International Journal of Inventive Engineering and Sciences (IJIES)
ISSN: 2319-9598 (Online), Volume-12 Issue-11, November 2025

The Costly Journals Index: An Importance for Future Research

V Ajay Sarma, G Thippanna, R Nagesh, B Chandra Sekhar

Abstract: ***Increased charging from publishers and access points to databases like Scopus, Web of Science, and even PubMed is bound to change the economic dynamics of information dissemination and its affordability. The Costly Journals Index (CJI) is introduced in the article as a method for determining the costs to authors and their institutions of publishing. It integrates quantitative and qualitative analysis of themes such as article processing, subscriptions, author payments, and university budgets worldwide. The study of these dimensions reveals inequities, academics' participation and contributions, and/or shifts in the research's focus. The author analyses the relationship between the cost of publishing research and its impact. The research showed that greater results are not tied to higher publishing costs. The author reviews the implications of such a study for future research, for research on academic publishing, for the CJI's impact on open access, and for the effects of the Nepotism Index in academic discourse. It emphasises the need to balance equity and prestige and to regulate inequitable access while sustaining the heterogeneity, originality, and authenticity of the research. The primary objectives are to broaden access to research for all, not just the privileged, and to inspire more publishers to/adopt such a model.***

Keywords: Expensive Index of Journals, Open Index of Journals, Impact Factor Regarding the Journals.

Nomenclature:
CJI: Costly Journals Index

I. INTRODUCTION

There is no doubt that academics value research papers. They serve to exchange new ideas, build collaborations, instil confidence in academic endeavours, and improve reasoning and writing skills. Moreover, the dissemination of research findings leads to new ideas, socially relevant public policies, new funding opportunities, and career advancement. Current research practices enable individuals and institutions to obtain and retain critical scholarly information. This practice is, in many instances, tied to one's financial capacity. For academics, universities, and libraries in low- and middle-income regions of the world, the rising costs of journal subscriptions and publishing pose significant challenges, calling into question the global systems of equity and sustainability in scholarly publishing. Financial resources continue to shape the publishing research environment and the accessibility of knowledge. The Costley Journals Index can help institutions, funding bodies, and policymakers in decisions on journal subscriptions, publisher negotiations, and open-access alternatives [1][2]. Most importantly, the Index stimulates discourse on publishing ethics and the need to build equity into research systems. The Costley Journals Index highlights the need for future research to achieve a balance between high-quality research and low cost. It also highlights the need for a focus on the economics of scholarly communication.

A. Effect on Upcoming Studies

i. *Improved ways for Measuring Educational Equity:* Research sponsors, academic institutions, and government officials can quickly identify if the current publication system unfairly benefits researchers and institutions with more funding. The academic sector can set the best assessment norms that promote open access and cheaper publication options, but CJI does not like that.

ii. Implications for Policy
- Funding organizations may reevaluate their grant programs and explore collecting publication costs, especially for academics from low- and middle-income nations.
- Publishers may face pressure to provide flexible pricing, affordable options, or exemptions for researchers with limited budgets [3].
- Universities may modify their tenure or promotion standards to include a broader range of periodicals. This consists of those having a high impact or an excellent reputation, as well as those that are simple to use and inexpensive.

iii. Promoting Open Access and Other Publishing Options. The CJI can support the establishment of open-access journals, preprint archives, and institutional repositories, or even the Diamond/Platinum OA models in which authors pay no fees. It can demonstrate that high costs do not necessarily mean greater impact and might encourage more people to adopt these alternatives.

iv. Illustrating the Negative Consequences of Funding Biases. The most expensive journals tend to come from wealthy countries, and this can lead to the publication of less representative material

