
The economics of publishing and the publishing of economics

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Abstract

The paper explores the relationship between economics and scientific journal publishing in a number of areas by: establishing the fact, neglected by some librarians, that the "serials crisis" is not exclusively a plague infecting the STM sector, but that economics too has been badly affected; providing a more disaggregated analysis of the market power exerted by the dominant commercial publisher in economics journal publishing; considering briefly three academic-led experiments aimed at improving scholarly communication in economics; comparing the policy stance taken by the UK Competition Commission on scientific publishing and on banking for small businesses in two recent reports and exposing its glaring inconsistency; and suggesting a modest proposal to remedy some of the inefficiencies identified in this paper.

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Introduction

Following the presentations for the Create Change conference organised by the University of Glasgow on the 9 April 2002, Nick Joint, the editor of *Library Review*, made a comment to me on the relationship between economics and scientific journal publishing that at the time I found both discouraging and illuminating. I found it discouraging because, I, as an economist, should have thought it first, but it was also illuminating, because it clarified some of my own rather confused ideas on the subject. Nick Joint's simple but sharp observation was that librarians were wrong in considering scientific journal publishing as a "special case" or a "one off", in so far as in any other industry the same insanely inefficient outcomes would have resulted, if the dominant firms had been granted the same freedom to exploit consumers.

In this paper, I wish to explore further the relationship between economics and scientific journal publishing in a number of areas. First, I want to establish the fact, neglected by some librarians, that the "serials crisis" is not exclusively a plague infecting the STM sector, but that economics too has been badly affected. Second, using economics as a case study, I want to provide a more disaggregated analysis of the market power exerted by the dominant commercial publisher in scientific publishing. Third, I shall consider briefly three academic-led experiments aimed at improving scholarly communication in economics. Fourth, I want to compare the policy stance taken by the UK Competition Commission on scientific publishing and on banking for small businesses in two recent reports and I hope to expose its glaring inconsistency. Finally, I wish to suggest a modest proposal to remedy some of the inefficiencies identified in this paper.

The extent of the "journal crisis" in economics

Professor Ted Bergstrom of the University of California Santa Barbara has recently written a very informative article on journal pricing in economics (Bergstrom, 2001). His opening paragraph summarises the extent of the problem:



There is a remarkable difference between the prices that commercial publishers charge to libraries for economics journals and the prices that professional societies and university presses charge. 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 non-profit 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 \$1,660 per year (Bergstrom, 2001, emphasis added).

Tables I and II from Professor Bergstrom's article provide some statistical background.

Table III (from the ELSSS website: <http://www.elsss.org.uk/survey/table1.html>) shows how the problem has been escalating in the last few years.

Three points about Tables II and III are worth emphasising:

- (1) the overwhelming preponderance (indeed dominance) of Elsevier/Academic Press titles in the top ten list;

- (2) commercially published top ten titles are over *seven times more expensive* (734 per cent) than the non-commercial top ten titles;
- (3) not only commercial top titles are much more expensive than their non-commercial counterparts, but their *rate of increase* in the recent past has been nearly *3.5 times faster* than for non-commercial titles.

In the light of the figures in Tables I-III, it is not surprising that the effect of journal pricing by some commercial publishers on libraries budgets and academic economists has been devastating. The "journal subscription cull" has become a gruesome annual event in every university library in the UK: economics departments all over the UK are asked which titles are to be discontinued in order to match the modest (often non-existent) real-term increases in budget allocations to the substantial increase in some "core journal" subscriptions.

Table I 2001 prices and citations: non-profit journals

Journal title	Price to libraries (\$)	Price per page (\$)	Price per cite (\$)	Price per recent cite (\$)	Citation rank
<i>American Economic Review</i>	140	0.03	0.01	0.12	1
<i>Econometrica</i>	214	0.14	0.03	0.93	2
<i>Journal of Political Economy</i>	175	0.10	0.03	0.69	3
<i>Quarterly Journal Economics</i>	198	0.13	0.05	0.70	4
<i>Journal of Finance</i>	207	0.07	0.05	0.63	5
<i>Journal of Consumer Research</i>	99	0.23	0.04	0.90	6
<i>Economic Journal</i>	321	0.16	0.13	1.29	8
<i>Review of Economic Studies</i>	180	0.22	0.08	2.34	11
<i>Review of Econs and Statistics</i>	200	0.29	0.09	1.15	12
<i>Amer. J. Agric. Economics</i>	134	0.11	0.07	1.01	14

