

# Report on Bachelor / Master Thesis

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

<b>Student:</b>	Daniel Vach
<b>Advisor:</b>	Aleš Maršál
<b>Title of the thesis:</b>	Comparison of double auction bidding strategies for automated trading agents

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

The Thesis compares a number of automated bidding strategies (ZIP60, GDX, AA, ZIPOJA) in a competitive environment. Open Exchange Experimental Laborator (OpEx) is used for the comparison. In a novel contribution to the literature, the Thesis changes the setup of the assessment in terms of the number of participating strategies and the number of agents of each strategy in one experiment. The key result is that the previously maintained dominance of the AA strategy is significantly eroded in the new environment whereby GDX is found to be the dominant strategy. Hence, the strategy comparison in previous literature is not robust to changes of the assessment setup.

The strategy comparison is based predominantly on one source: De Luca and Cliff (2011), and three strategies compared therein. It appears that there are a number of other automated bidding strategies with vast background literature.

Suggested question for defense is:

- „Do the presented comparison results generalize to other automated bidding strategies?“

In case of successful defense I recommend excellent (1).

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

CATEGORY	POINTS
Literature (max. 20 points)	20
Methods (max. 30 points)	25
Contribution (max. 30 points)	20
Manuscript Form (max. 20 points)	18
<b>TOTAL POINTS</b> (max. 100 points)	<b>83</b>
<b>GRADE</b> (1 – 2 – 3 – 4)	<b>1</b>

**NAME OF THE REFEREE:** Martin Burda, PhD

**DATE OF EVALUATION:** September 15, 2015

  
Referee Signature

**EXPLANATION OF CATEGORIES AND SCALE:**

**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

**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

**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                          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 POINTS	GRADE		
81 – 100	1	= excellent	= výborně
61 – 80	2	= good	= velmi dobře
41 – 60	3	= satisfactory	= dobře
0 – 40	4	= fail	= nedoporučuji k obhajobě