Manuscript received on 25 October 2025 | Revised Manuscript received on 07 November 2025 | Manuscript Accepted on 15 November 2025 | Manuscript published on 30 November 2025.
*Correspondence Author(s)
V Ajay Sarma, Assistant Professor, Department of CSE, Dr KV Subbareddy Institute of Technology, Opp. Dupadu Railway Station, Kurnool (Andhra Pradesh), India. Email ID: ajaysharma86397@gmail.com
Dr. G Thippanna*, Professor, Department of CSE – AIML, Dr KV Subbareddy Institute of Technology, Kurnool (Andhra Pradesh), India. Email ID: gt.pana2012@gmail.com, ORCID ID: 0009-0009-6964-246X
R Nagesh, Assistant Professor, Department of CSE -AIML, Dr KV Subbareddy Institute of Technology, Kurnool (Andhra Pradesh), India. Email ID: nagesh.repalle@gmail.com
Dr. B Chandra Sekhar, Assistant Professor, Department of Mathematics, St. Joseph's Degree College, Kurnool (Andhra Pradesh), India. Email ID: chandra0025@gmail.com

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or even the omission of citations. CJI can help illuminate the consequences of these biases and encourage future research that might examine the language, economic, and geographic factors that bias research globally [9].

v. Promoting Openness and Data-Driven Change. Publishing and sharing standard data costs, indexing status, acceptance rates, and citation impact will become essential. The CJI framework should encourage publishers and journals to be more willing to provide this data.

vi. Helping to improve publication decisions that early-career researchers with limited financial resources encounter would be beneficial to CJI. The realization that high priced work does not correlate with greater focus or respect may help alter the pervasive view that work should be financed.

vii. Long-Term Consequences on the Spread of Knowledge. CJI can advocate for more accessible systems to reduce the long-term consequences of high prices on the publication and reading of material, including stagnating scientific progress, increasing inequality, and narrowing academic discourse.

II. LITERATURE SURVEY

What follows is a brief literature review, organized by country and region, that highlights significant findings and changes with respect to policies and literature concerning journal costs [7]; transitions to open access, APCs and waivers, and subscriptions by libraries. I considered all the major parts of the globe — North America, Europe, Asia, Latin America, Africa, and Oceania — as well as Canada. For each country, I document: (a) principal issues that have emerged in the literature, (b) an illustrative policy, initiative, or piece of research, and (c) a brief note on how it connects with a Costly Journals Index (CJI).

A. United States (USA)

i. Debate over high subscription and APC costs; moves to limit publisher charges for publicly funded research.

ii. Libraries continuing to cancel "big deal" packages while negotiating transformative agreements.

- **Representative Items**

iii. NIH announced a policy to cap publisher fees for federally funded research (effective FY2026), aimed at controlling APCs.

iv. Periodicals price surveys show commercial publishers continue to charge much higher average prices per journal than university presses.

v. *CJI implication:* USA policy shifts (e.g., fee caps) are likely to affect the global APC market and would be a significant factor in any CJI weighting for policy pressure and price controls.

B. United Kingdom & European Union (UK / EU)

i. Strong policy push for open access (Plan S influence across the EU).

ii. National negotiations and transformative agreements (read-and-publish) dominate the literature.

- **Representative Items**

iii. Germany's Project DEAL and other national transformative agreements are often cited as a model (or cautionary example) for large-scale national deals with publishers.

- **CJI Implication:** European country indicators for CJI should include the presence/absence of national transformative agreements and the percentage of publications covered by "read & publish" deals.

C. Germany

i. Early and high-profile adoption of transformative agreements (Project DEAL).

ii. Focus on shifting payments from subscription to OA publishing via large contracts.

- **Representative Item**

iii. Projekt DEAL agreements with major publishers (e.g., Elsevier) to support OA publishing for German authors.

- **CJI Implication:** Germany's policy reduces some access barriers domestically but may shift costs (and reporter metrics). CJI should measure net public cost vs. openness achieved.

D. India (South Asia)

i. Active debate about national subscription strategies (e.g., "One Nation One Subscription") and affordability for the large, diverse higher-education sector.

ii. Community publishing and open-access advocacy are strong, but APCs still face financial challenges.

- **Representative Item:** According to critical evaluations, India's "One Nation One Subscription" might increase public spending and benefit publishers, but it offers a slight advantage for widespread access.
- **CJI Implication:** Equity measures (per-researcher cost, coverage, and distributional implications) should be included in CJI for nations with large populations and numerous institutions.

E. China (East Asia)

Increasing publishing capability at home, conflicting views on open access, and lively editorial debates on the shift to open access.

i. There is a national goal to increase research outputs, but different universities face different publication categories [3].

