Publishing articles – Findings and open questions of an empirical study conducted among editors of economic journals*

By Dirk Meyer**

1. Manuscript, article, journal - players and interests

In economic terms, articles are *productive goods*. Costs are incurred in their production. Authors must bear the *opportunity costs* of producing an initial manuscript version ready for submission as well as the usual subsequent versions whose contents have been revised. According to the survey conducted,¹ as many as four versions were sometimes required before a manuscript was finally accepted.² 86 % of the journals also required that the manuscripts meet certain formal requirements, and 80 % requested a version on disk. These two measures shift a not inconsiderable part of the editorial workload onto the author.

The author's opportunity costs are calculated according to the *time spent* – during which he is no longer available for writing expert reports, for example – and amount to several times his monthly income.³ In simple terms, the given working time of a professor can be used for teaching and paperwork, for research and publishing and for external services such as writing

 1 In the fall of 1998, questionnaires were sent to the editors of 61 economic journals. Of these, a total of 43 provided responses which could be used. The number of responses received was considerably higher from German-speaking (93 %) than from English-speaking countries (53 %).

² See section 2.2 for more information.

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³ Drawing on his own experience, this author assumes between one and two months of working time (170-340 working hours) to write a non-empirical article. If we take as alternative costs the monthly gross earnings of a professor in pay grade C4 as a basis, production costs will range from EUR 5,000 to 10,000 not including additional staff costs. According to one colleague, approximately 9 months of working time are required to produce a good theoretical article.

expert reports, consulting etc.⁴ Since the teaching load is for the most part regulated by the university, and there are no incentives for offering more hours of instruction, any remaining time is allocated to research and additional employment. But only the last seems to be a relatively profitable endeavour. Being able to earn large amounts of money from additional employment would, as a consequence, decrease the efforts which professors put into writing manuscripts and articles. It is conceivable, however, that a reputation established in the past would open the door to co-authorship at favorable conditions and would help offset any deficits in publications of one's own.⁵ If, on the other hand, well paid alternatives are not available, the opportunity costs for working on manuscripts drop.

Seen in terms of all the benefits derived, the *non-pecuniary returns* from publishing an article dominate, since a good reputation is likely to lead to long-term salary increases as a result of improved career and promotion opportunities.⁶ Assuming diminishing marginal returns with respect to reputation for the same manuscript quality, it ought then be possible to show that the rate of publication decreases with seniority. This is underpinned by the fact that the more seniority authors have, the fewer the income effects are. An earlier study by Blankart was able to confirm this hypothesis, if only in part.⁷ The effect of possible submission and publishing fees on the decision to publish or not should be negligible.

The market as seen from the point of view of the *publisher* is an *input* market, since manuscripts represent intermediate input for the product, i.e. the journal in question. Thus demand on the manuscript market is derived from the demand for journals.⁸ When it comes to accepting a manuscript, its exchangeability with competing submissions by other authors is a crucial

⁴ Cf. Rätzer (1984) for more information on professors' incentives provided at German-speaking universities. See Siegfried and White (1973) for the University of Wisconsin-Madison.

⁵ Studies conducted by McDowell and Melvin (1983) on the determinants of collective copyright support this assumption. A cohort test and a study of individual curricula vitae both revealed a positive statistical connection between age (experience) and the frequency of co-authorship. This was explained by the fact that reputations increase as a rule with age, thus making sole authorship no longer necessary.

 $^{^6}$ For more details on the possible effects of publications on salaries in the USA, see Siegfried and White (1973), pp. 312 ff. and Sauer (1988), pp. 863 ff. Estimations vary between \$345-392 (1972) and \$1,602 (1983) per year and article.

⁷ Cf. Blankart (1975), pp. 158 ff. This study is based on 2087 publications by the 61 members of the Theoretical Committee of the Association for Social Policy (*Theoretischer Ausschuss des Vereins für Socialpolitik*) up to the year 1973. According to the findings of this study, the publication rate is relatively high in the years prior to appointment as professor. It then sinks until the author turns forty, after which it reaches an absolute maximum on account of extensive knowledge, high productivity and the low costs of publishing. Only after the author turns fifty does the publication rate drop continuously.

⁸ See Prosi (1971), p. 27.

factor for reasons of sales volume and revenue. The more well known and respected an author is, and the more convincing and persuasive the quality of a manuscript is, the more exchangeability decreases.⁹ Finally and in the long run, the interests of readers dominate publishing processes on the journal market. This is also reflected in the choice of a suitable editor.

Publishers require the assistance of *editors* who are usually renowned researchers in their field.¹⁰ The editors for their part select suitable *referees* from amongst their colleagues who are willing to provide scholarly assessments of the manuscripts received. Publishers incur almost no costs for the time-consuming task of filtering out suitable articles, since at most only a small reimbursement is paid. The benefits for editors and referees consist mainly of *non-pecuniary returns*; the completed questionnaires provided no indication of effective financial incentives.¹¹ 66 % of the editors and 52 % of the referees believe the work they do has a positive effect on their reputation. The relatively large number of referees is surprising, since as a rule they are not mentioned by name.¹² In addition, the long gaps between the submission and publication of an article provide an especially valuable opportunity to examine the current research of other authors and use it for one's own work. On account of their specialized knowledge, this applies more to referees (97%) than to editors (80%). The advantage of acquiring such information can be used to adjust early to new forward-looking developments and to help them achieve a breakthrough by publishing appropriate articles of one's own.¹³ The altruistic motive of scientific advancement is, however, more important for editors (17 %) than for referees (6 %).¹⁴ The opportunity to play an active role, taking part in scholarly debate and being sent to conferences were rarely mentioned, thus indicating that they have almost no value as an incentive.

Particular constellations characterize the sales market for journals. Although it is true that the users of journals are readers, some 60 to 90 % of paying subscribers are libraries, institutes and other organizations.¹⁵ Of

⁹ See Prosi (1971), pp. 27 ff.

¹⁰ In particular when establishing a journal, editors attempt to find suitable publishers to help them carry out their project.

¹¹ See section 2.5.

 $^{^{12}}$ Various English-language journals have begun to express their high regard for refereeing by emphasizing it in each article published. Cf. Neilson (1997), p. X.

¹³ In extreme cases, this can lead to dishonest practices. This author learned of a colleague whose manuscript was rejected on account of a negative assessment by a referee. Shortly afterwards, the same referee published a similar article in another journal.

¹⁴ This was confirmed in no uncertain terms by Bös (1998), p. 57.

¹⁵ Making a distinction between libraries and institutes is impractical since the payment methods employed by various universities would lead to an arbitrary division. Although institutes may subscribe to specific journals, such journals frequently find their way into the library for lending.

note are economic associations whose members receive an annual subscription to a journal upon paying their club fees. Since members who are authors enjoy preferential treatment, such associations offer the additional advantage of being a scholarly discussion circle. The circulation figures for the journals under review ranges from 500 to 26,000 copies, with the majority having a circulation of 500 to 2,500 (cf. Table 1). Similarly large differences can also be found in the prices of annual subscriptions. German-language journals cost German universities between EUR 46 and EUR 463, whereas the somewhat more expensive English-language journals cost between \$58 and \$2,042 (cf. Table 1). The majority of subscriptions, however, cost between EUR 75 and EUR 200 or \$100 and \$200. Publishers have no trouble to charge different prices since the journal market fulfills the prerequisites for a policy of price discrimination.¹⁶ If we consider the price level for institutes and libraries to be 100 %, then regular private subscribers pay 50 % and club members 30 %.¹⁷ Although price discrimination always goes hand in hand with the conversion of a buyer's surplus into a producer's surplus, the intention of the publishers in this case cannot be equated with profit maximization but rather with indirect subsidies for various groups of subscribers. In this way, journals can be made economically feasible.

