# **Report on Bachelor / Master Thesis**

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

| Student:             | Eva Parlásková   |
|----------------------|--|
| Advisor:             | Mgr. Aleš Čornanič   |
| Title of the thesis: | Impact of Size and Other Factors on SMEs Performance: Evidence from the Czech Republic |

## **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 author aims to inspect the impact of size of a company (SME) on a defined performance indicator which is undoubtedly a very practical and contributing ambition. According to the performed literature review, there is a very scarce research on this topic in the CEE region (presumably also due to lack of data for SMEs). The author compiles and inspects a rich dataset of more than 200 companies in period 2010 – 2016 sufficient for potential representativeness of the results. Unfortunately, the promising contribution of this work is a bit lost in a number of confusions in interpretation of the empirical results (see below).

#### Methods

The author employs panel data techniques in order to test in total five hypotheses. First, the author presents theoretical principles of relevant techniques. The author justifies the usage of the selected fixed effects approach, however, there are few misconceptions in the methodology descriptions (e.g. the author claims that in case of failure to reject the null hypothesis of Hausman test, random effects and fixed effects are equivalent to use – what about efficiency?). The most important part of the thesis starts with the interpretation of empiricial results of in total six models capturing effects of size and other factors on selected performance measures (ROA, CFO). As there is no summary of units of the variables used, the interpretation in style ,...if the debt to equity ratio increases by 1, the return on assets lowers by 0.013" is confusing for an independent reader as in the literature debt to equity ratio is most frequently reported in percent, etc. Apart from that, the author carefully reports the results of each of the six models. However in case of Model 2, the author concludes a positive relationship of size (measured by number of employees) and return on assets despite the fact that the results show the value of the coefficient of 0.000. This should be explained. Further, in Model 3 the author claims that the effect of age of a company is not significant, but in the result summary table there is a 10% significance reported. After reporting the results the author turns the reader's attention to evaluation of the previously formulated hypotheses. The author probably evaluates (rejects or does not reject) a hypothesis based on the number of models (out of the six) with significant results of the relevant parameters. The key/procedure to the hypothesis evalution with relation to the six specified models could be described in more detail. Moreover, there are few confusions: first, the author states on page 34 that "the second hypothesis says that there should be a negative relationship between the capital structure and the firm performance", but the hypothesis formulation on page 17 states "H2: There is a positive relationship between the capital structure of SMEs and its performance". Further, the third hypothesis is formulated on page 17 as "H3: There is a negative relationship between sales growth rate and SMEs performance." and on page 34 the author concludes "So we can say that the third hypothesis is not rejected in the case when the return on assets stands as the dependent variable and it is rejected in the model with cash flow from operations scaled by total assets as the measure of firm performance." However, the table on page 31 reports positive and significant results in case of ROA being the dependent variable while in case of CFO being the dependent variable the effect of growth rate remains insignificant (which does not allow to reject the hypothesis).

# Report on Bachelor / Master Thesis

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

| Student:             | Eva Parlásková   |
|----------------------|--|
| Advisor:             | Mgr. Aleš Čornanič   |
| Title of the thesis: | Impact of Size and Other Factors on SMEs Performance: Evidence from the Czech Republic |

#### Literature

The author has performed a thorough literature review. The existing findings of the relevant works are well presented. Comparison of the author's empirical findings with the literature are practical and instrumental in connecting the introductory and conclusive parts of the thesis.

# Manuscript form

The thesis is well structured, however, chapter (section, subsection) numbering would be very beneficial for the reader's orientation in the text. The text itself is understandable and easy to follow. However, few ommissions and errors in units labeling also do not contribute to the reader's understanding of the text (e.g. wrong units on the chart on p. 21, lack of units description in the variable overview on p. 25 as mentioned above).

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

The author selected an interesting topic with relevant and contributive potential. Independent compilation of rich and relevant dataset has to be appreciated as well as careful and detailed review of the relevant literature in the field. The author has chosen appropriate techniques with respect to the task of the thesis and to the data. However, the overall contribution of the thesis is to a large extent affected by number of confusions in the text. To conclude, I recommend the thesis for defense with grade D.

I also suggest to discuss the following questions during the defense:

- 1. Do you think that profit margins (e.g. EBITDA margin, EBIT margin) could be also used as dependent variables? If yes, would you expect your results to change significantly?
- 2. How do you define "performance" of a company? Within the thesis you claim that there are also other factors than profitability (regardless the measure)?
- 3. What do you think about insignificance of most parameters on performance defined as cash flow from operations? What do you think about extension of the cash-flow-based measure of performance also by cash flow from investing?

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

| CATEGORY                      |                   | POINTS |
|-------------------------------|-------------------|--------|
| Contribution                  | (max. 30 points)  | 18     |
| Methods                       | (max. 30 points)  | 16     |
| Literature                    | (max. 20 points)  | 20     |
| Manuscript Form               | (max. 20 points)  | 12     |
| TOTAL POINTS                  | (max. 100 points) | 66     |
| GRADE (A - B - C - D - E - F) |                   | D      |

| NAME OF THE REFEREE: Mgr. Barbora Malinská |
|--|
|--|

DATE OF EVALUATION: 15.8.2018

| Referee | Signature |
|---------|-----------|

## **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 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

**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 | Α     |
| 81 - 90  | В     |
| 71 - 80  | С     |
| 61 – 70  | D     |
| 51 – 60  | E     |
| 0 – 50   | F     |