



# **ROUTINE VIOLENCE IN THE JAVANESE DISTRICTS: NEO-MALTHUSIAN AND SOCIAL JUSTICE PERSPECTIVES**

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# The context

- Routine and episodic violence:
  - Low profile routine → *Java*
  - High profile episodic (secessionist & ethnic) → *off Java*
- Java island
  - Densely populated
    - 128 million people
    - The most populous island on earth
    - 20% youth (15-25 year old)
  - Ethnically homogeneous
    - 85% share of two dominant ethnic groups (Javanese and Sundanese)
    - Higher homogeneity at district level. Ethnic Javanese accounts for more than 95% in more than two-third of districts in the provinces of Central and East Java.

# Indonesia and Java



# The focus

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- The two characteristics of Java lead us to the following two explanatory factors of routine violence:
  - Population pressure
  - Vertical inequality



## (1) Population pressure

- Neo-Malthusian conflict scenario
  - *Social stress* due to population pressure
    - population density and growth
    - youth bulges
- Marginal support at cross-country empirical study
- More support at cross-sectional observation in a single country, as this study show



## (2) Vertical inequality

- Inequality and conflict in cross-country study on civil war
  - The role of vertical inequality in conflict is rejected by Collier-Hoeffler (1998, 2004) and Fearon-Laitin (2003)
  - At best, the role is inconclusive
  - It is not *vertical* inequality that matters, it is *horizontal* inequality (Frances Stewart, 2000, 2008)
- This study finds *vertical* inequality **does** matter
  - On low profile routine violence
  - In a single country study

# The Objective

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- To examine the role of population/ demographic factors and vertical inequality, and their possible *joint effects* on routine violence across Javanese districts.

# Hypotheses



- H1: Districts that experience higher population pressures tend to experience higher level of routine violence incidence.
- H2: Positive joint effects among population pressure indicators.
- H3: Vertical income inequality would have a positive effect on routine violence.
- H4: Positive effects of vertical inequality are higher in a district (region) with higher degrees of population pressure.



# Research design

- Panel dataset of 98 districts, 1994-2003.
- Fixed effects negative binomial.
- Models:
  - Violence = (population pressure, controls)
  - Violence = (inequality, controls) → *2-stage process*
    - Inequality = (income, income<sup>2</sup>) → *Kuznets hypothesis*
  - Violence = (pop. pressure\*inequality, controls)

