Explaining Regional Heterogeneity of Poverty: Evidence from Decentralized Indonesia

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Global Overview on the Correlation Between Decentralization and Poverty Reduction

- The link between decentralization and poverty reduction is not straightforward and is largely influenced by country specificities, as well as process design

- OECD (2004) review of decentralization experiences in 19 countries finds improvements in poverty reduction in only one third of cases.

  - Countries that were more successful in reducing poverty following decentralization:

    ➢ Lower middle income countries, with literacy rates above 80%, and relatively open political process

  - Conditions required for decentralization to have a positive impact on poverty:

    ➢ Adequate commitment from the central government, (financial and technical) capacity of the LGs, local-level checks and balances
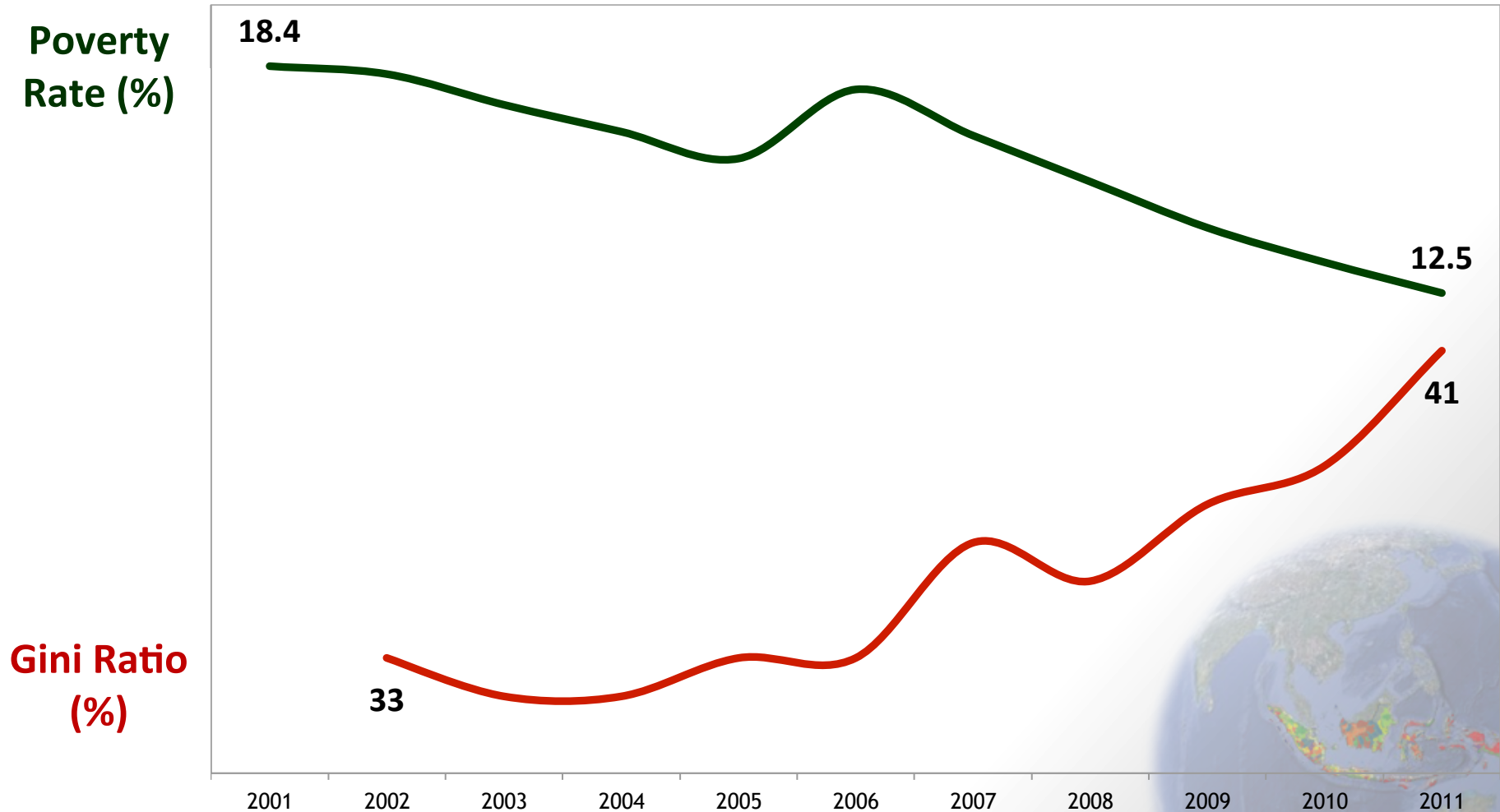
Outline

