

Credible Methods for Evaluating The Impacts of Amil Programs

Muhamad Said Fathurrohman

Universitas Airlangga

Motivation

- What is **the best way** to achieve targets?
 - **Type** of programs
 - **Design** of programs
- **Comparison** needs **measurements**
- Inaccurate measurements => mislead decisions
- **Credible** yet **simple** methods

Literature Review

- **Negative correlation** between zakat and poverty (Suprayitno et al., 2017; Abdelmawla, 2014)
- **Increase in the income** of productive zakat beneficiaries (Beik and Arsiyanti, 2016; Pratiwi, 2016; Beik and Pratama, 2017)
- The income of beneficiaries **increased more** than that of non beneficiaries (Nurzaman, 2016)
- The income of beneficiaries **is larger** than that of non beneficiaries having similar characteristics (Sohag et al., 2015)

Confoundings

- The estimates might **capture the effects of something else** other than programs
- The difference in outcomes between beneficiaries and non beneficiaries might be come from **characteristic difference**, not from programs (**group effects**)
- The changes in outcomes between before and after receiving programs might still happen even without the programs (**time effects**)

Difference in Differences

- Eliminating **time effects**, assuming **parallel trend**
 $(Y_{\text{after}} - Y_{\text{before}} \mid \text{beneficiaries}) - (Y_{\text{after}} - Y_{\text{before}} \mid \text{non beneficiaries})$
- Eliminating **group effects**, assuming **stable differences**
 $(Y_{\text{beneficiaries}} - Y_{\text{non beneficiaries}} \mid \text{after}) - (Y_{\text{beneficiaries}} - Y_{\text{non beneficiaries}} \mid \text{before})$

Randomized Experiment

- Randomizing treatment:
 - program allocation
 - program design
- Goal: characteristics balance between groups
- Outcome differences can only be explained by the differences in treatment

Issues in Experiment

- External Validity
 - impacts vary under different settings
 - learn the pattern from replication
- Ethics
 - intentionally hold program benefits from control group
 - limited resources require allocation mechanism, one way or another

Conclusions

- Optimal allocation of amil resources requires accurate impact measurement
- Existing studies on the impacts of amil program potentially contain bias in their impact estimates
- This paper introduces two credible methods for evaluating impacts, yet simple enough for amil to self evaluate their programs
- Good studies requires collaboration between researchers and amil institutions to integrate study design and program planning