

Anti-corruption Campaigns and Popular Support for Incumbent Government: A Survey Experiment in Nigeria *

CHIEDO NWANKWOR[†]
Johns Hopkins University
YAOYAO DAI[‡]
University of North Carolina Charlotte

ABSTRACT

Do anti-corruption campaigns increase popular support for incumbent governments? Extending existing theoretical accounts of government performance, we argue that support depends in a conditional way on the perceived motivation and effectiveness of the anti-corruption campaign. We conduct a survey experiment in Nigeria to test our theory. As predicted, effective anti-corruption campaigns increase support for the incumbent government, but not if they are seen as a strategic move to purge political rivals. Our paper contributes to our understanding on anti-corruption campaigns and has important implications for research on government support more broadly.

*Note: Both authors contributed equally and names are listed in reverse alphabetical order. The data, codebook, and codes necessary to replicate the results and figures in this analysis will be made publicly available on the dataverse on publication. The online survey experiment described in this paper received IRB approval.

[†]Lecturer and Research Associate, African Studies Program, The Paul H. Nitze School of Advanced International Studies (SAIS), Johns Hopkins University (cnwankw3@jhu.edu).

[‡]Assistant Professor, Department of Political Science and Public Administration, University of North Carolina Charlotte (yaoyao.dai@uncc.edu).

1 Introduction

Mohammad Buhari became president of Nigeria in 2015 after defeating the incumbent Jonathan Goodluck of the dominant and long-ruling People’s Democratic Party. President Buhari campaigned on the promise to fight corruption, leveraging the zero-tolerance image he had created during his War Against Indiscipline and Corruption campaign as a military dictator between 1983-85. Once in office, he immediately launched an anti-corruption campaign. Within the first three years, the Economic and Financial Crimes Commission (EFCC), the main anti-corruption agency in Nigeria, recorded 603 convictions, among whom many were high-ranking government and military officers, such as Chief Justice of Nigerian Court Walter Onnoghen. In July 2020, the acting head of the EFCC, Ibrahim Magu, was arrested for corruption charges.

Buhari’s anti-corruption war is one of many anti-corruption campaigns in Nigeria and one of many around the world. Anti-corruption campaigns, in which leading political figures espouse harsh campaign-style rhetoric against corruption and in which there are exhaustive reports on anti-corruption efforts, and numerous officials are arrested, are common around the world (Wedeman, 2005). However, the research on non-institutional campaign-style anti-corruption policy has focused mainly on authoritarian regimes, especially China (Wedeman, 2005; Wang and Dickson, 2018; Wang, 2019). Scholars have investigated the motivation or function behind anti-corruption campaigns in China. Some scholars argue that anti-corruption campaigns are introduced to keep corruption from reaching levels that might endanger economic performance (Manion, 2009; Wedeman, 2005) and build popular support by signaling that the government is responsive to citizen concerns (Gillespie and Okruhlik, 1991). Others claim that these campaigns are best understood as an efficient way to eliminate political rivals and consolidate their hold on power (Zhu and Zhang, 2017; Jiang and Xu, 2015). Very recently, scholars have begun to examine the consequences of anti-corruption campaigns on bureaucratic performance (Wang, 2019; Kim and Ferrali, 2019).

We know little about the mechanisms and consequences of anti-corruption campaigns outside of China, especially in democratic settings. In this article, we investigate whether and how anti-corruption campaigns increase popular support for incumbent governments. Politicians fre-

quently claim they are launching anti-corruption campaigns to respond to people's concerns on corruption and boost popular support. For example, in launching his anti-corruption campaign ahead of the 2015 presidential elections in Belarus, President Alexander Lukashenko said that his government would become unacceptable to the people unless corruption was significantly curbed (Naviny.by, 2014). However, do anti-corruption campaigns actually increase popular support for the governments, and if so, how? Empirical evidence on this issue is largely mixed. On the one hand, Zhang and Lavena (2015) report that the anti-corruption campaign in South Korea during the 1970s proved popular, with 79.4% of respondents in a 1979 survey believing it had reduced corruption levels. Li (2001) finds large support and demand for anti-corruption campaigns in rural China in a 1997 survey. On the other hand, Holmes (1993) argues that Gorbachev's anti-corruption campaign in the 1980s lowered citizen confidence in the government and accelerated the collapse of the Soviet Union. Similarly, Wang and Dickson (2018) find that citizens' support for the Chinese central government is negatively correlated with the number of anti-corruption cases in their local province. Anecdotal evidence suggests that support for authoritarian governments may depend on the perceived motivation for the anti-corruption campaigns. For example, Morris and Klesner (2010) find that anti-corruption campaigns in Mexico had no impact on public support for the government as they were not considered a credible attempt to lower corruption. Along the same lines, Manion (2009) notes that citizens in Hong Kong were initially skeptical about the underlying motivation and credibility of the anti-corruption campaign that occurred during the 1970s.

