NOT FOR PUBLICATION

Supplementary Online Appendices

Keeping the Public Purse:

An Experiment in Windfalls, Taxes, and the Incentives to Restrain Government

These appendices contain materials, results, and robustness checks that supplement the main text. Additional materials related to the implementation of the experiments can be found on the author's personal website, including: The original memo detailing the sampling and randomization strategy; a summary of the focus group discussions that informed design; the complete field manual for project implementation; and the survey instrument.

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A Summary of the main hypotheses

The main hypotheses are summarized in Figure A.1 following the experimental design and using hypothetical data. The 2x2 table shows windfall and tax contexts in both low and high information environments, creating four experimental groups mirrored in the figure. The first three predictions—that taxes cause more monitoring, participation, and sanctioning than windfalls—are captured by a shift upwards of the tax line vis-a-vis the windfall line (as well as the plus signs in the first two rows of the far right column in the table). Hypothesis four, predicting that the impact of (negative) information on political action will be greater in a tax than in a windfall environment, is denoted by the slope of the tax line rising more steeply than the slope of the windfall line (as well as the positive treatment interaction in the bottom right cell of the table).¹

¹The focus here is on the effect of negative information because this fits the empirical setting—few participants found the information positive—and simplifies the predictions. While it is straightforward to predict that negative information about the incumbent should decrease support, it is difficult to predict whether negative information leads to lower or higher levels of monitoring or participation. The +/- in the bottom row indicates this ambiguity without compromising the main prediction that the tax group will still take more action than the windfall group, even if negative information reduces political action.

		Windfall Context	Tax Context	Difference
		(C1)	(T1)	(T1-C1)
Low info	(C2)	Group 1	Group 2	+
High info	(T2)	Group 3	Group 4	+
Difference	(T2-C2)	+/-	+/-	+



Figure A.1: Summary of the hypotheses. The table and figure summarize the four main hypotheses. Taxes are predicted to lead to more monitoring, participation, and sanctioning than windfalls, illustrated by the fact that the tax line is higher than the windfall line (and the plus signs in the first two rows of the far right column in the table). The prediction in H4 that the effect of information on action will be greater in a tax than in a windfall environment is captured by the slope of the tax line rising more steeply than that of the windfall line (as well as the positive treatment interaction in the bottom-right cell of the table).

B Campaign script and illustrations

Empowering Citizens to Combat the Resource Curse "Your Voice, Your Opportunity" Campaign



Empowering Citizens to Combat the Resource Curse Campaign Roadmap



Figure B.1: Campaign roadmap. The figure shows the cover illustration for the campaign, the $2x^2$ table with over-lapping revenue and information experiments (producing four groups), and the list of which illustrations to use for each group.









Message: You elect your district leaders, but then what happens?

- Since *reformasi*, ordinary Indonesians like you have been directly electing leaders to the district government. Indonesians now have the **right and opportunity to elect directly the bupati and members of the DPRD**.
- This opportunity is important because the leaders you elect are responsible for the development of Blora. The
 <u>district government in Blora</u>, like in the rest of Indonesia, now has <u>more power and money than ever before</u> to
 make decisions about how to improve the lives of ordinary citizens. It is also the case that district leaders in
 Indonesia <u>do not necessarily use their authority and resources in the way that best benefits the people living in
 their districts.
 </u>

[USE ILLUSTRATION]

- How can you and other citizens make sure that your elected leaders are working for <u>YOU</u> once they get into office? In order to get into office, <u>candidates make many promises that sound good</u>. People then go to the polls and vote on the basis of those promises. But what do they do once they actually win the election? <u>Are they following</u> <u>through on their promises?</u> Are they working as hard as they can to make your life better?
- These are important questions to ask. Did you know that Blora is one of the poorest districts in Central Java? [Yes/No]. Indeed, <u>Blora is one of the poorest of 35 districts in Central Java</u>. It is important for you as a citizen of Blora to think about why that is, and whether it has to be that way.

Figure B.2: Campaign intro I. You elect your leaders, but then what happens?







lalaman	Ilustrasi	
2	3	

Message: Your leaders' decisions affect your daily life!

- The bupati and members of the DPRD make decisions about local development and public services to
 ensure a high quality of life for you and your family. <u>The bupati's role is to develop Blora. The role of
 the DPRD is to represent YOU</u> by passing laws that benefit you and also by making sure the bupati is
 working in your best interest.
- Together, the bupati and DPRD in Blora are responsible for providing public services. This includes things like ensuring your children have access to high quality education; building and maintaining roads; making sure there is high quality and accessible health care; and providing irrigation and support to farmers.
- They also are responsible for things like making sure there is enough water for households throughout the year, distributing fertilizer and raskin, and issuing important documents like KTP and birth certificates.











Message: ... and determine the future of Blora!

- The decisions that the district government makes are about MORE than providing public services to make your life better now. They are also about laying the foundation for the future of Blora. Only when these things are improved will Blora be able to attract businesses and create jobs that bring higher income and more stability.
- When you think about what you want Blora to look like five years from now, what comes to mind? How about ten years from now...?

Figure B.4: Campaign intro III. Think about what you want Blora to be like now and in the future.



Figure B.5: Campaign intro IV. The household budget game where participants selected six cards representing household expenditures and used their payment received at the start of the visit to illustrate how they planned to allocate funds across those expenditures.