1. Recent Progress in Poverty Reduction

2. Brief overview of decentralization in Indonesia

3. Determinants of local poverty levels
   a) Income generating capacity
   b) Delivery of public services and other governance aspects of decentralization
   c) The establishment of TKPKD

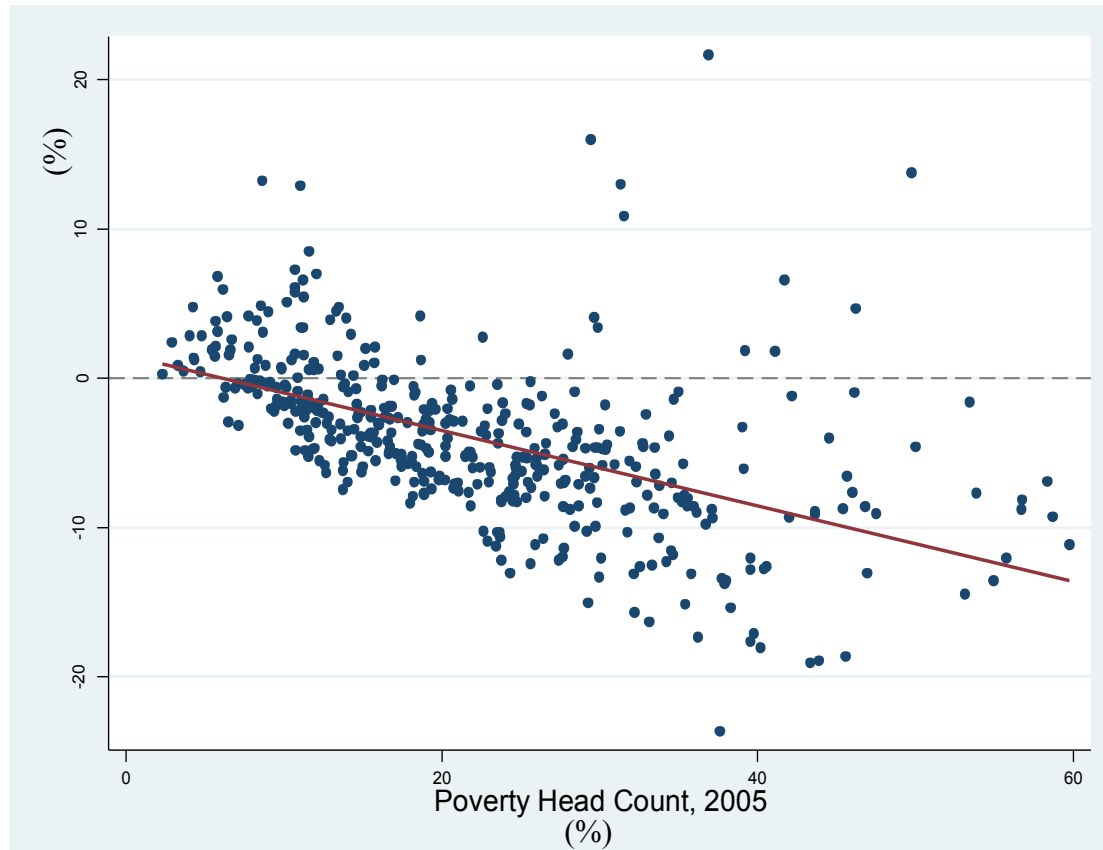4. Summary of Empirical Findings

5. Conclusion & Follow-up Research

Decentralized Indonesia has made progress in addressing absolute poverty

Poverty Rate (%)

18.4

12.5

Gini Ratio (%)