Table II 2001 prices and citations: commercial publishers

Journal title	Publisher	Price to libraries (\$)	Price per page (\$)	Price per cite (\$)	Price per recent cite (\$)	Citation rank
<i>J. Financial Economics</i>	Elsevier	1,429	0.73	0.53	7.85	7
<i>J. Economic Theory</i>	Academic Press	1,800	0.90	0.72	10.40	9
<i>J. Econometrics</i>	Elsevier	2,020	0.87	0.81	8.74	10
<i>J. Monetary Economics</i>	Elsevier	1,078	0.80	0.58	9.71	13
<i>J. Public Economics</i>	Elsevier	1,546	0.72	1.08	10.66	19
<i>World Development</i>	Elsevier	1,548	1.35	1.10	7.04	20
<i>European Economic Review</i>	Elsevier	1,189	0.65	0.96	6.83	21
<i>J. Environ. Economics and Mgmt</i>	Academic Press	650	1.02	0.56	3.90	22
<i>J. Health Economics</i>	Elsevier	865	0.98	0.90	5.41	28
<i>Economics Letters</i>	Elsevier	1,592	1.04	1.03	17.12	29

Table III Institutional subscription rates (in US\$) for some selected economics journals 1995-1999

Journal title	1995		1999		Percentage change per annum	
	Europe	USA	Europe	USA	Europe	USA
<i>Economics Letters</i>	957	802	1,388	1,706	9.7	20.7
<i>Journal of Banking and Finance</i>	811	684	1,759	1,539 ^a	21.3	17.6 ^a
<i>Journal of Development Economics</i>	778	657	1,310	1,066	13.9	12.8
<i>Journal of Econometrics</i>	1,305	1,094	2,164	1,761	13.4	12.6
<i>Journ. Economic Behavior and Organisation</i>	870	734	1,074	1,074	5.4	9.9
<i>Journal of Economic Dynamics and Control</i>	701	592	972	972	8.5	13.2
<i>Journal of Financial Economics</i>	733	615	1,530	1,245	20.1	19.2
<i>Journal of International Economics</i>	524	442	1,055	859	19.1	18.0
<i>Journal of Mathematical Economics</i>	559	469	1,310	1,066	23.7	22.8
<i>Journal of Monetary Economics</i>	723	611	1,154	939	12.4	11.3
<i>Journal of Public Economics</i>	969	812	1,636	1,331	14.0	13.1
<i>Research Policy</i>	680	574	1,410	1,147	20.0	18.9
Average annual increase for the above journals (published by Elsevier)					16.06	15.8
<i>Amer.Econ.Rev./Journ.Econ.Lit./</i>						
<i>Journ.Econ.Perspectives</i>	130	130	132	132	0.03	0.03
<i>Econometrica</i>	178	164	171	171	-1	1
<i>Economic Journal</i>	181	167	287 ^b	284 ^b	12.2	14.2
<i>Economica</i>	87	82	117	116	7.6	9
<i>Journal of Industrial Economics</i>	132	131	170	160	6.5	5.1
<i>Review of Economic Studies</i>	117	127	167	180	9.3	9.1
Average annual increase for above not-for-profit journals					4.48 ^b	4.84 ^b
Notes: ^a Data for 1999 missing from EBSCO Librarians' Handbook, 2000 subscription rate used instead						
^b Includes subscription to <i>Econometrics Journal</i> and is excluded from average						
Source: EBSCO (1996, 2000). Elsevier does not print subscription rates in its journals						

A more disaggregated view

In order to understand the predicament of economists wishing to disseminate their scholarly output and to obtain the quality control certification and peer recognition that are provided by publication in academic journals, it is not enough to consider the aggregate picture as described in Tables I-III. In view of the well-established trend towards increased scientific specialisation, one has to examine the options available in specific sub-disciplines. Two examples can suffice to establish the general pattern that is repeated throughout most economics fields.

