

Report on Master Thesis

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

Student:	Bc. Vojtěch Molnár
Advisor:	Doc. Mgr. Tomáš Holub, PhD.
Title of the thesis:	Price Level Targeting with Imperfect Rationality: A Heuristic Approach

Contribution

The thesis focuses on a topic related to the monetary policy regime choice, which has been an important part of both the academic and policy-makers' debates in recent two decades. In particular, it analysis possible advantages and risks of price level targeting (PLT) as opposed to inflation targeting (IT) in terms of better anchored expectations and addressing the issues related to the ZLB constraint. The topic has become even hotter now with the Fed's announced switch to average inflation targeting, which shares features of the PLT; the debate at the defense could thus focus on the student's assessment of this recent policy regime announcement.

The key contribution of the thesis is the fact that it analyses the topic for an economy in which expectations are not fully rational, but instead people choose between a few simple forecasting rules in a heuristic manner. One reason for the - so far - hesitant approach of central banks to implementing PLT in practice is the policy-makers' doubt about credibility of such a policy move and ability of people to understand correctly the new framework and form inflation / price-level expectations accordingly.

The thesis confirms the potential benefits of PLT found in the earlier literature. It does so even in a set-up in which people do not form rational expectations. This in itself constitutes an important contribution to the research in this field. However, the thesis also shows that for this to be true, there must be some degree of people's understanding about the regime change. In particular, the positive outcome for PLT holds if the economic agents (start to) form their expectations about price level (and the model parameters are not very unfavourable). On the other hand, if expectations continue to be created about inflation, the PLT regime may lose credibility over time and lead to a divergence of the economy. The author thus concludes that that inflation targeting constitutes significantly more robust choice for monetary policy than PLT.

When I first read the outcome about the divergent economy under the PLT regime and expectations formed about future inflation in a draft version of the thesis, it reminded me of the well-know price-level indeterminacy problem in the macro-models. This problem typically results from too weak responses on monetary policy to inflation deviations from the target (actual or expected, depending on whether the policy rule is a backward-looking or forward-looking one), which leads to a self-reinforcing drifting of the economy away from equilibrium. But the final version of the thesis in chapter 5 suggests – if I understand the text correctly – that in this case, the problem may be caused by destabilising oscillations of the economy around the equilibrium with their amplitude increasing over time. This is another very interesting finding that the author could focus on at the defense.

Methods

The thesis uses a standard small-scale New Keynesian Dynamic Stochastic General Equilibrium (DSGE) in which rational expectations are replaced with heuristic forecasting rules. This can be considered a state-of-the-art approach to this kind of research question. Note that empirical research is not possible for the chosen topic, as no modern central bank has adopted PLT regime yet. We thus need to rely on structural macro models to simulate the regime's properties.

I appreciate the numerous robustness checks that the author has carried out in terms of how people form their expectations, but also in terms of the model calibration. Without these robustness checks, the author would not have arrived at many of the crucial findings discussed above.

Literature

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All the seminal papers are mentioned in the thesis and properly referenced. The references are appropriately focused on the chosen topic.

Manuscript form

The thesis is logically structured, written in good English and easy to read.

Summary and suggested questions for the discussion during the defense

This is a very good thesis that has a future publication potential and could form a good starting point for a PhD. dissertation. The author has worked on it very independently, demonstrating his ability to do an advanced research work. At the same time, he has incorporated my hints and suggestions in a more than satisfactory way. I thus do not have any critical remarks on the final draft.

As a result, I am convinced that the thesis more than fulfills the requirements for a thesis at IES, Faculty of Social Sciences, Charles University. I thus recommend it for the defense and suggest a **grade A**. Depending on the opponent's review and author's performance at the defense, the committee could consider awarding a distinction.

The results of the Urkund analysis do not indicate significant text similarity with other available sources (other than draft versions of the same thesis).

I summarize my suggestions for the defense questions by the committee: (i) How do you assess the Fed's recent announced switch to an average inflation targeting framework in light of your research? (ii) Explain why PLT may lead to divergence of the economy if people (continue to) form their expectations about future inflation rather than future price level?

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

CATEGORY	POINTS
<i>Contribution</i> (max. 30 points)	30
<i>Methods</i> (max. 30 points)	30
<i>Literature</i> (max. 20 points)	20
<i>Manuscript Form</i> (max. 20 points)	20
TOTAL POINTS (max. 100 points)	100
GRADE (A – B – C – D – E – F)	A

NAME OF THE REFEREE: Tomáš Holub

DATE OF EVALUATION: 2 September 2020

*Digitally signed by
Tomáš Holub*

Referee Signature