

Booklet

Rankings and the structure of the economic sciences: promoting excellence, preserving academic quality, or constructing hierarchies and exclusions?



Research Area B:
Economic Sociology



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Quantification of Science

The Network Determinants of Publishing in Top 5 Journals. Evidence from the Swiss Field of Economics Professors (1991-2020)

Thierry Rossier

Academic economists are passionate about rankings. They rank their work according to bibliometric standards, their impact in the (social) media, or their academic department. Individual and institutional positions in rankings participate very centrally to the *illusio* of the discipline. The belief in rankings is so strong that the work of economists who situate high in said rankings is intricately considered as “good” or “sound” economics. As belief in meritocracy is also important, being located in a high position in the ranking is usually associated with “hard work”. Nevertheless, literature has shown that people who do well in these rankings do not come from random places. They teach or have obtained their PhD from economics departments from a small number of private US or UK universities. Within this context, they acquired and consolidated a large number of personal and institutional relations. One of the most significant types of rankings in economics concerns scientific reviews. At the helm of this hierarchy is situated what it is commonly known as the *Top five*, which have been the most important journals for the 30 last years. Publishing an article in a top five outlet implies huge and immediate advantages in terms of career advancement and symbolic capital. Publishing in these journals is also associated with top academic departments and a personal proximity to top-rated economists, who publish the most in these journals. Rather than thinking in terms of hard work or merit, we need to conceptualise the possibility to publish in these journals as personal and institutional networks. Some studies have already explored how critical top five publications are in terms of bibliometric advantages and career outcomes in the US, but little is known about how influential the top five is outside of the North American academic centre. In this study, I explore the network determinants of publishing in the top five by focusing on a relevant national case outside the US: Switzerland. As the Swiss academic field of economics is very internationalised, publishing in the top five is considered as a critical move during the academic career. The Swiss institutional context provides many funding opportunities for Swiss economists to move abroad (especially in top departments), while Swiss universities also recruit a large number of non-Swiss scholars, therefore the share of economics professors having been able to publish in these five journals is high. To study this

topic, I use data collected in a large collaborative prosopographical dataset, the *Swiss Elite Database*, containing biographical information on all economics and finance professors in the twelve Swiss universities. I focus on the period where publishing in the top five has been the most critical, i.e., between 1991 and 2020 (n=437 professors). To investigate the network determinants of top five publications among Swiss professors, I use the total number of top five publications as a dependent variable in a zero-inflated Poisson regression model, with network-related independent variables. To explore institutional networks, I focus on links to prestigious departments (such as Top 5 departments¹ and other top institutions) forged across the career, especially during the PhD period. To investigate personal networks, I focus on the number of top five publications as well as the editorial board position in a top five journal of their PhD supervisor(s). In order to understand more deeply this phenomenon, I use some other variables as controls: gender, main specialisation in economics, number of years between the PhD and professorial tenure, citizenship, institutional positions (head of department) and position in citation rankings (RePEc). I nevertheless assume that the relation between publishing in top journals and social networks with both important professors in the discipline and important (mostly Anglo-Saxon) departments is extremely strong. The results of my study will show, more generally, the importance of organisational and personal networks in the discipline of economics, where publishing in important outlets is often associated with hard work and merit.

The Performativity of Competitization in Academia

Stephan Pühringer & Georg Wolfmayr

The academic system has undergone two important transformations during the last decades: an internationalization and a quantification, both of which have led to an intensification of academic competition within the field. The trend towards internationalization rests on the increased mobility of researchers as well as the simplified academic discourse against the background of digitization. Quantification can be observed in the rapid expansion of academic rankings and bibliometric indices for institutions and individual researchers particularly since the 2000s (e.g. Wilsdon et al. 2015; Brankovic et al. 2018, Espeland and Sauder 2016). The trends are partly intertwined and both imply an increasing degree of competition and an expansion of competitive formats within the academic (among different players and for different resources). However, competition in academia has recently become a much-researched field across different research programs. First, the evolving field of competition research aims to trace the evolution, transformations and practical implications of a stronger reliance on competition in various societal fields (Werron 2015; Altreiter et al. 2020). Here, competitization, i.e. the process of how competition comes about and is expanded, can be observed on different levels and between different actors (e.g. universities, researchers, academic journals). Second, subjectivation studies focus on the performativity of competition between researchers. This way, it is analyzed how and to what extent research practices and routines as well as the self-perception of researchers changes once they are confronted with increasing competitive pressures. Third, more recent studies discuss the impact of academic platforms and networks such as ResearchGate, Acadmia.edu or Twitter both on research practices of researchers but also for the intensification of competition among researchers. Fourth and finally, the evolving field of valuation studies examines the quantification of science through the expansion of rankings and quantitative evaluation criteria and studies how different forms of academic metrics are suitable to evaluate academic quality. Against the background of these different approaches to competition in academia, this paper aims to examine academic social network sites from the perspective of competition research. While we aim to develop a better understanding of the implications of the competitization of the academic field, the main contribution of this paper is empirical. Therefore, we first provide a detailed analysis of the way competition is organized on academic social networks and how