By lending journals, libraries disassociate users from payers, thus bringing about a special *rationality of procurement decisions*. Since journal users, who in this case are not only students but above all scholars themselves, are not required to pay fees, the library budget is similar to a common pool.¹⁸ Its use is regulated in Germany by more or less democratic decisions made by each university.¹⁹ Since canceling subscriptions to certain journals would require a good many scholars to forfeit work in a special field, the principle of consensus prevails de facto. Changes in subscription practice are thus difficult to bring about. As demand does not depend on price, established journals are able to impose price increases.²⁰ A short-

¹⁶ The preconditions for a successful price discrimination policy include having the power to set prices, having the possibility to separate different buyers and markets, and being able to prevent arbitrage dealings. Cf. Pindyck and Rubinfeld (1995), pp. 364 ff.

¹⁷ North-Holland journals are an extreme example. Their price for private subscribers is only 13 % of that charged with institutes. The relatively high price for libraries can be explained by the high degree of price discrimination. In such a situation, higher prices are set in markets where demand is relatively price insensitive and vice versa. Cf. Pindyck and Rubinfeld (1995), pp. 368 ff.

¹⁸ Opportunity costs are, however, incurred by users, in particular by scholars themselves, as other literature is not purchased.

¹⁹ As a rule, only special journals are financed by individual professors. In the case of general-interest journals this would lead to considerable external effects as they are used by other institutes. Offering these journals at the faculty level would be less than optimal and would possibly lead to purchasing arrangements between professors.

term decline in quality does not result in sanctions, and competition between journals is weak in the short term.

2. Supply pressure or demand pull?

2.1 A question arising from the torrent of articles

In the economic sciences an ever increasing torrent of articles has been identified²¹ together with the problems this presents. According to a study by Laband and Piette in which the periods 1965-1969 and 1985-1989 were compared, the number of articles rose by 23 % and the number of pages published increased by a staggering 50 %.²² The number of economic journals grew by 51 % between 1976 and 1985.²³ With this in mind, Borchardt proposed an iron law of decreasing returns to scale from reading scientific articles according to which the number of really meaningful scientific papers increases by the square root of the actual number of publications.²⁴ This hypothesis is supported by an empirical study conducted by Holub /Tappeiner / Eberharter.²⁵ Similar findings have been obtained by the Philadelphia Institute for Scientific Information in its analysis of citations in 4,500 established journals covering different scientific fields over the years 1981 to 1985.²⁶ On the other hand, the slogan 'publish or perish' indicates a permanent publication pressure on the part of researchers, especially in the American scientific community, who compete for career-enhancing, but scarce publishing space.

Irrespective of the reasons for the increase of published articles, the question still remains as to whether too much is being published. The right balance can probably neither be established by theoretical calculations nor be put into practice through specific selection of manuscripts. Scholarly advances and leaps in knowledge prevent the microeconomic principle of marginality from being applied. Furthermore, flops and innovations can seldom be foreseen ex ante. What might instead be conceivable is some kind of *financial control* similar to the patent system which might be more successful in tailoring submitted manuscripts to the individual editor's policy.²⁷

²⁵ Cf. Holub, Tappeiner and Eberharter (1991); id. (1993).

 $^{^{20}}$ The Harrassowitz price index for economic journals increase about 4.6 % and 3.7 % for 1996 and 1997 respectively and was thus considerably higher than the general increase in the cost of living. In special fields, some public libraries must face annual increases of 10–15 %.

²¹ Cf. Holub, Tappeiner and Eberharter (1993), p. 203.

²² Cf. Laband and Piette (1994a), pp. 640 ff.

²³ Cf. Laband and Piette (1994a), pp. 652 ff.

 $^{^{24}}$ Cf. Borchardt (1978), p. 488. Holub, Tappeiner and Eberharter (1991), p. 317, have described this situation as the 'iron law of important articles'.

²⁶ Cf. Hamilton (1990) and id. (1991).

²⁷ In this context, see also Section 2.5.

Table 1	Economic journals in German- and English-speaking countries
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						processing	period ²⁾				finan incent	cial ives
	Journal	price ¹⁾	circu- lation	review method	submis- sion - rejection	submis- sion – ac- ceptance	accep- tance – publi– cation	submis- sion - publi- cation ³⁾	sub- mission fee ⁴⁾	authors' royalties/ printed page	editor	referee
	I. German-speaking countries											
	Außenwirtschaft ⁷⁾	EUR 169	no info	50 % no external review, 50 % open	2-4	2-4	1-2	a	~	~	`	~
2	Betr. Forschung und Praxis (BFuP)	EUR 82	no info	single-blind review	7	г	24	25	~	EUR 23	×	,
3	Die Betriebswirtschaft (DBW)	EUR 91	no info	double blind review / exception: no external review	6 - 9	6 - 9	6 - 9	15	~	EUR 10	×	1
4	Finanzarchiv ⁷⁾	EUR 142	no info	single-blind review	2-2,5	2-2,5	3-4	9	~	no info	×	/
5	Jahrbuch für Regionalwissenschaft	EUR 76	no info	double-blind review	4	4	6 – 12	13	/	`	1	1
9	Jahrbücher für Nationalökonomie und Statistik (Journal of Economics and Statistics) $^{7)}$	EUR 285	650	single-blind review	2 - 3	4-6	8-12	15	/	`	x (expense allow- ance)	/
7	Journal of Economics (Zeitschrift für Nationalökonomie)	EUR 463	no info	single-blind review	2-3	7	4	11	,	/	×	/
8	Journal of Institutional and Theoretical Economics (JITE) (Zeitschrift für die gesamte Staatswissenschaft) ⁶⁾ η	EUR 182	no info	double-blind review				1	r Ay			

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1-5	6 – 15	3 - 5		4-6	1-4	3-6	2	0, 5 - 2	11-13	12	7	3 - 8	3-4
3-10	2-8	1-2		5	7	2-4	1	<1	3-6	4-6	3	2-3	3-4
0-6	2-8	1 - 2		3	$^{<1}$	2-4	1	<1,5	3-4	1-4	2	2-3	2
double-blind review	double-blind review	single-blind review	no external review	single-blind review	no external review	double-blind review	no external review	no external review	single-blind review	double-blind review	no external review	open	single-blind review
500	1100	2500	no info	1350	800	1800	1400	3500	no info	2500	2550	1200	no info
EUR 83	EUR 60	EUR 146	EUR 70	EUR 90	EUR 85	EUR 86	EUR 227	EUR 67	EUR 73	EUR 149	EUR 68	EUR 69	EUR 422
Konjunkturpolitik (Applied economics quarterly)	Kredit und Kapital	Kyklos (International Review for Social Sciences) ⁷⁾	ORDO ⁶⁾	Schweizerische Zeitschrift für Volkswirtschaft und Statistik (Swiss Journal of Economics and Statistics) ⁷⁾	Sozialer Fortschritt	Weltwirtschaftliches Archiv (Review of World economics)	Wirtschaft und Wettbewerb (WuW)	Wirtschaftsdienst $^{7)}$	Zeitschrift für betriebsw. Forschung (ZfbF)	Zeitschrift für Betriebswirtschaft (ZfB)	Zeitschrift für die gesamte Versicherungswissenschaft(ZVersW)	Zeitschrift für öffentliche und gemeinwirtschaftliche Unternehmen (ZögU)	Zeitschrift für Sozialreform (ZSR)
6	10	11	12	13	14	15	16	17	18	19	20	21	22

