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Title: Mapping the Swiss Landscape of Diamond Open Access Journals. The PLATO Study on Scholar-Led Publishing

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DEDICATION

For the late Prof. Dr. Daniel Hürlimann, lawyer, scholar, editor, colleague and Swiss Diamond open access pioneer

FOREWORD

This report is the result of the PLATO study undertaken between April and September 2022 as part of the Platinum Open Access Funding project (PLATO), co-financed by swissuniversities. The PLATO project is an initiative of six Swiss universities – the University of Zurich, the University of Bern, the University of Geneva, the University of Neuchâtel, the Zurich University of the Arts and ETH Zurich –, dedicated to furthering community-led scholarly publishing in Switzerland. Platinum open access (or Diamond open access) stands for a concept of equitable open access to and participation in scholarly publishing that is free for both authors and readers. In this way, Platinum/Diamond open access isn't simply a variation of Gold OA minus APCs; it rather defines an alternative model of academic publishing that tackles the conceptual limits of Gold open access (Fuchs/Sandoval 2013).

The main objective of the PLATO study was to gain insight into the Platinum/Diamond open access publishing ecosystem in Switzerland in order to develop sustainable funding scenarios within the second phase of the PLATO project, starting in 2023. As the PLATO study shows, sustainable funding is one of the most critical challenges within this ecosystem and thus one of the prerequisites for strengthening Diamond OA as a scholar-led publishing model. The PLATO study presents the first investigation into this ecosystem in the Swiss context.

Internationally, the «OA Diamond Journals Study» (Bosman et al., 2021) provided an overview of the world-wide Diamond OA landscape and detailed recommendations for furthering community-led scholarly publishing. The impact of this study lies in its capacity to establish a discourse on Diamond OA publishing, on an epistemic but also terminological level: by having made the vast international Diamond open access publishing landscape visible for the first time as well as by standardising the term ‹Diamond open access›. Taking its cue from this study and its terminology, the PLATO study for its part specifically seeks to map the current Swiss Diamond OA landscape. The focus on Switzerland came as an analytical choice to highlight the journals, infrastructures, business models and funding structures existing within the national boundaries that are part of a wider network of institutions and initiatives in the field of Diamond OA publishing. Even though Diamond OA blogs, monographs, and anthologies constitute equally relevant forms of publication, particularly in the social sciences and humanities, the PLATO study focused solely on journals since an examination of the challenges regarding editorial workflow, funding, and infrastructures that publishers of Diamond OA monographs and anthologies face would necessitate a separate study.

The publication of this report comes at a time when the exploration of innovative models of scholarly publishing has gained momentum through initiatives such as the publication of the <u>«Action</u> <u>Plan for Diamond Open Access»</u>, published in March 2022 by Science Europe and cOAlition S, as well as the start of the Horizon project <u>DIAMAS</u> (Developing Institutional Open Access Publishing Models to Advance Scholarly Communication, 2022–2025) in September 2022, financed by the European Commission. By providing an overview of the Swiss Diamond OA ecosystem and of its specific challenges and opportunities, the PLATO study seeks to contribute to these ventures to advance affordable, value-based, and scholar-led science communication.

I would like to thank the co-authors of this report, Jennifer Hehn, Christian Hopp, and Gernot Pruschak from the Bern University of Applied Sciences who conducted the PLATO study and the participants who took part in the qualitative and quantitative parts of this study. Without their input, the study would have been impossible. I would also like to extend my thanks to the two PLATO committees – the PLATO Project Board and the PLATO Working Group – with their representatives of all partner institutions as sounding boards and spaces of exchange that provided productive feedback during the process of conducting the study. As external advisors, Jeroen Bosman, Bianca Kramer, and Marco Tullney have sharpened the study concept as well as the final study report with their detailed critical input and generous sharing of ideas. In addition, I am indebted to Manuela Höfler and Katherine Hermans from the Open Science Office and Andrea Malits, head of Open Science services at the University of Zurich, for their constant support in this venture. I would like to thank swissuniversities for supporting the PLATO project as part of their P-5 funding scheme, the swissuniversities National Open Science Coordinator Aude Bax de Keating and, lastly, the Open Access Alliance organised by swissuniversities in which first results of the study were presented and discussed in October 2022.

Dr. Daniela Hahn PLATO Project Manager

EXECUTIVE SUMMARY

1. BACKGROUND AND STRUCTURE

The PLATO study was conducted between April and September 2022 in collaboration with the Institute for Applied Data Science & Finance, Bern University of Applied Sciences (BFH). The study set out to provide the first overview of the landscape of Diamond open access journals in Switzerland by gathering information on its current state and characteristics, by assessing the editorial processes and technological infrastructures of Swiss Diamond OA journals, identifying their current business models as well as their perceived challenges and opportunities. Starting off from a basic working definition of Diamond open access as a publishing model that involves no charges for authors and readers, the study consisted of three parts: (1) a bibliometric study, (2) a qualitative study, and (3) a quantitative study. The PLATO project will build on the findings from this study as a groundwork for devising sustainable funding scenarios for Diamond OA and for formulating future policies within the second phase of the project.

2. STUDY CONCEPT

The PLATO study was based on a mixed-method approach. First, bibliometric data were combined with inputs from Swiss open access publishers, institutional open access experts as well as information on journal websites to identify Swiss Diamond OA journals and their main characteristics. Second, seven semi-structured interviews with editors of selected Diamond OA journals were conducted to generate a thorough understanding of their workflows, infrastructures, business models, challenges and opportunities. Third, based on the inputs from the interviews, three surveys were designed and sent to authors/reviewers, editors, and representatives of hosting and funding institutions of Swiss Diamond OA journals.

3. RESULTS

Bibliometric Study: The bibliometric study identified 186 Diamond open access journals of which the largest part is published in the social sciences, followed by arts & humanities, and life sciences & biomedicine. Nearly half of these journals are published by higher education institutions. In geographical terms, the cantons Zurich, Bern, and Geneva account for more than half of all journals. In terms of language distribution, 68 journals only publish English articles, whereas 16 journals publish only in French and 18 only in German. 83 journals are multilingual with English-French-German and English-French-German-Italian representing the most common combinations. The results of the bibliometric study were published in August 2022 as the «List of Platinum Open Access Journals in Switzerland» and are continuously updated: https://zenodo.org/record/6992615#.YzK3EIJBw-Q.

Qualitative Study: The target group of the qualitative study were editors of Diamond OA journals. Many editors cite visibility, access, and providing service to their research community as their main motivations in pursuing Diamond OA publishing. At the same time, policy changes of funding institutions were also mentioned as an incentive to transition to Diamond OA. Many journals, however, do not employ the term Platinum or Diamond open access to describe their journal's publication model, in some cases simply referring to it as open access, in other cases by stipulating that publishing incurs no charges for authors and readers. This points to the assumption that in the respective research communities the terminology of Platinum/Diamond OA isn't commonly used yet.

Quantitative Study: In the framework of the quantitative study, surveys were sent to three target groups – editors, publishers, and authors/reviewers of Swiss Diamond OA journals – in order to assess how they operate, what they value, and in which areas they face challenges and where they perceive opportunities.

Many editors report that currently journals are mainly relying on unpaid labour. Therefore, sustainable funding for editorial staff and IT services constitutes the major challenge of running a Diamond OA journal. Another major concern for editors is indexation in scientific databases, a process that despite being critical to the journal's visibility is perceived to be time-consuming or subject to conditions/ criteria for inclusion (as for example in the case of the <u>Directory of Open Access Journals</u> [DOAJ]). Furthermore, Swiss Diamond OA journals echo academia's overall difficulty of finding suitable reviewers.

On the publisher's side, the need for a diverse landscape of open access publishing was highlighted – a diversity that allows researchers in different disciplines to find the best possible route to publish their research output. Against this background, the importance of easy access to institutional Diamond OA platforms was also emphasised. Sustainable funding also presented a recurring theme here as some publishers called for a revision of budgets for subscriptions and transformative agreements and a rededication of funds to Diamond OA publications. Regarding the motivation for publishing in a Diamond OA journal, many authors cite the journal's significance and reputation in their specific field of research. In addition, special thematic foci and free access for readers, both locally and internationally, were also mentioned as reasons. Almost half of the authors would be willing to pay APCs or would be willing to still submit to the same journal even if it charged APCs, albeit many would do so only on condition that the journal's impact factor was higher.

3. STAKEHOLDERS

The report addresses funding organisations, higher education and research institutions, libraries and scholarly academies as stakeholders to incentivise them to collaborate on securing equitable access to and participation in high-quality open access publishing by funding scholar-led practices of scholarly publishing.

1. KEY FINDINGS

With a total of currently 186 journals, the Swiss Diamond OA publishing ecosystem is characterised by diversity in regard to scientific disciplines and publishing languages and by small journals that publish less than 25 articles per year. At the same time, it proves to already show a rather high level of standardisation in regard to hosting services employed and the existence of standardised quality assurance procedures (peer review).

For editors, increasing the outreach and visibility of a scholarly journal within local but also international research communities through free access to articles accounts as one of the main reasons for the adoption of a Diamond OA publishing model. At the same time, open access policies of funding institutions have also made an impact on editors' decision to transition to an OA publishing model.

Diamond OA is based on the idea of sharing knowledge and on a commitment to social values such as embracing diversity (in subjects, disciplines, and languages) and equity in access and participation. In this way, Diamond OA stands for the autonomy of scholarly publishing and providing service to research communities without commercial interests.

Approximately 40% of Diamond open access journals in Switzerland have been founded or switched to this publishing model in the year 2015 or after. This shows that recent institutional support campaigns for Diamond OA combined with increased efforts by editors to <flip their journals helped to create more Swiss Diamond OA journals as part of a wider transformation towards an open science culture.

High quality and field-specificity are deciding factors for authors to publish in those journals. In comparison to other open access or closed access journals, there is no discernable difference in authors' perception of the editorial workflows of Swiss Diamond OA journals. However, the proofreading process is rated well above average.

The ecosystem of Swiss Diamond OA journals shows a great variety in the types of publishing organisations: higher education institutions (institutional Diamond OA platforms, chairs, research groups, institutes), research institutions, academies and scholarly societies, not-for-profit publishers, for-profit publishers, museums and governmental agencies. Their economic model is most often based on institutional funding, grant endowments, and membership fees of research societies.

Editorial tasks are mainly done by small teams of collaborators, often young researchers in the roles of PhDs, postdocs, or academic assistants. Nearly all journals heavily rely on volunteer work with only very few journals being able to financially compensate editors, editorial managers, assistants and other contributors. Relying on volunteers also means that most journals do not have the capacities to acquire the specialised knowledge needed in some areas of open access publishing such as IT and legal aspects. Among the services outsourced, the most common are design, hosting, and IT development.

Managing journal operations in a volunteering world, the lack of sustainable funding and fundraising present the most critical challenges for Diamond OA journals. Particularly, the uncertainty of long-term sustainability (> 3 years) presents a constant, pressing issue for most journals.

Most Diamond OA journals do not operate profitably but at best achieve break-even. The financial costs for running a Swiss Diamond OA journal vary substantially: Several journals have total annual costs of less than CHF 1'000, only a few journals are running on budgets of more than CHF 100'000. The median lies at CHF 15'000 per journal in 2021. This implies that the average Swiss Diamond OA journal faces costs of CHF 433.03 per published article (average of published articles: 34.64).

Many Swiss Diamond OA journals save costs by using existing technological solutions. The provision of institutional Open Journal Systems (OJS) platforms and their technological support are substantial enablers of Diamond OA publishing in Switzerland. Despite this support, many journals still rely on the use of low-level technology for publication management (e-mails, spreadsheets).

2. KEY LEARNINGS

One of the driving factors and opportunities of strengthening Diamond OA can be seen in the strong motivation, especially among editors, to represent open access ideals and engage in best practices. Further action can build on this strong motivation as a multiplicator in the implementation of Diamond OA within the respective disciplines as well as in the acceleration of the industry's transition to affordable, sustainable, and high-quality open access scholarly publishing.

Authors' perception of Diamond OA journals' high level of editorial quality shows that high-quality scholarly publishing is possible without sacrificing equity of access and participation. This constitutes an essential argument for funding institutions to invest in scholar-led open access journals and infrastructures so they can sustain and further improve their quality, visibility, and services. Furthermore, promoting Diamond OA within research communities can build on these strong points.

Funding for Diamond OA publications would allow editors to pay collaborators for their work and improve services which some journals have already outsourced (design, hosting, IT development, typesetting). In turn, this would allow researchers running these journals, often on the basis of self-exploitation, to focus on the content side of operations and the scientific discussions with authors and reviewers. At the same time, providing funding for Diamond open access journals would alleviate the precarity of working conditions for journal staff. Institutional recognition of and reward for Diamond open access publishing is also a key element in heightening the visibility and reputation of scholar-led journals and initiatives.

Since Diamond OA journals mainly rely on free labour, the exact costs for journal operations are difficult to measure. Sustainable and diversified journal budgets, however, are key to secure funding and ensure long-term stability. This requires the availability of services offering financial and legal advice based on best practices.

Shared infrastructures such as institutional Diamond OA platforms play a significant role in sustaining and supporting journal operations and in creating opportunities, especially as small improvements on the level of technology can have a substantial impact on journal operations such as enhancing IT support, indexation, article metadata and citation standards. Yet the provision of these services comes at considerable costs on the side of the hosting organisations for providing the infrastructures and the associated IT support. Sharing costs through collaboration will help to strengthen existing technical infrastructures and to create innovative funding models.

While the overall reception of Diamond OA journals is positive among editors, authors, and reviewers, publishing institutions take a more critical stance. Instead of favouring one publishing model, the focus of publishing institutions lies on ensuring that everyone has access to research results and that all stakeholders (universities, academic societies, funding agencies, industry) pay their fair share of the publishing costs. For this to be achieved, collaboration among the stakeholders is needed.

Open access policies of funding institutions are a means of accelerating the transition to open science practices and tools to promote best practices in the field. Integrating Diamond OA into funders' policies would further existing initiatives and strengthen a value-based, equitable scholarly publishing model that is rooted in, owned, and steered by the research communities.

The disciplinary diversity of the Swiss Diamond OA ecosystem leads to different perspectives on the standardisation of Creative Commons Licenses (CC licenses) or the use of publication management systems. Thus, some journals engage in a balancing act between streamlining their processes and keeping the specificity of their journal. Funding policies should take varying publishing practices, standards, and requirements in different research communities into account since a one-fits-all model does not represent the diversity of scholarly research.

With their insights into the motivations of adopting a Diamond OA publishing model and into the operations of these journals, empirical studies of the Diamond OA ecosystem can help to sharpen the term Diamond OA which has been critically perceived as being too vague (Dellmann et al. 2022). The results of the PLATO study show that the term Diamond OA is intricately linked to a not-for-profit business model that is based on institutional funding and ownership by the research community, on collaborative work between researchers in the same field, and on shared values of equity and diversity.

3. DETAILED STUDY REPORT

This study report compiles the results from all three parts of the PLATO study – the bibliometric study on Platinum/Diamond OA journals in Switzerland (chapter 3.1), the qualitative study (chapter 3.2), and the quantitative study (chapter 3.3) – and elaborates the findings in greater detail.

3.1 BIBLIOMETRIC STUDY

The results of the bibliometric study were published as the «List of Platinum Open Access Journals in Switzerland» and are continuously updated: https://zenodo.org/record/6992615#.YzK3EIJBw-Q.

3.1.1 Methodology

To identify Swiss Platinum/Diamond OA journals, we combined a bibliometric study with inputs from publishers and institutional open access experts. The latter provided a counterbalance to the fact that a substantial number of open access journals is not indexed in bibliometric databases (Björk & Solomon, 2012). Moreover, bibliometric data only allows to identify journals based on the publishing location. However, due to the broad approach of the PLATO study, the publishing location did not feature as the sole criterium for identifying Swiss Diamond OA journals but also included journals run by Switzerland-based editors or organisations as well as those (partly) funded by Swiss institutions.

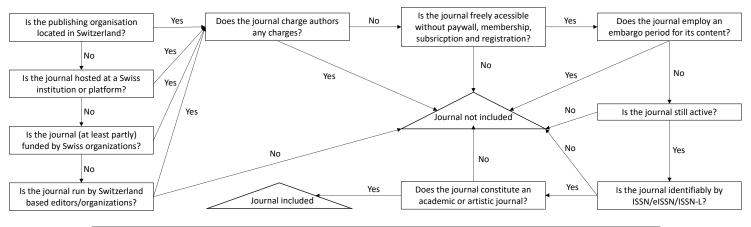


Fig. 1: Inclusion criteria.