The district budget includes your taxes

- Thank you for using your income to illustrate what a budget is. There is one kind of expense that was not
 included among the cards but that oftentimes you have to pay nonetheless. Citizens in Blora like you also
 <u>have to allocate money to pay taxes to the district government.</u> You are required to pay many different
 kinds of taxes, like income tax, the PBB, and the street light tax.
- <u>I now have to impose a 4,000 rupiah tax on your income</u> from today to represent the kinds of taxes you typically pay to the district government from your household budget.
- What you pay in taxes mostly goes into the APBD. I will now put the 4,000 rupiah here [PUT IN BOX ON GAMEBOARD] to indicate that you have had to pay back 4,000 rupiah to represent the taxes you pay to the district government, and this money goes into the district budget.
- You can put your remaining income back in your pocket.
- In addition to getting money from taxes, the district government gets income from other sources, like from the central government and from natural resources. I will now put 6,000 rupiah on the board [PUT IN BOX] to represent the income that government gets from other sources. There is now 10,000 rupiah on the board representing income in the APBD.
- Before we continue I would like to ask you a few questions.

[GO TO SURVEY SECTION 3]

Figure B.6: Tax treatment. The tax treatment in the revenue experiment. The game board has boxes for tax and 'other' revenue.



Figure B.7: Windfall treatment. The windfall treatment in the revenue experiment. The game board has boxes for 'central government' (including transfers and resource rents) and 'other' revenue.



Figure B.8: District budget game. Participants pretended that they were a district leader and used the rupiah on the revenue game board to show their ideal allocation of funds across six spending categories (education, infrastructure, health, farming, 'politicians', and others. They were also asked to illustrate how they thought the district government actually allocated funds.



Figure B.9: Information treatment. The actual share of total budget revenue allocated in 2008 to the six spending categories.



Figure B.10: Information treatment. The breakdown of the share of total budget revenue spent, within each category, on routine maintenance versus programs and services for citizens.



Figure B.11: Information treatment. The mention that not all funds allocated to programs for citizens reaches citizens due to corruption.



Figure B.12: Information treatment. The breakdown of how politicians allocated funds to themselves and their offices.



- There were 90 days of rain in 2008, with a total of 1336 millimeters of rain. The month with the greatest amount of rainfall is typically February.
- In 2008, 83 percent of the garbage in Blora was organic, and 9 percent was plastic.
- The growth rate of the Blora regional gross domestic product in 2008 was 5.8 percent.
- There is a golf course in Cepu.

(Campaigner note: All information obtained from Blora dalam Angka 2008-2009)

[GO TO SURVEY SECTION 5]





Figure B.14: Postcard campaign I. Introducing the postcard campaign.

SUARA ANDA, KESEM	PATA	IN ANDA			
Saya ingin Pemkab Blora melakukan pekerjaannya dengan lebih baik	a puas dengan	apa yang telah dilakukan ole tidak ingin mengubah apap Berhen	eh Pemkab Blora dan un ıti disini!		
		Kirim kembali	kartupos anda		
Jika anda menginginkan pemkab Blora lebih baik, sampaikan pada	mereka bas	aimana!	The baseline		
Saya [] peraturan/hukum yang memastikan adanya kesempatan 1. pada masyarakat untuk berpartisipasi dalam penyusunan keputusan yang diambil oleh Pemerintah Kabupaten.					
 Saya [] jalur informasi yang lebih baik dan lebih mudah tentang apa yang sedang dilakukan oleh Pemerintah Kabupaten. 					
Saya [] Pemerintah Kabupaten meningkatkan anggaran uang APBD 3. untuk pelayanan publik dan pembangunan dibandingkan untuk biaya administrasi kantor.					
 Saya [] adanya sebuah pusat pengaduan dimana saya dapat mengadukan permasalahan pelayanan publik dengan bebas dan mendapat jawaban dari permasalahan tentang kualitas pelayanan. 					
 Saya [] Bupati dan anggota DPRD dapat berkomunikasi langsung dengan masyarakat dan sebaliknya. 					
	X Team Tea		Halaman 12 10		
Postcard	3				
Let me describe to you what is on the postcard. If you think might have trouble reading or understanding the postcard, you can <u>ask a member of your household to help you</u> . First, you can indicate whether you want the district government in Blora to <u>do a better job</u> , or whether <u>you are satisfied</u> with the district government in Blora and don't want to change anything about how it works. If you pick the second one, then you					
 If you picked the first one, then we would like you to tell us how. There is a list of five reforms on the postcard. For each reform, put a check for whether you want/don't want that reform. We are asking how you feel about five reforms: I [want/don't really want] a law that guarantees opportunities for public participation in district government decisions. I [want/don't really want] better and easier access to information on district government programs and policies. I [want/don't really want] the district government to spend more of the APBD money on public services and development and less money on administration. I [want/don't really want] a central location established where I can freely report problems with public services and get answers to my questions about service quality. I [want/don't really want] the bupati and DPRD members to have more direct communication with the public. 					
f there is any reform that you don't know about, then that's ok too. sure'	Just tic the l	box in the column on th	ne far right for 'not		
Then at the very bottom under the 'Want' column, it asks you "if you write the number of the reform you most want in the box.' Here yo from all those you said that you want.	i have said 'l u should pic	want! to any of the ref k the <u>one reform y</u> ou t	orms above, please hink is most importa		
f you don't want or don't know about any of the reforms, then just	kip this box				

Figure B.15: Postcard campaign II. Explaining the postcard.









Postcard

- LPAW and the researcher will <u>collect all the postcards</u> and tabulate the responses. Then two weeks before the election,
 <u>LPAW will hold a public meeting with the bupati candidates</u> to tell them the results. The results will also be <u>shared with</u> <u>members of the DPRD, heads of Dinas, the media and other citizens</u> so that your voice will be heard in many corners of Blora.
- YOUR POST-CARD IS YOUR VOICE, IT IS A WAY FOR YOU TO COMMUNICATE WITH YOUR POLITICAL LEADERS AND TELL THEM HOW YOU FEEL ABOUT GOVERNMENT IN BLORA.
- Whether you decide to return the postcard is <u>completely up to you</u>. The most important and helpful thing to the campaign is for you to make your decision based on your <u>personal feelings</u> and your <u>reaction to the campaign</u>. Also, <u>the post-card is</u> <u>like a secret ballot</u> whether you return the postcard and what you vote for on the postcard is your secret.
- If you decide to return the postcard, please deposit it in a special mailbox that has been placed at [LOCATION] BEFORE MAGRHEB TOMORROW, in other words before tomorrow at 18:00.
- The postcard should reflect how each individual feels. We would like to <u>ask your help to not discuss the campaign with</u> your neighbors until after we have picked up the mailbox in your dusun.
- If your neighbor is interested in the campaign and asks you about it, you can suggest they go to the dusun head since we left a few extra postcards there.
- Do you have any questions? If there are any questions or concerns about the campaign, <u>here's a card with our contact</u> information.
- Thank you very much for your time today. Sampai Jumpa!

