1 Thesis structure

- 1. ABSTRACT
- 2. INTRODUCTION
- 3. THE ISSUES OF MENTAL HEALTH
 - (a) Why is MH relevant
 - i. A rising problem (find statistics from many different countries)
 - A. MH issues: depression, anxiety, ADHD, OCD, BPD...
 - B. DSM-V definitions of disorders
 - C. Which disorders do I focus on?
 - ii. MH and social capital
 - iii. MH and public spending (prevention and treatment)
 - iv. MH and private spending
 - v. MH and healthcare spending (+talk about comorbidity between MH issues)
 - vi. MH and private choice (savings, childbearing, employment)
 - (b) Provide literature on MH in general (brief history, up to date literature) + on specific issues brought up in the previous point
 - (c) How is it measured?
 - Psychometric tools (most common scales, have they changed during the years)
 - ii. Reliability of questionnaires (self-administered and under supervision administered)
 - iii. Most frequently used ones + have they changed recently? How do their scores behave?

4. FRAMING THE RESEARCH QUESTION

- (a) Q: how can we study the effect of MH on Y (education, free time use, employment, social networks quality and quantity, health outcomes)?
- (b) Literature review focused on this question: strategies, weaknesses of most common strategies.
- (c) Which data would I have in an ideal world?
- (d) Which analysis would I do in the ideal setting?
- (e) Using the pandemic as an identification tool.
 - i. Does the pandemic correlate with MH? Indicator of possible relevance of the instrument, so put a plot $+ R^2$.
- (f) The identification challenge.
 - i. Reverse causality.

- ii. Measurement error.
- iii. Simultaneity.

5. THE DATA

(a) SHARELIFE DATASET

- i. Describe the dataset.
- ii. What variables are relevant to me?
- iii. Building a MH indicator + reference other literature.
- iv. Plots and other graphic representation to explore and understand the dataset.
- v. Potential collinearity between variables.

(b) PANDEMIC RESTRICTIVENESS DATA

i. Describe data

6. IDENTIFICATION STRATEGY

- (a) IV approach
 - i. The method (brief explanation)
 - ii. The instruments + novelty of my new instrument
 - iii. Weaknesses + strenghts
 - iv. How to evaluate method performance
- (b) ML/non-parametric approach to the first stage of IV
 - i. The method
 - ii. Advantages and disadvantages with respect to regular IV
 - iii. How to evaluate method performance

7. ESTIMATION

- (a) Data cleaning (variables transformation)
- (b) Run the models
- (c) Plot results
- (d) Comment results

8. DISCUSSION

- (a) What did I find?
- (b) How does it compare with the most reliable literature?
- (c) How do the IV and IV+ML results compare?

9. CONCLUSION

- (a) Recap
- (b) How could the work be improved?
- (c) What is the main contribution of my work?