						processing	g period ²⁾				finar incen	ncial itives
	Journal	price ¹⁾	circu- lation	review method	submis- sion - rejection	submis- sion – ac- ceptance	accep- tance – publi- cation	submis- sion – publi- cation ³⁾	sub- mission free ⁴⁾	authors' royalties / printed page	editor	referee
23	Zeitschrift für Umweltpolitik und Umweltrecht (ZfU) (Journal of Environmental Law and Policy) ⁷⁾	EUR 186	600	single-blind review	4	4	10-14	16	~	~	~	~
24	Zeitschrift für Wirtschafts- und Sozialwissenschaften (ZWS)	EUR 59	ca. 2500	double-blind review	ę	r	r	9	~	`	`	~
25	Zeitschrift für Wirtschaftspolitik	EUR 46	ca. 500	no external review	2	2	8 - 12	12	/	1	'	
	II. English-speaking countries											
-	Canadian Journal of Economics	\$ 102	no info	single-blind review	4	12	9	18	\$ 90 (sub- scription included)	-	×	×
5	Industrial Relations Journal	£ 198	ca. 1000	double-blind review	9	9	12	18	`	~	`	~
3	Journal of Banking and Finance ⁷⁾	\$ 1.660	no info	double-blind review	ŝ	2-3	4-7	ω	\$ 130 (subscrip- tion included)	~	~	×
4	Journal of Business	\$ 78	no info	single-blind review	1	m	12	15	`	~	~	×
5	Journal of Econometrics	\$ 2.042	no info	open	9	24	æ	32	\$ 50 (sub- scribers free)	~	×	~
9	Journal of Economic Literature ⁷⁾	\$ 58	26000	single-blind review	7	15	9	21	/	`	×	`
2	Journal of Economic Perspectives ⁷⁾	\$ 58	26000	no external review	2-3	2-3	6 - 8	10	~	~	x (monthly salary)	

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2.2 Manuscript backlog, publication rate, article reduction requirements

The ratio of manuscript supply to publishing capacity might be defined as a journal's 'capacity utilization rate'. This ratio should be determined on the basis of a potential backlog of submitted manuscripts, the publication rate and the frequency of requirements to cut the length of a given article. Since it may be difficult to directly ascertain a backlog of submitted manuscripts, the length of the printing phase can be used as a valuable indicator. In a worst-case scenario the decision to accept a given manuscript is taken shortly before a new issue of the journal. Than, the next possible publication date depends on the intervals at which the journal is published, i.e. normally at intervals of one to three months. Since varying numbers of manuscripts are ready for publication, it is advisable to have additional material available in reserve. For quarterly journals we can assume a six-month production delay. This period is identical with the median value of the printing phase as obtained from the survey; this means that some 50 % of the journals do have a backlog of submitted manuscripts for more than a half year.²⁸ Printing phases range from 1 to 24 months with a printing delay of more than 12 months being observed for 7 % of the journals. Bearing in mind the objective of publishing articles whose content is state of the art, this result clearly indicates mismanagement.²⁹ As to the question of an overall trend, it can be said that an extension of the printing phase was observed for 25 % of the journals with a reduction being achieved by the same percentage. The remaining 50 % showed no discernible overall trend.

The *publication rate* defined as the percentage of manuscripts accepted for publication shows that it is normally very difficult for a given author to have his papers published in a particular journal.³⁰ From the editor's perspective this figure not only reveals the pool of manuscripts from which to choose, but also the workload and the personnel required for reviewing manuscripts. With the exception of journals which ask certain researchers to submit manuscripts covering particular scientific fields, the publication rate ranges from 10 to 70 % (see Fig. 1). Those journals that achieve a publication rate of 60 % or more are characterized by special features: the vast majority of them appear in German-speaking countries, external reviews are uncommon, manuscripts are obtained from active acquisition, and requirements to reduce article length are rare. Nevertheless, more than half

²⁸ For information on the printing phases of different journals, see Table 1.

²⁹ In his comparative analysis of 25 English-language journals, Yohe (1980), p. 1051, found an almost identical variation range between 1.6 and 23.3 months. The median value is 10 months which means that the current results suggest a slightly improved situation. However, when comparing specific journals from the intersection of both studies, the situation remains largely unchanged.

 $^{^{30}}$ Particulars on individual journals are not disclosed in order to avoid strategic responses in manuscript submission.

of the journals publish only one out of every three to every ten manuscripts submitted. A downward trend was observed for 29 % of the journals surveyed with only 2 % showing an upward trend. This development is indicative of a growing scarcity of publishing space.



1) Percentage of manuscripts accepted for publication.

2) Journals that normally ask individual authors to submit manuscripts on certain subjects while accepting only a small number of unsolicited submissions.

Figure 1: Publication rate

The extent of manuscript revision prior to final acceptance can be derived from the number of manuscript versions. Average values range from 1.2 to 2.9 versions with a median value of 2.0 (see Fig. 2). Particularly striking is the fact that relatively few corrections are required for manuscripts that have not been passed on to external referees. On average, about 80 % of these journals reach a maximum number of 1.6 versions. When the aboveaverage publication rate of these journals is taken into account, it can be assumed that either the reviewing process is less critical or the supply of manuscripts is tailored to demand.

As expected, article length reduction requirements are imposed by all journals, although to a varying degree. Such requirements are applied by nearly half of the journals to approx. 30 % of the manuscripts, and about one third of the journals see a need to shorten at least 70 % of the manuscripts submitted. Mr. Bös, the editor of the Journal of Economics, pursues a remarkable course. Authors whose manuscripts exceed the page limit can either revise the paper or pay for the additional pages.³¹ This approach

³¹ Payment is based on additional costs incurred from extending a given issue. According to Bös, most authors favor a middle course and often opt for shortening the appendices.

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grants the author a certain liberty and it is more flexible than rigorous quantitative restrictions.



1) Average values determined for individual journals.

Figure 2: Number of manuscript versions submitted prior to final acceptance

2.3 Complaints about the quality of submitted manuscripts

Several editors maintained that sometimes there are not enough manuscripts to fill a given annual volume which in their original version meet established quality standards. Although revision nowadays seems to be a very general procedure even for excellent papers, considerable subsequent improvements are often required to raise the quality level of *'marginally acceptable manuscripts'*.³² According to the editors, articles of questionable quality were sometimes published nevertheless.³³

Almost one third of the editors find it difficult to ensure that a sufficient number of submitted articles are available which satisfy quality standards for publication. Such concerns were expressed by 34 % of the editors in German-speaking countries, but only by 11 % of the editors in English-speaking countries. 23 % mentioned occasional problems, while frequent problems were reported by 7 %. This coincides with complaints voiced by 30 %

 $^{^{32}}$ In the words of Laband (1990), p. 343: "upgrading the quality of 'marginally acceptable' manuscripts."

