Does Elite Capture Matter?
Local Elites and Targeted Welfare Programs in Indonesia

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Joint with:
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Motivation

• Series of projects designed to understand how to improve the “targeting” of social programs in developing countries
  – Research conducted with the Indonesian Government to provide insights into PPLS 2011 (Indonesia’s unified targeting database)

• Large concern over the role of local leaders in the process
Motivation

• Social scientists and policy practitioners weary of local elites (Wade, 1982; Dreze and Sen, 1989; Bardhan and Mookherjee, 2000; Acemoglu, 2006; Acemoglu, Reed, and Robinson, 2012, etc.)

• Development policy often designed to marginalize local leaders, with potentially significant costs

• *E.g. Targeting:*
  – better information and monitoring at local level (Alderman, 2002; Galasso and Ravallion, 2005; Alatas et al, 2012; Bardhan and Mookherjee, 2005)
  – central governments are often reluctant to devolve decision making, preferring to allocate benefits based on less discretionary proxy-means test systems (Coady, Grosh, and Hoddinott, 2004).
Decentralization

• Done in a way that minimizes role of local elites

• “community driven development”: allow communities to choose/implement infrastructure projects
  – Designed to devolve decision making and project implementation to citizens (Casey, Glennerster, and Miguel forthcoming, Mansuri and Rao, 2012).
  – Citizens’ ability and skills to do so may be weaker than local leaders (Khwaja, forthcoming)
  – Possible long run effects: the incentive of local leaders to acquire skills and demonstrate performance is reduced (see, e.g., Myerson 2009).
This paper

• Estimate the extent of local elite capture in targeted welfare programs, and compare the loss from capture against other forms of targeting error

• Utilize both cross-sectional data on several targeted transfer programs and a high-stakes field experiment that we conducted in Indonesia, which ranked 118 out of 176 countries on the 2012 Transparency International’s Corruption Perception Index
Household Survey Data

• Dec 2010 to Mar 2011: 3,998 households in 400 villages chosen from 2500 PKH expansion villages (another 200 in self-targeting)
  – 3 provinces: Lampung, South Sumatera, and Central Java (30% urban/70% rural)

• Collected data on:
  – Household Per Capita Consumption
  – Detailed networks data:
    • Asked villagers to name formal and informal leaders and then all of their relatives in the hamlet (2 votes)
  – Access to targeted transfer programs
Methods

• Estimated the following specification:
  \[ \text{Received}_{ivs} = \beta_0 + \beta_1 \ln(\text{PCE})_{ivs} + \beta_2 \text{Elite}_{ivs} + \delta_s + \epsilon_{ivs} \]

• Elite: Leaders + Relatives
  – Robust to different definitions of relatives
  – Separate by type of elite (formal/informal)

• Include strata FE (\(\delta_s\)), cluster at village level

• Compare capture across:
  – With more and less slots relative to poverty line
  – With elected versus appointed leaders
Programs

• Targeted Transfer Programs (Survey Data):
    • UCT: $10 a month to about 19.2 million poor households
    • PPLS 2008 and PSE 2005
  – Jamkesmas: Health Insurance
    • Health Insurance for up to 76 million people
    • District quota from PPLS/PSE; to populate quota, PPLS/PSE or recommendations from National Family Planning Board (in reality, could also join with other methods)
  – Raskin:
    • Subsidized rice program
    • Village quotas, community meetings to populate list (most often, when actually held, just elites attend meeting)

• Matched survey data to PPLS 2008
Experimental Variation

• Aspects of the programs may have already been designed or implemented in a way to reduce elite capture in parts of programs/areas where central government is worried it would be a problem

• In 400 villages, we experimentally vary the ability of elites to control targeting process in Indonesia’s real conditional cash transfer program (PKH), which gives $150 per year for up to 6 years per beneficiary
Experimental Design

- 400 villages randomized to one of three treatments:
  - PPLS method: status quo procedure
  - Community Input Full: Full community invited to update the list; shown 75 percent of the sub-village’s beneficiary quota; depending on subtreatment, add or add/replace individuals
  - Community Input Elite: 5-8 local leaders, both formal and informal, to the updating meetings
Data for Experimental Results

• Survey data where we collected baseline data on consumption and networks
• Matched to administrative data on targeting outcomes
• Endline survey data on who received PKH
Outline of Results

• Existing Social Programs
• Experimental Results
• Formal versus informal leaders
• Slots relative to poverty line
• Democracy
• Other forms of patronage
• Benchmarking loss from capture against other targeting losses
- Do not observe evidence of capture in unconditional cash programs or rice program
- Conditional on LPCE, elites are 2.9 percentage points (6.8 percent) more likely to receive health insurance program (Jamkesmas)
- Robust to different definition of elite, robust to only leaders (not relatives), robust to control for whether one belongs to similar social groups as elite, etc

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<td>0.006</td>
<td>0.029*</td>
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<td>(0.016)</td>
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<td>PPLS 1</td>
<td>PPLS 2</td>
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<td>0.262</td>
<td>0.102</td>
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- 2008 PPLS survey (targeting lists)
  - 1- Near Poor (36 Percent), 2-Poor (26 percent), 3-very poor (~10 percent)

- No evidence that elites are more likely to be on the list, and if anything less likely to be on bottom of the lists (conditional on consumption)
Experimental Results (PKH)

<table>
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- No evidence that elites are more likely to get PKH

- Difference between PMT/community not significant
  - No difference between meetings with full community or elite only meetings
• Equivalent to 2008 PPLS very poor
• Similar results to 2008 list: no evidence of that elite and relatives less more likely to be on the list (in fact, less likely)
  – No difference between full and elite meetings
Results

• Not much evidence of elite capture thus far

• Results similar to experiment (Alatas, et al 2012) where we compare different forms of community targeting with PMT with lower stakes (one time payment of $3)

• Next question: are all elites the same?
  – Formal Elites: hold formal roles (hamlet head, member of the legislative council)
  – Informal Elites: “Tokoh Masyarakat”: teachers, religious leaders, rich people
Formal elites more likely, informal elites less likely.

