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Missing public funds and targeting performance: Evidence from an anti-poverty transfer program in Indonesia☆

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ABSTRACT

This paper investigates how failing to consider missing funds in public resource delivery can lead to misleading conclusions on the nature and correlates of targeting performance. Combining administrative data on disbursement and household survey data on receipt under Indonesia's anti-poverty program, *Inpres Desa Tertinggal* (IDT), we find that only 69% of disbursements were actually received by the intended beneficiaries. When these missing funds are ignored, the distribution of IDT benefits is pro-poor, and better targeting is found in districts with higher per capita expenditure. However, when the missing funds are taken into account, the distribution of IDT benefits in fact becomes less pro-poor than universal, equal distribution, and better targeting is correlated with a higher proportion of female village heads and a higher level of villagers' human capital. These results underscore the importance of considering the size and allocation of missing funds in the analysis of targeting in public resource delivery.

1. Introduction

A loss of public resources because of corruption and mismanagement hampers public spending efficacy, by reducing any possible effect that lost public resources might have had on the welfare of the intended beneficiaries. Recent empirical studies suggest that the magnitude of such a loss is significant in developing countries. For instance, Reinikka and Svensson (2004) and Olken (2006) have reported that only 20% and 82% of public resources reached intended beneficiaries in Uganda and Indonesia, respectively. Although there has been an increase in the number of studies on the use of public resources, only a few have been able to present evidence on the amount of missing resources.[1]

More important is the gap between the literature on public resource delivery and that on targeting. The issue of targeting concerns whether relatively poor households receive more public resources compared to non-poor households. The common methods for computing targeting performance rely only on the distribution of benefits reported in a household survey, and does not take into account the possibly missing funds that are not claimed by anyone in the survey. We demonstrate that failing to take into account the missing public resources could produce a misleading conclusion on the nature as well as correlates of the distribution of program resources. More specifically, we compute the share of disbursed funds that in fact reached selected beneficiary villages in one of Indonesia's anti-poverty programs, *Inpres Desa Tertinggal* (IDT, Presidential aid for poor villages). Using the estimated amount of missing funds, we examine how a commonly used targeting

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[1] Other studies that have provided evidence includes Francken et al. (2009), who found little leakage on average in Madagascar's education sector, and Xiao and Canagarajah (2002), who found that in Ghana, only about 20% of non-salary public health expenditure and 50% of non-salary public education expenditure were received by the respective facilities.

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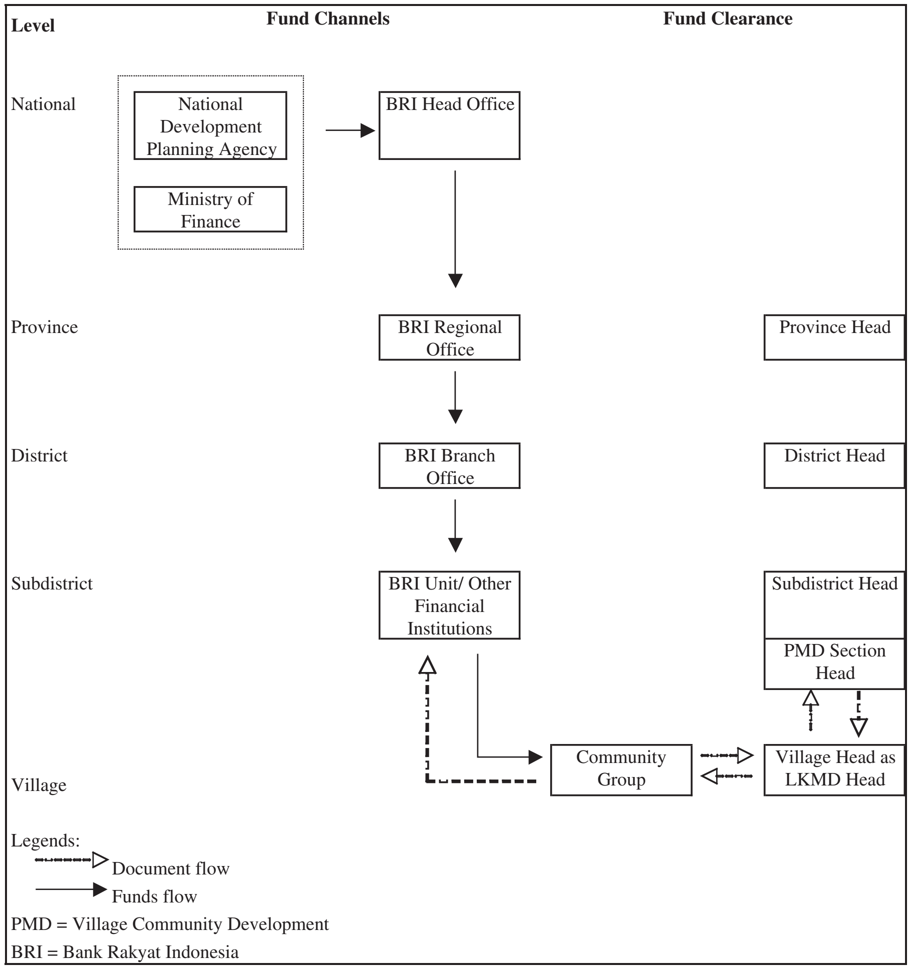