Consider the options open to an urban economist: as Table IV (based on 1999 data kindly provided by Professor Bergstrom[1]) makes clear, even though there are four potential journals where a paper in urban economics may be submitted, one (Blackwell's *Review of Urban and Reg. Develop. Studies*) is not in the same league in terms of prestige, diffusion, impact, etc.

compared to the rest. Indeed, if the key determinant of submission behaviour is the impact factor[2], the choice is further restricted to either Elsevier's *Regional Science and Urban Economics* or Academic Press' *Journal of Urban Economics*.

A second example refers to the submission options open to a highly mathematical paper in economic theory. Again, there is no escape from highly-priced journals, with Academic Press' *Journal of Economic Theory* being the most expensive. Notice the dominant position of Elsevier/Academic Press titles (see Table V).

The point to be stressed here is that the academic journal market is highly segmented and subtly differentiated and this allows the creation of "local monopolies" that can exercise substantial market power. This is particularly relevant in the highly-specialised prestige journal sub-sector. It is no coincidence at all that in this section of the market one finds the highest subscription prices.

Table IV Journals in urban economics

Journal title	Publisher	Library price (\$)	Pages per yr	Price/pages (\$)	Impact factor	Total cites	Cost/cites (\$)	Recent cites	Cost/recent cite (\$)	Current OCLC
<i>Review of Urban and Reg. Develop. Studies</i>	Blackwell	150	215	0.70		1	150	0		2
<i>Regional Science and Urban Econ.</i>	Elsevier	614	802	0.77	0.71	370	1.66	44	13.95	99
<i>Journal of Urban Economics</i>	Academic Press	640	1,058	0.60	0.88	787	0.81	73	8.77	230
<i>Urban Studies</i>	Carfax	742	1,711	0.43		508	1.46	119	6.24	222

Table V Economic theory journals

Journal title	Publisher	Library price (\$)	Pages per yr	Price/pages (\$)	Impact factor	Total cites	Cost/cites (\$)	Recent cites	Cost/recent cite (\$)	Current OCLC
<i>Journal of Economic Theory</i>	Academic Press	1,400	2,000	0.70	0.742	2,514	0.56	173	8.09	165
<i>Economic Theory</i>	Springer	899	1,493	0.60	0.400	264	3.41	54	16.65	165
<i>Mathematical Social Sciences</i>	Elsevier	824	697	1.18	0.392	180	4.58	28	29.43	36
<i>Journal of Mathematical Economics</i>	Elsevier	1,147	1,340	0.86	0.289	418	2.74	28	40.96	79

This is far from being a problem specific to economics journals: a very similar pattern applies to most STM journals. For evidence of market power, one has to look no farther than the main commercial scientific publisher, Reed Elsevier: even at a very basic level, the operating margin of Reed Elsevier's STM activities as reported in their 2000 accounts, amounting to 36.4 per cent of turnover, (in a business with one of the lowest degree of riskiness), by itself suggests a massive degree of market power.

New solutions to an old problem: experiences from economics

I shall focus on three recent attempts to provide a solution to the journals crisis in economics. These three initiatives provide the material for an interesting case-study in so far as by analysing their similarities and differences it may be possible to derive some general principles. The three initiatives I shall be examining are: the *Economics Bulletin*, *bepress*, and *ELSSS*.

The *Economics Bulletin*

This electronic-only journal was launched over one year ago by two well-respected economists, professors Myrna Wooders (University of Warwick) and John Conley (University of Illinois at Champaign) as a direct competitor to the extravagantly expensive Elsevier's *Economics Letters*. It is a

free e-journal, with institutional support from the library of the University of Illinois. Considering that its marketing campaign was almost exclusively by word-of-mouth and that it took on a long-established journal with a prestigious editorial team, the achievements of the *Economics Bulletin* have not been inconsiderable. From April 2001 to December 2001 it has published 57 articles (compared to the 180 published in the same period in *Economics Letters*), with an impressive average submission-to-acceptance/publication lag of less than three weeks.

In my view, the *Economics Bulletin* highlights both the advantages and the limitations of a small-budget initiative driven almost exclusively by the enthusiastic motivation of a small group of "academic innovators".