³³ In this context we wonder what has so far prevented a reduction in the journal market's alleged surplus capacities. The absence of quality control in conjunction with inadequate sanctions due to the libraries' ordering practice are possible explanations.

of the editors about authors failing to give due regard to suggestions for improvement. 56 % of the editors criticized authors' non-compliance with formal requirements and 65 % complained about the length of manuscripts. And finally, 21 % of the editors were dissatisfied with the amount of time authors take to revise their papers. Besides, the time required for revision reflects the differences between accepted and rejected manuscripts.³⁴

From the author's point of view, failure to give due regard to recommendations by referees can be justified by the fact that some experts do not provide sufficiently detailed or specific information. This problem is compounded by experience with different referees arriving at totally different and even contradictory reviews resulting in revision becoming a delicate 'balancing act' unsatisfactory for all concerned.

2.4 Active manuscript acquisition

70% of the journals rely on active manuscript acquisition. This is done either informally among colleagues (58%) or at meetings and conferences (53%). With one single exception, this course is pursued by all the journals which do not rely on external reviews. This may reflect their character as an associations' and members' journal. Active manuscript acquisition is also common among nearly two thirds of the periodicals surveyed with Englishlanguage journals accounting for a remarkably large portion.

On the one hand, actively entering into contact with researchers has the advantage of providing the right choice of manuscripts while simultaneously yielding *quality indicators* for positive screening results.³⁵ On the other hand, it is precisely this situation that gives rise to structural criticism of the procedure in terms of a *self-perpetuation* of methods and contents. Moreover, a number of editor responses show that approaching certain colleagues makes it virtually impossible to subsequently reject their submissions. Editors of externally reviewed journals, particularly in Germanspeaking countries, seem to view active manuscript acquisition as being inconsistent with any claim to objectivity.

2.5 Lack of financial control

As a *free-market rationing instrument*, the pricing system has been quite successful in controlling supply and demand of scarce resources in many

³⁴ See Section 3.4.

³⁵ Among journals not relying on external reviews this screening process may serve as a substitute for external reviews.

sectors of the economy. Because public libraries account for the bulk of journal subscriptions with their users being able to consult at no cost any articles of interest as quasi public goods and to make as many copies³⁶ as desired, this rationing mechanism is ineffective in this particular context, as already described in Section 2.1. On the other hand, electronic media facilitate the introduction of *user-oriented remuneration*. A continuation of free access to informative summaries of contents in the Internet should be in the publishers' sales interest. Once the subscription obstacle has been removed, researchers would have an enlarged reference potential at their disposal. Time-consuming orders on inter-library loan would be unnecessary, and service charges for use of literature could be allocated to the individual institutes.³⁷

The common objection that additional copies can be produced at zero marginal cost and that there is no competition in the use of publications, may be objectively justified. However, this also applies to the copyright's origins. It is therefore particularly important when publishing new knowledge to give due regard to the incentive to produce this commodity as well as to the user's rapidly changing preferences, which are largely ignored by (quasi) gratis use. Structural changes affecting topics, presentation, etc., would be under direct user control and immediately felt by the publishers.³⁸ Furthermore, there would also be *article-specific payments* according to the various substitution elasticities which take into account differences in guality and / or author reputation.³⁹ For the benefit of a medium-term certainty of cost accounting as well as "frequent users", it should still be possible to sign as forward contracts subscriptions with limited or unlimited copy numbers. Another conceivable option is a system in which the libraries still act as buyers when dealing with publishers and wholesalers and assume the task of reselling to the institutes. The most important thing in all these constellations is that the charges fulfill an effective control function in addition to their financing function.

Author's royalties are payments made to the author by the publisher upon publication of his work.⁴⁰ According to the survey, no journal in the Eng-

³⁶ Copy charges payable to the authors' fund VG WORT are ignored here.

³⁷ Services rendered to other library users (students, etc.) might be compensated in a similar way or by charging a standard library fee.

³⁸ Control by user-oriented remuneration is diametrically opposed to the elitist conception of scientific institutes that firstly rely on their ability to tell the difference between good and bad and secondly always work on the assumption that their output is bound to be important.

 $^{^{39}}$ See Prosi (1971), p. 28, who also recommends payment of graduated fees to the authors.

 $^{^{40}}$ As a member of a copyright collecting society, the author also receives a small amount of copyright royalties. In the case of VG WORT these currently amount to 2.05 EUR per page (1,500 characters).

lish-speaking countries pays these royalties. However, 38 % of the periodicals published in German-speaking countries normally make payments ranging from EUR 10 to 52 per printed page (see Table 1). Compared with the opportunity cost estimates of several thousand EUR and the non-pecuniary returns described in Section 1, this 'compensation for services rendered' can certainly not be expected to have a control function for the submitting author.⁴¹ These small payments can only be thought as a compensation for monetary expenses which the author has to bear when finishing a paper, e.g. payments to someone who types the manuscript.

Conversely, *submission fees* may be defined as negative royalties. Unlike author's fees which are paid only on publication, these fees are due as soon as the manuscript is submitted for publication. This is normal practice for one third of English-language journals, whereas publishers in Germanspeaking countries have so far refrained from charging such fees. Submission fees are normally \$ 50, and in exceptional cases may amount to sums of up to \$ 130 (see Table 1). These amounts suggest that it is more of a processing fee than the price to be paid for the use of relatively scarce review and publication capacities.⁴²

Submission fees could, though, play an important part in the control process considering the high 'rejection rate' of manuscripts, the scarce time resources of the referees⁴³ and the long waiting lists for already accepted, but not yet published manuscripts. With appropriate submission fees it is possible not only to cover the costs arising from editing and reviewing manuscripts, but also to influence the authors' behavior. Manuscripts with a poor chance of acceptance would be held back. There would be a decreasing rate of trial submissions with the intention of obtaining valuable critiques and discussion points from renowned referees employed by established journals. The attraction of double submissions to several journals at the same time, a common practice despite the violation of submission regulations, would begin to fade. Furthermore, when considering financial investment, the optimum sequence of submissions to journals would be replaced by the variable of 'acceptance probability'.⁴⁴ A flexible fee policy might enable editors to influence the average quality of manuscripts or their rejection rate. In order to attract high-quality manuscripts, a certain percentage of the submission

⁴¹ All the more so as the author's salaries are lump sum payments irrespective of user acceptance (citation rate) or any other performance indicators.

⁴² Normally, this fee includes a free annual subscription. This 'package service' is a misallocation because – notwithstanding a possible lack of interest – annual volumes fill the cramped shelves in the author's office without granting noticeably easier access than library issues.

⁴³ This pressure can be inferred from the delay in the reviews conducted by individual journals. See also Section 3.4 and Table 1.

⁴⁴ For the optimum order of submissions to journals, see Oster (1980), pp. 444 ff.

fees might be used to increase the authors' bonus should the manuscript be accepted.

If the fees are to exert their full influence on individual behavior, they should not be passed on to the institute's budget. Further problems in this connection may arise from differences among authors in financial strength and risk preference, irrespective of their individual achievements. As a result, young and unknown scientists may have greater difficulty entering the market than their renowned senior colleagues. However, young researchers can expect a relatively higher rate of return in view of their longer professional future.

