

Referee Report

CERGE-EI Dissertation 2005

Author of the Dissertation: Bersant Hobdari

Title of the Dissertation: Three Essays on the Effect of Alternative Ownership Structures on Investment and Financial Constraints: An Empirical Investigation

Referee: Karel Janda

The dissertation is centered around the firm-level panel data from Estonia. Thanks to his involvement with the Center for East European Studies at the Copenhagen Business School Bersant Hobdari had available the unbalanced panel of data on Estonian firms from the year 1993 to 1999. The average number of the firms included in any year was around 500, leading to the total of 3294 observations in the cleaned panel. The sample was created by a combination of the data obtained from the surveys and from standard firm financial statements reported to the Estonian Statistical Office. The major interesting feature of the sample was the more detailed information on the ownership structure than it is usually available. The six ownership classes identified in this sample were domestic outsiders, employees, former employees, foreigners, managers, state. In the subsequent analysis the five classes of ownership (not including former employees) were used for comparisons. I did not notice any indication in the dissertation to what extent was Bersant Hobdari involved in the creation and cleaning of this data set.

The dissertation consists of three closely connected papers titled as "Corporate Governance and Liquidity Constraints: The Sensitivity Of Access To Capital To The Identity of Owners" (Paper I), "Corporate Investment and Determinants of Financial Constraints When Sample Splitting Criteria Are Unknown and Endogenous" (Paper II), and "Ownership Structures and Capital Constraints: An Empirical Investigation of the Credit Rationing Hypothesis in

Privately Held Firms Using the Error Correction Specification" (Paper III). For all the three papers the author used the common structure of discussing the results of his econometric estimations with the respect to the above mentioned 5 ownership groups. This approach correspond to the stated objective of the thesis "to investigate in detail the impact that different corporate governance structures have on capital allocation and investment in a transition economy context." By the term "different corporate governance structures" author means the different prevailing ownership classes.

The major contribution of the dissertation is the empirical one. The author uses in a creative manner different approaches developed in the leading academic literature to analyze the new and interesting set of Estonian data in detailed and comprehensive manner. Therefore this dissertation serves as a valid contribution to the transition economics literature.

In the Paper I Bersant Hobdari concentrates the attention to the two main hypotheses. Firstly he is testing whether firms maximize profit (dividends) or whether they maximize profit (dividends) per worker. Secondly he investigates whether financial constraints (flow of funds constraint, capital accumulation constraint, non-negativity of dividends, credit ceiling, and the transversality condition preventing the firm to borrow money and pay back its debt at the end of the period) matter in the firm's investment behavior. He does his GMM estimations separately for different ownership classes and informally verbally compares the results obtained. He manages to get a nice and intuitive result that the employee owned firms are the only one which behave consistently with dividends per worker maximization hypothesis.

The correct assignments of each firm in the sample into particular ownership class is a very difficult and controversial task. Bersant Hobdari discusses this problem well on pages 27-30 of his dissertation. Therefore all results of his papers have to be considered conditional on the very crude and imprecise ownership assignments, which is of course a common problem in all the literature dealing with the ownership effects.

The dissertation shares a common feature with the majority of empirical papers dealing with credit provision and financial constraints. It refers to the adverse selections and moral hazard effects and situations, which are theoretically described in microeconomics and contract theory. It uses a microeconomic terminology of credit rationing or soft and hard budget constraints without clear and firm connection between the empirical econometrics and

theoretical concepts. The note that the government interventions could exacerbate the lemon problem (Conclusion of Paper I, p.53) serves as a characteristic example of this approach. Bersant Hobdari would find discussion of the effects of adverse selection problem in the context of government interventions in my paper (Karel Janda: The Comparison of Credit Subsidies and Guarantees in Transition and Post-Transition Economies, *Ekonomicky casopis* (Journal of Economics), vol. 53, no.4, 2005, pp.383-398), which contains references to the relevant literature. In that paper I show that the provision of the support to the right type of the firm alleviates the credit rationing and the provision of the credit support across the board to all types of the firms decreases the lemons problem too. Essentially in the context of the Paper I, I would argue that the government interventions are plagued with many inefficiencies, but the addition of government money does not exacerbate the lemons problem (as long as it is not targeted to the "good" type of the firm).