Database Search

The data provided in the following bibliometric directories were used to compile a first draft list of possible Swiss Diamond OA Journals. The number of journals indicated below refers to the journals added to the list after a process of manual data cleaning to ensure that only journals were included that fit the above-mentioned criteria.

- Directory of Open Access Journals (DOAJ): 54 (19.04.2022)
- Swisscovery: 14 (21.04.2022)
- Scimago Journal Ranking List 2020: 19 (22.04.2022)
- EBSCO Academic Search Ultimate: 13 (23.04.2022)
- Web of Science: 7 (24.04.2022)
- Directory of Open Access Scholarly Resources (ROAD): 49 (26.04.2022)

In total, the bibliometric query resulted in the identification of 156 Swiss Diamond OA journals that fulfilled the inclusion criteria. During the manual verification process, we also gathered relevant journal characteristics from the journals' websites, comprising the research field (as defined by the Web of Science research areas [Clarivate Analytics, 2020]), size in terms of articles published per year, founding year, publishing language, publishing organisation, type of publishing organisation, information on open access license and journal URL.

Stakeholder Input

After generating the first draft of the Swiss Platinum/Diamond OA journal list based on bibliometric databases, further inputs on potentially missing journals were collected by sending the draft list to institutional open access experts in early May 2022:

- (a) the PLATO Working Group members, representing the six partner institutions,
- (b) the members of the «Arbeitskreis Open Access» (AKOA) of the Conference of Swiss University Libraries, and
- (c) open access contact persons at higher education institutions that publish at least one Diamond open access journal according to the bibliometric findings and who had not been contacted in the previous steps.

In this way, 62 additional journal suggestions were gathered which were verified according to the inclusion criteria. This was not the case for six journals. Consequently, 56 journals were added to the list of Swiss Platinum/Diamond OA journals.

The combined list contained 212 (156 + 56) entries which were then reviewed in detail to verify the Diamond status of the journal and whether the journal was still active and/or in transition to a different publication model as well as to gather additional information on the composition of the editorial board, the publisher's location, the location of hosting services, open access policy and information on possible funding received from Swiss organisations. In addition, we checked the combined list against the journal inventory included in the 2021 «OA Diamond Journals Study». We further contacted select journal editors regarding missing information or for clarification, especially in cases in which no information on charges was provided. The data cleaning process resulted in the first published list of 170 Swiss Platinum/ Diamond open access journals (August 2022).

After the publication of the initial journal list, we received further feedback from journal editors, publishers, and hosting institutions. In total, we received 19 suggestions of journal additions to the first published version of the «List of Platinum Open Access Journals in Switzerland» until mid-October 2022. We manually reviewed all suggestions to verify the status of the journal according to our criteria of a Swiss Diamond OA journal (Fig. 1). Based on this review, we verified that 16 out of the 19 suggested journals constituted Swiss Diamond OA journals. Therefore, the updated «List of Platinum Open Access Journals in Switzerland» comprises 186 journals.

3.1.2 Presentation

The presentation of the list follows the inventory of Diamond Open access journals in the framework of «The OA Diamond Journals Study» mentioned above. We included the following journal information to provide an informative overview of the Diamond OA publication landscape in Switzerland:

- Title of journal
- Scientific discipline
- ISSN
- publisher/editor(s)
- Location of publisher/editor(s)
- Journal URL
- Hosting organisation
- Open access publishing license

3.1.3 Statistics

The following figures present an initial overview of the Swiss Diamond OA publishing landscape based on the findings from the bibliometric study.

> Total of Diamond OA Journals: 186 Number and percentage of those registered in DOAJ: 54 (29.03%)

Compared to the «OA Diamond Journals Study» and to the list of Diamond OA journals in Germany (Bruns et al., 2022), published by the project <u>CODRIA</u>, the number of Swiss Diamond OA journals indexed in the DOAJ appears to be rather low («OA Diamond Journals Study»: approx. 39%; CODRIA: approx. 42%). Non-fulfilment of the application criteria for DOAJ, lacking capacities or lacking support for applying at the DOAJ, or a lack of knowledge of indexation services can account as reasons for this low number. However, some journals are in the process of applying for inclusion in the DOAJ. In addition, the PLATO study took a broader approach by also identifying forthcoming Swiss Diamond OA journals as well as journals that are not (yet) indexed in any database by reaching out to experts of the Swiss OA publishing community.

Figure 2 highlights the distribution of Swiss Diamond OA journals among scientific branches. The largest group of journals (83 or 44.62%) are published within the social sciences. This is followed by life sciences & biomedicine (39 journals or 20.97%) and arts & humanities (39 journals or 20.97%). Only ten journals identified (5.38%) are published within the physical sciences, nine are technology journals (4.84%) and six interdisciplinary journals (3.23%).

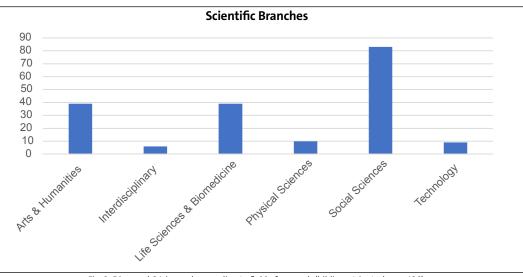


Fig. 2: Diamond OA journals according to field of research (bibliometric study; n = 186).

The following graph (Fig. 3) highlights the different types of publishers of Swiss Diamond OA journals. Nearly half of the journals are published by higher education institutions (88 journals or 47.31%). Of these 88 journals, 49 (55.68%) are hosted by an institutional Diamond OA platform (see box). Over the whole sample of 186 journals, these platforms publish just over one fourth (26.34%) of all journals and therefore constitute important enablers of Diamond OA in Switzerland.

Institutional Diamond OA Platforms in Switzerland

Bern Open Publishing (BOP) University of Bern https://bop.unibe.ch/

Hauptbibliothek Open Publishing Environment (HOPE) University of Zurich <u>https://www.hope.uzh.ch/</u>

Open Access Publications (OAP) University of Geneva https://www.unige.ch/biblio/fr/openaccess/editer/open-access-publications/

Shared Open Access Publishing Platform (SOAP2) University of Fribourg <u>https://www.soap2.ch/</u>

Academic societies publish 37 journals (19.89%). Interestingly, 21 journals (11.29%) are published by forprofit publishers, whereas 13 journals (6.99%) are published by not-for-profit publishers. Eleven journals (5.91%) are published by research institutions that are not higher education institutions. This includes, among others, CERN or the Natural History Museum Geneva. Nine journals (4.84%) are published by government agencies like the World Health Organization or the Federal Office for Agriculture. Seven journals are published by dedicated organisations (e.g. non-profit associations) that specialise solely in publishing the respective journal.

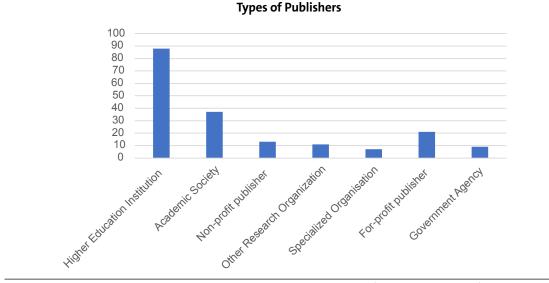


Fig. 3: Diamond OA journals according to type of publishing institution (bibliometric study; n = 183).

The following table depicts a crosstabulation of the above discussed scientific branches and types of publishing organisations. The table shows that the predominant type of publishing organisation are higher education institutions (HEIs) for the social sciences (49) and arts & humanities (25). This underlines the significance of institutional support for these disciplines. For-profit organisations publish 50% of all identified Swiss Diamond OA journals in the physical sciences (5 journals). In the case of life sciences & biomedicine, almost all publishing organisations show a relatively even share of journals. After higher education institutions, academic societies publish the second highest number of Swiss Diamond OA journals for all scientific branches except the life sciences & biomedicine as well as the physical sciences.

	Higher Education Institution	Academic Society	Non-Profit Publisher	Other Research Organisation	Specialised Organisation	For-Profit Publisher	Government Agency	Total
Arts & Humanities	25	9	2	1	1	1	0	39
	(64.10%)	(23.08%)	(5.13%)	(2.56%)	(2.56%)	(2.56%)	(0.00%)	(100.00%)
Interdisciplinary	3	2	0	0	0	1	0	6
	(50.00%)	(33.33%)	(0.00%)	(0.00%)	(0.00%)	(16.67%)	(0.00%)	(100.00%)
Life Sciences &	7	6	7	4	2	7	6	39
Biomedicine	(17.95%)	(15.38%)	(17.95%)	(10.26%)	(5.13%)	(17.95%)	(15.38%)	(100.00%)
Physical Sciences	1	1	2	1	0	5	0	10
	(10.00%)	(10.00%)	(20.00%)	(10.00%)	(0.00%)	(50.00%)	(0.00%)	(100.00%)
Social Sciences	49	17	1	5	3	5	3	83
	(59.04%)	(20.48%)	(1.20%)	(6.02%)	(3.61%)	(6.02%)	(3.61%)	(100.00%)
Technology	3	2	1	0	1	2	0	9
	(33.33%)	(22.22%)	(11.11%)	(0.00%)	(11.11%)	(22.22%)	(0.00%)	(100.00%)
Total	88	37	13	11	7	21	9	186
	(47.31%)	(19.89%)	(6.99%)	(5.91%)	(3.76%)	(11.29%)	(4.84%)	(100.00%)

Tab. 1: Crosstabulation of types of publishing organisations (columns) and scientific branches (rows). Percentages are summed according to scientific disciplines (bibliometric study; n = 186).

For publisher location, the list currently includes eight journals with publishers located outside of Switzerland: Austria, Germany, Singapore, the Netherlands and the United States of America. Taking a closer look at the 178 journals with Swiss-based publishers in the following figure (Fig. 4), most journals (37 or 20.79%) appear with publishers located in the canton of Zurich. This is followed by the cantons of Bern (32 journals or 17.98%) and Geneva (29 journals or 16.29%). 15 journals (8.43%) are published in Vaud, 14 (7.87%) in Basel-Stadt and twelve (6.74%) in the canton of Fribourg.

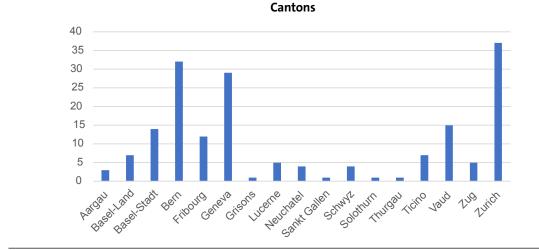


Fig. 4: Diamond OA journals according to location of publisher (bibliometric study; n = 178).

The next figure (Fig. 5) shows the distribution of the publishing languages. 68 journals (36.56%) only publish English articles while 16 journals (8.60%) publish only articles in French, 18 journals (9.68%) only in German and two journals only in Italian (1.08%). 82 journals (44.09%) allow more than one publishing language with the most frequent combinations being English-French-German (16 journals) and English-French-German-Italian (12 journals). One journal, Babylonia, even publishes articles in all four official Swiss languages, including Romansh. The PLATO study thus confirms the finding of the «OA Diamond Journals Study» (Bosman et al., 2021: 41) that the Diamond open access landscape is characterised by a diversity of publishing languages. While English, also in Switzerland, plays an important role as publishing language, three of the four national languages - French, German, Italian - also have a strong presence in Diamond OA publishing.

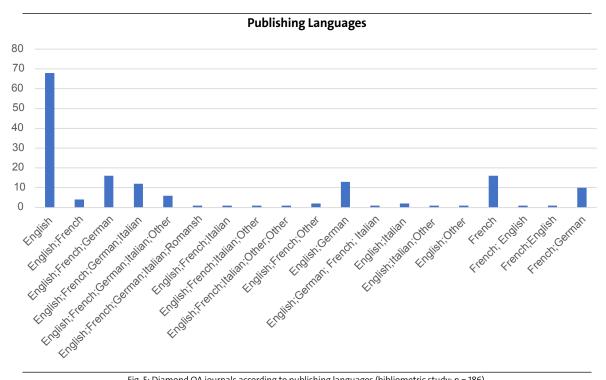


Fig. 5: Diamond OA journals according to publishing languages (bibliometric study; n = 186).

3.2 QUALITATIVE STUDY

3.2.1 Methodology

For the qualitative part of the PLATO study, semi-structured interviews with editors of Swiss Diamond open access journals were used as the primary data source – an approach appropriate for gathering rich empirical data, particularly when the phenomenon under examination is new and infrequent (Yin 2015). In addition, findings from the interview process were used in the development of the surveys and also served to contextualise the findings from the quantitative study. Whereas the latter seeks to present an approach of mapping the Diamond OA ecosystem in Switzerland, the aim of the qualitative study was to gain an in-depth understanding of the employed editorial processes, existing business models of Swiss Diamond OA journals, their perceived challenges and opportunities as well as the requests and wishes towards the design of implementable and sustainable future business models from editors' perspective.

Interview Selection

Based on the inventory of Swiss Diamond open access journals identified in the bibliometric study, 22 journals were selected through purposeful sampling to ensure the representation of

- a) various journal sizes: small journals (publishing less than 25 articles per year), mid-sized journals (publishing between 25 and 50 articles per year), and larger journals (publishing more than 50 articles per year);
- b) different research fields: arts & humanities, social sciences, engineering and technology, life sciences and physical sciences;
- c) varying types of publishing entities: universities, academic societies, and other nonprofit organisations;
- d) and publishing languages: English, German, French and Italian.

Data Collection

The editors-in-chief of the selected journals were contacted via their professional e-mail with an interview request. In total, we reached out to 22 journals; only eight journals agreed to participate. While lack of response constituted the main reason for journals not to be included in the interviews (10 journals), four editors replied that they do not have time to participate in an interview, and one editor replied that they do not consider the journal to be a «Swiss journal».

In total, seven semi-structured interviews with nine journal editors were conducted in June and July 2022. One journal editor sent their answers in written form which are included in the analysis. The interviews were based on a set of open-ended questions that allowed to follow up on interesting and unexpected responses with space for interviewees to elaborate on their experiences and personal reflections (Yin 2015). At the beginning of each interview, the objectives of both the PLATO study and the interview were set out. The questions were guided primarily by three key topics: (a) the journal's mode of operation, (b) challenges and opportunities, and (c) wishes for creating a sustainable business model in the future. The questionnaire can be found in the Appendix. The interviews, lasting between 50 and 90 minutes, were conducted remotely, recorded, and transcribed verbatim. Interviews and transcriptions were performed in English.

In some cases, additional data in the form of publicly available journal information provided background information on review processes, target audience, infrastructures, and current practices related to open access in order to contextualise the information gathered during the interviews.

Data Analysis

To analyse the data, we applied qualitative content analysis to identify themes and patterns. We used MAXQDA as a computer-assisted qualitative data analysis software to code all interview transcripts and to derive findings. Those insights provided the basis for the subsequent quantitative analysis.

3.2.2 Results

In the next subsections, insights from the interviews are presented along the research questions on editorial processes and infrastructures (RQ3), current business models (RQ4), opportunities and challenges (RQ5), and potential future business models (RQ6).

Research Question 3: What editorial processes and technological infrastructures are employed by Swiss Platinum/Diamond OA journals?

Editors of Swiss Diamond OA journals tend to take a pragmatic approach regarding their use of infrastructure when managing editorial processes. To them, a reliable system which they are accustomed to work with seemed particularly important. Most journals relied on IT solutions provided by their universities. E-mail and excel still worked for most, while others had adopted software applications such as OJS. The use of a specialised publication management system seemed to be connected to the numbers of papers dealt with. The majority of editors still preferred to use e-mail as the primary way of communicating with authors and reviewers because of its more personalised nature, although this might cause bottlenecks. Editorial tasks were mainly done by small teams of collaborators, often young researchers (PhDs, postdocs, or academic assistants).

