Educational assistance and education quality in Indonesia: The role of decentralization

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Overview

- Aim to examine the role of decentralization in explaining education quality in Indonesia.
- The study used a longitudinal household survey and applied policy evaluation method.
- The paper found decentralization improved education quality both in public and private schools.
- Yet, it has a spill-over effect toward private education - private schools are catching up.
- Institutional features of education provision matters. There is an indication of collusion and social norms underlying the mechanism, i.e. different preference in allocating fund toward private schools.
Why Education?

- Theory of human capital: human capital is the key for economic growth and development (Becker, 1962; Schultz, 1961).
- Despite being in the center of aid and development objective in developing world, improving quality (over quantity) of learning remains a challenge.

![Government Expenditure by Sector](image)

Source: INDO-DAPOER, World Bank (2017)
The more the better?

Figure 2: PISA Score in Math and Reading Worldwide (2015)

Source: OEDC (2015)
The Role of Education Assistance

- Scholarship programme
- School subsidy
- School operational assistance
- Education component within the CCT (Largest scale of CCT worldwide)

But...

- Weak link between education spending and education quality (World Bank, 2013).
- Education initiatives only effective in improving learning outcomes when social norms factored in the design (Masino and Nino-Zarazua, 2016).
Education during Post-Decentralization Era

Figure 3: Post-decentralization Education Management

Source: World Bank (2013, Table 1, p. 12)
The doubled edged sword of a decentralized planning

Two diverging views on the effect of decentralization:

- Decentralization let government to be more responsive to the governed (e.g. Olowu and Wunsch, 1990; World Bank, 1994).
  In education:
  - adapt to local educational needs (Di Gropello & Marshall, 2009)
  - accountability between schools and communities
  - shared sense of responsibility across actors (Grauwe, 2005)

- Decentralization effects on public service provision are varied to local government capacity (e.g. Crook & Sverrisson, 1999). Local governments are vulnerable to:
  - corruption
  - elite capture
  - lacking in technical, human, and financial resources
Study Design

- **Hypothesis** - Decentralization affects education outcomes through:
  - increased provision of education assistance
  - school and community efforts, social norms

- **Data**
  - Exclusion criteria: Catholic schools, DKI Jakarta, extreme values.

- **Setup** - compare the changes in education outcomes:
  - before and after decentralization took place in 2001
  - between public (treatment) and private schools (control)
  - heterogeneity in outcomes by type of schools and communities

- **Empirical strategy**:
  - DID: difference-in-difference
Decentralized Education

- Post-decentralization, more of public schools are managed by the district education office.
- It includes transfer of a degree of authorities to the district sub-national government including e.g. teacher hiring.

![Distribution of schools by administrator in Public and Private Schools](image)

**Figure 4: Distribution of schools by administrator**
Figure 5: Trend in Average Language and Math Test Score (1997-2007)
Result: Unintended consequence of decentralization

- Decentralization helps to improve learning outcomes, yet less of those of public schools.
- It shows a story of ‘spill-over’ effect.

Figure 6: The Effect of Decentralization on Education Quality
The Mechanism

There are four possible stories which can explain how decentralization affects education outcomes:

- education assistance
- altruistic behaviour of local institutions
- inequality in school efforts
- community efforts
M01: Increased Provision of Education Assistance

- Mechanism #01: decentralization led to increased coverage of education assistance, but more allocation is toward private schools.
- Post-decentralization, government and communities allocate more education transfer toward private schools.

Figure 7: The Effect of Decentralization on Education Assistance
M02: Altruistic behaviour of local institutions

- Post-decentralization, religious schools improved education outcomes more than the non-religious counterpart.
- Indication of community preference driven by social norms, in this case religion.

Figure 8: The Effect of Decentralization among Religious and Non-Religous
M03: Falling teacher’s performance

- Mechanism #03: Decentralization affects education quality through levelling-off teachers’ efforts.

Figure 9: The Effect of Decentralization on Teacher’s behavior
Figure 10: The Effect of Decentralization by School Head Election Type
M04: Community Efforts

- Mechanism #04: Decentralization influences education outcome through increased community efforts, e.g. parents engagement in school-committee.
- Yet, it is not the case; common view from pre-decentralization period prevails - “Education is the responsibility of government”

Figure 11: Trend in Community Efforts

![Figure 11: Trend in Community Efforts](image)
Figure 12: The Effect of Decentralization in Active vs Passive Communities
Discussion: Story of Collusion?

- Is story of collusion behind the catching-up of private schools?

  - *Behaviour of local institutions* - allocation of education finance is biased toward a particular schools driven by social norms, e.g. private and religious schools.

  - *Collusion* - increased school authority through decentralization may enforced rent-seeking behavior between local institutions, e.g. cases where school head who’s not democratically elected.

- Alternative story?

  - *School Competition* - worse off private schools are losing out, hence dropping altogether from the playing field; resulting to the ‘overall’ push on the education quality of private schools.
Lessons learned

- Thus far, the **preliminary findings** show:
  - Education outcomes gradually improved in the past two decades.
  - But, decentralization improved education outcomes more of students in private schools.
  - The spill-over effect story of decentralized education; students in private school performs better.
  - Institutional features of education provision matters, social norms need to be incorporated in the design of education policies.

- **What’s next?**
  - Extend analysis to other waves, running from 1993-2014.
  - Examining the alternative stories.
Key References

Thank you!
Sample Selection and Baseline Check

- Sample selection

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Table 1: Sample Selection

- Baseline check

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Table 2: Baseline Check
### Sample Selection and Baseline Check

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Table 3: Covariates Balance Check