



Universal Access to Electronic Information Resources

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Outline

- **Incentives**
- **Open Access**
- **Historical Review of Journal Development**
- **Initiative milestone**
- **Milestone documents**
- **Purpose**
- **Current model**
- **Related issues**
- **Suggestion**
- **Conclusion**



*The more e-access,
the more pricing dilemma is?*





Big Deal?

Or

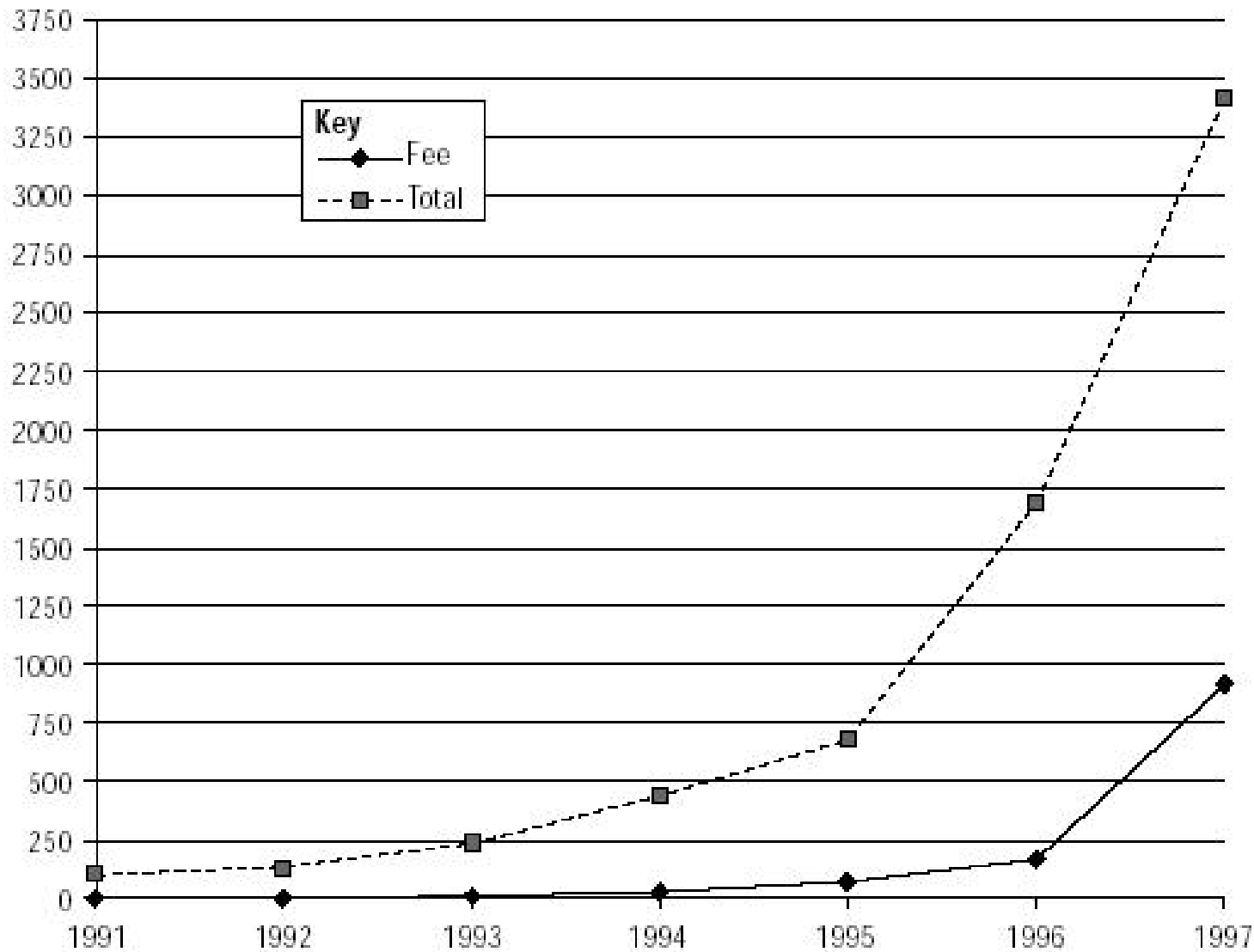
Big Chill?





