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Free Labor for Costly Journals?

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There is a remarkable difference between the prices that commercial publishers charge to libraries for economics journals and the prices charged by professional societies and university presses. This price difference does not reflect a difference in quality. The six most-cited economics journals listed in the *Social Science Citation Index* are all nonprofit journals, and their library subscription prices average about $180 per year. Only five of the 20 most-cited journals are owned by commercial publishers, and the average price of these five journals is about $1660 per year.

Tables 1 and 2 compare library costs and measures of cost-effectiveness for the ten most-cited nonprofit journals and the ten most-cited journals owned by commercial presses. The average price per page of the commercial journals is about six times as high and the average price per citation is about 16 times as high as for the nonprofit journals.

In Tables 1 and 2, the first column shows the year 2001 library subscription price and the second column shows the price per page (calculated by dividing year 2001 price by the number of pages published in the year 2000). The third column reports the price per citation. This is the library subscription price divided by the number of times that articles in this journal were cited in 1998, as recorded by the Social Science Citation Index. The fourth column, price per recent citation, is the library subscription price divided by the number of times that the 1996 and 1997 volumes of the journal were cited in 1998. The citation rank is found by ranking journals according to the number of times that this journal was cited in 1998.

The differences in prices and cost-effectiveness between nonprofit and commercial journals are similar for less prestigious journals. I have assembled a data-

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Table 1
Prices and Citations—Nonprofit Journals

Journal Title	*Price to Libraries*	*Price Per Page*	*Price Per Cite*	*Price Per Recent Cite*	*Citation Rank*
AEA Journal[a]	$140	$0.03	$0.01	$0.12	1
Econometrica	$214	$0.14	$0.03	$0.93	2
J Political Ec	$175	$0.10	$0.03	$0.69	3
Quarterly J Ec	$198	$0.13	$0.05	$0.70	4
J Finance	$207	$0.07	$0.05	$0.63	5
J Consumer Res	$ 99	$0.23	$0.04	$0.90	6
Ec Journal	$321	$0.16	$0.13	$1.29	8
Rev Ec Studies	$180	$0.22	$0.08	$2.34	11
Rev Ec Statistics	$200	$0.29	$0.09	$1.15	12
Amer J Ag Ec	$134	$0.11	$0.07	$1.01	14

[a] The American Economic Review, J. of Economic Perspectives, and J. of Economic Literature are sold as a package. Prices per page and per cite are calculated using total pages and cites from all three journals.

Table 2
Prices and Citations—Commercial Publishers

Journal Title	*Price to Libraries*	*Price Per Page*	*Price Per Cite*	*Price Per Recent Cite*	*Citation Rank*
J Financial Ec	$1429	$0.73	$0.53	$ 7.85	7
J Ec Theory	$1800	$0.90	$0.72	$10.40	9
J Econometrics	$2020	$0.87	$0.81	$ 8.74	10
J Monetary Econ	$1078	$0.80	$0.58	$ 9.71	13
J Public Ec	$1546	$0.72	$1.08	$10.66	19
World Development	$1548	$1.35	$1.10	$ 7.04	20
European Ec Rev	$1189	$0.65	$0.96	$ 6.83	21
J Env Ec & Mgmt	$ 650	$1.02	$0.56	$ 3.90	22
J Health Ec	$ 865	$0.98	$0.90	$ 5.41	28
Ec Letters	$1592	$1.04	$1.03	$17.12	29

base that includes essentially all academic English-language economics journals, where the area of economics is interpreted quite broadly. A spreadsheet that contains this list of 297 journals along with page counts, prices, and citation information for each journal can be found on my website at ⟨http://econ.ucsb.edu/~tedb⟩.

Table 3 reports costs, pages, and citations for journals owned by nonprofit organizations, by Blackwell Publishing, and by other commercial publishers. The prices reported are for the year 2000, the pages are calculated for the year 1999,

Table 3
Journal Statistics by Owner Type

Publisher Type	*Number of Journals*	*Total Cost*	*Total Pages*	*Total Cites*	*Price Per Page*	*Price Per Cite*
Nonprofit	91	$ 11,644	66,304	75,330	$0.15	$0.15
Blackwell	46	$ 11,807	23,574	6,335	$0.50	$1.86
Commercial	160	$100,381	113,646	40,402	$0.88	$2.48
Total	297	$123,832	203,524	122,067		

Table 4
Shares of Costs, Pages and Cites

Publisher Type	*Total Cost*	*Total Pages*	*Total Cites*
Nonprofit	9%	33%	62%
Blackwell	10%	12%	5%
Commercial	81%	56%	33%

and the total citations from the year 1998.[1] Blackwell has its own row because it occupies a special publishing niche, intermediate between other commercial publishers and the nonprofit publishers. Some Blackwell journals are owned entirely by Blackwell, some are owned jointly by Blackwell and a founding professional society, and some are wholly owned by a founding society which contracts publishing and subscription management to Blackwell. Examples of the latter include *Econometrica, Economic Journal*, and *Review of Economic Studies*. I have classified those Blackwell journals that are wholly owned by professional societies with the nonprofit journals. Thus, the Blackwell category includes journals that are partially or totally owned by Blackwell.[2] We see that just as for the elite journals listed in Tables 1 and 2, commercial publishers charge about six times as much per page and 16 times as much per citation as nonprofit publishers.

Table 4 offers an interesting perspective on journal productivity and cost. While the nonprofits are supplying most of the information used by economists, the

[1] The *Social Science Citations Index* counts citations *from* articles in only about half of the journals in my database. The journals from which articles are not counted are typically new or obscure or both. However, the *SSCI* counts citations *to* articles in all journals, whether or not citations found in the journal are counted. The totals recorded here include citations to journals whether or not *SSCI* records citations from them.

[2] It would perhaps be better to classify journals wholly owned by Blackwell with the commercial journals and keep the hybrids as a separate category. However, I have not been able to get Blackwell to provide me with a clear classification by ownership and in some cases, the distribution of ownership seems to be disputed.

commercial presses are absorbing the lion's share of library budgets. If a library were to subscribe to all of the available economics journals, it would spend less than 10 percent of its budget on nonprofit journals and these journals would provide access to more than 60 percent of all articles cited in economics. Subscriptions to the commercial journals (excluding Blackwell) would consume more than 80 percent of the library's budget but would supply only a third of all citations.

