Report on **Bachelor / Master Thesis**

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

Student:	**Bc. Jan Žáček**
Advisor:	**doc. Mgr. Tomáš Holub, PhD.**
Title of the thesis:	**Should monetary policy pay attention to financial stability? A DSGE approach**

OVERALL ASSESSMENT *(provided in English, Czech, or Slovak):*

The thesis tests within DSGE setting the application of augmented monetary policy rules, i.e. Taylor rule augmented by credit, asset prices, and both credit and asset prices, in a small open economy that is represented by the Czech Republic. The thesis is well written and walks the reader through the basics of financial stability and financial stability indicators, modelling of financial aspects within monetary policy, set-up of a small open economy model with financial frictions, calibration of the model parameters and robustness checks. Moreover, the author uses relevant literature and references it appropriately throughout the text. There are, however, a few points that caught my attention while reading:

- When modelling the wholesale branch of the commercial banking sector, a capital adjustment cost a bank pays when its capital ratio deviates from the value imposed by the central bank is applied. I find it curious that according to this setup a bank would be penalized under both scenarios; when it is overcapitalized the same as when it is undercapitalized. In the Czech Republic many banks currently exceed the minimum regulatory capital ratio and it is certainly not considered harmful. If only undercapitalized banks were penalized, how can we expect the results to change?
- At present, banks in the Czech Republic dispose of large amount of liquidity. Some previous research (e.g. Horvath et al., 2012) shows there exists a negative bi-causal relationship between stronger capital requirements and a greater bank liquidity creation (BLC), which implies that greater BLC might impair bank solvency in terms of capitalization and vice versa. Can not this concept of liquidity creation (a bank's ability to finance relatively illiquid assets with relatively liquid liabilities) be considered as an alternative way to incorporate financial variables in the monetary policy decision-making? Can we assume the results remain qualitatively the same if this financial indicator is used?
- In the monetary policy rule augmented by credit, a credit supply is considered. In the macroprudential literature credit in levels is not frequently used. Instead, other credit transformations tend to be more indicative of possible financial stress in the economy, e.g. credit growth or credit-to-GDP ratio.
- As for the policy rule augmented by financial variables, it is nice that the author analyzes rules with credit, asset prices and their combination within the model. However, there are some doubts that monitoring only asset prices is helpful for the conduct of monetary policy. For example, Mishkin (2012) highlights the existence of two types of imbalances, irrational exuberance bubbles and credit-driven bubbles. The former is driven solely by overly optimistic expectations and not backed by credit market, thus upon its burst the real economy is not severely hit. The latter, however, interacts with financial sector which leads to a credit boom removed from fundamentals and gives rise to financial disruptions. Therefore, the focus should perhaps be on the developments on credit market coupled with monitoring of lending standards, levels of risk premia and credit growth.
- In the parameter calibration chapter, the author uses parameter values from previous research for the Czech Republic as well as calculates select parameters of the model. It is briefly mentioned that the data are extracted from ARAD and cover the period of 2000Q1 to 2014Q4. This is a relatively extended period that includes also crisis years. If the crisis period were omitted from the data used for calibration, how would the parameters change? Does parameter calibration taken from the other studies correct for the crisis period or does the crisis have no impact on calibration itself? Moreover, an overview of data used in parameter calculations and its descriptive statistics would be useful.

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- The author states that he constructs a DSGE model for „a small open economy with financial frictions that is represented by the Czech Republic". Reading this at first gives impression that the objective is to construct a general model for a small open economy that is only later calibrated to fit the Czech Republic. Having read the thesis, it is now clear that the author aims to model the Czech economy under augmented monetary policy rules. However, in terms of financial controls in the augmented policy rule what other variables could be used for an emerging small open economy in e.g. Asia?

Overall, the thesis focuses on a highly relevant and important topic of monitoring financial sector developments within monetary policy framework and the interaction of monetary and macroprudential policies. The thesis uses appropriate language, though some typos and missing words occur. However, my reading of the thesis has brought up a few concerns/observations that were highlighted above and should be addressed by the author at the defense. Nevertheless, I recommend this thesis for defense with the suggested grade "excellent".

References:

Horvath, R., Seidler, J., & Weill, L. (2012). Bank capital and liquidity creation: Granger-causality evidence. *Journal of Financial Services Research*, 1–21.

Mishkin, F. S. (2012, November). Central banking after the crisis. In *Central Bank of Chile, Monetary Policy and Financial Stability, Sixteenth 16th Annual Conference of the Central Bank of Chile* (pp. 1-45).

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

CATEGORY		**POINTS**
Literature	*(max. 20 points)*	18
Methods	*(max. 30 points)*	26
Contribution	*(max. 30 points)*	28
Manuscript Form	*(max. 20 points)*	18
TOTAL POINTS	*(max. 100 points)*	**90**
GRADE	**(1 – 2 – 3 – 4)**	**1**

NAME OF THE REFEREE: Mgr. Diana Žigraiová

DATE OF EVALUATION: 14.6.2016

Referee Signature