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Fear of the state in governance surveys? Empirical evidence from African countries¹

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Empirical evidence from African countries

Abstract

The need to collect data on governance-related issues has been growing since the 1990s. Demand gained momentum in 2015 with the adoption of SDG16 worldwide and Agenda 2063 in Africa. African countries played a key role in the adoption of SDG16 and are now leading the process of collecting harmonised household data on Governance, Peace and Security (GPS). Yet the possibility has recently been raised that sensitive survey data collected by government institutions are potentially biased due to self-censorship by respondents. This paper studies the potential bias in responses to what are seen as sensitive questions, here governance issues, in surveys conducted by public organisations. We compare Afrobarometer (AB) survey data, collected in eight African countries by self-professed independent institutions, with first-hand harmonised GPS survey data collected by National Statistics Offices (NSOs). We identify over 20 similarly worded questions on democracy, trust in institutions and perceived corruption. We first compare responses from AB survey respondents based on who they believe the survey sponsor to be. No systematic response bias is found between respondents who believe the government to be behind the AB survey and those who consider it to be conducted by an independent institution. Our estimations suggest that the observed residual differences are due to a selection bias on the observables, which is mitigated by propensity score matching procedures. The absence of a systematic self-censorship or attenuation bias is further evidenced by means of an experimental design, whereby responses from GPS surveys conducted by NSOs (the treatment) are compared with AB surveys sponsored by reportedly independent bodies. Our results provide evidence, at much higher levels of precision than other existing data sources, of the capacity and legitimacy of government-related organisations to collect data on governance as a matter of national interest and sovereignty.

Keywords: Survey Sponsor effect, Governance data, Official Statistics, SDG16, Africa.

JEL classification codes: D02, C81, C83, O10, O55.

1 INTRODUCTION

The soaring number of household surveys in developed and developing countries is out of all proportion to studies of their quality and underlying biases. Common survey errors are divided mainly into sampling errors and non-sampling errors (Groves, 2004; Statistics Canada, 2010). The former are usually easier to observe than the latter, as non-sampling errors are highly heterogeneous. One such non-sampling error is called the “*threat of disclosure*”, which corresponds to the risks and potential costs to respondents of honestly reporting their answers (Tourangeau & Yan, 2007). One interpretation of the “*threat of disclosure*” is interviewee reluctance to let interviewer and survey sponsor identify their personal opinion. However, very little of the existing literature examines a response bias ascribable to survey sponsor identity. Some experts have expressed their reluctance to let public organisations collect sensitive data, particularly in non-democratic countries where “N[ational] S[tatistics] O[ffice]s may suffer from being perceived as ‘agents of the state’” (UNDP, 2009). Donor mistrust of state intervention largely explains the rise of non-governmental organisations (NGOs) in the development field, especially with respect to governance issues (Brass et al., 2018). The implicit assumption that private actors are more effective in promoting and monitoring human rights, democracy or accountability prevails. This assumption stems mainly from the under-reporting of the negative or inconclusive results of NGO interventions (Banks et al., 2015; Brass, 2016; Brass et al., 2018). Even though the new development agenda and current experiences are gradually changing this perception, with some players claiming National Statistics Office (NSO) legitimacy to collect sensitive data (UNDP, 2018), prejudices remain strong.

The Sustainable Development Goals (SDGs) have established the centrality of governance, peace and security issues for developed and developing countries. Goal 16 of the post-2015 SDG is to “Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable and inclusive institutions at all levels” (UN, 2015). African countries played a key role in the adoption of SDG16 (Cling et al., 2016; Razafindrakoto & Roubaud, 2018). The African Union Agenda 2063’s Aspiration 3 (“An Africa of good governance, democracy, respect for human rights, justice and the rule of law”) and Aspiration 4 (“A peaceful and secure Africa”) place even more importance on governance, peace and security (GPS) issues on the African continent. Particularly exposed to armed conflict and political instability, African countries are especially concerned by GPS issues. Between the fall of the Soviet bloc and 2009, the African continent reported around half of all

armed conflict fatalities worldwide (HSRP, 2012). In Transparency International's ranking of 176 countries, three-quarters of Sub-Saharan African countries are below the median for their perceptions of corruption (TI, 2017). There is a vital need for related indicators to be able to offer more suitable country-specific responses. Yet fierce debate continues to rage over the measurement of governance. The literature has used very different indicators to bridge the gap, each with their own particular limitations (Arndt & Oman, 2006). Indicators might be based on objective measures such as existing laws and the political regime or on administrative data or expert opinions. There has also been substantial interest from academics and policymakers in survey-based measures of governance and peace and security. Seen as highly sensitive issues, it is feared that government-related organisations such as NSOs collect an erroneous picture of the people's assessment of governance. Recent studies support this sentiment by questioning the reliability of household data on governance issues in autocratic countries (García-Ponce & Pasquale, 2015; Robinson & Tannenbergh, 2018; respectively in Zimbabwe and China), despite limited estimated bias (Panel, 2019). Respondents are thought to hide their real feelings and relate more positive perceptions in order to avoid potential reprisals. This intuition holds even when NSOs are reportedly neutral and independent from the central authority. The purpose of this paper is to reduce the gap in knowledge of the impact of survey sponsor identity on responses to apparently sensitive questions, particularly with respect to governance. The paper tests a simple hypothesis (albeit with huge policy implications), which we have called "the attenuation bias" hypothesis. It can be formulated as follows: *do NSO governance surveys present a systematic bias towards a rosier picture and non-critical view compared with alternative non-government sources?*

To the best of our knowledge, directly comparable literature is growing but still remains limited. They all support a "fear-of-the-state bias" (Zimbalist, 2018), but they are plagued by methodological shortcomings. This paper is the first ever attempt to disentangle the role of survey sponsor by means of a comparative analysis of survey data collected by two different organisations: reportedly independent collectors, the Afrobarometer (AB) network, and government-related collectors, the NSOs. The AB data is provided by an experienced and, most importantly, self-styled independent body set up with local partners comprising mainly advisory groups, research institutes and universities. The network benefits from technical support from Michigan State University. The GPS data collected by the NSOs are add-on survey modules that are part of the Strategy for the Harmonization of Statistics in Africa (SHaSA) backed by the African Union Commission (AUC). Both datasets cover similar governance-related issues including perceptions of corruption, trust in public services and

institutions, and political preferences. The questionnaires are comparable across a large subset of issues. Although they differ in some respects, both datasets present sufficient similarities (sampling procedures, wording of questions and period of data collection, among others) to allow for an extensive comparison to be made to study potential response bias due to survey sponsor identity.

A systematic comparison of responses to more than twenty similarly worded questions finds no evidence in the Afrobarometer samples of any systematic response bias due to the perceived survey sponsor. The differences found in AB interviewee responses depending on perceived survey sponsor identity are attributed to a selection bias. Propensity score matching (PSM) mitigates the latter bias and further confirms the absence of systematic differences based on perceived survey sponsor identity. A comparison of responses to selected questions between AB and NSO surveyed populations supports the absence of a ‘*fear-of-the-state*’ bias. Respondents to NSO agents do not systematically make a more positive assessment of national and local governance. Estimations should not be biased by reverse causations or omitted variable biases, as both surveys’ sampling methods are based on random selection of households. Nevertheless, the results found by this study can only be externally valid if similar protocols to the AB and GPS-SHaSA frameworks are adopted when collecting sensitive data. GPS-SHaSA data collection and analysis is guided, for instance, by additional, module-specific manuals and interviewer training, the establishment of independent steering committees and continuous technical support from national and external experts. The study does not intend to promote one survey sponsor over another, since both surveys’ data are complementary and serve different, interdependent purposes. Neither does this study seek to dismiss social desirability biases in sensitive surveys.

The paper is structured as follows. In section 2, we present the related literature. Then, in section 3, we present the data. Section 4 describes the empirical strategy. Section 5 presents our results from AB data comparisons based on the perceived survey sponsor and from survey comparisons (AB vs GPS-SHaSA). We summarise our findings and add concluding remarks in section 6.

2 RELATED LITERATURE

Different survey data biases are disproportionately documented in the literature. Survey errors are divided mainly into sampling errors and non-sampling errors (Groves, 2004). Non-sampling errors can take the form of nonresponse biases and measurement errors, which can both be explained by the sensitive nature of a question. Tourangeau & Yan (2007) highlight

three dimensions that define a question as sensitive. First, its intrusiveness dimension, meaning the embarrassment the question causes. Second, the utility respondents find in giving a different answer to the way they actually feel is another aspect to consider when asking sensitive questions. This dimension is called the ‘social desirability bias’, and it has been relatively well documented (Krumpal, 2011). Among the acknowledged determinants of the social desirability bias are question wording and bystander effects. Collection methods and designs are other potential determinants of the social desirability bias (Kreuter et al., 2008; Comblon & Robilliard, 2015). The interviewer’s identity has also been evidenced as influencing individuals’ answers. For instance, Adida et al. (2016) find a limiting effect on potential biases when matching the interviewer’s ethnic group with the respondent’s ethnic group. Many solutions are proposed to mitigate such risks, including the randomised response technique, bogus pipeline procedure, lists and endorsement experiments (Krumpal, 2011). The last dimension that defines a question as sensitive is called the “threat of disclosure” and is closely related to the social desirability bias. It corresponds to the risks and potential costs to surveyed individuals of honestly reporting their answers. One interpretation of the threat of disclosure is the unwillingness to let the interviewer and survey sponsor identify the respondent’s opinion. This might be partly explained by fear of being exposed to subsequent negative repercussions. These biases need to be taken into account ahead of survey implementation, including with intense interviewer training and careful question wording.

Some voices have recently emerged to suggest that the survey sponsor is determinant in limiting non-sampling errors in survey data. This subject has rarely been addressed by the literature and is primarily of interest to marketing studies to evidence potential determinants of response biases. Usually analysed with respect to data collected by online surveys, the survey sponsor has been shown to raise response rates if the sponsor is public, particularly if a university or government body is presented as being in charge of the survey (Doob et al., 1973; Jones & Linda, 1978). Peterson (1975) also shows that response quality is higher and the response bias apparently lower when the survey sponsor is a university. More recent studies have also shown that refusal rates are lower when respondents support the survey sponsor (Harris-Kojetin & Tucker, 1999; Groves et al. 2012). Nevertheless, although nonresponse rates tend to be higher among those who have a negative opinion of the survey sponsor, Groves et al. (2012) have brought evidence of more representative samples in publicly sponsored surveys. Yet none of these abovementioned studies can be directly linked to our work, since first and foremost they do not address sensitive questions and are based on the study of different forms of collection.

To the best of our knowledge, very few papers have focused on the potential impact of sensitive data collection by government-related organisations on governance response biases. While some studies have focused on Zimbabwe and China to identify self-censorship in household surveys in these autocratic countries (García-Ponce & Pasquale, 2015; Robinson and Tannenber, 2018), only a couple of studies have presented evidence suggesting an attenuation bias in cross-country studies (Tannenber, 2017; Zimbalist, 2018). The authors of these studies rely on the same data source to put their argument: the AB surveys. To analyse potential preference falsification, both Tannenber (2017) and Zimbalist (2018) compare those who believe the government is behind the survey with those who rightly think that the survey is conducted by AB or its partners. Using survey rounds 3 and 4, collected from 2005 to 2008, Zimbalist (2018) estimates multi-level models with random country effects. At the aggregate level, the author apparently identifies a perceived-survey-sponsor effect: those who perceive the government as the survey sponsor tend to report a more positive assessment of national governance. They also appear to have more trust in the ruling party. Zimbalist suggests that response bias can be better explained by “fear-of-the-state” than social desirability, particularly where freedoms are less respected. The author confirms this hypothesis by studying three countries individually (namely Mozambique, Cape Verde and South Africa). These countries are differentiated by expert assessments of national governance based on respect for democratic freedoms. On the basis of this interpretation, Zimbalist recommends more of an emphasis on interviewer independence in AB surveys, and strengthening partnerships with institutions well known for their independence and separate from the state. He also advocates relying more on qualitative data collected directly from those who are the most knowledgeable about the political context. This latter recommendation is contradictory to previous analytical findings about the poor reliability of expert assessments. Expert assessments have been shown to differ a great deal from citizens’ actual perceptions and experiences of corruption (Razafindrakoto & Roubaud, 2010). Noticeably, Zimbalist classifies perceived survey sponsors between state and non-state bodies. The former match government-related bodies, but the latter include very different organisations, which could have different effects on responses. In addition, statistics offices are classified as non-state players as Panel (2019) does.

The second study by Tannenber (2017) uses more recent Afrobarometer survey rounds (rounds 5 and 6 from 2012 to 2015) to suggest that fear of the government biases responses in ‘autocratic countries’, but not in democratic countries. The very low number of sensitive questions tested (seven) limits the external validity of this study. Again, the group compared with the perceived government agency sponsor is made up of very different players, which

complicates the interpretation. Four response categories are coded into binary responses, which could also be an oversimplification.

Panel (2019) provides evidence of underreported support for democracy when the perceived survey sponsor is the government based on very similar methodology and the same survey data. Again, as in the previously cited studies, the paper fails to discuss the identification strategy when the risk of selection and omitted variable biases is substantial.

This paper seeks to go beyond the limitations of existing studies of the impact of government sponsorship on responses to governance questions. It aims to extensively answer emerging voices contending that the collection of such reportedly sensitive information by government-dependent bodies, NSOs, is inadequate. Individuals are expected to give government-sponsored interviewers biased responses to the national and local government's advantage in order to avoid potential reprisals or, more broadly, due to threat of disclosure.

3 DATA

3.1 Data presentation

We take household survey data from two different sources to examine the potential “*fear-of-the-state*” bias: AB data collected by AB and its local partners, and GPS-SHaSA data collected by NSOs. Despite marked differences between these surveys, both datasets share a number of common features, including sampling method and question wording, which therefore allow for a precise comparison.

The first database is provided by the AB research network. AB has made governance-related questionnaires their focus. AB has long-established experience in data collection and is widely acknowledged as a benchmark in the measurement of household perceptions and experience of national and local governance. AB is commonly presented as an independent and non-partisan network. Interviewers introduce themselves as representatives of “a politically independent and a non-governmental entity” (Bratton, Mattes & Gyimah-Boadi, 2005). They are now established in more than thirty countries with the assistance of core partners declared as independent in Benin, Ghana, Kenya and South Africa and technical support from Michigan State University. Most of their national partners are private institutions, consulting groups and non-governmental organisations. They do not explicitly depend on national or local government funding. However, in some countries, local partners happen to be local universities and thus public-related organisations. These partners play a key role in survey implementation.

The AB data collection methodology is the same from one country to the next: 1,200 to 2,400 individuals of voting age (18 and over) answer a total of one hundred questions on the country's quality of governance based on their perceptions and experiences (www.afrobarometer.org). Randomised primary and secondary sampling units are drawn first on a regional and urban-rural basis with a probability proportional to the population size from which the households are selected. One adult is quasi-randomly interviewed (random walk method), alternately a man and a woman. Samples are representative at national level. Given the small sample sizes, sub-national inference is out of the question. In this paper, we focus on two rounds (rounds 5 and 6) of data collection from 2012 to 2015. We focus in particular on the eight countries where both AB and GPS-SHaSA surveys have been conducted.