Figure B.16: Postcard campaign III. Explaining how to return the postcard.

C Sequencing of campaign and survey



Figure C.1: Sequencing of campaign and survey. The figure shows the sequence in which campaign and survey components were conducted during the visit. Red boxes denote the campaign and orange boxes denote survey modules.

-		•	
I want the district government in Blora to do a better job	I am satisfied v	vith the district government in change anything about how i	Blora and don't want to it works
			Stop here and return your postcard!
Ļ			
If you want the district government in Blora to do better,	, tell them how!		
	Want	Don't really want	Not sure
 I [] a law that guarantees opportunities for public participation in district government decisions. 			
 I [] better and easier access to information on district government programs and policies. 			
 I [] the district government to spend more of the APBD money on public services and development and less money on administration. 			
 I [] a central location established where I can freely report problems with public services and get answers to my questions about service quality. 			
 I [] the bupati and DPRD members to have more direct communication with the public. 			
If you said "I WANT!" to any of the reforms above, please write the number of the reform you <u>most</u> want in the box:			

Your Voice, Your Opportunity

Figure D.1: The postcard (English). The two boxes at the top asked participants whether they 'want the district government to do a better job' (a sanction for incumbent performance) versus whether they were 'satisfied with the district government in Blora' (a reward for incumbent performance). The remaining questions inquire into support for specific reforms to provide information to the local NGO partners and were not intended for analysis in the paper. The box in the bottom right cell of the postcard contained the randomly assigned respondent ID and connected the postcard to the participant's survey instrument and treatment assignment.

E Randomization check and baseline data

				E	xperimenta	al Groups				
				1	2	3	4		p-value	
	Ra	nge	Sample	Windfall,	Tax,	Windfall,	Tax,		oneway	
	min	max	mean	$no \ info$	no info	info	info	Fk-1, n-1	ANOVA	n
Panel A: Demographics										
Age	17	65	41.7	41.7	41.7	41.8	41.5	.06	.980	1,818
Female	0	1	50	51	50	50	50	.04	.989	1,863
Muslim	0	1	99	99	99	100	99	.86	.460	1,863
Married	0	1	90	89	90	92	91	.86	.461	1,862
Completed primary school	0	1	72	71	74	73	70	.78	.506	1,862
Can read a newspaper	0	1	81	80	84	82	79	1.18	.315	1,861
Numeracy quiz (avg. correct)	0	5	1.9	1.9	1.9	1.9	1.9	.03	.993	1,863
Employed full-time	0	1	64	66	62	64	63	.62	.604	1,863
Work in agriculture	0	1	70	71	68	69	71	.45	.716	1,477
Distance from mailbox (min)	0	60	9.8	9.8	9.5	9.7	10.3	.88	.449	1,841
Panel B: Tax Experience										
Household paid a tax	0	1	93	93	92	95	94	1.13	.335	1,863
Personal experience paying a \tan^a	0	1	62	64	61	63	60	.76	.514	1,824
Believe taxes go to $\operatorname{district}^b$	0	1	67	65	70	66	67	.86	.459	$1,\!608$
Panel C: Political Knowledge										
Political awareness quiz (avg. correct)	0	5	1.9	1.9	1.9	1.9	1.9	.11	.956	1,863
Heard about work of district head c	0	1	9	9	9	10	9	.17	.918	1,847

Notes: Table reports summary statistics and results from a randomization check using baseline data and a oneway ANOVA across the four experimental conditions. The final column reports sample size.

^aDo you personally pay taxes or is another member of your household usually the one to pay? (Personally=1).

^bDo you think taxes primarily go to the central, provincial, district, or subdistrict government? (District=1).

^cHow much would you say you've seen or heard about the work of the district head over the past 12 months? (A lot/some=1).

Table E.1: Randomization Check with Baseline Data

F Summary statistics

		Ra	nge			Confiden	ce Interval	
		\min	max	mean	SD	Lower	Upper	\boldsymbol{n}
Panel A	: Main Results (Table 2)							
H1: M	onitoring							
1	Willing to monitor the budget	0	1	.79	.01	.77	.80	1,863
2	Willing to monitor government	0	1	.78	.01	.76	.80	1,862
3	Should pay more attention	0	1	.91	.01	.89	.92	1,858
H2: Pa	articipation							
4	Willing to take political action	0	5	1.32	.02	1.27	1.36	1,863
5	Turnout (postcard campaign)	0	1	.78	.01	.77	.80	1,863
H3: In	cumbent Sanctioning							
6	Support for incumbent district head	0	1	.53	.02	.48	.57	458
7	Support for challenger (former leg. chairman)	0	1	.09	.01	.07	.12	458
8	Sanctioned incumbent (postcard campaign)	-1	1	.75	.01	.73	.77	$1,\!857$
Panel B	: Tax Mechanisms (Table 3)							
Tax B	urden							
9	Gamble to win more	0	1	.49	.01	.48	.51	1,853
10	Gamble to avoid loss	0	1	.18	.01	.17	.19	1,848
Share	of Taxes in Total Revenue							
11	Posteriors on taxes/total revenue	0	1	.24	.00	.23	.25	1,836
12	Posteriors on windfalls/total revenue	0	1	.63	.01	.62	.64	1,842
Attitu	des towards Budget							
13	Citizen ownership over budget	0	1	.78	.01	.77	.80	1,830
14	Relevance of budget to daily life	0	1	.86	.01	.85	.88	1,850
Attitu	des towards Government							
15	Dissatisfaction with government	0	1	.67	.01	.65	.69	1,845
16	Distrust district head	0	1	.55	.01	.53	.57	1,853
17	Distrust local legislators	0	1	.61	.01	.59	.64	1,857
Efficac	у							
18	Citizens have power	0	1	.77	.01	.75	.79	1,853