Another financial component is the possible payment of *referees*. According to the survey, most manuscript reviews are performed on an honorary basis (see Table 1). Only 23 % of the referees, mainly those working on behalf of English-language journals, receive small financial rewards between \$ 25 and \$ 75. Three journals couple the remuneration with the requirement that the review be completed within four to six weeks. The time spent on the review process is a real problem, as described in greater detail in Section 3.4. Therefore, incentives to shorten this process are a step in the right direction. However, the study conducted by Hamermesh⁴⁵ shows that small sums are relatively ineffective. The journals surveyed in our own study showed no markedly short time spans.

Only about 50 % of all *publishers / editors* receive a financial reward for their generally time-consuming work (see Table 1). Of these 20 % are paid expense allowances, while a further 20 % can rely on a regular monthly pay. This means that for the other half, altruistic motives and other non-pecuniary returns must explain their decision to perform this honorary function.⁴⁶ The editors of several journals were supported by an assistant or even a regular editorial staff. The necessary funding was formally or informally provided by universities and must therefore be regarded as subsidies.

3. Reviewing procedures

3.1 Reliability of selection procedures - impressions of a masquerade

The responses justifying the selected review procedure show that editors, especially of journals relying on external referees, tend to place great emphasis on reliable, and even 'objective' selection. But what is meant by *reliability* in this context? This could mean identical decisions being taken in re-

⁴⁵ See Hamermesh (1994), p. 160.

 $^{^{46}}$ See also Section I. In one case, editing was rewarded with a reduction in teaching hours.

sponse to the submission of *identical manuscripts* to *several different journals* covering similar fields and applying similar methods. However, such comparisons are difficult. Different publication rates, different evaluation criteria, different specialties, etc., may, in the course of the complex review process, lead to completely different decisions. Besides, this 'experiment' has been conducted by the scientific community many thousands of times in all those cases where the first submission was rejected before the second or sometimes third submission – occasionally receiving quite contrary reviews – was finally published. Thus, the collection of such examples from very well-known researchers in the field compiled by Gans/Shephard gives cause for reflection, but it cannot be regarded as evidence of unreliable procedures.⁴⁷ There are, however, indications of a questionable concept of quality.

Another interpretation of reliability is based on the concept of *non-discrimination*. According to this concept, identical manuscripts should lead to identical decisions irrespective of the author's or research institute's standing. Following an experiment performed by Peters and Ceci⁴⁸, I selected 16 journals covering the entire spectrum of review procedures.⁴⁹ The 'masquerade' began in December 1998 with 'cosmetically' changed *copies* of articles being submitted for publication to the *very same journals* which had already published them 5 to 21 months ago.⁵⁰ The names of well-known scientists in the field, among them several Nobel prize winners, and the institutes involved were replaced by no-name substitutes. In the selection of papers, great emphasis was placed on subjects of topical interest. Unfortunately, the experiment had to be discontinued after only five weeks.⁵¹

⁴⁷ Using numerous examples from subsequently much-cited, pioneering articles, Gans and Shephard (1994) show that some manuscripts were submitted several times to different journals prior to publication. For example, Akerlof's manuscript 'Market for Lemons' was originally rejected three times. The authors also furnished interesting background information on J.M. Keynes's editorship at the Economic Journal.

⁴⁸ In their much regarded experiment, Peters and Ceci (1980) selected 10 quasi identical manuscripts of highly esteemed psychologists and, after a period of 18 to 32 months, submitted them again to the same outstanding journals in which they had already been published. The referees knew the names of the authors (single-blind review) which for the duplicates were replaced by unknown, fictitious names. As many as three out of ten journals realized that the submissions were duplicates. Only two out of 14 referees supported the acceptance, which would subsequently have resulted in publication, of 7 manuscripts subjected to review. The reasons given for negative votes included inadequate methodology, presentation and subject treatment.

⁴⁹ See also footnote 7 of Table 1. The complete list includes 'Econometrica' and the 'Quarterly Journal of Economics'; their responses to the survey are not available.

⁵⁰ Due to a shortage of clerical staff, half of the articles were submitted as appropriately prepared photocopies.

 $^{^{51}}$ Since both my name and current research interests had become known as a result of the survey, one of the editors involved suspected I was behind the experiment when the swindle with the review process was "exposed". In the spirit of academic honesty and fairness I revealed the role I was playing which met with an unex-

On account of the experiment's premature termination, it is very difficult to draw any far-reaching conclusions. Nevertheless, here are some *fragmentary* results:

- Four editors or referees recognized the duplicate.
- Two editors rejected the manuscript on grounds of similarity with recent submissions (naming the original paper).
- One editor rejected the manuscript on the grounds of substandard quality without having arranged for the usual external review. "[The] paper's content is not substantial enough to meet the high standards of this journal.... For these reasons I am sure that any referee I might consult would advise me to reject the paper."
- The manuscript of a Nobel prize winner was rejected because it was too specialized: "Your paper strikes our Board of Editors as appealing to a more narrow audience than we can target, given the general reader nature of our audience and our severe space constraints and backlog."
- One manuscript was rejected by the editors, among other reasons, on account of the journal's policy of generally accepting only solicited articles.
 "One reason for that decision is that most of the space in this journal is already committed to articles solicited by our associate editors."
- Another eight manuscripts were accepted for the review process.

Why is the reliability of the review process such an important aspect, not just as far as the self-concept of many editors is concerned? A reliable selection procedure in the sense of a generally accepted *quality inspection* is an important basis for any reasonable scientific work. In the eyes of the readers and authors representing the scientific public this is a *matter of trust* generally placed in journals in the scientific communication process. Furthermore, *protection of confidence* is also afforded to third parties performing professional evaluations of scientists and research institutes, inter alia, on the basis of the number of publications with special regard being given to the status of the respective journal. While not intending here to question the *ranking culture* based on published articles and citation frequencies, the reliability of the procedure forms the basis of this rating.⁵²

pectedly vehement response. Since the editor had already informed other journals of the manuscript submitted, it was clear at this point that the experiment could no longer produce any useful results. What is more, he imposed on my person a publication ban in his journal (a time – honoured german journal of – commonly – good repute), submitted a complaint to the President of the local university concerning the matter and advocated professional condemnation of this 'academically unethical behavior' before the Association for Social Policy (*Verein für Socialpolitik*). Most of the other editors, who wrote to me in response to my discontinuation of the experiment, reacted with kind sympathy.

⁵² For a critical analysis of publications and citation frequencies serving as ranking determinants, see Meyer (2000).