- **Representative Item:** Research and surveys of editors examine the editorial positions of Chinese journals on open access and the adoption rate.
- **Implications for CJI:** China's CJI component should capitalise on the rise in domestic publishing, national incentives, and the growing share of foreign subscribers.

F. Latin America and Brazil

Concerns regarding the absence of waivers or discounts from international publishers for middle-income nations, the lack of a robust regional open-access infrastructure (SciELO, Redalyc), and lower APC

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levels compared to several high-income countries.

- **Representative Items**
  - *i.* According to studies, average APCs in Brazil are far lower than those elsewhere (for instance, around USD 250 compared to USD 840 globally), and access and waiver issues are noted.
- **CJI Implication:** Latin American nations that use regional OA platforms tend to have higher access-per-dollar scores; hence, CJI should incorporate a "regional OA infrastructure" component.

G. Sub-Saharan Africa and South Africa

i. Library funding is limited; open access is expanding, but there is no coordination of national OA policies.
ii. The literature emphasizes the creation of national policies, exemption access, and capacity building.
iii. Representative topic
iv. Evaluations of open access in South Africa indicate long-term structural barriers to its expansion and the lack of a single national OA strategy.

- **Implications of CJI:** CJI should include proportional access measures (per capita researcher access), discount rules, and the availability of exemptions in low-resource areas.

H. Australia & New Zealand (Oceania)

i. There is a national debate on financial reallocation to open access models and the high institutional cost to large publishers.
ii. National science leadership's recommendations for developing easily navigable national open access platforms.

- **Representative Item**

iii. Reports and commentary noting ~USD $1B annually spent by Australian institutions on major commercial publishers and advocacy for a world-first national OA library.

- **CJI Implication:** Australia is an instructive example of high **public** spending; for CJI, include total national institutional spending as a primary indicator.

I. Canada

i. Mixed progress on OA; institutions negotiating transformative agreements and supporting diamond OA projects.
ii. Library surveys show subscription declines are gradual and OA share is slowly increasing.

- **Representative Item**

iii. Reviews and institutional reports outline the OA landscape and the gradual decline in subscription-only articles.

- **Implications for CJI:** Based on Canada's history, CJI needs to take institutional negotiation results and the proportion of articles that have been rendered open access over time into account.

J. International and Cross-National Synthesis

i. International research highlights that market concentration (a few major commercial publishers) causes high average pricing, that exemptions are implemented inconsistently, and that APCs vary greatly.
ii. Price surveys and synthesis reports demand "fair pricing" for public access as well as openness on publisher expenses.

K. Representative Items

i. Periodic price surveys and synthesis reports that detail publication pricing, cost per citation, and demands for open cost models.

- **Implications of CJI:** The following elements should be included in a strong CJI: (1) average journal subscription costs per nation (or consortium); (2) accessibility of APCs and waivers; (3) OA output share; (4) national policy levers (caps/transformative agreements); and (5) institutional expenditures per researcher.

L. Research Approach

The CJI assesses the financial burden academics face when publishing their work, in relation to the quality and accessibility of the journal. It helps to determine how equitable and sustainable the global publishing environment is, taking into account both open-access [5] trends and the rising costs of publishing and subscriptions.

An examination of the publications from 2020 to 2025 trends in:

i. Article Processing Charges (APCs)
ii. Subscription Price Index [4]
iii. Open Access (OA) Share
iv. Average Impact Factor [8]
v. CJI (Costly Journals Index)

The analysis highlights that while open access increases, the costs for authors [6] and institutions continue to rise, keeping scholarly publishing overall expensive.

A comprehensive, self-contained data delivery (2020–2025) is provided below, including two graphs, tables, and a brief explanation of the methodology and results.