Extending existing theoretical accounts of government performance, we argue that support depends in a conditional way on the perceived motivation and effectiveness of an anti-corruption campaign. As the existing literature suggests, politicians are motivated to implement an anti-corruption campaign either to purge their political rivals or because they wish to reduce levels of corruption and appear responsive to citizen preferences. The motivation behind an anti-corruption campaign matters because it speaks to the likelihood that any reduction in corruption will persist into the future. Popular support for the government will be greatest when the government is perceived to be both motivated to lower corruption and effective at doing so. It follows that anti-

corruption campaigns that are perceived to be effective at controlling corruption should always increase popular support for authoritarian governments, but less so if the campaign is perceived to be a vehicle for eliminating rivals.

Our theory emphasizes that when citizens evaluate government performance, they take into account not only the outcomes produced by government policies but also the government's motivation in implementing those policies. Empirical studies that examine the determinants of government support often focus on economic performance (Lewis-Beck and Stegmaier, 2000; van der Brug, van der Eijk and Franklin, 2007; Nadeau, Lewis-Beck and Éric Bélanger, 2013). To a large extent, these studies implicitly assume that economic outcomes are all that matter, not how or why those outcomes are produced.

We conduct a face-to-face survey experiment in Nigeria to test this theory. In line with our theoretical expectations, the level of popular support for the government depends on both citizen perceptions of the motivation and effectiveness of the anti-corruption campaign. Popular support for the government increases when the anti-corruption campaign is perceived as effective at reducing corruption. As predicted, this positive effect declines and, indeed, disappears if citizens perceive that the campaign is primarily motivated by a desire to eliminate political rivals rather than reduce corruption. Support for the government *decreases* when citizens perceive the campaign to be a vehicle for eliminating political rivals.

2 Theory

Whether anti-corruption campaigns increase popular support for a government depends jointly on whether citizens think the campaign is effective at reducing corruption *and* on the reasons why they think the government implemented the campaign.

2.1 Effectiveness

In a broad sense, the existing literature argues that incumbent government support is tied to government performance — incumbent support is expected to be high when the government performs well. In the retrospective voting literature, for example, the support for the incumbent government is often tied to economic outcomes, which are, at least partially, attributed to the incumbent's performance in office (Lewis-Beck and Stegmaier, 2000). While most studies of popular government support have focused on rich democracies, there is growing evidence that performance also matters for government support in less developed and less democratic settings. Lewis-Beck, Tang and Martini (2014), for example, evaluate the vote-popularity function in the China context and find that the popularity of the Chinese government also depends on its economic and political outcomes. Wright and Stein (2010) also find that economic outcomes influence individual-level support for leaders in nineteen non-democracies. Rosenfeld (2018) finds that economic growth and perceptions of economic performance play an important role in how individuals evaluate regional governments in Russia.

Although research on incumbent government support has typically focused on economic outcomes, support for governments should depend on their performance in any policy area that citizens care about. One such area is corruption. Corruption is a worldwide concern (Transparency International, 2017; Anderson and Tverdova, 2003). For example, a 2014 survey by the Pew Research Center in 34 countries across the Middle East, Asia, Latin America, Africa, and Eastern Europe finds that corruption was considered the second largest problem facing people, after crime. On average, 76% of people claimed that corruption was a 'very big problem' (Fisman and Golden, 2017, 147). A more recent survey in China finds that corrupt officials are viewed as the biggest challenge to the country, more problematic than even pollution and economic inequality (Wike and Stokes, 2016). All of this suggests that anti-corruption campaigns that are effective at reducing corruption should increase popular support for the government.

Support for incumbent governments depends on how citizens *perceive* government performance. There are debates in the existing literature as to how accurately citizen perceptions of gov-

ernment performance align with actual performance. Some economic voting scholars, for example, argue that citizen perceptions of the economy are distorted by things like partisan bias (Evans and Andersen, 2006; Anderson, 2007). Other scholars, though, argue that citizen perceptions are closely tied to economic reality, and that objective conditions drive voter behavior (Lewis-Beck, Nadeau and Elias, 2008; Nadeau, Lewis-Beck and Éric Bélanger, 2013; Lewis-Beck, Martini and Kiewiet, 2013).

When it comes to corruption, citizens do not always have much direct experience with corruption (Zhu, Lu and Shi, 2013), and studies find that citizen (and expert) perceptions rarely reflect actual levels of corruption (Olken, 2009; Treisman, 2007). From a theoretical perspective, the key point here is that we would expect support for the incumbent government to increase if citizens *think* anti-corruption campaigns are effective at reducing corruption irrespective of whether corruption levels actually decline.