Pricing studies by librarians show that the pattern found in economics is common to many disciplines. The commercial journals are far more expensive than the journals published by the professional societies, but the most-cited and influential journals are almost universally those published at low cost by professional societies. About 50 percent of all citations in chemistry come from journals published by professional societies, but expenditure on these journals constitutes only about 25 percent of library subscription costs for chemistry journals (Wilder, 1998). Similar price discrepancies have been reported from journal price studies in agriculture, mathematics, physics, and medicine.[3]

Although our focus is on library subscription prices, it is worth noting that most journals offer discounted subscription prices to individuals. The ten most-cited nonprofit journals charge an average of about $60 per year for individual subscriptions. Prices for individual subscriptions to the top ten commercial journals range from $85 to $1187 per year, with an average of about $360 per year. Some of the leading nonprofit journals have large numbers of individual subscriptions. For example, *Econometrica* has about 2900 individual subscribers and 2400 institutional subscribers, while *Review of Economic Studies* has about 850 individual subscribers and 2000 institutional subscribers. Subscription statistics of commercial publishers are closely guarded secrets, and I have no direct evidence about their numbers of individual subscriptions.[4]

Journal Costs and Profits

Given that nonprofit and commercial journals use essentially the same technology for journal publication, the large difference in prices is not likely to be explained by differences in costs. Although most commercial publishers are unwilling to reveal information about either their costs or their numbers of subscriptions, we can use information made available by nonprofit journals to estimate the

[3] Case (1999) surveys comparisons of the cost-effectiveness of nonprofit and commercial journals in physics by Henry Barshall and a recent study of prices and usage of journals in physics, neurology, and economics. Rob Kirby presents interesting data on production costs and prices of mathematics journals on his web page at ⟨http://www.math.berkeley.edu⟩.

[4] The U.S. postal authorities require journals that are mailed from within the United States to publish their total number of subscriptions every year. However, almost all commercial journals in economics are mailed from overseas and hence are exempt from this requirement.

costs and subscriptions of the commercial journals. Tenopir and King (2000) survey several cost studies for academic journals.

The costs of publishing a journal can be usefully partitioned into *first copy costs* and *marginal subscriber costs*. First copy costs are those that are required to produce even a single issue and are independent of the number of subscribers. For an academic journal, first copy costs include the cost of managing an editorial office—primarily wages and secretarial support for editors who handle, evaluate, and comment on the papers that authors submit—and the costs of copy-editing and typesetting. Marginal subscriber costs include the cost of printing and paper, shipping and postage, and the costs of managing subscriptions.

First copy costs are roughly proportional to the number of pages published per year, while marginal subscriber costs are proportional to the number of pages times the number of subscribers. Based on the estimates of Tenopir and King (2000) and on information supplied to me by publishers of several nonprofit journals, it appears that first copy costs average about $100 per page. Most of the journals that I surveyed reported first copy costs close to this estimate, although some reported first copy costs significantly larger or smaller. The largest reported cost was about $300 per page and the smallest was about $70 per page. The marginal subscriber costs are about $.02 per subscriber per page.[5]

Although the commercial journals do not make their subscription statistics public, several nonprofit journals have been willing to share their subscription data. The information supplied by the nonprofit journals can be combined with a partial list of library holdings that is available from a consortium database which librarians use for purposes of interlibrary loans, the Online Computer Library Center (OCLC) Union Lists of Periodicals. Assuming that the OCLC registers about the same fraction of all subscriptions for nonprofit and for commercial journals, one can estimate total library subscriptions to the commercial journals.[6]

Let us consider a hypothetical journal similar to some of the elite commercial journals listed in Table 2. Suppose that this journal publishes 2000 pages per year, charges $1500 per year for institutional subscriptions, and has 1000 institutional subscribers. Its annual revenues will be $1.5 million. Using the Tenopir-King cost estimates, the journal would have fixed costs of $100 x 2000 = $200,000 and marginal costs of $.02 x 2000 x 1000 = $40,000. This would give the publisher an annual profit of $1,260,000 from library subscriptions alone. Since commercial publishers price individual subscriptions at well above marginal cost, whatever sales they make to individuals would add to this profit.

[5] Tenopir and King (2000) present a detailed breakdown of costs, including a fixed per-issue cost and a handling cost per manuscript submitted, as well as per page costs for editing, proofing, and composition. I have incorporated these charges into a per page expression based on the assumptions that a journal has 200 pages, that article length averages 20 pages, and that 20 percent of the articles submitted are published.

[6] For the nonprofit journals for which I know the *actual* number of subscriptions, the Online Computer Library Center database records about 20 percent of all U.S. institutional subscriptions. To get better estimates, I am currently collecting data from additional union lists in the United States and abroad.

What Has Happened over Time?

Eight of the ten most-cited nonprofit economics journals were founded before 1933 and nine before 1945. Eight of the ten most-cited commercial economics journals were founded between 1969 and 1974, and all ten were founded between 1966 and 1982. The currently most successful commercial journals got off to a good start by attracting prestigious editors and able authors. They were able to do so because these journals were founded at a time when the economics profession was growing rapidly and while at the same time, the existing nonprofit journals failed to expand their size and scope to accommodate the great increase in work of publishable quality. In their early years, the leading commercial journals were priced much more competitively than they are today. As their reputations grew, their publishers took advantage of their prestige by raising prices far more rapidly than did the nonprofit journals.

Tables 5 and 6 show the prices (in 2000 dollars),[7] pages per year, and price per page for nonprofit and commercial journals in 1985 and in 2001. Over this period, average real subscription price to libraries increased by about 80 percent for the top ten nonprofit journals and by 379 percent for the top ten commercial journals. Average real price per page increased by about 50 percent for the nonprofit journals and by 173 percent for the commercial journals.

In 1960 there were about 30 English-language economics journals and almost all of them were owned by nonprofit organizations. In 1980 there were about 120 such journals, half of them nonprofit and half of them commercial. By the year 2000 there were about 300 English-language economics journals with more than two-thirds of them owned by commercial publishers. Since 1995, the prices of economics journals have risen at the rate of 13 percent per year, faster than for any other discipline except military and naval science (*Library Journal*, April 15 issues, 1999, 2000).

The Association of Research Libraries has collected statistics that offer a broad picture of changes in prices and numbers of journals in the academic community in general (Kyrillidou, 1999). Between 1986 and 1998, real prices of academic journals approximately doubled, while real library budgets for acquisitions of books and journals rose by only about 50 percent. During the same time interval, the *number* of academic journals published increased by 60 percent. Libraries responded to the increased pressure on their acquisitions budget by cutting the number of books purchased by 26 percent and the number of journal subscriptions by 6 percent. Thus, despite the large number of new journals introduced during this period, libraries have been cancelling journals more rapidly than they have been adding them.

[7] Nominal dollar prices in 1985 were multiplied by 1.59 to convert to year 2000 dollars. Some 1985 journal prices were quoted in Dutch guilders, some in Swiss francs, and some in German marks. These were converted to dollars at the 1985 exchange rates, which were 3.32, 2.45, and 2.04 per dollar, respectively.