# Results (1)

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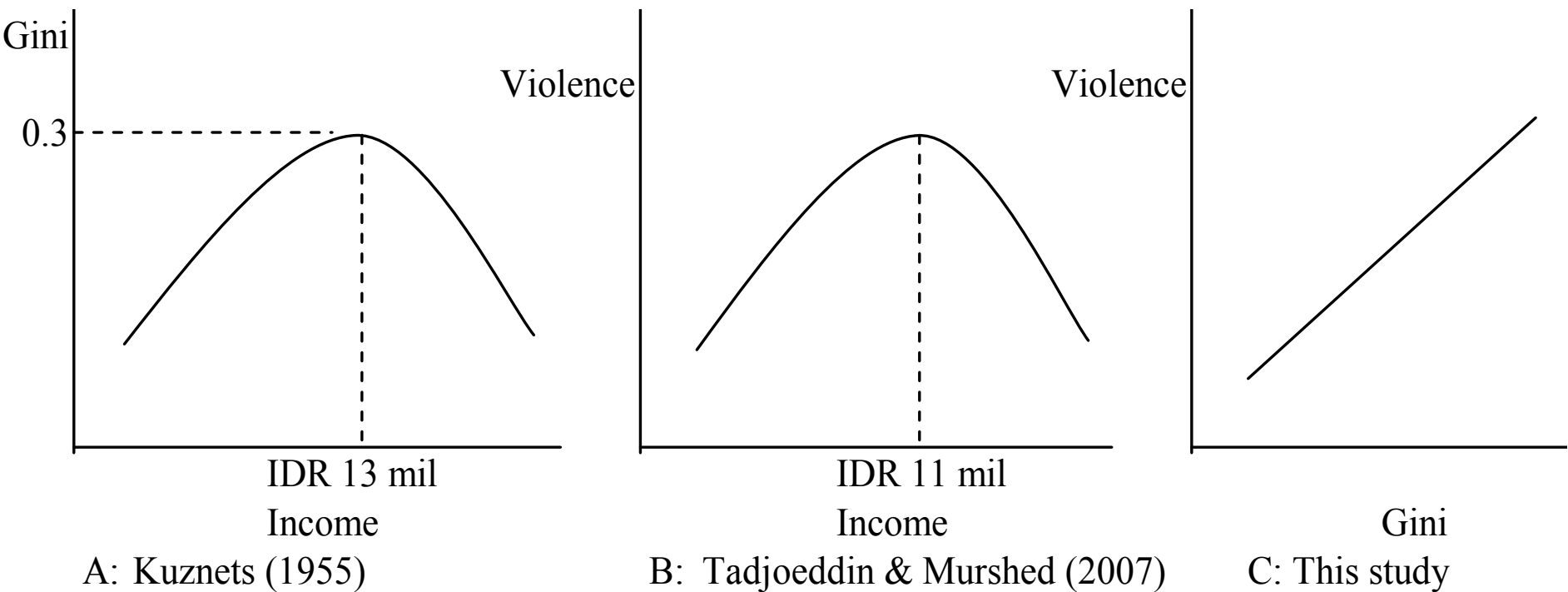
- Support for the neo-Malthusian conflict scenario with regard to *population density* variable only (H1)
- Significant join effect of population density and growth (H2).

## Results (2)



- Positive effect of inequality on routine violence (H3), through the workability of the Kuznets curve (two-stage process).
- The violence inducing effect of inequality helps to explain the Tadjoeeddin and Murshed's (2007) finding on the inverted-U-shaped relationship between violence and income.
- Inequality effects work at the upswing as well as at the downswing parts of the inverted-U-shaped curve of violence and income

# Violence, Gini & Income



## Result (3)

- Support for H4, positive joint effect between inequality and population density.
- This means that violence inducing risk of higher inequality is aggravated if it coincides with higher population density.

# Conclusion



- Neo-Malthusian conflict scenario in the densely populated Java.
- Role of vertical inequality in routine violence.
- The inherent Kuznets process by which inequality aggravates violence.
- Unsafe mix of population pressure and inequality.

Population pressure and violence

[illegible]

# Two-stage regression

## Second stage - Fixed effects NB

Violence		
Gini-predicted value	24.266	**
	9.681	
Growth	-0.035	***
	0.005	
Pop (mil)	0.388	***
	0.106	
Obs	980	
Wald $\chi^2$ (p-value)	0.000	

## First stage - pooled OLS

Gini		
Income	0.0094	***
	0.0013	
Income-squared	-0.0004	***
	0.0001	
Obs	980	
R-squared	0.054	



# 2SLS as a robustness check

<b>Violence</b>		
gini	46.4997	***
	13.7545	
grgdp	-0.0752	***
	0.0149	
popm	1.8642	***
	0.1390	
<b>Gini</b>		
Income	0.0013	***
	7.5300	
Income-squared	-0.0004	***
	0.0001	
Obs.	980	

# Join effects of Gini\*population pressure

	1		2		3	
Gini-predicted value	22.937	**	16.1926		21.728	**
	9.957		10.5498		10.545	
Growth	-0.034	***	-0.0337	***	-0.035	***
	0.005		0.0048		0.005	
Pop (mil)	0.390	***	0.3587	***	0.381	***
	0.106		0.1078		0.107	
Ginihat*popgrowth	0.095					
	0.175					
Ginihat*popden			0.0002	**		
			0.0001			
Ginihat*youth					0.051	
					0.081	
Obs	980		980		980	
Wald $\chi^2$ (p-value)	0.000		0.000		0.000	