When discussing editorial processes, interview partners highlighted the Diamond OA model as an advantageous way not only to increase a journal's outreach but also to find potential reviewers. One interview partner stated accordingly: *«I have the feeling that it's easier for open access Platinum journals to solicit reviews. [...] I think that this is a community thing. I would expect people to be more reluctant to decline an invitation from an open access journal, but I'm not sure if this is actually the case.»* (Interview 1)

Most journals employ a two-step review process in which papers are pre-selected by an internal board of editors and then send to external reviewers (most often double-blind review) to be approved for publication. The pre-selection process with the editorial board requires that the researchers within the board represent a broad set of knowledge of the discipline and, in the case of multilingual journals, even represent different languages to be able to assess submitted papers. Only one journal had guidelines for reviewers in place. Since the review process can in some cases take up to a year (which mainly presents a challenge for young scholars who depend on their record of publication to apply for grants and positions), interviewees also mentioned that they are exploring other ways of doing reviews such as versioning or open review.

Research Question 4:

What are the current business models of Swiss Platinum/Diamond OA journals?

The operations of Diamond OA journals largely depend on the support of volunteers and the institutions with which editors are affiliated as well as on grants from academic societies and governmental organisations to cover their costs, mainly for editorial workflows and infrastructure. When discussing their business model, it became clear that editors did not prioritise the business aspect of running a Diamond OA journal as one editor stated: *«I must admit, I never thought on the business model.»* (Interview 4), and another one emphasised: *«It's not really a business model. We are not looking for profit with this.»* (Interview 6) We attribute these responses to a realistic and pragmatic approach to running a scholar-led journal rather than to lacking business-savviness. In effect, editors perceived the Diamond OA publishing model as a means to foster discussions in their research community. One editor underlined: *«We are part of the community. We understand this as our service to the community and the editorial team understands this as a service to the community, the authors and also the reviewers. And if the community strives, then the journal strives. And if the community doesn't see any value in such an enterprise anymore, then it will finish at some point in time.» (Interview 1) Another editor stressed: <i>«It's more the case that the members profit from the contacts. And you always learn a lot about what is going on in your research field. But it's not a monetary compensation.»* (Interview 6)

When talking about finding financial support, our interview partners did not mention any sources leveraging website advertisements or crowdfunding opportunities. However, many of them needed to re-apply for funding every year tying up their resources. One interview partner, however, had recently hired a professional fundraiser.

There was a sense amongst some interviewees that terms like Platinum, Diamond, Gold or Green are not perceived as particularly helpful to create an understanding of the different types of open access models (*«nobody in our community talks like that»*, Interview 2). Most participants mentioned that they would not use a specific term but rather make it clear on their journal website that all content is *«free for authors and readers.»* (Interview 1) In the interviews, open access was a more common term than Platinum/Diamond open access as it mainly seemed not to matter too much to the stakeholders. This was particularly true for disciplines in which payments of APCs are not common. Here, the term open access emphasises immediate access rather than free publishing.

Research Question 5:

What challenges and opportunities do Swiss Platinum/Diamond OA journals face?

Journal editors reported a range of opportunities and challenges when pursuing a Diamond OA model. In both subsections, we highlight wishes that have been raised to leverage opportunities or tackle challenges.

Opportunities

Common opportunities can be grouped into three key areas which are mainly of 1. *idealistic* (accelerate the industry's transition to affordable OA), 2. *business-oriented* (increase the journal's outreach and impact), or 3. *content-related* nature (enhanced autonomy for creating content).

1. Journal editors want to accelerate the industry's transition to affordable OA

At its most fundamental level, all interviewed journal editors highlighted their motivation to be part of the open access movement, represent open access ideals, and offer an affordable publishing option (*«I think journals are basically functioning like a pyramid scheme because it's a lot of unpaid work. […] And everything is behind a paywall or else incredibly expensive to access. And that, I think, defeats the purpose of doing science. So open access, I think, is the way to go into the future regarding that aspect», Interview 5). Journal editors emphasise the ideal of sharing knowledge to ensure that all people (not only scholars) who contributed to the production of knowledge have access to the results. In addition, some editors reported on their motivation to be a role model or at least to be part of the <i>sciencest* in scholarly publishing. Journal editors underlined that they intended to make the greatest possible impact on the global transition to open access with their given resources. They aimed at levelling the playing field for researchers in their community, particularly for institutions and scholars who lack funding to subscribe to *«increasingly unaffordable journals»* (Interview 4), as one editor stated. We *«understand this as our service to the community»*, another interviewee highlighted (Interview 1). One journal editor emphasised that Diamond OA is not just about access but about accessibility, when discussing subscription and publication fees for low-income scholars or for scholars from low-income countries (*«accessibility to science [...] needs to be provided»*, Interview 2).

2. Journal editors want to increase the journal's outreach and visibility

Journal editors commented that having a Diamond OA publishing model helped them to raise the journal's profile and to receive more articles from authors (*«We are trying to become even more international and more visible to more possible authors and readers»*, Interview 6). Another editor underlined, *«I think open access is really linked to international readership. If you really want an international readership, you need to be open access.»* (Interview 3) This was echoed by editors of both specialised and non-specialised journals.

One editor stated, «...we have increased our audience within our field. So, it was a good solution for us in a way» (Interview 3), while another said, «one of my colleagues told me about their journal and how they would be happy to have 200 clicks per year and it exploded when they went open access. They really had as many as 10'000 clicks per year.» (Interview 4)

3. Journal editors value enhanced autonomy in creating and advancing content

Journal editors regarded Diamond OA as *«a way of accelerating the scientific discussion. Not in terms of speed, but in terms of broadness.»* Some editors perceived it as a way to act more autonomously in their editorial processes and operations. While English is the most common language, many Swiss Diamond OA journals do support multilingualism to embrace diversity in scientific discussions or local knowledge. For example, one editor saw Diamond OA as a chance to start an anti-movement to the *«mono-language ignorance»* (Interview 4) of using English as the main language in academia. Due to their local focus and field-specificity, they emphasised the potential to publish in several languages and foster discussions in their own languages. Editors' wishes also related to adding new media possibilities (e.g. videos and pictures) or to making review processes more transparent by expanding commenting features on platforms. Furthermore, one editor underlined the potential of Diamond OA to encourage authors to be more daring and risk-taking in their research: *«There is a sense sometimes that safe research is having an easier ride through the system* [...] but you're not excited by it. You know, it doesn't really move a lot. And how would you editorially tweak the process that authors feel more inclined to take risks?» (Interview 2)

Challenges

A range of challenges were reported by editors of Swiss Diamond OA journals. Substantial challenges can be grouped into three areas: 1. *monetary* (to secure sustainable funding), 2. *operational* (to manage operations in a volunteering world), and 3. *regulatory* (to balance autonomy and standardisation).

1. Journal editors must secure funding continuously

Most interviewees reported that securing funding is their main topic of concern. Funding sources typically included membership fees, sale of printed copies, higher education institutions, foundations and societies, and governmental institutions. It also became apparent that funding often relies on extra efforts from individual editors who, for example, use their own chair funding or even make funding part of their individual job negotiations.

Most interviewees who reported challenges related to sustainability were concerned about the uncertainty of long-term funding, even in the case when basic costs were covered by universities or societies. Some editors were concerned about changes in policy that could impact funding. Others mentioned the dichotomy of securing funding for existing vs. new Diamond OA journals (*«The biggest problem that I have is, now, the funding landscape. It makes it very easy to fund a new journal. [...] But it's very hard to receive funding for a journal which has been up and running for quite some time.» [Interview 1]) or the dichotomy of securing funding for specialist vs. non-specialist journals (<i>«There are many specialist journals, but there aren't that many non-specialist journals. [...] And if you're looking from a funder's perspective, I would say that governments need specific funding for non-specialist journals because if you say I mean anybody who does research wherever that is, you're going to be cared for by all these specialist areas with their own funding structures, but you won't be cared for by the non-specialist ones.» [Interview 2]).*

Securing funding is closely related to keeping up with large publishers which was perceived to be an issue: *«Funding is the main challenge. And the longer it takes, the more others are growing. I mean, we have two publishing houses in Switzerland. They get more and more known. People know them even in our discipline. And I think it would not be a good solution if APC becomes standard.»* (Interview 7)

In this context, it is not surprising that editors called for sustainable funding for Diamond OA journals to develop and innovate («Ideal would be to secure long term financial stability. So that maybe we could even expand or have more people», Interview 6). One editor also suggested regular evaluations of quality standards as precondition for funding: *«The best diamond journals should just be funded for a*

certain amount of time. [...] maybe every three years you must reapply and prove that you do good quality. [...] If you can prove that your articles meet certain standards, you should get funded. And if you just publish everything, you probably shouldn't get funded. I really like this idea. If the whole thing grows and more and more diamond journals exist, the funding should also be more.» (Interview 7)

2. Journal editors must manage operations in a volunteering world

Swiss Diamond OA journals face several challenges in operations. Most editors mentioned their journals ran on low budget. Resources were needed for reviewing activities and running operations (e.g. IT infrastructure, translations, copyediting, graphic design). Only few journals could afford to offer their reviewers, guest editors, or authors a small honorarium for their efforts. As a consequence, editorial processes can take up to one year from initial submission to publication – a fact that might be especially challenging for younger researchers. However, all editors also emphasised that quality should always be prioritised over speed.

All interviewees reported that they are largely dependent on volunteers for making operations work, or as one editor put it: *«Our business model is exploitation.»* (Interview 1) PhD students or postdoctoral researchers are often engaged in the entire publishing process which was perceived to be challenging as one interviewee pointed out: *«I think one of the major pain points is that everyone of us, I mean, specifically my two colleagues, have their PhD dissertations to write. They're doing the bulk of the work. And I think that's sometimes difficult to balance.»* (Interview 5)

Interview data also show that most editors did not report any additional or professional fundraising activities as resources were (too) scarce to professionalise their activities. While extensive fundraising may not be necessary for all journals, most indicated that fundraising is one of their main concerns for the future.

Editors of Swiss Diamond OA journals wish to be able to focus more on content-related work and quality (*«I mean, we just want to concentrate on our work»*, Interview 1). They called on funders or institutions to provide direct support and shared services. Monetary support for editorial services including copyediting and proofreading, translation and hosting services were mentioned explicitly. Some editors also mentioned collaboration or merging small journals to achieve economies of scale as a solution to operational challenges. One editor asserted: *«I think that journals in Switzerland are too decentralised. I think there should be a database. [...] there should be some sort of better coordination between people who have journals in Switzerland.»* (Interview 5)

3. Journal editors must balance autonomy and standardisation

In general, editors value their ability of adopting the governance model and way of operating that fits best for their journal. However, with enhanced autonomy (see opportunity area 3) come potential challenges for funding schemes that rely on standardised requirements. Some interviewees argued that the Swiss National Science Foundation (SNSF) requirement for open access created a positive impact, while others expressed concerns that setting one official standard for funding would not match all disciplines and should be reconsidered in light of different publication practices and editorial processes. In this context, editors have to engage in a balancing act between streamlining their processes (e.g. licenses, quality standards) and keeping the specificity of their journal. One interview partner even seemed reluctant to alter their policies and/or their editorial workflow when stating that *«the interweaving of the Budapest Declaration on open access and the open access standards didn't really work for us»* and *«for the indexes, the problem is that they are not reviewing basically non-PDF materials.»* (Interview 2)

Related to voluntary work, some editors reported challenges with the indexation of content, an area in which they are unable to compete with publishing houses without proper support and resources: «I mean advertising or also the expertise in indexing and making it available on different databases. So, it will be difficult for the moment for a society based on voluntary work to get all this expertise.» (Interview 6)

Attempts by editors to leverage new media features can also be perceived as challenging insofar as they question established academic norms (i.e., no indexing of non-PDF materials). This feedback demonstrates the need for a wider conversation on balancing enhanced autonomy and compliance in Diamond OA publishing.

Research Question 6: What are implementable sustainable future business models for Swiss Platinum/Diamond OA journals?

In general, it is important to mention that all interview partners showed high appreciation for the study's goals and emphasised its necessity. They particularly raised expectations and hopes regarding new funding opportunities for Diamond OA.

Editors underlined the potential of Switzerland as a comparatively small country with – in most part – well-funded research institutions to pursue and support the paradigm-shift to Diamond OA publishing. They also mentioned Switzerland's potential in acting as a role model (*«I think people are looking at Switzerland because they expect [...] to learn something from the way things are handled here»*, Interview 1).

Most interview partners showed a high level of confidence in the Diamond OA model as a significant way to democratise scientific research. Their outlook on the future appeared mainly optimistic, yet cautious regarding sustainable funding opportunities. None of the editors considered moving away from the Diamond OA model. While our interviews highlight the diversity of funding options used for Diamond OA journals, the potentials of leveraging new ways of funding seem not yet fully realised. To keep up with commercial publishing houses and to make scholarly publishing more affordable, collaboration between Diamond OA journals and a professionalisation of processes and operations seem key factors.

3.3 QUANTITATIVE STUDY

3.3.1 Methodology

In the quantitative part of the PLATO study, we generated 94 questionnaires using the online survey tool Qualtrics: one for editors, one for funding and publishing institutions as well as 92 survey questionnaires for the 92 Swiss Diamond OA journals that provided author e-mail addresses either on their websites or in the PDF articles. In total, we identified contact details of 187 editors-in-chief (several journals have co-chairs) and 261 contact persons of funding and publishing institutions. Furthermore, we extracted 8'899 e-mail addresses of corresponding authors from all papers published in 92 Swiss Diamond OA journals (we could only consider journals who provided author e-mail addresses either on their websites or in the PDF articles) between January 1, 2018 and July 31, 2022.

The initial surveys were sent out in August 2022 and followed up by a reminder e-mail in September. By late September 2022, the editorial survey was answered by 46 editors (response rate: 25.13%) from journals with various sizes (ranging from two to more than 200 articles published in 2021), disciplines (mirroring the disciplinary distribution outlined in the bibliometric findings), regions and languages (with the only exception that we miss insights from journals based in Italian-speaking Switzerland). 46 contact persons (response rate: 17.62%) – representing higher educational institutions (departments and libraries), academic societies, non-profit organisations and for-profit publishers – filled in the publisher and funder survey. The authors' responses stem from 445 scholars (response rate: 5.00%) from 80 Swiss Diamond OA journals covering all varying characteristics outlined in RQ2 (see journal distribution in Appendix). Variations in the number of responses included in the following presentation of results are due to the fact that not all respondents answered all questions (with some of them also not being eligible to answer all questions; e.g. if a funding/publishing institution contact person stated that they only fund but do not publish Swiss Diamond OA journals, they only received the questions for funding but not for publishing). We employed Python3 in Jupyter Notebook for data clearing and recoding. Microsoft Excel was used for generating barplots. We charted box plots in Stata. Last, for text analysis we referred to Wordcloud.com to visualise the text responses.

Despite the fact that editors' and publishers' response rates are substantially higher than those of similar unincentivised metascience research projects (e.g. Hopp & Hoover, 2017) and that the authors' responses mirror existing metascience research projects (e.g. Pruschak & Hopp, 2022), these numbers still highlight the possibility of existing response biases through respondents' self-selection into the sample.

To assess whether this constitutes a serious concern, we compared the objectively collected data in the bibliometric study to corresponding inputs from editors, publishers, and authors in the quantitative study. In terms of scientific disciplines, the journals included in both, the editor as well as the author survey, do not deviate by more than 5% for any discipline from the shares identified in the bibliometric study. The shares of journal sizes reported by the editors do also not deviate by more than 5% from the journal size categories identified in the bibliometric study. While the median and the upper quartile are the same for the founding years reported by the editors and those identified in the bibliometric study, journals founded in 1917 and earlier are slightly overrepresented in the editorial survey compared to the bibliometric study. Yet this only concerns four journals in total. Thus, we do not infer a substantial response bias based on the journal founding years.

Concerning the publisher survey, we find that in the category 'types of publishing institution' the share of higher education institutions is seven percent lower share in the quantitative survey sample. This constitutes the largest difference when comparing the responding publishing institutions to those identified in the bibliometric study. Overall, we find that the characteristics of respondents in the quantitative surveys mirror the corresponding data collected in the bibliometric study. We therefore assume the results to be generalisable although the individual circumstances and environments of each journal need to be considered when making policy decisions on the micro level.

3.3.2 Results

The following paragraphs present the results from the three quantitative surveys along the structure of the qualitative study by following the formulated research questions. We start by providing additional insights into the characteristics of Swiss Diamond OA journals (RQ2). This is followed by the presentation of employed editorial processes and infrastructures (RQ3) and current business models (RQ4). Last, we jointly elaborate on opportunities and challenges (RQ5) and wishes for potential future business models (RQ6).