Notes: Table reports summary statistics for the main outcome measures from both the survey and postcard campaign. Panel A presents summary statistics for the main effects of taxes (versus windfalls) on monitoring, participation, and incumbent sanctioning, as presented in Table 2 in the main text. Panel B presents summary statistics for the investigation into how the tax treatment worked, as presented in Table 3 in the main text. All question wordings are provided in the corresponding tables in the main text.

Table F.1: Summary Statistics for the Main Effects of Taxes vs. Windfalls

G Additional results for how revenue conditions the impact of information

Here I provide additional tables and analysis to accompany Section 5.3 in the main text:

- Table G.1 provides the table for Figure 3 on how revenue conditions the effect of information on attitudes towards government.
- Table G.2 presents additional results for measures of how revenue conditions the impact of information on dissatisfaction with the district government and distrust in local legislators.
- Table G.3 provides the table for Figure 4 on how revenue conditions the effect of information on willingness to monitor the budget, participation in the postcard campaign, and incumbent sanctioning in the postcard campaign.
- Table G.4 presents additional results for how revenue conditions the impact of information on the other main measures of monitoring and participation.
- Table G.5 presents additional results for how revenue conditions the impact of information on the other main measures of incumbent support.

Panel A: District leaders doing a worse job than expected ^a						
	Windfall (C1)	Tax $(C1)$	Diff (T1-C1)			
Low Info (C2)	.34	.34	.01			
n/s.e.	(463)	(458)	(.03)			
$RI \ p$ -value			.849			
High Info (T2)	.77	.79	.02			
n/s.e.	(464)	(466)	(.03)			
$RI \ p$ -value			.530			
Diff (T2-C2)	.43***	.45***	.01			
s.e.	(.03)	(.03)	(.04)			
$RI \ p$ -value	.000	.000	.746			
			7			
Panel B: Dissatisfa	ction with budge	et managem	ent ^b			
	Windfall (C1)	Tax (C1)	Diff (T1-C1)			
Low Info (C2)	.51	.53	.02			
n/s.e.	(452)	(453)	(.03)			
$RI \ p$ -value			.529			
High Info (T2)	.86	.86	.00			
n/s.e.	(463)	(464)	(.02)			
$RI \ p$ -value			.873			
Diff (T2-C2)	.35***	.33***	01			
s.e.	(.03)	(.03)	(.04)			
$RI \ p$ -value	.000	.000	.736			
		0				
Panel C: Distrust	the district head					
	Windfall (C1)	Tax (C1)	Diff (T1-C1)			
Low Info (C2)	.42	.39	03			
n/s.e.	(464)	(464)	(.03)			
RI p-value			.338			
High Info (T2)	.69	.71	.01			
n/s.e.	(462)	(463)	(.03)			
RI p-value			.653			
Diff $(T2-C2)$.27***	.32***	.04			
s.e.	(.03)	(.03)	(.04)			
RI p-value	.000	.000	.319			

Table reports sample means and treatment effects over sample size or Neyman standard errors in parentheses. Randomization inference p-values from a Fisher exact test reported below, where *p < .10, ** p < .05, and *** p < .01. The intersection of the 'Diff' column and row in the bottom right cell of each panel is the difference-in-difference (interaction) effect of the treatments.

^a Elected leaders in the district are doing a worse job (1) or a better job/the same job (0) than you thought they were?

^bHow satisfied are you with the way the district government manages the budget? (dissatisfied=1).

^c How much do you trust the district head to do the right thing for the people of Blora? (distrust=1).

Table G.1: How revenue conditions the impact of information on attitudes towards government

Dissatisfaction with district government ^a					
	Windfall (C1)	Tax $(C1)$	Diff (T1-C1)		
Low Info (C2)	.49	.51	.03		
n/s.e.	(461)	(457)	(.03)		
$RI \ p$ -value			.351		
High Info (T2)	.84	.84	.00		
n/s.e.	(463)	(464)	(.02)		
$RI \ p$ -value			.935		
Diff (T2-C2)	.35***	.33***	03		
s.e.	(.03)	(.03)	(.04)		
$RI \ p$ -value	.000	.000	.543		
Distrust local legis	\mathbf{lators}^b				
	Windfall (C1)	Tax $(C1)$	Diff (T1-C1)		
Low Info (C2)	.48	.46	02		
n/s.e.	(465)	(464)	(.03)		
$RI \ p$ -value			.500		
High Info (T2)	.76	.76	.00		
n/s.e.	(463)	(465)	(.03)		
$RI \ p$ -value			.974		
Diff (T2-C2)	.27***	.29***	.02		
s.e.	(.03)	(.03)	(.04)		
$RI \ p$ -value	.000	.000	.611		

Table reports sample means and treatment effects over sample size or Neyman standard errors in parentheses. Randomization inference p-values from a Fisher exact test reported below, where *p<.10, ** p<.05, and *** p<.01. The intersection of the 'Diff' column and row in the bottom right cell of each panel is the difference-in-difference (interaction) effect of the treatments.

^a How satisfied are you with the way the district government in Blora is doing its job overall? (Dissatisfied=1).

^b How much do you trust local legislators to do the right thing for the people of Blora? (Distrust=1).