2.2 Motivation

Research on government support typically assumes that citizens only care about the effectiveness of government policies. Citizens are expected to look favorably on the government when, say, unemployment is low, inflation is low, or economic growth is high (Powell and Whitten, 1993). They are not thought to care about how or why these outcomes are produced. In what follows, though, we argue that citizens care not only about the effectiveness of government policies but also about the motivation behind those policies.

One area in which the motivation of the government is sometimes raised is political business cycles. In a political business cycle, the government actively manipulates the economy to engineer a short-term economic high to coincide with an election (Nordhaus, 1975; MacRae, 1977). Traditionally, citizens are assumed to assess governments based on the economic outcomes they produce at election time, and are not expected to take account of either why those outcomes are produced or the future consequences of the government's economic policies. These assumptions have been challenged by rational expectations scholars who argue that citizens understand the

motivation behind the government's expansionary pre-election economic policies as well as the expected post-election costs associated with these policies (Persson and Tabellini, 1990; Rogoff and Sibert, 1988; Cukierman and Meltzer, 1986). In effect, citizens should look unfavorably on governments they think are trying to manipulate the economy solely for their own political gain.

As with political business cycles, we might expect citizens to care about why anti-corruption campaigns are introduced when evaluating the government. The existing literature suggests that governments introduce anti-corruption campaigns either because they want to reduce corruption and appear responsive to citizen concerns or because they want to purge political rivals and consolidate their hold on power. Some scholars, for example, argue that anti-corruption campaigns are introduced to keep corruption levels below the point at which they might endanger economic performance and encourage mass rebellion (Wedeman, 2005; Manion, 2009). However, others argue that they are introduced as a relatively uncontroversial way to efficiently purge political rivals (Zhu and Zhang, 2017; Jiang and Xu, 2015). Eliminating rivals on the grounds that they are corrupt is likely to generate significantly less public opposition than simply removing them for political or ideological reasons. Anti-corruption campaigns that are introduced to eliminate political rivals are an abuse of power for private gain and, hence, a form of corruption in itself. As a result, citizens are much more likely to look favorably on a government if they think it has introduced an anti-corruption campaign to reduce corruption than if they think it is simply using the campaign to strengthen its grip on power.

2.3 The Interaction between Effectiveness and Motivation

Perceptions about the effectiveness of anti-corruption campaigns should interact with perceptions about the motivation behind these campaigns to determine popular support for the government. This is because the motivation for introducing an anti-corruption campaign speaks to the likelihood that any observed reduction in corruption will persist into the future. Corruption may well decline in the short term irrespective of why the government introduces an anti-corruption campaign. Officials who are uncertain as to exactly why an anti-corruption campaign has been introduced are

likely to respond initially by engaging in fewer corruption (Wedeman, 2005). If these officials realize over time that the campaign is driven by a desire to eliminate political rivals rather than reduce corruption, perhaps because they see who is being targeted, then they are likely to return to their previously corrupt ways. Citizens who perceive that the government is primarily motivated by a desire to eliminate rivals should understand this dynamic and expect any immediate reduction in corruption to be relatively short-lived. Indeed, anti-corruption campaigns that are targeted at political rivals may even lead to higher levels of corruption in the future as officials (and citizens) learn that the government is uninterested in cracking down on actual corruption.

The specific conditionality underlying our theory is illustrated in Figure 1. Popular support for the incumbent government will be high when citizens perceive that the government is motivated to reduce corruption *and* is effective at doing so (bottom left quadrant). This is because citizens in this scenario value the reduction in corruption and expect it to persist into the future. In contrast, popular support for the government will be low when citizens perceive that the government is motivated by a desire to target political rivals *and* is ineffective at lowering corruption (top right quadrant). This is because citizens in this scenario dislike both the government's abuse of power in using the anti-corruption campaign to eliminate political rivals and the fact that corruption has not declined. Popular support for the government will be moderately high when citizens perceive that the government is effective at reducing corruption but motivated by a desire to eliminate political rivals (bottom right quadrant). This is because citizens in this scenario value the reduction in corruption but don't expect the reduction in corruption to persist into the future. Popular support for the government will also be moderately high when citizens perceive that the government is motivated to reduce corruption but is ineffective at doing so (top left quadrant). In this scenario, the citizens value the fact that the government is at least trying to lower corruption but would prefer that it was more effective at doing so.

Two conditional hypotheses can be drawn from this interactive theoretical framework (Berry, Golder and Milton, 2012). According to the *Effectiveness Hypothesis*, individuals will evaluate the government more favorably if they perceive that the anti-corruption campaign is effective at reduc-

ing corruption. This positive effect should be smaller, and may disappear entirely, if individuals believe that the anti-corruption campaign is primarily targeted at eliminating political rivals as opposed to reducing corruption. This is because any reduction in corruption levels in this scenario will be considered only a side-effect of the anti-corruption campaign and unlikely to persist into the future. According to the *Rivals Hypothesis*, individuals will always evaluate the government less favorably if they perceive that the anti-corruption campaign is primarily targeted at eliminating political rivals. The inherent symmetry of interactions means that this negative effect will be larger if individuals believe that the anti-corruption campaign has been effective at reducing corruption. This is because the government's reason for introducing the anti-corruption campaign matters more when the campaign appears to be effective at reducing corruption than when this is not the case.