Research Question 2: What are the differences across sizes, disciplines, regions, languages and publisher types of Swiss Platinum/Diamond OA journals?

On average, Swiss Diamond OA journals published 34.64 articles in 2021. This goes in line with the results of the «OA Diamond Journals Study» that also found an annual average number of articles of 34 (source: DOAJ), thus referring to the Diamond OA landscape as a «wide archipelago of relatively small journals serving diverse communities» (Bosman et al., 2021: 7). In the international sample, the majority of Diamond OA journals (54.4%) published 24 or fewer articles (ibid.: 36). In the case of the PLATO study, the large standard deviation of 52.56 suggests that the mean is substantially influenced by a small number of outliers publishing a considerably higher number of articles. The following box plot highlights this more clearly, showing that the median is located at 15 articles published in 2021.

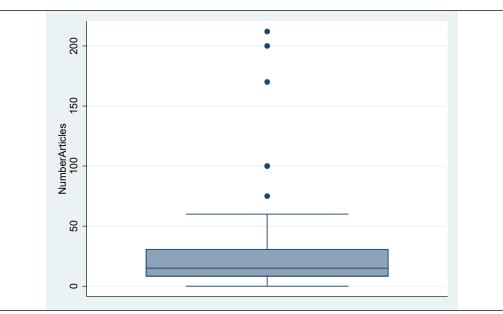


Fig. 6: Number of articles published (editors' survey; n = 39).

Concerning the (in)stability of the journals' sizes, we find that more than half of the journals report that they did not experience any substantial change in the number of articles published within the last three years, despite facing additional challenges through the COVID-19 pandemic. Eleven journals report that their number of articles increased; in only 2 cases the number decreased. Five journals were founded within the last three years and thus could not provide information on the change of the number of articles.

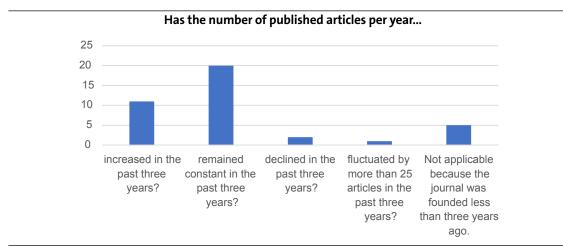


Fig. 7: Change in the number of articles in the last three years (editors' survey; n = 38).

A look into the history of the journals shows that 23 (out of 46) journals have been publishing Diamond OA from the start whereas twelve journals switched from a different publishing model to Diamond OA (the remaining eleven editors did not answer the corresponding question). Nine journals also indicated the year in which they switched to Diamond open access publishing: With the exception of one journal that switched in 2001, all other journals switched after 2013. Out of the ten journals who indicated their prior publishing model, five had published only offline articles, four had been subscription journals and one had been a hybrid OA journal.

In order to assess which role Diamond OA journals play as outlets in science communication, the survey included questions regarding the reader- and authorship which these journals cater for. The data suggest that the target audience of Swiss Diamond OA Journals is quite open. Unsurprisingly, nearly all journals (35 out of 41) target scholars within the journal's main discipline as readers. This underscores field-specificity as one of the strong points of Diamond OA journals. However, 21 journals (multiple target audience selection was possible) also target scholars in other disciplines and professionals or practitioners. The high share of 14 journals catering for educators and teaching staff shows that didactics represent a research field with a strong Diamond OA community.

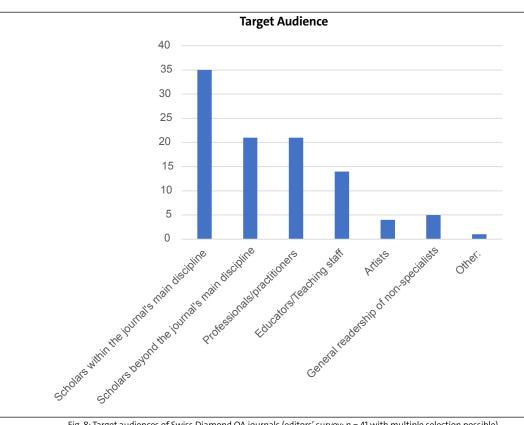


Fig. 8: Target audiences of Swiss Diamond OA journals (editors' survey; n = 41 with multiple selection possible).

Based on editors' assessments, we find that on average 48.63% of the authors publishing in those journals are not based in Switzerland which highlights internationality as a challenge for funding scenarios and the need for collaboration of institutions across borders.

Yet the considerably large standard deviation of 36.78% indicates that the background of authors publishing in Swiss Diamond OA journals differs quite substantially across journals. This is supported by the following histogram highlighting that most journals can be divided into two types: journals with a majority of Swiss-based authors and journals whose majority of authors are based outside of Switzerland. There are only few journals who include equal shares of Swiss-based and non-Swiss based authors. Nevertheless, even journals that mainly publish works authored by Swiss-based researchers are still diverse in terms of the institutional affiliation of the authors: Only one journal publishes almost exclusively works from authors affiliated with the same institution as the editor-in-chief while this share does not exceed 20% for nearly all other journals.

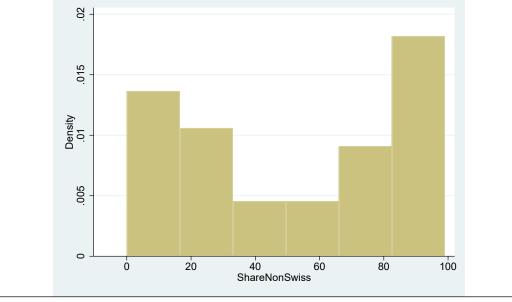


Fig. 9: Share of Swiss-based/non-Swiss-based authors (editors' survey; n = 40).

We can corroborate editors' estimates using the data gathered from authors. 198 authors out of 428 authors who responded to the question asking for the country of their primary affiliation come from Switzerland. This share of 46.26% is only slightly lower than the estimates provided by the editors. The authors affiliated with non-Swiss institutions come from various regions. The neighbouring countries play an important role with 29 authors coming from either Germany, Austria, or Liechtenstein and 29 authors coming from France or Italy. In addition, 35 authors come from Asia and 30 authors from Northern America. 20 authors are based in Oceania (mostly Australia and New Zealand), and 15 authors are located each in Latin America and Southern Europe (excluding Italy). Twelve authors in total come from Northern African and Middle Eastern institutions, eleven from Eastern Europe and seven from Sub-Saharan Africa.

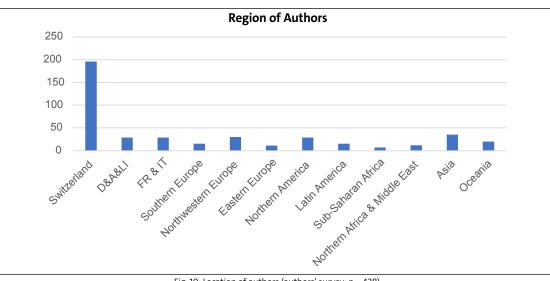
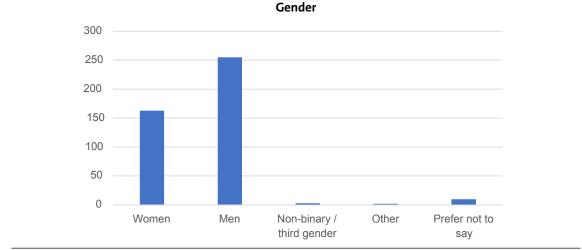


Fig. 10: Location of authors (authors' survey; n = 428).

Since the research communities are one of the key stakeholders in the process of furthering scholar-led Diamond open access, the author survey also included questions relating to the social structure of Swiss Diamond OA authorship.

Authors' responses were slightly biased in terms of gender with only 163 women responding to the questionnaire but 250 men. In addition, three respondents identify as non-binary/third gender and two respondents as other. Ten respondents preferred not disclosing their gender.





Concerning the age of authors, we find that most authors of articles in Swiss Diamond OA journals are between 30 and 64 years old (depicted in the figure below), with the largest share in the age group 35–39. This goes in line with the second figure below which shows that publications of early career researchers (PhD students and postdocs) are underrepresented in these outlets compared to more established scholars. Promoting Diamond OA publishing must take this finding into account and offer encouragement and reward to young scholars for publishing in these outlets as a contribution towards an open science culture (e.g. in processes of research assessment). In fact, we find that tenured professors make up the largest share of authors followed by assistant/junior professors. However, this statistic must be considered with care because 103 respondents chose the <Other> option inserting various specific job positions like lecturers, docents, and job descriptions in their respective language.

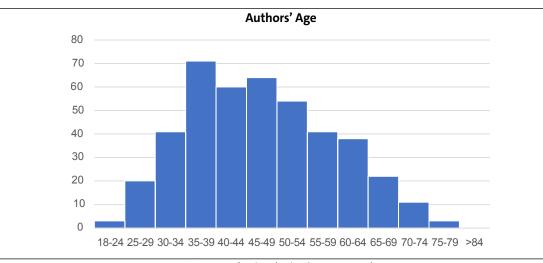
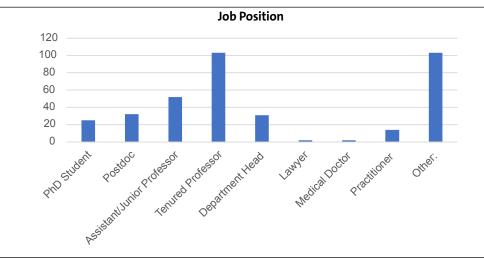


Fig. 12: Age of authors (authors' survey; n = 429).



Whilst the figure above might not provide us with robust information on the experience levels due to the large share of respondents selecting the (Other) option, we can infer on the level of publishing experience based upon the year when the author survey respondents published their first article in a scientific or artistic journal. The histogram below shows that most authors published their first article between 2000 and 2022. However, our survey respondents also include scholars who published their first article back in the 1960s.

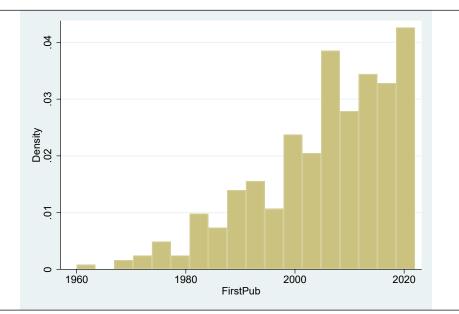


Fig. 14: Year of first publication (authors' survey; n = 354).

The author survey asked respondents about the total number of articles published in the years 2019, 2020, and 2021. One fourth of the respondents published three or less articles in this time period; half of the respondents published between three and twelve articles. Our sample also contains two very prolific scholars who published 97 and 100 articles respectively.

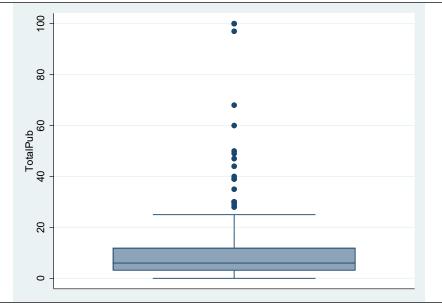


Fig. 15: Total number of published articles of authors between 2019–2021 (authors' survey; n = 361).

In a second step, the survey asked participants to provide information on their open access publishing experience in the years between 2019 and 2021. Interestingly, 118 (35.12%) out of 336 respondents stated that they had not publish in Diamond OA journals despite this being the inclusion criteria for contacting them. This could be due to the fact that some journals switched to a Diamond OA publishing model in 2019 or later, rather than a lack of knowledge of the different types of open access publishing because the survey provided respondents with definitions of these types. However, still a handful of authors also qualitatively responded to these questions, for example by asking «What are article processing charges?» This highlights the need for educating scholars on the different types of open access publishing and for explaining their respective advantages and disadvantages. Nevertheless, 132 (39.29%) respondents had published multiple articles in Diamond OA journals. Traditional subscription journals constitute the second largest publishing type among the author survey respondents: 188 (55.95%) respondents had published at least one article in such a journal. Substantially fewer articles were published Green, hybrid, and Gold OA. Yet out of 321 authors 132 state that they also published in another Diamond OA outlet.

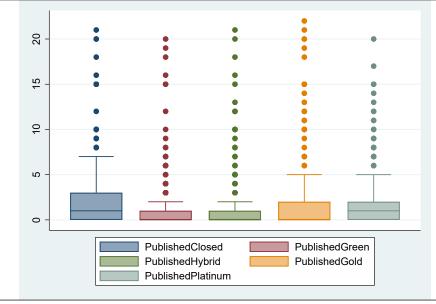


Fig. 16: Number of publications according to journals' open access status (authors' survey; n = 336).

The surveyed authors also wrote many peer reviews between 2019 and 2021. The following table contains the corresponding descriptive statistics. On average, each of the 355 authors who responded to the question performed 10.90 peer reviews in these three years. Yet the standard deviation of 19.85 points towards the existence of outliers with some very prolific review writers. In fact, our dataset includes five scholars who wrote more than 100 reviews between 2019 and 2021 but in turn it also included 60 scholars who did not write a single review.

Variable	Obs	Mean	Std. Dev.	Min	Max
TotalReview	355	10.89577	19.8461	0	180

Tab. 2: Descriptive statistics of total number of reviews by authors between 2019 and 2021 (authors' survey; n = 355).

Research Question 3: What editorial processes and technological infrastructures are employed by Swiss Platinum/Diamond OA journals?

Besides sustainable finances, the sustainability of a journal's operations is also determined by the stability of its ownership and legal situation. In total, 12 editors indicate that there exists a contractual agreement with the publishing organisation addressing the ownership of the journal whereas 23 editors state that they do not have such an agreement. The following table shows that this mainly applies for journals hosted by open access publication platforms provided by universities: Here, out of 12 responding journals only one journal has a contractual agreement. In turn, nearly half of the journals hosted by other entities (academic societies, dedicated non-profit publishers, for-profit publishers and government agencies) have contractual agreements with their hosting institutions.

1	Ownersh	ip	
UniHost	No	Yes	Total
0	13	11	24
1	10	1	11
Total	23	12	35

Tab. 3: Crosstab between journal ownership and university hosting (editors' survey; n = 35).

The low number of Swiss Diamond OA journals having a legal ownership document stands in contrast to the «OA Diamond Journals Study» which found that just over half (51%) have a formalised ownership: «This distribution shows that the OA Diamond ecosystem remains significantly structured by informal forms of ownership.» (Bosman et al., 2021: 80)

To assess the journals' alignment with industry best practices, the survey also included questions regarding creative commons license, guidelines (such as COPE), processes of quality assurance and findability.

Creative Commons Licenses

While, in the case of Switzerland, many journals are lacking contractual agreements with their publishers, most of them engage in creative commons (CC) licensing required by Plan S Principles: «All publications must be published under an open licence, preferably the Creative Commons Attribution licence (CC BY), in order to fulfil the requirements defined by the Berlin Declaration.» (<u>https://www.coalition-s.org/plan_s_principles/</u>)

Only six out of 33 journals include no dedicated creative commons license in their publications and therefore aren't compliant to Plan S. One journal employs a CCO license; 13 journals use a CC BY license. Three journals refer to CC BY-NC and ten journals refer to CC BY-NC-ND for their license.

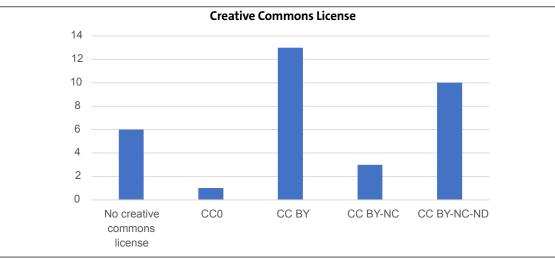


Fig. 17: Distribution of CC licenses (editors' survey; n = 33).

Guidelines

37 out of 40 journals provide information for authors on their website. Yet only 15 of those guidelines refer to established standards. The most commonly referred to publishing standard are the guidelines set out by the <u>Committee for Publication Ethics</u> (COPE) with ten journals including them in their author guidelines. Unsurprisingly, the same ten journals also state that they adhere to the COPE guidelines in their editorial workflow and publishing process. Eleven journals adhere to other guidelines such as the ICMJE criteria or the guidelines stated in the <u>Budapest Open Access Initiative</u>. However, 19 journals do not adhere to any established best practice guideline during the publication process. In addition, only ten out of 39 journals state that they have policies in place to promote open research data sharing among their authors.

