

# Report on Bachelor / Master Thesis

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

<b>Student:</b>	<b>Bc. Magdalena Hummelová</b>
<b>Advisor:</b>	<b>Mgr. Barbara-Pertold-Gebická M.A., Ph.D.</b>
<b>Title of the thesis:</b>	<b>Measuring the Effect of the Timing of First Birth on Mother's Wages in the Czech Republic</b>

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

### **Contribution**

The thesis targets a very interesting research topic using poor data, unfortunately. The thesis replicates with few adjustments a research paper by Herr (2016) with data about mothers from the Czech Republic.

Magdalena finds according to her contra intuitively a negative effect of postponing the first motherhood on mother's long-run wage. She argues that the effect is driven by long parental leave in the Czech Republic that causes a need to start the career from the beginning after re-entering the labor market. Therefore, the earlier the women become a mother, the earlier she can return to work and has more time for building her new career.

It is new and a very important finding for the family policy in the Czech Republic. On the other hand, the results are very weak given the data limitations. Nevertheless, similar results can be found in the literature. For example, Davies et al. (2005) find a wage penalty for motherhood in Europe. However, Magdalena does not connect her finding to the current literature.

Davies, R., & Pierre, G. (2005). The family gap in pay in Europe: A cross-country study. *Labour Economics*, 12(4), 469-486.

### **Methods**

The applied methods are appropriate. Moreover, Magdalena had to deal with imperfect data. For example, she uses advanced matching methods to estimate the mother's wage at labor force entry. She also runs the analysis on subsamples as a robustness check of her results.

Nevertheless, I have few notes.

First, Magdalena matches the mothers of 1993 to mothers in 2013 according to three characteristics -- education, age at labor market entry, and place of residence to estimate the former income of the mothers. I was wondering whether the data does not contain information about the type of the mother's work. Because the wages will differ significantly for various types of occupation and these differences might not be captured by the attained education level.

Second, maybe a question for the defense. Why have you included education only as a dummy variable indicating at least high school level into the analysis? There might be significant differences in the wage levels of mothers with high school and university levels.

### **Literature**

The thesis provides a literature review explaining the research motivation, especially why the motherhood pay gap may explain a slow down in narrowing the gender pay gap. Nevertheless, the thesis does not deal with the motherhood pay gap, and the connection to the fertility timing decision is not clearly stated.

However, Magdalena summarizes the current literature dealing with fertility timing rather briefly (only results) and mentions only studies from the US confirming the hypothesized positive effect of delayed fertility on wage, although also some studies from Europe are available (for example, Cigno and Ermisch 1989). Do all published studies confirm the same finding? Comparison of used methodologies is missing. It would also be useful to explain why has Magdalena chosen the methodology of Herr (2016) for the research replication.

Otherwise, Magdalena properly quotes the literature.

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Cigno, A., & Ermisch, J. (1989). A microeconomic analysis of the timing of births. *European economic review*, 33(4), 737-760.

## Manuscript form

Generally, the thesis is very well written. It follows a logical structure and the text refers to the graphs and tables. The description of the data is very detailed. I have only minor comments. Sometimes the argumentation might be more straightforward which would make the thesis shorter. Also for better orientation of the reader, Magdalena should name the estimated effects consistently and preferably not only by the model coefficient names (e.g.,  $\beta_1$ ) when interpreting the results.

## Summary

It is a well-written diploma thesis pointing to an interesting research topic. The results provide, however, only the first insight regarding the impact of the birth timing on long-run wages as the imperfection of the data does not allow to make any conclusions from the results.

## Suggested questions for the discussion during the defense

Why have you chosen the SILC 2013 cross-sectional data when a longitudinal data would be more appropriate for such an analysis? And why data from the year 2013, were more recent data not available?

Why have you not included the type of occupation into the model? SILC data should contain such information. There might be differences in wage patterns and fertility decisions between blue-collar, white-collar, and managerial positions (also found in the literature).

Do you have any idea how to proceed with your research to get more reliable results?

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

<b>CATEGORY</b>	<b>POINTS</b>
<i>Contribution</i> (max. 30 points)	22
<i>Methods</i> (max. 30 points)	26
<i>Literature</i> (max. 20 points)	14
<i>Manuscript Form</i> (max. 20 points)	19
<b>TOTAL POINTS</b> (max. 100 points)	<b>81</b>
<b>GRADE</b> (A – B – C – D – E – F)	<b>B</b>

**NAME OF THE REFEREE:** Dominika Špolcová

**DATE OF EVALUATION:** January 13, 2019

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**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	<b>A</b>
81 - 90	<b>B</b>
71 - 80	<b>C</b>
61 – 70	<b>D</b>
51 – 60	<b>E</b>
0 – 50	<b>F</b>