Table 5
Nonprofit Journals: Prices and Pages, 1985 and 2001
(prices for 1985 are inflated to 2000 dollars)

	Year 1985			*Year 2001*		
Journal	*Price*	*Pages*	*$ Per Page*	*Price*	*Pages*	*$ Per Page*
AEA Journals	$160	4583	$0.03	$140	4427	$0.03
Econometrica	$139	1525	$0.09	$241	1558	$0.14
J Political Ec	$ 80	1277	$0.06	$175	1337	$0.13
Quarterly J Ec	$ 77	1350	$0.06	$198	1467	$0.13
J Finance	$ 64	1528	$0.04	$207	2950	$0.07
J Consumer Res	$ 90	495	$0.18	$ 99	522	$0.19
Ec Journal	$160	1178	$0.14	$321	1983	$0.16
Rev Ec Studies	$104	725	$0.14	$180	818	$0.24
Rev Ec Statistics	$141	715	$0.20	$200	733	$0.27
Amer J Ag Ec	$ 24	460	$0.05	$134	1053	$0.10
Average	$104	1384	$0.10	$187	1637	$0.15

Table 6
Commercial Journals: Prices and Pages, 1985 and 2001
(prices for 1985 are inflated to 2000 dollars)

	Year 1985			*Year 2001*		
Journal	*Price*	*Pages*	*$ Per Page*	*Price*	*Pages*	*$ Per Page*
J Financial Ec	$175	609	$0.29	$1429	1974	$0.72
J Ec Theory	$410	1198	$0.34	$1800	2000	$0.90
J Econometrics	$463	1193	$0.39	$2020	2323	$0.87
J Monetary Econ	$146	406	$0.36	$1078	1371	$0.79
J Public Ec	$389	1187	$0.33	$1546	1817	$0.85
World Development	$413	1313	$0.31	$1548	2198	$0.70
European Ec Rev	$333	1206	$0.28	$1189	1992	$0.60
J Env Ec & Mgmt	$ 78	395	$0.20	$ 650	697	$0.93
J Health Ec	$106	389	$0.27	$ 865	1137	$0.76
Ec Letters	$341	1237	$0.28	$1592	1492	$1.07
Average	$286	913	$0.30	$1372	1700	$0.82

How Can This Happen?

There is free entry to the journal publishing industry. Libraries are not compelled to subscribe to expensive journals, and scholars are not compelled to write for them, referee for them, or edit for them. Why has competition not driven profits to zero?

To understand how a few commercial publishers have been able to extract

huge profits from the academic community, despite the possibility of new entrants into the industry and despite competition from nonprofit journals, it is useful to consider game theory's notion of a *coordination game*. In a coordination game, each player chooses an action from among several alternatives and each player's payoff increases with the number of other players whose choice is the same as her own. An equilibrium is an outcome such that given the actions of others, no player could individually benefit by switching to another action. Coordination games commonly have many different equilibria, in each of which all players choose the same action. An outcome can be an equilibrium even though there is another equilibrium that would be better for everyone and which could be reached if all players were to change simultaneously to the same new action.

The Parable of the Anarchists' Annual Meeting

This table is intended to illustrate the workings of coordination games and to show that in such games, the presence of potential competitors does not necessarily prevent monopoly pricing.

A large number of anarchists find it valuable to attend an annual meeting of like-minded people. The meeting is more valuable to each of them, the greater the number of other anarchists who attend. A meeting attended by only a few is of little value to any of them. At some time in the past, the anarchists started to gather on a particular day of the year in one hotel in a certain city. Other hotels in this and other cities would have served equally well for the meeting, but since each anarchist expects the others to appear at the usual hotel, they return every year to the same hotel on the day of the meeting.

A few years after the anarchists had established their routine, the hotel that served as their meeting place increased its prices for the day of their annual meeting. Most anarchists valued the annual meeting so highly that they continued to attend, despite the price increase. A few decided that at the higher price, they would rather stay home. The hotel owner observed that although attendance was slightly reduced, the fall in attendance was less than proportional to the price increase, and thus his revenue and his profits increased. In subsequent years, after some experimentation, the hotel owner learned that he could maximize his annual profit by setting a price on the anarchists' meeting day that was much higher than that of other hotels. After setting this price, the hotel owner proclaimed that he was offering a uniquely valuable service to the anarchists.

The anarchists were annoyed at having to pay tribute to the hotel owner for services no better than other hotels offered more cheaply. Moreover, since all of the anarchists prefer larger attendance to smaller, they were all made worse off by the fact that high prices caused some of their number to stay home. But what else could they do? Each anarchist was aware that he or she would be better off if they could all meet at one of the many other hotels offering equal physical facilities at a lower price. Given their beliefs and temperaments, the anarchists were resistant to making and obeying centralized decisions. Lacking central direction, the anarchists were unable to coordinate a move to another hotel. No individual, nor even any

small group of anarchists, could gain by moving to another hotel because small meetings, however cheap, are not worth much to any of them.

Pessimistic anarchists speculated that even if they were somehow able to recoordinate at a cheaper hotel, this victory would be short-lived. The new hotel, like its predecessor, would raise *its* prices to take advantage of the anarchists' disorderly ways. More optimistic anarchists suggested that the problem of organizing a meeting at a new hotel is not insurmountable, even for anarchists. Therefore, argued the optimists, once it is demonstrated that the anarchists will move their meeting if prices become excessive, the hotel at which they settle will moderate its prices rather than provoke another mass defection.

Like Unto . . .

Like the Anarchists' Annual Meeting, academic publishing can be understood as a coordination game, where scholars in their roles as authors, referees, editors, and readers coordinate at journals. Journals that regularly attract the most able authors, editors, and referees gain prestige and are more frequently read and cited than less prestigious journals. The most able authors prefer to publish their papers in prestigious journals where their work is more likely to be read. At any given price, more libraries will subscribe to a journal the more frequently it is read and cited, and conversely, more scholars will read from and write for a journal the more widely it is available in libraries.

There is nothing intrinsically valuable in the title of a prestigious commercial journal, nor are the services rendered by its publisher of higher quality than those offered much more cheaply by nonprofit publishers. Other firms can and do sell the same printing, mailing, copy-editing, and advertising services at prices close to average cost. (For example, Blackwell provides these services relatively cheaply for such low-priced journals as *Econometrica, Review of Economic Studies* and *Economic Journal*.) A journal has prestige simply because in the past it has served as a meeting place where able scholars have coordinated their efforts and libraries their purchases.

Much as the hotel owner in the parable found it profitable to raise his prices above prices charged by other hotels, the commercial publishers of successful academic journals have discovered that they can set their prices far above their average costs. These high prices reduce their number of subscribers but increase their profits, since the proportionate effect on quantity is less than the proportionate price increase. The profits collected by commercial journals are not payments for any input that the publisher provides, but are simply rents that they can collect because of their position as a focal point in a game of coordination.