Effectiveness Hypothesis: Individuals will evaluate the government more favorably if they believe the anti-corruption campaign is effective at reducing corruption. This positive effect will be smaller, and may even disappear, if they believe the campaign is primarily targeted at eliminating political rivals as opposed to reducing corruption.

Rivals Hypothesis: Individuals will evaluate the government less favorably if they believe the anti-corruption campaign is primarily targeted at eliminating political rivals as opposed to reducing corruption. This negative effect will be larger if they believe the campaign is effective at reducing corruption.

3 Experimental Design and Procedure

To test our theory, we conducted a face-to-face survey experiment relate to the recent anti-corruption campaign in Nigeria in June 2018.

3.1 Experimental Design

To test the conditional theory, we adopt a fully crossed 2 by 2 factorial design as illustrated in Figure 1. Respondents were provided information about the motivation and effectiveness of the anti-corruption campaign as treatment to change their perceptions about the campaign. Respondents were either informed that the recent anti-corruption campaign in Nigeria has been effective in

reducing the level of corruption or informed that it has not been effective, and were also informed that the campaign has been targeting political rivals or has not been targeting political rivals. It is fully crossed meaning that a respondent receive one condition from each of the two factors, which gives us four possible treatment conditions:

1. *Effective & Rivals (ER)* Treatment: The anti-corruption campaign has been *effective* at reducing corruption and has been *targeted at political rivals*.
2. *Effective & Not Rivals (ENR)* Treatment: The anti-corruption campaign has been *effective* at reducing corruption and has *not been targeted* at political rivals.
3. *Not Effective & Rivals (NER)* Treatment: The anti-corruption campaign has *not been effective* at reducing corruption and has been *targeted* at political rivals.
4. *Not Effective & Not-Rivals (NENR)* Treatment: The anti-corruption campaign has *not been effective* at reducing corruption and has *not been targeted* at political rivals.

The goal of these treatments is to change respondent perceptions of the anti-corruption campaign. For perceptions to change, though, two things are necessary. First, respondents must have some uncertainty as to the effectiveness of, and motivation for, the anti-corruption campaign. If respondents have strong priors about the anti-corruption campaign, then the information treatments are likely to have little effect. At the time of our experiment, there was a mixed perception of Buhari's anti-corruption campaign among citizens, politicians, and domestic and international media outlets. Nigerians have witnessed several government anti-corruption campaigns since the birth of the Fourth Republic in 1999. Yet, corruption has remained pervasive in the country with increasing impunity, creating a high level of citizen distrust in government. Citizens often perceive government anti-corruption war as a hoax, characterized by showmanship and wielded as an instrument of opposition curtailment (Abosede, 2018; Ojoye, 2019). Therefore, most citizens have deep reservations about government motivation for anti-corruption campaign. While the government claims the anti-corruption campaign to be successful and nonpolitical, some prominent

Figure 1: Anti-Corruption Campaigns and Popular Support for Authoritarian Governments

		<i>Motivation: Target Political Rivals?</i>	
		No	Yes
<i>Effectiveness: Is Corruption Lower?</i>	No	NENR	NER
	Yes	ENR	ER

Note: *Effectiveness* captures whether the government’s anti-corruption campaign is perceived as effective in reducing corruption. *Motivation* captures whether the government’s anti-corruption campaign is perceived as primarily targeting political rivals as opposed to reducing corruption. Cell entries denote the four treatment conditions.

politicians and journalists criticise Buhari’s anti-corruption campaign as selective and ought to fail (OKON and Edemekong, 2018; Financial Times, 2020). While citizens have access to independent media, there is also a sense that the media itself is susceptible to corruption (Adeyemi, 2013). Given the information environment and the low level of trust towards the government and media, most citizens are likely to be uncertain about the motivation and effectiveness of the anti-corruption campaign.

Second, respondents must find the information treatments credible (Acharya, Blackwell and Sen, 2018). To maximize the credibility of the treatments, respondents are told that the information is based on research from University of Lagos and Cambridge University. University research is generally considered as apolitical. We use a highly respected domestic university and foreign university to maximize the credibility and minimize the bias perceived by the respondents. While a foreign university might be free of domestic partisan politics, it might be perceived as having less domestic knowledge than a domestic institution and might be associated with colonialist bias.

On the other hand, a domestic University might be associated with nationalist and/or partisan bias. Using a highly respected domestic university and a foreign university as the source of information have the benefit of mitigating the bias associated with a solo source.

