes to the traditional way of producing books, specifically if the publisher makes the electronic format available in PDF file online as the open version. However, working with other formats and using distribution platforms are actions that require different skills and processes, which requires adaptation from the editorial team. The hybrid model caters to authors who aim for traditional distribution and open access via the Internet. However, printed books may take longer to be sold, but to overcome this factor, printing can be done on demand (print-on-demand – POD), eliminating expenses with inventory maintenance, although printing on demand is more expensive when compared to the print model large runs. In short, the hybrid model can be adopted as a form of transition by the publisher; even so, it can be costly and difficult to implement as the demands of the traditional print model are different from open access models.
  - e) Release model refers to the strategy by which the publisher decides to publish in open access those titles that will no longer be reissued or reprinted by the publisher, but which will still have readers around the world, and therefore, will bring visibility to the press through an online version in open access.
  - f) Selective model of open access, also known as cross-subsidy model. In this, other commercial activities of the publisher, such as profits from sales of non-open access publications, provision of services, sale of translation rights, among others, fund the publication of titles in open access. It is important to point out that small and medium-sized presses – whether beginners or long-established in the market – may face difficulties in adopting this model since there are no guarantees of book sales in general.
  - g) The donation and crowdfunding model whereby publishers launch a title and seek financial donations from individuals or institutions. Donations can promote an entire open access collection or series. It is a common model in the United States, where the tradition of alumni (former students of the institution) making substantial donations to their *alma mater* is very consolidated, and such donations can reach very substantial sums.
  - h) The community model whereby researchers in specific disciplines join forces to publish in open access, works from their field in open access.
  - i) The collaborative underwriting model, whereby multiple libraries join forces to cover the price set by a publisher for a title to become open access and share the cost.
  - j) The shared infrastructure model, also known as co-publishing, consists of sharing resources, costs and infrastructure between two university presses. When choosing to co-publish in this way, university presses sign a specific contract with detailed clauses on the commitments assumed by each of the institutions involved. The model presents as challenges the collective governance of projects and the possible loss of control over certain stages of editorial production. Even so, the shared infrastructure benefits small

- publishers with a shortage of human, financial and technological resources, in addition to distributing risks and knowledge between publishers.
- k) There is a set of models for the publication of open access books that depend on funding – direct or indirect – from the higher education institution (HEI) which is the parent university publishing house, through the assignment of financial, human, technological resources or facilities that support the general functioning of the publishing house or, specifically, of open access publications, underlining the HEI's commitment to open access. An example of this model would be the celebration of internal partnerships through which the publisher and another sector of the HEI come together to cover publication costs. In this line, a model foreseen in the editorial policies of several HEIs around the world is the partnership between publishers and university libraries in which financial, human or technological infrastructure resources are shared, to make the publication widely available. It is necessary to delineate responsibilities: the publisher is in charge of publishing and the library is responsible for archiving the work in the Institutional Repository (and consequent attribution of metadata) and its online dissemination. Librarians can also offer strong encouragement and experience with practices of open access to scientific literature, so important for the distribution of scientific and academic books in the context of Open Science. In order to avoid conflicts and negative impacts, it is necessary that resources be applied efficiently to avoid losses to one of the parties. Libraries play an important role as clearinghouses for open access to books, whether as creators of workflows for such e-books, or working to advise authors so that they can make informed decisions about their publications on copyright and open or restricted publication options.
  - l) A model that envisages the publication of research output in open access is one that involves the granting of funding and research grants by a research funding body in which the researcher/author receives financial support for research that explicitly includes covering the costs of publishing open access books. There are also cases in which publishers compete in public notices for the publication of academic and scientific books by funding agencies (CAPES, CNPq or state research support foundations, etc.) either in the open e-book format or in the hybrid model in which the resources cover the costs of printing and the electronic format is openly available. The granting of research funding and scholarships is directly affected by financial crises in funding agencies: considering the Brazilian scenario, there have already been successive cuts in transfers to public research funders even before the start of the covid-19 pandemic, cuts that may deepen and extend for years to come.