33

41

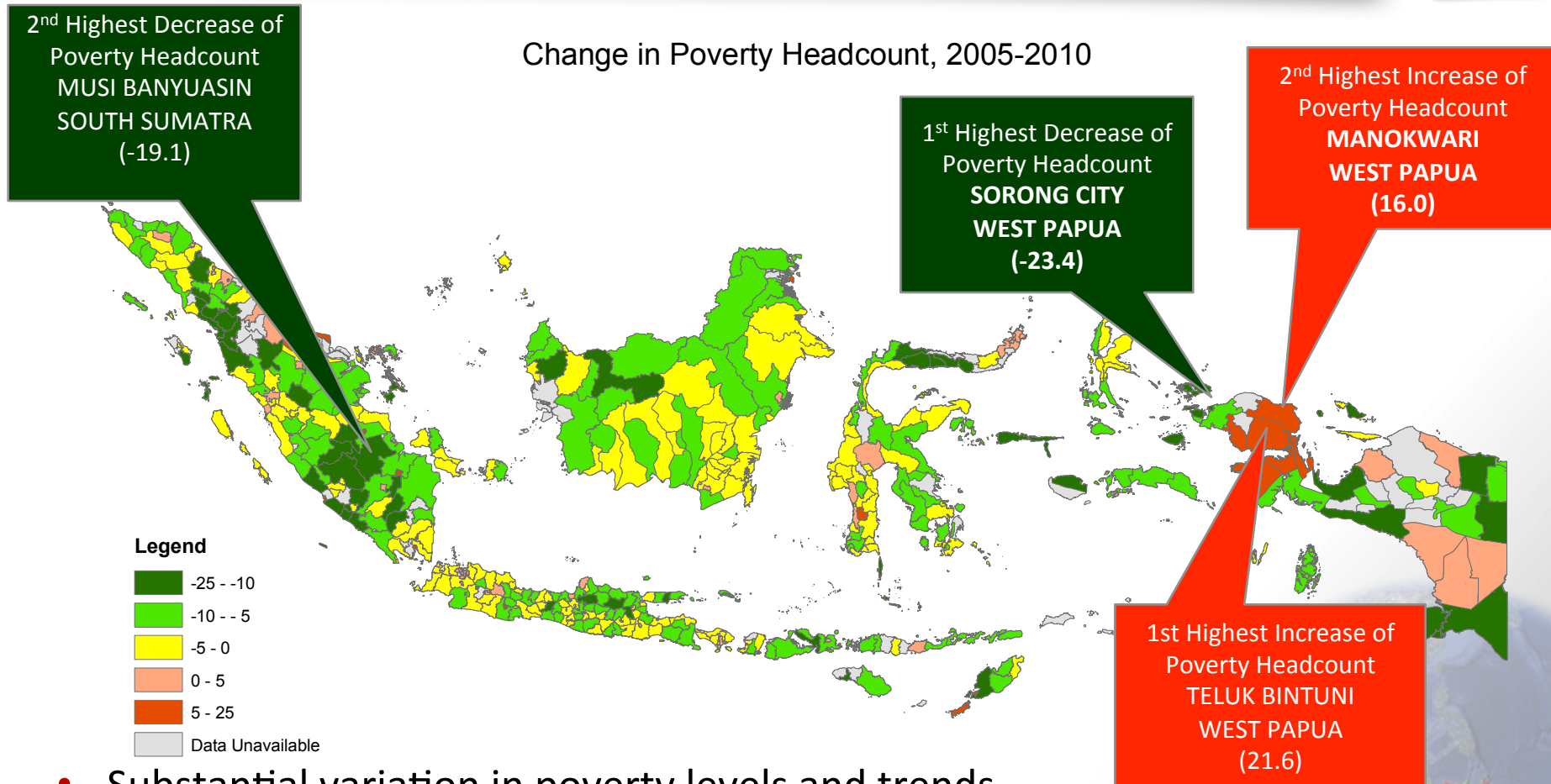2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

Source: Susenas, various years

And Districts are converging

- Regions with initial higher levels of poverty tend to experience a larger decrease in poverty (-> convergence)

