

**REPORT ON MASTER THESIS**  
**CENTER FOR ECONOMIC RESEARCH AND GRADUATE STUDIES**

<b>STUDENT:</b>	<b>Kotarja, Angjielina</b>
<b>ADVISOR:</b>	<b>Menzel, Andreas</b>
<b>TITLE OF THE THESIS:</b>	<b>The Impact of Floods on Maternal and Newborn Healthcare in Pakistan</b>

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

The thesis provides a useful, relevant and timely assessment of the massive 2010 floods that affected large parts of Pakistan on ante- and post-natal health care utilization around birth events, as well as the occurrence of births assisted by skilled personnel. Interestingly, the author finds that flooding reduced the use of ante- and post-natal health services, but increased the prevalence of births assisted by skilled personnel. This may be due to organizations assisting the affected populations right after the floods bringing with them skilled birth personnel (while on the other hand, ante/post-birth health centers were destroyed in the floods).

The thesis overall meets the required standards, especially regarding the important and novel research question, and the thorough literature review, the appropriate choice of methodology (Difference-in-differences) as well as the sufficiently clear presentation and interpretation of results. Some issues remain around the discussion of the methodology, which was at times hard to follow and not clear.

**CONTRIBUTION:**

The contribution is clear and important. Flood events like these ones are likely to increase in frequency due to climate change and population growth. The use of DiD methodology to evaluate the effects of the floods on pregnant people and birth outcomes, which the author claims is the first in relation to this flood event, is relevant and important.

**METHODS:**

The use of DiD methodology is fully adequate. It is not fully clear though why the author used a logit regression model instead of a linear model. Especially given that the interpretation of DiD results based on logit regressions is much more complex and opaque than based on OLS. Also, the author could discuss more why the sample is restricted the way it is. Finally, a graphical representation of the Difference in difference results (the standard DiD graph with two trend lines for treated and control units pre- and post treatment event) would have been useful.

**LITERATURE:** The discussion of the literature is extensive and useful.

**MANUSCRIPT FORM:** At times there are grammatical errors in the text, slightly complicating the reading of the text. The organization of the text is good.

## **SUMMARY AND SUGGESTED QUESTIONS FOR THE DISCUSSION DURING THE DEFENSE:**

Proposed questions for defense

- Why the restriction to every married women in the sample?
- Why are you using a logit/probit model?
- The framework requires that  $f(\mathbf{0}, \mathbf{u}_{g0}) - f(\mathbf{0}, \mathbf{u}_{g-1})$  to hold? There is no equation here. Could the author clarify?
- Table 5/6/7/8. Show number of observations, and do show which additional variables were controlled for.
- Were your standard errors clustered in any way?
- Not clear to me (p. 25): "I pooled the data and conducted a mixed effects model, with a binary treatment indicator predicting variation in the outcome's pre-intervention slope."
- Why do Tables 7 and 8 have different outcomes? Are all robustness checks discussed in Section 4.2 shown in Tables 7 and 8? Not clear.

*Please indicate whether you recommend the Thesis for defense or not.*

**I recommend the thesis for defense.**

## **TEXT ORIGINALITY CONTROL**

I confirm that I acquainted myself with the report on the originality of the text of the thesis from

Theses    Turnitin    Ouriginal (Urkund)

Comments on the reported results:

I looked at the document produced by turn-it-in, marking every text piece that coincides with text bits found in the internet or in other pieces. Overall, I did not find any too concerning, too lengthy bits of overlapping text that suggests that the author copied whole pieces of text into the thesis.

**SUMMARY OF POINTS AWARDED** (for details, please see the page 3)

<b>CATEGORY</b>	<b>POINTS</b>
Contribution (max. 30 points)	28
Methods (max. 30 points)	21
Literature (max. 20 points)	20
Manuscript Form (max. 20 points)	19
<b>TOTAL POINTS (max. 100 points)</b>	<b>88</b>
<b>GRADE (A – B – C – D – E – F)</b>	<b>B</b>

**NAME OF THE REFEREE:**

Andreas Menzel

**DATE OF EVALUATION: 21. August 2022**



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**REFEREE SIGNATURE**