Just as the anarchists were annoyed by the high prices at their hotel, many scholars and librarians are distressed at the way that overpriced journals drain university budgets and by the fact that since small libraries are excluded by high prices, access to scholarly work in journals is artificially restricted. It remains to

be seen whether, like the anarchists, the academic community is stuck in an equilibrium where it will continue to pay huge rents to owners of commercial journals.

What Can We Do?

Before the 1970s, almost all significant economics research was published in nonprofit journals that maintained reasonable pricing policies. Even today, the economics profession remains tantalizingly close to a satisfactory equilibrium in which almost all significant work is published in reasonably priced journals. The most prestigious journals in economics are also among the cheapest (as shown earlier in Tables 1 and 2). Moreover, about 60 percent of all citations recorded by the *Social Science Citations Index* are found in nonprofit journals whose cost is less than 10 percent of the cost of the library subscriptions to all economics journals (as shown earlier in Table 4). However, the academic community is paying dearly for the fact that coordination is imperfect, since about 80 percent of the cost of a complete economics collection is spent on expensive journals that supply only 30 percent of all citations. Let us consider some strategies that show promise of nudging our publishing activities into a new equilibrium that will better serve the academic community.

Expanding Nonprofit Journals

The most straightforward way to coordinate libraries, authors, editors, referees, and readers around reasonably priced journals would be to expand the elite journals currently published by the professional societies and university presses. As shown in Table 5, in the last 15 years, only three of the top ten nonprofit journals have significantly increased their annual number of pages. During the same time period, nine of the ten top commercial journals substantially increased their page count and the average number of pages in these journals more than doubled.[8]

Would expanding the top nonprofit journals unduly lower their standards of quality? I don't think so. During the past 20 years, the number of economics journals published has more than doubled and the number of articles per journal in the top commercial journals has also doubled. The top nonprofit journals remain the preferred outlets for most economists. Roughly speaking, the elite commercial journals lie in a second echelon, just below the leading nonprofits. Expanding the size of the top nonprofit journals would attract strong articles away from the overpriced journals.

The most successful commercial journals of economics are devoted to specific subfields of economics. Probably the main reason that these journals have succeeded is that the established elite journals tend to prefer articles of general

[8] The American Economic Association has recently made a modest step in the right direction by deciding to add one more issue per year to the *American Economic Review*.

interest and to reject more specialized articles, even though they may be of great interest to a relatively small group of readers. Hal Varian has an interesting suggestion for expanding the number of articles published by the AEA. This suggestion is modelled on procedures of the American Medical Association. If a paper is submitted to the *Journal of the American Medical Association* and the paper is rejected as being "too specialized," the paper and the associated reviews can, at the discretion of the author, be routed to the appropriate AMA specialized journal. The editor of the specialized journal can accept the paper on the basis of the original reviews or seek additional reviews. In addition to offering a home for high-quality applied work, this proposal has the advantage that a group of journals with separate editorial boards would allow for plurality and diversity of tastes, while the endorsement (and financial backing) of a major professional society would confer the prestige needed to coordinate scholars under a new banner.

Supporting New Electronic Journals

Within the last few months, some innovative and reasonably priced new electronic economics journals have appeared. Each of these new journals has recruited an impressive editorial board of prestigious and able economists and each aspires to become a major player among economics journals.

The *Economics Bulletin*, targeted as a competitor for the expensive *Economics Letters*, was introduced in spring 2001. *Economics Bulletin*, like *Economics Letters*, is a refereed journal publishing short papers in all fields of economics and is intended for wide and rapid distribution of new research ideas. Because of its high price, many smaller research libraries do not subscribe to *Economics Letters*. *Economics Bulletin* will be able to achieve much wider circulation, since it is available on the Internet at no charge. The *EB* will support itself by charging a $20 submission fee to authors. More information is available at the website ⟨http://www.economicsbulletin.com⟩.

The Berkeley Electronic Press has started three new series of journals in economics: the *BEP Journals in Theoretical Economics*, the *BEP Journals in Macroeconomics*, and the *BEP Journals in Economic Analysis & Policy*. More information about these journals can be found at ⟨http://www.bepress.com⟩. The BEP journals are currently available on the web at no charge. Eventually, the publisher plans to charge for access. Individual subscriptions will be available and institutions will be able to buy group subscriptions for all users coming from specific domains. The BEP has pledged that its library subscription price for economics journals will be no more than two-thirds of the average subscription price for economics journals. Currently they calculate this average price as $458 and accordingly will not charge more than about $300 per year to libraries.

The Electronic Society for Social Scientists (ELSSS) is a nonprofit group that is soliciting support for publishing a series of electronic publications in direct competition with their Elsevier counterparts. The ELSSS plan is to pay both authors and referees, to let authors own their own copyrights, and to sell subscriptions to

libraries at approximately half the price charged by Elsevier. Detailed information about ELSSS can be found at their website ⟨http://www.elsss.org.uk⟩.

Punishing Overpriced Journals

Table 7 is my rogue's gallery of the world's most expensive economics journals. All of the journals on this list cost more than $750 per year and more than $0.60 per page.[9] Journals on this list appear to merit a description as "overpriced," and I suggest that economists consider at least a partial boycott against them. Actions that I suggest include:

Cancellation of Library Subscriptions to Overpriced Journals. Although the leading commercial journals are poor bargains compared to the leading nonprofit journals, they publish a great deal of significant research. It would be difficult for a large research library to cancel subscriptions to most of the commercial journals listed earlier in Table 2. But as Table 7 shows, many high-priced commercial journals have few citations and remarkably high prices per citation. For these journals, there appears to be an easy solution. If your library subscribes to journals with high prices and few citations, why not ask your librarians to cancel these journals and spend the money on something more cost-effective? On my web page at ⟨http://www.econ.ucsb.edu/~tedb⟩, you can find a spreadsheet listing all journals that cost more than $300 and more than $1 per citation. There is also a list of journals that are relatively good bargains, costing less than $350 and less than $0.50 per citation.

Defections by Editors and Editorial Boards. Editors of expensive journals tell me that they have asked their publishers to restrain their price increases and that these requests fall on deaf ears. Publishers believe that the demand for their journals is very price inelastic and they are eager to charge what the market will bear. There is a recent, interesting exception. After difficult negotiations, the editors of the *American Journal of Physical Anthropology* convinced their publisher, Wiley, to reduce the 2001 price of the journal from $2085 to $1390 per year. This is still a steep price, but a move in the right direction.

