

Empowering Citizens to Combat the Resource Curse

TREATMENT MEMO

Laura Paler
Columbia University
April 28, 2010

1 Overview

This memo describes the randomized information campaign that was the main activity in the “Empowering Citizens to Combat the Resource Curse” program. Between March-May 2010, four different versions of the campaign were implemented with a total of 1860 randomly sampled respondents from 93 villages in Blora district, Central Java. The broad goal of the campaign was to strengthen public awareness about district-level budgeting and public finances so as to increase public support for good governance reforms advocated by PATTIRO and LPAW, the partners in this collaboration.¹ The specific goal—and the reason for developing four campaign versions and randomly assigning respondents to each be exposed to one version only—was to explore the causal impact of the different campaign versions on political engagement and demand for better government.

The following section in this memo describe the theoretical motivation for the different campaign versions and the experimental treatments that resulted in four campaign versions. For a full picture of the project, this memo should be read in conjunction with the Research Design Memo, which describes how sampling and randomization were conducted for the project.

2 Motivation

The different campaign versions were designed to investigate specific explanations for why citizens might be less politically engaged in resource windfall environments. Researchers,

¹PATTIRO (*Pusat Telaah dan Informasi Regional*) and LPAW (*Lembaga Penelitian Aplikasi Wacana*) have been working directly with district level stakeholders on the responsible management of natural resource revenue at the sub-national level (with support from the Revenue Watch Institute and the Open Society Institute-Local Governance Initiative). This program extended their work to the grassroots level to build public support for the good governance reforms they are advocating at the district level.

development organizations and policy-makers alike have long postulated the existence of a ‘resource curse’ in which governments rich in natural resources tend to be more corrupt, less developed, less democratic and more conflict-prone than their resource-poor counterparts (Sachs and Warner, 2001; Robinson, Torvik and Verdier, 2006; Vicente, 2007; Humphreys, 2005; Ross, 2001). The resource curse has been attributed not only to natural resources but to other forms of windfall revenue, including foreign aid and central government transfers (Moore, 1998; Treisman, 2000; Dalgaard and Olsson, 2006; Brollo et al., 2009). While most existing literature on the resource curse focuses at the national level, recently more attention has been paid to the existence of a resource curse at sub-national levels (Brollo et al., 2009). While numerous explanations for the resource curse have been put forward, the main one of interest here is that windfalls undermine the willingness or ability of citizens to scrutinize government and hold elected officials accountable for their performance.

The campaign aimed to investigate two explanations in particular. One hypothesized explanation is that citizens care more about how government spends money when the resources come from them (as tax payments) rather than from revenue windfalls. Since windfalls substitute for domestic taxation, citizens are simply less motivated to pressure their elected leaders (Huntington, 1991; Karl, 1997; Moore, 1998). Another hypothesis attributes the lack of public pressure in windfall environments not to a lack of motivation but to a lack of ability. Resource windfalls undermine transparency and, without access to information on government behavior, citizens are ill-positioned to be the real keepers of the public purse (Barro, 1973; Ferejohn, 1986; Besley, 2006; Robinson, Torvik and Verdier, 2006; Mehlum, Moene and Torvik, 2006; Boschini, Pettersson and Roine, 2007).

We therefore aimed to answer two questions in the context of the campaign:

1. Does political engagement depend on the source of district government revenue (windfalls or taxes). In other words, are citizens more likely to take action when revenue comes from them as tax payments rather than from windfalls?
2. Does increasing fiscal transparency (citizen access to information on how the government manages revenue) lead to more political action?

2.1 Indonesia Context

District level governance in Indonesia offers an important setting for asking (and answering) these questions. In post-Suharto Indonesia, the question of how to incentive district governments to optimize resources for development, rather than waste them or misuse them for personal gain, is of central importance. Since Indonesia’s ‘big bang’ decentralization in 2001, district governments have acquired the authority and resources to manage development at the local level. District governments in Indonesia now control over 40 percent of total public funds and have the authority to manage local development in key areas, such as health, education, water sanitation and infrastructure (World Bank, 2007, ii). As one recent World