¹ Harvard, Chicago, MIT, Princeton, Stanford.

different platforms and social networks impact on stratification logics in academia and are translated on the level of universities (e.g. doctoral thesis or habilitation guidelines). Second, we conduct a questionnaire study with researchers from different academic disciplines in Austria to examine how the active engagement on ResearchGate and Twitter impacts on the self-perception, research practices and performance of researchers. While we are particularly interested in different forms of competitive behavior amplified by academic social networks and their metrics, we also provide a comparative account on different research practices across disciplines. We have chosen biology, economics, sociology and historical science and assume that these disciplines represent different traditions of publication and have been exposed to competition to varying degrees.

On the Quantification of Quality: A revised model for evaluating scientific excellence

Johanna Rath

Quantitative metrics are becoming more prevalent in academia as a means of evaluating the performance of individual researchers. One key indicator to measure the efficiency of labour input, is the evaluation of single factor productivity. But the increasing use of productivity indicators measuring the research output of individual scientists comes with a negative trend: The existence of metrics shapes and distorts incentive structures in academia, which again feedback on the behavioural strategies of individual researchers. This paper focuses on potential restrictions imposed on individual researchers' productivity by an increasing standardisation for the sake of better comparability, from a microeconomic stance. The paper discusses conditions for generating science including creativity and trust, and more broadly, autonomy in the workplace. In some aspects, the reliance on a set of proxy indicators to evaluate science contradicts the fundamental objective of autonomous, independent scientific work. Therefore, the paper provides a roadmap to depart from the evaluation of single indicators to a structural change in the institutional setting of science evaluation. It introduces a new model of evaluating scientific excellence that includes an input-output orientated approach for productivity indicators as well as non-metric feedback loops to evaluate the accuracy of said indicators in the specific cases. Last, the aim is to test whether the revised model of evaluating scientific excellence can theoretically facilitate the provision of trust-based knowledge creation.

The Construction of Economic Expertise

Research Organizations: public policy and the search of excellence

Lúisa Veloso & Helena Carvalho

The paper aims to stress the importance of analysing how public policy can favour, based on evaluation, the excellence approach through granting of the specific statute of Associate Laboratory (AL) in Portugal to science and technology (S&T) institutions. The AL statute was created in 1999 as a mark of distinction. Between 2000 and 2011, 26 S&T institutions achieved this recognition, based on an evaluation of their research activities and strategic plan. This process led to the establishment of a cadre of elite scientific institutions in Portugal. Instead of an approach based on individual rankings, we highlight the existence of organizational rankings, the role they play in the configuration of the S&T structure of a country and the consequences it has in the distribution of public funds devoted to S&T. The aim of this policy measure has been to promote a central core of institutions that, in comparison with other research organisations have greater administrative independence and a greater share of public funds, feeding, due to their privileged positions rankings of researchers, publications, etc. This policy was aligned, namely, with the aim of promoting excellence in research, like the present so-called 'research excellence initiatives' as presented on the OECD report in 2014. The period of time selected is particularly important, due to the launching of the public policy

measure with the creation of the AL statute and the consequences of the economic crisis in 2007/2008. We adopted a mixed methods approach based on the analysis of quantitative data obtained from IPCTN, a National Survey of the national funding agency for S&T, with a qualitative approach based on content analysis of 21 interviews to the AL leaders. It is worth noting that the laboratories gained AL statute through an institutional research evaluation, which aimed to raise the international standing of Portuguese research and development institutions, and not individual researchers. The analysis led us to affirm that a public policy measure favoured the distinction of a set of research organisations through granting a specific statute and, due to the conditions provided, the role they play in the development of research activities. The analysis shows how these conditions have had a visible effect in different dimensions, such as number and impact of scientific publications, network creation, and internationalisation, promoting organisational sustainability and enhancement and, thus, increasing the function of the ALs in the public higher education and research system.