GPS-SHaSA data collection is part of an original framework comprising two survey modules, the first on Governance and the second on Peace and Security. These modules are incorporated into traditional socio-demographic household surveys, which are nationally representative (and usually also regionally representative). The NSO-collected information is destined to feed into a national statistical report and is therefore a matter of public interest. This approach has been tested for more than 20 years (since 1995), with the first experiment conducted in Madagascar where similar modules were incorporated into household surveys. In 2002, the modules were included in a 1-2-3 household survey conducted in seven West African Economic and Monetary Union capitals (Razafindrakoto & Roubaud, 2006; Herrera, Razafindrakoto & Roubaud, 2007). In 2012, they were incorporated into a vast programme launched by the African Union Commission in a move to develop regular institutionalised statistics on governance, peace and security at national and sub-national level. For example, the GPS-SHaSA modules are already an integral part of the annual Malian household survey, EMOP, with GPS-SHaSA data now available from 2014 onwards for precise dynamic analyses and studies (Razafindrakoto et al., 2015; Calvo et al., 2019). Fifteen countries have now grafted the GPS-SHaSA modules onto their Labour Force Surveys (LFSs). Four countries launched GPS-SHaSA data collection in 2018. The questionnaire covers a raft of key governance and security questions. GPS-SHaSA captures opinions on democratic governance (e.g. feelings about different types of regimes, importance and level of respect of the main democratic principles, and leadership accountability), perceptions and experience of discrimination, access to and trust in public institutions/services, perceptions and experience of corruption, and civic and political participation. The peace and security module includes questions on interpersonal trust, sense of security, fear of potential threats, and perception of existing local tensions. These modules contain at least 36 main questions and usually include country-specific questions. All

NSOs are supervised to ensure compliance with good statistical practices: the DIAL-IRD research unit provides technical support and independent steering committees are set up to control data collection quality. This study draws on data collected from 2013 to 2015 from eight countries: Benin, Burundi¹, Cameroon, Cote d'Ivoire, Madagascar, Malawi, Mali and Uganda.²

Sampling methods vary from one country to the next, but they all present a similar general procedure (Razafindrakoto & Roubaud, 2018). The main survey is based on a stratified random sampling design. First, enumeration areas are drawn randomly, with selection proportional to each region's population size (from the latest available census) and taking into account the urban-rural distribution. Households are then drawn randomly within each stratum after obtaining an exhaustive list. Lastly, adults only are selected from the main survey for the GPS-SHaSA survey modules. The selection of GPS-SHaSA respondents is country specific: the surveys might interview all adults from randomly drawn households (as in Cameroon) or adults drawn from within each surveyed household (as in Mali). In Burundi and Benin, all adults from the initial sample were interviewed. Note that, in Mali, the survey was not conducted in the Kidal region for obvious security reason, but that sampling remains nationally representative. Sample size ranges from 1,035 observations (in Uganda) through 15,135 in Mali to as many as 40,000 in Benin. The GPS-SHaSA sampling methodology and inclusion in a broader-based household survey allows for national and regional inference and even, in some countries, district and sub-district inference.

These surveys are relatively well distributed across the continent, as shown in Figure 1, and representative of different past colonial and institutional influences (Acemoglu, Johnson, & Robinson, 2001). Data are collected not only in established democracies, but also in countries emerging from transition and still in the throes of democratisation. These countries are also fairly representative of the continent's demographic and economic diversity as shown in appendix Figures B1 and B2.³ The quality of governance is also very uneven, as illustrated by

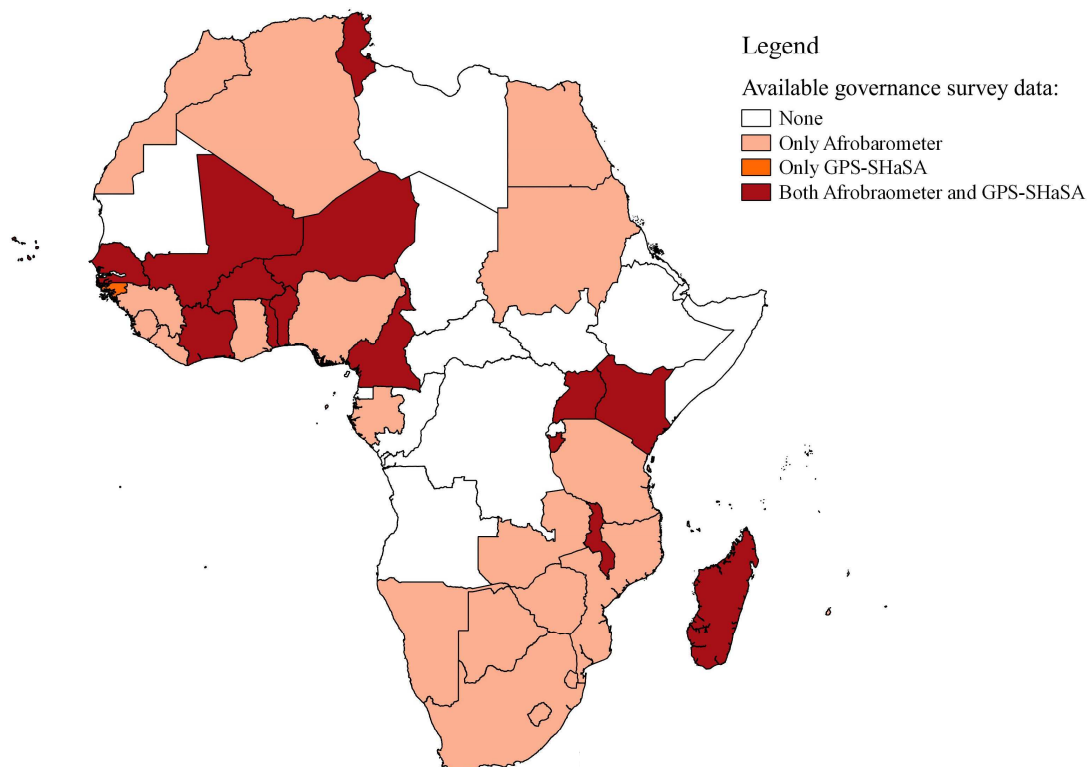
¹ In Burundi, data were collected before the outbreak of the political crisis in late 2014 and announcement of the president's decision to stand again for a new term.

² The GPS-SHaSA modules were grafted onto the following support surveys: Benin (*Household Survey of Living Conditions in Benin* - EMICoV 2015), Burundi (*Survey of Household Living Conditions* - ECVMB 2014), Cameroon (*Cameroonian Household Survey* - ECAM 2014), Cote d'Ivoire (*Living Standards Survey* - ENV 2015), Madagascar (*I-2-3 Survey* 2015), Malawi (*Welfare Monitoring Survey* - WMS 2015), Mali (*Continuous, Modular Household Survey* - EMOP 2015) and Uganda (*Uganda National Governance Baseline Survey* - UNGBS 2013).

³ The sample of countries differs by population size and socio-demographic characteristics (Figure B1). The sample comprises both middle-income and low-income countries, with extremely heterogeneous GDP/capita and economic growth (Figure B2). In 2015, Cameroon and Cote d'Ivoire's GDP/capita stood at US\$1,470 (in constant

two composite governance indicators: the State Fragility index (Marshall & Elzinga-Marshall, 2017) and the Electoral Democracy Index (Coppedge et al., 2019). The eight countries are well distributed below and above the African average (Figures B3 and B4).⁴

FIGURE 1: COUNTRIES COVERED BY AB (ROUND 6) AND GPS-SHAsA SURVEYS



Source: Authors.

AB addresses governance issues more extensively than GPS-SHAsA. The questionnaire's large size compensates for the relative scarcity of data on common socio-demographic and economic dimensions. The advantage of the GPS-SHAsA modules lies in their easy matching with an extended set of socioeconomic measures (labour market, poverty and other living conditions indicators). Both datasets allow for dynamic analyses with their regular data collection schedules.

2010 US\$) compared with US\$220 for Burundi. Between 1990 and 2015, Madagascar and Burundi posted a deep, ongoing recession (-14% and -34% respectively), while Uganda benefited from a steady growth rate (+129%).

⁴ Both indicators rank Benin as the most democratic country during the period of interest while Burundi, Uganda and Mali (for the SFI) and Cameroon (for the EDI) are among the least democratic.

Table 1 presents a summary of the data used in this study. GPS-SHaSA sample sizes are consistently larger than Afrobarometer samples, except in Uganda. GPS-SHaSA samples are eight times larger on average than AB samples (1,500 vs. 12,000). GPS-SHaSA's large sample sizes make for precise sub-national analyses. In addition, most of the NSO and AB surveys were conducted within a relatively close space of time. Data were collected within six months of each other in half of the countries, while less than a year separates the two surveys in the other four countries.

TABLE 1: AB AND GPS-SHAsA SURVEYS: PRESENTATION

Country	Framework	Observations	Survey	Survey agent	Month of data collection	Year
Benin	AB	1,200	AB round 6	African School of Economics	05-06	2014
	GPS-SHaSA	39,987	EMICoV	INSAE	03-06	2015
Burundi	AB	1,200	AB round 5	GRADIS	11-12	2012
	GPS-SHaSA	13,116	ECVMB	ISTEEBU	11-01	2014
Cameroon	AB	1,182	AB round 6	University of Yaoundé II	01-02	2015
	GPS-SHaSA	5,044	ECAM	INS	10-12	2014
Cote d'Ivoire	AB	1,199	AB round 6	CREFDI	08-09	2014
	GPS-SHaSA	3,082	ENV	INS	02-03	2015
Madagascar	AB	1,200	AB round 6	COEF Resources	12-01	2015
	GPS-SHaSA	7,166	1-2-3 Survey	INSTAT	11-12	2015
Malawi	AB	2,400	AB round 6	CSR (University of Malawi)	03-04	2014
	GPS-SHaSA	13,965	WMS	NSO	11-02	2015
Mali	AB	1,200	AB round 6	GREAT	12	2014
	GPS-SHaSA	15,135	EMOP	INSTAT	01-03	2015
Uganda	AB	2,400	AB round 5	Hatchile Consult Ltd	12-02	2012
	GPS-SHaSA	1,035	UNGBS	UBOS	11-12	2013
Total	AB	11,981		AB network	2012-2016	
	GPS-SHaSA	98,530		NSOs	2012-2015	

Note: Afrobarometer survey agents comprise GRADIS (Burundi): *Groupe de Recherche et d'Appui aux Initiatives Démocratiques*; CREFDI (Cote d'Ivoire): *Centre de Recherche et de Formation sur le Développement Intégré*; COEF Ressources (Madagascar): *CONseils - Expertises - Formations Ressources*; CSR (Malawi): *Centre for Social Research*; and GREAT (Mali): *Groupe de Recherche en Économie Appliquée et Théorique*. All GPS-SHaSA survey agents are national statistics offices.

Source: AB network and NSOs; Authors.

We compare 21 questions administered in both surveys (reported in Table 2) to identify a potential response bias. These questions were selected on the basis of two inclusion criteria. First, the wording of the questions had to be similar in both surveys. This inclusion criterion assumes that respondents understand the questions in a similar way. Second, response options also needed to be similar for obvious comparison purposes. The questions selected can all be said to be sensitive and are divided into three categories: democratic governance, trust in institutions and perception of corruption. The democratic governance track includes questions on overall satisfaction with respect for democratic principles and opinions of other political systems. The set of questions on trust in institutions looks into the citizen's level of trust in the

public administration and other central government services. The corruption section includes questions on the respondent's perceptions of corruption at all levels from president to local government. All these questions offer the same response options ranked from 1 to 4, with 1 the most negative response ("*not at all*" or "*never*") and 4 the most positive answer ("*completely*" or "*always*").⁵

In the Afrobarometer surveys, the perceived survey sponsor can be identified by the following concluding question: "*Who do you think sent us to do this interview?*". The question captures which institutions interviewees believe the interviewer is working for, and hence into whose hands respondents think the data will first fall. In the AB round 6 surveys, interviewers were asked to code answers among 12 bodies, but no specific mention was made of NSOs. Nonetheless, previous AB survey rounds reveal that respondents rarely considered NSOs as potential survey sponsors. So we differentiate between three main types of survey sponsors: government-related organisations, AB and partners, and other organisations. Government-related bodies correspond to a very straightforward classification that includes all ministries, presidential staff, parliament, local government, the constitutional court, public enterprise and also the NSOs. We included in Afrobarometer and partners all potential data collection partners: non-governmental organisations, research institutes and universities or equivalent. The remaining bodies concern mainly international organisations, private firms, media, religious associations and political parties.

⁵ In a very small number of cases where GPS-SHaSA responses are binary (a few questions in Benin, Burundi and Madagascar), AB options have been aggregated into dichotomous options. In Malawi, GPS-SHaSA questions on trust in public organisations were administered only to those who had access to such bodies. This question is therefore excluded for Malawi. Some questions are also absent from the AB questionnaire in a certain number of other countries.

TABLE 2: COMMON AB AND GPS-SHAsA QUESTIONS

	Afrobarometer	GPS-SHAsA
<i>Democratic governance</i> (8 questions)	Overall, how satisfied are you with the way democracy works in this country?	Overall, how satisfied are you with the way democracy works in this country?
	In this country, how free are you to say what you think?	Democracy is often associated with freedom of expression. Is it respected in this country? BEN, BUR, MAD
	In this country, how free are you to join any political organisation you want?	Democracy is often associated with political freedom. Is it respected in this country? BEN, BUR, MAD
	In this country, how free are you to choose who to vote for without feeling pressured?	Democracy is often associated with the free and fair elections. Is it respected in this country? BEN, BUR, MAD
	Would you disapprove or approve if the army ruled the country?	What do you think of a political system where the army rules the country?
	Would you disapprove or approve if elections and Parliament were abolished so that the president can decide everything?	What do you think of a political system where the power is concentrated in the hands of one leader, who does not worry about parliament or elections?
	How much of the time do you think members of parliament try their best to listen to what people like you have to say?	How often do you think the Members of Parliament listen to people like you?
	How much of the time do you think local government councillors try their best to listen to what people like you have to say?	How often do you think local elected officials/councillors listen to people like you?
<i>Trust in institutions</i> (6 questions)	How much do you trust the President?	How much do you trust the President? BUR, MAD
	How much do you trust the Parliament?	How much do you trust the Parliament? BUR, MAD
	How much do you trust the Army?	How much do you trust the Army? BUR, MAD
	How much do you trust the Revenue Authority?	How much do you trust the tax authorities? BUR, MAD
	How much do you trust the Police?	How much do you trust the Police? BUR, MAD
	How much do you trust the courts of law?	How much do you trust the courts of law? BUR, MAD
<i>Perceptions of corruption</i> (7 questions)	How many of the President and his/her office officials do you think are involved in corruption?	To what extent do you think the President is involved in corruption?
	How many of the members of Parliament do you think are involved in corruption?	To what extent do you think the members of Parliament are involved in corruption?
	How many of the government officials do you think are involved in corruption?	To what extent do you think the ministers are involved in corruption?
	How many of the local government councillors do you think are involved in corruption?	To what extent do you think local authorities are involved in corruption?
	How many of the police do you think are involved in corruption?	To what extent do you think the police is involved in corruption?
	How many of the tax officials do you think are involved in corruption?	To what extent do you think the tax/customs officials are involved in corruption?
	How many of the judges and magistrates do you think are involved in corruption?	To what extent do you think the judges, magistrates and courts of law officials are involved in corruption?

Note: COUNTRIES correspond to the countries where the number of response options differs from four.

Source: Afrobarometer surveys and GPS-SHAsA surveys.

3.2 Descriptive statistics

Descriptive statistics for the 21 selected questions are presented in appendix Table A1. Table A1 also identifies for both surveys those questions with different response options and answers not available. Partial nonresponses are in themselves meaningful indicators of potential

reluctance to reveal a point of view to a survey interviewer or sponsor. We thus first compare the frequency of answers coded as missing from the AB and GPS-SHaSA surveys. Missing answers include answers not given and answers that fall outside of the response options read by the interviewer. They capture all answers that do not express the interviewee’s assessment of the quality of governance. The number of missing observations for each of the selected questions is reported in appendix Table A2. No clear difference can be observed, as partial nonresponses are relatively low in both surveys. Nevertheless, there is less likelihood of question avoidance in the GPS-SHaSA modules. Missing answers represent on average less than 1% of the GPS-SHaSA aggregated sample as opposed to 3.5% for the AB sample. This result is in line with previous findings in the literature whereby government-sponsored surveys tend to achieve higher response rates than those of other sponsors (Gloves et al., 2012).

Table 3 reports who the AB respondents perceive to be behind the survey. Overall, almost half of surveyed adults (47%) think the government or a related organisation conducted the survey, despite interviewers describing the survey as independent, non-governmental and apolitical. A total of 43% of all eight selected countries’ citizens rightly identify AB or its partners as the survey sponsor. This picture varies a great deal across countries: e.g. 28% of Ugandans versus 66% of Malagasy respondents rightly identify AB or its partners as the data collector. Still, a substantial share of the samples think the government commissioned the survey. Half of the selected countries – namely Burundi, Malawi, Mali and Uganda – are found to have a larger share of those who believe the survey to be state-sponsored than those who think AB is the survey sponsor.

