



**INDONESIA
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Pathways to Tackle Regional Disparities Across the Archipelago

Sub-Theme : Smarter Funding for Better Outcomes





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The Size of Flypaper Effect in Decentralizing Indonesia

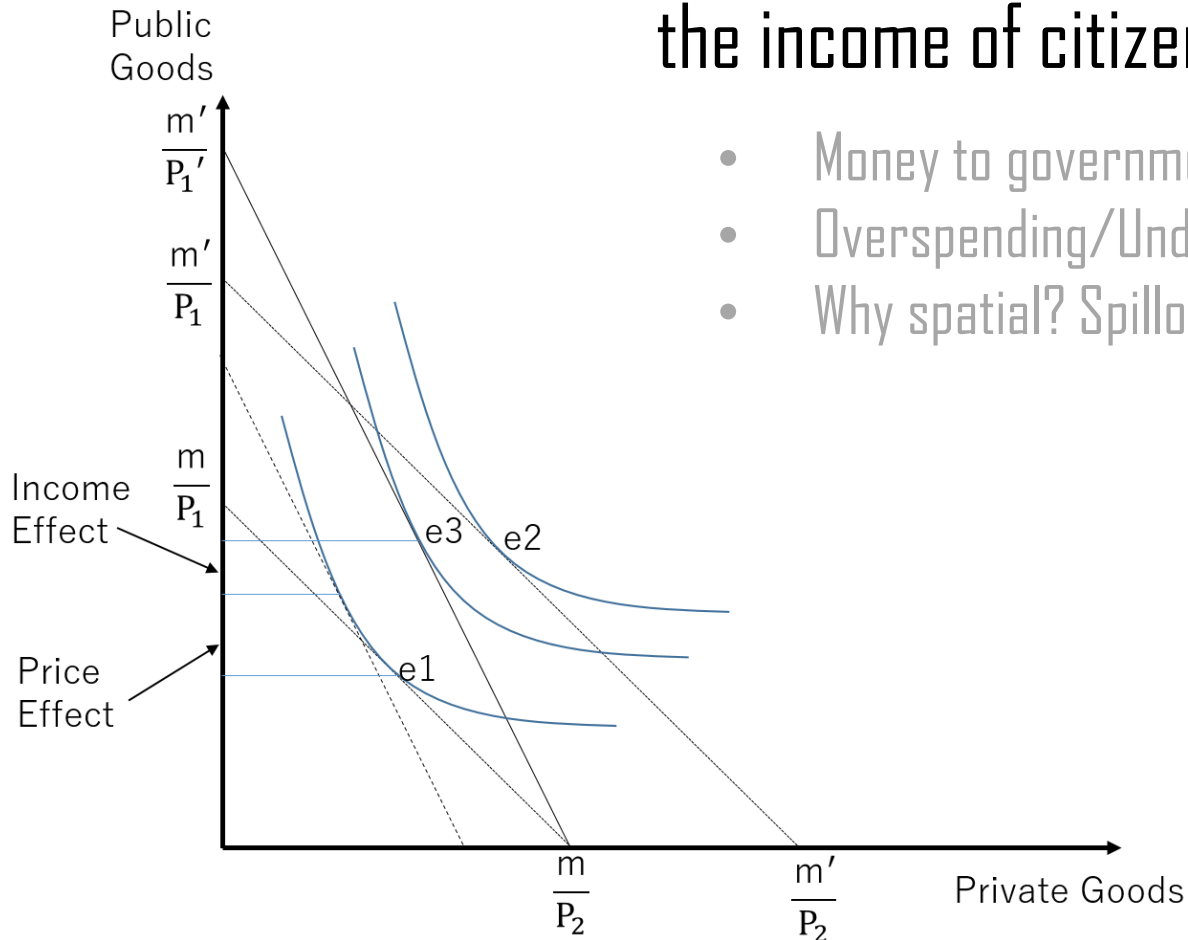
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Flypaper Effect

