

December 11, 2016

Prof. Krešimir Žigić  
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Politických vězňů 936/7  
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**Re: “Essays on Fairness, Inequality, and Uncertainty,” a PhD dissertation by  
Vítězslav Babický**

Dear Professor Žigić:

Please find below my examiner’s report on Vítězslav Babický’s PhD dissertation. I have read over the final version of his dissertation and have no doubt that the thesis fully satisfies all the criteria laid out in the document pertaining to the PhD examination process. In particular, I am convinced that the dissertation presents original analyses of the described economic issues and makes an interesting contribution in its field. The candidate has displayed creative abilities in his area of research.

The dissertation demonstrates adequate knowledge of the literature, economic modelling, and the appropriate use of the experimental methodology. The three chapters are interesting and add to our knowledge regarding fairness behavior under uncertainty. I found no critical aspects of the theory presented in the first chapter. The experiments presented in the second and third chapters were properly conducted and the statistical analysis is appropriate. Any shortcomings were properly acknowledged.



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The dissertation meets recognized standards for the conduct and presentation of research in the field of economics. I would like to congratulate the author on having the second chapter accepted for publication in *Games* prior to defending his dissertation. A publication in a good quality international journal on game theory and decision making speaks for itself.

Overall, I find the dissertation to be a praiseworthy effort and recommend that the candidate be admitted to the dissertation defense and, conditional on successfully defending, awarded the degree of PhD in Economics.

Please let me know if you have any questions or if you require further information from me.

Sincerely,

A handwritten signature in blue ink, which appears to read 'Maroš Servátka'.

Maroš Servátka  
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## **Examiner's Report on "Essays on Fairness, Inequality, and Uncertainty," a PhD dissertation by Vítězslav Babický**

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The backbone of the dissertation consists of one theoretical and two experimental papers studying the impact of inequality and uncertainty on human behavior in environments with salient fairness considerations.

The first paper on fairness under risk (CERGE-EI working paper) presents a theoretical analysis of a dictator game situation in which the dictator decides how much to allocate to the recipient if the size of the pie is uncertain. More specifically, the dictator has a preference for giving a relative share of the pie and the analysis concerns how the risk associated with the distribution of possible pie sizes affects the allocations and how the dictator's risk attitude influences his decision. The author employs the ERC model framework (Bolton and Ockenfels, 1999) and derives predictions that as the coefficient of relative risk aversion decreases below 1, the dictator is more altruistic up to a certain level (or in other words substitutes risk aversion for fairness). Past that level the dictator starts to treat risk and fairness attributes as complements, decreasing his giving as the risk increases.

**Assessment:** The novelty of the first chapter lies in incorporating both risk and fairness attitudes into dictator's preferences and thus being able to understand what drives people's behavior in situations where the pie size is unknown. The model provides an intuition that high pie sizes are attractive for risk-loving people and that such individuals do not like to share such large pies with others. The chapter thus presents a nice addition to the literature on social preferences and uncertainty, as evidenced for example by a citation in Cappellen et al. (AER 2013).

The second paper (co-authored with Silvester Van Koten and Andreas Ortmann and published in *Games*, 2013) partially draws on the first chapter and studies how unknown pie sizes with varying degrees of risk influence individual behavior in the dictator and ultimatum games. The theoretical predictions are experimentally tested

using two subject pools: undergraduate students and employees of Prague City Hall. Risk preferences of subjects are elicited using Holt & Laury (2002) method. The paper finds that (i) more risk averse subjects also give more and thus are more inequality averse in the dictator game but insignificantly so in the ultimatum game; (ii) varying risk affects subject behavior in the ultimatum game but not in the dictator game; (iii) subjects make inconsistent choices across games in a within-subject design; and (iv) once controlled for demographics and risk attitudes there are no significant subject pool differences.

Assessment: As evidenced by the fact that the paper has already been published in *Games*, this study presents a valuable contribution to the existing literature in the area. I was pleased to see that the theory developed in Chapter 1 provided a basis for experimental tests.

The third paper (co-authored with V. Semerak) explores how contributions to a public good might depend on the size of individual's income relative to the income of other contributors. In the first stage of the experiment the subjects could earn three levels of income by their performance in a quiz. In the second stage the subjects were anonymously grouped together based on their income to create "rich", "middle class," and "poor" groups (each consisting of five subjects) and asked to contribute a required amount toward a public good. If they didn't reach the required amount they would be taxed. Two taxation schemes were implemented: an absolute scheme based on the lump sum principle and a relative scheme which was based on a flat rate.

The absolute scheme worked on the lump sum principle, while the relative scheme was based on flat-rate taxation. If the amount of contributions collected within a group did not reach the required amount, either efficient (the missing amount was collected) or inefficient punishment (twice the missing amount was collected) was imposed. The paper finds that subject contributions depended on the expectations of behavior of others and that a large positive difference between one's own income and the average income of the group was capable of increasing higher contributions.

### Assessment:

This third paper is a very ambitious undertaking that demonstrates the candidates modelling capabilities and also his understanding of experimental methods (as exemplified by e.g. section 3.7). The current version provides a quality ground work for a possible journal publication. If the candidate decides to pursue this path (which I would encourage him to do), he might want to simplify the design and run some additional control treatments. When writing up a paper, he might also justify certain design issues based on the previous literature. However, these are just suggestions that would improve the publication chances in a high quality journal, but not a requirement for completing the dissertation.

### Corrections:

Chapter 3, p. 63 (and other places): “Reference source not found.”