In the Paper II Bersant Hobdari uses the switching regression technique to empirically investigate the problem of soft and hard budget constraints of the firms. This approach was already used in the US context (Xiaoqiang Hu and Fabio Schiantarelli: Investment and Capital Market Imperfections: A Switching Regression Approach Using U.S. Firm Panel Data, *The Review of Economics and Statistics*, vol. 80, no. 3, 1998, pp. 466-479), but it is new in the transition economies situation where the usual approach was to divide the sample into a priori financially constrained and unconstrained firms and then estimate separate equations for each group. In the switching regression model used in the Paper II the sample separation into constrained and unconstrained firms is a priori unknown and it is determined endogenously by a selection function.

While I consider the Paper II to be very interesting and important research paper, I will raise three suggestions for possible improvements. First is the question of the sample selection bias in the sense that only good firms survive and are around for us to survey and collect data on. This question of the survival of fittest should be discussed in connection with the use of balanced and unbalanced panel in the Paper II. In the light of this natural process of the death of the firms I view the "robustness" (mentioned on p.93) of the same results from the balanced and unbalanced panels somehow suspiciously. Second suggestion concerns the manifestations of the soft budget constraint discussed on pages 85-87. I recommend to add the softness and toughness of bankruptcy procedures and the bankruptcy provisions and procedures in general as another dimensions for softness/hardness of budget constraint of the

firm. The discussion of this problem and relevant references are in Karel Janda: Bankruptcy Procedures with Ex Post Moral Hazard, Working Paper UK FSV - IES, no.61 or in the paper on bankruptcies presented by Ondrej Knot and Ondrej Vychodil on GDN 2005 summer conference at CERGE-EI. Thirdly, when the author talks about the Estonian financial system and about Tallin Stock Exchange on p.74 , he should mention the stock exchange alliance NOREX between the Nordic and Baltic exchanges. It is the most advanced exchange alliance of today and Estonian stock exchange takes part in its operations. The same comment about NOREX also applies to the parts of Paper I and Paper III dealing with Estonian participation in Baltic stock exchanges.

After reading Papers I and II I did not find Paper III particularly novel in the terms of economic substance. The main point of interest in this part was the different technique (the error correction model) used to answer similar question as in the Papers I and II on the same data. Also I do not consider the title of the Paper III to be particularly well fitting to the paper. The emphasize on "privately held firms" in the title, abstract and the introduction of the paper is at odds with the same structure of the analysis in the Paper III as in the Papers I and II (which do not emphasize "private held firms" specification). The analysis in Paper III is done for all 5 types of ownership structures, including the state ownership. As long as "credit rationing" is emphasized in the title of the paper I would recommend to properly define it and to use this concept throughout the paper. In the current version the credit rationing is effectively introduced only in the last but one paragraph of the section Estimation Results on p.134. And it is mentioned only in a passing way there. It should be introduced and clearly defined earlier. It would be also nice if the good connection between theoretical microeconomic concept of credit rationing and its operational econometric and empirical representation was established. (See my comments about the use of theoretical concepts in the part devoted to the Paper I).

As a reader of the dissertation I would appreciate the table of contents. The table of contents would also help the author to realize that for example the Paper III has two sections 4 (firstly Estimation Results on p. 129 and secondly Conclusions and Policy on p. 134).

The papers in this dissertation sometimes contain the same text in the different papers. As long as I view the parts of the dissertations as independent papers prepared for individual submissions in different journals, I am perfectly fine with the 3 times repeated description of

the sample (sometimes with the same tables or with identical parts of text). But I recommend the author to again the Conclusions of the Papers I and III. To have two papers with the same last two pages of Conclusion does not send good signal about the value added by the Paper III. I am not sure if these identical conclusions are an intention of the author or if they are unintended cut-and-paste mistakes.

I conclude these comments with a statement that I enjoyed reading the dissertation and that I consider it to be a nice empirical investigation of important concepts connected to the microeconomics of banking in general and economics of transition in particular.

I recommend the dissertation to be allowed to go to a defense.

Prague, September 4, 2005

Karel Janda