Competent and respected editors and editorial boards are essential for a successful journal. The elite commercial journals have been able to attract such editors, presumably because editing a successful journal confers satisfaction and prestige and in some cases a modest salary.[10] These motives are understandable, and if expensive journals were the only possible venues for coordination of good editors, referees and authors, there would be no reason to propose that anyone act differently.

The weakness in the publishers' position is that all they own is the journal

[9] I have attempted to make this a complete list of refereed economics journals meeting these criteria. There are many other journals that cost more than $0.60 per page but, because they have fewer pages, cost less than $700 per year. Some of these latter journals are new or highly specialized journals with few subscribers and hence high average costs.

[10] Some economics departments are even willing to pay for the prestige that may rub off from housing a journal's editorial office by offering secretarial services, office space, and/or release time from teaching to editors of expensive commercial journals.

Table 7
A Rogue's Gallery of Expensive Journals

Journal Title	*Publisher*	*Inst Price*	*Price Page*	*Price Cite*	*Price Rec Cite*
Int J Social Ec	MCB	$8199	$ 5.41	$241.15	$2733.00
J Ec Studies	MCB	$7599	$14.61	$189.98	$ 690.82
Applied Ec[a]	Taylor & Francis	$2384	$ 0.70	$ 3.57	$ 18.63
J Econometrics	Elsevier	$2020	$ 0.87	$ 0.81	$ 8.74
J Ec Theory	Academic Press	$1800	$ 0.90	$ 0.72	$ 10.40
J Banking & Finance	Elsevier	$1770	$ 0.93	$ 2.94	$ 23.92
Int J Production Ec	Elsevier	$1642	$ 0.92	$ 6.49	$ 12.93
Economics Letters	Elsevier	$1592	$ 1.03	$ 1.71	$ 17.12
World Development	Elsevier	$1548	$ 1.35	$ 1.10	$ 7.04
J Public Ec	Elsevier	$1546	$ 0.82	$ 1.08	$ 10.66
J Financial Ec	Elsevier	$1429	$ 0.73	$ 0.53	$ 7.85
Research Policy	Elsevier	$1317	$ 1.69	$ 1.43	$ 11.45
J Futures Markets	Wiley	$1275	$ 1.29	$ 4.22	$ 36.43
Ecological Economics	Elsevier	$1248	$ 0.64	$ 2.50	$ 8.43
J Ec Behavior & Org	Elsevier	$1232	$ 0.89	$ 1.77	$ 26.21
J Mathematical Ec	Elsevier	$1224	$ 0.91	$ 2.93	$ 43.71
J Development Ec	Elsevier	$1223	$ 1.10	$ 1.73	$ 14.22
European Ec Rev	Elsevier	$1189	$ 0.65	$ 0.96	$ 6.83
J Ec Dyn & Control	Elsevier	$1116	$ 0.68	$ 1.75	$ 13.29
J Monetary Ec	Elsevier	$1078	$ 0.80	$ 0.58	$ 9.71
Public Choice	Kluwer	$1050	$ 0.66	$ 1.21	$ 21.88
J International Ec	Elsevier	$ 985	$ 0.76	$ 1.17	$ 9.66
Economic Theory	Springer	$ 961	$ 0.64	$ 3.64	$ 17.80
Int J Industrial Org	Elsevier	$ 959	$ 0.78	$ 3.06	$ 20.40
J Business Ethics	Kluwer	$ 914	$ 0.72	$ 1.38	$ 22.85
Manag & Decis Ec	Wiley	$ 995	$ 2.43	$ 26.89	[b]
J Appl Econometrics	Wiley	$ 945	$ 1.37	$ 2.29	$ 16.88
Environ & Resource Ec	Kluwer	$ 892	$ 0.84	$ 9.20	$ 13.40
Insurance: Math & Ec	Elsevier	$ 891	$ 1.20	$ 14.61	$ 59.40
Math Social Sciences	Elsevier	$ 879	$ 1.26	$ 4.88	$ 31.39
J Health Economics	Elsevier	$ 865	$ 1.04	$ 0.90	$ 5.41
Omega	Elsevier	$ 859	$ 1.10	$ 4.69	$ 23.22
J Forecasting	Wiley	$ 850	$ 1.65	$ 2.68	$ 30.36
J Int Money & Fin	Elsevier	$ 817	$ 0.87	$ 1.91	$ 9.50
J Accounting & Ec	Elsevier	$ 758	$ 0.68	$ 1.87	$ 32.96
J Urban Ec	Academic Press	$ 750	$ 0.72	$ 0.93	$ 10.27

[a] Bundled with App Ec, App Ec Letters, and App Finan Ec. Prices per page and per cite include pages and cites from all three journals. (I found no citations to App Finan Ec.)
[b] I found no recent cites to this journal.

name. Editors and editorial boards are not indentured servants. If the publishers will not price reasonably, why not resign, or better yet start a nonprofit journal with the same constituency but a new name? This option is particularly attractive if the journal has a cohesive constituency who either belong to or would be interested in starting a professional society.

There are at least two recent instances of successful defections from high-priced journals.

The editor and editorial board of *Evolutionary Ecology*, after repeated unsuccessful efforts to get their publisher, Kluwer, to reduce its prices, resigned and founded a new journal, *Evolutionary Ecology Research*, whose first issue appeared in 1999. The editor's account of these events and a great deal of interesting information about the economics of the journal industry can be found at ⟨http://www.evolutionary-ecology.com/citizen/citizen.html⟩. In 1998, the old journal, *Evolutionary Ecology*, published about 1000 pages at an institutional price of $800. The new journal, *Evolutionary Ecology Research*, publishes about 1000 pages per year at an institutional price of $305 per year, with an electronic subscription included. The editor reports that *EER* made a slight loss in 1999 and a slight profit in 2000. In 1999, Kluwer's old journal, *Evolutionary Ecology*, was able to publish only 600 pages. Kluwer reduced the price of the 2000 volume to $467. Even at this price, the Kluwer journal seems to be no bargain, since as of March 2001, not a single issue of the year 2000 volume has yet appeared.

In November 1999, after unsuccessful negotiations with Elsevier Press over the price of library subscriptions, the entire editorial board of the *Journal of Logic Programming* resigned and started a new journal *Theory and Practice of Logic Programming*, published by Cambridge University Press. The sponsoring professional organization, the Association of Logic Programming, withdrew its support for the *JLP* and adopted the *TPLP* as their sole official journal. At the time of this decision, the Elsevier journal was priced at $973 for about 1100 pages. The new journal, which will appear in 2001, is priced at $301 for approximately the same number of pages. In response, Elsevier changed the name of their journal to *Journal of Logic and Algebraic Programming* and reduced its price to $701. A recent paper by the editor of the new *TPLP* discusses his vision for the academic journal publishing industry (Apt, 2001).