No difference on the targeting outcomes (PPLS), suggesting that adjustments happen when programs actually implemented (and not during targeting stage).
- Neither formal or informal elites more likely to receive PKH (no difference between full community and elite only meetings)
- Targeting results: less effect of elite

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Where along distribution does manipulation occur?

- PKH is ~10 percent of the population, while 36% UCT, 42% Health insurance, 75% rice subsidy
  - We find less capture by elites for targeting outcomes on of the very poor on the 2008 targeting survey
- Natural variation in number of slots a village receives relative to its poverty line (over or under quota)
• Elite more likely to get benefits when more slots available
  – Formal elites only steal when there is left over after taking care of the very poor, or harder for elite to pretend to be “poor” when there are fewer slots?
• May explain less capture in PKH than other programs
Democracy as Constraint on Capture?

- Urban villages generally have appointed village heads; rural villages generally have elected ones
- Response to demographic shifts slow—variation in democracy (Martinez-Bravo, 2012)

\[
\text{Beneficiary}_i = \beta_0 + \beta_1 \text{Elite}_i + \beta_2 \ln(\text{Per Capitia Consumption})_i + \beta_3 \text{Elite}_i \times \text{Elected}_i + \beta_4 \text{Elected}_i + \beta_5 \text{Elite}_i \times \text{Urban}_i + \beta_6 \text{Urban}_i + \alpha_s + \varepsilon_i
\]
Democracy does not appear to be a constraint

• We find no effect of the village leader being elected on whether elites are more likely to be on the 2008 targeting lists or BLT

• If anything, in elected areas: formal elites are differentially more likely to be in the PKH targeting list, get PKH, and receive health insurance or rice
Other forms of patronage

• So far, we have focus on capture of the form of putting themselves or their relatives on the list
• May provide patronage to certain individuals or groups other than those related to them.
• Hard to observe since we do not know who these individuals are
• But, we can test whether the observed characteristics of individuals chosen by elites versus non-elites matters (conditional on LPCE)
Other forms of patronage

• We explore 22 characteristics including household size, share of children, debt, alcohol spending, friendliness, hardworkingness, minority status, contributions to village level public goods

• First test whether leaders and non-leaders have same preferences/information on who is poor
  – Baseline survey: individual rankings of poverty
  – Regress rankings on characteristics
  – No difference: coefficients looks similar for leaders versus non-leaders
Experimental Results

• Compare characteristic for those chosen in elite only meeting versus full community (both actual outcomes and targeting outcomes)

• Coefficients tend to look very similar in terms of sign, magnitude and significance levels
  – Receives PKH: p-value of joint test=0.17
  – Targeting list PKH: p-value of joint test=0.77
Benchmarking Capture to Targeting Error

• We find that formal elites are more likely to receive transfers, conditional on their consumption level, during the implementation of certain targeted transfer programs.

• We next want to ask: is this loss economically significant and how does it compare to other forms of targeting error?
  – Back of envelope calculation
  – Formal analysis
Back of the Envelope Calculation

• Some facts:
  – Formal elites are 9 percent richer than non-elites
  – At most 8 percentage points more likely to receive benefits than non-elites (health insurance)
  – Represent at most 15 percent of the population

• Average consumption level of beneficiaries would be three tenths of a percentage point higher with formal elite capture than without it
  – $0.15 \times \frac{0.08}{0.42} \times 0.09$ (share of elites in population) × (relative increase in elite’s probability of receiving the program) × (elite consumption relative to non-elite consumption)
Formal Analysis

• Assume a CRRA utility function with $\rho=3$; calculate utility for all households in our sample without the program.

• Calculate expected utility from each social program, both with and without elite capture.
  – For each household: calculate their predicted probability of receiving benefits from a program, and the predicted probability of receiving benefits from the same model setting the ELITE variable equal to 0 (without an elite premium).
    • Keep the #of beneficiaries the same with/without capture, but just change the probability of a household receiving benefits
  – Assign each household the benefits from a program based on their predicted probability, and then calculate the total utility under the program with and without capture using the two different predicted probabilities
Two additional benchmarks

1. Utility from the program under “perfect” targeting (rank households by baseline consumption)

2. High quality PMT using data from our baseline survey rather than the government survey for the entire population (not just pre-identified)

• Share of the possible utility gain each scenario obtains, where 0 is the utility without the program and 100% is the maximum utility with the program under perfect consumption targeting.
• Differences between elite and non-elite are small: eliminating formal elite capture entirely would improve welfare by about 0.54 percentage points
• In contrast, gain in utility from better implementing PMT is quantitatively large
  – Largely due to data quality: implemented PMT using our high quality survey data (rather than government data) over the government’s pre-identified household list results in a 36.99 percent welfare gain for PKH
Conclusion

• Despite the perceived high level of corruption in targeted programs, we find very little evidence of elite capture
  – formal elites are more likely to capture programs than informal local leaders
  – The manipulation of the system occurs during program implementation, and not during the targeting surveys
Conclusions

• Relatively larger gains from focusing on methods to improve our ability to predict consumption and data quality
  – Currently conducting research to understand if we can improve on existing targeting formulas

• Costs of elite capture may not be that large relative to the benefits of engaging local leaders in the process and providing additional training and support