What if the process of selecting manuscripts is actually unreliable in isolated cases? Assuming a *structural imbalance* in favor of renowned researchers, a *structure-conserving effect* could be expected. Were more low-quality papers to be accepted, this trend would be restricted, if only in the long term, by competition among journals and scientists. *Unsystematic differentiation*, however, raises hardly any problems since success is to be expected at least in a second or third attempt.⁵³ What is more, unsystematic discrimination may grant *newcomers* easier access.⁵⁴

3.2 Selection of the review process - pros and cons

Selecting the review process is a crucial decision which will influence the work and time load, in some cases even the quality of the published articles, and the reliability of the process. According to the survey, 79 % of the journals opt for external reviews.⁵⁵ This is due to the increasing degree of specialization which places excessive demands at least on editors of general-interest journals.⁵⁶ Furthermore, the referee system contains two quality hurdles which must be overcome: on the one hand, the 'rejection' or '(conditional) acceptance' and, on the other hand, the evaluation of a revision based on referee proposals.⁵⁷ As shown by Laband using the parameter of citation frequency, articles reviewed by referees receive greater attention than those papers that are not subjected to external reviews.⁵⁸

The survey population is dominated by the single-blind procedure accounting for 44 %, followed by double-blind reviews accounting for 28 % and overt reviews accounting for 7 %.⁵⁹ Advantages of the *double-blind*

 $^{^{53}}$ What has been ignored here is the depreciation rate of the manuscript's content which should be taken into consideration in view of the time spent on further review processes.

⁵⁴ These considerations might also account for the fact that quite similar results were obtained when using modified ranking criteria. Cf. Conroy, Dusansky, Drukker & Kildegaard (1995); Laband (1985a and 1995b).

 $^{^{55}}$ In the 21 % share of journals without external reviews, there are twice as many journals from German-speaking countries as English-language journals. See also Table 1.

⁵⁶ Cf. Bös (1998), p. 47.

⁵⁷ See Bös (1998), p. 69.

 $^{^{58}}$ Between 1976 and 1980 Laband (1990) conducted a study of 98 articles published in six U.S. top journals, with 14 manuscripts not being reviewed by external referees.

⁵⁹ Single-blind reviews: the author does not know the name of the referee, but the latter is informed of the author's name. Double-blind reviews: neither the author nor the referee know each other's names. Most English-language journals prefer the single-blind procedure, whereas the majority of German-language journals opts for the double-blind procedure. In recent years, 10% of the journals have abandoned the single-blind procedure in favor of double-blind reviews.

procedure are a higher degree of objectivity, as stated by 50 %, and conformity with international standards as stated by 33 % of editors concerned.⁶⁰ A disadvantage seen by as many as 15 % of the respondents is the fact that the referees, in spite of the submissions' anonymity, may be able to guess the author's name, not least from the attached list of references. Wrong guesses might even result in undesired distortions.⁶¹ Advantages of the *single-blind review* include less administration and the informative value that goes with knowing the author's name as reported by 16 % of editors concerned.⁶² One respondent emphasized the fact that this is the only way to guarantee respect for and protection of referees. As to the advantages of *non-external refereeing*, emphasis has been placed on its up-to-dateness because of the shorter time required as well as the possibility of specialization.

Normally, the *pool of referees* is an open forum of continuously rotating scientists asked by the editors for their expert opinion, as and when required. 74 % of the journals employ more than 100 referees at irregular intervals, while 18 % use more than 300 reviewers. Several editors reported that recruitment of colleagues who, with few exceptions, work on an honorary basis is an arduous job.⁶³ About one third had no difficulties in recruiting suitable referees, 55 % recorded few problems, while 15 % reported more frequent problems. Some of these statements correspond to editors' responses concerning *problems* affecting the review process. For example, 24 % mentioned the problem of manuscripts being rejected, 3 % complained that they get no response to the submission, and 12 % criticized the poor informative value of some reviews. One respondent complained about the frequently harsh criticism expressed by the referees whose anonymity is preserved throughout the process.⁶⁴

⁶⁰ For empirical findings in support of this view, see Blank (1991) as well as Laband and Piette (1994c).

 $^{^{61}}$ See Blank (1991), p. 1051. For a total of 832 anonymous manuscript submissions to the American Economic Review, correct guesses of the author's name accounted for 46 %, while wrong guesses were reported for another 5 %. Similar findings by Bös (1998), p. 59.

⁶² Knowledge of the author's name may, for example, render unnecessary double checks on mathematical derivations. See Blank (1991), p. 1042, as well as Deaton, Guesnerie, Hansen a. Kreps (1987), p. 204.

⁶³ The large number of referees may be explained by their honorary position and the fact that editors do not wish to place too many demands on their colleagues.

⁶⁴ For this reason, a reversal of the single-blind method as already applied by the Review of Radical Political Economics has been under discussion. This would mean that the author's name remains unknown to the referee, whereas the author is informed of the referee's name.

3.3 Who decides whether to accept or reject a manuscript?

The *formal* answer to this question should be quite clear: It is one or more editors who are responsible for selecting the manuscripts for publication and who have the final say in this matter. However, where special subjects are concerned, editors are at a disadvantage vis-à-vis referees, which can be attributed to asymmetries in the distribution of information.⁶⁵ Moreover, editors deciding contrary to the unanimous vote of the referees would come under heavy pressure.⁶⁶ This also explains the editor's stronger position where there are two as opposed to three referees because in the latter case there is normally always a clear majority on the part of the referees which would have to be countered by reasonable arguments.

Fig. 3 shows the distribution of the *de facto* decision-making power. Although 75 % of the respondents claim to have a major say in the selection of manuscripts, only 20 % regard themselves as the sole decision-maker. Reaching a figure of nearly 30 %, the co-editors, who normally take care of certain scientific disciplines, bring significant influence to bear. About 30 % of the editors hold the view that referees influence the de facto selection, with as many as 5 % crediting them with the all-important preliminary decision.



Figure 3: Who decides whether to accept or reject a manuscript? (one or more possible answers)

With renowned scientists being appointed editors and referees, the policy-making bodies of the journals have come to personify state-of-the-art

⁶⁵ Cf. Bös (1998), pp. 64 f.

 $^{^{66}}$ For similar findings, see Bös (1998) who identified a clear connection with the votes of the referees.

expertise. According to Kuhn⁶⁷, innovative outsiders might have a hard time of asserting themselves in majority-holding bodies, particularly as the expertise of decision-makers would be devalued. In three out of five journals, the board of editors consists of no more than five members. In the last four years, half of the journals have substituted one member of this body, and 23 % replaced several members in the same time.⁶⁸ 24 % of the journals have referee teams that are characterized by open membership and regular rotation. This should offset the risk of fossilized structures.

3.4 Time factor

Publishing manuscripts submitted to journals is an *interactive and timeconsuming process*. The time span between submission and publication should be kept as short as possible in order to make the (new) scientific knowledge available to professional circles and to defend intellectual property rights. For the journals surveyed this *publication lag* ranges, on average, from two to 32 months (cf. Table 1 and Fig. 4b). The median value is exactly 11 months.⁶⁹ However, 31% of the periodicals took more than 16 months to publish submitted manuscripts which means that this subset failed to achieve the objective of up-to-dateness.

Journals not opting for external reviews require a remarkably short time before publication. On average, manuscripts were published within a maximum of seven months by 67 %, while a delay of more than 11 months was observed for only 11 % of these journals. These figures reflect the advantages of purely internal reviews because much simpler communication and decision-making structures mean quicker results.

On closer examination, a distinction must be made between the *review phase* and the *printing phase* as described in Section 2.2. If the manuscripts are to be reviewed externally, the (co-)editor, following initial perusal, will pass them on to two qualified referees. After the referees have delivered their opinion to the editors, the author – should his manuscript win preliminary acceptance – is normally asked to make improvements in line with the referees' criticism. The revised manuscript, which may occasionally undergo two or even three revision processes, forms the basis of the editors' final decision whether to accept or reject the manuscript. Therefore, it is not

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⁶⁷ Cf. Kuhn (1973) and Fölster (1995).