The three main advantages are:

- (1) free access;
- (2) the speed at which a well thought-out academic journal can be set up and distributed; and
- (3) the lack of pressing financial concerns, so that, provided the credibility of the journal is maintained, it can engage in a prolonged "war of attrition" with its commercial rivals, building up gradually its reputation and prestige.

On the other hand, any initiative that relies almost exclusively on enthusiasm and an initial pool of goodwill (with no matching budget) suffers from a number of drawbacks:

- both the quality and quantity of submissions inevitably cannot match those of established incumbents, thereby increasing the risk that the newcomer is perceived as a lower-prestige publication;
- while the addition of a free journal cannot but be welcome by academics and librarians alike, it does not necessarily offer a solution to the journals crisis, in so far as, by not providing a direct alternative to commercially published journals, it does not relax the library's budget constraint;
- under current citation-tracking rules, the lack of hard copy combined with the irregular publication of articles (which are distributed as soon as they are favourably peer-reviewed) means that articles may not be included in the main citation databases, resulting in zero impact;
- by providing an electronic journal with necessarily fairly rudimentary features (due to the lack of the financial resources required to produce advanced electronic capabilities), small-budget journals cannot speed up the mass conversion by academics from hard-copy to (fully featured) electronic publications;
- enthusiasm is certainly a necessary condition for starting a journal – whether it is sufficient to sustain it in the long run is open to doubt.

bepress

bepress is a commercial initiative based at the University of California Berkeley and is aimed at providing an advanced solution to the journals crisis.

I wish to stress that although bepress is a concept originally developed by academics, it is a commercial enterprise, backed by venture capital and thus constrained to evolve in ways that eventually will produce an economic return to its investors.

In order to understand the somewhat unusual business model underlying bepress, it is important to appreciate one peculiar feature of peer-review in economics, namely the extremely long lags between submission and receipt of referees' reports (the submission-report lag) and between acceptance and publication (the acceptance publication lag). Whereas in disciplines such as chemistry, an author can expect to receive reports on his/her submission within four to five weeks, in economics the submission-report lag can be

anything between 3 to 15 months. This, coupled with long acceptance-publication lags (again anything between nine and 15 months), makes many economics articles obsolete by the time they are published. The reasons for this anomaly are complex: the fact that until recently most editorships were unpaid and regarded as a prestige responsibility to be discharged for the public good of the profession and to be carried out in addition to one's main functions of teaching and research may have contributed to establishing an ethos that regards long lags as acceptable. Another important factor is that the pool of conscientious and punctual referees is much smaller than the pool of potential authors, so that the onerous burden of refereeing is not spread evenly across economists.

bepress' solution is to create an "authors and reviewers" account, whereby an author either pays \$1,000 for having his/her paper reviewed in a "conscientious" and timely (i.e. with a guaranteed report within ten weeks) manner, or commits him/herself to reviewing three submissions by other authors (and, in the meantime, pays in a "collateral" of \$1,000).

Another distinctive feature of the bepress model is that submissions are "quality rated", i.e. the editors, on the basis of referees' reports and their own judgement, not only determine whether to publish a paper but also whether it merits publication either in their "highest-ranked" journal (*Frontiers in ...*), or in the high-ranked *Advances in ...* or in the middle-ranked *Contributions in ...* or in the lowest-ranked *Topics in ...*

bepress managed to obtain some press coverage before the launch of its journals (with an article in *The Economist* and a subsequent piece in *The Chronicle of Higher Education*) and since January 2001 has published two "founding" journals in economics plus a new journal in economic analysis and policy[3].

Can bepress be regarded as a success? Perhaps it is too early to say, but in view of the strength of its financial backers and of the strong institutional support from the University of California, bepress' output in the first year of operations is somewhat meagre, as can be seen from Tables VI and VII.

Again, it is not wholly fair to judge an initiative from its very first year of operations,

Table VI *Journal of Theoretical Economics*

Type of journal	Number of articles	
	published	Comments
Frontiers	0	
Advances	5 (4)	4 (3) by editorial board
Contributions	4 (2)	1 by editorial board
Topics	2 (0)	

Note: Figures in parentheses refer to the period January-October 2002

Table VII *Journal of Macroeconomics*

Type of journal	Number of articles	
	published	Comments
Frontiers	0	2 by editorial board
Advances	10 (9)	2 by editors
Contributions	4 (2)	
Topics	3 (0)	

Note: Figures in parentheses refer to the period January-October 2001

but it can be reasonably surmised that the arrival of bepress journals is unlikely to have induced many university librarians to cancel expensive subscriptions to commercially-published journals.