Authors' Choices. Most authors want to publish in the most prestigious journal that will accept their papers. I don't expect this to change. But in the face of increased price awareness both in the profession and among librarians, I expect the prestige and availability of overpriced journals to diminish. In most areas of economics, many good, reasonably priced journals are available. If you want your article to be available to a wide readership, why not select a journal with a low subscription price and a generous policy for reprints and photocopying? When it comes time to decide where to submit a new paper, one usually has a handful of choices that seem roughly equivalent. I propose that you weigh journals' pricing policies in the balance of your decision.

A Referees' Boycott. I consider it a professional obligation to spend a lot of time writing careful referee reports. For years I paid no attention to the prices that journals charged to libraries when agreeing to referee for them. Now that my eyes have opened, I see no reason to supply free labor to journals that are gouging university budgets. In the future, I will refuse to do free refereeing for any of the

overpriced journals listed in Table 7, and I suggest that other economists consider doing the same.

Economists at the beginning of their professional careers may find this course of action harder to follow. Refereeing the work of others is a useful learning experience. It can be in one's interest to make a favorable impression on journal editors by writing good referee reports. Perhaps editors will remember your hard work when they consider the paper that you submit to their journal. These are legitimate motives and it would make no sense to ask people to ignore them. On the other hand, economists are professionally trained to be exquisitely attuned to marginal effects and substitution possibilities. Even if you do not make an absolute policy of boycotting expensive journals, you are likely to confront marginal choices where on purely selfish grounds it is a close call whether to spend time refereeing for an expensive journal or on other scholarly activity. When this happens, I suggest that a regard for professional citizenship should weigh *against* rather than in favor of assuming this chore.

Conclusion

By charging prices far above their average costs, commercial publishers of academic journals have been draining huge amounts of money from university budgets. Their high prices also prevent the flow of scholarly information to teachers and researchers at universities without large library budgets. Like the anarchists in our Parable of the Anarchists' Annual Meeting, scholars who contribute their efforts to overpriced journals have arrived at an unfortunate equilibrium in a coordination game.

But coordination games have multiple equilibria. The elite commercial journals will retain their prestige and their subscription base only so long as leading scholars continue to coordinate their efforts in these venues—as authors, referees, and editors. The drastic price differences between commercial and nonprofit journals have appeared relatively recently, and most of us have not been paying attention. Publishers of the expensive commercial journals have been unwilling to moderate their prices because they believe that library demand is quite price-inelastic once a journal has achieved success. Publishers need to be reminded that the supply of the academic labor that creates a successful journal depends on the goodwill of the scholarly community. As academics become more aware of the price-gouging strategies of the elite commercial journals, they are likely to become less willing to supply these journals with free labor. Commercial publishers may discover that even if demand for their product is price-inelastic, the supply of scholarly effort needed to maintain the quality of their journals is very responsive to price.

The economics profession is fortunate that more than 60 percent of our professional research, as measured by citation counts, appears in reasonably priced journals that are owned by professional societies and university presses. The intro-

duction of new, reasonably priced electronic journals, an expansion of current nonprofit journals, and the creation of new field journals sponsored by the professional societies will do much to encourage the scholars and libraries to abandon those journals that persist in overpricing. Finally, we should remember that we, ourselves, supply almost all of the work involved in preparing journal articles as unpaid authors, referees, and editors. Journal publishers rely on the goodwill of the profession to get this work done. Publishers of overpriced journals have lost my goodwill and my services, at least until they return their prices to reasonable levels. I hope that other economists will take the same view and act on it.

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References

Apt, Krzystzof R. 2001. "One More Revolution to Make: Free Scientific Publishing (FSP)." *Communications of ACM.* Forthcoming.

Case, Mary M. 1999. "Measuring Cost Effectiveness of Journals: The Wisconsin Experience." *ARL Newsletter.* August.

Kyrillidou, Martha. 1999. "Spending More for Less." *ARL Report.* June, p. 204.

Tenopir, Carol and Donald W. King. 2000. *Towards Electronic Journals.* Washington, D.C.: SLA Publishing.

Wilder, Stanley J. 1998. "Comparing Value and Estimated Revenue of SciTech Journals." *ARL Report.* October, p. 200.

This article has been cited by:

1. Sascha Baghestanian, Sergey V. Popov. 2018. On publication, refereeing and working hard. *Canadian Journal of Economics/Revue canadienne d'économique* **51**:4, 1419-1459. [Crossref]
2. Mark J. McCabe, Christopher M. Snyder. 2018. Open Access as a Crude Solution to a Hold-Up Problem in the Two-Sided Market for Academic Journals. *The Journal of Industrial Economics* **66**:2, 301-349. [Crossref]
3. Mike Edwards, Jessica Reyman. 2018. Open Access and the Economics of Scholarshipin Rhetoric and Composition Studies. *Rhetoric Review* **37**:2, 212-225. [Crossref]
4. Frank Mueller-Langer, Richard Watt. 2018. HOW MANY MORE CITES IS A $3,000 OPEN ACCESS FEE BUYING YOU? EMPIRICAL EVIDENCE FROM A NATURAL EXPERIMENT. *Economic Inquiry* **56**:2, 931-954. [Crossref]
5. Matteo Migheli, Giovanni B. Ramello. Scholarly Publishing and Open Access 1-8. [Crossref]
6. Molly Kleinman. 2017. Faculty Rights to Scholarly Research. *New Directions for Higher Education* **2017**:177, 39-50. [Crossref]
7. Jason Potts, John Hartley, Lucy Montgomery, Cameron Neylon, Ellie Rennie. 2017. A journal is a club: a new economic model for scholarly publishing. *Prometheus* **35**:1, 75-92. [Crossref]
8. Doh-Shin Jeon, Domenico Menicucci. 2017. The Benefits of Diverse Preferences in Library Consortia. *The Journal of Industrial Economics* **65**:1, 105. [Crossref]
9. Casparus J. Crous. 2017. Could disruptive technologies also reform academia?. *Web Ecology* **17**:2, 47. [Crossref]
10. Eberhard Feess, Marc Scheufen. 2016. Academic copyright in the publishing game: a contest perspective. *European Journal of Law and Economics* **42**:2, 263-294. [Crossref]
11. Vignes Gopal Krishna, Rajah Rasiah, Kuru Ratnavelu. 2016. Measuring scientific performance of ISI indexed journals in economics: the impact of synchronous and diachronous impact factors. *Quality & Quantity* **50**:5, 2185-2215. [Crossref]
12. Christophe Magis, Fabien Granjon. 2016. Numérique et libération de la production scientifique. *Variations* :19. . [Crossref]
13. R. Preston McAfee. 2016. Edifying Editing. *The American Economist* **61**:1, 110-118. [Crossref]
14. James D. Campbell. 2015. Ownership and pricing of information: A model and application to open access. *Information Economics and Policy* **33**, 29-42. [Crossref]
15. Yuqing Zheng, Harry M. Kaiser. 2015. SUBMISSION DEMAND IN CORE ECONOMICS JOURNALS: A PANEL STUDY. *Economic Inquiry* n/a-n/a. [Crossref]
16. Stuart Macdonald. 2015. Emperor's New Clothes. *Journal of Management Inquiry* **24**:3, 264-279. [Crossref]
17. Bo-Christer Björk, David Solomon. 2015. Article processing charges in OA journals: relationship between price and quality. *Scientometrics* . [Crossref]
18. 2015. Book Reviews. *Journal of Economic Literature* **53**:1, 118-119. [Abstract] [View PDF article] [PDF with links]
19. 2015. Book Reviews. *Journal of Economic Literature* **53**:1, 115-131. [Citation] [View PDF article] [PDF with links]
20. 2015. Book Reviews. *Journal of Economic Literature* **53**:1, 115-118. [Abstract] [View PDF article] [PDF with links]
21. Mark Armstrong. 2015. Opening Access to Research. *The Economic Journal* **125**:586, F1. [Crossref]