Bank (2007, x) report notes, however: “Local governments now have significant authority over planning and budgets, but they do not yet have clear incentives to use these funds to maximize economic development and service delivery outputs for local citizens.” Moreover, other resource rich districts in Indonesia such as Kutai Kartanegara, are testimony to the potential for a sub-national resource curse.²

In any democracy, the public’s ability to sanction politicians through elections provides an important performance incentive. There is good reason to believe, however, that accountability at the district level in Indonesia is undermined by a resource curse. More than 90 percent of district income comes as windfall revenue in the form of central government transfers, however. Ten percent of all regional governments receive additional windfalls from natural resources in the amount of six percent of the central government’s take (World Bank, 2007, 8). The promise of decentralization lies in its ability to improve service delivery and strengthen accountability by bringing state and society into closer proximity (Tiebout, 1956). Because districts primarily survive on windfall revenue, however, it is possible that citizens’ expectations of government, their levels of political engagement, and their demand for better government are weaker than they would be otherwise.

3 Campaign ‘Treatments’

To answer the questions in Section 2, we developed four slightly different versions of the campaign. All campaign versions included basic information on the role of district government in managing public funds. The versions differed, however, in what revenue information they emphasized (windfalls versus taxes), as well as whether they presented real information on how government managed public finances or not.

The campaign versions were (see also Table 1):

1. A *windfall only* group—learns that revenues come from windfalls and doesn’t get real information on how government spends public funds.
2. A *tax only* group—learns that revenues come from taxes and doesn’t get real information on how government spends public funds.
3. A *windfall and information* group—learns that revenues come from windfalls plus gets real information on how that income is spent; and
4. A *tax and information* group—learns that revenue comes from taxes plus gets real information on how that income is spent

²Under the Oil and Gas Shared Revenue Fund agreement, producing area districts receive six percent of oil revenue and 12 percent of gas revenue that accrues to the central government.

Table 1: Treatments

		Tax Experiment	
		Control (<i>Pure Windfall, Taxes=0</i>)	Treatment (<i>Taxes=4,000 rupiah</i>)
Transparency Treatment	Control (<i>Placebo information</i>)	1 n=465 n per village=5 Number of villages=93	2 n=465 n per village=5 Number of villages=93
	Treatment (<i>Spending information</i>)	3 n=465 n per village=5 Number of villages=93	4 n=465 n per village=5 Number of villages=93

Canvassers conducted the campaign face-to-face with respondents, using specially designed visuals and game boards to facilitate the delivery of campaign content. The main outcome—demand for good government—was measured using participation in a good governance post-card campaign as well as using survey data from both pre- and post-treatment modules.

3.1 The Tax Experiment

This experiment aimed to test whether citizens care more about government revenue if it comes from them (as taxpayers) or if it comes from windfalls. The control group in this experiment learns that district government revenue primarily comes from windfalls. The treatment group participates in a behavioral exercise in which they pay a representative tax to the district government, and learn that the APBD (the district budget) contains their tax payments.

At the outset of the campaign, each participant earns income (Rp. 10,000 for the control and Rp. 14,000 for the treatment group, equivalent to about US \$1 and \$1.40 respectively) for taking the time to take part in the campaign and survey. Later in the campaign, a household budgeting exercise is introduced and the participant is asked to use their income to illustrate how they plan to allocate their income across household expenditures. The purpose of the exercise is both to clarify the concept of a budget and also to deepen the endowment effect. After using their income to participate in the household budget exercise, participants in the control group are asked to return their income to their pocket. The canvasser then takes out 10,000 rupiah representing per capita revenue in the district budget (the income the district government has to spend on each citizen). Using a special gameboard, participants are shown that 8,000 of that comes from central government transfers and natural resources. The remaining 2,000 represents district government income from other, unspecified, sources. The control group therefore learns primarily that district government revenue comes from windfalls.

The treatment group, however, pays a representative tax to the district government and learns about the relationship between their tax payments and government revenue. Following the household budgeting exercise, the canvasser reminds the participant about the taxes they often have to pay to the district government from their household income. The canvasser collects 4,000 rupiah from the participants income as a representative district government tax. Using a special gameboard, participants are shown that their 4,000 becomes district government revenue. The canvasser also adds in 6,000 rupiah representing district income from other sources.