Table G.2: How revenue conditions the impact of information on attitudes towards government: Additional Measures

Panel A: Willingness to monitor the budget ^a						
	Windfall (C1)	Tax (T1)	Diff (T1-C1)			
Low Info (C2)	.73	.77	.04*			
n/s.e.	(466)	(465)	(.03)			
$RI \ p$ -value			.065			
High Info (T2)	.79	.85	.06**			
n/s.e.	(466)	(466)	(.02)			
$RI \ p$ -value			.017			
Diff (T2-C2)	.07**	.08***	.01			
s.e.	(.03)	(.03)	(.04)			
$RI \ p$ -value	.006	.001	.710			
Panel B: Turnout	(Postcard Campa	$aign)^b$				
	Windfall (C1)	Tax (T1)	Diff (T1-C1)			
Low Info $(C2)$.77	.78	.01			
n/s.e.	(466)	(465)	(.03)			
RI p-value			.633			
High Info (T2)	.80	.79	02			
n/s.e.	(466)	(466)	(.03)			
$RI \ p$ -value			.528			
Diff (T2-C2)	.03	.00	03			
s.e.	(.03)	(.03)	(.04)			
$RI \ p$ -value	.192	.830	.414			
Panel C: Incumber	it Sanctioning (H	ostcard Car	mpaign) ^e			
	Windfall (C1)	$\operatorname{Tax}\left(\mathrm{T1}\right)$	Diff (T1-C1)			
Low Into (C2)	.71	.77	.06**			
n/s.e.	(465)	(464)	(.03)			
RI p-value	-		.041			
High Info (T2)	.78	.75	03			
n/s.e.	(463)	(465)	(.03)			
RI p-value	o – k k		.253			
Diff $(T2-C2)$.07**	02	09**			
s.e.	(.03)	(.03)	(.04)			
RI p-value	.014	.480	.023			

Table reports sample means and treatment effects over sample size or Neyman standard errors in parentheses. Randomization inference p-values from a Fisher exact test reported below, where *p<.10, **p<.05, and ***p<.01. The intersection of the 'Diff' column and row in the bottom right cell of each panel is the difference-in-difference (interaction) effect of the treatments.

^aHow interested are you in learning more about how the district government spends money in the budget? (interested=1) b Returned postcard (1), abstained (0).

^cReturned postcard and sanctioned incumbent (-1), returned postcard and rewarded incumbent (1), abstained from returning postcard (0).

Table G.3: How revenue conditions the impact of information on political action (H4)

Willing to monitor	$\mathbf{government}^{a}$		
	Windfall (C1)	Tax (C1)	Diff (T1-C1)
Low Info (C2)	.73	.75	.02
n/s.e.	(466)	(465)	(.03)
$RI \ p$ -value			.363
High Info (T2)	.80	.84	.04
n/s.e.	(465)	(466)	(.03)
$RI \ p$ -value			.136
Diff (T2-C2)	.07***	.09***	.01
s.e.	(.03)	(.03)	(.04)
$RI \ p$ -value	.003	.001	.713
Chauld new mana a	ttomtionb		
Should pay more a	Windfall (C1)	$T_{2} \mathbf{v} (C1)$	$D_{\text{iff}}(T_1 C_1)$
Low Info $(C2)$		$\frac{1}{01}$	00
$\frac{1000}{n/s}$	(465)	(464)	(02)
RI n-value	(400)	(101)	970
High Info (T2)	91	90	- 01
n/s.e.	(463)	(466)	(.02)
RI p-value	()	()	.581
Diff $(T2-C2)$.01	.00	01
() s.e.	(.02)	(.02)	(.03)
RI p-value	.670	.938	.711
Willing to take pol	litical action ^e		
	Windfall (C1)	Tax (C1)	Diff $(T1-C1)$
Low Info (C2)	1.26	1.33	.07
n/s.e.	(466)	(465)	(.06)
RI p-value	1.00	1.05	.190
High Into (12)	1.32	1.35	.03
n/s.e.	(466)	(400)	(.07)
KI p-value	00	0.2	.529
Diff $(T2-C2)$.06	.03	03
s.e.	(.06)	(.07)	(.09)
KI p-value	.249	.024	.031

Table reports sample means and treatment effects over sample size or Neyman standard errors in parentheses. Randomization inference p-values from a Fisher exact test reported below, where *p < .10, ** p < .05, and *** p < .01. The intersection of the 'Diff' column and row in the bottom right cell of each panel is the difference-in-difference (interaction) effect of the treatments.

^a How interested are you in learning more about what the government of Blora is doing? (Interested=1).

^b You should pay more attention to what the district government does. (Agree=1).

^c Regarding a problem or issue that was affecting your daily life or your community, would you in the future: contact a village or subdistrict official, contact the district head, contact a local legislator, contact the media or an NGO, take part in a demonstration? (Average of five).

Table G.4: How revenue conditions the impact of information on attitudes towards government: Additional monitoring and participation measures

Support for the incumbent district head ^a							
	Windfall (C1)	Tax $(C1)$	Diff (T1-C1)				
Low Info (C2)	.48	.51	.04				
n/s.e.	(115)	(109)	(.07)				
$RI \ p$ -value			.590				
High Info (T2)	.54	.58	.03				
n/s.e.	(116)	(118)	(.07)				
$RI \ p$ -value			.667				
Diff (T2-C2)	.06	.06	.00				
s.e.	(.07)	(.07)	(.09)				
$RI \ p$ -value	.339	.394	.980				
Support for the ch	allenger (former	leg. Chairn	$(nan)^b$				
	Windfall (C1)	Tax $(C1)$	Diff (T1-C1)				
Low Info (C2)	.11	.10	01				
n/s.e.	(115)	(109)	(.04)				
$RI \ p$ -value			.758				
High Info (T2)	.10	.06	04				
n/s.e.	(116)	(118)	(.04)				
$RI \ p$ -value			.323				
Diff (T2-C2)	01	04	03				

Table reports sample means and treatment effects over sample size or Neyman standard errors in parentheses. Randomization inference p-values from a Fisher exact test reported below, where *p < .10, ** p < .05, and *** p < .01. The intersection of the 'Diff' column and row in the bottom right cell of each panel is the difference-in-difference (interaction) effect of the treatments.