Moreover, whereas a lot of thought has gone into the mechanics and the economics of submission and refereeing, the electronic output generated by bepress is hardly innovative, consisting of PDF files with no added features. Again, as bepress journal issues do not appear to be published with a regular frequency, the content is unlikely to be indexed in the main citation databases, thereby depriving authors of citation impact.

ELSSS

ELSSS (the eLEctronic Society for Social Scientists) was launched in November 2000 with an act of faith – a single e-mail message sent from St Andrews to thousands of economists world-wide. The message contained some startling facts about the crazy economics of academic journal publishing and a request to register an active interest in setting up new journals in direct competition with established high-price publications. The response has been phenomenal: there is no prestigious economics department anywhere in the world that does not include ELSSS supporters. The breadth of the support is also impressive: not only geographically (with over 25 countries represented), but more importantly across sub-disciplines and levels of seniority. Almost every field of

economics is covered and supporters range from Nobel prize-winners to junior faculty. Media coverage has also been extensive, with articles appearing in *The Wall Street Journal*, *The Chronicle of Higher Education*, *The Times Higher Education Supplement*, *The Independent*, *The Scotsman*, *The Sunday Herald* and many more. Librarians worldwide seem to have taken to the ELSSS project, highlighting the initiative in their bulletins and lists. Last but not means least, financial and academic support has been provided by the Royal Economic Society, with additional financial support from Scottish Enterprise Fife.

In terms of technological innovation, ELSSS aims at producing a fully integrated software package that includes all the functions of a traditional academic journal (from submission to refereeing to editing to publishing – both in print and online) and more besides.

Consistent with its philosophy, the ELSSS publishing template (EPT) is being developed in close collaboration with potential users, so to match and enhance their requirements and needs. This process of inclusion will involve librarians, too, whose opinion and advice will be solicited as soon as the first draft blueprint is ready for diffusion. In my view it is both counterproductive and inefficient not to draw on the pool of relevant skills and expertise that librarians have accumulated over the years, and I hope that librarians world-wide will respond favourably and constructively to ELSSS's request for feedback on its "ideal journal" template.

Two points are worth stressing here:

- (1) The ELSSS approach is more flexible than both EB's and bepress' in so far as the ELSSS template can include both these publishing templates as special cases of its more general framework.
- (2) ELSSS sees the EPT as part of its wider aim of improving scholarly communication, not only by providing cheaper and faster journals, but also by revitalising the very role of journals in the post-Gutenberg era. In fact, the EPT includes many levels of interactivity, between authors, referees, editors, readers (both specialised and not) aimed at restoring the role of academic journals as a catalyst for scientific debate, rather than mere repositories of knowledge.

The three attempts to improve scholarly communication in economics examined above can be summarised in Table VIII.

The fact that economists, who are by training and inclination averse to inefficiency and prone to offering solutions, have taken so long to wake up to the fact that the academic journals market is a textbook example of monopolistic inefficiency; and on-line publishing may provide effective competition to commercial incumbents is painful evidence that identifying a problem and its solution is only a necessary condition for the problem to be solved. The key issue is coordination: if all academics (as authors, referees, and readers) decided to boycott high-price journals and to switch to academic-friendly publications and if all libraries discontinued their subscriptions to high-price journals and subscribed instead to cheaper, but equally prestigious, alternatives, the “journals crisis” could be solved almost overnight. The problem, of course, is how to coordinate such a concerted move.

It is in this regard that ELSSS is sharply different from both EB and bepress: whereas the latter are intent on waging a war of slow attrition against the giant commercial publishers in the hope that economists worldwide will migrate to the new titles, ELSSS is predicated on the belief that only a frontal attack has a realistic chance of success. In other words, the ELSSS project is designed to provide from the very start a credible alternative to established (high-priced) prestige journals.

This explains why ELSSS is not pursuing either the free distribution route chosen by EB or the submission-review barter model of bepress and why, in addition to developing new online functionality for its journals, ELSSS will publish hard-copy regular issues (unlike EB and bepress).