Quality Assurance

38 journal editors responded to the questions concerning reviewing. We find that all journals operate some type of review. Seven journals only conduct editorial review whereas the remaining 31 journals operate a peer-review system. 21 journals employ double-blind peer-reviewing, eight journals rely on single-blind peer-reviewing and two journals on open peer-reviewing. The following bar plot depicts these figures.

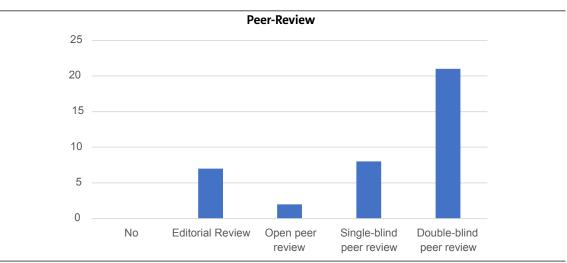
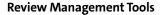
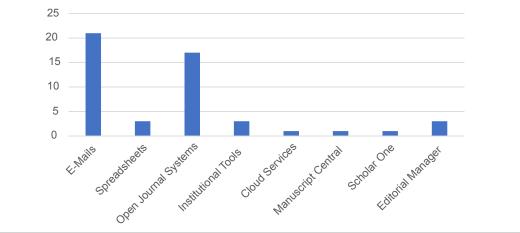


Fig. 18: Employed quality assurance procedures (editors' survey; n = 38).

The employed reviews are handled using a variety of tools. While 17 out of 40 journals rely on review management tools included in OJS, 21 journals manage reviews via e-mails. Other standardised tools are only infrequently used with five journals relying on commercial tools like Editorial Manager, Manuscript Central and Scholar One and three journals using tools provided by their hosting institutions. The slight preference for a more personalised approach could also account for the lower adaptation rate of standardised publication management tools. The following graph depicts the review management tools in greater detail (multiple selection of tools was possible for respondents).







The majority of Swiss Diamond OA journals do not check their submissions for plagiarism which marks a difference to the «OA Diamond Journals Study». Here, 55% of journals indicated the use anti-plagiarism software (Bosman et al., 2021: 88). Nevertheless, the international study defines the use of an antiplagiarism tool as a challenge, specifically for small journals, because it adds up to the financial pressure (ibid.: 99). In the PLATO study, only nine out of 40 journals systematically scan all submissions for plagiarism using a detection software; additional seven journals scan at least certain submissions. iThentica, PlagScan, and TurnItIn represent the most commonly used plagiarism detection software among Swiss Diamond OA journals.

In regard to reporting statistics, two thirds of Swiss Diamond OA journals collect statistics (22 out of 34 journals). 16 journals track the time between submission and publication and 17 journals calculate acceptance rates. Eight journals keep count on the number of requested reviews, seven of them also on the number of received reviews. Eleven journals collect information on the number of article downloads and ten journals on the number of website visitors. The following barplot presents these figures (multiple selection was possible).

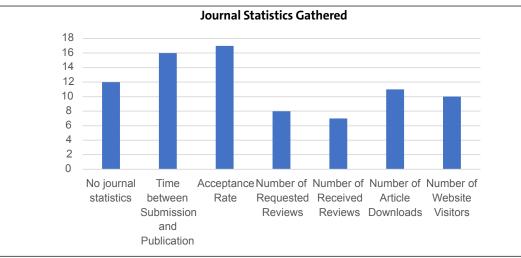


Fig. 20: Types of statistics collected by Swiss Diamond OA journals (editors' survey; n = 35 with multiple selection possible).

Table 4 concretises the insights from the journal statistics presented in the figure above. The following statements are based on the respective number of journals which provided the information in the survey (Obs. in the table). The average time from submission to publication lies at 19.64 weeks. The acceptance rate averages at 60.82% with one journal accepting all submitted articles and one journal accepting only 8% of all submitted articles. On average, the corresponding journals requested 311.5 reviews in 2021, although this number is substantially inflated by a single journal soliciting 1581 reviews, putting the median at only 156.5 requested reviews. On average, out of the 311.5 average requested reviews, only 147.29 reviews – less than 50% – were returned by the reviewers in 2021. The median lies at 60 received reviews. This substantially smaller number suggests that the maximum of 711 received reviews constitutes a stark outlier. The low rate of returns points to the challenge for journals to find reviewers – a challenge also mentioned in the «OA Diamond Journals Study», stating that «recruiting and retaining reviewers are by far the major concerns of the respondents regarding peer review challenges» (Bosman et al., 2021: 91).

In terms of article downloads in 2021, we again find extremely varying numbers with an average of 25'909 downloads ranging between one journal only reporting 200 downloads whereas another journal reports 122'000 downloads in 2021. This finding is mirrored in the total website visitors in 2021 with an average of 261'107.8 persons visiting the website of the six journals reporting this statistic. However, one journal only reports 400 visitors whereas another one reports 1'406'788 visitors in 2021.

Variable	Obs	Mean	Std. Dev.	Min	Max
Submission~e	14	19.64286	13.99234	4	48
Acceptance~e	15	60.82	28.71237	8	100
RequestedR~s	8	311.5	527.9045	2	1581
ReceivedRe~s	7	147.2857	254.3552	1	711
ArticleDow~s	7	25909	43137.85	200	122000
Visitors	6	261107.8	561764.2	400	1406788

Tab. 4: Summary statistics of collected journal statistics (editors' survey; n corresponds to Obs.).

Whereas the implementation of standardised quality assurance procedures and journal statistics constitute criteria for the assessment of the editorial work, the latter can also be viewed from the subjective perspective of authors. This is why the author survey included questions relating to authors' perceptions of editorial processes when comparing Diamond OA to non-Diamond OA journals. (Only authors received these questions after having stated that they had also published in outlets other than Diamond OA.) The following box plot pictures the results. We find that Swiss Diamond OA journals on average score better on all measured characteristics: duration between submission and acceptance (*DurSubAcc*), duration between acceptance and publication (*DurAccPub*), the quality of the reviews (*ReviewQuality*), the correspondence(s) with the editors (*EditorCorr*), the handling of proofs (*ProofsHandling*) and the technical setup of the submission system (*Technical Setup*). Swiss Diamond OA journals especially outperform other journals in terms of the editorial correspondence(s). This highlights that editors put a lot of effort into the journals.

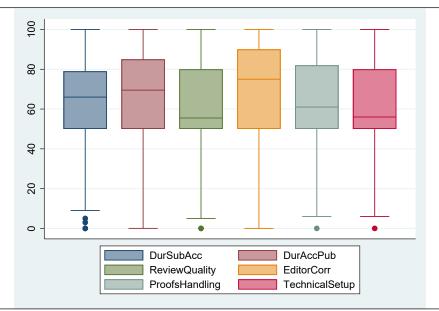


Fig. 21: Assessment of journals' editorial processes (0: Definitely Worse – 100 for Definitely Better; authors' survey; n = 286 [DurSubAcc] n = 284 [DurAccPub] n = 272 [ReviewQuality] n = 284 [EditorCorr], n = 271 [ProofsHandling], n = 244 [Technical Setup]).

While the figure above shows that there exist differences in authors' perception of the publishing process between Diamond OA journals and non-Diamond OA journals, the findings for differences across Diamond OA journals are more mixed. Based on responses from 126 authors, 25 authors (19.84%) perceived that the publication processes were very similar. 53 authors (42.06%) perceived the publication processes quite similar and 28 (22.22%) perceived them do differ slightly. 20 authors (15.87%) stated that the publication processes differed a lot. While these results show that editorial processes at Diamond OA journals are rather similar to those in other outlets, it contradicts the assessment that Diamond OA journals outperform other open access journals in terms of journal to authors relationships.

Differences between Platinum OA journals

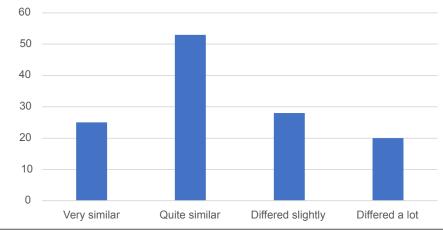


Fig. 22: Authors' perception of editorial processes of Diamond OA journals and non-Diamond OA journals (authors' survey; n = 126).

The survey asked authors to indicate whether they also acted as reviewers for the respective Swiss Diamond OA journal. Out of 325 authors who answered that question, only 128 (38.15%) acted as reviewers. The survey also asked whether reviewing in the respective Swiss Diamond OA journal differed from reviewing in non-Diamond OA journals. Most authors did not identify any differences. Those who identified differences mainly stated that reviews are conducted more community-based with editors and reviewers interacting with each other more frequently than only at single revision time points.

Findability is a key factor when it comes to the visibility of a journal and its publications. The inclusion of keywords and indexation in databases count as best practice to enhance the journal's findability and visibility (Maggio et al., 2021). The usage of keywords is common among Swiss Diamond OA journals. Based on the editors' survey, we find that 28 out of 40 journals include keywords for the published articles. 27 of those 28 let authors freely choose their keywords whereas one journal provides a standardised list of keywords for authors to choose from.

Swiss Diamond OA journals are indexed in an array of databases and search engines. The most common databases and search engines are the Directory of Open Access Journals (DOAJ) and Google Scholar with 20 journals. With 66.7%, the percentage of journals which participated in the study and being indexed in DOAJ is substantially higher than compared to the whole sample of 186 journals included in the bibliometric list. This is followed by Scopus with ten journals and ROAD with eight journals. Seven journals are indexed in EBSCO. Interestingly, no journal is indexed in the Web of Science whereas eleven journals report to be indexed in databases and/or search engines that were not listed in the questionnaire. These were mainly discipline-specific databases like PubMed or Dimensions. Twelve journals report that they are not indexed in any database or search engine. Out of these twelve journals, three journals are currently in the process of applying for indexation. Hereby, again the DOAJ and Google Scholar represent the most common application indexes.

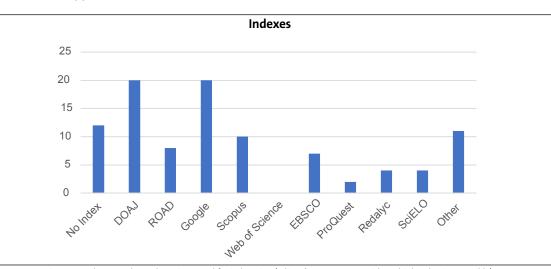


Fig. 23: Databases and Search Engines used for indexation (editors' survey; n = 30 with multiple selection possible).

The following figure depicts the databases and search engines used for indexation split by scientific branches. We find that indexation in the DOAJ represents the most common indexation for all scientific branches except interdisciplinary and technology journals (which we exclude in our elaborations due to small number of observations), followed by Google Scholar, independently of their scientific field. Interestingly, we find that life sciences & biomedicine journals are more often indexed in Scopus whereas social sciences journals are more often not indexed at all.

	No Index	DOAJ	ROAD	Google	Scopus	EBSCO	ProQuest	Redalyc	SciELO	Other	Journals Included
Arts & Humanities	2 (5.26%)	4 (10.53%)	0 (0.00%)	3 (7.70%)	1 (2.63%)	2 (5.26%)	1 (2.63%)	0 (0.00%)	0 (0.00%)	3 (7.70%)	
Interdisciplinary	1 (2.63%))	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	
Life Sciences & Biomedicine	1 (2.63%)	6 (15.79%)	3 (7.70%)	6 (15.79%)	5 (13.16%)	3 (7.70%)	0 (0.00%)	1 (2.63%)	1 (2.63%)	5 (13.16%)	
Physical Sciences	0 (0.00%)	1 (2.63%)	0 (0.00%)	2 (5.26%)	1 (2.63%)	1 (2.63%)	0 (0.00%)	1 (2.63%)	1 (2.63%)	1 (2.63%)	
Social Sciences	5 (13.16%)	9 (23.68%)	4 (10.53%)	8 (20.51%)	3 (7.70%)	1 (2.63%)	1 (2.63%)	1 (2.63%)	1 (2.63%)	2 (5.26%)	
Technology	2 (5.26%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	
Total	11 (28.95%)	20 (52.63%)	7 (18.42%)	19 (50.00%)	10 (26.32%)	7 (18.42%)	2 (5.26%)	3 (7.89%)	3 (7.89%)	11 (28.95%)	38 (100.00%)

Fig. 23a: Databases and search engines used for indexation (columns) split by scientific branches (rows) (editors' survey). Percentages are calculated based on the 38 journals that responded to the question. Only the columns add up to a correct total. The rows do not add up because multiple selection was possible.

32 out of 36 responding journal editors indicate that their journals use persistent identifiers (PIDs). Crossref DOIs represent the most employed PIDs (26 journals), pointing to the standardisation of these identifiers in Diamond OA journals. This process of standardisation can also be seen in the «OA Diamond Journals Study» with 69% of responding journals using them (Bosman et al., 2021: 97). However, similar to our qualitative findings, the study also states that «indexation can represent a significant burden for Diamond OA journals with little administrative support» (ibid.: 101).

In the framework of the PLATO Study, there are also 15 journals that use ORCID for persistently identifying authors and/or articles. Only five journals use Datacite DOIs while four journals do not work with persistent identifiers at all. Here, institutional platforms can offer much needed support regarding indexation.

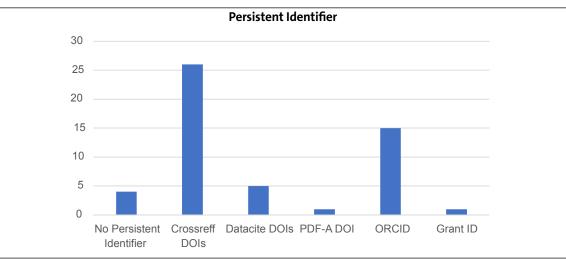


Fig. 24: Distribution of persistent identifiers (editors' survey; n = 36).

The authors survey asked respondents to compare their publication in Swiss Diamond OA journals with their publications in closed, hybrid, and Gold OA journals in terms of scientific impact. In the frame-work of the study, the term <scientific impact> does not relate to quantitative parameters or bibliometric indexes (such as the journal impact factor or the h-index) but to an author's subjective assessment of the perceived impact their publication has within the research community. The results are depicted below. We do not find any substantial differences in terms of scientific impact between different journal types based on a scale ranging from 0 (definitely less impactful) to 100 (definitely more impactful).

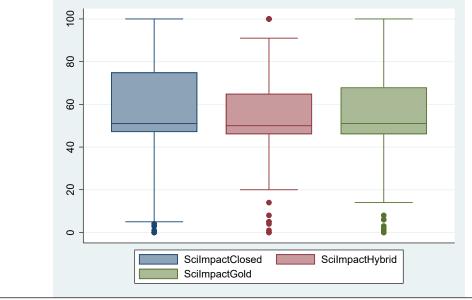


Fig. 25: Perception of scientific impact of Diamond OA journals compared to closed, hybrid, or Gold OA (authors' survey; n = 239 [SciImpactClosed] n = 183 [SciImpactHybrid] n = 173 [SciImpactGold]).

To allow a discipline-specific insight into authors' perception of scientific impact of Diamond OA journals, we split the responses according to scientific branches of the journals. The following figure depicts the perceived scientific impact of Diamond OA journals compared to closed (subscription and/or paywall) journals. We find that journals in the life sciences & biomedicine, physical sciences, and social sciences do not substantially differ from the general assessments discussed above. Nevertheless, in the case of interdisciplinary journals, we find that the scientific impact of Diamond OA journals is rated lower than of closed access journals. However, Diamond OA journals in the arts & humanities are considered slightly better in terms of scientific impact than closed access journals. Diamond OA journals in technology are rated to have a substantially higher scientific impact compared to their closed access counterparts.

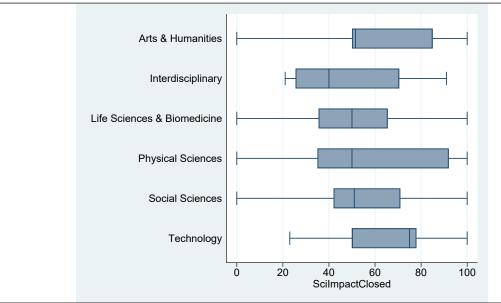


Fig. 25a: Perception of scientific impact of Diamond OA journals compared to closed journals split by scientific branches (authors' survey; n = 26 [Arts & Humanities] n = 4 [Interdisciplinary] n = 48 [Life Sciences & Biomedicine] n = 18 [Physical Sciences] n = 122 [Social Sciences] n = 21 [Technology]).

