# Report on Bachelor / Master Thesis

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

Student:	Jan Bílek
Advisor:	PhDr. Václav Korbel Ph.D.
Title of the thesis:	Gender differences under competitive pressure: Evidence from skittles

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

Please provide your assessment of each of the following four categories, summary and suggested questions for the discussion. The minimum length of the report is 300 words.

#### Contribution

The thesis contributes to the field studies analyzing how competitive pressure affects gender differences in performance. It is a first paper using the sports environment of skittles. The setting of skittles is interesting for this research question since men compete only with men and women with women. In this manner, the thesis departs from the existing literature, mostly experimental, which typically combines men and women in samples.

The author does not find evidence that competitive pressure affects men and women differently. Playing against a better player increases the performance of both men and women similarly. Interestingly, alternative specifications suggest gender differences. Better performance of the opponent in a given match increases the performance of men more than of women. However, due to endogeneity issues, the results must be interpreted with caution.

Overall, Jan studies an important and relatively new question in the field of economics in an understudied field of sports using a novel dataset. It is a contribution sufficient for a bachelor thesis at the IES.

#### Methods

First of all, Jan conducted extensive manual data collection. He collected new dataset with over six thousand observations, which is impressive.

He analyzes the effect of competitive pressure using player fixed-effects in home matches as the main empirical strategy. In other words, he leverages the fact that players face differently skilled opponents in each match (approximated by the last year average). Fixed-effects, therefore, eliminate the problem that teams strategize in matches and non-randomly place their players based on their skills. Jan analyzes the effects with alternative definitions of skills (the actual performance in the match, the difference between the actual performance and the long-term average). He correctly points out that these specifications are endogenous and therefore problematic. He further shows that the estimates differ for opponents with a long-term average below and above mean.

I consider the individual fixed-effects empirical strategy appropriate for the research question. It does not guarantee causality but it alleviates many potential problems, especially non-random selection of opponents. Taking into account only home matches limits problems of unobserved effects of away alleys on performance. I can imagine more specifications of the outcome variable (e.g., failures), but it would require another

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extensive data collection. I would also appreciate more robustness checks (the effect on players across performance distributions, considering different functional forms) but Jan did not have enough time before submitting.

#### Literature

The literature review combines papers from three fields – economics, psychology/biology, and sports. I appreciate that the review is concise and stresses only important findings. The literature review is short but comprehensive. Based on the literature review is clear why the research question is important for the field of economics and how it fits the literature.

## **Manuscript form**

The manuscript is logically structured; the text is concise and written in excellent English. Further polishing of the text would improve the overall quality of the manuscript. It is true that Jan improved the text significantly during the process of editing, but some sentences remain a bit confusing and cumbersome. Also, references to tables in the Appendix is confusing (Table A1 is Table 11 in Appendix). Those are, however, just minor points.

### Summary and suggested questions for the discussion during the defense

The thesis investigates an interesting and behaviorally important question using the newly collected dataset in a unique setting. The author employs an appropriate econometric technique (fixed-effects models) and correctly interprets the results.

The thesis is of high quality and could be without a doubt defended at the IES. The only minor points are the breadth of the analysis (robustness checks) and quality of the manuscript (could be improved with more time for further polishing). Even with the minor points in mind, I recommend the thesis for defense and suggest grade A.

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

CATEGORY		POINTS
Contribution	(max. 30	30
Methods	(max. 30	27
Literature	(max. 20	20
Manuscript Form	(max. 20	16
TOTAL POINTS	(max. 100	93
GRADE (A - B - C - D - E		A

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Ph.D.

**DATE OF EVALUATION: 26. 5. 2019** 

Referee Signature

Ruhl

#### **EXPLANATION OF CATEGORIES AND SCALE:**

**CONTRIBUTION:** The author presents original ideas on the topic demonstrating critical thinking and ability to draw conclusions based on the knowledge of relevant theory and empirics. There is a distinct value added of the thesis.

Strong Average Weak

30 15

**METHODS:** The tools used are relevant to the research question being investigated, and adequate to the author's level of studies. The thesis topic is comprehensively analyzed.

Strong Average Weak

30 15 0

**LITERATURE REVIEW:** The thesis demonstrates author's full understanding and command of recent literature. The author quotes relevant literature in a proper way.

Strong Average Weak

20 10 0

**MANUSCRIPT FORM:** The thesis is well structured. The student uses appropriate language and style, including academic format for graphs and tables. The text effectively refers to graphs and tables and disposes with a complete bibliography.

Strong Average Weak

20 10 0

#### **Overall grading:**

TOTAL	GRADE
91 - 100	A
81 - 90	В
71 - 80	С
61 - 70	D
51 - 60	E
0 - 50	F