

Report on Bachelor / Master Thesis

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

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| Student: | Vojtěch Górecki |
| Advisor: | Prof. Roman Horváth Ph.D. |
| Title of the thesis: | The Effect of Unconventional Monetary Policy of ECB on Housing Prices |

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

Contribution

The thesis contributes to the discussion about the effect of an unconventional monetary policy (UMP) on housing prices. As the results show, both the stability and the significance of results is low. The author explains and documents the limited significance with respect to the heterogeneity of housing markets across EA, which is an important contribution to the literature. The topic is up to date.

Methods

The estimation of panel VAR using GMM as well as the unit root and cointegration tests exceed the average abilities for the bachelor level of studies. The methods are used correctly, in the necessary extent, and can be considered as the best option for empiric evaluation of the research question.

Crucial methodological challenge is the measurement of the UMP. The author sufficiently describes all the challenges related to the usage of either balance sheet measures or the shadow rate.

Beyond this, the utilized shadow rate reflects the short rate (although estimated from the whole yield curve). This causes two issues. First, on contrary, the UMP often included purchases of bonds with medium to long maturities. It is therefore questionable whether the shadow rate (although being estimated from the whole yield curve) sufficiently represents the monetary policy conduct in the period of UMP. Second, due to the medium- to long-term nature of mortgages, *banks adjust their mortgage pricing and fund supply according to developments in the medium- to long-term bond and interest rate swap markets rather than the short monetary policy rate*. Therefore, the obtained weak response of the housing prices on the shadow rate might be partially caused by the weak connection between the (shadow) monetary policy rates and longer yields.

Using directly a 10-year bond yield, for example, either observed or shadow, or some of its components, could bridge both these issues. It would lead to a better representation of the UMP conduct and simultaneously avoid uncertainty related to short-long yields transmission. Therefore, the results could become more significant. Naturally, the bond yields are affected by other causes (e.g. fiscal policy), but such adjustment could provide at least an interesting robustness check.

Literature

The reference to existing literature is sufficient, usage of references well describes the position of the thesis in the literature. The most important quoted papers are very recent. The extent of literature used is above-average.

Manuscript form

The manuscript form is very good, with only few mistakes (e.g. reference at page 30). Both language and style are on a high level.

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Summary and suggested questions for the discussion during the defense

The rather theoretical parts (chapters 2 and 3) demonstrate good theoretical background of the author with relation to the monetary policy and housing prices determinants. The chapter 4 shows above-average ability of the author to work with literature. Finally, the very good use of advanced econometric techniques in the chapter 5 prove that the quantitative skills of the author significantly exceed level required for the bachelor level of study.

I therefore consider the bachelor thesis as of a high quality. The above mentioned idea concerning usage of longer yields is a recommendation rather than a mistake. The thesis could have a chance to be published after several improvements including those outlined in the section 5.4 (i.e. sign restriction).

Suggested question:

The thesis implies (section 3.1) that the UMP mostly transmits into the housing market through providing additional and/or cheaper funds to banks. Consequently, banks use these funds via increasing mortgage loans supply, which leads to growth in mortgage lending and finally also growth in housing prices.

The question is: does this transmission work also in case of banking systems with excess liquidity (already before the crisis) as is the case of the Czech republic? Or are the indirect channels (as outlined at the end of section 3.1) more important in that case?

Building on this, from the empirical analysis in section 5, are you able to conclude whether the direct effect (increasing bank funding) or the indirect effect (increasing GDP, income and therefore also housing demand) is the dominant part of the transmission?

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

| CATEGORY | POINTS |
|---|---------------|
| <i>Contribution</i> (max. 30 points) | 28 |
| <i>Methods</i> (max. 30 points) | 29 |
| <i>Literature</i> (max. 20 points) | 20 |
| <i>Manuscript Form</i> (max. 20 points) | 19 |
| TOTAL POINTS (max. 100 points) | 96 |
| GRADE (A – B – C – D – E – F) | A |

NAME OF THE REFEREE: Adam Kučera

DATE OF EVALUATION: August 20, 2018

Referee Signature

EXPLANATION OF CATEGORIES AND SCALE:

CONTRIBUTION: *The author presents original ideas on the topic demonstrating critical thinking and ability to draw conclusions based on the knowledge of relevant theory and empirics. There is a distinct value added of the thesis.*

| | | |
|---------------|----------------|-------------|
| <i>Strong</i> | <i>Average</i> | <i>Weak</i> |
| 30 | 15 | 0 |

METHODS: *The tools used are relevant to the research question being investigated, and adequate to the author's level of studies. The thesis topic is comprehensively analyzed.*

| | | |
|---------------|----------------|-------------|
| <i>Strong</i> | <i>Average</i> | <i>Weak</i> |
| 30 | 15 | 0 |

LITERATURE REVIEW: *The thesis demonstrates author's full understanding and command of recent literature. The author quotes relevant literature in a proper way.*

| | | |
|---------------|----------------|-------------|
| <i>Strong</i> | <i>Average</i> | <i>Weak</i> |
| 20 | 10 | 0 |

MANUSCRIPT FORM: *The thesis is well structured. The student uses appropriate language and style, including academic format for graphs and tables. The text effectively refers to graphs and tables and disposes with a complete bibliography.*

| | | |
|---------------|----------------|-------------|
| <i>Strong</i> | <i>Average</i> | <i>Weak</i> |
| 20 | 10 | 0 |

Overall grading:

| TOTAL | GRADE |
|----------|-------|
| 91 – 100 | A |
| 81 - 90 | B |
| 71 - 80 | C |
| 61 – 70 | D |
| 51 – 60 | E |
| 0 – 50 | F |