## Report on PhD Dissertation by Anastasiya Shamshur: Essays on Capital Structure Stability – Prof. Saul Estrin

This thesis comprises three essays linked by a common theme – the stability of capital structures of firms in central and eastern Europe. This has been a longstanding area of research in developed market economies, but there is almost no work for the transition economies. Thus it is entirely relevant that this subject matter has been chosen for a PhD. The thesis is unified by the use of data from the Bureau Van Dijk at the firm level for the period 1996-2006 or the Zephyr dataset 1997-2007.

The thesis contains three papers. The first seeks to explain leverage ratios in the group of Central European economies. It finds that the ratios are in fact rather stable. This is consistent with evidence for the United States. However it is perhaps surprising in the transition economy context because of changes in the underlying institutional structure. One explanation for this stability might be constraints that firms face in obtaining finance, likely to be a major issue in the institutional environment of these economies. This issue is the subject of the second chapter of the thesis. Quite sophisticated econometric techniques are employed to distinguish between the choices of financially constrained and unconstrained firms in the dataset. Evidence is provided that constraints may indeed be influencing the capital structure because unconstrained firms are found to adjust more quickly to their target levels. Moreover, they are found to be more responsive to economic changes than constrained firms. Neither finding is surprising but it is consistent with the view that stability of capital structures may reflect the relatively constrained financial environment. The paper also explores the impact of ownership arrangements on capital structure. This is an important variable for many studies of transition economies, and it also proves to be the case in this study. Evidence is provided that direct ownership is an important factor explaining leverage in unconstrained firms.

The topic changes somewhat in the third paper, which looks at M&A behaviour in the same economies over approximately the same period. Once again using fairly sophisticated and entirely appropriate econometric methodology, the paper finds that there is some effect of M&A activity on leverage; acquirers are found to have higher leverage after the takeover. However, no changes in leverage are identified in acquired firms post-merger.

Overall, the thesis in my view meets the standards required for the award of a doctorate. The issue is an important and interesting one, which is of current research concern in other economies as well as those being studied. Indeed, the literatures to which these papers contribute are relatively recent (within the past five years) and published in high level economics and finance journals. Moreover, the student has gathered a large and high quality dataset which is appropriate to the analysis of these issues. Perhaps most importantly, rigorous research methods have been applied in the analysis of the data. In this respect, the use of endogenous switching regressions in the second chapter, and of difference in difference methods in the final chapter are of note. The study as a whole is well executed and the results are for the most part convincing. In the comments which follow, I will discuss areas where the papers themselves could be improved for future publication. However, these critical point should be interpreted in that context; I am of the view that the three papers merit the award of a PhD, though further work is needed before the papers can individually be accepted for publication by major journals.

## Chapter 1:

This chapter looks at the leverage ratio in central and eastern Europe, using bureau van dirk data 1996-2006. The Western literature has found fairly stable ratios, though much of the variance is unexplained. The empirical work is highly competent and the results are interesting. However, the paper would benefit from more work in the following areas:

- i. The theoretical framework is ad hoc. One would be much more comfortable if the results were derived from a model, rather than developed as a list of variables used in previous papers. The danger of omitted variables is quite strong. Moreover, variables are included because they have been significant in previous work. However, in the absence of a clear theoretical framework, some of these might be endogenous and others might be omitted. Size is an example of the former.
- ii. A lot more work could be done in discussing the dataset and convincing readers of its quality. One would surely expect to see some key means/standard variations cut by for example country. The discussion of missing values and what has been done is inadequate. Further evidence of the bias that might have been imparted is required.
- iii. I am not sure how good the bureau dataset is when one considers variables like equity, because for many firms the values are not market determined. This is

especially true in transition economies at the start, though it may become less relevant as time goes on. Some discussion of these issues would give the reader more confidence.

- iv. The previous point means that I would put especial stress on the results in table1.4. The fact that these seem broadly to confirm the 1.3 results is an important robustness check.
- v. The conclusions of the paper are disappointing. One might expect some reflection of the implications of the findings for policy, or perhaps for firm's financial policies in the transition context.

It will be clear that several of these comments are also relevant for the latter two chapters, and I will not repeat them.

## Chapter 2:

- i. The issue of ownership arrangements and their impact on corporate behaviour is a particularly interesting one in the transition context. Ms Shamshur is to be congratulated for addressing it in a thesis on capital structures, and in such an innovative manner, namely with respect to financially unconstrained firms. The results are not entirely convincing because the data on ownership does not match perfect the other datasets, but the findings are intriguing.
- ii. In terms of a future paper for publication, I would recommend that chapters 1 and 2 are merged. The results would thereby be more insightful and original, and the overlap eliminated. The repetition opens the issue of whether the thesis contains sufficient original material, but I believe that the use of switching regressions and the ownership discussion are sufficient in this context. But publication is a different question from PHD examining, and the two papers would be better merged.
- iii. The issues raised above about discussion of the data, ad hoc specification and weakness of the conclusions, apply to this chapter as to the previous chapter.

## Chapter 3

i. This chapter is intellectually more distinct that the two previous ones. Moreover the dataset is also somewhat different. For future development, of the work,

- there is the same need for deeper discussion of the problems generated by using this dataset.
- ii. The literature review and the hypotheses under consideration are clearer in this case, probably because the institutional environment of transition does not have any obvious implications for M&A while it may have for capital structure per se. Thus, the paper is a fairly straightforward if well executed application of a proven methodology.
- iii. The paper has the advantage of being able to look at capital structures for firms post-merger, looking at the acquired and the acquirer separately. This is a very interesting twist. It might have been interesting to re-examine the theoretical framework from this perspective.