“Per-unit grants stimulate government expenditure more than the income of citizen”

- Money to government stay at the government
- Overspending/Underspending of local government due to ex-ante transfer
- Why spatial? Spillover of spending





Estimating the Flypaper Effect



Reduced Form:

$$G_i = \alpha + \beta_1 z_i + \beta_2 m_i + X + \varepsilon_i$$

G_i is public expenditure by municipal/city government i , z_i is the transfer from central government, and m_i is household income in the municipal/city i jurisdiction area. X is the control variable and ε_i is the error term

G is decomposed....

Z is decomposed...

Methodology:

Building Spatial Weighting matrix

Spatial as Spillover (Spatial Lag Model)

Spatial as Interdependency Factor (Spatial Error Model)

Geographical Weighted Regression

Total Expenditure vs Grant

1.87

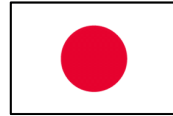


1.12



Acosta, 2010

6.01



Kakamu et al, 2014

37.57



Gennaro &
Messina, 2014

2.63



Gramlich et al, 1973

2.62



Lalvani, 2002



Capital
Expenditure vs
Grant

1.49

Routine
Expenditure
vs Grant

1.12

Decentralization Process

Before 2004

2.44

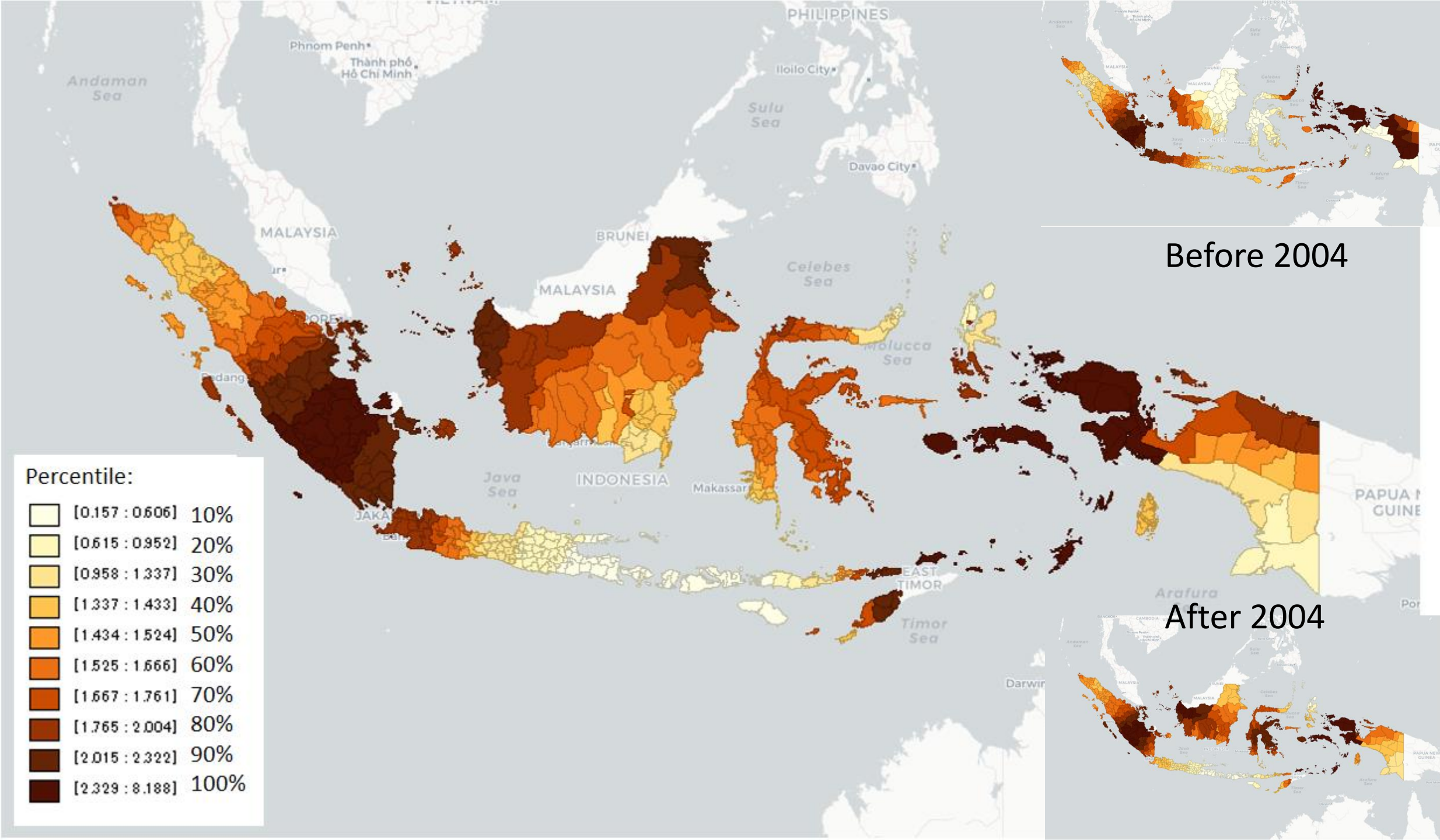
After 2004

1.97

Stimulation Effect of Grant

DepVar	TOT			XPD			CAP		
	OLS	SL- ML	SE- ML	OLS	SL- ML	SE- ML	OLS	SL- ML	SE- ML
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Equalization</i>	1.01 ^a	1.00 ^a	1.01 ^a	0.76 ^a	0.71 ^a	0.64 ^a	-0.09	-0.08	-0.08
<i>Grant</i>	(0.02)	(0.02)	(0.02)	(0.04)	(0.04)	(0.04)	(0.09)	(0.09)	(0.09)