*Are we stuck into
the Faustian Bargain?*

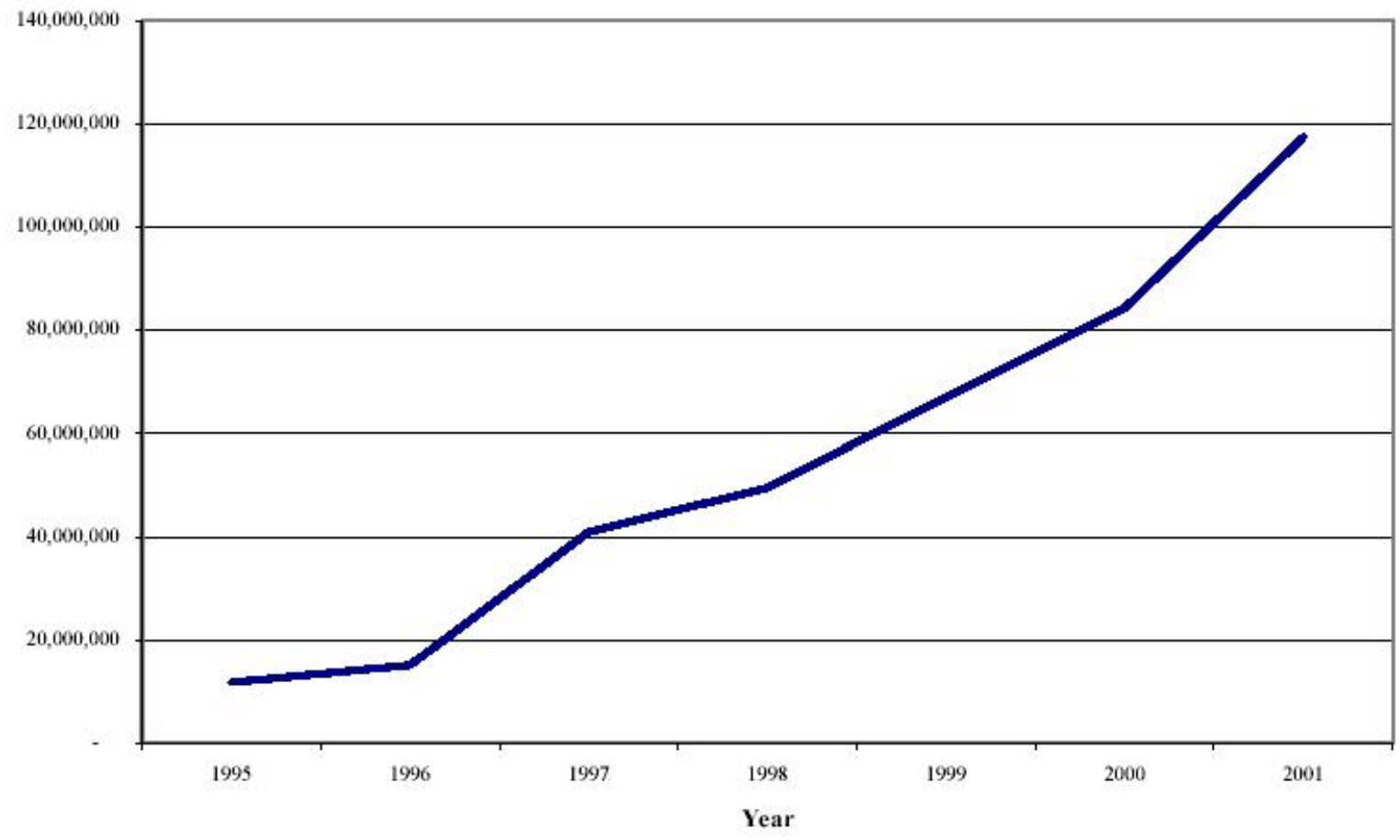




Source: Mogge 1999 p. 23



Total Electronic Serials Expenditures, 1995-2001

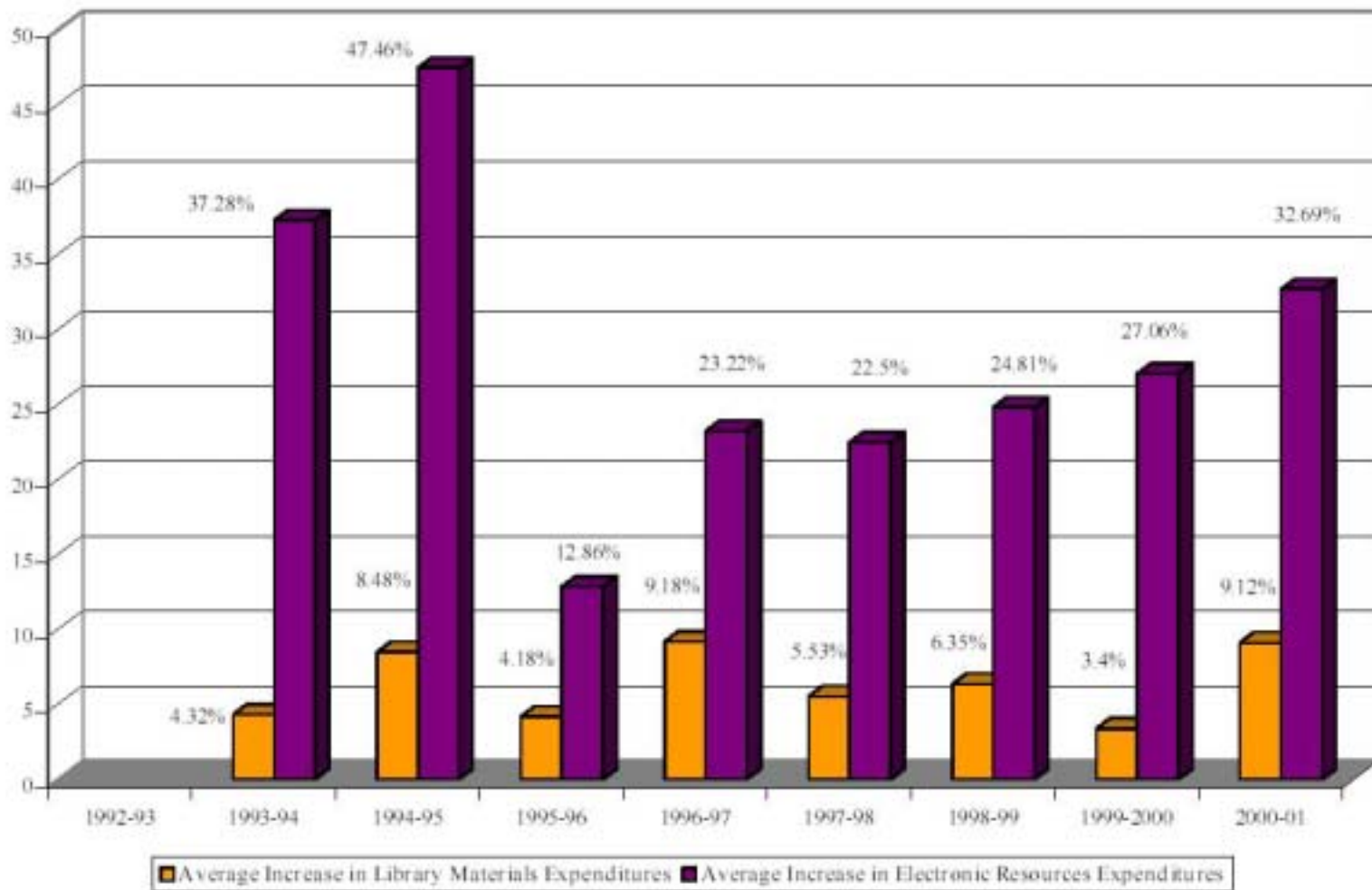