In regard to hybrid OA journals across scientific branches, we find that authors of interdisciplinary journals also perceive Diamond OA journals to have a lower scientific impact than hybrid OA journals. In the arts & humanities, Diamond OA journals also get a higher impact rating than those publishing in a hybrid OA model. For technology, however, we do no longer find a substantial difference as the median for the comparison of the scientific impact of Diamond OA technology journals to hybrid OA technology journals is exactly 50.

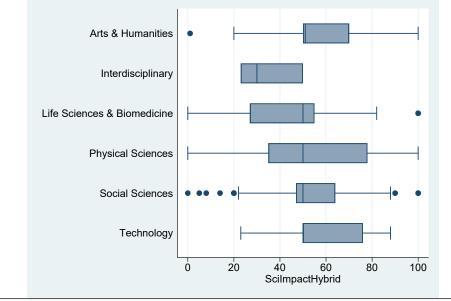


Fig. 25b: Perception of scientific impact of Diamond OA journals compared to hybrid OA journals split by scientific branches (authors' survey; n = 17 [Arts & Humanities] n = 4 [Interdisciplinary] n = 33 [Life Sciences & Biomedicine] n = 15 [Physical Sciences] n = 89 [Social Sciences] n = 15 [Technology]).

Lastly, the following figure splits authors perceived scientific impact of Diamond OA journals compared to Gold OA journals by scientific branches. Here, the only difference exists in regard to Diamond OA interdisciplinary journals who were rated substantially better than their Gold OA counterparts. Interestingly, the median of the comparison for technology journals again lies exactly at 50.

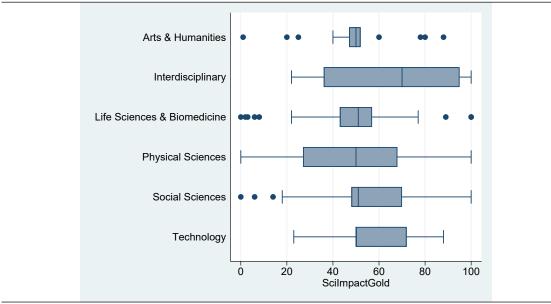


Fig. 25c: Perception of scientific impact of Diamond OA journals compared to Gold OA journals split by scientific branches (authors' survey; n = 22 [Arts & Humanities] n = 3 [Interdisciplinary] n = 34 [Life Sciences & Biomedicine] n = 17 [Physical Sciences] n = 90 [Social Sciences] n = 17 [Technology]).

In addition to assessing the scientific impact, we also asked authors to compare the societal impact (meaning: the perceived impact of a publication within a wider socio-cultural framework) of their publications in Swiss Diamond OA journals and closed, hybrid, and Gold OA journals. The results are depicted below. Hereby, the scores are overall slightly higher compared to closed (subscription) journal.

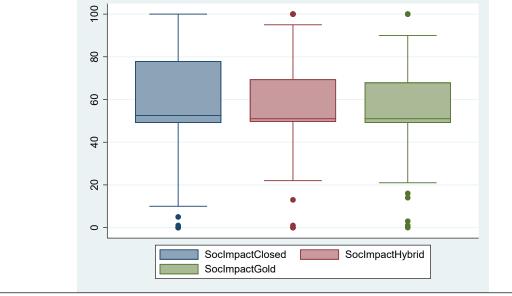


Fig. 26: Perception of societal impact of Diamond OA journals compared to closed, Hybrid, or Gold OA (authors' survey; n = 214 [SocImpactClosed] n = 168 [SocImpactHybrid] n = 159 [SocImpactGold]).

In line with the analyses regarding the scientific impact and as an additional insight, we also provide the detailed authors' ratings regarding the societal impact of Diamond OA journals compared to the other journal types by scientific branches. The following figure shows that authors perceive the societal impact of Diamond OA technology journals to be slightly higher than of closed (subscription and/or paywall) technology journals. Diamond OA interdisciplinary journals have an even higher perceived societal impact compared to closed journals. And for arts & humanities, more than three quarters of all respondents perceive the societal impact of Diamond OA journals higher than of closed journals.

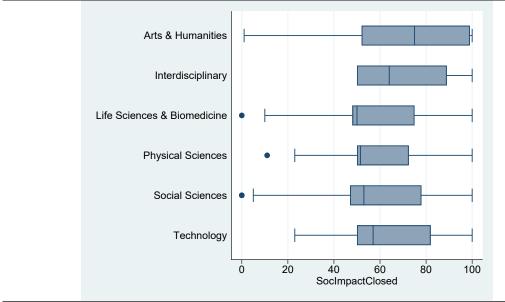


Fig. 26a: Perception of societal impact of Diamond OA journals compared to closed journals split by scientific branches (authors' survey; n = 21 [Arts & Humanities] n = 4 [Interdisciplinary] n = 43 [Life Sciences & Biomedicine] n = 16 [Physical Sciences] n = 110 [Social Sciences] n = 20 [Technology]).

The figure below depicts authors perceived societal impact of Diamond OA journals compared to hybrid OA journals split by scientific branches. The only discernible difference exists in the physical sciences. Here, a slightly higher societal impact is accorded to Diamond OA than to hybrid OA journals.

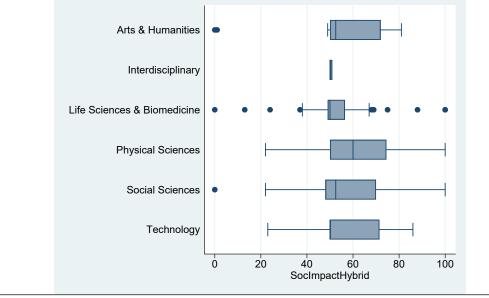


Fig. 26b: Perception of social impact of Diamond OA journals compared to hybrid journals split by scientific branches (authors' survey; n = 18 [Arts & Humanities] n = 3 [Interdisciplinary] n = 32 [Life Sciences & Biomedicine] n = 16 [Physical Sciences] n = 83 [Social Sciences] n = 16 [Technology]).

Furthermore, when comparing authors' perception of the societal impact of Diamond OA and Gold OA journals according to scientific branches (Fig. 26c), we find that authors of interdisciplinary journals and in social sciences give Diamond OA journals a higher societal impact rating than their Gold OA counterparts.

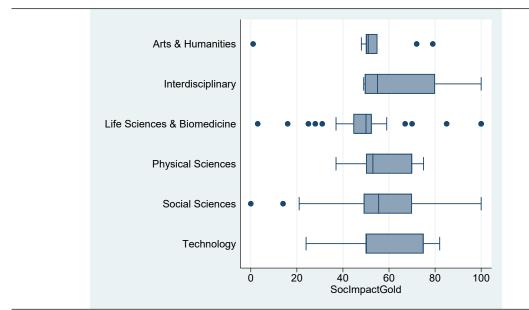


Fig. 26c: Perception of social impact of Diamond OA journals compared to Gold OA journals split by scientific branches (authors' survey; n = 13 [Arts & Humanities] n = 4 [Interdisciplinary] n = 32 [Life Sciences & Biomedicine] n = 15 [Physical Sciences] n = 81 [Social Sciences] n = 14 [Technology]).

Regarding the format of publication, all surveyed journals publish PDF articles (37 out of 37). According to the «OA Diamond Journals Study», PDF is the most popular format of publication; it is offered by 98.8% of Diamond OA journals (Bosman et al., 2021: 95). In the PLATO sample, 16 journals also publish articles in HTML format and four journals in XML format, the format recommended by Plan S.

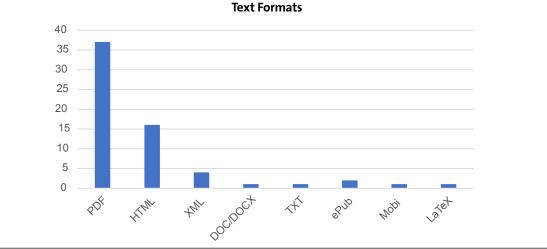


Fig. 27: Distribution of publishing formats (editors' survey; n = 37).

Concerning long-term archiving as recommended by Plan S, 23 out of 35 journals do have a long-term archiving policy in place while 12 journals have yet not implemented such a policy. The figure below depicts the implementation of standardised and non-standardised long-term archiving policies.

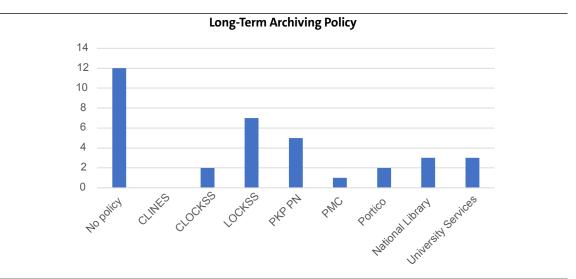


Fig. 28: Distribution of long-term archiving policies (editors' survey; n = 35).

Addressing the technical aspects, our results show that multiple editors find it difficult to assess the technical policies and standards employed at their journals. 14 out of 32 editors do not know whether their journal provides standardised article metadata. Six journals do not provide metadata and eight journals provide only non-standardised metadata. No journal provides metadata according to the <u>OpenAIRE guidelines</u>. Nevertheless, four journals employ other article metadata standards like Bio One, Dublin Core and «various from Open Journal Systems plugins».

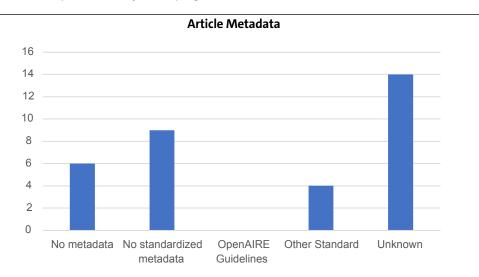


Fig. 29: Provision of article metadata (editors' survey; n = 32).

The following figure demonstrates that the share of editors being unaware of technical specialties increases for repositories. The high number of (Unknown) responses points to the need of heightening the awareness for the importance of the provision of metadata through engagement with the community of Diamond OA journal editors.

When asked whether the journals deposit articles and their metadata into repositories to make them findable by academic search engines, 21 out of 36 editors respond that they do not know whether this takes place. Eight journals deposit articles and metadata in machine-readable community standard formats like JATS-XML and one journal provides this information in a non-standardised format. Six journals do not deposit their articles and metadata in a repository.

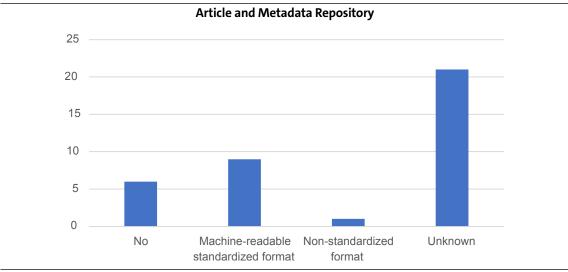


Fig. 30: Distribution of use of article and metadata repositories (editors' survey; n = 21).

The question *Does the journal provide openly accessible data on citations according to the standards of the Initiative for Open Citations* (I4OC)? returns a similar finding. 18 out of 36 journal editors selected <Un-known³. From the remaining 18 journals, six journals provide openly accessible data on citation according to the I4OC standards and twelve journals do not use this standard.

Research Question 4:

What are the current business models of Swiss Platinum/Diamond open access journals?

While the bibliometric study already provided a detailed overview of the publisher types of the 186 Swiss Diamond OA journals identified until the start of the quantitative survey, the following figure provides an overview of the publishers who responded to our dedicated publishers' and funders' survey. In total, 28 respondents stated the type of their organisation. Nine university libraries (32.14%) responded to our survey. In addition, we received four responses from non-profit publishers (14.29%) and three responses (10.71%) each from specialised publishing organisations (e.g. associations founded specifically for publishing the journal), national scholarly or learned societies, and for-profit publishers. Except for a slight overrepresentation of non-profit publishers, these shares are similar to those presented in the bibliometric study. This highlights that our results based on publishers' insights are unlikely to suffer from sample selection bias.

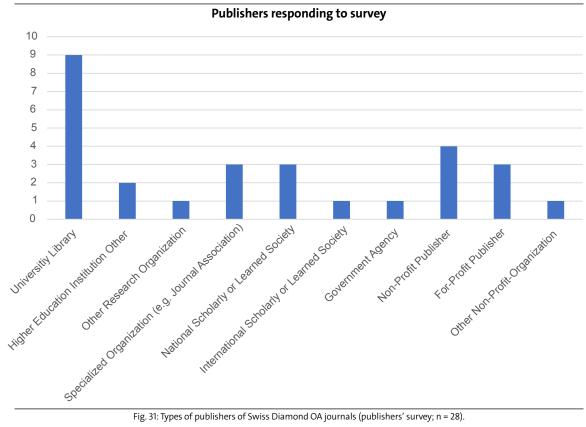


Fig. 31: Types of publishers of Swiss Diamond OA journals (publishers' survey; n = 28).

We also asked publishers to indicate the number of Swiss Diamond OA journal they publish. We find that nine (33.33%) out of 27 publishers only publish one journal. Ten (37.04%) publishers publish between two and six journals. Nevertheless, we also find four outliers (14.82%) publishing more than 15 journals.

Funding

The defining criterium for Diamond open access journals is that they do not charge article processing charges (APC) which is why these journals rely on the support from institutions and funding organisations. Swiss Diamond Open Access journals receive funding from different types of institutions. 25 out of 35 journal editors report that the institution they are affiliated with provides funding for their journal. Eight journals receive funding from other higher education institutions (excluding libraries) and seven journals receive funding from university libraries. Other research organisations provide funding for four journals in our sample. National scholarly or learned societies fund seven journals and international scholarly or learned societies fund two journals. The same applies to Swiss government agencies. Five journals are funded by association members whereas three journals report other funding sources like private persons and private foundations. The following bar chart depicts this information (multiple selection was possible). In addition, we also sought to reach funding institutions with our survey addressing publishers and funders. Yet we only received feedback from three organisations that they act as dedicated funders for a journal without also being their publishers. This highlights that most organisations who fund Diamond open access also act as publishers, whereas there are only very few funding-only organisations.

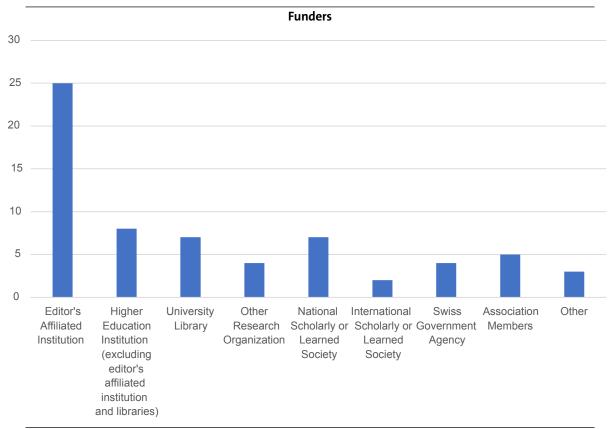


Fig. 32: Types of funding organisations (editors' survey; n = 35 with multiple selection possible).

The funding mechanisms reflect the previous findings. 17 out of 34 journals receive direct financial support by editors' affiliated institutions and 15 journals benefit from salary costs covered by these institutions. Moreover, donations and endowments constitute an important funding mechanism with seven journals relying on them. Six journals each rely on grants and membership fees for covering the costs of their operations while four journals generate financial revenue through selling print copies of their journals. In comparison to the «OA Diamond Journals Study», it is remarkable that the support from Swiss governmental agencies is rather low (Bosman et al., 2021: 117).

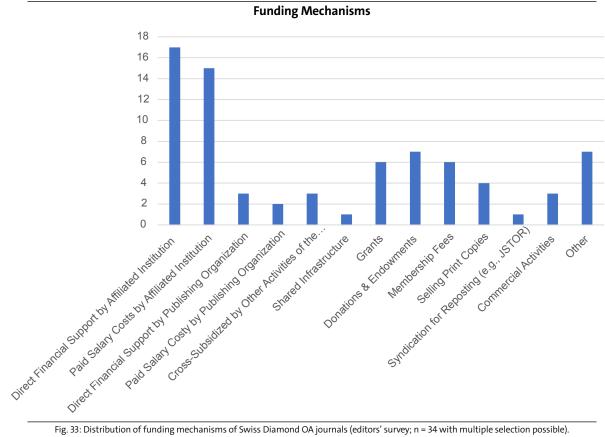


Fig. 33: Distribution of funding mechanisms of Swiss Diamond OA journals (editors' survey; n = 34 with multiple selection possible).

