

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

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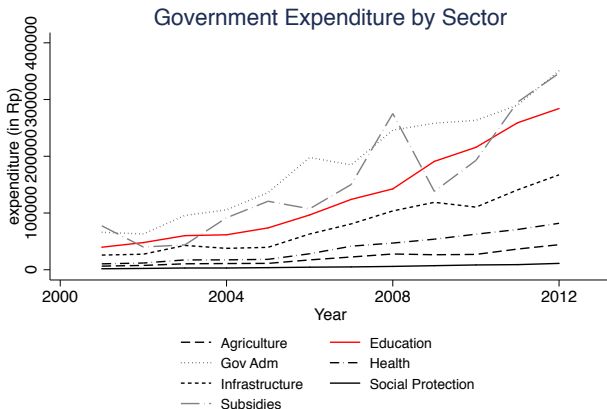
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Overview

- 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.



Source: INDO-DAPOER, World Bank (2017)

The more the better?

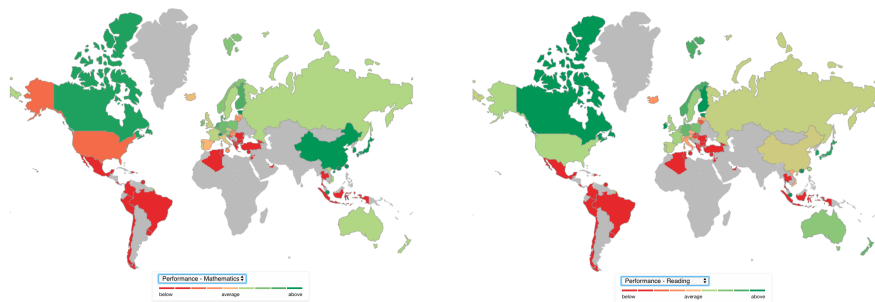


Figure 2: PISA Score in Math and Reading Worldwide (2015)

Source: OECD (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

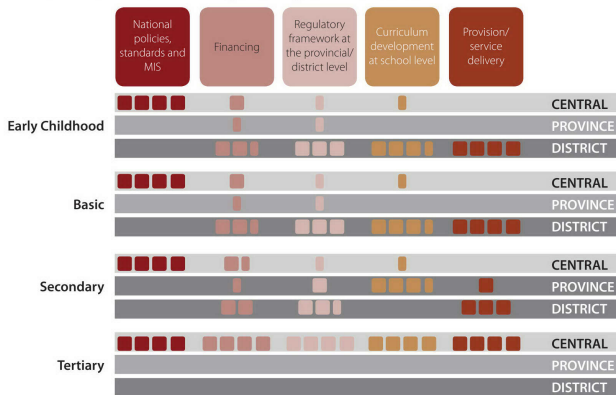


Figure 3: Post-decentralization Education Management

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
 - Longitudinal data on school characteristics and education outcomes from Indonesian Family Life Survey (IFLS). Period: 2000 and 2007. sample
 - 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
 - SDID: semi-parametric diff-in-diff (Abadie, 2005) balance check

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.

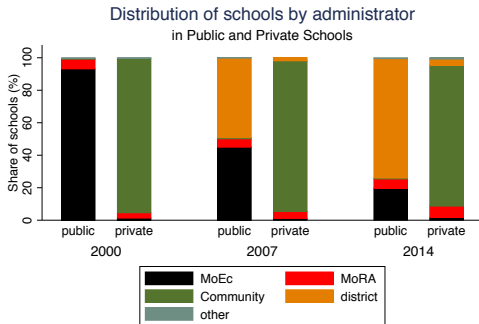


Figure 4: Distribution of schools by administrator

Trends in Education Outcome: Students' Achievement

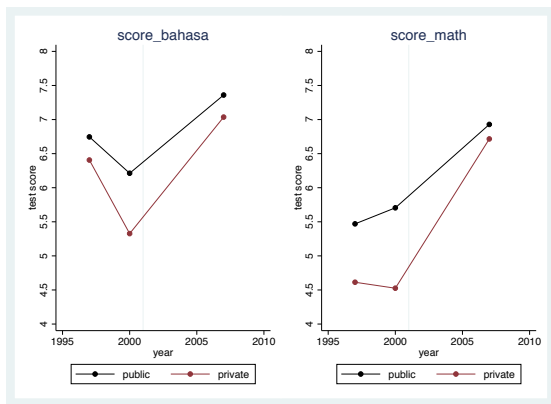


Figure 5: Trend in Average Language and Math Test Score (1997-2007)

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.

