

## Doctoral Thesis Review

Ph.D. student: **Mehmet Civelek**

Title of the Doctoral Thesis:

**Credit Risk Management in Small and Medium-sized Enterprises (SMEs)**

Reviewer: Prof. Dr. Ing. Drahomíra Pavelková, FaME, Tomas Bata University in Zlín

The doctoral thesis deals with the topic of credit risk management focused on Turkish SMEs. On the base of a deep literature review, the student identified a research gap and formulate a research aim based on the effects of entrepreneurial orientation (EO) of SMEs and relationship lending on access to bank finance by applying a signaling theory. He analyzed a Turkish bank sector, access to finance by the Turkish SMEs and increasing trends in the share of non-performing loans in Turkey (providing also a comparison with other countries).

I appreciate the evaluation of the Economic, Business and Financial Freedom Indexes in Turkey in comparison with other economies to show the position of the Turkish entrepreneurial and financial environment. The rankings and scores of Turkey published by World Bank and discussed by the author of thesis clearly illustrate the situation in Turkey and give the reasons for research – according to thesis's author: *"to solve asymmetric information and credit risk issues by finding credit evaluation methods for SMEs"* (p. 35).

Based on the empirical results of previous studies, the student created his comprehensive conceptual framework of the thesis. Research questions, research objectives and hypotheses response to the research problem defined by the author on p. 42: "How does EO enable to assess to bank finance for Turkish SMEs?" I expected a little more – explicitly to define an objective to create a model for evaluation SMEs' credit access on the base of their entrepreneurial orientation (EO) and relationship lending as it was announced in p. 35 (see above).

The theoretical framework and methodology of research are described clearly and in detail. The author uses exploratory, explanatory and descriptive research, based on an empirical quantitative approach. He collected data using a questionnaire survey. The author very carefully describes the bilingual approach to the questionnaire, but there is no detailed information about the origin of questions in this survey (it is just mentioned that *"all survey questions were created and validated by previous researchers"* – p. 66). On the other side, the author describes the process of piloting this questionnaire – I suggest to student to explain this issue more during thesis defense.

Concerning sampling – the author identified the sample as SMEs that made credit application in the last three years. According to the description in the thesis, it is not clear how the student found out the SMEs with credit applications. There is just notified that e-mail lists from several chambers of commerce were applied.

The author obtained 479 valid answers from the respondents. On the basis of data processing, the detailed description of the sample was presented, hypotheses were tested, results discussed and compared with the findings of the previous studies. This part is very extensive, detailed and not easy to follow, but the author summarized the results in Table 4.7 (p.100). I appreciate the hard work of the student with the processing of data and a broad discussion of results. There are several inconsistencies, e.g.:

p. 88: "...non-existence of statistically significant influences of innovativeness, proactiveness, competitive aggressiveness and autonomy on access to finance are confirmed...", followed by "... $H_{1d}$  that assumes negative association among autonomy and access to finance is also rejected", moreover,  $H_{1d}$  is formulated on p. 50 as: "Competitive aggressiveness of SMEs is positively associated with their bank credit access."

If we consider, that it is only mistaken, because " $H_{1e}$ : Autonomy of SMEs is negatively associated with their access to finance" (p. 50), then it is inconsistent with the statement above.

p. 91: "...the positive relationships between all three measurements of relationship lending and banks credit access are confirmed...", but in Table 4.7 is stated a result of the test: "failed to reject"... In connection with hypothesis testing, terms rejected/fail to reject/accept are interpreted vaguely several times.

The following chapter (4.2) deals with financial support for Turkish SMEs and gives some recommendations – the chapter is just a little linked to the previous content and research results, part of this information could be valuable in the analysis of the approach to bank finance in Turkey in Chapter 2.2.

The last chapter is devoted to answering the research questions and explanation of the thesis's contribution to theory and practice. The author concludes with the limitations of the research and outlines the possibilities for further research.

The results of the doctoral thesis could contribute to knowledge in this up-to-date topic, although to a limited extent, given by the mentioned research constraints.

Formal aspects of doctoral thesis satisfy the requirements of doctoral thesis, economic terminology and language are correctly used.

During the thesis defense I recommend to the student to explain the issues concerning survey (origin of questions, sampling) and to answer the following questions:

- on page 28 you describe the increase of weighted average interest rates for trade credits in Turkey as a possible measure for banks' protection against SMEs' default problems. The question can be formulated from the different point of view: Could be higher interest rate one of the factors causing default problems of SMEs?
- Chapter 5.3 contains a set of research limitations, one of them is no hard data as financial results are considered. Do you suppose that this approach seriously, or just slightly limits explanatory power of your results?

Despite the above comments, the thesis results presented and demonstrated student's knowledge and skills, show his ability to carry out research, to process and analyze data and

to formulate own conclusions and recommendations. The publication activities of the student are satisfied, he is an author or co-author of nine papers dealing with the topic of SMEs and financial issues, presented in journals or conference proceedings.

**I recommend the doctoral thesis for defense.**

In Zlín, June 12, 2019

prof. Dr. Ing. Drahomíra Pavelková

A handwritten signature in blue ink, appearing to read 'Pavelková', is written below the printed name.

