

CONCORSO PUBBLICO, PER TITOLI ED ESAMI, A N. 1 POSTO DI CATEGORIA EP, POSIZIONE ECONOMICA EP1, AREA BIBLIOTECHE, PER LE ESIGENZE DI DIREZIONE DELLE BIBLIOTECHE DI AREA DELL'UNIVERSITA' DEGLI STUDI DI NAPOLI FEDERICO II (COD. RIF. 2023), INDETTO CON DECRETO DEL DIRETTORE GENERALE N. 780 DEL 23.10.2020 E PUBBLICATO SULLA G.U. IV SERIE SPECIALE — CONCORSI ED ESAMI — N. 86 DEL 03.11.2020

QUESITI ESTRATTI ALLA PROVA ORALE DEL 13 APRILE 2021 SUDDIVISI PER SCHEDA

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- **Il Consiglio di amministrazione: composizione, compiti e funzioni**

- **Information literacy e ruolo delle biblioteche**
- **Reference digitale, document delivery e digital lending**
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- **I servizi al pubblico nelle biblioteche accademiche**
- **Le risorse bibliografiche per la ricerca nell'ambito delle scienze sociali**
- **Pubblicità, diritto alla conoscibilità e limiti alla trasparenza**

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- **La bibliometria in biblioteca**
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- Biblioteche e terza missione
- La ricerca bibliografica in ambito umanistico e i software di gestione bibliografica
- Il collegio dei revisori dei conti: composizione, compiti e funzioni
- Standard bibliografici di catalogazione internazionali e regole nazionali
- Fonti bibliografiche e fonti catalografiche
- Gli organi di governo dell'Università

TEST DI LINGUA INGLESE ESTRATTI

The costs and benefits of library site licenses to academic journals

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Edited by Thomas J. Sargent, New York University, New York, NY, and approved November 19, 2003 (received for review September 3, 2003)

Scientific publishing is rapidly shifting from a paper-based system to one of predominantly electronic distribution, in which universities purchase site licenses for online access to journal contents. Will these changes necessarily benefit the scientific community? By using basic microeconomics and elementary statistical theory, we address this question and find a surprising answer. If a journal is priced to maximize the publisher's profits, scholars on average are likely to be worse off when universities purchase site licenses than they would be if access were by individual subscriptions only. However, site licenses are not always disadvantageous. Journals issued by professional societies and university presses are often priced so as to maximize subscriptions while recovering average costs. When such journals are sustained by institutional site licenses, the net benefits to the scientific community are larger than if these journals are sold only by individual subscriptions.

When academic journals were distributed only as paper editions, the obvious way for scholars to share a journal was to borrow a copy from the shelves of their university library. With the arrival of electronic access, the logistics of journal sharing has changed. Physical proximity and storage constraints, which once made libraries the natural venue for shared access, are no longer important. Despite this change, university libraries continue to act as publishers' revenue collectors and gatekeepers, by purchasing site licenses that entitle their faculty and students to access journals electronically.

Because there is no compelling logistic reason for university libraries to participate in the journal distribution process, we ask whether university wide site licenses perform a fiscal function that benefits the academic community. We find a surprising answer. If a journal is priced to maximize the publisher's profits, scholars on average are likely to be worse off when universities purchase site licenses than they would be if access were by individual subscriptions only. However, site licenses are not always disadvantageous. We show that institutional site licenses for nonprofit journals such as those published by professional societies and university presses are broadly beneficial to the scientific community.

If we use citation counts as a measure of journal quality (useful for within-field comparison, although less useful for between-field comparisons), we see that the prices charged per citation differ by an even greater margin (Table 1). The magnitude of this discrepancy is illustrated in Fig. 1, which shows library subscription price versus the number of citations for academic journals in six scientific fields.

Table 1. Mean institutional price per page and per citation for journals in six scientific fields

Field	Cost per page (U.S. \$)		Cost per citation (U.S. \$)		Year
	For profit	Nonprofit	For profit	Nonprofit	
Ecology	1.01	0.19	0.73	0.05	2000
Economics	0.83	0.17	2.33	0.15	2000
Atmosph. Sci.	0.95	0.15	0.88	0.07	1999
Mathematics	0.70	0.27	1.32	0.28	2000
Neuroscience	0.89	0.10	0.23	0.04	1997
Physics	0.63	0.19	0.38	0.05	1997

Data for atmospheric sciences (Atmosph. Sci.) are from a September 2000 University of Washington Libraries report prepared by Patty Carey, which can be accessed at www.lib.washington.edu/subject/atmosphericsci/scholcom. Data for mathematics are from the American Mathematical Society's Journal Price Survey, which can be accessed at www.ams.org/membership/journal-survey.html. Data for neurosciences and for physics are from a 1998 University of Wisconsin Libraries report by George Soete and Athena Salaba, which can be accessed at www.library.wisc.edu/projects/gisdo/cost.html. Data for economics and ecology were collected by the authors and are available by request. Citation rates are from the Institute for Scientific Information's *Journal Citation Reports*, which can be accessed at www.isinet.com.

These price differences have grown rapidly over the past 15 years. In economics, for example, the average inflation-adjusted price per page charged by commercial publishers has increased by 300% since 1985, whereas that of nonprofit economics journals has increased by "only" 50%. Studies of journal production costs indicate that the price differences over time and among journal types do not reflect differences in production and distribution costs (1–3).

Markets for information goods such as computer software or journal access are quite different from those for ordinary commodities such as shoes or houses. If you sell a house to one buyer, you cannot sell the same house to others. For each buyer, you must bear the full cost of producing an additional house. In contrast, once an information good is produced, access to this information can be sold to many different buyers with a negligible cost of extending access to an additional user. The information vendor can also sell collective access to groups of individuals in firms or universities by means of site licenses. This marketing device has no direct parallel in markets for ordinary commodities. Varian (4) presents a particularly stimulating discussion of the distinctive nature of information goods and their marketing.

Another curious feature of the market for academic journals is that publishers of major commercial journals appear to enjoy substantial monopoly power despite the absence of obvious legal barriers to entry by new competing journals. Bergstrom (1) argues that journals achieve monopoly power as the outcome of a "coordination game" in which the most capable authors and

This paper was submitted directly (Track II) to the PNAS office.

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