Comments and Recommendations for Anna Pestova's Dissertation "Essays in Applied Macroeconomics"

Summary of the Dissertation and Contributions. Anna Pestova's dissertation consists of four chapters on applied macro-economics (macro-econometrics to be more specific), that focus on the transmission of credit supply expansions and shocks (including those related to economic sanctions and sovereign spread shocks) on business cycles, financial performance and other important outcomes of households and firms. Specifically, in her first chapter, Anna studies the implications of credit growth on business cycle outcomes. The second chapter investigates the role of credit growth on non-performing loans, which is also an important macro-financial indicator in the short-run. The third and fourth chapters switch the perspective towards an international context and study the implications of international sanctions and sovereign spreads.

Overall Evaluation. I would like to congratulate Anna as the author of this excellent dissertation and her dissertation supervisors in helping her to achieve this great outcome. This dissertation is a carefully drafted academic piece, which contributes to the literature substantially. The rigor of the empirical work is really high, with an extensive amount of robustness checks, extensions and sensitivity analysis provided in each chapter. The empirical methods are well executed and motivated. The tables and figures are also prepared with great care and they present the results clearly. Finally, the language, style and the structure of each chapter are also professional and seamless.

My comments and recommendations for the dissertation mainly relate to a few expositional improvements and theoretical foundations of the chapters, and these are not necessarily points that need to be addressed before the PhD defense, as they mostly relate to increasing academic publication chances at journals.

Comments and Recommendations.

Chapter 1

- 1. What are the important country characteristics and country's financial sector specificities that generate the differential implications of household and corporate credit for business cycles? There could be some rationale why certain local context characteristics matter for the outcome effects obtained in this chapter. Why and how the country characteristics are important or on the other extreme why local characteristics should not play a role (and the results are generalizable in that sense) can be discussed a bit more in the dissertation.
- 2. In a broad perspective, it would help to lay the theoretical foundation and delineate the hypothetical conjectures expected from the empirical analysis.

- 3. For instance, as an interesting result, the chapter highlights the outcome that the corporate credit expansion does not lead to a boom, as opposed to the outcome effects related to household credit expansion. What is the theoretical insight related to this result? Financial accelerator literature traditionally highlighted the interaction between business lending and business cycle fluctuations, and it would be interesting to discuss why no business cycle outcome effects are captured with respect to corporate lending.
- 4. What are the specific policy recommendations stemming out of the empirical results? It would be good to emphasize these a bit more.

Chapter 2

- 5. This chapter obtains the interesting empirical result that credit expansions are associated with rising default / delinquinecy behavior. Is this due to a change in the composition of borrowers (pool of borrowers enlarging and the adverse selection issues becoming more severe) or the repayment burden increasing or the moral hazard becoming more of an issue? Is there a way to provide some type of a mechanism analysis and/or utilize some of the existing empirical results to shed light on this?
- 6. And in that respect, and similar to my comments on the first chapter, some clarity on the theoretical foundation of this chapter would also be helpful for the reader.

Chapter 3

- 7. One interesting result reported in this chapter is that more productive firms (both in large and small firms samples) experienced larger revenue drops compared to their unproductive counterparts. I believe this result can also be supported with a theoretical foundation. If the reason why more productive firms experience a decline in their revenues simply relates to the fact that their pre-shock revenues are larger than those of unproductive firms, then the decline is mainly due to the "size" rather than "productivity". Having said that if the result is due to another theoretical channel that productivity relates, then perhaps clarifying that potential channel could be helpful to support this empirical result.
- 8. If data is available, another interesting result for the cross-sectional firm analysis can utilize the industry information that firms belong to. Specifically, are there some industries which are more heavily hit by the sanctions and what are the common attributes of those industries that are likely to generate the larger contractions observed in those industries?

Chapter 4

9. The novel literature contributions of this chapter are not as clear as the previous chapters. Clarifying this point and presenting the key research question to be addressed earlier in the introduction would be help with the exposition of this chapter.

Recommendation for the PhD Defense. The comments that I provide above are mainly expositional and relate to potential theory angles as discussed within each item. They may be helpful to increase the "academic publication" chances of the dissertation chapters at journals and they are not necessarily needed to be addressed to advance to the defense. In my view, this dissertation as a whole can be defended already (without undertaking any changes). And in that respect, once again I would like to congratulate Anna for the dissertation & the PhD defense and wish her a successful academic life.