To be clear, the goal of providing an information source for the treatments in our experiment is not to evaluate ‘source effects’ (the source is constant across all treatments), but rather to maximize the likelihood that respondents will find the information credible and change their perceptions of the anti-corruption campaign. It is important to note that to the extent that respondents fail to find the information treatments credible or have strong prior beliefs about the anti-corruption campaign, we will not find the effects predicted by our theory. As an example of one of our information treatments, here is the exact wording for the *Effective & Not Rivals (ENR)* treatment:¹

Researchers at the *University of Lagos* in Nigeria and *Cambridge University* in the U.K. have spent the last three years studying the anti-corruption campaign in Nigeria. They have collected and analyzed data from numerous sources, including the promotion track and network of officials, the experience and opinion of both experts and ordinary citizens, as well as economic and trade data. This research shows that since 2015 the anti-corruption campaign in Nigeria ***has been effective at reducing the level of corruption***, and it ***has not been targeted at political rivals***.

Since our theory addresses how perceptions of anti-corruption campaigns *change* the level of popular government support, our dependent variable, *Change in Support*, captures the change in a respondent’s level of support for the government since the start of the anti-corruption campaign. It is measured on a 1 – 7 scale, with 1 meaning that support for the government has greatly decreased and 7 meaning that it has greatly increased. The precise survey question is:

How has your support for the government changed since 2015?

Respondents are asked this question immediately after receiving one of the information treatments.

Experiments with a factorial design are intended to test conditional claims. As such, the results from these experiments are appropriately evaluated with an interaction model (Brambor,

¹The exact wording of the treatments only differs in the last sentence which indicates whether the anti-corruption campaign has been effective at reducing corruption or not and whether it has been targeted at political rivals or not.

Clark and Golder, 2006; Berry, Golder and Milton, 2012). We use the following interaction specification to test the *Effectiveness Hypothesis* and the *Rivals Hypothesis*,

$$\text{Change in Support} = \beta_0 + \beta_1 \text{Effective} + \beta_2 \text{Rivals} + \beta_3 \text{Effective} \times \text{Rivals} + \epsilon. \quad (1)$$

Effective is a dichotomous variable that equals 1 if the respondent receives information that the anti-corruption campaign is effective at reducing corruption and 0 otherwise. *Rivals* is a dichotomous variable that equals 1 if the respondent receives information that the anti-corruption campaign is targeted at political rivals and 0 otherwise. The interaction term, *Effective* \times *Rivals* is included to test the conditionality of our hypotheses.

The marginal effect of *Effective* is $\beta_1 + \beta_3 \text{Rivals}$. According to the *Effectiveness Hypothesis*, β_1 should be positive as support for the government is expected to increase when the respondent believes the campaign has been effective at reducing corruption *and* is not targeted at eliminating political rivals. This positive effect is expected to be smaller and may even disappear if the respondent believes the campaign is targeted at political rivals. Thus, β_3 should be negative and $\beta_1 + \beta_3$ should be greater than or equal to 0. The marginal effect of *Rivals* is $\beta_2 + \beta_3 \text{Effective}$. According to the *Rivals Hypothesis*, β_2 should be negative as support for the government is expected to decrease when the respondent believes the campaign is targeted at eliminating rivals *and* is not effective at reducing corruption. This negative effect is expected to be larger if the respondent believes the campaign is effective at reducing corruption. Thus, both β_3 and $\beta_2 + \beta_3$ should be negative.

3.2 Recruitment

The survey experiment was conducted in the Federal Capital Territory (FCT), Abuja from June 7 – June 20, 2018. Abuja is Nigeria’s administrative and political center, the fastest growing city in Africa and one of the fastest growing in the world with an estimated population of six million in 2016. It is a metropolitan and represented a good mix of the various socio-economic and cultural identities in Nigeria. The city was developed into Phases for ease of coordination during the development stages. There are three Phases all split into districts. Phase I and 2 are divided into ten and

sixteen districts and Phase 3 into eleven districts with an additional five suburban districts. The survey experiment was conducted in Phases 1 and 2, which were more central and metropolitan. The enumerators recruited every 10th person they encounter and randomly assign a questionnaire with one of the four treatment information to the respondent using a random number generator. 1461 recruitment efforts were made, and 1149 respondents participated and finished the questionnaire. The average age of the respondents are 33. 44% of the respondents are female. The average level of education is between high school and university level. More details on the demographics of the respondents and analysis of non-responses and demographic balance are included in Appendix.

4 Results

As an initial test to our hypothesis, we first report the average *Change in Support* for the government in each of the four treatment groups in Figure 2. The Difference in Means column indicates how the *Change in Support* differ cross columns when the motivation of the anti-corruption campaign changes from not targeting political rivals to targeting political rivals. The Difference in Means row indicates how the *Change in Support* differ cross rows when the effectiveness of the anti-corruption campaign changes from not effective to effective in reducing corruption.