In sum, both the control and treatment groups learn about government revenue in per capita terms and scaled to 10,000 rupiah. What differs between the groups, however, is the emphasis on different revenue sources. The campaign versions were also designed to simulate closely participants real experience with government revenue. While the representative tax is not a real tax payment, the exercise simulates the core elements of an income tax in many ways: both the outset of the campaign and the household budget exercise are designed to encourage the participant to think of their income as *earned* income, which is considered key to the perceived psychological difference between windfalls and income. The role of the canvasser in deducting the tax from the income is akin to than of an employer obligated to withhold income tax on behalf of the government.

In addition to closely simulating a tax, the exercise eliminates other potential obstacles to the link between taxation and political action so that we can eliminate complicating factors. For one, the experiment reduces fiscal illusion in terms of where the money is going. It is often argued in complex fiscal federal systems that, because tax revenue is collected and spent on different levels, it is hard for citizens to know who/what level of government to hold accountable for spending. Secondly, the experiment holds constant tax salience, the tax rate and tax compliance. In other words, the tax treatment resembles a direct income tax of 29 percent (4,000 of 14,000 rupiah) and all participants are required to comply with the payment. Another experimental design, for instance once that primed a respondent to recall recent tax payments, would likely encounter great variation in the population in these factors, all of which would likely impact the outcome. The design used here allows us to simplify the analysis of the impact of tax payments on political action.

3.2 The Transparency Experiment

This experiment follows the tax experiment; participants in the treatment group learn how the 10,000 rupiah in income composed during the tax experiment is spent while participants in the treatment group get only placebo (empty) information. The spending information was obtained through an analysis of the APBD (the district government budget).³ The campaign presents four kinds of information: (1) spending across key sectors (education, infrastructure,

³Information on allocated and realized budget figures were obtained for 2007-2009. The campaign presents realized budget data for 2008, the most recent year for which realized budget information could be obtained.

health, farming, elected leaders, and others); (2) the spending on direct programs versus administration within key sectors; (3) allegations of corruption in spending within key sectors; and (4) spending breakdowns within the ‘elected leaders’ category, including how much goes for salaries, health benefits and homes for elected representatives. The control group receives placebo information, namely facts and figures quoted directly from the annually published *Blora in Numbers*.

How the information in the transparency treatment is presented is a crucial feature of the campaign. In particular, both the tax and transparency treatments are presented in per capita terms. In the tax experiment the 10,000 rupiah presents income composition on a per capita basis. In the transparency experiment, the 10,000 rupiah from the tax experiment illustrates per capita spending. Specifically, the 10,000 rupiah represents the money that government spends for each person in Blora, and participants learn how that 10,000 is allocated. Presenting all information in per capita terms has several advantages. First, it helps to make complicated budget information digestible and relatable for the average audience. Second, by using the same 10,000 rupiah a close link between the revenue and transparency experiments is established. Third, by putting everything in per capita terms, it is possible to directly compare the impacts of the tax and transparency treatment as well as test hypotheses about how taxes and spending relate in inducing political mobilization.

Specifically, the campaign first uses the 10,000 rupiah to illustrate spending allocations across key public service sectors. Respondents learn that 47 percent of the budget goes to education (illustrated by 4700 rupiah, and so on), 12 percent to infrastructure, nine percent to health, and two percent to agriculture. Additionally they learn that 18 percent of the budget is spent on elected leaders and their offices. Respondents then learn how much within each of the key public service sectors is put towards direct programs for citizens and how much returns to the government as salaries and administration. Overall, almost 68 percent of the budget is spent on costs associated with running the government, compared to 30 percent spent on direct programs for citizens. Money is withdrawn from each sector to represent the division between direct and indirect spending within the sector. The campaign then reminds respondents that not even all the money allocated to direct programs reaches them. Recent stories on corruption and misuse in infrastructure and education are presented to show how funds are lost along the way (two percent of the total spending is removed from these sectors to symbolize corruption and misuse).

Finally, the campaign shows respondents how the district government spent the 18 percent that elected leaders allocated for themselves and their ministries. In particular, one percent of the total budget is spent on their one percent salaries, health benefits and homes (which is quite a sum when divided over 46 representatives). By illustrating the content as shares of 10,000 rupiah and displaying it on a game board, participants can clearly compare spending across sectors. They can see, for instance, that elected leaders allocate as much to themselves as they allocate to all direct agriculture programs.