- Confirmation of an overall convergence in poverty levels at district level

However, progress has been uneven and a substantial heterogeneity remains

Change in Poverty Headcount, 2005-2010

2nd Highest Decrease of Poverty Headcount
MUSI BANYUASIN
SOUTH SUMATRA
(-19.1)

1st Highest Decrease of Poverty Headcount
SORONG CITY
WEST PAPUA
(-23.4)

2nd Highest Increase of Poverty Headcount
MANOKWARI
WEST PAPUA
(16.0)

1st Highest Increase of Poverty Headcount
TELUK BINTUNI
WEST PAPUA
(21.6)

Legend

- ■ -25 - -10
- ■ -10 - -5
- ■ -5 - 0
- ■ 0 - 5
- ■ 5 - 25
- ■ Data Unavailable

- Substantial variation in poverty levels and trends both across and within regions
- **So the objective of the paper:** investigate the determinants of the observed differences in poverty

- Unique because despite its size & heterogeneity, Indonesia adopted a "Big Bang" decentralization approach in 1998

  - ➢ This rapid decentralization and its hasty preparation have left much unfinished business

- Lacks key institutional requirements for an effective management of the process, e.g.:

  - ➢ Absence of performance measures and an effective framework of constraints

  - ➢ Unclear division of responsibilities between the different levels of government – weak local accountability

  - ➢ Insufficient human and institutional capacity of local governments

  - ➢ Inappropriate incentives given by the structure of decentralized public finance (e.g. encourage "pemekaran")

Existing evidence from Indonesia

- Skoufias & Olivier (2013) find that differences in the returns to household mobile characteristics are the primary explanation of the welfare differences across regions.

- Hill (2002) finds that disparity in poverty levels is increasing instead of converging.

- This is a cause of concern because:

  ➢ an increase in inequality across districts can bring social and political unrest,

  ➢ and thereby reduce the impact of the Government of Indonesia's overall poverty reduction strategy.

- **Income generation capacity at the local level**
  - ➢ the main source of income is still transfers from the central government
    - in 2011, on average 91% of district revenue comes from the central government
    - In addition close to 64% of direct spending within districts also comes from the central government
  - ➢ local governments are able to generate their own income
    - evidence of harm done to the investment climate with complex and problematic regulations that often overlap with national regulations
    - the presence of natural resources is a key determinant of the amount localities can generate
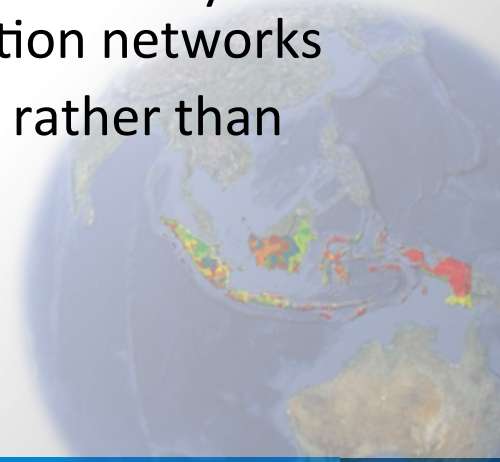
Determinants of local poverty (2)

- **Performance in delivering public services**
  - fiscal abilities
    - in the education sector, the district of Badung (Bali) spent nearly Rp. 250 million in addition to funds provided by the central government in 2008, while the district of North Mamuju (West Sulawesi) allocated less than Rp. 40 million for education in the same year. In terms of spending per capita, Badung spent 50% more than Mamuju.

