

Editorial

Notes on the Reform of Scientific Work Assessment Systems in Post-Communist Countries

Groundbreaking reforms of the society started in post-communist countries after 1989. This process has also affected basic research and its framework. Slovak Academy of Sciences (SAS), the organism which has been linking up with Universities in Slovakia to do basic research, has undergone a deep and sometimes even draconic reform. As a result, the effectiveness of labor could be increased in the various SAS units. Such an increase in the effectiveness of labor could only be achieved thanks to rather strict rules concerning accreditation of the institutes based on the assessment of research activities and their outcomes. And this is where this success can be traced back. What are the criteria permitting realistic assessment of specific research projects and their scientific value? The criteria chosen at SAS have been rather simple, including *the number* of original papers published by the fellows of an institute and *the impact factor* of the periodical where the papers appeared.

There are both positive and negative elements associated with the method chosen. The positive aspect is that the scientific community in post-communist countries was brought to adopt criteria, which are effective from the viewpoint of international scientific competition. However, the extent to which this mechanical assessment of scientific work is being used sometimes exceeds any acceptable limits: impact factor has become the Golden Calf, the centerpiece of modern worship rites. Yet, the one who is to do the assessment has got an easy job: he not even needs to read the paper in question to be able to rate it. Thus, impact factor has become more important than the subject matter of the research, the methodology used or the achievement itself.

In their struggle to survive, scientists are pressed to adopt such rules of the game. A parallel comes to my mind of an explorer travelling to places of his interest who is always required to focus on the recommended means of transport rather than to care about his mission. Indeed, there have been occasions when a paper would be valued higher than another one just because it had been published in a journal with a higher impact factor, without considering the very results. This approach has also been used to compare papers from different fields among each other.

The assessment of scientific work based on formal criteria of the meeting of centrally planned research targets during the communist era has been replaced by a mechanical approach preferring the quality of journals over that of the research. Nevertheless, it has to be admitted that this approach marked some progress at the very beginning. Yet, the post-communist countries have experienced major changes

in their economy and State policies during the recent ten years, accompanied by cuts in the resources used to fund science and culture. It has been rather difficult to keep research at the desired standard under these circumstances. The only possible way to work to the standards has proven to be intensive cooperation with research teams in developed countries. Certainly, intensification of international scientific cooperation is essentially a positive factor making the scientific community of post-communist countries more international in nature. However, it has become too appealing for scientists from these countries to find a possibility of conducting a substantial portion of their research projects in a developed country where they are significantly better paid. Collaboration thus turns into working at a renowned institute where the reward is twofold: money and the pride of having the address of a home institute as a part of the title of one's paper. And exactly because of this the scientific production of the scientific community from post-communist countries as a whole is seen to grow while that at the respective home laboratories keeps decreasing.

This state of affairs can only be tolerated for a limited time, being an option to survive in the face of the shortage of domestic funds. If this "transient" bad situation concerning the funding of scientific research lasts over longer period of time, it might eventually result in a drain of the younger generation of scientists to nations, which are better off while reducing the training level of young graduates – potential researchers and, consequently, of also talented undergraduates in the post-communist countries.

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