(.04)

.326

(.05)

.576

(.04)

.812

s.e. RI p-value

^a Which [candidate] would you say has your strongest support at present [in the upcoming district head elections]? (Incumbent=1). ^b Which [candidate] would you say has your strongest support at present [in

^bWhich [candidate] would you say has your strongest support at present [in the upcoming district head elections]? (Challenger and former legislative chairman=1).

Table G.5: How revenue conditions the impact of information on attitudes towards government: Additional sanctioning measures

H Robustness checks for the main effects of taxes vs. windfalls

I present robustness checks for the key results in the paper, including regressions with controls, subdistrict fixed effects, and enumerator fixed effects:

- Table H.1 presents the main effects of taxes versus windfalls on monitoring, participation, and sanctioning, corresponding to Table 2 in the main text.
- Table H.2 presents robustness checks for the analysis of why taxes caused more political action, corresponding to Table 3.

		Full	Subdistrict	Enumerator	
		Controls	Fixed Effects	Fixed Effects	
Pane	l A: Monitoring (H1)				
1	Willing to monitor budget	.06***	.05***	.06***	
		(.02)	(.02)	(.02)	
2	Willing to monitor government	.04*	.03	.03*	
		(.02)	(.02)	(.02)	
3	Should pay more attention	01	01	01	
		(.01)	(.01)	(.01)	
Panel B: Participation (H2)					
4	Willingness to take political action	.05	.05	.05	
		(.05)	(.04)	(.04)	
5	Turnout (postcard campaign)	.00	.00	.00	
		(.02)	(.02)	(.02)	
Pane	Panel C: Incumbent Sanctioning (H3)				
6	Support for incumbent district head	.04	.04	.05	
		(.05)	(.04)	(.04)	
7	Support for challenger (former leg. chairman)	03	04	03	
		(.03)	(.02)	(.03)	
8	Sanctioned incumbent (postcard campaign)	.01	.01	.01	
		(.02)	(.02)	(.02)	

Notes: Table reports robustness checks for main results presented in Table 2 in the main paper, with significance levels denoted by *p<.10, **p<.05, and ***p<.01. All question wordings are provided in the main text. Column 1 reports OLS results with controls and Neyman standard errors. The controls include all variables presented in the randomization check (Table ??) in the main text except for 'Married' and 'Javanese' due to low variation. Column 2 reports results from a regression with subdistrict fixed effects and column 3 reports results with enumerator fixed effects. Standard errors are uncorrected in Columns 2-3 as negative intracluster correlation makes clustered standard errors are biased in fixed effects regressions.

Table H.1: Do taxes motivate political action: Robustness Checks

		Full	Subdistrict	Enumerator		
		Controls	Fixed Effects	Fixed Effects		
Panel A: Aspects of Taxation						
Tax Bı	ırden					
1	Gamble for gain	.00	.00	.00		
		(.02)	(.02)	(.02)		
2	Gamble to avoid loss	.03**	.03*	.02*		
		(.01)	(.01)	(.01)		
Share of	of Taxes in Total Revenue (Fiscal Dependence)					
3	Priors on taxes/total revenue	01	01	01		
		(.01)	(.01)	(.01)		
4	Posteriors on taxes/total revenue	.28***	.28***	.28***		
		(.01)	(.01)	(.01)		
5	Posteriors on windfalls/total revenue	33***	33***	33***		
		(.01)	(.01)	(.01)		
Panel B:	Change in Attitude					
Attituc	les towards budget					
6	Citizen ownership over budget	.03*	.03*	.03*		
		(.02)	(.02)	(.02)		
7	Relevance of budget to daily life	.04***	.04**	.04**		
		(.02)	(.02)	(.02)		
Attituc	les towards government					
8	Dissatisfaction with government	.03	.02	.03		
		(.02)	(.02)	(.02)		
9	Distrust district head	.01	.01	.01		
		(.02)	(.03)	(.02)		
10	Distrust local legislators	.01	.01	.01		
		(.02)	(.02)	(.02)		
Efficac	У	· · ·	· · ·	· · ·		
11	Citizens have power	03	03	03		
		(.02)	(.02)	(.02)		

Notes: Table reports robustness checks for main results presented in Table 3 in the main paper, with significance levels denoted by *p<.10, **p<.05, and ***p<.01. All question wordings are provided in the main text. Column 1 reports OLS results with controls and Neyman standard errors. The controls include all variables presented in the randomization check (Table ??) in the main text except for 'Married' and 'Javanese' due to low variation. Column 2 reports results from a regression with subdistrict fixed effects and column 3 reports results with enumerator fixed effects. Standard errors are uncorrected in Columns 2-3 as negative intracluster correlation makes clustered standard errors smaller and heteroskedastic robust standard errors are biased in fixed effects regressions.

Table H.2: Why taxation motivates political action: Robustness checks

I Multinomial logit for how taxes and information affect incumbent sanctioning

Section 5.3 reveals an unexpected negative interaction in the effect of taxes on information. Results from a multinomial logistic regression in Table I.1 show that the results were primarily driven by a decrease in the use of the postcard to reward the incumbent and a corresponding increase in incumbent sanctioning.