  - technical capacity
    - about two-thirds of the villages in the country, particularly in eastern Indonesia, still have no access to telecommunication networks
    - local government spending on wage expenditure rather than services.
    - Lack of accountability at local levels

Determinants of local poverty (3)

- **Governance aspects of decentralization**

  - Generally, decentralization has not led to a notable increase in violence

  - However, The Crisis Group (2005) links administrative decentralization to conflict due to redistricting

  - By dividing a district into two or more entities (*Pemekaran*), localities may receive increased block grant amounts from the central government

  - Yet, this process may causes social tension and violence as occurred in for example Mamasa, Papua and Musi Rawas

Conflict in Mamasa, Musi Rawas & Papua related to Pemekaran

Mamasa: www.depkes.go.id

Musi : www.waspada.co.id
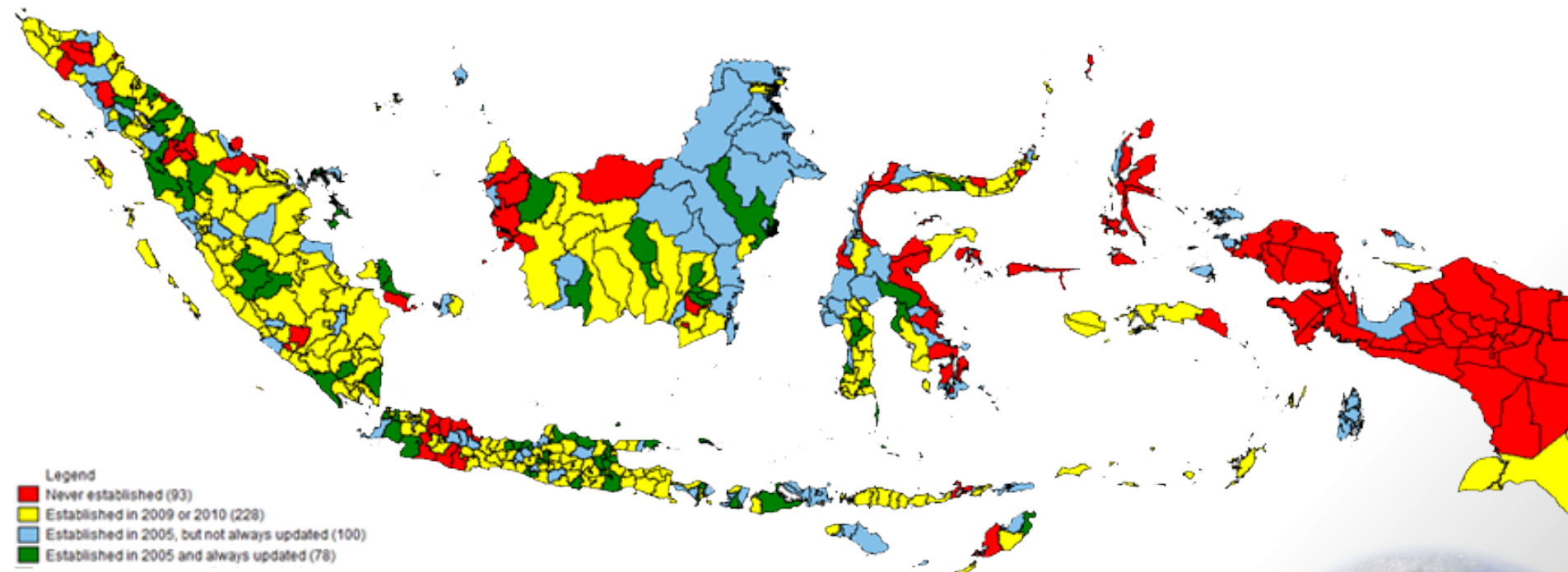
Papua: www.tempo.co.id

Determinants of local poverty (4)

- **District institutional capacity for poverty reduction**

  - TKPKD: overseeing and coordinating the design and implementation of local poverty reduction strategies.

  - Main responsibilities of TKPKDs:

    - management and development of local poverty indicators,

    - development of a poverty information system,

   - establishment of an early warning system on poverty issues.

Establishment of TKPKD at District Level

Legend
- **Never established (93)** (red)
- **Established in 2009 or 2010 (228)** (yellow)
- **Established in 2005, but not always updated (100)** (light blue)
- **Established in 2005 and always updated (78)** (green)

- Less than 35% (175) of districts established TKPKD by end of 2005
- As of 2010 about 20% of districts had not established a TKPKD; of which nearly half of are located in the eastern part of the country.
- The degree by which existing TKPKD are institutionalized varies widely across districts.

