

SCIENTIFIC PROGRESS AND EARLY CAREER SUCCESS IN ECONOMICS: The impact of the academic publishing process

Talented researchers from less prominent institutions have to work harder and overcome larger hurdles to publish on a par with otherwise equivalent researchers based in more prominent institutions.

That is one of the conclusions of research by **Sascha Baghestanian** and **Sergey Popov** to be presented at the annual congress of the European Economic Association in Mannheim in August 2015. Their study explores the impact on young economists' careers of the way the academic publication process works these days.

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They note that the process has changed significantly in recent decades: the review process has slowed substantially; the number of submitted papers to top journals has increased; and so too have rejection rates. Is it possible that these changes could actually affect the quality of research and hence scientific progress?

First of all, why would some of these changes affect scientific progress? Clearly, many decisions in academia – from hiring to promotions to funding – are based on a measure of a researcher's academic qualification.

One such measure, frequently used in practice, is the number of a researcher's high quality publications. Put differently, publications do not only bear the merit of generating scientific progress but also generate career related benefits to individual researchers. An increase in rejection rates will therefore ultimately distort a researcher's motivations and his or her incentives to produce high quality research.

This study presents a simple yet powerful model that makes it possible to demonstrate the differential effects of many changes in the academic publication process. In it, authors submit their papers to journals and editors decide on acceptance or rejection. Editors will accept the papers of sufficient quality, based on a signal that referees provide.

The researchers show that many of the changes in the academic publication process might benefit some groups of authors, while hurting others. For example, if the referee's signal (his or her report) becomes less informative, high ability authors are affected negatively, whereas low ability authors are the beneficiaries.

The intuition behind this result is straightforward. Due to the noise in the refereeing process, high ability authors have to work harder to distinguish themselves from their peers. If effort is costly, these authors face welfare losses. Low ability authors, on the other hand, have a greater probability of getting published out of sheer luck, due to the increased noise in the review process.

This effect on authors of heterogeneous abilities has implications for the whole publication market: since less able authors are better off when the referees' signalling becomes less precise, they are more likely to submit their papers for publication. This increases the workload of referees, which is unlikely to improve the quality of their signals. Relatively more bad papers end up above the editor's threshold; this, on the

other hand, requires the editor to increase the requirements for publication, leading to an increase in rejection rates.

This work is theoretical, but it generates important policy implications. For example, if editors knew that researchers of certain institutions are more likely to produce research of higher quality, the threshold that these authors would need to overcome should be lower than for the rest: the signal of affiliation would complement the signal of the referees.

Therefore, two identical authors in two different institutions would face unfair treatment: equally able authors from less prominent institutions would have to work harder, and would need to overcome larger hurdles, to publish on par with authors from more prominent institutions. Since their threshold is lower, some of the best authors of that institution would exert less effort. If the UK's research excellent framework (REF) is about comparing the academic impact of different departments, REF needs to take this into account.

In a separate paper, 'Alma Mat(t)er(s): Determinants of Early Career Success in Economics', the researchers provide evidence of dependence of the publication success on affiliation. They show that for current top 100 economists, the success of the first 10 of their publications was correlated with the school they graduated from and the school in which they were initially placed.

The authors' econometric approach suggests that the effect is not generated by the difference in ability and not due to individual prominence or reputation. The effects they observe are big enough to affect a researcher's career prospects.

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On Publication, Refereeing, and Working Hard
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