Source: Young, Kyrillidou and Blixrud, 2002





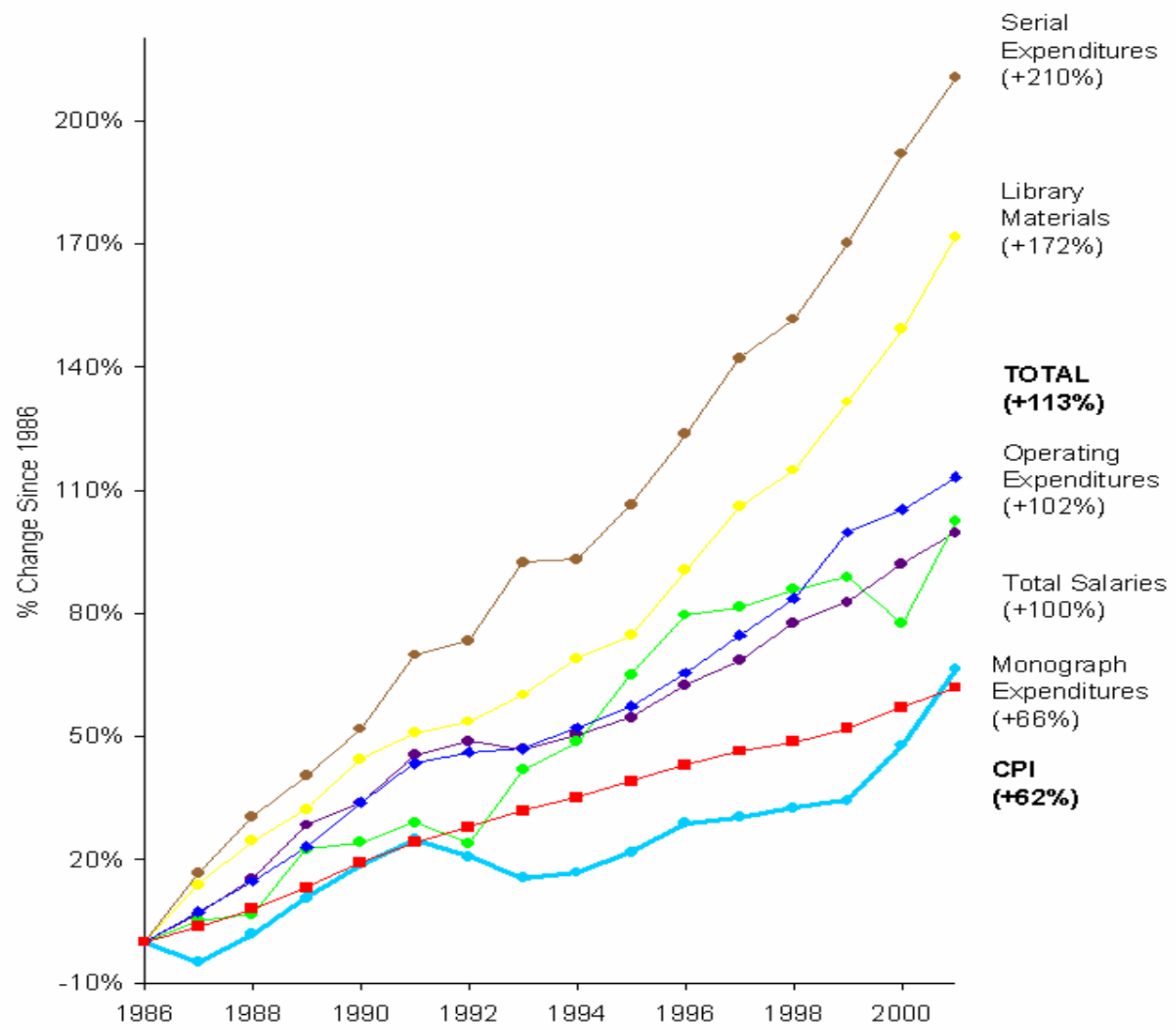
Average Yearly Increases in Electronic Resources and Total Library Materials Expenditures



Source: Young, Kyrillidou and Blixrud, 2002



Graph 4
**Expenditure Trends
in ARL Libraries, 1986-2001**



Source: *ARL Statistics 2000-01*, Association of Research Libraries, Washington, D.C.