TABLE 3: AB PERCEIVED SURVEY SPONSOR

% of respondents	Benin	Burundi	Cameroon	Cote d'Ivoire	Madagascar	Malawi	Mali	Uganda	Total
Afrobarometer and partners	61.7	37.5	49.8	47.8	66.6	34.5	36.0	28.3	43.0
Government-related body	33.6	47.9	38.5	44.9	21.8	50.0	52.8	65.6	46.7
Other	4.7	14.6	11.7	7.3	11.6	15.5	11.2	6.1	10.3

Note: Non-weighted samples.

Sources: AB surveys; Authors’ calculations.

4 ECONOMETRIC APPROACH

The potential ‘attenuation bias’ is examined in three steps (see Figure 2). In keeping with the existing literature, we first constrain estimations to AB data. We simply examine the response bias on the basis of the perceived survey sponsor, estimating an ordered logit with the

response of individual i in country c to selected question k . Our first set of estimations can be modelled as follows:

$$Y_{i,c,k}^* = \alpha + \gamma \text{SurvSponsor}_{i,c} + \beta X_{i,c} + \varepsilon_{i,c,k} \quad (1)$$

$$\begin{aligned} Y_{i,c,k} = 1 &\Leftrightarrow C_{1,c,k} \leq Y_{i,c,k}^* < C_{2,c,k} \\ Y_{i,c,k} = 2 &\Leftrightarrow C_{2,c,k} \leq Y_{i,c,k}^* < C_{3,c,k} \\ Y_{i,c,k} = 3 &\Leftrightarrow C_{3,c,k} \leq Y_{i,c,k}^* < C_{4,c,k} \\ Y_{i,c,k} = 4 &\Leftrightarrow C_{4,c,k} \leq Y_{i,c,k}^* < C_{5,c,k} \end{aligned} \quad (2)$$

where $Y_{i,c,k}$ is the answer from adult i in country c to question k . Answers are ranked from 1 (the most negative perception) to 4 (the most positive perception). Y_{ik}^* is the unobserved latent variable associated with the answer to question k . X_{ik} is a vector of individual controls including gender, age group, level of education and whether the adult identifies with a political party.⁶ The latter variable is included to control for upwardly or downwardly biased perceptions due to political proximity to the ruling party or the opposition. $\text{SurvSponsor}_{i,c}$ is the variable of interest: it takes the value 1 if the surveyed adult rightly identifies AB or one of its partners as the survey sponsor, 2 if the surveyed adult believes the government is behind the survey and 3 otherwise. ε_{ik} corresponds to the error term. Standard errors are bootstrapped (100 replications). The estimation method is repeated for each question and each country. We also conduct estimations for each question, pooling all AB samples and including additional country dummies.

The ordered logit estimation method rests on a proportional odds assumption, also called a parallel regression assumption (Williams, 2006). This assumption holds when a non-significantly different relationship is found between all pairs of responses. This is rarely the case and the effect captured differs then by pair of answers of interest. Alternatively, multinomial logit methods, which relax the assumption of parallel regressions, are also implemented. Moreover, the results of the baseline estimations are potentially plagued by the following endogeneity biases: selection and omitted variable biases. More suitable estimation methods are used to minimise the biases dealt with in the naïve baseline estimations.

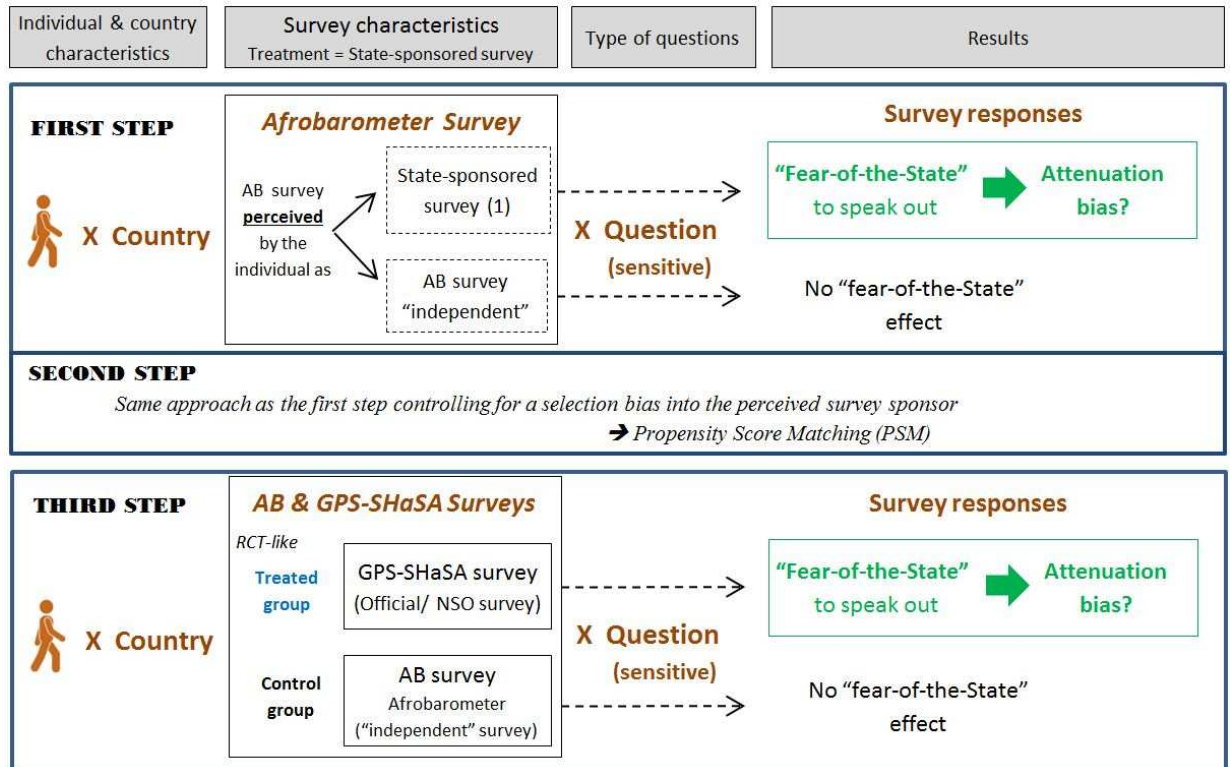
Second, for a ‘*fear-of-the-state*’ bias to be observed, respondents who believe they are being interviewed by government-related agents would be expected to give a systematically more positive assessment of the quality of national and local governance. Yet, such results are potentially exposed to estimation biases. Contrary to the existing literature, we seek to tackle

⁶ Descriptive statistics for the covariates are presented in appendix Table A3.

this issue. Selection into the treatment, namely perception of the government as the survey sponsor, is one source of bias. Surveyed adults who believe they are responding to a state-related agent, defined as the treatment group, could present different characteristics to the rest of the AB samples. The treatment group might feel closer to the ruling party and thus return a better assessment of the current quality of governance. This potential bias is investigated and mitigated using a matching method, which estimates a propensity score for perception of the government as survey sponsor. Once individuals are matched, the average treatment effect on the treated (ATT) is calculated as the mean difference between the response to question k in country c by treatment group individual i ($Y_{i,k,c}^1$ - perceiving the government as the survey sponsor), and the response by matched control group individual j ($Y_{j,k,c}^0$), weighted by the distance of j to i (ω). N_T is the number of treated observations. The estimation can be modelled as follows:

$$ATT = \frac{1}{N_T} \sum_{i=1}^{N_T} \left[Y_{i,k,c}^1 - \sum_{k \in m(i)} \omega(j) Y_{j,k,c}^0 \right] \quad (3)$$

FIGURE 2: METHODOLOGICAL APPROACH



Third, endogeneity, in particular a potential omitted variable bias, is further ruled out by comparing AB and GPS-SHaSA responses to the selected questions. This method of pooling

the two datasets collected by reportedly independent and government-related organisations, and defining the GPS-SHaSA sample as the treatment group, could be considered to be an experimental framework (RCT). First, the pooled sample (overall or for each country) is a random sample of the total population (as the sum of two independent random samples). Surveyed individuals are randomly assigned to the treatment group (GPS-SHaSA respondents), as being interviewed by a government-related agent, and to the control group, as being interviewed by a reportedly independent organisation. In addition, given that each sample is representative at national level, the same consequently holds true for the pooled samples, and our context extends beyond the usual RCT protocol, lending external validity to our estimations (Deaton, 2010). Although the time of data collection differs between the two groups in some countries, it generally remains very close. Moreover, in Cameroon and in Mali, data collection was simultaneous and thus provides a completely exogenous framework. We estimate an ordered logit with responses to the selected questions at individual level per country as the dependent variables.⁷ The estimation can be modelled as follows as a simple RCT-like method:

$$Y_{i,c,k} = \alpha + \gamma T + \beta X_{i,c} + \varepsilon_{i,c,k} \quad (4)$$

where the treatment T is the actual survey sponsor. It takes the value 0 if the respondent is surveyed by an AB agent and the value 1 if the respondent is surveyed by an NSO agent. The covariates remain the same as in equation 1. Additional estimations with all pooled samples also include country dummies.⁸

5 RESULTS

5.1 *Effects of Afrobarometer's perceived survey sponsor*

The specifications modelled in equations (1) and (2) are estimated constraining the sample to AB data only.⁹ Tables 4 to 6 present the odds ratios of the adults' assessments for the respondents who perceive the survey sponsor to be a government-related organisation (the group who believe they are answering a "state-sponsored survey") compared with those who actually think that AB is behind the survey (the group who identify an "AB independent survey

⁷ Neither the level of education nor political party proximity is available for Uganda.

⁸ Uganda is always excluded from this aggregated estimation as some controls are unavailable. When one question authorizes for only binary responses in one country (or the question was not part of the country survey) are also excluded from the aggregated estimation.

⁹ Simple tests of the equality of mean responses from respondents who believe they are answering an independent-sponsored survey or a state-sponsored survey are reported in appendix Table B1. Aside from in the case of the trust questions and respondents to the Burundi and Cote d'Ivoire surveys, the differences do not suggest any attenuation bias.

sponsor”). The “*other*” category is reported in appendix Table A5 to keep the focus on the estimates of interest and for space-saving purposes. For ease of legibility, the same colour coding is applied to all tables below: odds ratios in red correspond to the likelihood of more negative answers from respondents who believe the survey is state-sponsored than from those who believe that AB or its partners are the sponsor. Green odds ratios correspond to the likelihood of more positive assessments from respondents who believe they are answering a government agent (i.e. with presumed “attenuation effect”). Estimates in black correspond to non-significantly different perceptions between groups. Perceptions are considered consistent when the government-sponsor coefficient is not different from zero at the 10% threshold. Only the odds ratio of the variable of interest is displayed to save space. Each odds ratio reported is derived from a separate estimation.

Table 4 presents the results for the democratic governance category of questions. For the full sample (all countries aggregated; column 1), AB respondents give consistent answers regarding the types of regime that should rule and MP accountability, irrespective of who they consider to be behind the survey. However, more negative views are held by both those who perceive the survey as state-sponsored (regarding local government accountability) and those who identify AB rightly as the independent survey sponsor (regarding respect for democratic freedoms and satisfaction with democratic governance).

Analyses per country qualify these results. On the one hand, respondents in Benin (column 2), Burundi (column 3), Cameroon (column 4) and Malawi (column 7) who stuck with the idea of an “AB independent survey sponsor” are significantly likely to be more sceptical of respect for freedoms. On the other hand, respondents in Cote d’Ivoire (column 5), Madagascar (column 6), Mali (column 8) and Uganda (column 9) give non-significantly different answers. Moreover, in Benin and Burundi, respondents convinced of a “state-sponsored survey” are more likely to hold more negative views of representatives’ accountability than those who believe the survey is being conducted independently.

The picture is also mixed for trust in institutions (Table 5) and perception of corruption (Table 6). Although the results for the pooled sample largely argue in favour of the existence of an attenuation bias, analysis per country mitigates such an interpretation. Those who perceive a “state-sponsored survey” in Benin, Burundi, Côte d’Ivoire, Malawi and Mali are likely to place more trust in public institutions. However, in three of these five countries, namely Benin, Mali and to a lesser extent Malawi, these same individuals do not return a significantly different assessment of corruption by civil servants. To be more precise, in Benin and Mali, citizens share the same perception of corruption levels from the president and his staff to police officers

irrespective of the perceived survey sponsor. In addition, in Madagascar and Uganda, citizens do not return significantly different answers regarding trust in institutions. Nevertheless, Malagasy respondents who identified an “AB independent survey sponsor” are likely to report a more negative assessment of corruption by public servants. In Cameroon, those who consider the survey to be state-sponsored are likely to be more distrustful than the rest of the sample, and consistently assess the involvement of public servants in corruption.

TABLE 4: DEMOCRATIC GOVERNANCE BY RESPONDENTS WHO PERCEIVE AB AS SURVEY SPONSOR

Perceives the government as the sponsor (<i>ref.</i> : AB)	All countries (1)	Benin (2)	Burundi (3)	Cameroon (4)	Cote d'Ivoire (5)	Madagascar (6)	Malawi (7)	Mali (8)	Uganda (9)
Satisfaction with democracy	1.332*** (0.0573)	1.382** (0.184)	2.066*** (0.290)	1.029 (0.157)	1.500*** (0.198)	1.054 (0.175)	1.511*** (0.138)	1.021 (0.125)	1.137 (0.113)
Regime where power is in the hands of									
One leader	0.996 (0.0430)	0.738** (0.101)	1.223 (0.208)	0.526*** (0.0812)	1.719*** (0.220)	0.676** (0.112)	1.234 (0.176)	0.788* (0.0982)	1.223 (0.193)
The army	1.068 (0.0483)	0.954 (0.129)	0.999 (0.150)	1.008 (0.144)	1.459*** (0.182)	0.985 (0.156)	1.210 (0.177)	1.047 (0.112)	0.870 (0.110)
Freedom is respected									
Speech	1.173*** (0.0507)	1.481*** (0.225)	1.426*** (0.178)	1.384** (0.184)	1.143 (0.144)	0.865 (0.129)	1.011 (0.149)	0.777** (0.0956)	1.446*** (0.154)
Political	1.145*** (0.0476)	1.520*** (0.214)	1.305** (0.162)	1.519** (0.251)	0.814 (0.105)	0.722** (0.0972)	1.590*** (0.231)	0.888 (0.145)	1.197 (0.138)
Vote	1.236*** (0.0559)	1.827*** (0.267)	1.366** (0.187)	1.428** (0.253)	0.821 (0.114)	1.130 (0.189)	2.368*** (0.605)	1.122 (0.188)	1.125 (0.126)
Listen to people									
MPs	1.054 (0.0416)	0.632*** (0.0799)	1.048 (0.187)	1.036 (0.160)	1.124 (0.152)	1.266 (0.222)	1.333*** (0.123)	1.421*** (0.172)	0.894 (0.0795)
Local government	0.818*** (0.0378)	0.625*** (0.0776)	0.514*** (0.0692)	0.917 (0.127)	1.018 (0.133)	1.122 (0.198)	N/A	N/A	0.925 (0.0944)

Note: OR reported. Robust standard errors (bootstrapped 100 times) are in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1. Each OR corresponds to a separate estimation. All estimations include individual controls (gender, age group, level of education, identification with a political party and area of residence). Country dummies are also included in column 1. Countries can be excluded if the question is absent from the country's questionnaire. The “other” category is presented in appendix Table A4. Number of observations are reported in appendix Table A4.

Sources: AB surveys, rounds 5 and 6; Authors' calculations.

No systematic attenuation bias can therefore be identified for either category of questions between respondents who perceive the government as survey sponsor and those who identify the Afrobarometer network as survey sponsor. Only in Burundi and Cote d'Ivoire are respondents identifying AB as the survey sponsor more critical when it comes to trust and corruption. Nevertheless, this feature does not hold for democratic governance. Uganda is the only country to display relative consistency of perceptions irrespective of the perceived survey sponsor. In the five remaining countries, differences in assessments between groups are inconsistent from one question to the next. This further dismisses the assumption of a systematic response bias by those who believe they are answering a “state-sponsored survey”.