22. Ofer H. Azar. 2015. A Model of the Academic Review Process with Informed Authors. *The B.E. Journal of Economic Analysis & Policy* **15**:2. . [Crossref]
23. Alain R. Lamothe. 2014. Examining the Possibility of an E-Resource Collection Maximal Mass: Looking Beyond the Critical Mass of E-Journals. *Journal of Electronic Resources Librarianship* **26**:4, 235-249. [Crossref]
24. MATTEO MIGHELI, GIOVANNI B. RAMELLO. 2014. OPEN ACCESS JOURNALS AND ACADEMICS' BEHAVIOR. *Economic Inquiry* **52**:4, 1250-1266. [Crossref]
25. MARK J. McCABE, CHRISTOPHER M. SNYDER. 2014. IDENTIFYING THE EFFECT OF OPEN ACCESS ON CITATIONS USING A PANEL OF SCIENCE JOURNALS. *Economic Inquiry* **52**:4, 1284-1300. [Crossref]
26. Theodore C. Bergstrom, Paul N. Courant, R. Preston McAfee, Michael A. Williams. 2014. Evaluating big deal journal bundles. *Proceedings of the National Academy of Sciences* **111**:26, 9425-9430. [Crossref]
27. John Willinsky, Laura Moorhead. How the rise of open access is altering journal publishing 195-222. [Crossref]
28. Angus Phillips. Business models in journals publishing 139-158. [Crossref]
29. Achim Zeileis, Torsten Hothorn. 2013. A toolbox of permutation tests for structural change. *Statistical Papers* **54**:4, 931-954. [Crossref]
30. Richard Wellen. 2013. Open Access, Megajournals, and MOOCs. *SAGE Open* **3**:4, 215824401350727. [Crossref]
31. Jere Odell, Elizabeth C. Whipple. 2013. The Changing Landscape of Scholarly Publishing: Will Radiation Research Survive?. *Radiation Research* **180**:4, 335-339. [Crossref]
32. Armin Beverungen, Steffen Böhm, Christopher Land. 2013. From the open road to the high seas? Piracy, damnation and resistance in academic consumption of publishing. *Prometheus* **31**:3, 241-247. [Crossref]
33. David Harvie, Geoff Lightfoot, Simon Lilley, Kenneth Weir. 2013. Publisher, be damned! From price gouging to the open road. *Prometheus* **31**:3, 229-239. [Crossref]
34. Ramzi Nasser, Haitham M. Alkhateeb. 2013. Students learning about research through the process of publishing academic papers in Qatar. *Near and Middle Eastern Journal of Research in Education* **30**:2013, 1. [Crossref]
35. Mark J. McCabe, Christopher M. Snyder, Anna Fagin. 2013. Open Access versus Traditional Journal Pricing: Using a Simple "Platform Market" Model to Understand Which Will Win (and Which Should). *The Journal of Academic Librarianship* **39**:1, 11-19. [Crossref]
36. David Harvie, Geoff Lightfoot, Simon Lilley, Kenneth Weir. 2012. What are we to do with feral publishers?. *Organization* **19**:6, 905-914. [Crossref]
37. Armin Beverungen, Steffen Böhm, Christopher Land. 2012. The poverty of journal publishing. *Organization* **19**:6, 929-938. [Crossref]
38. Y. S. Lincoln. 2012. The Political Economy of Publication: Marketing, Commodification, and Qualitative Scholarly Work. *Qualitative Health Research* **22**:11, 1451-1459. [Crossref]
39. Yuqing Zheng, Harry M. Kaiser. 2012. Price Discrimination in the Subscription Market for Economics Journals. *Southern Economic Journal* **79**:2, 464-480. [Crossref]
40. . References 317-354. [Crossref]
41. Lisa M. Rose-Wiles. 2011. The High Cost of Science Journals: A Case Study and Discussion. *Journal of Electronic Resources Librarianship* **23**:3, 219-241. [Crossref]
42. Yuqing Zheng, Harry M. Kaiser. 2011. Price premiums for journal quality and journal governance: Evidence from economics journals. *Economics Letters* **112**:1, 125-127. [Crossref]

43. Patrick Gaulé, Nicolas Maystre. 2011. Getting cited: Does open access help?. *Research Policy* . [Crossref]

44. Donald W. King, Carol Tenopir. 2011. Some economic aspects of the scholarly journal system. *Annual Review of Information Science and Technology* **45**:1, 295-366. [Crossref]

45. Jens Prüfer, David Zetland. 2010. An auction market for journal articles. *Public Choice* **145**:3-4, 379-403. [Crossref]

46. GLENN ELLISON. 2010. IS PEER REVIEW IN DECLINE?. *Economic Inquiry* . [Crossref]

47. R. P. McAfee. 2010. Edifying Editing. *The American Economist* **55**:1, 1-8. [Crossref]

48. MARK ARMSTRONG. 2010. COLLECTION SALES: GOOD OR BAD FOR JOURNALS?. *Economic Inquiry* **48**:1, 163-176. [Crossref]

49. Jade Miller, Otto Khera. 2010. Digital Library Adoption and the Technology Acceptance Model: A Cross-Country Analysis. *The Electronic Journal of Information Systems in Developing Countries* **40**:1, 1-19. [Crossref]

50. OFER H. AZAR. 2009. THE INFLUENCE OF ECONOMICS ARTICLES ON BUSINESS RESEARCH: ANALYSIS OF JOURNALS AND TIME TRENDS. *The Journal of Industrial Economics* **57**:4, 851-869. [Crossref]