Source: Young and Kyriallidou 2002





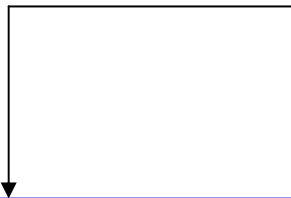
Incentives

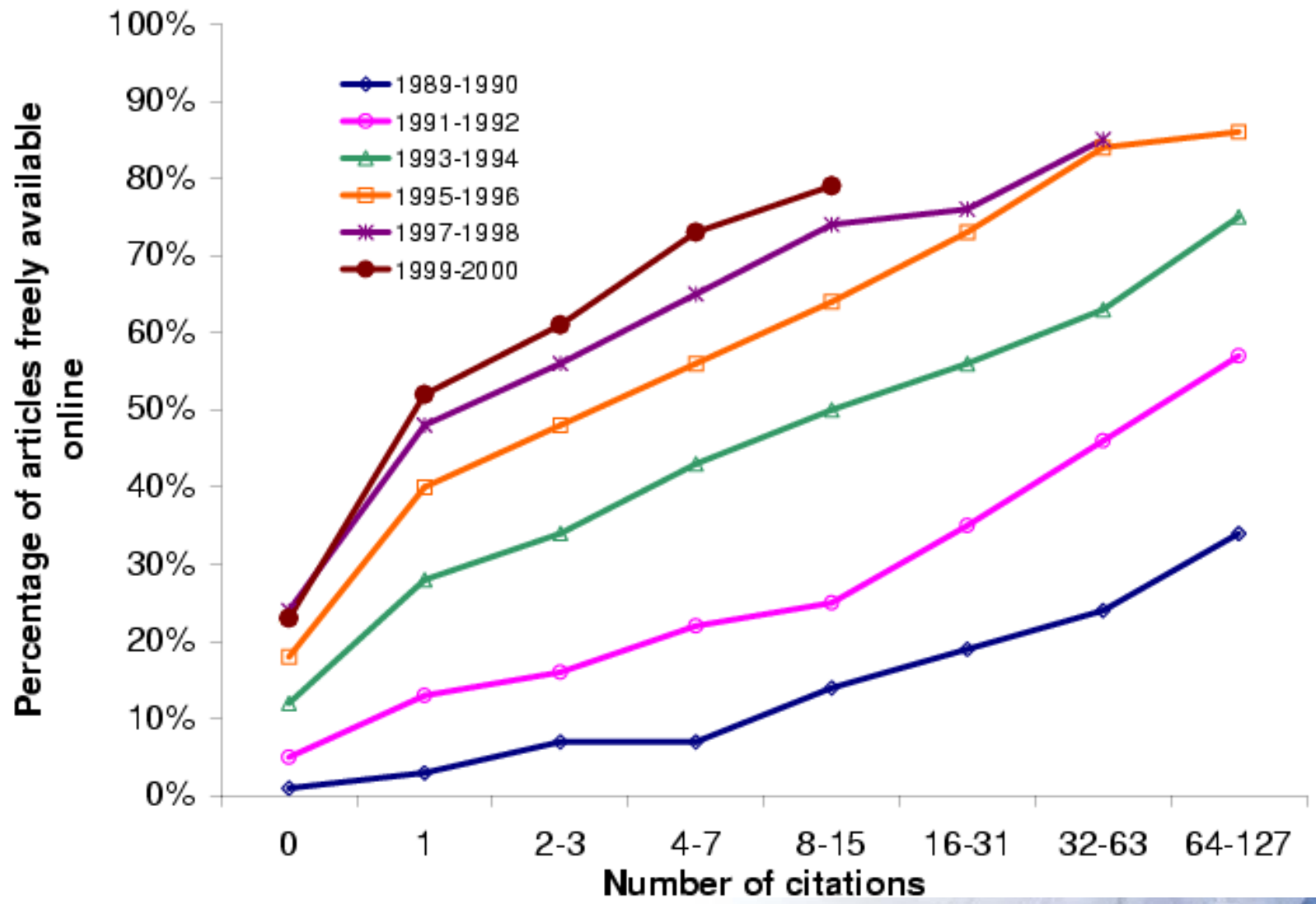
*Serial Pricing Crisis or
Serial Crisis*

Scholarly Publishing Crisis

Scholarly Communication Crisis

Information Divide





Source: Lawrence 2001, p. 521



Historical Review of Journal Development¹

➤ 1665 –

➤ **Philosophical Transactions of the Royal Society of London**

- Dealt with new information, really aimed at **creating a public record of original contributions to knowledge.** (Guédon, 2001)
- Reached a wider audience.
- Peer review was instituted as a means of screening and improving what was published.
- Citations to earlier articles provided a way to weave previous research into the fabric of the new. (Walker, 1998)

➤ **Journal des Scavans**

A French Publication as Republic of Letters. A news-oriented patterns of manuscript epistolary exchanges. It stands closer to something like Scientific American than to a modern scholarly journal. (Guédon, 2001)



Historical Review of Journal Development²

➤ **1960s**

- **Most societies recovered publication costs largely from members' dues, which included a journal subscription.**
- **The number of articles published by each author was relatively small.**
- **Library subscriptions were not a major source of income for publishers.**
- **Commercial publishers were generally not attracted to the field because there was little potential for profit.**



Historical Review of Journal Development³

➤ **Post-1961**

- **Societies soon faced problem of having to reject good manuscripts and to delay publication of accepted manuscripts because their journals and their ability to subsidize members' publication were at capacity.**
- **To alleviate the financial strains on journal publishing, the federal government approved the payment of page charges by federal agencies and from federal grants to nonprofit publishers.**



Historical Review of Journal Development⁴

➤ **Post-1961**

- Societies quickly took advantage of this new source of revenue **to publish more pages** in their established journals and **to start new journals**.
- **Commercial publishers** seized the opportunity to offer scientific investigators new outlets for their manuscripts.
- Commercial publishers **started new journals in long-established fields**; but, of greater impact, they identified new or newly popular research areas and established journals in those specialist.