Putting Rankings in Place: from “economics as science” to the economic expert *dispositif* *Jens Maesse*

Economists receive high social recognition in media, politics and business discourses where they often obtain a status as “star economists” and “financial prophets”. This presentation investigates the social conditions that make the formation of top positions in the economic sciences possible. It analyses the *institutional constraints, professional networks, forms of academic knowledge* and *publication strategies* of early career economists as part of an academic *dispositif*. In these processes, rankings play a special role relevant only for a small group of academics. A top position in “economics as science” is achieved when academics take a privileged scientific discourse position via publications, presentations and various evaluation reports for journals, funds and other academic institutions. To understand the formation of privileged academic discourse positions, we need to investigate the entire construction processes that start already at the *earlier phases of the professional biography*. Based on narrative-biographical interviews with economists in UK and Germany, this paper will focus on *four sorts of resources* that are analysed as “biographical discourse capital”. Biographical resources as “discourse capital” are mobilised by early career researchers to solve practical problems in their daily life. The paper shows how specific tacit and conceptual knowledge interact with access to professional networks in order to find a “proper topic” that help young economists to finally publish an A+ or “Four*” paper. In a second step, the presentation analyses narrative-biographical interviews with economists from political institutions and think tanks. Here, the results differ significantly from the interviews with academic economists. Rankings disappear from these professional contexts and other relevant (e)valuation tools become important. Thus, the “economic expert *dispositif*” appears as a much more complex social world than “economics as science”. In a final step the presentations outlines recommendations for changing economic education in order to meet the complexities of relevance and recognition of the economic expert *dispositif*.

Is Alternative Economic Expertise Intelligible? Peer review, Evaluative Criteria and Disciplinary Hierarchy *Ellen D. Russell*

Determinations of what constitutes “research excellence” are produced via peer evaluative mechanisms in which experts judge the research of other experts. This “quality control” of expert research (Shatz 2004, p. 1) is a form of “institutionalized vigilance” (Merton, 1973, p. 339) that enables the broader public to esteem research that has been judged favourably by others who are also accomplished in their field. Peer evaluation is only possible where substantial consensus exists on what constitutes excellent research. Broad agreement on the meritorious attributes of scholarship is possible because adjudicatory processes employ

“customary rules of deliberation” that contextualize scholarship within the standards relevant to that body of knowledge (Lamont, Mallard, and Guetzkow, 2006, p. 48). Assessments of research excellence are more feasible where these rules are highly prescriptive concerning the theoretical and methodological attributes are deemed indicative of exemplary research. Thus particular evaluations cultures exercise a homogenizing influence on research. Signals of professional reputation accrue as practitioners successfully pass through these evaluatory processes, thus indicating that they have been judged favourably by their peers. Because the public is not able to independently evaluate specialized research, these reputational signals are influential in public’s regard for expert knowledge. Experts also may be influenced by these reputational signals. For example, “Prestige bias” (Lee. et al., 2013, p. 7) operates when evaluators are favourably disposed towards scholars from elite universities (Medoff, 2006; Gillispie, Chubin, and Kurzon., 1985). Reputational advantages can have cumulative impacts, as when articles in highly-ranked journals are disproportionately cited (Larivière and Gingras, 2010, and wide citation is subsequently interpreted as indicative of research quality. Thus, disciplinary hierarchies can be reinforced by Merton’s “Matthew Effect” (a biblical reference sometimes summarized as “to those who have, more shall be given). This presentation examines the potentially performative impact of the Mathew effect in economics. To the extent that these evaluatory and disciplinary dynamics homogenize the criteria for research excellence and impede the disciplinary accomplishments of heterodox economic research, alternative economic research is likely to be judged insufficient – if not unintelligible - by the prevailing standards of research excellence.

The current state of economics and its implications

How evaluation practices in macroeconomics threaten objectivity: Complementing the “what went wrong” story with a social epistemology perspective

Teemu Lari

The financial crisis of 2008 resulted in debates about the state of macroeconomics. Some economists argued that the crisis proved the established theoretical frameworks and models, especially Dynamic Stochastic General Equilibrium models, to be seriously inadequate (Buiter, 2009; Colander et al., 2009; Wren-Lewis, 2016). Additionally, some economists expressed concerns that the prevailing conceptions of good macroeconomic research were so narrow as to have hindered the exploration of research avenues that might have helped macroeconomics to perform better in time of crisis (Akerlof, 2020; Wren-Lewis, 2016). In this paper, I complement the previous accounts of the failure of macroeconomics by explaining why the deficiencies were able to remain uncorrected for so long. I argue that the institutions of macroeconomics, such as journal rankings and research evaluation practices, failed to support criticism in an adequate way and thus enabled the mistakes to persist.

