

Impact of competitive funding on research output of Russian researchers: a bibliometric analysis by the Web of Science, 2008

Impacto del financiamiento competitivo sobre la producción científica de los investigadores rusos: un análisis bibliométrico en el Web de la Ciencia, 2008

Dr. Vladimir Ivanov¹, Dr. Valentina Markusova²

² *ivanov@presidium.ras.ru*

Deputy-Chief Scientific Secretary of the Presidium of the Russian Academy of Sciences, Russia.

¹ *vmarkusova@yahoo.com*

Head of the Department of the All Russian Institute for Scientific and Technical Information (VINITI), Russia.

Abstract:

Introduction: The development of multi-channel funding on a competitive basis had an enormous influence on the development of science in general and research productivity. The goal of our paper is to give an overview on funding agencies' impact on basic research done in Russia. **Method:** We used the new option of the Web of Science (WOS) introduced to its users in the end of 2009 – the opportunity to perform a search by the name of funding agency. It was downloaded more than 26.5 thousand Russian papers for 2008. Then we have limited the search by “funding agencies” and downloaded separately all records supported by the Russia Foundation for Basic Research (RFBR), or the Russian Academy of Sciences (RAS), or the Ministry of Education and Science of the Russian Federation and other funding agencies. It was used the option "Research Analysis" to collect statistics on funding distribution by organizations, subject category, journals title and countries. **Results and Discussion:** Analysis of the list of funding agencies indicates that the RFBR and the Russian Academy of Sciences (RAS) are the main sources of funding on a competitive basis. Clearly, in the sum of the proportion of articles exceeds 100% because many papers were supported simultaneously by several funding agencies. Random sampling has allowed us to detect a number of works, expressing gratitude at the same time up to 14 funding organizations. There are many funding acknowledgements to non-Russian support sources, especially the NSF and various European agencies. List of 250 leading agencies was printed and checked manually. Approximately 23.4% (6830 articles) of articles were funded by various agencies, of which about 4.6 thousand were supported by RFBR grants and about 2,000 funded by various program of the RAS. In full paper we present our finding analyzing also Russian research output for 2009. The main sources of publications have been as foreign journals on physics and chemistry as Russian journals. Our finding revealed an extensive international network of Russian researchers and their creativity looking for additional funding. **Conclusions:** New option of the WOS gives a good opportunity to investigate impact of various competitive funding programs on research output. This option could be helpful to monitor an efficiency of various government programs which distribute additional funds on competitive basis.

Keywords: bibliometrics; competitive funding; research output; Russia.