<i>Specific</i>	1.13 ^a	1.23 ^a	0.98 ^b	-1.47 ^a	-1.05 ^a	-0.62 ^b	1.50 ^a	1.55 ^a	1.40 ^b
<i>Allocation Grant</i>	(0.14)	(0.14)	(0.14)	(0.28)	(0.28)	(0.26)	(0.71)	(0.71)	(0.72)
<i>Revenue</i>	1.25 ^a	1.24 ^a	1.23 ^a	0.27 ^a	0.26 ^a	0.26 ^a	0.52 ^a	0.50 ^a	0.52 ^a
<i>Sharing</i>	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.04)	(0.04)	(0.04)
<i>HH Income</i>	0.11 ^a	0.10 ^a	0.12 ^a	0.29 ^a	0.27 ^a	0.36 ^a	0.19 ^a	0.17 ^a	0.19 ^a
	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.05)	(0.05)	(0.05)
<i>Y-Spatial Lag/σ</i>		0.03 ^a			0.10 ^a			0.08 ^c	
		(0.01)			(0.02)			(0.05)	
Lambda			0.38 ^a			0.47 ^a			0.10 ^c
			(0.05)			(0.05)			(0.06)
N	431	431	431	431	431	431	431	431	431

Notes: Standard errors in brackets; a denotes significance at 1% level, b at 5% and c at 10%.





Conclusion and Discussion

- Fiscal decentralization indeed leads to observation of the flypaper effect even after spatial spillover is controlled.
- Lump sum transfer stimulates spending more than matching grants, but the stimulation effect decreasing → Rethinking fiscal transfer?
 - Ex-ante vs Ex-Post Transfer (Soft Budget vs Hard Budget)
- Like a flypaper, lump sum grants stick on routine spending, matching grants sticks on capital spending
- The size of flypaper effect can reflect the dependency of local government on fiscal transfer
- Should the central government intervenes on LG expenditure? Yes but in an indirect way
- Decentralization process in Indonesia is on the right track