The explanation for the observed discrepancies lays elsewhere, such as in potential differences in the composition of the groups who perceive respectively the government and AB as survey sponsor. This assumption is investigated below.

TABLE 5: TRUST IN INSTITUTIONS BY RESPONDENTS WHO PERCEIVE AB AS SURVEY SPONSOR

Perceives government sponsor (<i>ref.</i> : AB)	as All countries (1)	Benin (2)	Burundi (3)	Cameroon (4)	Cote d'Ivoire (5)	Madagascar (6)	Malawi (7)	Mali (8)	Uganda (9)
Trust in:									
<i>President</i>	1.542*** (0.0662)	2.718*** (0.312)	2.369*** (0.301)	0.934 (0.150)	1.565*** (0.205)	1.097 (0.140)	1.668*** (0.179)	1.356** (0.179)	1.196** (0.0945)
<i>Parliament</i>	1.364*** (0.0531)	1.831*** (0.248)	2.462*** (0.371)	0.764** (0.105)	1.578*** (0.211)	1.039 (0.155)	1.490*** (0.161)	1.479*** (0.163)	0.851* (0.0825)
<i>Army</i>	1.257*** (0.0571)	1.583*** (0.199)	1.769*** (0.251)	0.708*** (0.0870)	1.523*** (0.196)	1.076 (0.159)	1.036 (0.108)	1.717*** (0.242)	1.137 (0.0986)
<i>Courts of law</i>	1.325*** (0.0525)	1.725*** (0.209)	1.938*** (0.249)	0.735** (0.0956)	1.590*** (0.195)	1.225 (0.189)	1.391*** (0.129)	1.542*** (0.195)	0.932 (0.0969)
<i>Tax/customs</i>	1.244*** (0.0562)	1.518*** (0.194)	1.916*** (0.238)	0.854 (0.113)	1.220 (0.169)	0.838 (0.129)	1.291** (0.137)	1.380** (0.172)	1.099 (0.0956)
<i>Police</i>	1.305*** (0.0567)	1.703*** (0.200)	2.175*** (0.302)	0.720** (0.110)	1.311** (0.154)	0.987 (0.143)	1.332*** (0.114)	1.204* (0.120)	1.261** (0.118)

Note: See Table 4.

Sources: AB surveys, rounds 5 and 6; Authors' calculations.

TABLE 6: PERCEIVED LEVEL OF CORRUPTION BY RESPONDENTS WHO PERCEIVE AB AS SURVEY SPONSOR

Respondent perceives AB sponsor (<i>ref.</i> : AB)	as All countries (1)	Benin (2)	Burundi (3)	Cameroon (4)	Cote d'Ivoire (5)	Madagascar (6)	Malawi (7)	Mali (8)	Uganda (9)
Perceived level of corruption:									
<i>President</i>	1.339*** (0.0545)	1.198 (0.144)	1.642*** (0.249)	0.735** (0.106)	1.564*** (0.231)	1.407** (0.202)	1.418*** (0.135)	1.180 (0.136)	1.485*** (0.150)
<i>Government officials</i>	1.302*** (0.0588)	1.110 (0.142)	1.489*** (0.212)	1.081 (0.164)	1.576*** (0.205)	1.381** (0.202)	1.147 (0.110)	1.022 (0.135)	1.534*** (0.172)
<i>MPs</i>	1.191*** (0.0520)	0.918 (0.118)	1.658*** (0.245)	0.897 (0.122)	1.719*** (0.274)	1.350** (0.179)	1.253** (0.144)	1.086 (0.145)	0.968 (0.115)
<i>Local government</i>	1.229*** (0.0680)	1.016 (0.136)	1.197 (0.157)	0.783* (0.114)	1.670*** (0.222)	1.831*** (0.305)	N/A	N/A	1.113 (0.120)
<i>Court of law officials</i>	1.285*** (0.0502)	1.324* (0.208)	1.497*** (0.199)	0.815 (0.105)	2.091*** (0.315)	1.586*** (0.260)	1.356*** (0.134)	1.075 (0.128)	0.995 (0.106)
<i>Tax/customs officials</i>	1.288*** (0.0488)	1.178 (0.128)	1.563*** (0.225)	1.164 (0.163)	1.851*** (0.265)	1.202 (0.205)	1.273** (0.143)	1.020 (0.139)	1.224** (0.125)
<i>Police</i>	1.254*** (0.0585)	1.001 (0.137)	1.631*** (0.228)	1.183 (0.169)	1.494*** (0.194)	1.151 (0.157)	1.086 (0.106)	1.061 (0.114)	1.492*** (0.158)

Note: See Table 4.

Sources: AB surveys, rounds 5 and 6; Authors' calculations.

The above analyses focus on the supposed sensitive nature of the questions asked to test the hypothesis of an attenuation bias explained by the perception that the survey is state-sponsored. A systematically higher likelihood of respondents in the “state-sponsored survey” group positively assessing a country’s quality of governance would confirm the validity of the ‘*fear-of-the-state*’ bias. In this case, however, a ‘*fear-of-the-state*’ bias should not be identified

when it comes to non-sensitive questions. A comparison of non-sensitive questions will therefore capture non-significantly different assessments based on respondent perception of the survey sponsor's identity. In keeping with Tannenbergh (2017), we thus estimate the same baseline models for trust in relatives and neighbours. Usually, the vast majority of the population say they trust closely related individuals such as family members and neighbours. Variation in trust in relatives and neighbours can hardly be explained by a person's fear of being interviewed by a government servant.

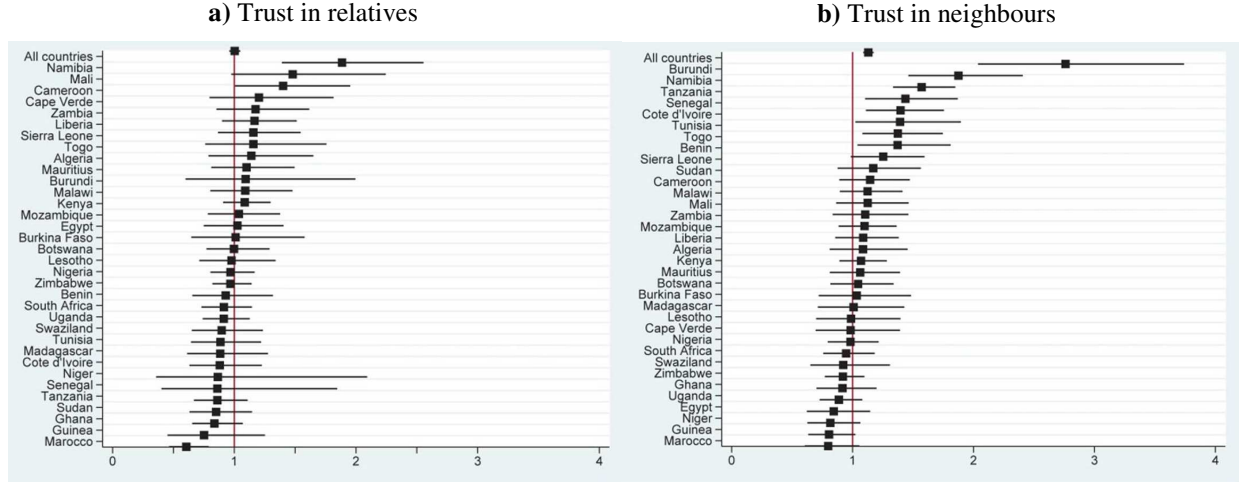
Questions about interpersonal trust were absent from AB round 6 questionnaires. Nevertheless, they were included in the previous AB round conducted from 2012 to 2013. We hence repeat the step-one estimations using trust in relatives and neighbours as the dependent variables. The questions are asked as follows: "How much do you trust your relatives? – your neighbours?" Again, the response categories are ranked from 1 to 4, with one being the most negative and four the most positive response. We compile results for both questions for all 35 countries surveyed by the fifth AB round of data collection. We use the same controls as previously and include country dummies for the pooled estimation. Odds ratios for *SurvSponsor* when individuals believe they are answering a state-sponsored survey are reported in Figure 3. With respect to trust in relatives (Figure 3a), whereas the aggregated estimation does not reveal any significant difference, analysis per country finds some heterogeneity. For instance, in Cameroon, Mali and Namibia, interviewees identifying an "AB independent survey sponsor" are likely to place less trust in their family members. In Morocco, trust in relatives is likely to be greater when respondents believe AB to be behind the survey. The differences are greater for trust in neighbours. In general, the level of trust in neighbours (Figure 3b) is likely to be lower among those who think AB is behind the survey than those who believe the survey is state-sponsored. Burundians are very significantly likely to be more distrustful when they think they are being interviewed by AB "independent" agents rather than by the government. The interpretation is similar for seven other countries, including Cote d'Ivoire and Benin.

Discrepancies in responses to non-sensitive questions by perceived survey sponsor cast further doubt on a 'fear-of-the-state' bias.¹⁰ Indeed, these differences suggest rather selection into the treatment in the form of the belief of being interviewed by a government-related agent. Response differences would be better explained by the group characteristics of those who

¹⁰ It is confirmed by the estimations based on responses to another non-sensitive question: personal opinion of gender equality in politics. The results again display significant differences by perceived survey sponsor, but given the nature of the question, they cannot be explained by any possible threat of disclosure.

perceive the government versus those who perceive an independent institution as the survey sponsor.

FIGURE 1: INTERPERSONAL TRUST BY RESPONDENTS WHO PERCEIVE AB AS SURVEY SPONSOR



Note: Robust standard errors (bootstrapped 100 times). Each row corresponds to a separate ordered logit estimation. It displays the odds ratios based on the perception of a government-related organisation as survey sponsor compared with the perception of the AB network as survey sponsor. All estimations include the abovementioned individual controls. Country dummies are also included in the aggregated estimation.

Source: AB surveys, round 5; Authors' calculations.

5.2 Different perceived sponsor, different group characteristics

Tests of the equality of the means in intra-Afrobarometer samples confirm a selection bias based on perceived survey sponsor identity. As presented in Table 7, those who perceive a “state-sponsored survey” are the most vulnerable adults. They more frequently live in rural areas and have a lower level of education on average. They are also significantly more often women. Furthermore, they have significantly less access to the different media and hence to information (reported in appendix Table B2). Noticeably, the members of the “state-sponsored survey” group (who believe the government to be behind AB survey) tend to identify significantly more with a political party, and more with the ruling party (see appendix Table B2).¹¹ These differences are particularly sharp in the case of Burundi (column 3) where adults perceiving a “state-sponsored survey” are 15 percentage points more supportive of the ruling party than the rest of the sample. A lower average level of education is observed for all eight countries. The ‘treated’ are also more rural in six of the eight countries.

¹¹ The ruling party variable takes the value 1 if an individual supports the president’s party or the parliamentary ruling party, and 0 otherwise.

TABLE 7: RELATIVE CHARACTERISTICS OF THOSE PERCEIVING AB SURVEY AS STATE-SPONSORED

	All countries (1)	Benin (2)	Burundi (3)	Cameroon (4)	Cote d'Ivoire (5)	Madagascar (6)	Malawi (7)	Mali (8)	Uganda (9)
Female	0.0670*** (0.0102)	0.0342 (0.0318)	0.111*** (0.0335)	-0.00430 (0.0338)	0.0472 (0.0308)	0.00931 (0.0365)	0.148*** (0.0247)	0.0529 (0.0316)	0.116*** (0.0248)
Age	0.167 (0.277)	-0.568 (0.883)	1.054 (0.939)	-2.321** (0.758)	1.119 (0.759)	1.917 (1.022)	1.286 (0.700)	-1.240 (0.919)	1.693** (0.624)
Level of education	-0.339*** (0.0184)	-0.220*** (0.0636)	-0.376*** (0.0518)	-0.249*** (0.0498)	-0.479*** (0.0530)	-0.273*** (0.0495)	-0.338*** (0.0363)	-0.329*** (0.0538)	-0.430*** (0.0414)
Rural	0.126*** (0.00921)	0.150*** (0.0315)	0.102*** (0.0269)	0.0694* (0.0336)	0.133*** (0.0305)	0.116*** (0.0294)	0.0811*** (0.0178)	0.0187 (0.0278)	0.0498** (0.0175)
Identification with pol. party	0.0496*** (0.00984)	-0.0157 (0.0317)	0.0432 (0.0310)	0.0479 (0.0348)	-0.0448 (0.0307)	-0.123*** (0.0372)	0.00191 (0.0203)	-0.0629* (0.0289)	0.0178 (0.0205)
Observations	9,536	1,081	895	894	1,052	1,01	1,651	1,038	1,915

Note: Differences in means between respondents who perceive the government as the AB survey sponsor and those who rightly identify AB as the survey sponsor. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Sources: AB surveys, round 6; Authors' calculations.

Propensity score matching (PSM) appears to be the strategy best suited to overcome this observed selection bias. The effect of the perceived survey sponsor is captured better by matching individuals who think the government is behind the survey with the rest of the AB sample. We predict a score for belonging to the “state-sponsored survey” group by estimating a logit with the same covariates as the baseline specification. The variable capturing individual proximity to the ruling party is not included in this specification, as responses could be driven by the identity of the perceived survey sponsor.

The results of the estimation of the propensity scores are reported in appendix Table A6 and affect the treatment as expected. We then implement the nearest neighbour matching algorithm with a caliper of 0.005 in order to limit poor matches. This algorithm best meets the need to match individuals in the control group with the most similar individuals in the treatment group, i.e. the “state-sponsored survey” group. Kernel matching is unsuitable here, as poor matches are more likely. The common support assumption is largely satisfied, as presented in appendix Figure A1 for the entire pooled sample. The share of observations excluded off-support never exceeds 0.2% of the pooled samples. Balancing tests on the covariates, reported in appendix Table A7, further confirm the quality of the matching conducted as none of the differences in mean between the treatment and control groups is significant once observations are matched.

Results of the average treatment effects on the treated (ATT) are reported in Table 8. They confirm the hypothesis of a selection bias in each observed group. Indeed, per country differences are no longer significant once individuals are matched. This outcome is particularly

striking for Burundi. The post-matching negative bias remains statistically significant for just two questions (satisfaction with democratic governance and trust in Parliament).