Summary of Journal Development¹

A Public Registry of Discoveries

Publication of journals remains little changed

*Federal funding incorporated into journals and
author started to be charged for publication.*

*Commercial publishers entered into
scientific publishing and dominate it.*

Serial crisis becomes an issue gradually.



Summary of Journal Development²

<i>Registration</i>	<i>Certification</i>
<i>Awareness</i>	<i>Archiving</i>



What is Open Access¹

➤ User's aspect

Its **free availability** on the public Internet, **permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the Internet itself.**



What is Open Access²

➤ Author's aspect

The only constraint on reproduction and distribution,
and the only role for copyright in this domain,
should be give authors control over the integrity of their work and the right to be properly acknowledged and cited.



Initiative Milestones

- **1991 – arXiv**
- **1995 – MDPI
(Molecular Diversity
Preservation
International)**
- **1998 – SPARC**
- **1999 – BMC
(BioMed Central)**
- **2000/02 – PMC
(PubMed Central)**
- **2000/10 – PLoS**
- **2001/01 – OAI**
- **2002 – OSI/Open
Access Program**



Milestone Documents

- **1995 - Subversive proposal (ARL)**
- **2000 – Tempe Principles (ARL)**
- **2001**
 - **Declaring Independence (SPARC)**
 - **Open Letter (PLoS)**
 - **OAI Specification**
- **2002**
 - **BOAI Statement (OSI)**
 - **Bethesda Statement on Open Access Publishing**
- **2003**
 - **Principles and Strategies for the Reform of Scholarly Communication (ACRL)**
 - **Sabo Bill**
 - **Berlin Declaration on Open Access Contribution**





Subversive Proposal

- **Will electronic technologies save us from the economic pressures of the current papyrocentric publishing system?**
- **Will they be more expensive than we dreamed?**
- **Were journal publication systems the only way authors could make their work public at all during the age when paper publication was their only option?**





Tempe Principles¹

- **The cost** to the academy of published research should be contained so that access to relevant research publications for faculty and students can be maintained and even expanded.
- **Electronic capabilities should be used**, among other things, to: provide wide access to scholarship, encourage interdisciplinary research, and enhance interoperability and searchability. Development of common standards will be particularly important in the electronic environment.



Tempe Principles²

- **Scholarly publications must be archived in a secure manner so as to remain permanently available and, in the case of electronic works, a permanent identifier for citation and linking should be provided.**
- **The system of scholarly publication must continue to include processes for evaluating the quality of scholarly work and every publication should provide the reader with information about evaluation the work has undergone.**





Tempe Principles³

- **The academic community embraces the concepts of copyright and fair use and seeks a balance in the interest of owners and users in the digital environment. Universities, colleges, and especially their faculties should manage copyright and its limitations and exceptions in a manner that assures the faculty access to and use of their own published works in their research and teaching.**





Tempe Principles⁴

- **In negotiating publishing agreements, faculty should assign the rights to their work in a manner that promotes the ready use of their work and choose journals that support the goal of making scholarly publications available at reasonable cost.**
- **The time from submission to publication should be reduced in a manner consistent with the requirements for quality control.**





Tempe Principles⁵

- To assure quality and reduce proliferation of publications, **the evaluation of faculty should be place a greater emphasis on quality of publications and a reduced emphasis on quantity.**
- In electronic as well as print environments, scholars and students should be **assured privacy** with regard to their use of materials.





Declaring Independence

- **To re-think how to solve the existing issues of serial crisis and scholarly communication crisis.**
 - **Step 1: Does your journal meet its primary goal – To serve its community?**
 - **Step 2: Exploring alternative options**
 - **Step 3: Evaluating the options**



Open Letter

➤ **Goal**

is urging publishers to allow the research reports that have appeared in their journals to be distributed freely by independent, online public libraries of science.

➤ **Domain**

is focused on medicine and life sciences.