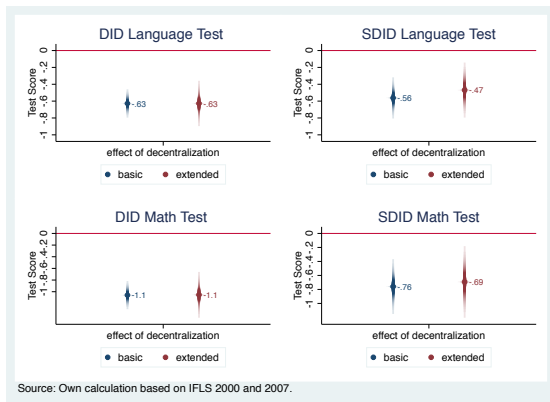


Figure 6: The Effect of Decentralization on Education Quality

The Mechanism

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

- education assistance [here](#)
- altruistic behaviour of local institutions [here](#)
- inequality in school efforts [here](#)
- community efforts [here](#)

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.

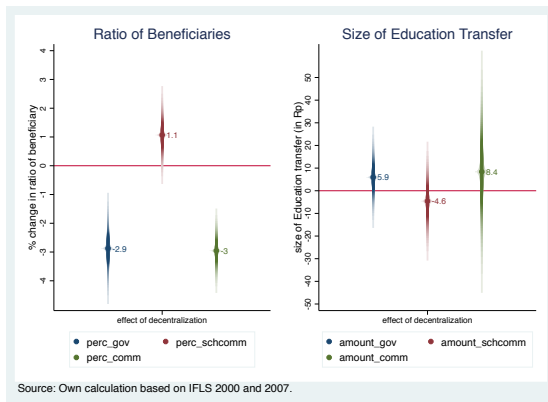


Figure 7: The Effect of Decentralization on Education Assistance

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.

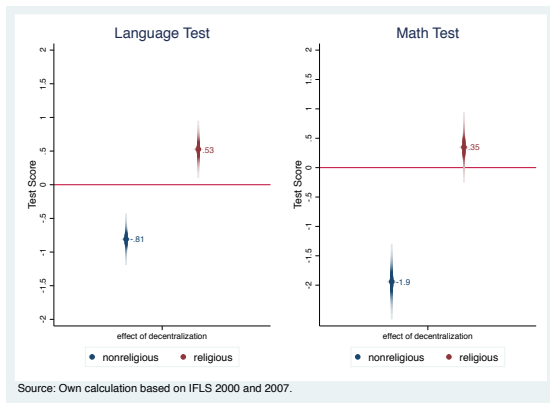


Figure 8: The Effect of Decentralization among Religious and Non-Religious

M03: Falling teacher's performance

- Mechanism#03: Decentralization affects ducation quality through levelling-off teachers' efforts.