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Penier, Eve and Grady (2021) draw attention to the difficulty of a single business model being able to support all the publication of open access books by a press, and therefore, advise the combination of models.

### 3 METHOD

Descriptive in nature, the aim of the research was to describe the characteristics of the editorial policies and business models of Brazilian University Presses (BUPs) of public HEIs for the publication of books in open access. The nature and analysis of the data performed is quantitative and qualitative (GONSALVES, 2007). Data were collected from documentary

research on the presses' institutional websites and from the application of an online questionnaire at the BUPs.

First, the website of the Associação Brasileira de Editoras Universitárias (ABEU – The Brazilian Association of University Presses) was consulted in order to identify the group of Brazilian university publishers to participate in the research. A total of 92 presses belonging to federal, state and municipal universities, federal education institutes, research institutes, official state presses, museums and archives were identified. On each website of the 92 identified presses, we searched for documents that made up the editorial policies, such as regulations, statutes, manuals for authors and other available texts. The search for this variety of documents was necessary because many publishers do not have a single document that explains their editorial policy. From these documents, information was extracted on the business models and funding sources for publication in general (not just open access publication). All data collected in these first two steps were tabulated in a spreadsheet in Microsoft Excel®.

Next, functionaries responsible for the 92 university presses were invited, by e-mail, to answer an online questionnaire (developed in Google Forms®) consisting of eight structured and thirteen open questions about the publication of books in open access as practiced by the publisher.

A total of 36 publishers contributed with responses, which represents 39.1% of the total universe of 92 publishers initially identified. The research was approved by the Research Ethics Committee of the Federal University of São Carlos, protocol number 39955220.2.0000.5504 and all stages took place between July and September 2021.

## 4 RESULTS

The results presented in this section point to the business models adopted and/or foreseen in the editorial policies of the presses that took part in the research and referring to open access publication. Table 1 shows the percentage of the 92 BUPs participating in the research that adopt one or more models identified in the literature and documents collected on the BUP websites. Note that in 30% of the researched BUPs, no explicit information about the business models was found during the document research stage on the websites.

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**Table 1.** Business models adopted by the participating university presses

Business model	% of presses
Author/Book processing charge (APC/BPC)	15.2
Embargo period	6.5
Hybrid	7.6
Release	14.1
Selective / cross-subsidy	39.1
Monetary donations (p.ex. <i>crowdfunding</i> )	20.7
Shared infrastructure: co-editing	25.0
Institutional financing	66.3
Partnership with the university library	1.1
Research funding/grants	32.6

Source: Research data (2021)

The book processing charge model, which consists of charging the authors (or their research funding agency) a fee that will cover the expenses of publishing an open access book, is used by 15.2% of the BUPs surveyed. Of these, 28.6% transfer to authors only the fee for issuing the International Standard Book Number (ISBN), which currently costs R\$ 22.00.

Among the researched BUPs that use this model are the Editora UFFS, EDUR and Editora UEMS.

A much-cited model in the context of open access is the stipulation of an embargo period, whereby the publisher sets a certain time, or number of copies of a given title to be sold, to later make it available in open access. Of the BUPs surveyed, 6.5% adopt this model for an average period of six months, but it can reach two years, depending on the contract signed between publisher and author. It is possible to forecast and measure the volume of sales of the title (when compared to the hybrid model in which forecasting is not possible), in addition to enabling the sale of the printed and electronic versions. If availability is anticipated, sales may decrease dramatically; the period that a work remains closed can affect its relevance in areas that use books more as sources of information. It should be noted that some development agencies may not agree with the stipulated embargo period when allocating resources to the publisher (PENIER; EVE; GRADY, 2021). The testimony of one research participant (answering an open question in the questionnaire) exposed the situation of declining sales due to the availability of the e-book in open access after a period as a printed book:

Our press's main experience with open access has been negative. There were five titles published in print, two of which sold very well. These titles were placed in open access on SciELO Books and from then on, sales dropped to practically zero. It was a strategic mistake that led us to understand that open access and print run do not mix, contrary to some hypotheses that open access would boost print sales. (A Brazilian University Press survey respondent).

