Marija Brajdić Vuković

Department of Sociology

Center for Croatian Studies, University of Zagreb

**Challenges of globalized evaluation practices in the context of semi-peripheral and localized knowledge production**

This paper deals with the problems of research assessment as perceived and practiced in the Croatian post-socialist academic system. The focus of the research is on the younger generation of Croatian scientists from all scientific fields, patterns of their research productivity and their attitudes, norms and values related to the scientific productivity and research assessment. The main research questions are concerned with the future of scientific system in terms of prediction of the patterns related to the knowledge production and scientific productivity preferred by new generation of Croatian scientists. The study is interested in the possibility of generational shift in terms of productivity and research assessment and explanations for such shift are observed in the light of specific post-socialist context and path-dependence of the academic system.

The study builds its context on three main groups of findings related to the Croatian academic system. First group is related to the structural characteristics of the system. Research on evaluation of scientific productivity in post-socialist countries of southeast and east Europe shows that there is no common pattern related to the research productivity. Rather, that the success of a scientific system in the terms of valued types of scientific publications (e.g. number of *Web of Science* publications) can often be seen related the organizational forms of public funding (Lepori et al., 2009). Features that have marked the transformation of scientific systems of the former socialist countries in the nineties can be seen as: a) a sharp drop in investment in science that caused the reduction, narrowing or complete destruction of certain research activities ( such as the industrial sector ), b) fundamental change of the academic system in terms of implementation of new competitive system of financing and evaluation focused on the support of individual research projects ( rather than institutions ), and c) significant reduction in the research potential related to the lowered material status of science and scientists and institutional restructuring of the entire research and development, due to which, it is estimated that the number of the research staff in this period reduced in the range of 10 % to 40 % ( Balazs et al., 1995 , Frankel and Cave 1997 , Darvas 1997 and 1995 according to Prpic 2003 : 46-47 ). The effect of this reduced investment and the crises that the research system went through in the 1990s (and has not yet recovered from) is most obvious in the continuous decrease in the number of researchers in Croatia. The most significant problem is the unfavourable age composition of the research community, whereby the system has been shrinking mostly in the cohorts of mid-career researchers (Golub & Šuljok, 2005: 135). Another problem is that in Croatia, other transitional trends, were not followed by the decentralization of the system which was one of the major reforms in other Eastern European countries, but in contrast by the increasing centralization of decision-making in science ( Flego 2002) . One of the consequences of centralization is that the state is still the largest investor in research system (Sporer, 2004) which is reflected in the fact that the system of evaluation, selection and funding of proposed research projects are also centralized and at the same time lack transparency and objectivity (Prpic 2007). In the period from 2003 through 2012 research projects were mostly funded through the system of so-called *Z-* projects that has been mostly criticized for crumbling the funds into small research projects of almost no visibility or impact no matter scientific field that the public money is invested in (Vlahoviček, 2014). Research findings shows that, especially in the fields of natural sciences, projects struggle with the lack of funding sufficient for the primary research project by carrying out different commercial projects of low scientific value, which results in lowered publishing record (Brajdić Vuković, 2012).

The second group of findings is related to the younger generation of scientists specifically, to the process of professional socialization within the scientific system in Croatia. From the late 1980s onwards, the socialization of young researchers in Croatia has formally taken place within the so-called ‘research novice’ (*znanstveni novak*) programme. The main problems of the research novice programme in Croatia are the length of time novices take to earn their PhDs and their low productivity. In the period 2002-2009, less than 50% of novices earned their PhD before the expiration of their contract. Also, during period from 1999 to 2005, only 37% of all young researchers published a paper in an international scholarly journal indexed in the *ISI Web of Science* database (Polašek, 2008). An additional problem relates to the lack of effective evaluation of the quality of the programme. The research shows that the socialization into the academic system lacks quality in diciplinary socialization and especially in terms of socializing for scientific productivity in terms of publishing of the research findings (Brajdić Vuković, 2013, 2014).

Third group of findings relevant for the context of this research is related to the patterns of research productivity of Croatian scientists and its changes. Research on scientific productivity shows that there has been steady increase related to the number of international publications and co-authorships in all scientific fields in Croatia since 90’s (Prpić 2004, Prpić i Brajdić Vuković 2007). However, this productivity remains low in terms of its international impact and visibility (Vlahoviček, 2014). The proposed changes of research assessment and the system of promotion have resulted in heated debates in Croatian academic system that have not been resolved throughout the last 5 years. Recent studies have shown perceived generational differences not just in attitudes related to research practices and the future of academic system in Croatia, but also in attitudes regarding patterns of productivity and research assessment. In natural and social sciences younger generations of scientists are being less critical and more in favour of global scientific productivity patterns and research evaluation practices, but are also more critical regarding research infrastructure, systems of promotion and organizational forms of public funding (Brajdić Vuković, 2012, 2013, 2014).

By analysing the empirical findings from the two field studies on the samples of young Croatian scientists, focusing on scientific productivity and research assessment, and previous research findings related to the scientific productivity in Croatian academic system, and in the light of the above-mentioned contextual characteristics and newly implemented changes, this paper aims to provide valuable in-depth analysis of current and future prospects of the scientific system in Croatia.