The ELSSS recipe for establishing an instant reputation is based on the following ingredients:

- (1) *Refereeing*. Instead of burdening potential authors with either a hefty submission fee or a commitment to referee a given number of papers (as in the bepress model), ELSSS will reward its pool of high-calibre referees with honoraria which, while not compensating them for the onerous and time-consuming task of reviewing, will provide an effective incentive for the prompt return of comprehensive referee’s reports. In addition to these pecuniary rewards, ELSSS will compensate its referees also in other novel ways (not wishing to give the game away to the opposition, perhaps I may be allowed to remain mysterious on this point).
- (2) *Editing*. Working on the assumption that the high-responsibility and time-consuming job of editing a major journal cannot be carried out in the long run on goodwill alone, ELSSS aims at rewarding editors with stipends that will attract and retain world-class economists. Moreover, by developing the EPT in close collaboration with editors, the package will streamline and rationalise the whole process of submission management, making the editor’s job easier and more rewarding.
- (3) *Value to authors*. Like EB and bepress, ELSSS journals will shorten dramatically the submission-to-acceptance lag, but unlike EB and bepress ELSSS will do so without having to rely on either permanent goodwill or a convoluted payment scheme. Unlike EB and bepress, ELSSS journals will be catalogued in the main citation databases, thereby providing authors with impact

Table VIII Comparison of three systems

	<i>Economics Bulletin</i>	bepress	ELSSS
Institutional support	Moderate	High	High
Commercial support	None	Strong	None
Media campaign	None	Successful	Very successful
Academic grassroots support	Medium	Medium	Strong
Librarians’ support	Local	Local	Growing
Electronic sophistication	Low	Moderate	High
Business model	Basic	Original	Aggressive
Effect on journals crisis	Negligible	Negligible	Potential strong
Flexibility	Low	Medium	High

data (as well as other statistics). Again unlike EB and bepress, ELSSS journals will be both more traditional (in so far as they will be published in hard-copy) and more innovative (by providing an altogether new look-and-feel experience in their online format). Unlike EB and bepress, ELSSS will work in close contact with leading learned societies in economics as well as with prominent economists world-wide to gain credible endorsements of the quality and prestige of its journals. Finally, ELSSS journals, by publishing promptly high-quality research, will provide a natural platform for lively, informed, and fast scientific debate among interested academics world-wide.

- (4) *Value to readers.* The unique and novel format(s) of ELSSS journals will be adapted to a range of readers: specialists, general economists, economic and financial analysts, students, and (when appropriate) the general public. Again, the range of functionalities will be appropriate to the target readership.
- (5) *Value to libraries.* Without the active support of university and research libraries world-wide the ELSSS project is unlikely to succeed. But why should budget-constrained libraries wish to subscribe to a new portfolio of journals? I think there are two main reasons: first, by not subscribing to ELSSS journals libraries would be depriving the faculty and students in their institutions of access to first-rate research and its associated platform for debate. Second, and more importantly, a subscription to ELSSS journals will carry long-term benefits over and above access to quality research; indeed it could be argued that the greatest benefit will be in terms of the effects on ELSSS' competitors, in so far as the emergence of credible and prestigious alternatives cannot but have a beneficial impact on the pricing policies of some well-known rapacious publishers. These will have to either reduce their subscriptions or, perhaps more likely in the shorter term, accept a haemorrhage of authors and referees and thus a degradation of their journals' quality, which, in turn, will allow astute librarians to discontinue their subscriptions without any reduction in the quality of research

made available to their readers. In order to facilitate the transition from subscription to high-price for-profit journals to cheaper not-for-profit ones, ELSSS will offer a novel discount scheme to all libraries (of course, libraries in developing countries will access all ELSSS publications for free).

On the basis of the case study presented above, it is possible, I believe, to draw some general conclusions on the new models of academic journal publishing.