Hybrid publishing is a business model in which a given work is published in the printed version, either for commercialization or free distribution, and in the e-book version for open access. It is possible that the publisher will continue to produce print copies of a title after publication in open access, exclusively on demand (print on demand – POD). A total of 7.6% of BUPs surveyed adopt this model. EdUFES and EdUFERSA are among the researched BUPs that work with this model.

A total of 14.1% of BUPs surveyed adopt the release business model, whereby the decision is made to publish some titles in open access that will not be reprinted or reissued in print form. Longer-established presses on the market have more published works, which makes it easier to adopt the release model. EDUEM and EDUSP are examples of these cases, the latter using the USP Portal de Livros Abertos for this.

The business model called cross subsidies / selective open access is present in 39.1% of university press editorial policies, including Editora UNESP, EdUFRN and Editora da UFSC. In this model, the publisher subsidizes the publication of titles in open access with the other commercial activities it carries out. The predominance of this business model (which occurs as the second most adopted model by the surveyed BUPs) seems to signal that the BUPs have a growing interest in publishing books in open access, an interest possibly arising from the growing diffusion of Open Science principles and the materialization of such principles in open access publication.

Around 20.7% of the BUPs use financial donations as a source of funds for publishing open books. Of these, 57.9% are limited to receiving resources from legal entities; 42.1% from individuals; and 21.1% did not specify the source. It should be noted that books financed through the donation model are not exempt from peer review and approval by university editorial boards. Presses that propose to work with this model put some instructions to be followed in order to make the process more effective. We can cite the example of Editora UFPR, which requires the proponent/author to pledge the amounts by contracting external revision/editing and/or printing services or transfer the entire amount to the press to pay for the printing process.

The shared infrastructure or co-editing business model consists of the division of resources, costs and infrastructure by two entities (BUFREM, 2015) and is adopted by a quarter of the BUPs surveyed. An example of co-edition of a book in open access would be the title

*Introduction to robotics*, by Maja Mataric, co-edited by Editora UNESP and Editora Blucher. Another detail about this model was explicated in the data collected from the questionnaire. From the question: “For open access publications, does the Press carry out (or has already carried out) partnerships with which other types of institutions?”, it was possible to obtain information about partnerships for co-editions already published, although a third of the BUPs did not have sufficient information to be able to answer the question. Table 2 shows the partnerships already established by the BUPs for the publication of open access books.

**Table 2.** Institutional partnerships for co-edition and shared infrastructure

Partner for the shared infrastructure	% of the uni presses
Other university presses	25
Research funding agencies	19.4
SciELO Books	19.4
Libraries	11.1
Comercial publishers	8.3
Research institutes	5.5
Other	8.3
Insufficient information to answer the question	30.3

Fonte: Research data (2021)

An example of a partnership between a university press and a university library is the UnB Book Portal. SciELO Books is another partnership that offers advantages to university presses, as the books available on the platform are widely found through search engines, consequently are more accessed by users, thus bringing a lot of visibility to editorial production in open access. It is important to note that for each book made available by SciELO Books, the publisher bears a single cost at the beginning of the process.

Institutional financing is the business model adopted by 66.3% of the BUPs that participated in the survey. This majority is due, in the first place, to the research sample focus on presses linked to public HEIs. Secondly, this result is explained by the fact that the Brazilian research system is mainly supported by public funding and takes place in public institutions. Although only the aforementioned percentage places institutional funding as a source of funds explicitly in their policy documents found online, it is possible to generalize that all BUPs, to some extent, fit this model, as they have a physical space within the HEIs, often with salaried public functionaries assigned to the press, with the direction and coordination carried out by a member of the teaching staff or a technical-administrative staff member. For example, sometimes it is possible to use financial resources from postgraduate programs that can be used in various activities to disseminate research carried out by research teaching staff and students.