		Main Specification	Full Controls		
Panel A	Panel A: Pr(Sanction)				
Margir	nal effect of taxes				
1	Low information	.04	.05		
		(.03)	(.03)		
2	High information	02	03		
		(.03)	(.03)		
Marginal effect of information					
3	Windfall group	.05*	.06*		
		(.03)	(.03)		
4	Tax group	01	02		
		(.03)	(.03)		
Panel B: Pr(Reward)					
Margir	nal effect of taxes				
5	Low information	02***	04***		
		(.01)	(.01)		
6	High information	.01	.00		
		(.01)	(.01)		
Marginal effect of information					
7	Windfall group	02**	02**		
_	_	(.01)	(.01)		
8	Tax group	.01*	.02***		
		(.01)	(.01)		
Panel C:	: Pr(Abstain)				
Margir	nal effect of taxes				
9	Low information	01	03		
		(.03)	(.03)		
10	High information	.02	.01		
		(.03)	(.03)		
Marginal effect of information					
11	Windfall group	03	.00		
		(.03)	(.00)		
12	Tax group	.00	.00		
		(.03)	(.00)		

Notes: Table reports results from a multinomial logistic regression of the effect of taxes and information on incumbent sanctioning in the postcard campaign. The table accompanies Panel C of Figure 4 in the main text and Panel C of Table G.3 in the appendix. Significance levels are denoted by *p<.10, ** p<.05, and *** p<.01 (robust standard errors). Column 1 reports treatment effects with no controls while Column 2 reports treatment effects with controls. The controls include all variables presented in the randomization check (Table ??) in the main text except for 'Married' and 'Javanese' due to low variation.

Table I.1: The impact of taxes and information on incumbent sanctioning in the postcard campaign: Multinomial Logit

J Does satisfaction condition the effect of taxes and information on incumbent sanctioning?

There is good reason to believe that initial satisfaction with government performance played a key role in conditioning the effect of both taxes and information on the propensity to use the postcard to sanction the incumbent. Figure J.1 explores this possibility to provide additional clarity on the conditions under which H4 holds (see also Table J.1. Participants are coded as 'satisfied' if they responded in the pre-treatment survey that they were satisfied with "the way the district government in Blora is doing its job overall." Notably, for those who were originally satisfied, taxes caused a 15 percentage point increase in incumbent sanctioning in the postcard campaign in the low information environment (Panel A). Similarily, the information caused a 14 percentage point increase in incumbent sanctioning in the satisfied (Panel B). Among those who were initially dissatisfied, however, neither taxes nor information had any effect. These results are interesting in that they suggest that the greatest gains to both taxes and information came from those who initially had a positive outlook on government. Additionally, they mirror the results above in that there also appears to be a ceiling to the effect of taxes on incumbent sanctioning among the initially satisfied.

Panel A: Sanctioning (Postcard), Satisfied				
	Windfall (C1)	Tax (C1)	Diff (T1-C1)	
Low Info (C2)	.63	.77	.15***	
n/s.e.	(206)	(204)	(.05)	
High Info (T2)	.77	.76	01	
n/s.e.	(219)	(226)	(.04)	
Diff (T2-C2)	.14***	01	15**	
s.e.	(.05)	(.04)	(.07)	
Panel B: Sanctioning (Postcard), Dissatisfied				
	Windfall (C1)	Tax (C1)	Diff (T1-C1)	
Low Info (C2)	.77	.75	02	
n/s.e.	(237)	(234)	(.04)	
High Info (T2)	.78	.73	06	
n/s.e.	(221)	(215)	(.04)	
Diff (T2-C2)	.01	02	04	

Table reports sample means and treatment effects over sample size or Neyman standard errors in parentheses, where *p<.10, **p<.05, and ***p<.01. The intersection of the 'Diff' column and row in the bottom right cell of each panel is the difference-in-difference (interaction) effect of the treatments. Satisfied is coded as 0 for all those who said in the pre-treatment survey module that they were satisfied "with the way the district government in Blora is doing its job overall" and 1 for those who were dissatisfied. The net sanctioning effect of the postcard campaign (the outcome) is coded 1 for those who returned the postcard and rewarded incumbent, and 0 for those who abstained from returning postcard.

(.04)

(.06)

(.04)

s.e.

Table J.1: How satisfaction conditions the impact of taxes and information on incumbent sanctioning.



Figure J.1: How satisfaction conditions the impact of taxes and information on incumbent sanctioning. Figures shows the effect of taxes and information on incumbent sanctioning in the postcard campaign for the initially satisfied (Panel A) and initially dissatisfied (Panel B). Satisfaction is the proportion who said in the pre-treatment survey module that they were satisfied "with the way the district government in Blora is doing its job overall." Significance is denoted by *p<.10, ** p<.05, and *** p<.01 based on Neyman standard errors.

K Validity check: Spillover

Treatment effects are underestimated when there is spillover between the treatment and control groups. In designing the experiment, I took precautions to minimize the likelihood of spillover but also to measure whether it occurred. This was important since a *dusun*, as a sub-village unit, is a small community. There is perhaps only minor cause for concern about spillover for the tax treatment since it is based on a behavioral exercise that would be hard to replicate (although the information could spread). Similarly, the information in the information treatment is rather complicated and would be hard to convey in detail. Canvassers asked respondents not to discuss the campaign with their neighbors until after the program was over in their village. Teams also typically conducted all visits in a dusun in less than two days to minimize the time period during which spillover could occur. Piloting revealed some anecdotal evidence that information about the campaign spread, but this was typically basic information contained in the shared sections of the campaign rather than information specific to any particular treatment.

To assess the extent to which spillover impacts the estimation of treatment effects, I collected additional data on the postcard campaign. In each village, five extra postcards were left with the dusun head. If another community member approached a sampled participant to inquire about the campaign, the sampled participant was asked to refer that person to request a postcard from the dusun head. Sampled participants were asked not to advertise that the dusun head had extra postcards. The dusun head was also instructed not to hand out postcards unless a community member specifically requested one. The assumption is that the extent of spillover of information about the campaign is positively correlated with the number of additional postcards requested from the dusun head.