I evaluate the functioning of critical discussion in macroeconomics against the ideal of interactive objectivity, which has been developed in social epistemology (Longino, 1990, 2002). I draw on earlier literature on evaluation, ranking, and funding practices in economics as well as literature on the discussion culture of economics to argue that macroeconomics did not satisfy the conditions of interactive objectivity, which require incentives and recognized forums to publish and develop critical views, distribution of power, responsiveness to criticism, and cultivation of diversity. This paper thus demonstrates how various previous criticisms of the institutions of macroeconomics hang together by connecting them to different failures with respect to the ideal of interactive objectivity. Moreover, by taking this perspective, it is possible to grasp the seriousness of the criticisms voiced against the institutions of macroeconomics: what is at stake is no less than the objectivity of economics. As there is little evidence that the problems with objectivity have been solved since the financial crisis, the analysis presented here suggests that the post-2008 developments in macroeconomics cannot be said to have fixed the state of the field. While this paper focuses on problems (and respective solutions) in macroeconomics, it also invites us to watch out for similar deficiencies in the functioning of

other fields of economics. The analysis also implies that various institutional reforms in economics, including reforms of ranking and evaluation practices, which have been called for by mainstream and heterodox economists alike, are justified from the perspective of social epistemology.

How rankings consolidate the paradigmatic monism in economics

Rouven Reinke

In modern capitalism, the discipline economics has become a relevant actor in the political economy. Due to its mathematically underpinned knowledge about the functioning of economic phenomena and its institutional orientation towards academic excellence, economics functions simultaneously as a knowledge producer and an authority for epistemic legitimacy. Based on this societal role of economics, it is the aim of this article to analyze the formation and consolidation of the paradigmatic monism within the economic discipline in Germany. The article combines the discourse analysis and capital theory of Discursive Political Economy of Economics with the epistemological and ontological foundations of the discipline. Basically, mainstream economics on the one hand and heterodox economics on the other hand differ by their respective ontological foundations and pre-analytic visions. Whereas the mainstream paradigm rests upon Walras' law and the related idea of a harmonic interaction of rational individuals in an exchange and market economy, heterodox paradigms e.g. postkeynesianism or marxism emphasize the critical momentum of capitalistic market economy. The implementation of classification mechanism such as rankings or evaluations in the last decades and a pyramidal hierarchy of publications resulted in homogenization of the scientific conception of economics and in an exclusion of non-standard approaches in economics. Since then, the distribution of the different form of capital (economic, social symbolic) solely depends on whether research results of economists are discursively and institutionally labeled as 'excellent' according to the meritocratic rules in the academic field. Thereby, rankings published by the *Frankfurter Allgemeine Zeitung* or the *Handelsblatt* can be seen as an expression of both classification and class, so that discourse and power constantly interact in rankings. The systematic marginalization of the heterodoxy and the monopolization of mainstream economics, thus, can be interpreted as the result of this dialectic between discourse and power.

Scientific understanding and mathematical modelling in economics

Rodrigo Lopez-Orellana and Bralind Kiri

We propose an inferential and pragmatic perspective on economic models. Considering that economic phenomena are intrinsically open to a wide range of possibilities, we believe that economic models should encompass this complexity via scientific understanding. In our view, mathematical models, which are particularly employed to represent, analyse and explain economic phenomena, should better adjust to the phenomenal abundance. In this regard, models, in line with the criteria of surrogate reasoning and directionality (i.e., the model-M is directed toward a target system-TS, and not the other way around), should be able to generate: (i) new problems in the form of inconsistencies between empirical observations and theoretical predictions, (ii) new value in the form of a better understanding of the phenomena, and (iii) new actions to be taken, usually in the form of posing new hypotheses. These three elements altogether, i.e., new problems, new value and new actions, will consequently lead to what we refer to as scientific understanding, a rationale of scientific modelling, which seems to be completely omitted by the mainstream view on economic models. Additionally, we believe that scientific understanding is a pragmatic position towards mathematical models of any type. It considers them as mediation tools between theory and reality, to be used autonomously, without interfering with target systems (TS), and to the aim of surrogate reasoning. Among other things, we hold that this view may contribute to avoid the endogeneity in public choice,

an issue pointed out by Witt (1992), and which refers to the negative side of specialized agents' (e.g., academic economists) comparative advantages compared to other agents' (e.g., laymen, or other nonspecialized) abilities in selling some ideas. Both groups of agents, however, are equally interested and mutually affected by the public policy choices. The endogeneity in public choice relates, thus, to the risk of having a type of economic modelling that serves the interests of a small group of academics, or elites, who may pursue their own narrow interests for popularizing their ideas. On this issue, we believe that the process of scientific understanding, while it is rooted in the criteria of surrogate reasoning and directionality, would significantly contribute to a higher reliability of economic sciences. In practical terms, the process would imply a stronger emphasis on models as tools for comprehension rather than for prediction of social phenomena. We also infer that the excessive importance on prediction might have contributed to transform branches of economics in "battle fields" from which "winners" (e.g., research groups or Departments) seem to automatically deserve a privileged status due to their superior ranking records. Ultimately, we provide arguments that a novel perspective on mathematical models might contribute to mitigate the fragmentation and the excessive importance of rankings in economic sciences.