TABLE 8: ATT OF MATCHED INDIVIDUALS (PSM)

	All countries (1)	Benin (2)	Burundi (3)	Cameroon (4)	Ivory Coast (5)	Madagascar (6)	Malawi (7)	Mali (8)	Uganda (9)
Satisfaction with democracy	0.219*** (0.062)	0.101 (0.122)	0.373** (0.159)	0.0329 (0.147)	0.171 (0.121)	0.112 (0.126)	0.557*** (0.198)	-0.0878 (0.153)	0.187 (0.136)
Regime where power is in the hands of									
One leader	0.0527 (0.0447)	0.0334 (0.0828)	-0.126 (0.103)	-0.222** (0.112)	0.203** (0.0792)	-0.21* (0.121)	0.298** (0.12)	-0.0102 (0.116)	0.037 (0.0807)
The army	-0.0147 (0.0524)	0.152 (0.11)	-0.122 (0.122)	-0.0585 (0.133)	0.247*** (0.0793)	-0.169 (0.146)	0.0621 (0.0972)	-0.058 (0.163)	-0.117 (0.0976)
Freedom is respected									
Speech	0.0685 (0.0602)	0.118 (0.101)	0.0515 (0.156)	-0.0251 (0.127)	-0.0403 (0.134)	-0.264* (0.155)	-0.0314 (0.142)	-0.140 (0.160)	0.450*** (0.143)
Political	0.141*** (0.0541)	0.171* (0.0949)	-0.0252 (0.141)	0.0644 (0.118)	-0.0719 (0.127)	-0.367** (0.15)	0.211 (0.149)	0.0782 (0.109)	0.362*** (0.137)
Vote	0.0771* (0.0466)	0.122 (0.0826)	0.0188 (0.106)	0.100 (0.105)	0.0667 (0.122)	-0.0439 (0.0922)	0.0712 (0.104)	0.0601 (0.0836)	0.135 (0.123)
Listen to people									
MPs	0.055 (0.0521)	-0.0572 (0.101)	0.112 (0.0779)	0.0976 (0.133)	-0.0764 (0.105)	0.161* (0.09)	0.355*** (0.112)	0.0971 (0.173)	-0.175 (0.119)
Local government	-0.0571 (0.0653)	-0.203* (0.113)	-0.155 (0.154)	0.0122 (0.149)	-0.155 (0.107)	0.313** (0.123)	N/A	N/A	-0.023 (0.124)
Trust in:									
President	0.210*** (0.0734)	0.625*** (0.144)	0.284** (0.137)	-0.264* (0.151)	0.366** (0.153)	-0.0173 (0.183)	-0.0066 (0.211)	0.509*** (0.179)	0.160 (0.154)
Parliament	0.124* (0.0682)	0.370*** (0.124)	0.487*** (0.169)	-0.151 (0.163)	0.167 (0.153)	-0.205 (0.169)	-0.00664 (0.201)	0.238 (0.17)	0.0671 (0.146)
Army	0.0778 (0.0684)	0.234 (0.147)	0.233* (0.139)	-0.465*** (0.149)	0.315** (0.134)	-0.0563 (0.175)	-0.00664 (0.201)	0.358** (0.149)	0.205 (0.154)
Courts of law	0.0657 (0.0684)	0.216* (0.131)	0.279* (0.151)	-0.121 (0.161)	0.00866 (0.135)	0.165 (0.173)	-0.115 (0.185)	0.319* (0.165)	0.0111 (0.155)
Tax /customs	0.156** (0.0663)	0.161 (0.133)	0.149 (0.169)	-0.155 (0.154)	-0.0714 (0.129)	0.101 (0.164)	0.21 (0.203)	0.551*** (0.172)	0.083 (0.147)
Police	0.195*** (0.0686)	0.304** (0.144)	0.315* (0.171)	-0.272 (0.168)	0.342*** (0.13)	0.026 (0.165)	0.183 (0.207)	0.0666 (0.174)	0.279* (0.152)
Perceived level of corruption:									
President	0.140** (0.0588)	0.0799 (0.117)	0.0891 (0.13)	-0.00893 (0.132)	0.145 (0.118)	0.222 (0.146)	0.111 (0.166)	0.338** (0.136)	0.138 (0.141)
Government officials	0.0852 (0.0547)	0.0962 (0.106)	-0.0645 (0.127)	0.0723 (0.129)	0.124 (0.116)	0.0885 (0.151)	0.0202 (0.142)	0.219* (0.125)	0.111 (0.107)
MPs	0.045 (0.0533)	0.0531 (0.11)	0.157 (0.134)	-0.0602 (0.126)	0.158 (0.113)	-0.0396 (0.146)	0.0658 (0.142)	0.0282 (0.125)	-0.031 (0.0933)
Local government	0.0082 (0.0606)	0.0571 (0.103)	-0.0493 (0.116)	-0.126 (0.124)	0.217** (0.108)	0.117 (0.113)	N/A	N/A	-0.0384 (0.111)
Court of law officials	0.0906* (0.0545)	0.0958 (0.103)	0.0479 (0.139)	-0.012 (0.134)	0.126 (0.101)	0.279 (0.175)	0.116 (0.131)	0.018 (0.141)	0.110 (0.108)
Tax/customs officials	0.0842 (0.0552)	0.075 (0.104)	-0.17 (0.141)	0.227 (0.138)	0.201* (0.115)	0.262* (0.156)	0.0938 (0.136)	0.135 (0.143)	0.0106 (0.12)
Police	0.0815 (0.057)	-0.00273 (0.109)	0.177 (0.143)	0.140 (0.132)	0.246** (0.117)	0.152 (0.169)	0.0198 (0.148)	-0.158 (0.145)	0.151 (0.119)

Note: Each cell corresponds to a separate estimation. Standard errors are in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1. Matching is based on logit estimated propensity scores of identification of the government as survey sponsor.

Sources: AB surveys, rounds 5 and 6; Authors' calculations.

In Benin, Cameroon, Madagascar, Malawi and Mali, where we have already cast doubt on a potential systematic bias due to “*fear-of-the-state*”, differences are significant for just four or less questions. In Cote d’Ivoire, differences remain statistically significant for five of the questions, including three in the trust-in-institutions category. The remaining observed differences could well be explained by the sparing use of covariates in the PSM estimation (see sub-section 5.4).

The potential systematic bias explained in previous studies by self-censorship due to the survey sponsor’s identity finds its roots rather in an over-representation of vulnerable adults among those who perceive the government as survey sponsor. They have less access to contradictory information and are more exposed to the official line to which they might be sensitive. In some countries, those who wrongly believe that the AB survey is state-sponsored are also more likely to be supporters of the ruling party and so express a more positive assessment of the country’s governance. PSM methods are able to correct this selection bias. Yet PSM estimation methods depend on the hypothesis that the selection is only explained by observed characteristics. This estimation method cannot rule out a potential endogeneity bias, in particular an omitted variable bias that would explain both responses to sensitive questions and survey sponsor identity. The framework that randomly attributes adults to an interviewer sent by a government-related organisation, namely an NSO, or an independent organisation, namely the AB network, rules out all remaining potential endogeneity biases. Results are presented in the next subsection.

5.3 Effects of being interviewed by an NSO agent

Simple tests of the equality of mean responses from AB and GPS-SHaSA surveyed adults are reported first in appendix Table B3. Results are summarised in Table 9. Overall, GPS-SHaSA respondents return a significantly more negative assessment of the country’s governance for 46% of the 21 selected questions asked in the eight countries. For 13% of the selected questions, AB and GPS-SHaSA respondents share a consistent view of the quality of governance. For two-fifths of the questions (41%), average perceptions reported in GPS-SHaSA survey modules are more positive than those expressed in AB.

The picture remains unchanged for the democratic governance and corruption questions. For half of these questions, GPS-SHaSA respondents have a more negative perception on average. Both surveys present consistent trust in public institutions on average for 30% of the questions, while half of trust-related responses collected by GPS-SHaSA are more positive than those collected by the AB network. These results need to be put into perspective from the point

of view of country-specific differences. In Burundi and Cote d'Ivoire alone, the hypothesis of a potential “*fear-of-the-state*” bias finds some quantitative ground. However, the differences could also be explained by the time lapse between the two surveys. In 2012, for example, political violence in Burundi was rising to levels unseen since the last boycotted presidential elections of 2010 (HRW, 2012), while 2014 coincides more with a calmer security and political situation (HRW, 2014) before the new cycle of political violence in 2015. In Cote d'Ivoire, the year of GPS-SHaSA data collection was also a democratic presidential election year, which could have changed the assessment of the country's quality of governance. In all six other countries, at least 60% of the responses to NSO interviewers are non-significantly different or more negative than AB respondents' perceptions. In Cameroon and Mali, where data collection was simultaneous, perceptions collected by the GPS-SHaSA framework are consistent with or more negative than the AB surveys for more than three-quarters of the questions. For 84% and 52% respectively of the selected questions in the two countries, GPS-SHaSA respondents' average assessments are significantly more negative than AB respondents. A raw comparison of perception levels from AB and GPS-SHaSA surveys rules out any response bias from those interviewed by a government-dependent organisation, namely GPS-SHaSA respondents surveyed by NSO interviewers.

TABLE 9: SUMMARY TABLE OF TESTS OF THE EQUALITY OF MEANS (% OF SELECTED QUESTIONS)

GPS respondents give an assessment:		Benin	Burundi	Cameroon	Cote d'Ivoire	Madagascar	Malawi	Mali	Uganda	Total
Democracy	<i>More negative</i>	50.0	37.5	62.5	62.5	62.5	42.9	71.4	50.0	55.0
	<i>Consistent</i>	0.0	0.0	37.5	0.0	0.0	0.0	0.0	0.0	5.0
	<i>More positive</i>	50.0	62.5	0.0	37.5	37.5	57.1	28.6	50.0	40.0
Trust in the institutions	<i>More negative</i>	16.7	0.0	100.0	0.0	0.0		16.7	16.7	19.5
	<i>Consistent</i>	33.3	0.0	0.0	0.0	50.0	N/A	50.0	66.7	29.3
	<i>More positive</i>	50.0	100.0	0.0	100.0	50.0		33.3	16.7	51.2
Corruption	<i>More negative</i>	85.7	0.0	100.0	14.3	50.0	100.0	66.7	42.9	55.8
	<i>Consistent</i>	14.3	14.3	0.0	0.0	16.7	0.0	16.7	14.3	9.6
	<i>More positive</i>	0.0	85.7	0.0	85.7	33.3	0.0	16.7	42.9	34.6
Total	<i>More negative</i>	52.4	14.3	84.2	28.6	40.0	69.2	52.6	36.8	45.8
	<i>Consistent</i>	14.3	4.8	15.8	0.0	20.0	0.0	21.1	26.3	13.1
	<i>More positive</i>	33.3	81.0	0.0	71.4	40.0	30.8	26.3	36.8	41.2

Note: Based on t-test of the equality of means reported in appendix Table B3. Consistent answers correspond to a non-significant mean difference.

Sources: AB surveys, round 6 and GPS-SHaSA surveys; Authors' calculations.

Given the experimental framework adopted, the comparisons of means should suffice to exclude the hypothesis of a causal impact of government-related survey sponsor on interviewees' responses. However, to take into account potential imbalances due to sample selection (only balanced in expectations), we further examine the potential response bias by

adding additional controls to our unconditional tests of difference in means. We estimate an ordered logit as modelled in equations (4) in section 4. Tables 10 and 11 report the odds ratios for the treatment variable per question and per country.¹² Complete estimations are presented for the satisfaction-with-democracy question in appendix Table B4. Overall, young people living in rural areas are significantly more positive about governance, while more educated adults are likely to have a more negative view, other things being equal.

Table 10 displays the estimates for the eight democratic governance questions. Overall, no systematic bias can be identified (see also appendix Figure A2). Although GPS-SHaSA respondents hold a more negative view for the majority of the questions, the differences do not follow any clear pattern. Taking all countries together (column 1), GPS-SHaSA respondents are likely to express a dimmer view of respect for democracy's essential freedoms (freedom of speech, freedom to join the political party of their choice and freedom to vote). Yet, these latter results should be interpreted with caution. Indeed, while AB interviewees answer direct questions in the second person, GPS-SHaSA interviewees answer indirect questions in the passive tense (Table 2). Some studies have presented evidence of a limiting effect of indirect questions on partial nonresponse and social desirability bias (see for instance, Fisher, 1993; McNeely, 2012). In our study, first, such wording differences have no effect on partial nonresponse. Second, although the potential attenuation bias is underestimated for these particular questions, the magnitudes of the odds ratios are substantial enough to hold with second person questions.¹³

AB respondents are more likely to express dissatisfaction with democratic governance and government accountability. Yet the differences in perceptions appear to be highly country-specific. The assumption of a noncritical judgement by GPS-SHaSA respondents finds the most support in Burundi (column 3). Still, no significant difference can be identified in the latter country regarding respect for freedom of speech. GPS-SHaSA respondents in Burundi are even likely to give a more negative assessment of respect for free elections for political freedom. In Cameroon and Mali (columns 4 and 8), where both GPS-SHaSA and AB surveys were

¹² The same colour coding is applied again for the sake of legibility: odds ratios in red correspond to questions for which NSO-interviewed adults are likely to express more negative perceptions than AB respondents; green odds ratios correspond to a more positive assessment by NSO-surveyed adults (i.e. presumed "attenuation effect"), while estimates in black correspond to non-significantly different perceptions between both data sources. Perceptions are considered consistent when estimates are significant at most at the 10% threshold.

¹³ In Burundi, the GPS-SHaSA survey module includes both indirect and direct questions about respect for fundamental freedoms. RCT-like estimations based on responses to direct questions in AB and GPS-SHaSA confirm the absence of an attenuation bias. While AB respondents are more likely to feel that they are less able to speak their mind, they are more likely to feel more able to vote freely than GPS-SHaSA respondents. Both surveys' respondents feel equally free to support the political party of their choice.

conducted almost simultaneously, only two questions lend credit to the hypothesis of a systematic attenuation bias in responses when information is collected by a government-dependent body. In Cameroon, these two questions correspond to the perceived accountability of MPs and local government officials. In Mali, AB respondents express less satisfaction with democratic governance and perceive MPs as less accountable. Benin (column 2) is a very good illustration of the absence of a systematic response bias in terms of democracy-related issues. With respect to interviewee perceptions of a regime with one strong leader or the army in power: AB survey adults present more opposition to a regime with one leader, while GPS-SHaSA respondents are more likely to be more reluctant to give political power to the army. A similar diagnosis holds for perceived accountability of members of parliament and local government officials.

TABLE 10: DEMOCRATIC GOVERNANCE BY SURVEY SPONSOR (AB VS GPS-SHAsA)

<i>Treatment:</i> GPS-SHaSA respondent	All countries (1)	Benin (2)	Burundi (3)	Cameroon (4)	Cote d'Ivoire (5)	Madagascar (6)	Malawi (7)	Mali (8)	Uganda (9)
Satisfaction with democracy	2.584*** (0.0714)	20.40*** (1.497)	1.720*** (0.119)	0.931 (0.0674)	1.774*** (0.142)	5.755*** (0.354)	1.628*** (0.0749)	1.686*** (0.123)	2.643*** (0.189)
Regime where power is in the hands of									
<i>One leader</i>	2.928*** (0.0948)	16.18*** (0.959)	25.51*** (1.882)	0.577*** (0.0431)	0.350*** (0.0278)	0.458*** (0.0250)	4.225*** (0.276)	0.519*** (0.0388)	
<i>The army</i>	1.016 (0.0224)	0.831*** (0.0467)	1.578*** (0.0911)	0.419*** (0.0281)	0.335*** (0.0289)	0.781*** (0.0487)	4.746*** (0.334)	0.628*** (0.0498)	N/A
Freedom is respected									
<i>Speech</i>	0.365*** (0.00999)	0.196*** (0.0185)	0.970 (0.0671)	0.308*** (0.0221)	0.526*** (0.0394)	0.352*** (0.0308)	0.201*** (0.0114)	0.620*** (0.0449)	0.523*** (0.0363)
<i>Political</i>	0.485*** (0.0162)	0.196*** (0.0198)	0.446*** (0.0382)	0.508*** (0.0331)	0.636*** (0.0437)	0.437*** (0.0376)	0.379*** (0.0231)	0.447*** (0.0311)	0.926 (0.0692)
<i>Vote</i>	0.227*** (0.00922)	0.0498*** (0.00664)	0.125*** (0.0164)	0.166*** (0.0107)	0.299*** (0.0237)	0.0690*** (0.00957)	0.144*** (0.0142)	0.308*** (0.0222)	0.441*** (0.0348)
Listen to people									
<i>MPs</i>	2.821*** (0.0725)	1.562*** (0.102)	4.243*** (0.355)	1.306*** (0.0883)	2.562*** (0.203)	6.864*** (0.441)	2.884*** (0.155)	2.235*** (0.166)	1.436*** (0.121)
<i>Local government</i>	2.272*** (0.0827)	0.522*** (0.0457)	4.166*** (0.257)	1.386*** (0.110)	2.805*** (0.219)	3.511*** (0.243)	N/A	N/A	4.642*** (0.339)

Note: See Table 4. Number of observations are reported in appendix Table A8.

Sources: AB surveys, round 6 and GPS-SHaSA surveys; Authors' calculations.

Table 11 presents the estimates for trust-in-institutions questions and the perceived level of corruption. On three questions, AB respondents express a higher level of distrust in general in public representation and organisations. At the same time, no significant differences can be observed in trust in parliament, the army and the police. Yet, in Burundi and Cote d'Ivoire (columns 3 and 5), AB respondents express a systematically higher level of distrust. In Benin (column 2), GPS-SHaSA respondents are more distrustful of the police and show no difference in trust in the courts of law compared with AB respondents. AB and GPS-SHaSA respondents

living in Madagascar (column 6) share a similar level of trust in the highest level of political power, the president and parliament. AB respondents are likely to be more distrustful of the other public bodies in Benin and Madagascar. In Cameroon (column 4), citizens are always more likely to hold a dimmer view when they are interviewed by NSO agents. This result is contradictory to the findings of Tannenbergh (2017) and Zimbalist (2018), who come to the conclusion of a larger bias in least democratic countries. Indeed, Cameroon has one of the lowest *Varieties of Democracy* Electoral Democracy scores (Coppedge, et al., 2019). Yet responses to the GPS-SHaSA survey are more negative than the AB survey. Differences are balanced in Mali and Uganda (columns 8 and 9). In Mali, results are relatively consistent: adults interviewed by statistics office agents show a consistent level of trust in parliament and tax officials, more distrust of the army and more trust in the president, courts and the police. Responses in Uganda are highly consistent: across six questions, AB respondents express more distrust of the president, but place equal trust in parliament, the army, tax officials and the police, and more trust in the courts of law than GPS-SHaSA respondents.

