
Grant support and doctoral studies: Analysis of the Grant Agency of the Charles University data²

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VÁCLAV KORBEL

Summary

- Only about half of the doctoral students in the Czech Republic finish their studies. Students have both insufficient financial and non-financial support from universities. One way to support students in their research and studies is through grant competitions.
- This is the first study in the Czech Republic to study the relationship between grant support of doctoral students and their further studies. Specifically, we study the effect on graduation rate and study length at the Charles University. We analyze the effects for all students aggregately and divided into field sections. The grant agency is divided into field sections based on the field of research (social sciences, natural sciences, and medicine). We use data from the Grant Agency of Charles University from 2010 to 2013. One third to half of the doctoral students apply for grant support during their studies. Only one third of projects are supported.
- We match similar students with and without grant support in the analysis. We use matching procedure, which searches for similar students, who received grant support, and students, who applied but did not receive grant support based on their characteristics and their research project characteristics. Our empirical strategy does not guarantee to estimate the causal impact. We interpret our results as a non-causal relationship of grant support on further studies of doctoral students.

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- Our findings show that grant support is positively related to the graduation rate. Students with the grant support graduate more often by 10 to 20 percentage points. It represents an increase from approximately 60% graduation rate to 70–80% graduation rate. The relationship is positive for all field sections but the medicine. However, the relationship is insignificant for all sections with respect to a low number of observations.
- Students with grant support finish their studies 3 to 7 months later than similar students without grant support. This relationship cannot be precisely identified in field sections (social and natural sciences) due to limited statistical power except for medical science students who finish their studies with the grant support more than a year later in comparison to not supported students. Supported students also finish their studies within 3–4 years (standard study length) less often by ten percentage points. It represents a decrease from 28% to 18%.
- A positive relationship between grant support and doctoral studies suggests that grant support can be an effective way of support. The adverse effect on the length of study needs to be, however, taken into account.
- Our study can be understood as a pilot study. With longer time series and more information on the future careers of students, we could investigate other questions. For example: **(1)** What is the causal impact of grant support on studies of doctoral students? **(2)** Are there heterogeneous impacts on different types of students (e.g., based on their field of study). **(3)** Does grant support impact the future careers of doctoral students and their publication record? **(4)** Does it interact with other forms of student support? **(5)** Does grant support at other universities in the Czech Republic have a positive impact on students?
- Grant schemes supporting research from other providers such as the Grant agency of the Czech Republic, the Technological agency of the Czech republic, the Agency for medical research, grant schemes of ministries and the Operational programmes of the European Union should be evaluated in a similar way.