The publisher and funder survey asked publishers whether they receive financial support for publishing Swiss Diamond OA journals. Out of 17 publishers responding to this question, nine publishers receive external funding, eight publishers do not receive external funding. Swiss government agencies like the Federal Office of Agriculture and the Federal Office of Culture combined with other (partly) governmentally funded agencies like swissuniversities represent the most common external funding mechanisms.

Costs

The operation of a scholar-led journal incurs costs in the areas of personnel, infrastructure, and administration, some of which are «hidden», as activities are often carried out as unpaid labour by the editors and staff. For this reason, the editors of scholar-led journals are confronted with the problem of measuring costs. Transparency of costs, however, is an important factor for the Diamond OA business model in order to optimise journal budgets but also for acquiring funding. The average total costs of the 28 journals who provided us with insights into their cost structure in the survey accumulated CHF 58'857 CHF in 2021. Yet the standard deviation of CHF 117'392 suggests that there are large variations in terms of outliers. This can also be clearly seen in the following box plot. In fact, the median lies at CHF 15'000, indicating that 50% of the journals included in our survey faced costs of CHF 15'000 or less in 2021. This is also corroborated by the publisher and funder survey where we find that the average total journal costs accumulate to CHF 14'744 per year.

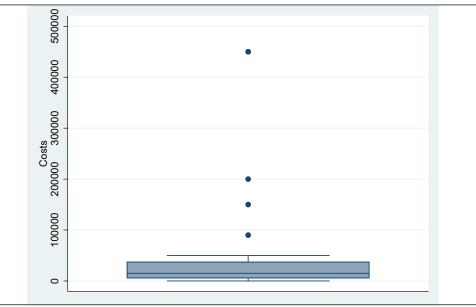


Fig. 34: Average total costs of Swiss Diamond OA journals (editors' survey; n = 28).

The following figure splits the average total costs of Swiss Diamond OA journals according to scientific branches. Unfortunately, details on interdisciplinary and technology journals are not conclusive with only one response available each. Nevertheless, we find that Swiss Diamond OA journals from the physical sciences face the highest costs with a median of yearly total costs of CHF 100'000. In addition, the costs of life sciences & biomedicine journals vary substantially with the majority of journals facing costs below CHF 20'000 but also journals facing costs of several 100'000s Swiss Francs. The average total annual costs of Swiss Diamond OA journal from the arts & humanities and the social sciences vary less with no arts & humanities journal exceeding costs of CHF 50'000 and only one social scientific journal exceeding costs of CHF 100'000.

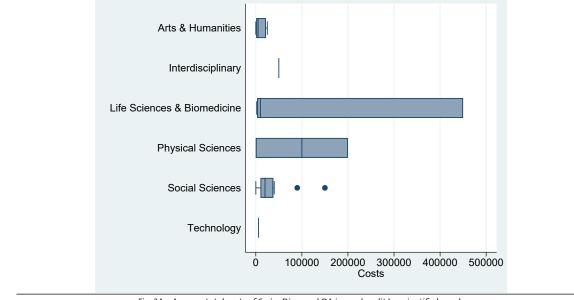


Fig. 34a: Average total costs of Swiss Diamond OA journals split by scientific branch (editors' survey; n = 5 [Arts & Humanities n = 1 [Interdisciplinary] n = 6 [Life Sciences & Biomedicine] n = 2 [Physical Sciences] n = 13 [Social Sciences] n = 1 [Technology]).

Given the costs for operating a Diamond OA journal combined with the lack of diversified funding budgets, it is not surprising that our survey shows that only one Diamond OA journal is currently making profit. In addition, 15 journals out of 31 report a break-even result whereas nine journals report a loss. Furthermore, six journal editors state that they do not know the current financial results.

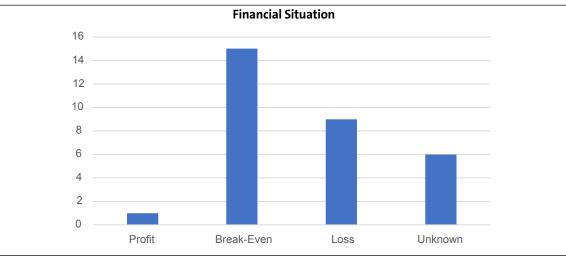


Fig. 35: Financial situation of Swiss Diamond OA journals (editors' survey; n = 31).

Despite the finding that nine journals operate with financial loss, we find that editors are quite confident when assessing the sustainability of their journals for the upcoming year. This is shown in Fig. 36. Hereby, editors indicate on a scale from 0 (not sustainable) to 100 (sustainable) whether their journal's business model is sustainable for the upcoming year. The box plot indicates that 25 (75%) of the 33 responding journal editors are at least 70% confident that their business model is sustainable for the upcoming year. However, this picture changes when we assess the sustainability of the business model for the next three years (Fig. 37). Editors are more pessimistic about the longer-term future with nearly half of them being less than 70% confident that the business model is sustainable for the rest.

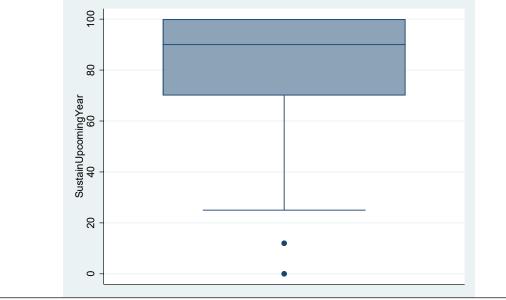


Fig. 36: Sustainability of business model for the next year (editors' survey; n = 33).

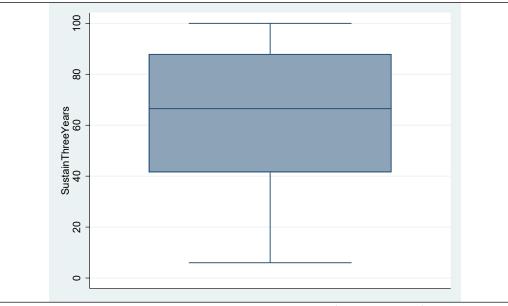


Fig. 37: Sustainability of business model for the next three years (editors' survey; n = 33).

Looking at the cost structure in more detail, we find that none of the 29 journals spends money for fundraising activities, peer reviews, IT development, IT support and training. Only one journal pays considerably low salaries to their editorial board (CHF 2400) and one journal engages in marketing advertisement. Only a small fraction of journals pays for proofreading (3), printing services (3), copy editing (4) and typesetting (4). Eight journals face rather inexpensive hosting costs (between CHF 50 and CHF 1'500), and eight journals pay for design. The most common and also highest cost drivers are salaries for editorial managers and assistants which range from CHF 1'500 to up to CHF 160'000. Interestingly, only four journals state that they face variable costs (costs that change according to the output) per article (between CHF 150 and CHF 2'300) whereas seven journal editors explicitly state that the incurred costs are independent of the exact number of articles the journals publish.

From publishers' and funders' perspectives, the largest cost driver are staff costs. The average incurred annual salary costs per journal amount to CHF 6'833.39. This is followed by costs paid for outsourced services, CHF 2'327.08 on average. Many publishers also face significant costs arising from IT related tasks like IT development (M = CHF 1239.58), IT support (M = CHF 721.59), and the provision of IT equipment (M = CHF 279.99). Annual costs for marketing (M = CHF 84.39) and the provision of DOIs (M = CHF 58.30) are rather low, as can be seen from the summary statistics provided in the table below.

Variable	Obs	Mean	Std. Dev.	Min	Max
SalariesCo~l	12	6833.386	10004.65	0	31250
Outsourcin~1	12	2327.083	3904.942	0	12500
ITEquipmen~1	12	279.9863	572.6322	0	2000
ITDevelopm~1	12	1239.583	2604.879	0	8750
ITSupportC~1	12	721.5909	1780.976	0	6250
MarketingC~l	12	84.375	194.1711	0	500
DOICostsJo~1	12	58,29651	142.34	0	500

Tab. 5: Descriptive statistics of costs per type (editors' survey; n = 12).

We cannot provide detailed information on the number of staff members paid for working for the journals because we received multiple invalid responses to the questions where we asked about the size of the paid work staff in full-time equivalents. As a case in point, multiple journals reported between ten and twenty full-time equivalents paid out of their own budgets despite having total costs lower than CHF 25'000.

Our findings addressing the tasks executed by staff members, presented in the figure below (multiple selection was possible), only partly mirror these costs findings. 24 out of 29 journals rely on staff members for the editorial management and editorial assistance. This is followed by 23 journals who assign copy editing and proofreading to their staff members. 20 journals report that their editorial board consists of staff members (note that this result contradicts the finding on the exact cost structure above in which only one journal stated that it faces costs for the editorial board). Other relevant staff member tasks are typesetting (17 journals), marketing and organising peer reviews (14 journals each) and fundraising (9 journals). However, the responses to the publisher and funder survey show that HR support in terms of salaries is provided almost exclusively by the publishing institution. In fact, we find that only two out of 28 organisations provide HR support by paying their employees a (partial) salary for working for Swiss Diamond OA journals that are not published by the institution they are affiliated with.

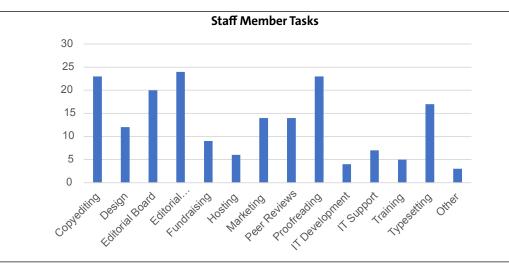


Fig. 38: Overview of staff member tasks (editors' survey; n = 29 with multiple selection possible).

We compare the findings above with the insights gathered in the publisher survey which also included a question about journal services that are conducted internally. The following bar chart depicts the results. In total, 17 publishers responded to this question. The largest difference between the findings from the editorial and the publisher survey concerns the hosting services. Eleven publishers state that they internally provide hosting services (compared to only six editors stating this). Another strong difference concerns typesetting services, which, according to the responding publishers, are never done internally.

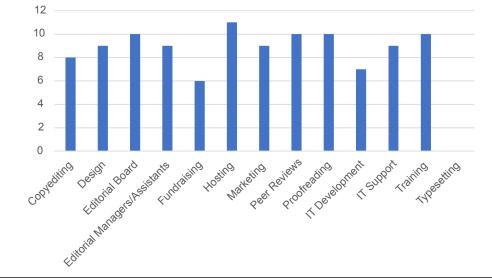


Fig. 39: Overview of services provided by staff members of the publishers (publishers' survey; n = 17 with multiple selection possible).

The finding that many organisations do not allocate dedicated hours for their staff members to perform tasks for Swiss Diamond OA journals or otherwise reward the activity for collaboration in a Diamond OA journal is also corroborated by the fact that half of the surveyed organisations do not encourage their employees to take up roles in those journals while only 25% of them moderately to strongly agree that they encourage them. Half of the organisations also do not specifically encourage their staff to publish in Diamond OA journals.

These findings could be attributed to the fact that the Diamond OA publishing model has only reached a threshold of visibility and gained traction within the last couple of years. Yet we find that the share of organisations who moderately to strongly agree that they encourage them to publish in these outlets is higher than their encouragement to actively take up roles in these journals. The efforts of some institutions to establish OJS hosting platforms for Diamond OA journals are in support of encouraging authors at the respective institution to publish in these outlets and offer valuable support for editors of Diamond OA journals. At the same time, higher education institutions are not likely to encourage their scientific staff to take up roles in Diamond OA journals as long as there are no sustainable funding schemes that prevent the further self-precarisation of researchers.

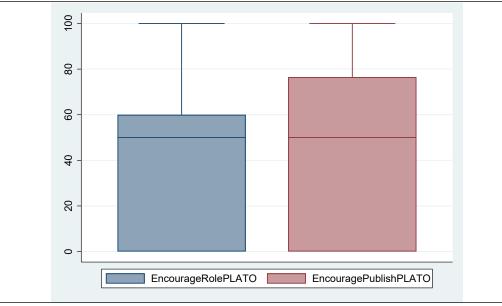


Fig. 40: Encouragement of staff to publish or perform roles in Diamond OA journals (publishers' survey; n = 11 [EncourageRolePLATO] n = 12 [EncouragePublishPLATO]).

Swiss Diamond OA journals do not only rely on the collaboration of staff members but also on volunteers. Based on 29 journals who responded to the questions addressing volunteering, we find that 6.79 volunteers work for the average Swiss Diamond OA journal. While the exact number varies slightly with multiple journals reporting the inclusion of 13 to 20, we also find five journals that do not rely on volunteer work. Based on the 24 journals that include volunteers work, the following figure depicts the tasks executed by volunteers. Our results indicate that volunteers frequently are part of the editorial boards (19 journals). Volunteers conduct proofreading in 14 journals and copy editing in twelve journals. Furthermore, nine journals rely on volunteers when organising peer reviews and when engaging in marketing.

Eight journals incorporate volunteers as their editorial managers/assistants. In seven journals designing is done by volunteers, fundraising in six journals with all other tasks only seldomly done by volunteers (three journals or less).

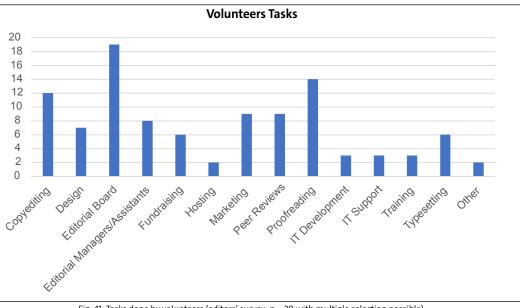


Fig. 41: Tasks done by volunteers (editors' survey; n = 29 with multiple selection possible).

Besides relying on staff members and volunteers, journals can also outsource services to specialised providers. Out of the 29 journals who responded 23 journals outsource at least one task. Among those outsourced services, design is the most common with eleven of the 23 journals paying third parties to conduct this task, followed by hosting (eight journals). In addition, also IT related tasks and proofreading are outsourced by some journals. Unsurprisingly, editorial board tasks are not outsourced. The same applies to tasks conducted by editorial managers/assistants and fundraising. The following figure provides an overview across all tasks.

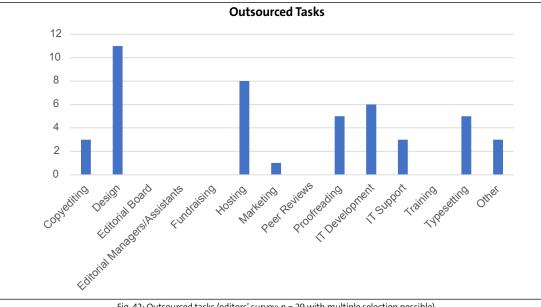


Fig. 42: Outsourced tasks (editors' survey; n = 29 with multiple selection possible).

The data gathered in the publishers and funders survey corroborates the finding from the editorial survey that Swiss Diamond OA journals outsource relatively few tasks. Using insights from ten publishers, we again find that IT development and IT support, hosting and design range among the most commonly outsourced services.

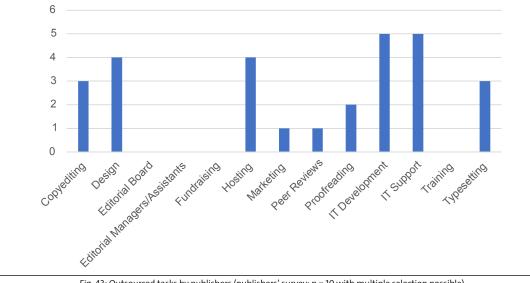


Fig. 43: Outsourced tasks by publishers (publishers' survey; n = 10 with multiple selection possible).

The following table presents the results of a ranking of the overall HR intensity of all tasks, ranking from 1 (most intensive) to 13 (least intensive). Thus, the lower the mean, the higher editors perceive that this task is HR intense. The standard deviation points out whether the 26 editors who responded to this question ranked the task in the same area (low standard deviation) or ranked the task differently (high standard deviation).