The picture is highly mixed and country-specific. No evidence of systematic self-censorship is observed from data collected by government-related bodies. The systematic differences in Burundi and Cote d'Ivoire might cast doubt on the absence of a '*fear-of-the-state*' bias. Yet in Cameroon, where governance is characterised by low inclusiveness, the bias is in the opposite direction. GPS-SHaSA respondents appear to be less likely to have better assess to the institutions.

Turning to the perceived level of corruption by civil servants, unlike the trust-in-institutions questions, GPS-SHaSA respondents are likely to assess public servants as more corrupt. These results contradict the potential systematic attenuation bias partially observed for the trust-in-public-institutions questions. President aside, across all pooled samples, respondents interviewed by NSOs are always likely to perceive officials as more corrupt compared with AB respondents. Even when it comes to the president's involvement in corruption, estimates are likely to be higher in four countries (Burundi, Benin, Madagascar and Malawi) and lower in three countries (Cote d'Ivoire, Mali and Uganda).¹⁴ In Benin, Cameroon and Malawi, all agents are likely to be perceived as more corrupt by GPS-SHaSA respondents. In Cote d'Ivoire, Madagascar, Mali and Uganda, perception levels are mixed and do not appear to follow any set rule. Burundi (column 3) remains an exception: AB respondents express a more negative perception of all public bodies of interest. This almost systematically more

¹⁴ Data are not available in Cameroon.

negative perception from AB respondents in Burundi does not appear to correspond to a survey sponsor bias, as the bias is in the opposite direction for Cameroon where the governance indicators are very similar.

TABLE 11: TRUST IN INSTITUTIONS AND PERCEIVED CORRUPTION BY SURVEY SPONSOR (GPS-SHAsA vs AB)

<i>Treatment: GPS-SHAsA respondent</i>	All countries (1)	Benin (2)	Burundi (3)	Cameroon (4)	Cote d'Ivoire (5)	Madagascar (6)	Malawi (7)	Mali (8)	Uganda (9)
Trust in:									
<i>President</i>	1.446*** (0.0747)	1.223** (0.110)	2.634*** (0.254)	N/A	1.494*** (0.128)	0.963 (0.0623)		1.440*** (0.111)	1.356*** (0.102)
<i>Parliament</i>	1.092* (0.0499)	1.348*** (0.106)	3.128*** (0.231)	0.635*** (0.0376)	1.434*** (0.138)	1.137* (0.0851)		1.093 (0.0830)	0.888 (0.0776)
<i>Army</i>	0.932* (0.0398)	1.209** (0.0924)	2.296*** (0.234)	0.553*** (0.0366)	1.694*** (0.157)	1.192*** (0.0784)		0.717*** (0.0503)	0.947 (0.0749)
<i>Courts of law</i>	1.434*** (0.0596)	1.156 (0.103)	1.938*** (0.123)	0.750*** (0.0598)	2.432*** (0.190)	2.316*** (0.181)	N/A	1.719*** (0.152)	0.707*** (0.0536)
<i>Tax/customs</i>	1.221*** (0.0453)	1.661*** (0.107)	4.745*** (0.344)	0.765*** (0.0500)	1.593*** (0.140)	1.543*** (0.114)		1.146* (0.0926)	0.988 (0.0782)
<i>Police</i>	0.999 (0.0415)	0.820** (0.0732)	1.876*** (0.141)	0.651*** (0.0443)	1.533*** (0.135)	1.660*** (0.113)		1.211** (0.105)	1.182* (0.104)
Perceived level of corruption:									
<i>President</i>	1.054** (0.0264)	0.735*** (0.0357)	3.784*** (0.177)	N/A	3.508*** (0.293)	0.263*** (0.0159)	0.715*** (0.0238)	1.917*** (0.110)	5.610*** (0.665)
<i>Government officials</i>	0.680*** (0.0172)	0.597*** (0.0384)	3.822*** (0.205)	0.147*** (0.00993)	2.876*** (0.227)	N/A	0.297*** (0.0120)	1.203*** (0.0588)	1.584*** (0.167)
<i>MPs</i>	0.578*** (0.0133)	0.517*** (0.0271)	2.613*** (0.155)	0.176*** (0.0113)	1.986*** (0.131)	0.845*** (0.0490)	0.268*** (0.0113)	0.770*** (0.0417)	1.022 (0.0985)
<i>Local government</i>	0.739*** (0.0266)	0.533*** (0.0269)	5.421*** (0.337)	0.232*** (0.0165)	2.100*** (0.156)	0.238*** (0.0129)	N/A	N/A	1.676*** (0.159)
<i>Court of law officials</i>	0.546*** (0.0110)	0.500*** (0.0283)	1.321*** (0.0646)	0.196*** (0.0147)	0.903 (0.0584)	2.510*** (0.162)	0.205*** (0.00810)	0.691*** (0.0432)	0.421*** (0.0432)
<i>Tax/customs officials</i>	0.455*** (0.0125)	0.450*** (0.0228)	1.211*** (0.0777)	0.153*** (0.0124)	0.877* (0.0695)	1.107** (0.0568)	0.206*** (0.00914)	0.576*** (0.0406)	0.743*** (0.0710)
<i>Police</i>	0.500*** (0.0120)	0.570*** (0.0378)	1.839*** (0.106)	0.128*** (0.0103)	0.592*** (0.0410)	2.729*** (0.164)	0.180*** (0.00810)	0.646*** (0.0433)	0.314*** (0.0285)

Note: See Table 4. Number of observations are reported in appendix Table A8.

Sources: AB surveys, round 6 and GPS-SHAsA surveys; Authors' calculations.

There is no evidence to support the assumption that the collection of apparently sensitive data by government-related agents implies systematic self-censorship by respondents. NSO-surveyed adults do not assess the country's governance any better than they would if they had been interviewed by self-professed independent survey agents. Indeed, the calculation of ordered logit estimations for the 21 selected questions finds that GPS-SHAsA respondents are not likely to have a more positive perception of the quality of governance than AB respondents. Differences in perception between the two data sources might hence be explained by other

factors such as sampling errors, the time of data collection and the questionnaire design.¹⁵ Nonetheless, in Mali, where both surveys were conducted simultaneously, responses are among the most consistent. Nor are results driven by the national level of freedom, as has been suggested in the recent literature. In countries with the lowest Electoral Democracy score, such as Cameroon and Uganda, respondents do not give any more positive responses. Respondents interviewed by the NSO in Cameroon are likely to hold a more negative view of national and local governance. In Uganda, perceptions are relatively balanced and no rule can be evidenced from survey sponsor identity. Results are very robust to multinomial logit estimation methods (and generalised ordered logit).

The study is also applied to non-sensitive questions, namely trust in relatives and trust in neighbours.¹⁶ We can conduct the analysis for Burundi, Cameroon and Uganda, where round 5 data were collected relatively close in time to GPS-SHaSA data. Estimates are reported in appendix Table A9. The effects captured by survey sponsor identity are also significant. In Burundi and Cameroon, trust is likely to be lower in relatives (columns 1 and 2) and higher in neighbours (columns 4 and 5) when adults are interviewed by NSO agents. In Uganda, respondents are likely to share a consistent view of trust in relatives (column 3). Yet AB respondents are likely to trust more in their neighbours than GPS-SHaSA respondents. These results cast further doubt on any role played by the survey sponsor in survey responses.

5.4 Robustness checks

We test the robustness of our results for a large set of specifications and estimation methods, for all three steps of our estimation strategy. In the first-step estimations, we control for interviewers' characteristics and local heterogeneity by including interviewer dummies and region dummies. In the second-step estimations, we restrict our PSM estimation using solely the exogenous set of controls. Finally, in the third-step estimations, we implement simple OLS or multinomial logit methods, which relax the parallel regressions assumption. We further estimate RCT-like models including sub-national time-invariant characteristics. We also run step-three estimations comparing answers from GPS-SHaSA respondents solely with, on the one hand, those from AB respondents who believe they are being interviewed by a government-related entity and, on the other hand, with all AB responses differentiated by perceived survey sponsor. Finally, we randomly re-sample the GPS-SHaSA surveys to get the

¹⁵ Systematic analysis of the questions should be explored further, in particular to test both question sequence and procedural- vs. outcome-lens interpretation of democratic governance questions, trust in institutions and level of corruption (Mattes & Bratton, 2007; van der Meer & Hakhverdian, 2017).

¹⁶ It has also been conducted for gender equality in politics.

same sample size as in the AB surveys. The rationale for each robustness checks and detailed results are reported in Appendix B. Overall, the results remain highly consistent across all robustness checks conducted.

6 CONCLUSION

The need to collect data on governance-related issues has been growing since the 1990s (UNDP, 2010; Wilde, 2011). In particular, the indicator industry mushroomed with the emergence of the aid selectivity principle (aid should be allocated on the basis of good governance achievements). Later, the international post-2015 agenda created further momentum for governance data initiatives with the adoption of SDG16 on governance in 2015. African countries are now leading the process of collecting harmonised governance, peace and security (GPS-SHaSA) data from households driven by the African Union Commission’s Strategy for the Harmonisation of Statistics in Africa (SHaSA) and National Statistics Office experience. Yet the possibility has recently been raised that what is seen as sensitive survey data such as governance indicators collected by government-dependent institutions are potentially biased due to self-censorship by respondents. This study compares first-hand AB and GPS-SHaSA data from eight African countries to identify a potential ‘*fear-of-the-state*’ bias. Results exclude a bias due to survey sponsor identity following a comparison of responses to more than 20 similarly worded questions. Answers are never systematically more or less positive when collected by NSOs. Respondents do not show any reluctance to report a negative assessment of national or local governance compared with Afrobarometer survey adults. This result holds irrespective of the level of development of democracy and is also robust to the AB respondents’ perception of survey sponsor identity.

We cast further doubt on the existence of such a bias, since responses still differ by actual or perceived survey sponsor when considering non-sensitive data. The reasons for different assessments of the quality of governance (positive or negative) by respondents interviewed by the government (or believing that to be the case) need to be found elsewhere, including in selection issues. We find AB survey adults who believe they are answering a survey conducted by a government-related organisation to be different from the rest of the sample. They are among the most vulnerable and least educated, have less access to information and, in some countries, identify more with the ruling party.

To wrap up our results, in our chosen specification (experimental design), of the 173 regressions (on 21 questions addressing a broad range of governance issues in eight individual countries for the pooled sample), 76 show AB respondents to be significantly more critical than

GPS-SHaSA interviewees. Inverse perceptions are found in 78 cases, while responses are consistent between both sources in the remaining 19 cases. We obtain the same mixed picture when comparing unconditional averages, or intra-AB analysis by perceived survey sponsor. This result is further confirmed by the many robustness checks conducted. The attenuation bias hypothesis tested in this paper is therefore quite definitely rejected.

Three main conclusions can be drawn from this absence of a systematic attenuation bias. First, NSOs should not be assumed to have no legitimacy to collect data on governance issues in general. They are fully qualified to monitor SDG16 and Agenda 2063 (Aspiration 3 and 4) indicators. Not only are they not any more prone to the collection of biased data than other survey sponsors, but there are many other reasons for putting NSOs in the driver's seat. NSO surveys respect best statistical survey practices, and NSOs are the institutions where most of the statistical skills are concentrated in African countries. In the specific case of governance, NSO surveys provide better estimates than others: they are not biased (or at least not any more biased) and they are much more precise (given the sample sizes). NSOs have the mandate and legitimacy to collect such data, while fostering national ownership less easily achieved by unofficial statistical sources. Governance data constitute a public good that should be collected by public institutions as a matter of national sovereignty, as with all other kinds of socioeconomic statistics, where NSO expertise is undisputed: unemployment, poverty, living conditions, prices, international trade, national accounts, etc. Naturally, putting NSOs on the front line does not mean that other sponsors (like AB) are illegitimate to collect data on governance. Far from it. Alternative governance surveys form a good stimulus to further improve data quality. This paper is a good example of the advantage of having two sources of data on the same issue. Furthermore, the existence of unofficial sources can play a role of watchdog in the event of attempted manipulation for political reasons.

Second, contrary to popular belief, governance data are not especially sensitive. Despite being a relatively new field in statistics, they are not particularly tricky to collect. In some instances, it is even easier to gather information on governance than on other topics. On the supply side, governance indicators are less challenging (for instance, compared with monetary poverty indicators). On the demand side, people are keener to speak out about governance issues, especially in case of poor governance, than more classical questions (such as income and expenditure). Hence reluctance to embark on governance surveys should be dispelled. More should be done to promote governance statistics in advocacy activities with stakeholders (public authorities, civil society, donor community, and statisticians themselves, prone to self-censorship).

Lastly, although the evidence suggests that NSO surveys on governance are not specifically biased compared with other sources, we cannot rule out the possibility of potential measurement errors irrespective of survey sponsor (as with in all other fields of statistics). The observed differences between AB and GPS-SHaSA remain largely unexplained. There may be many reasons for such discrepancies (at all stages of the survey process from sampling design to nonresponse and imputation, question wording and sequence, questionnaire administration, and data capture and processing). This issue should be investigated further to bridge the knowledge gap.