51. Jayson L. Lusk, M. Darren Hudson. 2009. Submission Patterns, Submission Policies, and Revealed Preferences for Agricultural Economics Journals. *Review of Agricultural Economics* **31**:4, 695-711. [Crossref]

52. Miles Maguire. 2009. The Nonprofit Business Model: Empirical Evidence From the Magazine Industry. *Journal of Media Economics* **22**:3, 119-133. [Crossref]

53. Kuang-hua Chen, Jieh Hsiang. 2009. The unique approach to institutional repository. *The Electronic Library* **27**:2, 204-221. [Crossref]

54. Thomas David Scheiding. 2009. Explaining the inability of economists to practice what they preach: the funding of the American Economic Review with author charges. *Journal of Economic Methodology* **16**:1, 21-43. [Crossref]

55. John P. Conley, Myrna Wooders. 2009. But what have you done for me lately? Commercial Publishing, Scholarly Communication, and Open-Access. *Economic Analysis and Policy* **39**:1, 71-88. [Crossref]

56. Piero Cavaleri, Michael Keren, Giovanni B. Ramello, Vittorio Valli. 2009. Publishing an E-Journal on a Shoe String: Is It a Sustainable Project?**We wish to thank a number of colleagues for helpful comments and suggestions. We are grateful among others, to the participants in the conference on 'Open Societies vs. Intellectual Enclosures Innovation, Imitation and Economic Growth' at the Università del Piemonte Orientale 'Amedeo Avogadro' in Alessandria, on 3-4 October, 2008 and in particular to Alberto Cassone, Stefano Fenoaltea, Brett Frischmann, Wendy Gordon, Carla Marchese, Keith Maskus and Francesco Silva. Usual disclaimers apply. *Economic Analysis and Policy* **39**:1, 89-102. [Crossref]

57. Angus Phillips. Business models in journals publishing 87-103. [Crossref]

58. BjÃ¶rn Ortelbach, Sebastian Schulz, Svenja Hagenhoff. 2008. Journal Prices Revisited: A Regression Analysis of Prices in the Scholarly Journal Market. *Serials Review* **34**:3, 190-198. [Crossref]

59. Achim Zeileis, Torsten Hothorn, Kurt Hornik. 2008. Model-Based Recursive Partitioning. *Journal of Computational and Graphical Statistics* **17**:2, 492-514. [Crossref]

60. Richard N. Langlois, Giampaolo Garzarelli. 2008. Of Hackers and Hairdressers: Modularity and the Organizational Economics of Open-source Collaboration. *Industry and Innovation* **15**:2, 125-143. [Crossref]

61. Erik W. Black. 2008. Wikipedia and academic peer review. *Online Information Review* **32**:1, 73-88. [Crossref]

62. Danny Kingsley. 2007. The journal is dead, long live the journal. *On the Horizon* **15**:4, 211-221. [Crossref]

63. Julie Holland Mortimer. 2007. Price Discrimination, Copyright Law, and Technological Innovation: Evidence From The Introduction of DVDs*. *Quarterly Journal of Economics* **122**:3, 1307-1350. [Crossref]

64. Golnessa Galyani Moghaddam. 2007. Scholarly Electronic Journal Publishing. *The Serials Librarian* **51**:3-4, 165-183. [Crossref]

65. Mathias Dewatripont, Victor Ginsburgh, Patrick Legros, Alexis Walckiers. 2007. Pricing of Scientific Journals and Market Power. *Journal of the European Economic Association* **5**:2-3, 400-410. [Crossref]

66. Frederick Guy. 2007. Strategic bundling: Information products, market power, and the future of globalization. *Review of International Political Economy* **14**:1, 26-48. [Crossref]

67. OFER H. AZAR. 2007. THE SLOWDOWN IN FIRST-RESPONSE TIMES OF ECONOMICS JOURNALS: CAN IT BE BENEFICIAL?. *Economic Inquiry* **45**:1, 179-187. [Crossref]

68. John Willinksy. 2006. The Properties of Locke's Common-Wealth of Learning. *Policy Futures in Education* **4**:4, 348-365. [Crossref]

69. Christopher Merrett. 2006. The expropriation of intellectual capital and the political economy of international academic publishing. *Critical Arts* **20**:1, 96-111. [Crossref]

70. Martin Frank. 2006. Access to the Scientific Literature — A Difficult Balance. *New England Journal of Medicine* **354**:15, 1552-1555. [Crossref]

71. Albert N. Greco, Robert M. Wharton, Hooman Estelami, Robert F. Jones. 2006. The State of Scholarly Journal Publishing: 1981-2000. *Journal of Scholarly Publishing* **37**:3, 155-214. [Crossref]

72. András Simonovits. 2005. Selection by Publication in Economics. *Acta Oeconomica* **55**:3, 255-269. [Crossref]

73. Justus Haucap, Tobias Hartwich, André Uhde. 2005. Besonderheiten und Wettbewerbsprobleme des Marktes für wissenschaftliche Fachzeitschriften. *Vierteljahrshefte zur Wirtschaftsforschung* **74**:3, 85-107. [Crossref]

74. Aaron S. Edlin, Daniel L. Rubinfeld. 2005. The Bundling of Academic Journals. *American Economic Review* **95**:2, 441-446. [Citation] [View PDF article] [PDF with links]

75. Mark J. McCabe, Christopher M. Snyder. 2005. Open Access and Academic Journal Quality. *American Economic Review* **95**:2, 453-458. [Citation] [View PDF article] [PDF with links]

76. Bruno S. Frey. 2005. Problems with Publishing: Existing State and Solutions. *European Journal of Law and Economics* **19**:2, 173-190. [Crossref]

77. Derek Leslie. 2005. Are Delays in Academic Publishing Necessary?. *American Economic Review* **95**:1, 407-413. [Citation] [View PDF article] [PDF with links]

78. Jean-Robert Tyran, Dirk Engelmann. 2005. To Buy or Not to Buy? An Experimental Study of Consumer Boycotts in Retail Markets. *Economica* **72**:285, 1-16. [Crossref]

79. Malcolm Getz. 2005. Open-Access Scholarly Publishing in Economic Perspective. *Journal of Library Administration* **42**:1, 1-39. [Crossref]

80. . References 387-411. [Crossref]

81. C. T. Bergstrom, T. C. Bergstrom. 2004. The costs and benefits of library site licenses to academic journals. *Proceedings of the National Academy of Sciences* **101**:3, 897-902. [Crossref]

82. Manfredi La Manna. 2003. The economics of publishing and the publishing of economics. *Library Review* **52**:1, 18-28. [Crossref]

83. Mark J. McCabe. 2002. Journal Pricing and Mergers: A Portfolio Approach. *American Economic Review* **92**:1, 259-269. [Citation] [View PDF article] [PDF with links]