

Report on Bachelor Thesis

Institute of Economic Studies, Faculty of Social Sciences, Charles University in Prague

Student:	Petr Pham
Advisor:	doc. PhDr. Martin Gregor, Ph.D.
Title of the thesis:	Manipulation through Evaluative Voting in the State Cinematography Fund

OVERALL ASSESSMENT (provided in English, Czech, or Slovak):

Contribution

This thesis is motivated by a controversial November 2014 vote of the Board of the State Cinematography Fund in which 31 movies competed for support but eventually only three movies earned support, and a single movie (Lída Baarová) surprisingly earned 60% of total funds. This particular vote raised concerns about manipulative voting which is achieved by overstating of points given to the preferred movie and understating of points of competing movies.

To understand the potential of an individual Board member to shift resources to a preferred movie in this committee, the thesis estimates the *allocation function* of the Board based on observable characteristics of the movies and the call; especially, the author asks how extra total points from the Board affect the probability of gaining funds (i.e., the probability of reaching a minimal endogenous threshold in terms of total points). With the estimated allocation function, the author additionally runs an interesting countefactual analysis of manipulation.

Even though voting theory knows very well that cardinal voting systems (such as evaluative voting) are susceptible to manipulation, it is very rare to obtain estimates of the potential losses in real voting bodies. This thesis is thus a novel contribution with the potential to be published well if properly revised.

There are also many additional result. For example, given that the Board has changed the voting procedure from secret ballot to open ballot voting, we can see how this reform has impacted the allocation function and the potential for manipulation. In particular, it is interesting to see that with open ballot voting, the Board tends to more often reduce the impact of scores of the experts (p. 33), which is consistent with the idea that open ballot voting makes it easier to justify a score reduction than a score increase.

Methods

The author has chosen to model funding success instead of the level of funds or total points received. This is reasonable especially if we assume that the Board first determines a threshold in terms of total points, which is a cutoff for the funding, and then determines the levels of funds. This estimation then basically covers the first step of the procedure. (Alternatively, we could first estimate the cutoff out of some aggregate statistics of proposals, and then estimate the number of points, where cutoff could be inserted as an independent variable.)

Out of feasible binary models, logistic regressions were selected as they are less restrictive than a liner probability model. The thesis demonstrates that the author is experienced with handling logistic regressions. For model selection and assessment of the model, he uses AIC, pseudo R-squared, and AUROC.

Literature

The literature properly reviews the small literature on axiomatic properties of evaluative voting, and on strategic voting for evaluative voting.

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Manuscript form

The thesis is correctly formatted and edited with care. I would only standardize formatting of tables (see Table 6.1.3a) and sometime the use of variables is not properly edited.

Summary

Overall, I consider the Bachelor thesis is a very interesting and innovative work with strong results as the estimated odds ratios and marginal effects are rather huge.

The thesis is a very rare attempt to analyze the potential for manipulation in a non-experimental setting. It also gives policy lessons to the funding body and provides evidence on influence associated with membership in small bodies (recall the Board has 9 members, but only 6 members meet on average).

SUMMARY OF POINTS AWARDED (for details, see below):

CATEGORY	POINTS
<i>Contribution</i> (max. 30 points)	29
<i>Methods</i> (max. 30 points)	28
<i>Literature</i> (max. 20 points)	20
<i>Manuscript Form</i> (max. 20 points)	19
TOTAL POINTS (max. 100 points)	96
GRADE	A

NAME OF THE REFEREE: *Martin Gregor*

DATE OF EVALUATION: *May 21, 2019*



Referee Signature