Link between TKPKD and Poverty Reduction

Changes in Poverty 2005-2010 by TKPKD Status
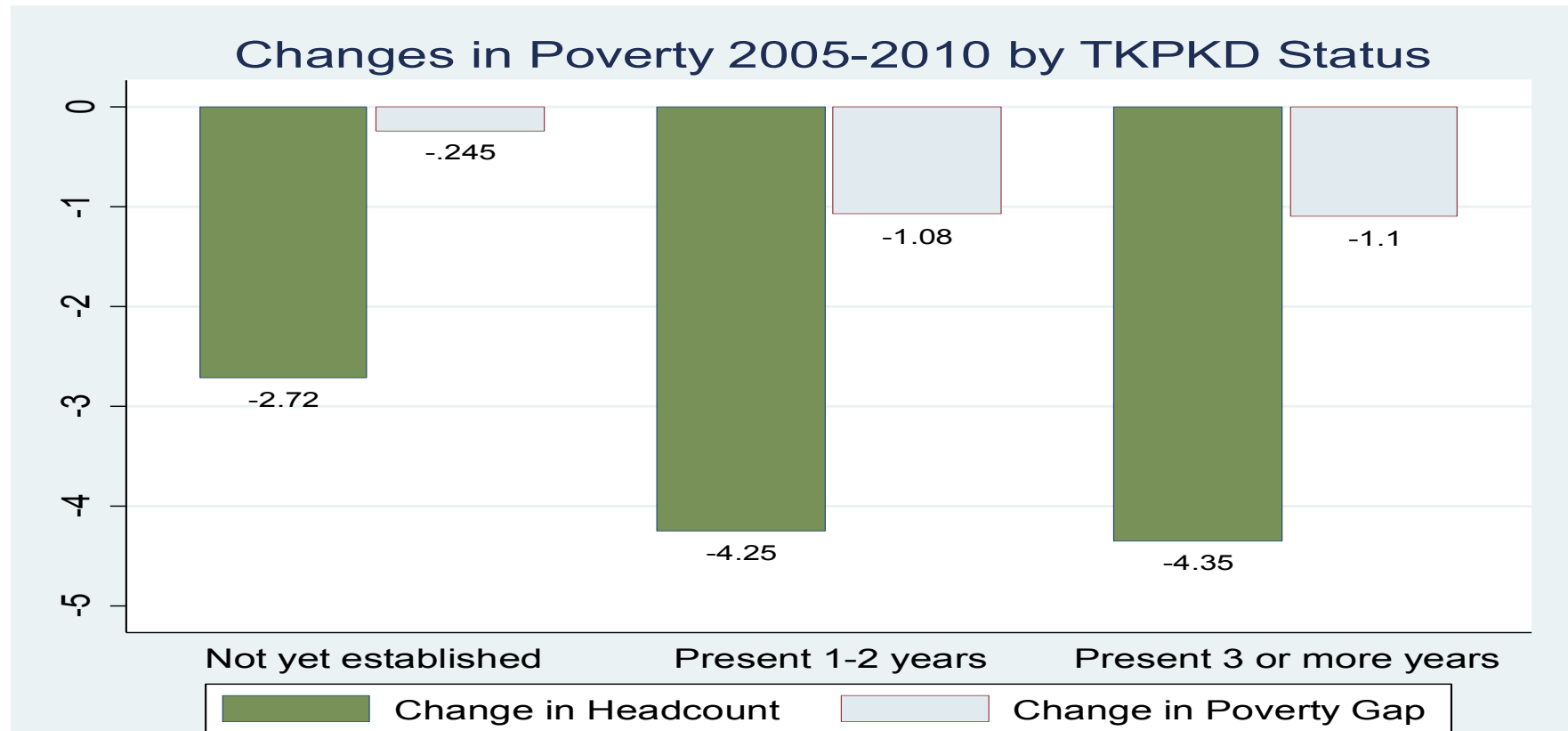
- Districts that have established TKPKDs reduced poverty more than those that have not.
- The empirical analysis allows disentangling the effect of TKPKD from other socio-economic determinants of poverty

Empirical Analysis

- District-level panel dataset with annual observations for the period 2005 to 2010