⁶⁸ For some journals, the statutes provide for a periodic change in the composition of the Board of Editors.

 $^{^{69}}$ This time span is relatively short compared with the results obtained by Yohe (1980), p. 1051. According to this study, 50 % of the journals took an average time of 17.4 months to publish submitted manuscripts.

Publishing articles

surprising that on average, rejections tend to reach authors sooner than final notifications of acceptance. On average, rejections from all journals arrived within a maximum of eight months, whereas positive replies took up to 24 months to reach the recipient (cf. Fig. 4a).⁷⁰ Major differences were also observed for time periods of three and six months within which 62 and 98 %, respectively, of all rejections had arrived, but only 40 and 70 %, respectively, of positive replies. Where the editors were able to discern an overall trend, there were more reports of a shortened instead of a lengthened review process compared with previous years.⁷¹





Figure 4a: Distribution of publication lags among various phases

Figure 4b: Overall time required up to publication

The survey shows that the *reasons* for the sometimes quite considerable time required lie with all the parties involved but that most of the blame lies with the referees. 71% of the editors complained about the excessive

⁷⁰ These figures are average values for the individual journals. See also Table 1.

 $^{^{71}}$ 26 % of the editors observed a reduction, and only 8 % reported a lengthening of the time required for rejections. The time spent on reviewing manuscripts was reduced by 18 % of the journals and increased by 15 %.

time taken for external reviews, while only 21 % reported that the authors spent a lot of time revising their papers. Delays are occasionally caused by referees who turn down or fail to respond to manuscript review requests.⁷² Delays caused by editors can be attributed to the physical distance between individual members of the board, to the need to organize meetings for formal publication decisions as well as to the discontinuity that arises from personnel rotation.

What *characteristics* do journals with exceptionally long review phases have in common?⁷³ The vast majority of these journals rely on large boards of editors with ten or more members. While only an average number of complaints were heard about the length of time required for reviews, there was a remarkable increase in the number of complaints about time-consuming revision by the authors. Contrary to all expectations, the number of revised manuscript versions seemed not to play any particular role. Similarly, of the journals with exceptionally long review phases, only a few waited three or more months before inquiring about reviews still due. On the other hand, a major characteristic common to these journals is the difficulty caused by referees who either turn down or fail to reply to manuscript review requests.

3.5 'Stewing in their own juice'

One point of structural criticism directed at the review system, regardless of the particular procedures adopted, concerns the *self-perpetuation* of methods and contents.⁷⁴ This means that authors contact journal editors sharing the same philosophy and methodology who in turn arrange for reviews to be performed by referees associated with them. Admission to the circle of referees is acquired through relevant publications resulting in the author himself being approached at the next suitable opportunity for refereeing for relevant specialties.⁷⁵ Various journals are thus characterized by a rather high degree of uniformity as far as methodology and content orientation are concerned.⁷⁶ Nevertheless, some variety is ensured by the competition between journals. The absence of scholarly debate and the exclusion of

 $^{^{72}}$ See similar observations by Hamermesh (1994), pp. 158 ff., and Bös (1998), p. 56. According to the survey, 70 % of the editors normally wait no more than two months before they make another attempt to contact referees who fail to reply.

 $^{^{73}}$ This issue specifically applies to 18 journals which took an average period of four months to send off rejections and/or more than six months for positive replies.

⁷⁴ See Fölster (1995), pp. 43 ff.

 $^{^{75}}$ The survey shows that all referees have been published in the various journals. Ironically, our manuscript experiment resulted in at least two instances where the original author was appointed as referee.

 $^{^{76}}$ For method dominance in various journals, cf. Grubel and Boland (1986). See also Laband and Piette (1994b), p. 194 f.

innovative mentors from publishing cartels may ultimately impair scientific progress.

A similar problem arises from the *link* between the editing job and the publication of articles in the same journal. 57 % of the respondents reported that their own papers were published during their editorship in the very journal for which they officiated as editors with 16 % pointing out the exceptional character of this situation. The respondents' awareness of the problem is highlighted by the stress laid on the fact that these were isolated cases and their assertions that review procedures were strictly adhered to. This want of separation between the two functions applies to externally reviewed journals to a much lesser extent (approx. 50 %) than to those relying exclusively on internal reviews (89 %).

The phenomenon of journals serving as 'official organs' of institutes is examplified here by one of the leading economic research institutes.⁷⁷ In order to illustrate the journalistic influence of the acting president, the stock of citations referring to publications of the head of the institute that appeared in two journals published by the institute was determined. The study was based on a nine-year period with a new president assuming office in 1989.⁷⁸ Fig. 5 shows the change in the citation dominance resulting from the change in presidency.⁷⁹ Multiple citations to the same paper appearing in one article were excluded, whereas self-citations by the presidents in their own publications were included.⁸⁰ The decline in the number of citations of the former president is certainly due to his retiree status, but the influence of the new president is clearly evident. The difference in the scale of the citation stocks reflects the fundamental difference between the two journals. While journal X publishes manuscripts of international economists, journal Y mainly contains publications of in-house research findings.

4. Summary

Both a survey among editors of economic journals and a manuscript experiment are used to make the interaction between authors, editors, referees and publishers in the creation of 'articles' as productive goods more transparent. The distinction between manuscript and journal markets sheds light

⁷⁷ Cf. Pommerehne (1986), p. 298.

⁷⁸ Investigations will reveal that this constellation can be found in three economic research institutes, i.e. DIW (Berlin), IfW (Kiel) and RWI (Essen). Due to lack of resources, the years 1986 and 1992 were excluded from the survey.

⁷⁹ Surprisingly, this dominance changed without delay.

⁸⁰ Most self-citations were derived from the 'new president' in the journal X who accounted for a stock of exclusive self-citations in four out of seven annual volumes.







* Excluding multiple citations to the same paper.

Figure 5: Stock of citations

on the significance of non-pecuniary costs and returns as key incentives for the actors involved. Differentiated subscription fees appear to indicate that indirect subsidies to individual recipient groups result in a profitable calculation for the publisher. The common pool characteristic of library services makes rational procurement decisions difficult where budgetary resources are scarce.

The question as to whether the manuscript market may be better understood in terms of supply pressure rather than demand pull cannot be conclusively settled. Long lags between acceptance and publication, publication rates below 30%, and the standard requirement to cut article lengths suggest an excessive supply of manuscripts. On the other hand, frequently voiced criticisms pointing to the necessity to revise submitted papers, as

well as active prospecting for new manuscripts on the part of editors both tend to underpin the hypothesis of demand pull. An analysis of financial incentives such as user payments by readers, author royalties, submission fees and remuneration of referees tends to suggest that there exists a considerable wealth of untapped potential for influencing market behavior.

In spite of its premature discontinuation, the results of a manuscript experiment bring to light grounds for doubting the overall reliability of publication decisions, i.e. their non-discriminatory character. Reviews are predominantly carried out by external referees, while no convincing arguments are to be found for the choice of the double-blind procedure. Whereas it may be true that editors are nominally responsible for selections, the real (pre-)decision lies in effect with the referees and co-editors. For one third of the journals there is a considerable time lag of more than 16 months between manuscript submission and subsequent publication. In this domain, journals not opting for external reviews exhibit substantial advantages. The dangers of self-perpetuating methods and contents are illustrated on the basis of structural indicators of the reviewing process, the double function of the editor as author, and the question of journals acting as 'official organs' of institutes.