Figure 2 provides strong initial support to both our hypotheses. Exactly as we expected, on average the respondents in the treatment group *ENR* report the highest increase in support for the government, and the respondents in the treatment group *NER* report the largest decrease in support for the government. As the *Effectiveness Hypothesis* predicts, perceiving the anti-corruption campaign as been effective in reducing corruption always increase popular support for the regime which is indicated by the positive and significant values of difference in means in the bottom row of 2. In addition, as expected, this positive effect is smaller when the anti-corruption campaign is viewed as targeting political rivals as oppose to not targeting rivals, which is indicated by the small value in the second cell of the *Difference in Means* row. Similarly, as the *Motivation Hypothesis* predicts, perceiving the anti-corruption campaign as being motivated by the need to eliminate

rivals always decrease popular support for the regime, which is indicated by the negative and significant values in the *Difference in Means* column. This negative effect of targeting rivals is in fact larger, as expected, when the anti-corruption campaign is perceived as effective in reducing corruption, which is indicated by the larger negative value in the second cell of the *Difference in Means* column.

Figure 2: An Initial Test of the Hypotheses

		Motivation: Target Political Rivals?		Difference in Means (Rivals – Non-Rivals)
		No	Yes	
Effectiveness: Is Corruption Lower?	No	–0.45 (1.97)	–1.35 (1.80)	–0.90***
	Yes	0.72 (2.01)	–0.59 (2.06)	–1.32***
Difference in Means (Effective – Not Effective)		1.17***	0.76***	

Note: The shaded cells report the mean level of *Change in Support* in the four treatment groups; standard deviations are included in parentheses. *Change in Support* is measured on a –3 to 3 scale, with –3 meaning that support for the government has greatly decreased, 0 meaning that there is no change in support, and 3 meaning that support for the government has greatly increased. The *Difference in Means* row indicates how *Change in Support* differs depending on whether the anti-corruption campaign is perceived as effective or not at reducing corruption. The *Difference in Means* column indicates how *Change in Support* differs depending on whether the anti-corruption campaign is perceived to be targeted at political rivals or not; *t*-statistics from difference-in-means tests are shown in parentheses. Welch's *t*-test, which allows for unequal variances, was used for the difference-in-means tests. **p* < 0.05; ***p* < 0.01; ****p* < 0.005 (two-tailed).

Although the Difference in Means tests provide strong initial support to our theory, they do not provide direct test to the interaction effect, nor do they control for the unbalanced demographic variables. Therefore, we also estimate an ordered-logit model. Results from four slightly different

model specification are reported in Table 1. The first two models are estimated on the full sample, while the last two models are estimated on only those respondents who answered the validation question right. Variable *Effective* indicates the condition of the effectiveness factor that a respondent received, with a value 0 indicating that the respondent was informed that the anti-corruption campaign has been effective in reducing corruption and 0 otherwise. Model 1 and Model 3 only include the two variables indicating the treatment conditions and their interaction. Model 2 and Model 3 include the unbalanced demographic variables, Age Income and Occupation, mentioned earlier. The ‘Other’ category in the nominal Variable Occupation is excluded as the baseline.

Results in Table 1 again provide strong support to both the *Effectiveness Hypothesis* and the *Rivals Hypothesis*. As expected, the coefficients on *Effective* are positive and statistically significant in all four model specifications, and the coefficients on *Rivals* are negative and statistically significant in all four models. However, there is only weak support for the interaction effect between *Effective* and *Rivals*. Although the coefficients on the interaction term are always negative in all four models as predicted, the effect is statistically insignificant.

These results are substantively meaningful. An anti-corruption campaign that is perceived as effective in reducing corruption and is not target at political rivals would increase the probability that a respondent would report having increased support for the government by 0.21 [0.14, 0.28] compared to an anti-corruption campaign that is not effective and not targeting political rivals; 95% confidence interval is included in the square bracket. An anti-corruption campaign that is perceived as effective in reducing corruption campaign would increase the probability that a respondent will report having increased support for the government by 0.09 [0.05, 0.14] when the campaign is viewed as targeting political rivals. Similarly, changing the perception of the motivation of an anti-corruption campaign from not targeting political rivals to targeting political rivals decrease the probability that a respondent will report an increase in support for the government by 0.23 [0.16, 0.31] when the campaign is perceived as effective in reducing corruption. This decrease in probability of reporting increase in support change to 0.11 [0.07, 0.17] when the campaign is perceived as not effective in reducing corruption.