Figure K.1 shows the number of postcards requested of the dusun head in the 93 villages. The modal outcome is zero additional postcards requested (in 44 percent of the villages). In 15 percent of the villages, however, all five additional postcards were claimed. (There is missing data for two villages where we were unable to collect this data.) I next check whether the tax treatment effect for the main measure of each political action outcome varies depending on this measure of spillover with results presented in Table K.1. Panel A interacts the tax treatment with the continuous measure of spillover (the number of postcards of five claimed from the dusun head). Panel B interacts the tax treatment with a binary measure of spillover (equals 1 if greater than the village-level mean of 2 postcards requested). Panel C is a restricted analysis where I only estimate the treatment effect in villages in which there was no evidence of spillover. The results all provide little indication that spillover affected the main results.



Figure K.1: Spillover. The figure shows the number of postcards (max of 5) picked up from the dusun head in the 93 villages. Zero postcards suggests little probable spillover while five postcards suggests that spillover was more likely.

			~ · · · · ·		
	Willing to	Participation	Sanction Incumbent		
	Monitor Budget	Postcard Campaign	Postcard Campaign		
Panel A: Spillover (Continuous Measure)					
Tax treatment	.05**	.01	.02		
	(.03)	(.03)	(.03)		
Spillover	.01	.01	.01		
	(.01)	(.01)	(.01)		
Treatment*spillover	.00	01	01		
	(.01)	(.01)	(.01)		
Panel B: Spillover (E	Binary measure)				
Tax treatment	.05**	.01	.02		
	(.02)	(.02)	(.02)		
Spillover	.05	.02	.00		
	(.04)	(.04)	(.05)		
Treatment*spillover	.00	05	03		
	(.05)	(.05)	(.06)		
Panel C: Spillover (Only no spillover villages)					
Tax treatment	.06*	-0.01	0.01		
	(.03)	(.03)	(.03)		

Notes: Table reports validity checks for main results, with significance levels denoted by *p<.10, **p<.05, and ***p<.01. All question wordings are provided in the Table 2 in the main text, where Column 1 is the main measure of monitoring, Column 2 the main measure of participation, and Column 3 the main measure of incumbent sanctioning. Panel A interacts the tax treatment with the continuous measure of spillover (the number of postcards of five claimed from the dusun head). Panel B interacts the tax treatment with a binary measure of spillover (equals 1 if greater than the village-level of mean of 2 postcards requested). Panel C is a restricted analysis where the treatment effect is estimated only in villages in which there was no evidence of spillover (no additional postcards were picked up from the dusun head)

Table K.1: Validity check of the main results: Spillover

L Did the tax payment prime real tax experience?

The results discussed in Section 6 in the main text suggest that participants responded not to the tax payment in the treatment but rather to the shift in the perceived share of taxes in total revenue. There are, however, difficulties associated with measuring the pain of an out-of-pocket loss using survey measures of tolerance for risky monetary gambles. To dig deeper into how the tax treatment worked—and specifically to look for additional evidence that participants reacted to the tax payment—I exploit the fact that the tax payment could have worked in two ways. First, it could have primed previous real-world experience paying taxes. If this were the case, we would expect to see that the effect of the tax treatment on political action outcomes would be bigger for those with more previous experience with taxation or bigger actual tax burdens. Second, it could have effectively simulated a tax payment *regardless* of previous tax experience.

I explore the former by assessing whether the effect of the tax treatment on three of the main outcomes of interest varied depending on previous experience with taxation. Table L.1 presents the effect of the tax treatment on three of the main outcomes of interest, conditional on four different measures of real world tax experience. The measures include whether: (1) the household had paid at least one tax in the previous 12 months; (2) the participant had personally ever paid a tax; (3) annual household taxes in the previous 12 months were high (greater than the mean); and (4) the household was poor (implying the 4,000 rupiah tax from the 14,000 rupiah income would matter more the participant). There is no evidence that any of these factors conditioned the effect of the tax treatment on monitoring, participation, or sanctioning. These results provide additional evidence that the tax payment did not operate by priming previous tax experience.

	Willing to	Participation	Sanction Incumbent	
	Monitor Budget	Postcard Campaign	Postcard Campaign	
Panel A: Household paid a tax ^a				
Tax treatment	05	03	09	
	(.08)	(.08)	(.09)	
Paid taxes	04	.01	04	
	(.05)	(.06)	(.06)	
Treatment*paid taxes	.10	.03	.11	
	(.08)	(.08)	(.09)	
Panel B: Paid taxes persons	\mathbf{ally}^b			
Tax treatment	.02	02	.00	
	(.03)	(.03)	(.03)	
Participant paid	03	01	03	
	(.03)	(.03)	(.03)	
Treatment*participant paid	.05	.03	.02	
	(.04)	(.04)	(.04)	
Panel C: Annual taxes high	c			
Tax treatment	.04	.00	.02	
	(.03)	(.02)	(.03)	
Annual tax high	.03	04	04	
	(.03)	(.03)	(.03)	
Treatment*annual tax high	.03	02	01	
	(.04)	(.04)	(.04)	
Panel D: \mathbf{Poor}^d				
Tax treatment	.08***	01	.00	
	(.02)	(.03)	(.03)	
Poor	02	.06**	.05	
	(.03)	(.03)	(.03)	
Treatment*Poor	05	.01	.04	
	(.04)	(.04)	(.04)	

Table reports robustness checks for main results presented in Table 3 in the main paper, with significance levels denoted by p<.10, p<.05, and p<.01. All question wordings for main outcome measures are provided in the main text.

^a Household paid at least one tax in the previous 12 months.

^bYou mentioned that you pay taxes. Do you personally pay taxes or is another member of your household usually the one to pay? (Personally=1) ^cAnnual household taxes are greater than the mean=1.

 ^{d}I would like you to think of your village in terms of three levels of poverty/wealth. Imagine that each level has about the same number of households in it. In your opinion, relative to other households in your village, which level is your household on? (Lowest level=1)

Table L.1: Did the tax payment prime real tax experience?