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APPENDIX A

TABLE A1: SUMMARY STATISTICS FOR THE SELECTED QUESTIONS

		Benin		Burundi		Cameroon		Cote d'Ivoire		Madagascar		Malawi		Mali		Uganda	
		GPS	AB	GPS	AB	GPS	AB	GPS	AB	GPS	AB	GPS	AB	GPS	AB	GPS	AB
Democracy																	
Satisfaction with democratic governance	-- No	1,2	21,0	5,4	13,3	22,7	29,5	15,9	28,3	13,1	41,9	14,4	24,3	11,0	20,5	9,4	16,1
	-	7,8	36,4	17,6	21,1	41,0	30,9	27,8	33,2	33,9	45,8	21,3	23,2	31,5	29,3	18,3	30,4
	+	39,5	34,6	39,7	34,3	29,7	32,1	41,1	30,3	41,5	10,0	38,9	32,4	44,0	33,6	34,8	40,9
	++ Yes	51,5	8,0	37,4	31,3	6,6	7,5	15,3	8,3	11,6	2,3	25,4	20,2	13,5	16,6	37,4	12,7
Agree with army ruling	-- No	48,9	48,9	54,5	64,0	62,0	41,9	69,7	49,4	39,2	29,7	47,5	80,8	45,7	47,2	N/A	71,9
	-	27,9	33,8	22,7	23,8	24,3	31,0	23,7	39,4	31,2	39,4	37,3	8,9	39,6	20,2		19,2
	+	15,7	12,8	14,0	10,6	8,8	19,4	4,6	9,5	19,6	26,1	10,8	5,0	10,0	19,7		5,6
	++ Yes	7,5	4,5	8,8	1,6	5,0	7,7	2,0	1,8	10,0	4,9	4,4	5,3	4,8	12,9		3,4
Agree with one leader ruling	-- No	10,1	60,6	9,6	65,6	66,2	56,5	70,4	52,7	61,4	38,2	46,5	78,8	62,2	58,1	N/A	80,9
	-	16,2	33,8	9,5	22,4	24,7	34,2	24,9	40,6	25,1	49,8	38,9	9,0	36,7	30,8		13,3
	+	29,9	4,1	19,0	10,9	5,7	6,4	3,5	4,9	10,2	8,3	10,2	4,9	0,8	7,6		3,7
	++ Yes	43,9	1,6	61,8	1,2	3,4	3,0	1,3	1,8	3,4	3,7	4,4	7,3	0,3	3,5		2,2
Freedom of speech is respected	-- No	47,2	3,9	32,2	14,2	14,7	7,4	17,1	14,3	43,2	5,1	6,9	3,0	6,4	7,5	11,6	4,5
	-		10,3		17,7	41,5	18,3	34,9	24,2		17,0	27,7	7,4	25,3	16,2	22,6	11,6
	+		32,9		34,7	24,6	31,7	31,5	30,2		42,2	23,8	12,0	34,4	23,9	22,2	31,9
	++ Yes	51,8	52,9	67,8	33,4	19,3	42,6	16,5	31,3	56,8	35,7	41,6	77,6	33,9	52,5	43,7	52,0
Political freedom is respected	-- No	40,7	3,1	30,5	6,9	7,7	4,7	9,2	8,4	40,6	6,6	2,3	2,6	1,3	1,6	9,6	4,4
	-		7,1		9,6	25,2	7,2	23,8	13,7		15,5	10,6	6,0	11,9	4,6	12,2	8,4
	+		27,5		37,5	21,0	25,9	35,7	32,3		43,8	19,9	6,0	32,0	18,3	16,8	27,3
	++ Yes	59,3	62,3	69,6	46,0	46,1	62,2	31,3	45,6	59,4	34,1	67,2	85,4	54,8	75,6	61,5	60,0
Free and fair elections are respected	-- No	58,9	2,3	39,7	3,0	16,1	2,8	12,8	6,4	45,4	1,8	1,6	0,9	2,7	1,0	13,7	2,9
	-		4,9		4,9	29,1	5,5	25,4	9,5		3,9	9,4	1,9	15,7	3,4	14,1	7,4
	+		20,8		31,9	22,4	21,5	35,8	29,9		33,6	18,8	2,6	30,6	16,6	18,8	22,2
	++ Yes	41,1	72,0	60,3	60,2	32,4	70,2	26,1	54,2	54,6	60,7	70,3	94,6	51,0	79,0	53,4	67,6
MPs listen to the people	-- No	32,1	43,4	47,1	77,5	44,3	49,0	28,6	56,0	32,9	75,0	30,7	57,1	28,9	51,8	36,3	37,4
	-	57,3	40,7	31,3	15,6	36,8	32,2	41,0	27,8	43,2	19,3	48,8	30,0	36,8	18,7	30,8	42,1
	+	9,1	14,9	13,2	6,2	14,5	13,7	24,1	12,5	19,9	5,3	13,1	6,6	28,5	15,2	18,7	15,8
	++ Yes	1,4	1,0	8,4	0,7	4,4	5,1	6,3	3,8	4,2	0,3	7,5	6,3	5,8	14,3	14,2	4,7
Local officials listen to the people	-- No	31,6	32,0	18,3	49,9	30,2	38,3	27,1	53,5	23,5	51,7	31,8		20,8		14,3	30,6
	-	58,8	39,7	40,0	26,4	40,4	33,7	38,6	29,2	45,2	30,9	43,7		39,0		21,6	44,0
	+	8,2	25,0	28,9	20,2	21,5	19,4	28,0	12,6	26,3	15,3	16,0	N/A	32,2	N/A	28,6	18,6
	++ Yes	1,4	3,3	13,0	3,6	7,9	8,6	6,4	4,7	5,1	2,1	8,5		8,0		35,5	6,8

Continued on next page

Table A1 – continued

		Table A1 - continued															
		Benin		Burundi		Cameroon		Cote d'Ivoire		Madagascar		Malawi		Mali		Uganda	
		GPS	AB	GPS	AB	GPS	AB	GPS	AB	GPS	AB	GPS	AB	GPS	AB	GPS	AB
Trust in institutions																	
President	-- <i>No</i>	16,3	31,3	5,9	4,8	N/A	11,2	7,3	20,8	50,6	25,2	N/A	46,9	2,7	12,2	18,3	13,4
	-	27,9	22,0	8,9	19,3		16,6	24,9	22,9	23,4	18,9		17,4	13,3	26,9		
	+	43,2	18,2	24,6	28,5		38,7	14,5	31,6	9,0	43,1		27,4	17,6	27,0		
	++ <i>Yes</i>	12,6	28,5	94,1	61,7		41,1	37,4	39,8	49,4	20,3		20,7	35,4	42,9	50,8	32,7
Parliament	-- <i>No</i>	11,3	19,3	9,6	9,4	33,8	25,1	7,9	25,5	56,4	25,4	N/A	23,0	5,4	13,1	17,3	9,3
	-	31,2	31,1	15,2	31,9	28,9	24,2	28,6	31,7	24,7	30,4		25,0	18,9	21,9		
	+	46,6	27,9	27,7	21,0	27,4	50,4	15,9	30,3	17,9	44,6		31,5	23,0	32,4		
	++ <i>Yes</i>	11,0	21,7	90,4	47,8	13,3	18,6	17,6	30,0	43,6	12,6		34,5	19,6	30,5	40,9	36,5
Army	-- <i>No</i>	8,2	15,1	6,0	3,8	17,7	12,7	11,0	26,4	55,3	29,1	N/A	9,0	1,2	6,8	20,3	10,5
	-	26,5	26,7	8,8	26,6	15,7	26,8	32,5	26,8	9,7	14,7		11,1	13,2	22,2		
	+	49,0	27,3	33,5	25,9	24,8	43,9	17,4	28,4	14,1	42,1		22,8	19,0	26,7		
	++ <i>Yes</i>	16,3	30,9	94,0	53,9	29,8	46,8	18,3	23,7	44,7	15,7		67,2	42,0	59,3	47,5	40,6
Justice	-- <i>No</i>	8,6	18,8	20,5	11,8	31,3	27,2	9,3	25,3	52,3	41,4	N/A	10,5	10,0	26,7	19,0	9,3
	-	32,5	31,0	20,9	34,0	28,5	24,4	36,8	29,7	16,6	40,0		28,0	19,0	22,6		
	+	47,8	29,1	34,2	22,8	26,8	48,5	20,0	20,0	20,1	37,1		25,0	28,9	35,2		
	++ <i>Yes</i>	11,1	21,1	79,5	33,1	11,9	17,5	17,8	17,9	47,7	8,9		52,8	12,9	20,2	33,1	32,9
Tax / customs	-- <i>No</i>	14,1	23,0	17,8	26,3	42,7	36,6	7,2	17,5	46,9	19,9	N/A	22,2	7,1	18,4	31,8	24,1
	-	34,9	33,1	24,4	30,4	28,6	27,8	38,2	36,2	21,2	35,5		24,7	26,3	35,0		
	+	39,9	30,6	26,4	17,7	24,6	50,5	21,8	33,3	19,3	41,9		31,8	20,5	26,5		
	++ <i>Yes</i>	11,1	13,4	82,2	23,0	9,2	10,2	14,6	22,5	53,1	10,6		37,3	15,5	25,1	21,5	14,5
Police	-- <i>No</i>	10,7	17,4	19,6	12,7	30,7	25,9	12,8	22,6	51,7	34,6	N/A	19,2	10,6	24,1	23,0	18,9
	-	34,2	29,6	17,4	31,9	23,8	26,4	35,0	28,7	19,4	38,8		24,2	19,8	30,5		
	+	44,0	25,8	31,2	24,2	29,3	46,8	20,9	24,2	18,6	37,1		25,2	23,4	27,9		
	++ <i>Yes</i>	11,2	27,2	80,4	38,8	13,3	21,0	14,0	21,5	48,3	12,6		42,8	13,5	26,5	33,8	22,8
Corruption																	
President	-- <i>All</i>	23,7	22,5	3,3	2,8	N/A	15,8	5,1	10,2	41,8	6,8	39,9	24,7	8,0	9,1	16,6	15,4
	-	33,6	30,8	6,1	14,7		24,2	8,9	14,9	23,6	22,1	18,9	24,4	21,4	26,5	8,5	22,6
	+	34,8	39,7	16,3	43,1		52,2	29,0	54,9	21,3	44,3	24,4	41,0	40,7	46,5	19,2	55,5
	++ <i>None</i>	7,9	7,1	74,3	39,4		7,8	57,0	20,1	13,3	26,9	16,8	10,0	29,9	18,0	55,7	6,5
Ministers	-- <i>All</i>	24,9	20,1	3,5	3,2	62,5	17,6	5,8	10,5	N/A	7,4	44,9	11,8	9,2	9,3	24,0	10,4
	-	40,6	35,8	8,1	21,8	22,5	33,1	12,0	20,1		28,1	25,0	27,5	34,7	34,3	17,8	31,8
	+	29,1	40,4	23,0	47,0	11,5	43,5	36,1	53,5		44,1	21,7	51,2	38,5	43,1	23,6	54,4
	++ <i>None</i>	5,3	3,7	65,4	28,0	3,5	5,8	46,1	16,0		20,4	8,5	9,5	17,6	13,3	34,6	3,5

Continued on next page

Table A1 – continued

		Benin		Burundi		Cameroon		Cote d'Ivoire		Madagascar		Malawi		Mali		Uganda	
		GPS	AB	GPS	AB	GPS	AB	GPS	AB	GPS	AB	GPS	AB	GPS	AB	GPS	AB
MPs	-- All	21,8	16,8	2,8	2,9	52,4	15,4	5,1	9,6	15,8	7,9	41,8	9,8	11,5	8,8	23,6	7,2
	-	39,9	31,6	8,0	14,3	27,2	25,7	14,8	15,5	27,6	27,5	24,1	21,0	36,9	27,8	17,9	22,3
	+	32,9	45,3	24,3	44,9	15,8	51,6	40,7	56,8	35,5	44,5	24,8	54,3	37,7	47,5	25,6	65,0
	++ None	5,4	6,3	65,0	38,0	4,6	7,2	39,4	18,1	21,2	20,1	9,4	15,0	13,9	15,8	32,9	5,6
Local government officials	-- All	19,8	16,6	1,9	4,4	42,1	15,1	7,2	10,5	15,9	1,9	29,9		15,2		18,7	9,4
	-	43,4	31,9	4,5	18,9	33,6	23,9	18,2	22,6	34,4	11,3	20,1	N/A	40,8	N/A	14,1	22,2
	+	31,4	47,1	18,1	42,1	19,4	53,0	41,2	53,7	33,6	48,4	30,8		29,5		30,8	61,0
	++ None	5,4	4,4	75,5	34,6	5,0	8,0	33,5	13,2	16,1	38,4	19,2		14,5		36,4	7,4
Judges	-- All	22,3	15,2	13,6	13,4	61,5	26,1	16,3	13,0	8,9	18,0	44,4	7,4	26,8	24,2	33,4	9,5
	-	40,5	35,4	31,2	37,8	24,4	29,6	22,8	23,5	18,8	31,0	23,6	18,3	40,4	32,4	21,7	22,1
	+	32,3	45,0	33,8	36,0	10,8	39,4	41,7	52,7	35,9	32,8	23,0	55,6	24,5	33,7	22,0	61,6
	++ None	4,9	4,4	21,4	12,8	3,3	5,0	19,2	10,8	36,5	18,2	9,0	18,7	8,3	9,7	22,8	6,9
Tax officials	-- All	24,7	15,7	11,6	12,2	70,9	30,9	16,4	14,6	12,3	7,6	47,1	9,5	19,5	15,2	38,3	20,3
	-	43,5	38,4	34,0	39,1	19,8	28,6	25,9	24,7	24,8	27,8	24,7	22,6	42,8	31,5	18,2	27,8
	+	27,2	41,8	35,4	34,8	7,0	36,2	38,8	50,1	34,2	43,7	19,6	53,8	27,5	39,0	17,9	48,3
	++ None	4,7	4,1	19,0	14,0	2,3	4,4	18,8	10,6	28,6	20,9	8,6	14,2	10,2	14,3	25,6	3,6
Police officers	-- All	19,7	17,7	11,1	16,9	71,4	26,3	30,7	20,8	8,1	15,9	60,0	14,3	22,4	19,2	60,1	28,2
	-	46,3	37,7	31,1	39,7	19,5	32,7	34,3	29,0	18,4	33,3	19,3	28,4	43,5	34,2	15,9	35,4
	+	28,9	38,7	36,0	30,7	7,4	36,8	25,7	40,8	37,1	35,9	14,3	46,8	25,8	33,9	12,0	34,3
	++ None	5,1	6,0	21,8	12,7	1,8	4,2	9,4	9,4	36,5	15,0	6,5	10,5	8,3	12,7	12,0	2,0

TABLE A2: PARTIAL NONRESPONSES TO THE SELECTED QUESTIONS

	All countries		Benin		Burundi		Cameroon		Cote d'Ivoire		Madagascar		Malawi		Mali		Uganda	
	<i>GPS</i>	<i>AB</i>	<i>GPS</i>	<i>AB</i>	<i>GPS</i>	<i>AB</i>	<i>GPS</i>	<i>AB</i>	<i>GPS</i>	<i>AB</i>	<i>GPS</i>	<i>AB</i>	<i>GPS</i>	<i>AB</i>	<i>GPS</i>	<i>AB</i>	<i>GPS</i>	<i>AB</i>
Observations	98 530	11 981	39 987	1 200	13 116	1 200	5 044	1 182	3 082	1 199	7 166	1 200	13 965	2 400	15 135	1 200	1 035	2 400
Democracy-related questions																		
Satisfaction with democracy	279	663	2	80	145	12	127	83	0	72	0	141	5	182	0	14	0	79
Agree with the army ruling	202	611	0	59	71	78	127	116	0	26	0	114	4	99	0	62	<i>N/A</i>	57
Agree with one leader ruling	202	566	0	41	70	84	127	97	0	31	0	133	5	100	0	34	<i>N/A</i>	46
Freedom of speech respected	192	94	1	4	68	12	120	31	0	9	0	1	3	19	0	0	0	18
Political freedom respected	193	138	1	3	68	12	121	50	0	17	0	8	3	24	0	0	0	24
Free and fair elections are respected	194	83	1	3	68	5	122	38	0	10	0	3	3	11	0	1	0	12
MPs listen to the people	224	329	0	15	80	24	136	110	0	23	0	5	8	41	0	33	0	78
Local officials listen to the people	228	207	1	13	82	8	136	93	0	36	0	3	9	<i>N/A</i>	0	<i>N/A</i>	0	54
Trust in institutions																		
<i>President</i>	98	176	1	2	97	5	<i>N/A</i>	42	0	8	0	3	<i>N/A</i>	71	0	2	0	43
<i>Parliament</i>	318	307	0	17	91	33	135	60	0	14	0	9	<i>N/A</i>	108	0	7	92	59
<i>Army</i>	226	245	0	16	91	12	135	31	0	3	0	4	<i>N/A</i>	79	0	0	0	100
<i>Justice</i>	212	331	0	30	78	15	134	46	0	26	0	4	<i>N/A</i>	72	0	2	0	136
<i>Tax/customs</i>	284	756	0	40	78	177	135	63	0	74	0	10	<i>N/A</i>	218	0	9	71	165
<i>Police</i>	212	92	0	8	77	6	135	23	0	3	0	2	<i>N/A</i>	35	0	2	0	13
Perceived corruption questions																		
<i>President</i>	141	1 021	1	47	86	216	<i>N/A</i>	183	0	75	0	19	12	288	0	22	42	168
<i>Ministers</i>	579	835	1	36	84	197	138	136	0	61	<i>N/A</i>	22	11	265	0	9	45	109
<i>MPs</i>	258	982	0	53	84	228	138	177	0	73	0	20	10	299	0	8	26	124
<i>Local gvt officials</i>	240	435	0	21	82	109	138	117	0	71	0	12	11	<i>N/A</i>	0	<i>N/A</i>	9	105
<i>Judges</i>	265	825	0	64	81	76	138	108	0	55	0	14	8	291	0	5	38	212
<i>Tax officials</i>	275	955	0	52	80	131	138	94	0	69	0	25	7	383	0	10	50	191
<i>Police</i>	232	499	0	28	79	78	138	84	0	28	0	9	8	206	0	5	7	61

