Zooming in on Open Access in Ukraine: Trends and Patterns

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Emergence and development of Open Access (OA) policies and initiatives

2006 The Kyiv-Mohyla American Foundation's 'Vidrodzhennya' Foundation, the EIFL's initiatives to foster open access.


2008 Belgorod Declaration on Open Access to Scientific Knowledge and Cultural Heritage.

2012 Crimean Declaration on Open Access.

2015 Decree of the Ministry of Education and Science to make dissertations freely accessible at institutional websites.

2021 Roadmap for integrating Ukraine’s research and innovation system into the European Research Area (ERA).


2022 Open Science policy of National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”.
Challenges in monitoring OA uptake

<table>
<thead>
<tr>
<th>Data sources selection</th>
<th>OA classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>● coverage of publications indexed</td>
<td>● green, gold, hybrid, bronze and closed as per Piwowar et al (2019)</td>
</tr>
<tr>
<td>● completeness and accuracy of the data</td>
<td>● Publisher Open, Other Platform Open, Closed as per COKI Open Access Dashboard <a href="https://open.coki.ac/">https://open.coki.ac/</a></td>
</tr>
<tr>
<td>● terms of access (open, proprietary)</td>
<td></td>
</tr>
<tr>
<td>● importing capabilities (API etc.)</td>
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</tbody>
</table>
Methodology

Dimensions: 153,299
WoS (via InCites): 85,867
Scopus (via SciVal): 98,683
Crossref Metadata Search: 30,542

Dimensions without DOI: 1,766
WoS without DOI: 13,060
Scopus without DOI: 15,716

Metadata extraction: 337,849

DOI found: 5,199
Duplicate: 121,595
Publications with DOI: 312,506
OA status from Unpaywall: 187,135
Final dataset: 190,911
No OA metadata: 3,776
Discipline mapping

*The OECD Category schema corresponds to the Revised Field of Science and Technology (FOS) Classification of the Frascati Manual*
What is the fraction of OA publications?

- Overall OA share was 71.5%, ranging from 37.6% in 2012 to 82% in 2021.
- Number of publications increased significantly from 7,454 in 2012 to 35,623 in 2021;
- Prevalence of paywalled publications showed a steady decline, from 62.4% in 2012 to 18% in 2021.
What is the prevalence of OA subtypes?

- 48.1% of papers are available under the gold OA, followed by bronze OA 12.8%, hybrid OA 5.6% and green 5%;

- The share of green OA publications dropped from 8.9% in 2012 to 3.4% in 2021, while the prevalence of gold OA increased dramatically from 12% in 2012 to 59.8% in 2021.
How does OA vary by research fields?

- Humanities — 89,7%
- Social Sciences — 88,5%
- Medical and Health Sciences — 76,4%
- Agriculture Sciences — 76,1%
- Multidisciplinary — 67,8%
- Engineering and technology — 57,3%
- Natural Sciences — 55,8%
How dominant are international publishers in disseminating UA research?

<table>
<thead>
<tr>
<th>Publisher</th>
<th>articles, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Springer Science and Business Media LLC</td>
<td>7,8%</td>
</tr>
<tr>
<td>Elsevier BV</td>
<td>6,8%</td>
</tr>
<tr>
<td>LTD Ukrinformauka</td>
<td>4,9%</td>
</tr>
<tr>
<td>Private Company Technology Center</td>
<td>3,6%</td>
</tr>
<tr>
<td>Publishing House Helvetica</td>
<td>2,7%</td>
</tr>
<tr>
<td>Pleiades Publishing Ltd</td>
<td>2,7%</td>
</tr>
<tr>
<td>Taras Shevchenko National University of Kyiv</td>
<td>2,5%</td>
</tr>
<tr>
<td>Oles Honchar Dnipropetrovsk National University</td>
<td>2,0%</td>
</tr>
<tr>
<td>Publishing House Zaslavsky</td>
<td>1,8%</td>
</tr>
<tr>
<td>Kyiv Politechnic Institute</td>
<td>1,7%</td>
</tr>
<tr>
<td>IOP Publishing</td>
<td>1,7%</td>
</tr>
<tr>
<td>others</td>
<td>61,6%</td>
</tr>
</tbody>
</table>

- Springer Science & Business Media published 7,8% of 187,099 articles; Elsevier — 6,8%;

- 7 out of 10 most popular publishers were identified to be national publishers and university presses with a high level of open access publications;
What are the most popular repositories for self-archiving?

- arXiv
- National Academy of Sciences of Ukraine repository
- Electronic Sumy State University Institutional Repository
- Europe PMC
- HAL - Hyper Articles en Ligne
- RePEc: Research Papers in Economics
- eNTUKhPIIR
- Hungarian Academy of Sciences
- LA Referencia
- MPG.PuRe

Among the top repositories, 3 out of 10 were national repositories.
Conclusions & insights

- The high share of OA in the country can be explained by habits of UA researchers to publish their research in national journals, which in its great majority are OA.

- Ukrainian scientific-communication infrastructure is of significant importance to disseminate national research. It predominantly owned by public universities and research institutions, is non-profit.

- Developing a module for OA monitoring within the National Research Information System will provide a comprehensive picture of the OA landscape.

- Further research needed to estimate institutional findings of OA.

What path to choose to increase OA share in Ukraine?
Initiatives to keep Ukrainian publishing afloat
Supporting Ukrainian Editorial Staff which provided both mentoring and financial support - https://www.operas-eu.org/projects/sues/

Supporting Ukrainian Publishing Resilience and Recovery (SUPRR) Initiative to support Ukrainian publishing now and after the war - https://suprr.org/

Electronic Preservation Project for Ukrainian OA journals of TIB relevant subjects (EPP UA) - https://doi.org/10.6084/m9.figshare.23631969.v1
Thank you for your attention!

Questions?

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References & materials


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