In a similar vein, another model foreseen in the editorial policies is the partnership between presses and university libraries in which financial, human and technological infrastructure resources are shared, to make the publication widely available. However, in the case of the BUPs researched here, this type of partnership is adopted by only 1.1% of the research participants, pointing to the incipient partnerships between the BUPs and the libraries of their parent institutions. An example of this business model is the partnership signed between Editora UnB and the Central Library of UnB to build the UnB Book Portal.

With regard to the source of institutional funding, 64.1% of the BUPs surveyed are maintained with federal funding and 34.8% with state funding, which reflects the proportions of the types of universities and their respective presses in the survey sample. Within the researched HEIs, the origin of funding for the BUPs had the distribution shown in Table 3 below:

**Table 3.** BUP allocation sectors and budget sources

Intra-institutional sector budget sources	% of BUPs
Dean's office	33
Research and Postgraduate adjunct dean offices	16
Outreach and Culture adjunct dean offices	13
Institutional Communication	4
University Press Foundation	2
Academic coordination adjunct dean's office	1
Administrative adjunct dean's office	1
Information not located on the university press website	30

Fonte: Research data (2021)

The open access publishing business model incorporated into research proposals is on the list of financing options for publishing open access books for almost 33% of the BUPs surveyed. This model becomes a possibility for the publisher to finance the publication of open access books, as it will be the researcher, holder of funding from the research support agency, who will approach the publisher, offering the funds to fund the publication of the book, if the publisher accepts the manuscript after peer review. For example, the Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP) finances “the publication of books in Brazil that communicate original and unpublished research results” (FAPESP, 2023) of research supported by FAPESP, and with the co-financing of the publishing company/university press. An example of an open access book funded by the Coordination for the Improvement of Higher Education Personnel (CAPES) and published by the Academic Culture press at UNESP is the book *Users of information and diversity* organized by Professor Helen de Castro Silva Casarin (2021).

## 5 DISCUSSION

At the beginning of the movement for open access to the scientific literature, activists focused their attention on the release of scientific articles from journals, with books being comparatively absent from these initial discussions. For Suber (2012), removing access barriers to books may be easier than opening up journals. This happens when considering the traditional low profits obtained from the sale of scientific books; thus, the decision would be up to the author to expand its impact or receive little or no remuneration from sales.

In cases where the author has already conceded the rights to publishers, the decision to publish – or even to publish in open access those scientific and academic books already published – rests with publishers when analyzing market trends. Suber (2012) suggests examples to publishers who feel insecure about releasing a book in open access, such as applying an embargo period of six months to one year on publications before opening them up or making available in open access, titles in their catalogue that they have already decided will not be reissued and reprinted.

Thatcher (2007) argues for the importance of understanding exactly what risks and dangers are involved in moving to open access business models. “We publishers believe it's important to keep an open mind about what constitutes open access, not least because not all approaches that might deserve the name need be inconsistent with a market-based model.” (THATCHER, 2007, p. 167). However, maintaining two business models can be complex since editorial teams will have to reconcile what has already been done with new tasks. This situation is quite challenging for Brazilian university presses, bearing in mind the small teams that, when accumulating functions for which they are not trained, can take more time, produce an editorial object of inferior quality, impacting the end user-client, in addition to higher costs for the institution.

Withey et al. (2011) propose some characteristics of business models for university presses. These should be seen as part of scientific communication, considering the entire ecosystem of interdependence in academic communities. The models also need to cover the various types of content and genres that are part of the publisher's publication catalogue. They must also coexist well with other business models, as no model can support an entire publishing house. Revenues must be used for the improvement of operational technologies. The publisher must anticipate revisions or successions to the models, in view of the rapid technological and social changes in the way researchers work. The effectiveness of the model must be measurable in order to support meaningful resource allocation decisions across the editorial system.

University presses face institutionalization challenges, dealing with tensions between academic commitment and market determinations; high value attributed to journals for scientific communication and the financial, bureaucratic and structural conditions of publishers; conciliation between modes of production and technological advances in the aforementioned conditions (BUFREM; GARCIA, 2014).