3.3 Measuring Outcomes

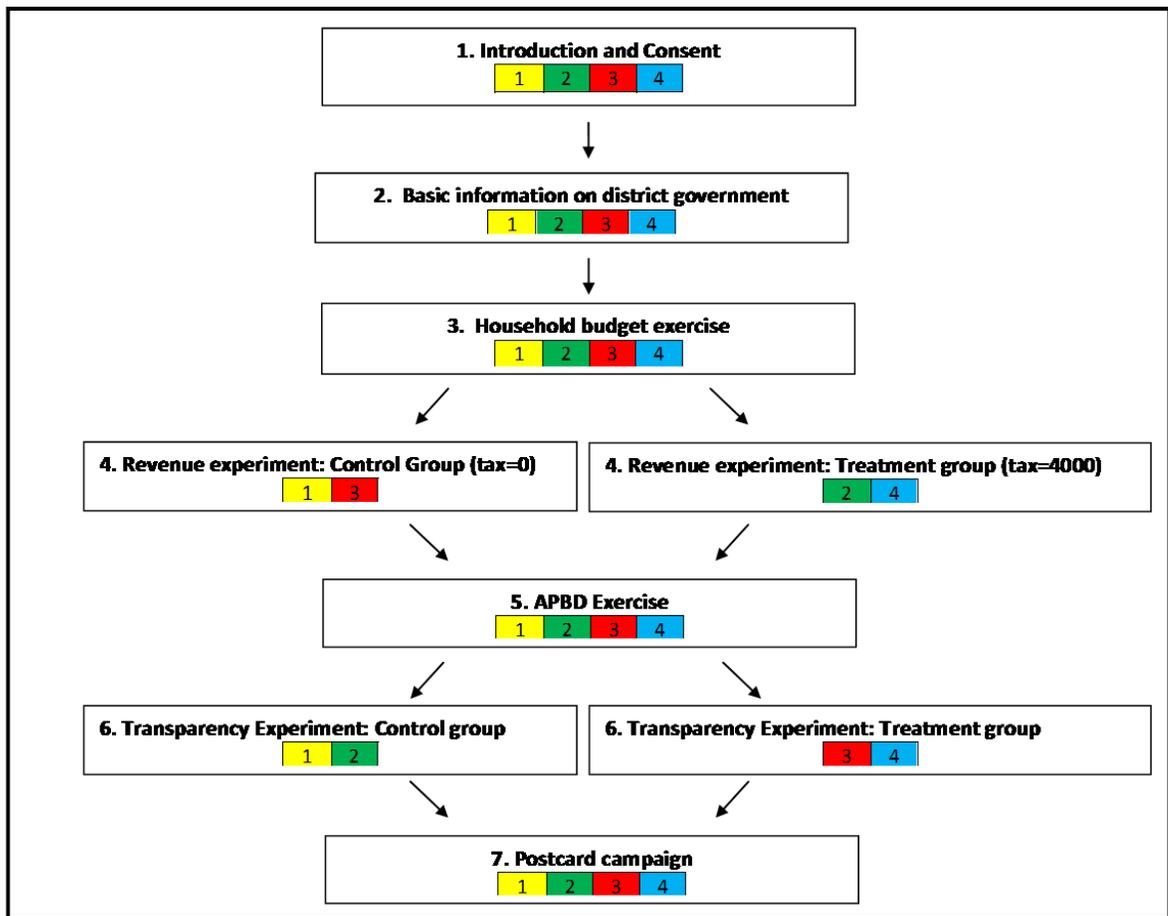
At the end of the campaign, canvassers encouraged participants to participate in a postcard campaign. Each respondent was given a postcard and told the location of a special mailbox in their village where they could deposit it. The postcard asked individuals to indicate whether they were satisfied with the district government and-if they were not-what governance reforms they wanted. Since returning the postcard required respondents to make some small effort, the postcards measure participants' demand for good governance and their willingness to signal it. To learn the impact of the tax and transparency treatments, we compare the return rates and responses across participants who received different versions of the campaign. An analysis of the campaign impacts will also be done using pre- and post-treatment survey modules.