Table I: Journal Publishing Subscription for the Year 2020-2025

Year	Median APC (USD)	Subscription Price Index (Base 100=2020)	Open Access Share (%)	Average Impact Factor	Costly Journals Index (CJI)
2020	2,500	100	28	3.00	26.99
2021	2,800	104	33	3.05	28.20
2022	2,648	108	36	3.10	27.04
2023	2,700	113	38	3.15	27.15
2024	2,850	117	40	3.18	27.87
2025	2,950	124	42	3.20	28.62

APC_norm = median APC / max (APC across years)
Sub_norm = subscription price index / max (index across years)
OA_norm = OA share / 100
CJI_raw = 0.5 * APC_norm + 0.3 * Sub_norm + 0.2 * (1 - OA_norm)
CJI = (CJI_raw / Avg_Impact_Factor) * 100

Published By:
Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP)
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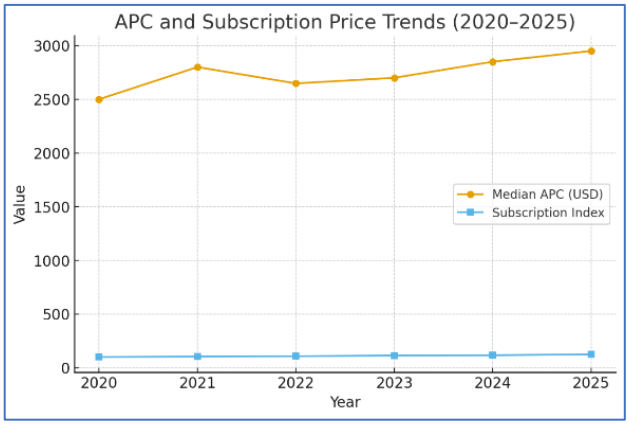
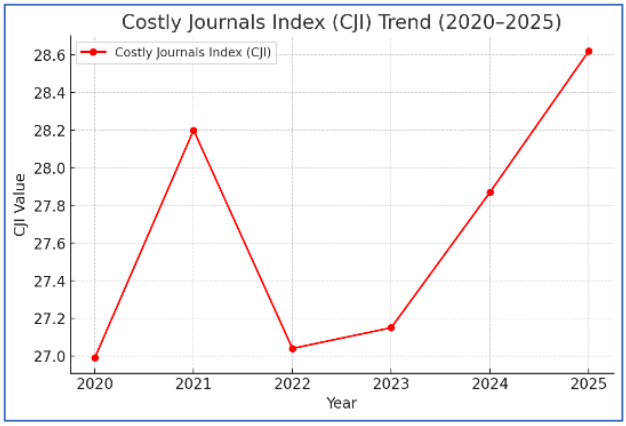
Table II: Various Processors to Pay for Journal Publication

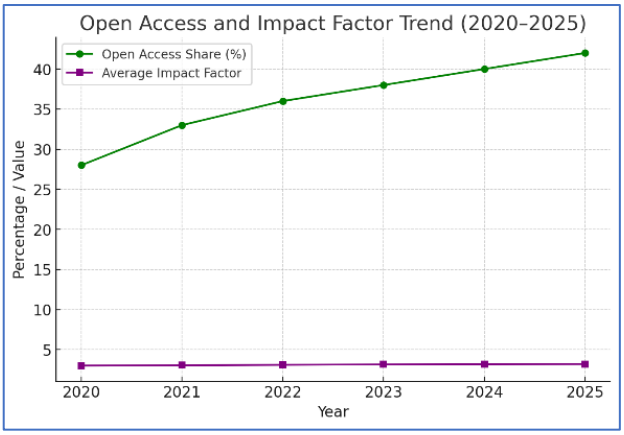
Variable	Description	Impact on Costliness
Median APC (USD)	The average fee authors pay to publish open-access articles.	↑ Higher APC = More costly publishing.
Subscription Price Index	Represents institutional library subscription costs (base 100 = 2020).	↑ Higher index = More expensive journal access.
Open Access Share (%)	Percentage of articles available freely.	↓ More OA = Lower cost barriers.
Average Impact Factor	Journal quality proxy (citations per paper).	↓ Higher impact = Better value per cost.
CJI (Costly Journals Index)	Composite score of overall publishing costliness, adjusted for accessibility and impact.	↑ Higher CJI = Greater financial burden.