- Control variables include

  - Economic conditions (GDP, structure of the economy)

  - Socio-demographic conditions
    (education, inequality, conflict history, urbanization)

  - Institutional conditions
    (education of leaders, fiscal revenues, TKPKD establishment)

- Econometric approach: panel regressions with fixed and random effects – see Appendix

- **Poverty appears to have decreased more in districts with:**

  - established a local office for the coordination of poverty reduction initiatives (TKPKD)

  - a higher share of fiscal revenues but less successful when fiscal revenue represent 50% (and above) of RGDP

  - a larger share of local leaders with secondary education

  - a higher average educational attainment

  - a higher share of urban population.

- Findings consistent with previous studies

- Regional output, poverty reduction and income distribution are found strongly interrelated

- A successful development strategy requires effective, region-specific combinations of growth and sound social policies

  - ➢ Rapid and sustainable regional economic output is viewed as the primary vehicle for poverty reduction.

  - ➢ Sufficient fiscal and institutional capacity as a pre-condition to efficient public services to support poverty reduction

- **Follow-up Research:**

  - Delving more into the TKPKD black box (what make them work and not work) and addressing the endogeneity issue

  - Further investigate the role of local leaders

Appendix

Econometric Approach

- Panel regressions on poverty (i) headcount and (ii) gap

- Use of random (RE) and fixed effects (FE) models to exploit the longitudinal dimension of the data

- Allows controlling for regional / local characteristics that are constant over time
(cultural attitudes, geographic and climatic conditions, etc.)

- Given the complex interrelations between poverty and the other socio-economic conditions, no causality is claimed

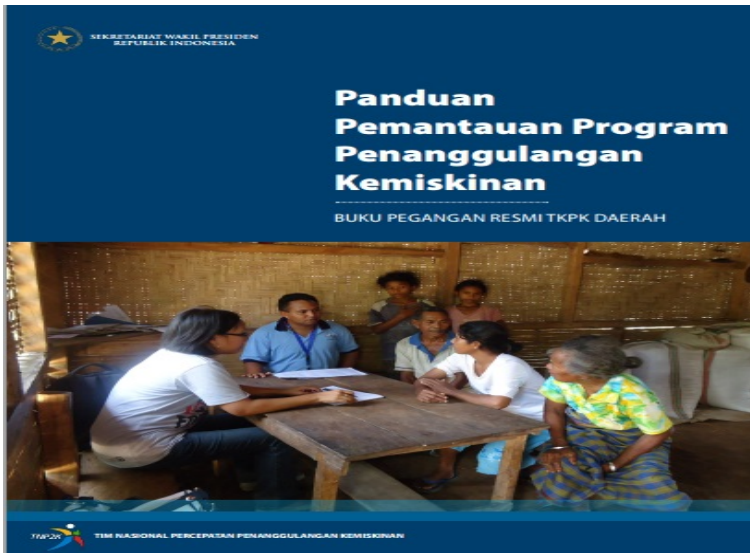- Goal: Identification of the factors most related to local poverty (reduction) in a decentralized Indonesia

Regression Results

Control variables	Poverty Headcount		Poverty Gap	
	RE	FE	RE	FE
GDP per capita (real, w/o mining)	-0.77	-0.37	-0.06	-0.10
Fiscal revenues (as share of GDP)	-3.54***	-4.99***	-0.97***	-2.01***
Education (Average years of schooling)	-2.03***	-1.99***	-0.34***	-0.33***
Education Village heads (no sec. education)	7.77***	6.56**	1.15	-0.49
Urban population (share total population)	-4.30		-1.29*	
TKPKD: active for 1-2 years	-1.13***	-1.35***	-0.16**	-0.32***
TKPKD: active for more than 3 years	-3.43***	-3.79***	-0.66***	-0.92***
Inequality: Gini Coefficient	0.04	0.03	0.07***	0.06***
Recent history of large scale violence	4.44***		1.05***	
Observations	2598	2598	2598	2598
Pseudo-R^2	0.309	0.314	0.128	0.145

Included, but not reported: GDP share of agriculture / mining; regional dummies

Activity Engaging TKPKD & Poverty Tool Kit