References

- Blank, R. M. (1991), The Effects of Double-Blind versus Single-Blind Reviewing: Experimental Evidence from the American Economic Review, The American Economic Review 81, 1041–1067.
- Blankart, B. (1975), Mikroökonomische Ansätze zur Messung des wirtschaftswissenschaftlichen Forschungsoutputs, Konjunkturpolitik 21, 148–169.
- Bös, D. (1998), Gedanken zum Refereesystem in ökonomischen wissenschaftlichen Zeitschriften, in: F. Baltzarek, F. Butschek u. G. Tichy (eds.), Von der Theorie zur Wirtschaftspolitik – ein österreichischer Weg. Festschrift zum 65. Geburtstag von E. W. Streissler, Stuttgart, 47-72.
- Borchardt, K. (1978), Wissenschaftliche Literatur als Medium wissenschaftlichen Fortschritts, Jahrbücher für Nationalökonomie und Statistik 193, 481–499.
- Conroy, M. E., Dusansky, R., Drukker, D., Kildegaard, A. (1995), Communication, Journal of Economic Literature 33, 1966–1971.
- Deaton, A., Guesnerie, R., Hansen, L.P., Kreps, D. (1987), The Econometric Society Annual Reports, 1986 – Econometrica Operating Procedures, Econometrica 55, 204-206.
- *Fölster*, S. (1995), The Perils of Peer Reviews in Economics and Other Sciences, Evolutionary Economics 5, 43–57.
- Gans, J. S., Shepherd, G. B. (1994), How are the Mighty Fallen: Rejected Classic Articles by Leading Economists, Journal of Economic Perspectives 8, 165–179.

- Grubel, H. G., Boland, L. A. (1986), On the Efficient Use of Mathematics in Economics: Some Theory, Facts and Results of an Opinion Survey, Kyklos 39, 419–442.
- Hamermesh, D. S. (1994), Facts and Myths about Refereeing, Journal of Economic Perspectives 8, 153-163.
- Hamilton, D. P. (1990), Publisling by- and for? the Numbers, Science 250, 1331– 1332.
- (1991), Research Papers: Who's Uncited Now?, in: Science, Vol. 251, pp. 25.
- Holub, H. W., Tappeiner, G., Eberharter, V. (1991), The Iron Law of Important Articles, Southern Economic Journal 58, 317–328.
- (1993), Die Literaturflut in den Wirtschaftswissenschaften und ihre Folgen, WiSt 22, 203-207.
- Kuhn, Th. S. (1973), Die Struktur wissenschaftlicher Revolutionen, (Original: The Structure of Scientific Revolutions), Frankfurt.
- Laband, D. N. (1985a), Publishing Favoritism: A Critique of Department Rankings Based on Quantitative Publishing Performance, Southern Economic Journal 52, 510-515.
- (1985b), An Evaluation of 50 'Ranked' Economics Departments By Quantity and Quality of Faculty Publications and Graduate Student Placement and Research Success, Southern Economic Journal 52, 216–240.
- (1990), Is There Value-Added from the Review Process in Economics? Preliminary Evidence from Authors, The Quarterly Journal of Economics 55, 341–352.
- Laband, D. N., Piette, M. J. (1994a), The Relative Impacts of Economics Journals: 1970-1990, Journal of Economic Literature 32, 640-666.
- (1994b), Favoritism versus Search for Good Papers: Empirical Evidence Regarding the Behaviour of Journal Editors, Journal of Political Economics 102, 194–203.
- (1994c), Does the 'Blindness' of Peer Review Influence Manuscript Selection Efficiency?, Southern Economic Journal 60, 896–906.
- McDowell, J. M., Melvin, M. (1983), The Determinants of Co-Authorship: An Analysis of the Economics Literature, The Review of Economics and Statistics 65, 155–160.
- *Meyer,* D. (2000), On the Information and Selection Function of Economic Articles Claims and Reality, will be published in the Journal of Post Keynesian Economics.
- Neilson, W. S. (1997), 1996 Editor's Report, Economic Inquiry 35, X XII.
- Oster, S. (1980), The Optimal Order for Submitting Manuscripts, The American Economic Review 70, 444–448.
- Peters, D. P., Ceci, S. J. (1980), A Manuscript Masquerade, The Sciences 20, 16–19 and 35.
- Pindyck, R. S., Rubinfeld, D.L. (1995), Microeconomics, 3. ed., Englewood Cliffs.
- Pommerehne, W. W. (1986), Die Reputation wirtschaftswissenschaftlicher Fachzeitschriften: Ergebnisse einer Befragung deutscher Ökonomen, Jahrbücher für Nationalökonomie und Statistik 201, 280–306.

Prosi, G. (1971), Ökonomische Theorie des Buches, Düsseldorf.

- Rätzer, E. (1984), Institutionelle Ursachen der geringen ökonomischen Forschungsaktivität im deutschsprachigen Raum, Kyklos 37, 223 – 246.
- Sauer, R. D. (1988), Estimates of the Returns to Quality and Coauthorship in Economic Academia, Journal of Political Economy 96, 855-866.
- Siegfried, J. J., White, K. J. (1973), Financial Rewards to Research on Teaching: A Case Study of Academic Economists, The American Economic Review 63, 309–315.
- Yohe, G. W. (1980), Current Publication Lags in Economics Journals, Journal of Economic Literature 18, 1050-1055.

Zusammenfassung

Die Publikation von Artikeln in Zeitschriften ist ein wichtiges Element des wissenschaftlichen Kommunikationsprozesses. Einerseits dienen Artikel einer raschen Verbreitung von (neuem) Wissen (Information). Andererseits beeinflussen sie die Berufschancen von Forschern (Selektion), denn deren Reputation wird maßgeblich von der Qualität und Quantität ihrer Veröffentlichungen bestimmt. Ziele der Arbeit sind eine Beleuchtung des Veröffentlichungsprocederes, speziell der Begutachtung, sodann eine Diskussion möglicher Probleme wie beispielsweise des Zeitverbrauchs und der Zuverlässigkeit des Verfahrens. Die empirische Grundlage der Untersuchung bildet eine Fragebogenerhebung unter Herausgebern ökonomischer Zeitschriften sowie ein Experiment, bei dem Duplikate bereits veröffentlichter Manuskripte ein zweites Mal unter einem Pseudonym eingereicht wurden.

Abstract

Publishing articles in journals is an important part of the scholarly communication process. Articles not only serve to rapidly disseminate (new) knowledge (information), they also influence the career opportunities of researchers (selection) since their reputation is determined first and foremost by the quality and quantity of their publications. The objectives of this study are to shed light on the publication process, in particular refereeing, and then discuss possible problems such as the time factor and the reliability of the process. The empirical basis of this study consists of a questionnaire completed by editors of economic journals and an experiment in which duplicates of previously published manuscripts were submitted a second time under a pseudonym.*

JEL-Klassifikation: A2

Keywords: publication process, publication rate, manuscript backlog, publication lag, referee, reviewing procedure, journal market