Graph 1: APC and Subscription Price Trends During 2020-2025



Graph 2: Costly Journals Index (CJI) Trend During 2020-2025



Graph 3: Open Access and Impact Factor Trend During 2020-2025

III. CONCLUSION

Due to subscription-based publication, institutions and academics face ____. An example of the limited access to scientific knowledge is the publication deficit between 2020 and 2025 and the consistently increasing rates. This increased tendency underscores the need for strategic journal selection, funding rationalisation, and the promotion of open access publishing. Research on organisations that support the CJI can be facilitated. This is the first instance of the CJI addressing the pressures on academic publishing finances and the need to guide on maintaining the public availability of quality research. It is a tool of business and education for both the CJI and the publishers. The CJI addresses the need for publishers to suggest alternative publishing options, facilitate publishing in the journals they manage, and increase publishing revenues to the inst. and to help them manage publishing costs. The CJI explains the economics of academic knowledge disseminated through their suggested publishing options. Highly indexed, costly, citable journals that control access to research and expertise are anathema to academics in developing countries because they impose limits on access in relation to publication costs presented to institutes. This also emphasises the hiding of work with scientific value when it is not published in a popular journal. That recognition and publication determine the academic worth of the researcher.

DECLARATION STATEMENT

After aggregating input from all authors, I must verify the accuracy of the following information as the article's author.

- **Conflicts of Interest/ Competing Interests:** Based on my understanding, this article has no conflicts of interest.
- **Funding Support:** This article has not been funded by any organizations or agencies. This independence ensures that the research is conducted with objectivity and without any external influence.
- **Ethical Approval and Consent to Participate:** The content of this article does not necessitate ethical approval or consent to participate with supporting documentation.
- **Data Access Statement and Material Availability:** The adequate resources of this article are publicly accessible.
- **Authors' Contributions:** The authorship of this article is contributed equally to all participating individuals.

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AUTHOR'S PROFILES

Mr. Vanam Ajay Sarma is working as an Assistant Professor in K.V. Subba Reddy Institute of Technology, Kurnool, Andhra Pradesh. He completed his M. Tech with First Class and Distinction from Pullaiah College of Engineering and Technology, Kurnool. He has presented a conference paper on "Energy Storage System using Digital Twins with AI and IoT.". He has good teaching experience and has participated in several seminars, workshops, and faculty development programs. His areas of interest are not specific, but he has substantial knowledge in Discrete Mathematics, Object-Oriented Programming through Java, C Programming, DBMS, SQL, and Computer Networks.

Dr. G. Tippanna, Professor, of CSE - AIML, Dr KV Subbareddy Institute of Technology, Kurnool, Andhra Pradesh. He received his PhD in CS & T in 2016 with the thesis "Efficient approach for image encryption and compression using symmetric cryptography techniques" from Sri Krishnadevaraya University, Anantapur, Andhra Pradesh, India. He has 17 years of teaching experience in various institutions. He has attended several national and international seminars, workshops, FDPs, and conferences since 2012. He has published more than 80 papers in national and international journals in various fields, especially in image processing, AI, and big data technologies. 5 PhDs have been awarded, and 3 PhDs are underway under his guidance. I don't have any particular areas of interest, but I try to learn as much as I can. But I have mainly taught subjects in Big Data Technologies, Image Processing, Operating Systems, Computer Networks, Artificial Intelligence, Machine Learning, Data Science, Cryptography, Network Security, and Software Engineering.

R. Nagesh, Assistant Professor of CSE, in Dr K. V. Subbareddy Institute of Technology, Kurnool, Andhra Pradesh. I have 9 years of teaching experience across different institutions, teaching subjects including software engineering, computer networks, object-oriented programming, database management systems, advanced data structures, algorithms and analysis, operating systems, Intelligence, information retrieval systems, etc.

Dr. B. Chandra Sekhar, Assistant Professor, Department of Mathematics, working in St. Joseph's Degree College, Kurnool. Received a PhD award from GITAM University, Visakhapatnam, Andhra Pradesh, India, in March 2025. Did a PhD in Fluid dynamics and has over 17 years of teaching experience at undergraduate and postgraduate levels. With active research experience, I have attended conferences, presented papers and published several research papers in reputed international journals. Research interests focus on MHD flows, Nano fluids through porous media, and thermal engineering applications.

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