Table 1: Anti-corruption Campaigns and Popular Support for the Government

	<i>Dependent variable:</i>			
	<i>Change in Support for the Government</i>			
	Full Sample		Passed Validation	
	Model 1	Model 2	Model 3	Model 4
Effect	1.024*** (0.154)	0.958*** (0.160)	1.115*** (0.162)	1.028*** (0.169)
Rival	−0.824*** (0.156)	−0.846*** (0.162)	−0.943*** (0.172)	−0.978*** (0.179)
Effect:Rival	−0.335 (0.218)	−0.259 (0.231)	−0.268 (0.235)	−0.181 (0.249)
Age		0.0002 (0.004)		−0.001 (0.005)
Income		−0.057 (0.068)		−0.100 (0.078)
Government Employee		−0.028 (0.172)		−0.021 (0.184)
Student		−0.427* (0.169)		−0.410* (0.185)
Military		0.464* (0.218)		0.573* (0.233)
Unemployed		0.017 (0.180)		0.056 (0.195)
Observations	1,084	1,041	950	913

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.005$ (two-tailed)

Note: The dependent variable, *Change in Support*, captures the change in the respondent's level of support for the government since 2015. It is measured on a −3 to 3 scale, with −3 meaning that support for the government has greatly decreased and 3 meaning that support for the government has greatly increased. Estimates are based on ordered logit models. The cutpoints from these models, which tests reveal are statistically different, are not shown. Standard errors are shown in parentheses. *Passed Validation* include only those respondents who passed the validation check, whereas *Full Sample* includes all respondents.

Our findings are robust to a number of additional tests with no change in their substantive interpretation. First, we replicate our analyses using the support for president Buhari as the dependent variable (see Table B1). Second, we check whether the treatment effects depend on respondents' prior support for president Buhari (see Table B2). Altogether, consistent with our previous results, these models suggest that popular support for the incumbent depends on the perceived effectiveness AND motivation of anti-corruption campaigns. Popular support for the incumbent increases when the anti-corruption campaign is perceived as effective at reducing corruption and declines when the anti-corruption campaign is perceived as motivated by political reasons.

5 Conclusion

Although campaign-style anti-corruption measures are common worldwide, especially among countries with high levels of corruption, most studies on anti-corruption campaigns have been focusing on China. To the extent that scholars have examined anti-corruption campaigns, they have focused on their causes – why do authoritarian leaders implement these campaigns? In this paper, we examine whether and how anti-corruption campaigns increase the popular support for the incumbent governments in general. We argue that much depends on the perceived effectiveness and motivation of the anti-corruption campaign. Anti-corruption campaigns that are considered effective at reducing corruption should increase support for authoritarian governments but less so, or not at all if the campaign is seen as a tool to eliminate political rivals. Politicians frequently claim that their campaigns are designed to increase popular support by responding to citizen concerns on corruption. There is little systematic evidence, though, as to whether and why anti-corruption campaigns increase popular support for incumbent governments.

Our survey experiment in Nigeria provides empirical evidence in support of the theory. Respondents care about both the effectiveness of the anti-corruption campaign in reducing corruption and the motivation behind the anti-corruption campaign. Respondents would increase their support for the government only if the anti-corruption campaign is perceived as effective at reducing

corruption and not motivated to purging rivals. Our finding suggests that given the seemingly partisan and controversial history of Buhari's anti-corruption campaign and the apparent solidification of citizens questions over the government's motivation for the anti-corruption campaign as reflected in traditional media reports and social media postings, Nigerians will disapprove of the government's campaign and will discount its effectiveness.

In addition to advancing our understanding of anti-corruption campaigns, our paper has broader implications for the study of government support more generally. Existing studies of incumbent support typically assume that citizens care only about the outcomes produced by government policies. In many situations, though, citizens are likely to also care about the motivation behind a government's policies. There are at least two reasons for this. First, citizens may care intrinsically about whether the government is implementing a particular policy to promote its own goals or those of society more generally. Second, the government's motivation can speak to the likelihood that any policy outcome, such as lower corruption or better economic performance, will persist into the future. While rational expectations scholars have suggested that government motivation should be important for citizens when evaluating economic outcomes in the context of political business cycles, empirical research has yet to take this into account. Our analysis is the first to empirically find that government effectiveness and motivation interact to determine incumbent government support.

Given the pervasiveness of anti-corruption campaigns' use as an electioneering tool and its use in the post-election period by the elected government as a legitimacy-building tool, it's important to understand whether and how the anti-corruption campaigns influence popular support for the government. Our study provides valuable information for political parties and governments as they seek legitimacy and citizens' approval. While beyond the scope of this research, our findings also highlight the importance of understanding how citizens form their perceptions of effectiveness and motivation behind government policies for future research.