OAI Specification

- Can be treated as a **promotion and discovery tool** for scholarly communication on Internet.
- Is a **protocol to harvest data** from electronic materials on Internet – OAI-PMH(protocol for metadata harvesting)
- Is an adoption of **DC with un-qualifiers.**



BOAI Statement

- **Self-archiving or institution repository**
- **Open Access Journals/Publishing (OAJ or OAP)**





Bethesda Statement

- **Providing open access to the primary scientific literature, including**
 - **The organizations foster and support scientific research,**
 - **The scientists generate the research results,**
 - **The publishers facilitate the peer-review and distribution of results of the research,**
 - **And the scientists, librarians and other who depend on access to this knowledge.**



Principles and Strategies for the Reform of Scholarly Communication¹

- **The broadest possible access to published research and other scholarly writings**
- **Increased control by scholars and the academy over the system of scholarly publishing**
- **Fair and reasonable prices for scholarly information**
- **Competitive markets for scholarly communication**
- **A diversified publishing industry**
- **Open access to scholarship**

Principles and Strategies for the Reform of Scholarly Communication²

- **Innovations in publishing that reduce distribution costs, speed delivery, and extend access to scholarly research**
- **Quality assurance in publishing through peer review**
- **Fair use of copyrighted information for educational and research purposes**
- **Extension of public domain information**
- **Preservation of scholarly information for long-term future use**
- **The right to privacy in the use of scholarly information**



Sabo Bill

- **This act may be cited as the “Public Access to Science Act”**
- **Proposed by Congressman Martin Sabo of Minnesota on 7 July 2003.**
- **Goal**
Publicly funded research data should be *openly available to the maximum possible extent.*
Public funded research data are *a public good, produced in the public interest.*





Berlin Declaration

➤ **Open access contribution**

- **Encouraging researchers to publish their work according to principles of the open access paradigm.**
- **Encouraging the holders of cultural heritage by providing their resources on the Internet.**
- **Developing means and ways to evaluate open access.**
- **Advocating that open access publication be recognized in promotion and tenure evaluation.**
- **Advocating the intrinsic merit of contributions to an open access infrastructure software tool development, content provision, metadata creation, or the publication of individual articles.**

*Source: Berlin Declaration on Open Access to Knowledge
in the Sciences and Humanities, 2003*





Purpose

- To ensure **broad distribution and use of information** (ARL, 2003)
- To construct **an alternative model** to current scholarly publishing system
- **To turn** the scholarly publishing **market** from “**monopoly**” to “**be competitive**”
- To change the **Rules of Scholarly Publishing**
- **To regain** the right of fair use