A key distinction that has to be highlighted here is between the short and the long run. Being an economist, I am far more comfortable with predicting the distant future, as I will not be there to collect opprobrium for my failure, but it seems reasonable to assume that the long-term equilibrium must be one in which the price of distributed peer-reviewed research output will reflect (i.e. be very close to) the cost of peer-review plus the cost of distribution, both of which are small compared to the current prices charged by for-profit publishers. Thus, in terms of long-term trends, there is little to distinguish between the approaches taken by EB, bepress, and ELSSS, as they will all converge to the same pattern. However, unless appropriate steps are taken now, this rosy future can be so distant as to become a mirage. Which brings me to the far thornier issue of the short run.

It seems self-evident to me that in order for any new model of academic publishing to alleviate the journals crisis, it must make an impact, either directly or indirectly, on the pricing policies of those publishers whose behaviour has caused the crisis in the first place. This is a task of gigantic proportions, as the Goliaths of academic journal publishing can rely on hundreds of millions of dollars of annual profits to fight off any newcomers. However, these giants may have feet of clay in so far as their empires are built on the assumption that the academic community is and will remain unable to provide credible alternatives to the current inefficient and unfair mechanism of academic publishing.

Things are changing (even though at an infuriatingly slow pace): there are now examples of successful "editorial migrations" where academics, exasperated with their for-profit publishers' unwillingness to bring subscription prices down to reasonable levels,

have resigned *en masse* and set up essentially the same journal with a different title and a new and academic-friendly publisher.

For direct, head-to-head alternatives to be successful it is crucial:

- to mobilise the relevant community of consumers and producers of journals;
- to obtain the backing of associations and learned societies;
- to create wider awareness by launching a media campaign;
- to obtain institutional support from the academic home of the project;
- to set out clear and credible criteria committing the new publication(s) to high-quality research output;
- to match, and indeed better, the features (such as citation tracking, online access, and more) offered by for-profit journals; and
- last but not means least, to forge and sustain links with both individual librarians and libraries associations, as detailed in the next section.

Why us? Some questions librarians ought to ask policy-makers. A UK example

In the last ten years or so the job of university librarian must have become an infuriating mixture of exciting new possibilities and increasing frustration at the difficulties imposed by the combination of tight budget allocations and escalating prices charged by a handful of oligopolistic commercial publishers. From my own, admittedly narrow, perspective, it would appear that librarians should add a new skill to their armoury – academic coordination. Librarians are ideally placed to provide the necessary link between academics as both producers and consumers of (peer-reviewed) research on the one hand, and responsible publishers/associations on the other. In other words, I am advocating a more active role for university librarians, a switch from administering a publishing system that is depriving increasing numbers of staff and students of access to quality-controlled research output, to reforming the publication mechanism.

I myself am not a believer in grand schemes, but I have an unshakeable faith in the power of coordinated individual action. I am certain that, as soon as it realised that “things can get

better”, many people in this room can formulate practical and effective ways for solving the “journals crisis” and more generally for freeing access to quality-certified research output. I am one of the least qualified people to offer advice to university librarians, but from the vantage point of my colossal ignorance, perhaps I can make a few random simple suggestions. For example:

- Information about cancellation of high-priced journals should be publicised widely, not only to strengthen the resolve of fellow librarians to follow suit, but more importantly to send a signal to authors, referees, and editors that “their” over-priced journal is losing readership and impact and to the editors, publishers, and would-be authors in more academic-friendly publications that a new potential readership is opening up.
- Librarians ought to use their superior knowledge of academic publishing to get academics working in their institutions acquainted with both the problems and the possible solutions in academic journal publishing. What I am suggesting is that instead of reacting passively to the next round of journal cancellations that the pricing policies of large commercial publishers will inevitably produce, librarians should actively propose solutions in direct collaboration with their academic colleagues.
- National and international libraries associations ought to appoint independent observers to whom individual libraries could report in confidence any “deals” offered by those publishers who promote “bundles” of titles and/or services. In turn, these observers ought to alert the librarian community if anti-competitive practices are being indulged in by any publisher.
- Librarians and academics ought to lobby jointly their funding bodies that special funds be set up with the specific purpose of kick-starting credible and direct alternatives to high-priced journals.
- More generally, national and international libraries associations ought to lobby national governments and international institutions, such as the European Union, to institute anti-trust investigations into the pricing of academic journals. The recent experience in the UK gives ground to a moderate

degree of optimism. While on the one hand the Competition Commission inexplicably allowed the take-over of Harcourt by Reed Elsevier in spite of a nearly unanimous consensus among all contributors to its report that such a take-over would be against the public interest, on the other hand it instructed the Office of Fair Trading to investigate the market for scientific journals for possible anti-competitive practices. The OFT is expected to report in the near future and its deliberations, I hope, may mark a turning point in the uneven battle between librarians and academics on one side and some rapacious commercial publishers on the other.