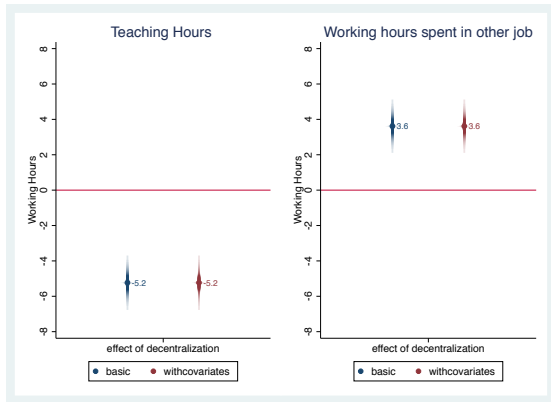


Figure 9: The Effect of Decentralization on Teacher's behaviour

M03: School Governance

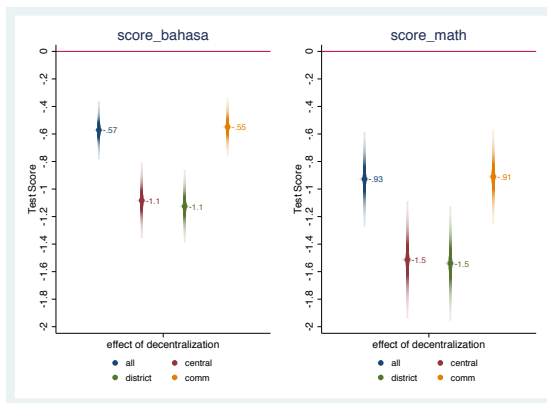


Figure 10: The Effect of Decentralization by School Head Election Type

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”

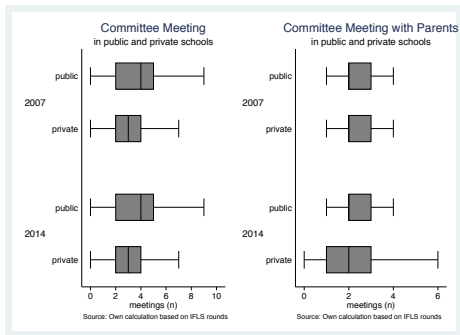


Figure 11: Trend in Community Efforts

M04: Community Efforts

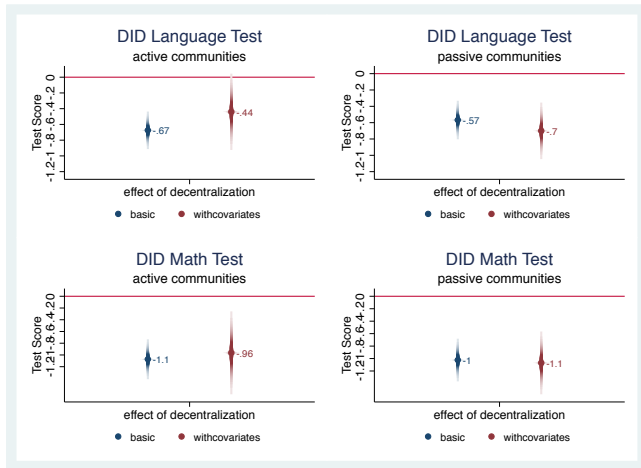


Figure 12: The Effect of Decentralization in Active vs Passive Communities

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 schoos.

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

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Thank you!

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Sample Selection and Baseline Check

- Sample selection

N of Schools	Full-sample	DID	SDID
Total	3275	1633	737
Public Schools	1459	821	212
Private Schools	4734	2454	949

Table 1: Sample Selection

- Baseline check

Students' performance	mean	DID	SDID
Language Score	6.575	-0.886***	-0.751***
Math Score	6.068	-1.179***	-0.743***

Table 2: Baseline Check

Sample Selection and Baseline Check

Variables	Original Sample				Reweighted Sample			
	PV	PC	t-stat	sig_level	PV	PC	t-stat	sig_level
sanitation	0.67	0.591	3.831	***	0.657	0.54	3.029	***
villrev_total	109.743	120.317	-1.08		98.91	107.096	-0.538	
share_poorhh	23.379	26.982	-3.117	***	27.521	26.859	0.304	
urban	0.72	0.592	6.389	***	0.645	0.543	2.618	***
dist_district	16.901	17.683	-0.772		18.064	20.342	-1.184	
n_activegroups	4.854	4.832	0.308		4.7	4.763	-0.48	
teacher_primary	0.001	0.001	0.501		0.005	0.001	0.956	
teacher_lowsec	0.073	0.052	2.06	**	0.093	0.055	1.956	*
teacher_upsec	0.135	0.158	-1.45		0.186	0.142	1.539	
teacher_tertiary	0.913	0.851	4.27	***	0.902	0.874	1.081	
teacher_year	12.672	16.527	-12.881	***	12.626	16.054	-6.477	***

Table 3: Covariates Balance Check

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