Current Model¹

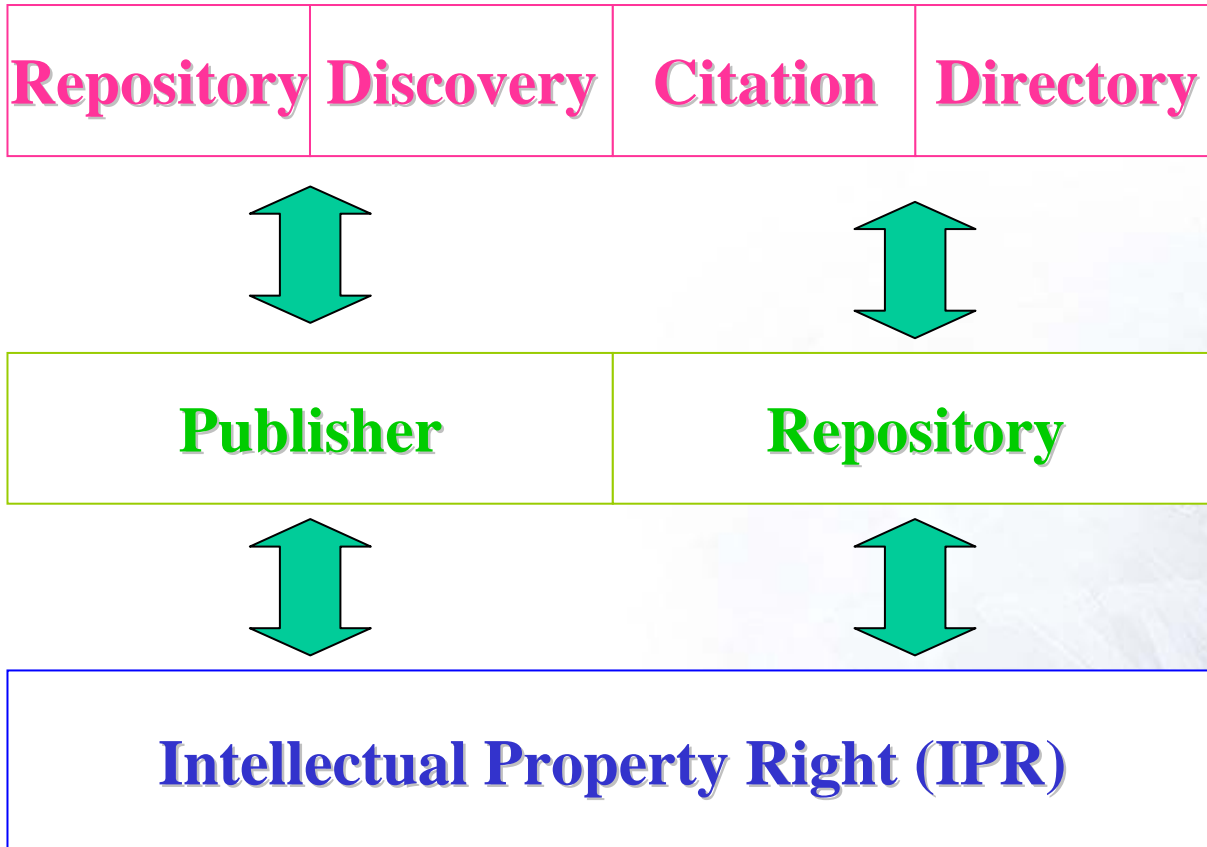
➤ **By ROLE**

- **Individual:** arXive.org, Cogprints, and RePEc
- **Institutional:** eScholarship Repository, Glasgow ePrints Service, and Knowledge Bank
- **Library:** DSpace, and Univ. of Michigan Univ. Library Scholarly Publishing Office
- **Professional:** SPARC, ELSSS, and Stoa
- **Organizational:** BMC, GNU EPrints Software, PLoS
- **National:** FAIR, and SciELO





Current Model²





Current Model³

- **IPR: OSI, PLoS, and ROMEIO**
- **Enabling IT**
 - **Repository: CDSware, DSpace, Eprints, Fedora, I-TOR, and MyCoRe**
 - **Discovery: OAI**
 - **Citation: CiteSeer**
 - **Directory: DOAJ (Directory of Open Access Journals)**
- **Publisher: BMC, PMC, PLoS, and SPARC**
- **Repository: either by institution or discipline**



Related Issues¹

- **Funding:** for paper submission from author to publisher
- **Quality assurance**
 - Traditional peer review
 - **Overlay journal:** is to separate the peer review from the publication.
 - In addition to traditional peer review, it makes the publications available through open access archives at the same time. (Buckholtz, Dekeyser, Hagemann, Krichel and Van de Sompel, 2003)
- **Paper submission**



Journal List of Paper Rejection¹

- **American Journal of Clinical Nutrition**
- **American Journal of Psychiatry**
- **American Journal of Roentgenology**
- **Arteriosclerosis, Thrombosis & Vascular Biology**
- **Biology of Reproduction**
- **Blood**
- **Circulation**
- **Circulation Research**
- **European Journal of Biochemistry**
- **Hypertension**
- **JAMA**
- **Journal of Cell Biology**



Journal List of Paper Rejection²

- **Journal of Experimental Medicine**
- **Journal of General Physiology**
- **Journal of General Virology**
- **Journal of Histochemistry and Cytochemistry**
- **Microbiology**
- **New England Journal of Medicine**
- **Pediatrics**
- **Pediatrics in Review**
- **Science**
- **Stroke**



Related Issues²

➤ IPR

➤ Author

Please **copy and distribute** this article as often and as widely as possible.

➤ Publisher

No copying or further dissemination of this article is allowed.



Suggestion

➤ **Evaluation**

- **Criteria should change.**

- **Quality is much important than quantity.**

➤ **Funding for publication**

The publication cost of research results should be included into an essential part of research grant.

➤ **IPR**



Conclusion

***FREE** scholarly communication
is our common goal!*

➤ **Information availability**

Unrestricted Information Accessibility

➤ **IT interoperability**

*Clear the IT-barriers' to access
information resources in a free way.*





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*Thank for your join, and
welcome any comments!*