We find that copy editing (M = 2.69) is the most HR intensive task with all editors ranking this within the highest six tasks. This is followed by the work of the editorial managers and assistants (M = 3.65) and peer reviews (M = 3.77). Editors assess typesetting quite ambivalently, with nearly half of the editors assigning it a high intensity ranking and nearly the other half assigning a low intensity ranking. IT Development (M = 9.92), IT Support (M = 10.77), and HR Training represent the three least HR intensive tasks.

Variable	Obs	Mean	Std. Dev.	Min	Max
HRCopyedit~g	26	2.692308	1.619117	1	6
HRDesign	26	6.038462	3.168353	2	13
HREditoria~d	26	4.307692	2.526171	1	13
HREditoria~s	26	3.653846	2.712081	1	12
HRFundrais~g	26	8.038462	2.734678	3	13
HRHosting	26	8.576923	1.963122	5	13
HRMarketing	26	8.615385	2.136856	3	13
HRPeerReview	26	3.769231	2.502921	1	10
HRProofrea~g	26	5.423077	2.670926	1	10
HRITDevelo~t	26	9.923077	1.383418	7	12
HRITSupport	26	10.76923	1.607674	8	13
HRTraining	26	11.53846	1.838059	7	13
HRTypesett~g	26	7.653846	4.568959	1	13

Tab. 6: HR-intensity of tasks (editors' survey; n = 26).

Research Question 5:

What challenges and opportunities do Swiss Platinum/Diamond open access journals face?

The following word cloud depicts editors' answers to the question What are your main motivations for pursuing a Platinum/Diamond OA publishing model? The graph shows that journal accessibility constitutes the largest motivation for pursuing Diamond OA. The editors also support similar concepts like free access, availability, open science and knowledge sharing. Interestingly, multiple editors also state that they opted for a Diamond OA publishing model to increase their journal's visibility. Another recurring theme is the fact that they perceive it as unfair to charge readers for journals that are already financed through membership fees in academic societies. Last, several editors refer to the implementation of funding requirements by the SNSF and similar institutions that mandate scholars to publish the findings of funded research in Gold or Diamond OA outlets. This motivates editors to work for and improve their journals to provide their research community with suitable outlets for publishing the results of third-party funded research.

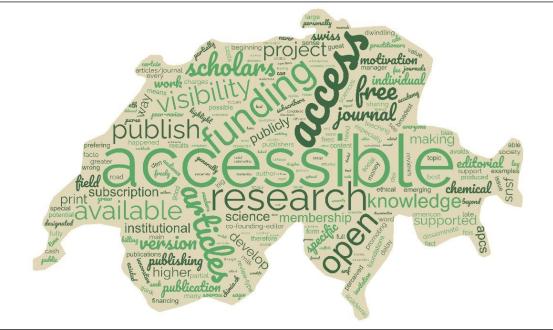


Fig. 44: Word cloud of editors' motivations for publishing Diamond OA journals (editors' survey; n = 34).

The following word cloud highlights authors' motivations for submitting to and publishing in these Diamond OA journals. We find that the field specificity with several journals focusing on small, specialised sub-disciplines represents one of the main reasons why authors choose to publish in these journals. In addition, multiple authors state that the journals represent quality journals within and for these community, highlighting that the editorial efforts pay off in terms of making the journals attractive for potential submitters. Furthermore, several authors mention that publishing in a Swiss journal especially in context-heavy fields like law, culture, and local history adds to their profile as researchers in that field.

Moreover, authors also published in Swiss Diamond OA journals upon invitation. Interestingly, the fact that Diamond OA journals are free for submitters only plays a minor role in authors' motivation to publish in those journals. Nevertheless, when asking authors whether they would still submit to the same Swiss Diamond OA journal if it charged APCs, 169 out of 320 authors state that they would no longer be willing to submit an article. 66 authors indicate that they would only be willing to pay APCs for submissions to the same journal if the impact factor was higher. Last, 85 authors would still submit to the same journal even if it charged APCs. This highlights that despite authors not mentioning financial aspects in their qualitative motivation assessments, finances still play an important role when deciding on target journals.



Fig. 45: Wordcloud of authors' motivations to publish in Diamond OA journals (authors' survey; n = 302).

Last, in the survey publishers and funders were asked why they support Swiss Diamond OA journals. The following word cloud summarises their answers.



Fig. 46: Wordcloud of publishers' motivation to support Diamond OA journals (publishers' survery; n = 16).

Challenges and wishes

The survey asked editors to indicate the challenges their journals face with regard to specific tasks. 27 editors indicated the severeness of potential challenges on a scale from 0 (No challenge) to 100 (Major Challenge). The following box plot depicts the responses.

Fundraising represents the toughest challenge with nearly half of the editors rating this challenge with 90 or higher. This is followed by indexation although the larger box already indicates that not all editors agree with this assessment. In turn, challenges related to design or training are rated very low by the editors. The other tasks range in mid-field with medians between 40 to 60.

In addition to this quantitative assessment of challenging topics regarding editorial management, the survey also gave editors the opportunity to qualitatively elaborate on the challenges in more detail. Hereby, the lack of (especially long-term) funding is a recurring theme with several editors stating that they are required to renegotiate their funding on an annual or bi-annual basis. In addition, multiple editors mention that they run the journals on the basis of *«self-exploitation»* because many *«Swiss higher education institutions do not include publishing tasks in their missions»* and thus do not remunerate their employees for taking up editorial or volunteering roles in journals. Thus, it is not surprising that multiple editors call for compensating these scholars for their work, especially those who already face *«precarious financial circumstances»*. After all, *«everybody requests open access, but nobody is willing to pay for it»*. Another frequently discussed issue is the low rate of accepted review invitations, an issue not specific to Diamond OA journals but a challenge to academia as whole.

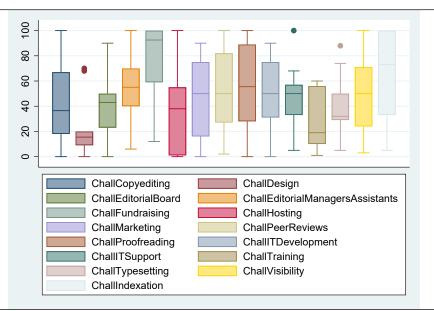


Fig. 47: Challenges with regard to tasks (editors' survey; n = 27).

Concerning the topics not touched upon in the quantitative results depicted above, editors' largest concerns are related to internationalisation and standardisation. Multiple editors point out that scholarly research does not adhere to geographical or political boundaries in many disciplines. Thus, European and/or global collaboration would be needed to transition to an open science culture, particularly in regard to the creation of guidelines and tutorials outlining best-practices and how-to instructions. As one editor puts it, a *«trustworthy homepage»* with instructions and information on best practices and standardisation *«would be very helpful»*.

Opportunities and Wishes

Overall, Diamond OA publishing is on the rise. This can be inferred from the fact that all of our surveyed publishers agree or strongly agree with the notion that they consider to further develop Diamond OA.

The editorial survey asked for assessments of areas of opportunities on a scale from 0 (No opportunities) to 100 (Major opportunities). Yet this, combined with the challenges, constituted the last content section of the questionnaire. This partially explains why only 14 editors responded to the opportunities. However, since 27 editors still responded to the questions addressing the challenges located on the same page, the lower number can be attributed to editors not perceiving many opportunities for their journals and/or focus more on overcoming existing challenges than to think about potential opportunities for development.

The following box plot presents the assessed areas of opportunities. Editors perceive significant opportunities for their journals in the areas of visibility, IT development, and indexation. In all other cases editors only see minor opportunities, indicated by the fact that the median is located below the middle line of 50 for all other task areas. Editors are especially pessimistic when assessing opportunities in the areas of copy editing and peer reviews with half of them indicating opportunities scores of 10 or less.

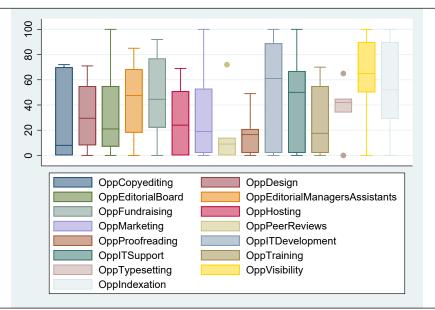


Fig. 48: Opportunities with regards to tasks (editors' survey; n = 14).

In the qualitative section regarding opportunities, only few editors entered responses. There were two main reasons for why editors perceive opportunities in the areas of visibility, IT development, and indexation: First, editors believe that indexation in large databases are *«exciting and necessary»* to increase visibility, readership, authorship, reviewer pools and consequently the size of the editorial board. Second, multiple editors state that ongoing developments in academia generally and publishing more specifically could deepen the *«OA culture in higher education institutions»*. This could in turn raise the awareness and change the mindset of all stakeholders, scholars, funders and policy makers and support the further development of Diamond OA publishing.

Many editors ask for the introduction of long-term funding programs provided by higher education and research institutions as well as funding institutions to establish financial security and sustainability in Diamond OA publishing. This can be also seen in the following word cloud which we generated based on the question *If you could make up to three wishes to Swiss research funding institutions to support the financial sustainability of the journal, what would they be?* Hereby, clearly funding and financing is the most often named. One editor summarises the wishes best by stating, *«Government funding that is otherwise being pumped into paying APCs to commercial publishers could be redirected to supporting Diamond open access.»*



Fig. 49: Wordcloud of editors' perceived opportunities for Swiss Diamond OA journals (editors' survey; n = 13).

4. DEFINITIONS

Business model: A journal's business model is defined as the way of operating of a specific journal and encompasses financial as well as organisational and legal aspects such as funding and costs, hosting, and the organisation of editorial workflow and publishing. The business model is not necessarily stable over time but can change according to the situation within the ecosystem (see Ovans 2015).

Community-led: Researchers taking the lead in scholarly publishing through the establishment of collaborative publishing models that puts academics' needs first. This is ensured by including researchers' opinions in all steps of the publishing and journal management process.

Diamond Open Access: Diamond Open Access (also known as Platinum Open Access) refers to publishing and accessing scholarly publications without barriers for both authors and readers. These barriers can be monetary (requiring the payment of APCs, page charges or image charges) or non-monetary (subscription or registration barriers, implementation of an embargo period for the publication of a free online version, so-called (delayed OA).

Swiss Diamond Open Access journal: Since the Diamond Open Access scholarly publishing ecosystem is largely defined by its internationality and collaborative nature, we employed a broad approach to the criteria of defining «Swiss» Diamond OA journal in the framework of this study.

- Published by/at a Swiss higher education institution, research institution or academic society
- Hosted at a Swiss institution or platform
- Published by a publisher (primarily) located in Switzerland
- Member from Switzerland among editors-in-chief, editorial or advisory board
- Still active (at least one publication since 2018)
- Identifiable by an ISSN/eISSN/ISSN-L (or in the process of applying for one)

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APPENDIX

INTERVIEW QUESTIONNAIRE

Diamond Open Access Landscape in Switzerland Interview

Interview Context

In our study, we create an overview of the Platinum/Diamond open access landscape in Switzerland. In this context, we aim at generating a thorough understanding of the processes, infrastructures, business models, challenges, and opportunities of Swiss Diamond open access journals.

QUESTIONS

Editor & Journal Information

- 1. Can you describe yourself in a few sentences? (job position, role, background etc.)
- 2. Can you provide some information about your journal and its readership? *discipline, language, scope, audience, number of readers etc.*)
- 3. Can you provide some information about your journal's authorship and team structure? (authors' structure, reviewers' structure, editorial board etc.)
- 4. What was your main motivation to create the journal? (only if participants have insights)
- 5. Do you use the term «Platinum/Diamond Open Access» for your journal? And if not, what are reasons why?
- 6. Do you know any other Platinum/Diamond journals in your field? And if yes, is there any exchange concerning funding, technical infrastructures and the like?

Editorial process & technological infrastructure

- 7. How do the editorial processes in your journal look like? (e.g., editorial board and discussions within the editorial board, indexing, etc.)
- 8. How does the peer review process typically work and who is involved in that process?
- 9. Who (and how many people) is responsible for proofreading, corrections, layout, meta-data and publishing?
- 10. Which of these activities regarding editorial process are being paid/contracted?
- 11. Which technological infrastructures do you use? (e.g., process and content management system, providers) *Is there anything that you would like to improve?*
- 12. Are you aware of the Plan S principles? If so, how do you make sure that the requirements for cOAlition S funded research are met?

Business/Funding Model

- 13. What are your main motivations in pursuing an open access model that does not charge authors or readers?
- 14. Could you please describe the current business model of your journal? (e.g., costs, funding, voluntary work, ...)
- 15. Who/which institutions have funded the journal so far?
- 16. Do you pursue fundraising activities? And if yes, which ones?
- 17. Typically, for how long can you secure funding for the journal? (Short-term, mid-term, long-term)

- 18. Do you see any emerging developments that might impact your current model in the next years? (e.g., sustainability of operations, opportunities for funding, changes in editorial board)
- 19. In an ideal world, how would your perfect business model look like?

Challenges & Opportunities

- 20. What are your current challenges and pain points in the context of the open access model? Are there expected future challenges that should be addressed?
- 21. Do you see any possible solutions to these challenges?
- 22. Which opportunities do you see?
- 23. In general, do your see any additional challenges & opportunities for the Platinum/Diamond open access landscape in Switzerland?

Platinum/Diamond Open Access in Switzerland & Wrap Up

- 24. How do you see Switzerland differing with other countries in terms of the Platinum/Diamond open access landscape? *What do you think underlies these differences*?
- 25. If we met again in 3 years, how do you think (and maybe hope) the status of Platinum/Diamond open access in Switzerland will look like?
- 26. Anything else that you want to share with us, that we did not ask about?

JOURNAL DISTRIBUTION OF AUTHOR SURVEY RESPONDENTS

Journal	Number of respondents
Anwendungen und Konzepte der Wirtschaftsinformatik	3
Babylonia	25
Basel Institute on Governance Policy	1
Boletin Hispanico Helvetico	2
Bulletin de la Société d'Égyptologie	1
Bulletin of Mathematical Sciences	3
Bulletin of the WHO	6
CERN IdeaSquare Journal of Experimental Innovation	1
CHIMIA	20
Cahiers du Centre de linguistique et des sciences du langage	4
Cardiovascular Medicine	3
Cognitio	4
Conexus	5
Connexe	3
Contour	1
Cortica	3
Current Issues in Sport Science	5
Didattica della Matematica	2
Dubai Diabetes and Endocrinology Journal	2
ETH Learning and Teaching Journal	3
Egyptian Journal of Forensic Sciences	10
European Journal of Health Communication	2
European Journal of Musicology	3
Flusser Studies	1
Formation et pratiques d'enseignement en questions	2
Fragmentology	7
Frequenz	11
Germanistik in der Schweiz	1
Geschichte und Informatik	1
Gesellschaft – Individuum – Sozialisation	1
Informationspraxis	5
Inter- and Transdisciplinary Education	2
International Journal of Health Professions	2
International Journal of Instruction	54
International Journal of Particle Therapy	2
International Journal of Social Work Values & Ethics	2
Jahrbuch Diakonie Schweiz	1
Journal of Holticulture and Plant Research	1
Journal of Object Technology	10
Journal of Quantitative Description	5
Journal of Statistical Software	16
Judaica	1
Leseforum	14
Lingua Lugar	2

Living Reviews in Computational Astrophysics	1
Living Reviews in Solar Physics	3
Manazir Journal	5
New Zealand Journal of Forestry Science	2
PARKS	8
Pachyderm	4
Paralleles	17
Quid – Fribour Law Review	1
Raison Éducatives	3
Ressi	5
Revue Francophone de Recherche en Ergothérapie	3
Revue Suisse de Zoologie	16
Revue de Paléobiologie	4
Schmalenbach Journal of Business Research	4
Schweizer Jahrbuch für Musikwissenschaft	2
Socialpolicy.ch	1
Studia Philosophica	2
Studies in Communication Sciences	5
Sui Generis	12
Sustainable Food Production	5
Swiss Dental Journal	2
Swiss Journal of Economics and Statistics	10
Swiss Journal of Educational Research	17
Swiss Journal of Social Work	3
Swiss Journal of Sociology	14
Swiss Medical Weekly	1
Swiss Sports and Exercise Journal	2
Swiss Yearbook of Administrative Science	4
The Cuban Scientist	4
Tranel	7
Tsantsa	7
Vulgata	3
Zeitschrift für Religionskunde	3
artenuevo	5
iglus Quarterly	4
xviii	3

Tab. A1: Distribution of author survey respondents according to journals.