Noting the decline in sales of academic books, OAPEN (2021) advocates the adoption of publishing books in open access. As they are widely available on the internet, they can reach a wider, more diverse readership, for example academics from other disciplines, independent researchers, policy makers, industry and the general public, potentially resulting in increased usage and citations of the work.

From experiences with publishers that publish in open access, Penier, Eve and Grady (2021) found other variations of business models used in this context, among which:

a) “advertisements and marketing” based on the interests of customer-users, either within the work or on the publisher's website;

b) “fundraisers” organized by editors soliciting periodic or ongoing donations from individuals or foundations, which can be subscription-based or “pay what you want”;

c) “freemium digital hybrid”, by which the open access book is available in HyperText Markup Language (HTML) format and other electronic formats are paid as they offer more additional tools, but the content is always the same;

d) “licensing to third parties” in which the publisher licenses part of the catalogue to third party distributors or content aggregators and uses the revenues to fund new open access publications;

e) “consortium or subscriptions”: a work network is created with the aim of generating economies of scale on an economic platform. The members (libraries, funders and publishers; national or international, from a specific knowledge field or not) of a consortium of this type allocate quotas that fund the publication of open access books by a publisher or a collective. These, in turn, can offer a range of benefits to this particular group of customers;

f) “subscribe to open”: libraries sign up to have access to the publisher's content, after a certain number of subscribers, the content becomes widely available. In essence, this is a risk-free option for the subscribing institution, as when a library subscribes, its users automatically have access to publications. A variation of this model would be the subscription of books that will no longer be reprinted and the model offers access to the current catalogue of the publisher.

It is therefore recommended that publishers experiment with other open access models, in addition to exchanging experiences with other university presses. The effectiveness of the model must be measurable in order to guide financial decisions throughout the publishing system. In strategic planning, revisions or successions must be included for the models adopted, in view of the rapid technological and social changes in the scientific field.

## 6 CONCLUSION

The discussion on open access academic and scientific books is important for the consolidation of Open Science in Brazil, considering the Brazilian research system being based in public institutions and research carried out predominantly with public funding. In this way, budgets must be used efficiently, effectively and transparently, with a view to limiting amounts received annually and being accountable to the State and citizens regarding how public funds were used. In addition, one must consider the social inequality present in Brazil, which implies the high cost of acquiring books, especially scientific ones by the end user-reader.

The covid-19 pandemic resumed and centralized questions about the importance of rapidly disseminating discoveries made around the world, as a way of understanding the situation experienced and dealing with the state of calamity created by the coronavirus. In the pandemic context, we experienced the closure of educational institutions at all levels and the adoption of distance or remote learning, making access to academic books in open access online one of the most democratic ways to continue study and research activities. University presses are fundamental agents in the science communication system for their purposes and values. However, a certain lack of studies of these institutions and their relationship with open access to academic and scientific books in the Brazilian context is noted, and especially those that focus on their editorial policies and business models.

Open access practices are justified by proposing that scientific publications are widely available free of charge, online and free of restrictive licenses; findable and retrievable by researchers, students and any interested citizen for reuse in their research, long-term archiving, text mining and countless other forms of scientific development. With the adoption of e-book open access publishing, Brazilian university presses are aligned with the precepts of Open Science. As presented in this text, the BUPs already demonstrate some experiences with open models that can be expanded through the experimentation of other business models or the exchange of experience between university presses affiliated to public HEIs. It is important to point out that business models must be explicitly registered in editorial policies and duly disclosed, noting the high rate of university presses that do not make this information available.

Business models are fundamental parts and must integrate the editorial policies of a university press whose main function is institutional organization or the creation and development of its own identity. Based on a detailed analysis of university philosophy, geographic and structural issues, historical factors, local needs and particularities, in addition to financial resources and how to raise them, other factors of impact on political-administrative decisions are considered. More specifically, editorial policies define issues such as the themes focused on editorial production, the services provided with detailed descriptions, the target audience, publication formats, editorial flow, tools used in production and the opening up, or not, of publications.

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