Fig. 1. Channels of IDT funds distribution.
Source: Badan Pusat Statistik (BPS), 1994.

measure and its correlates change, with and without taking into account the missing funds.

The possibility that missing public funds distort the nature of targeting has been pointed out in the literature. For instance, missing rice is more prevalent in areas with lower per capita household expenditure in Indonesia (Olken, 2006). In Uganda, regions experiencing an increase in the average household expenditure also attain higher receipt of grants for nonwage spending in education (Reinikka and Svensson, 2004). However, the quantitative evidence is still lacking on how commonly used targeting measures, such as the funds accruing to the poorest quintile,[2] as well as the correlates of such a measure, are altered when missing funds are ignored. Our study fills this gap in the literature by using Indonesia's IDT as a case study.

Our results suggest that households in selected villages received only 69% of IDT funds on average. Without taking the loss into account, the conventional targeting measure suggests a pro-poor distribution, where the poorest quintile of households receives more than one-fifth of the funds. However, when the loss is included, the same measure with a realistic assumption on who received the missing funds indicates that the poorest quintile receives significantly less than one-fifth of the funds. Moreover, failing to take into account the missing funds results in misleading conclusions on regional characteristics associated with targeting performance. Overall, these findings underscore the importance of direct, quantitative evidence of public resource delivery.[3]

The rest of the paper is organized as follows. The next section describes the IDT in detail. Section 3 describes the data, and Section 4 provides the estimates for the amount of missing funds. Taking these estimates into account, Section 5 discusses IDT's targeting performance. Section 6 illustrates the correlates of the share of receipt and targeting performance. Finally, Section 7 concludes.

2. Background

2.1. Indonesia and IDT

Indonesia is considered to be one of the most corrupt countries in the world. Transparency International's Corruption Perception Index ranked the country 100th out of 183 countries in 2011, and Indonesia's international standing as a corrupt country has been unchanged since 1990s. The IDT program therefore provides an opportunity to examine

[2] The share of funds accruing to the poorest 40 and 20% of the population are used in a meta-study comparing the performance of 122 anti-poverty programs from 48 countries based on the fact that most programs provided the necessary information (Coady et al., 2004).

[3] This in turn links to a broader literature on corruption and public spending efficacy. For example, the loss in public spending in the distribution system may explain why the size of public spending is not as correlated with development outcomes as one might expect (Barro, 1991; Filmer and Pritchett, 1999; Landau, 1986). It also provides an insight into why countries that are perceived to be corrupt tend to have worse development outcomes (Mauro, 1995; Azfar and Gurgur, 2008), and why the effects of public expenditures on related outcomes are hampered in places with more corruption (Rajkumar and Swaroop, 2008; Suryadarma, 2012).