To an outsider, librarians and academics have been far too timid in their dealings with funding bodies and policy-makers. A more robust approach is required.

As an example, I wish to compare the policy stance taken by the UK Competition Commission (the main UK anti-trust agency) in two of its most recent reports, one on the Reed Elsevier-Harcourt merger[4], and the other on Banking for Small Businesses (BSB)[5]. What follows are some of the questions that I believe UK librarians are entitled to ask of the Secretary of State of Trade and Industry.

- Why did the CC consider as “excessive profit” the average return of 36 per cent earned over the period 1998–2000 by the big four clearing banks on BSB activities but not Reed Elsevier’s average operating margin for scientific publishing of over 37 per cent (approx. £244m p.a.) over the 1997–2001 period?
- Why did the CC regard the dominant market share of the big four and the lack of entry as extremely worrying, but in the case of scientific publishing, it allowed RE to consolidate its monopoly position by clearing its takeover of Harcourt, thereby increasing the concentration in the industry?
- Why did the CC observe that banks do not compete on price and that charges bear little relation to cost, while failing to recognise that some of RE’s scientific publications are up to ten times more expensive than equivalent publications by smaller publishers/societies and that its

pricing policies have no relation whatsoever to costs?

- Why did the CC criticise the big four’s failure to publicise charges while RE is allowed to practise the most extreme form of price discrimination, in so far as it can negotiate in secret with individual libraries, effectively extracting maximum profits from the public purse?
- Why did the CC recommend the unbundling of personal and business loans, whereas RE is currently allowed to engage in the most deleterious and anti-competitive forms of bundling, reaching the absurdity of forcing a leading single-faculty university (which specialises in the social sciences) to subscribe to hundreds of titles in medicine, physics, astronomy, etc.?
- Why did the CC fail to quantify the cost to the competitiveness and the inventiveness of the UK due to the restraint to the flow of scientific knowledge imposed by the pricing policies of monopolistic scientific publishers while it measured the overcharge by the big four banks to the 3.5m small businesses in the UK (£725m p.a.)?
- Will the Office of Fair Trading, which is currently undertaking an investigation on the market for scientific journals, ban the type of “bundling” practised by RE, which effectively prevents customers from substituting cheaper non-RE journals for expensive RE ones, in so far as the cost of the bundle is unaffected by individual cancellations, therefore forcing a potential entrant to compete against a zero-priced rival?

A modest proposal

Whereas a comprehensive solution to the current deep and deepening crisis in scientific communication can only be worked out by a dynamic task force (on the line of the various initiatives advocated by the Consortium of University Research Libraries), a good start could be provided by a modest windfall tax on the monopoly profits of the more rapacious scientific publishers. For example, a 30 per cent tax on the scientific publishing profits of one such company alone (Reed Elsevier) would reduce its rate of return to a more than

healthy 25.9 per cent and still would yield over £70m p.a., which, if earmarked for initiatives such as ELSSS or the Public Library of Science, could introduce credible and viable competition. This would be a chance for policy makers to reverse years of not-so-benign neglect of a market (scientific journal publishing) that is vital for the long-term economic welfare of a dynamic economy.

"most" of whom had "committed to submit papers" to the new journals. Over one year on, only a small fraction of the academics in the list appears to have published in bepress journals.

- 4 Full text of the report is available at: <http://www.competition-commission.org.uk/reports/457reed.htm#full>.
- 5 Full text of the report is available at: <http://www.competition-commission.org.uk/reports/462banks.htm#full>.

Notes

- 1 Available at <http://www.econ.ucsb.edu/~tedb/Journals/listkey.html> (See this source for details about definitions of cites, etc.)
- 2 The impact factor is the number of citations in 1998 to articles published in this journal in 1996 or 1997 divided by the number of articles published in 1996 and 1997.
- 3 Interestingly, before the publication of their journals, bepress publicised a list of economists

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