

Project title: How to get a grant? An analysis of endogenous success determinants of international research proposals in terms of the consortium composition and abstract relevance

1. Research objective

This research aims to understand the determinants of the success of international research proposals concerning the composition of a project consortium and an abstract's discourse. The study will focus on the European Union's Framework Programmes proposals, which are important tools for funding European research. The problem of obtaining funds under these programs is significant for European researchers, mainly from Eastern European countries where the success rate is lower than the European average. Little is known about the success determinants of international research funding proposals. However, there need to be more scientific studies that would explain comprehensively the factors that influence the evaluation of research proposals. The main limitation of the to-date research on the determinants of the success of research proposals is that they are not systemic, comprehensive and conceptually coherent but are mainly based on statistical and bibliometric methods. Researching in a multifaceted yet highly objectified manner should bring in-depth and novel conclusions that could foster the advancement of this field.

2. Research description

Literature on success determinants of research proposals is mainly devoted to the statistics of funded projects and is primarily concerned with the bias of review panels. Some studies focus on the Matthew effect in science - the hypothesis that outstanding scientists and/or outstanding research institutions have an advantage in competing for funding. The topic appears mainly in grey literature, websites and training materials. To obtain the best knowledge about the determinants of the success of international research applications, a variety of research methods will be used, such as semi-structured interviews with Horizon 2020 evaluators, quantitative analysis of the European Commission data and analysis of the text of the proposals' abstracts and calls' topics. With a detailed examination of factors related to the composition of the project consortium, potential applicants will know how to control this endogenous factor - how to select the consortium members. Because the factors related to the partner institutions forming the consortium, such as the reputation of the institution, experience in project implementation and coordination, geographic location, etc., will be examined using machine learning methods, the study will also provide an insight into the impact of exogenous institutional factors in obtaining grants. It should be noted that the proposal evaluators are selected based on the project abstract. Thus the relevant abstract is an important success factor which should be scrutinized further.

3. The reason for conducting the study

Research proposals typically precede the outputs that researchers are evaluated on, such as obtaining grants, publications that present the results of funded research, and patents. A research proposal is a unique document representing one of the earliest signals of a potential scientific breakthrough. Scientists write grant applications, submit new proposals, refine details, submit applications again, and receive reviewers' opinions. How many of these ideas will be possible to implement and disseminate their results, and how many will remain in the archives of universities and funding agencies? What can increase the success rate of applications prepared by research teams? Studying the determinants of the success of international research applications is essential for improving the absorption of EU funds by universities, which should pay special attention to applying for international grants, providing their researchers with specialist support in finding partners and preparing grant applications. The team will conduct a comprehensive study of the determinants of the success of research applications, which will constitute the theoretical framework for increasing the absorption of EU funds by universities. Our methods will involve interviews with evaluators, text mining and machine learning.

4. Anticipated effects

The most important expected results of the research are the following: 1. providing a profound insight into the determinants of the success of international project applications, based on systematic literature review and interviews with evaluators; 2. filling the research gap concerning the analysis of rejected proposals; 3. filling the research gap regarding the impact of the characteristics and composition of project consortium project on the proposal success; 4. broadening the knowledge on the patterns of selection of project consortium members for international cooperation within the framework of research grants; 5. Checking how the application abstract's text converges with the call's text.