3.4 The Campaign Flow

The experiments outlined above were integrated into a public awareness campaign. Figure 1 outlines the overall flow of the campaign where the colored numbers (1-4) indicates the corresponding campaign version (see Table 1). First, all participants receive basic information on the role and responsibilities of the district government. Participants then participate in a household budget exercise where they allocate the income they earn for taking part in the campaign and survey across different household expenditures. The purpose of the exercise is both to illustrate the concept of a budget and to deepen the endowment effect for the treatment group. The revenue experiment follows the household budget exercise.

Following the revenue experiment (and the first post-treatment survey module) all participants are introduced to the APBD process. The money from the revenue experiment is transferred to a new game board illustrating how elected leaders allocate district government revenue to the key sectors. All respondents then participate in an 'APBD exercise' in which they use the 10,000 rupiah to show how they would allocate the money if they were the decision-maker. They then show how they think the district government *actually* allocates the money. This exercise measures both ideals and priors before the transparency treatment to help interpret whether respondents are likely to view the information revealed in the campaign as positively or negatively reflecting on government. The transparency experiment follows the APBD exercises, and the postcard campaign is introduced following the transparency experiment (and the second post-treatment survey module).

Figure 1: Campaign Flow



References

- Barro, Robert. 1973. "The Control of Politicians: An Economic Model." *Public Choice* 14.
- Besley, Timothy. 2006. *Principled Agents?* Oxford University Press.
- Boschini, Anne, Jan Pettersson and Jesper Roine. 2007. "Resource Curse or Not: A Question of Appropriability." *Scandinavian Journal of Economics* 109(3):593–617.
- Brollo, Fernanda, Tommaso Nannicini, Roberto Perotti and Guido Tabellini. 2009. "Federal Transfers, Corruption and Political Selection: Evidence from Brazil." *unpublished*.
- Dalgaard, Carl-Johan and Ola Olsson. 2006. "Windfall Gains, Political Economy and Economic Development." *Working Papers in Economics No. 223*.
- Ferejohn, John. 1986. "Incumbent Performance and Electoral Control." *Public Choice* 50(1):5–25.
- Humphreys, Macartan. 2005. "Natural Resources, Conflict and Conflict Resolution: Uncovering the Mechanisms." *Journal of Conflict Resolution* 49(4).
- Huntington, Samuel. 1991. *The Third Wave: Democratization in the Late Twentieth Century*. Julian J. Rothbaum distinguished lecture series; 4 Norman: University of Oklahoma Press. by Samuel P. Huntington. 21 cm.
- Karl, Terry Lynn. 1997. *The paradox of plenty : oil booms and petro-states*. Studies in international political economy ; 26 Berkeley: University of California Press. Terry Lynn Karl. 24 cm.
- Mehlum, Halvor, Karl Moene and Ragnar Torvik. 2006. "Institutions and the Resource Curse." *The Economic Journal* pp. 1–20.
- Moore, Mick. 1998. Death without Taxes: Democracy, State Capacity, and Aid Dependence in the Fourth World. In *The Democratic Developmental State*, ed. Mark Robinson and Gordon White. Oxford Studies in Democratization Oxford: Oxford University Press pp. 84–119.
- Robinson, James, Ragner Torvik and Thierry Verdier. 2006. "Political foundations of the resource curse." *Journal of Development Economics* 79:447–468.
- Ross, Michael. 2001. "Does Oil Hinder Democracy?" *World Politics* 53(3):325–61.
- Sachs, J and A.M. Warner. 2001. "The Curse of National Resources." *European Economic Review* 45:827–838.
- Tiebout, Charles. 1956. "A Pure Theory of Local Expenditures." *Journal of Political Economy* 64:416–424.

- Treisman, Daniel. 2000. "The Causes of Corruption: A Cross-National Study." *Journal of Public Economics* 76:399–457.
- Vicente, Pedro. 2007. "Does Oil Corrupt? Evidence from a Natural Experiment in West Africa." *Department of Economics Discussion Paper Series No. 317* .
- World Bank. 2007. "Spending for Development: Making the Most of Indonesia's New Opportunities, Indonesia Public Expenditure Review 2007."