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Appendix A: Sample Balance

In Table A1 we provide demographic information on the four treatment groups and the full sample. Although the treatment information were randomly assigned to respondents, it is still possible that respondents in some treatment conditions might be different demographically. To test the sample balance, we conduct and report difference-in-means tests between the treatment groups and treat the group *NENR* as the baseline. As shown in Table A1, the four treatment groups are balanced in terms of gender and education. Respondents in treatment group *NENR* and treatment group *ER* are slightly younger than the rest of the sample. Respondents in group *ENR* are relatively poorer than other groups. Group *ER* has less government employees than the rest of the sample. There are also some variation in the proportion of students in the four groups. Therefore, we control age, income and occupation in relevant analyses.

Table A1: Demographic Balance across Treatment Groups

	Group Means				
	<i>NENR</i>	<i>NER</i>	<i>ENR</i>	<i>ER</i>	Sample
Female	0.44 (0.50)	0.42 (0.50)	0.46 (0.50)	0.43 (0.50)	0.44 (0.50)
Age	32.91 (15.07)	35.37* (13.05)	34.78 (11.73)	31.05 (13.68)	33.45 (13.56)
Fulani Ethnicity	0.04 (0.19)	0.02 (0.12)	0.05 (0.22)	0.04 (0.20)	0.04 (0.19)
Education	4.33 (1.44)	4.42 (1.16)	4.53 (1.56)	4.50 (1.29)	4.44 (1.37)
Income	1.61 (0.92)	1.54 (0.82)	1.26*** (0.66)	1.53 (0.93)	1.49 (0.85)
Government Employee	0.17 (0.38)	0.16 (0.37)	0.13 (0.33)	0.10* (0.30)	0.14 (0.35)
Military	0.09 (0.28)	0.03*** (0.16)	0.08 (0.27)	0.14* (0.34)	0.08 (0.28)
N	267	301	279	301	1149

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.005$ (two-tailed)

Note: Table A1 indicates the means for different demographic variables across the treatment groups and the sample as a whole; standard deviations are shown in parentheses. *NER* refers to the *Not Effective and Rivals* treatment, *NENR* refers to the *Not Effective & Not Rivals* treatment, *ENR* refers to the *Effective & Not Rivals* treatment, and *ER* refers to the *Effective & Rivals* treatment. *NER* is treated as the baseline group for conducting difference-in-means tests. Welch's *t*-test, which allows for unequal variances, was used for the difference-in-means tests. All demographic information was gathered prior to the information treatments.

Appendix B: Robustness Check

Table B1: Anti-corruption Campaigns and Popular Support for President Buhari

	<i>Dependent variable:</i>			
	<i>Change in Support for President Buhari</i>			
	Full Sample		Passed Validation	
	Model 1	Model 2	Model 3	Model 4
Effect	1.104*** (0.154)	1.029*** (0.160)	1.223*** (0.162)	1.136*** (0.168)
Rival	−0.811*** (0.155)	−0.825*** (0.161)	−0.974*** (0.171)	−1.005*** (0.178)
Effect:Rival	−0.358 (0.219)	−0.358 (0.230)	−0.326 (0.235)	−0.305 (0.249)
Age		0.004 (0.004)		0.002 (0.005)
Income		−0.088 (0.069)		−0.102 (0.081)
Government Employee		0.008 (0.169)		0.004 (0.180)
Student		−0.089 (0.170)		−0.125 (0.188)
Military		0.553* (0.219)		0.579* (0.234)
Unemployed		0.152 (0.182)		0.197 (0.197)
Observations	1,083	1,040	950	913

Note: The dependent variable, *Change in Support*, captures the change in the respondent's level of support for president Buhari since 2015. Estimates are based on ordered logit models. The cutpoints from these models, which tests reveal are statistically different, are not shown. Standard errors are shown in parentheses. *Passed Validation* include only those respondents who passed the validation check, whereas *Full Sample* includes all respondents. *p<0.05; **p<0.01; ***p<0.005.

Table B2: Anti-corruption Campaigns and Popular Support for the Government

	<i>Dependent variable:</i>	
	<i>Change in Support for the Government</i>	
	Model 1	Model 2
Effect	0.939*** (0.160)	0.775*** (0.179)
Rival	−0.892*** (0.164)	−1.034*** (0.186)
Effect:Rival	−0.246 (0.232)	−0.215 (0.266)
Age	−0.001 (0.004)	−0.002 (0.004)
Income	−0.057 (0.069)	−0.064 (0.069)
Government Employee	0.024 (0.173)	0.012 (0.173)
Student	−0.383** (0.170)	−0.366** (0.170)
Military	0.374* (0.221)	0.335 (0.221)
Unemployed	0.016 (0.182)	0.021 (0.182)
Voted Buhari	0.379*** (0.136)	−0.347 (0.274)
Effect:Voted Buhari		0.869** (0.383)
Rival:Voted Buhari		0.723* (0.394)
Effect:Rival:Voted Buhari		−0.393 (0.532)
Observations	1,029	1,029

Note: Estimates are based on ordered logit models. Standard errors are shown in parentheses. *p<0.05; **p<0.01; ***p<0.005.