TABLE A3: SUMMARY STATISTICS FOR THE COVARIATES

	Benin		Burundi		Cameroon		Cote d'Ivoire		Madagascar		Malawi		Mali		Uganda	
	<i>GPS</i>	<i>AB</i>	<i>GPS</i>	<i>AB</i>	<i>GPS</i>	<i>AB</i>	<i>GPS</i>	<i>AB</i>	<i>GPS</i>	<i>AB</i>	<i>GPS</i>	<i>AB</i>	<i>GPS</i>	<i>AB</i>	<i>GPS</i>	<i>AB</i>
Female	0.53 (0.50)	0.50 (0.50)	0.54 (0.50)	0.50 (0.50)	0.53 (0.50)	0.50 (0.50)	0.48 (0.50)	0.50 (0.50)	0.51 (0.50)	0.50 (0.50)	0.53 (0.50)	0.50 (0.50)	0.54 (0.50)	0.50 (0.50)	0.49 (0.50)	0.50 (0.50)
Age	38.04 (14.70)	35.84 (28.15)	37.48 (15.37)	37.15 (13.98)	36.33 (16.11)	32.49 (10.85)	37.00 (14.40)	35.46 (12.31)	38.71 (15.31)	39.52 (13.77)	36.50 (15.67)	34.56 (13.89)	38.76 (15.53)	40.03 (14.58)	40.36 (15.74)	35.18 (12.81)
Age group																
18-24	0.17 (0.37)	0.23 (0.42)	0.23 (0.42)	0.20 (0.40)	0.28 (0.45)	0.26 (0.44)	0.26 (0.44)	0.20 (0.40)	0.21 (0.41)	0.14 (0.35)	0.27 (0.44)	0.28 (0.45)	0.20 (0.40)	0.15 (0.36)	0.15 (0.35)	0.21 (0.41)
25-30	0.22 (0.41)	0.26 (0.44)	0.20 (0.40)	0.20 (0.40)	0.20 (0.40)	0.28 (0.45)	0.22 (0.42)	0.21 (0.41)	0.16 (0.37)	0.17 (0.37)	0.18 (0.39)	0.21 (0.41)	0.19 (0.39)	0.18 (0.38)	0.19 (0.40)	0.25 (0.43)
31-40	0.27 (0.44)	0.23 (0.42)	0.21 (0.41)	0.26 (0.44)	0.21 (0.41)	0.25 (0.44)	0.24 (0.43)	0.29 (0.46)	0.22 (0.42)	0.26 (0.44)	0.22 (0.42)	0.25 (0.44)	0.23 (0.42)	0.26 (0.44)	0.24 (0.43)	0.26 (0.44)
41-50	0.17 (0.37)	0.14 (0.34)	0.15 (0.36)	0.16 (0.36)	0.13 (0.34)	0.12 (0.33)	0.13 (0.33)	0.17 (0.38)	0.18 (0.38)	0.23 (0.42)	0.14 (0.35)	0.12 (0.32)	0.15 (0.36)	0.18 (0.39)	0.18 (0.38)	0.16 (0.37)
51-60	0.095 (0.29)	0.091 (0.29)	0.12 (0.32)	0.11 (0.31)	0.078 (0.27)	0.065 (0.25)	0.077 (0.27)	0.075 (0.26)	0.13 (0.33)	0.13 (0.33)	0.086 (0.28)	0.064 (0.24)	0.12 (0.33)	0.13 (0.34)	0.11 (0.31)	0.066 (0.25)
61 and +	0.082 (0.27)	0.059 (0.24)	0.10 (0.29)	0.073 (0.26)	0.10 (0.30)	0.019 (0.14)	0.073 (0.26)	0.045 (0.21)	0.098 (0.30)	0.077 (0.27)	0.096 (0.30)	0.077 (0.27)	0.10 (0.30)	0.10 (0.30)	0.13 (0.33)	0.059 (0.24)
Rural	0.52 (0.50)	0.51 (0.50)	0.89 (0.32)	0.82 (0.38)	0.56 (0.50)	0.48 (0.50)	0.49 (0.50)	0.46 (0.50)	0.75 (0.43)	0.81 (0.39)	0.82 (0.39)	0.85 (0.36)	0.73 (0.44)	0.75 (0.43)	0.83 (0.37)	0.86 (0.34)
Level of education																
None	0.62 (0.48)	0.39 (0.49)	0.54 (0.50)	0.33 (0.47)	0.23 (0.42)	0.047 (0.21)	0.54 (0.50)	0.13 (0.33)	0.19 (0.39)	0.085 (0.28)	0.0042 (0.065)	0.13 (0.33)	0.74 (0.44)	0.64 (0.48)		0.12 (0.33)
Primary	0.15 (0.36)	0.22 (0.41)	0.18 (0.39)	0.49 (0.50)	0.28 (0.45)	0.19 (0.39)	0.19 (0.39)	0.26 (0.44)	0.40 (0.49)	0.54 (0.50)	0.67 (0.47)	0.56 (0.50)	0.20 (0.40)	0.23 (0.42)	N/A	0.40 (0.49)
Secondary	0.19 (0.39)	0.32 (0.46)	0.26 (0.44)	0.15 (0.36)	0.38 (0.48)	0.52 (0.50)	0.23 (0.42)	0.45 (0.50)	0.34 (0.47)	0.34 (0.47)	0.27 (0.44)	0.27 (0.44)	0.041 (0.20)	0.085 (0.28)		0.33 (0.47)
Post-secondary	0.043 (0.20)	0.073 (0.26)	0.014 (0.12)	0.032 (0.18)	0.10 (0.31)	0.25 (0.43)	0.049 (0.22)	0.16 (0.36)	0.069 (0.25)	0.037 (0.19)	0.059 (0.23)	0.043 (0.20)	0.019 (0.14)	0.047 (0.21)		0.15 (0.35)
Identification with a political party	0.066 (0.25)	0.42 (0.49)	0.49 (0.50)	0.70 (0.46)	0.33 (0.47)	0.49 (0.50)	0.39 (0.49)	0.62 (0.49)	0.21 (0.41)	0.56 (0.50)	0.55 (0.50)	0.76 (0.42)	0.35 (0.48)	0.68 (0.47)	N/A	0.77 (0.42)
Observations	39,987	1,200	13,116	1,200	5,044	1,182	3,082	1,199	7,166	1,200	13,965	2,400	15,135	1,200	1,035	2,400
Year of collection	2015	2015	2014	2012	2014	2015	2014	2014	2015	2016	2014	2014	2015	2015	2012	2013

TABLE A4: NUMBER OF OBSERVATIONS PER BASELINE ESTIMATIONS

	All countries	Benin	Burundi	Cameroon	Ivory Coast	Madagascar	Malawi	Mali	Uganda
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Satisfaction with democracy	9,741	1,047	1,010	888	1,039	966	1,766	1,155	1,870
Regime where the power is in the hands of									
<i>One leader</i>	9,808	1,076	949	896	1,064	965	1,834	1,136	1,888
<i>The army</i>	9,759	1,059	959	876	1,070	982	1,822	1,107	1,884
Freedom is respected									
<i>Speech</i>	10,152	1,109	1,010	923	1,083	1,076	1,872	1,169	1,910
<i>Political</i>	10,114	1,110	1,007	907	1,076	1,071	1,867	1,169	1,907
<i>Vote</i>	10,154	1,110	1,015	915	1,082	1,074	1,876	1,168	1,914
Listen to people									
<i>MPs</i>	9,986	1,099	1,002	865	1,073	1,073	1,860	1,136	1,878
<i>Local government</i>	7,014	1,102	1,014	877	1,062	1,075	<i>N/a</i>	<i>N/a</i>	1,884
Trust in:									
<i>President</i>	10,109	1,111	1,013	914	1,084	1,075	1,848	1,167	1,897
<i>Parliament</i>	10,015	1,096	992	904	1,079	1,071	1,831	1,162	1,880
<i>Army</i>	10,052	1,097	1,009	923	1,088	1,074	1,836	1,169	1,856
<i>Courts of law</i>	9,988	1,084	1,008	914	1,071	1,073	1,847	1,167	1,824
<i>Tax/customs</i>	9,672	1,082	883	905	1,032	1,068	1,739	1,160	1,803
<i>Police</i>	10,164	1,104	1,015	930	1,088	1,075	1,871	1,167	1,914
Perceived level of corruption:									
<i>President</i>	9,516	1,078	849	843	1,031	1,064	1,699	1,148	1,804
<i>Government officials</i>	9,660	1,084	859	869	1,042	1,063	1,726	1,160	1,857
<i>MPs</i>	9,559	1,070	839	844	1,032	1,065	1,702	1,161	1,846
<i>Local government</i>	6,871	1,097	934	877	1,032	1,068	<i>N/a</i>	<i>N/a</i>	1,863
<i>Courts of law officials</i>	9,666	1,058	956	887	1,048	1,066	1,705	1,164	1,782
<i>Tax/custom officials</i>	9,555	1,070	910	897	1,038	1,059	1,630	1,159	1,792
<i>Police</i>	9,901	1,090	953	898	1,068	1,071	1,768	1,164	1,889

TABLE A5: SENSITIVE QUESTIONS AND PERCEIVED AB SURVEY SPONSOR (TABLES 4 TO 6 CONTINUED)

Perceive 'other' organisations as the sponsor (<i>ref.: AB</i>)	All countries (1)	Benin (2)	Burundi (3)	Cameroon (4)	Cote d'Ivoire (5)	Madagascar (6)	Malawi (7)	Mali (8)	Uganda (9)
Satisfaction with democracy	0.984 (0.0651)	0.800 (0.292)	1.534** (0.279)	0.763 (0.154)	0.956 (0.224)	1.072 (0.223)	1.381** (0.181)	0.592*** (0.102)	0.715** (0.120)
Regime where power is in the hands of									
One leader	1.001 (0.0789)	0.763 (0.254)	1.738*** (0.339)	1.052 (0.219)	1.207 (0.303)	0.876 (0.175)	1.111 (0.233)	0.443*** (0.120)	1.604* (0.453)
The army	1.106 (0.0737)	1.348 (0.373)	1.186 (0.244)	1.645** (0.355)	0.975 (0.250)	1.011 (0.203)	0.906 (0.193)	0.810 (0.169)	1.388 (0.326)
Freedom is respected									
Speech	0.906 (0.0555)	1.091 (0.319)	1.128 (0.187)	0.783 (0.139)	0.742 (0.139)	0.912 (0.168)	1.166 (0.206)	0.593** (0.130)	0.818 (0.168)
Political	0.942 (0.0626)	1.497 (0.548)	1.074 (0.197)	0.643* (0.154)	0.725 (0.160)	1.117 (0.201)	1.051 (0.209)	0.866 (0.201)	0.883 (0.209)
Vote	1.009 (0.0781)	1.493 (0.601)	0.933 (0.191)	0.606** (0.137)	0.663* (0.141)	1.229 (0.228)	1.698* (0.533)	1.052 (0.297)	1.221 (0.288)
Listen to people									
MPs	0.995 (0.0665)	0.868 (0.277)	0.778 (0.214)	1.104 (0.219)	0.932 (0.212)	0.816 (0.182)	1.050 (0.160)	1.516** (0.289)	0.928 (0.201)
Local government	0.842** (0.0691)	0.736 (0.231)	0.570*** (0.109)	0.873 (0.148)	1.019 (0.233)	0.817 (0.151)	N/A	N/A	1.282 (0.225)
Trust in:									
President	1.187*** (0.0761)	1.881** (0.503)	1.000 (0.195)	0.655* (0.152)	1.170 (0.264)	0.904 (0.155)	1.608*** (0.229)	1.541* (0.344)	0.755* (0.125)
Parliament	1.069 (0.0669)	1.347 (0.452)	1.340 (0.287)	0.692* (0.136)	1.028 (0.267)	0.906 (0.140)	1.272* (0.164)	1.374* (0.240)	0.587*** (0.115)
Army	1.019 (0.0671)	1.136 (0.293)	1.209 (0.268)	0.842 (0.165)	1.256 (0.258)	0.872 (0.148)	1.013 (0.147)	1.359 (0.264)	0.764 (0.147)
Courts of law	1.051 (0.0672)	1.657 (0.520)	1.156 (0.193)	0.938 (0.204)	1.118 (0.243)	0.751 (0.146)	1.147 (0.180)	1.058 (0.201)	0.964 (0.207)
Tax/customs officials	0.987 (0.0662)	1.272 (0.374)	1.270 (0.250)	1.160 (0.252)	1.045 (0.203)	0.534*** (0.101)	1.035 (0.155)	1.102 (0.217)	0.961 (0.205)
Police	1.203*** (0.0839)	1.640 (0.581)	1.359* (0.239)	1.063 (0.188)	0.972 (0.198)	0.840 (0.141)	1.409*** (0.181)	1.315 (0.220)	0.982 (0.160)
Perceived level of corruption:									
President	1.278*** (0.0890)	1.931* (0.669)	1.141 (0.247)	1.147 (0.274)	1.104 (0.231)	1.369* (0.235)	1.388** (0.201)	1.490** (0.280)	0.907 (0.138)
Government officials	1.222*** (0.0873)	1.704 (0.604)	1.408* (0.266)	1.241 (0.250)	1.164 (0.239)	1.292 (0.228)	1.149 (0.168)	1.178 (0.221)	0.844 (0.156)
MPs	1.064 (0.0720)	1.032 (0.307)	1.071 (0.221)	1.090 (0.265)	0.877 (0.172)	1.203 (0.205)	1.043 (0.137)	1.578** (0.303)	0.707* (0.144)
Local government	0.961 (0.0751)	0.842 (0.274)	0.796 (0.152)	0.919 (0.198)	1.061 (0.172)	1.342** (0.191)	N/A	N/A	0.821 (0.167)
Court of law officials	1.181** (0.0812)	1.144 (0.397)	1.266 (0.241)	1.333 (0.368)	0.722* (0.141)	1.288 (0.233)	1.477*** (0.209)	1.185 (0.216)	0.698** (0.122)
Tax/customs officials	1.264*** (0.0898)	1.087 (0.293)	1.384 (0.284)	1.688* (0.477)	0.850 (0.180)	0.908 (0.186)	1.606*** (0.249)	1.139 (0.221)	1.233 (0.241)
Police	1.392*** (0.0920)	1.078 (0.346)	1.522** (0.281)	1.922*** (0.393)	0.773 (0.159)	1.319* (0.219)	1.519*** (0.227)	1.378 (0.294)	1.373* (0.252)

Note: OR reported. Robust standard errors (bootstrapped 100 times) are in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1. Each OR corresponds to a separate estimation. All estimations include individual controls (gender, age group, level of education, identification with a political party and area of residence). Country dummies are also included in column 1. Countries can be excluded if the question is absent from the country's questionnaire.

TABLE A6: PROPENSITY SCORE OF PERCEIVING THE GOVERNMENT AS SURVEY SPONSOR

	All countries (1)	Benin (2)	Burundi (3)	Cameroon (4)	Cote d'Ivoire (5)	Madagascar (6)	Malawi (7)	Mali (8)	Uganda (9)
Female	1.214*** (0.0564)	1.017 (0.144)	1.381** (0.210)	0.885 (0.131)	0.953 (0.132)	0.951 (0.152)	1.430*** (0.141)	0.969 (0.135)	1.516*** (0.166)
Age group (reference: 31 - 40 y.o.)									
18 - 24	0.669*** (0.0463)	0.853 (0.166)	0.436*** (0.104)	0.493*** (0.0984)	0.848 (0.177)	0.979 (0.279)	0.673*** (0.0930)	0.736 (0.178)	0.832 (0.129)
25 - 30	0.701*** (0.0473)	0.956 (0.193)	0.461*** (0.105)	0.519*** (0.107)	0.767 (0.149)	0.793 (0.213)	0.739** (0.0987)	0.818 (0.189)	0.940 (0.146)
41 - 50	0.762*** (0.0591)	0.781 (0.181)	0.587** (0.153)	0.320*** (0.0840)	0.621** (0.138)	1.336 (0.351)	0.862 (0.145)	0.868 (0.219)	1.361 (0.257)
51 - 60	0.744*** (0.0690)	0.879 (0.238)	0.636 (0.180)	0.233*** (0.0798)	1.035 (0.305)	1.250 (0.371)	1.136 (0.241)	0.593* (0.159)	0.885 (0.209)
61 and more	0.855 (0.0902)	0.669 (0.210)	0.942 (0.314)	0.800 (0.390)	1.272 (0.456)	1.229 (0.418)	1.278 (0.267)	0.445*** (0.125)	1.263 (0.402)
Level of education (reference: none)									
Primary	0.917 (0.0620)	0.995 (0.174)	0.923 (0.158)	1.220 (0.554)	0.698 (0.168)	0.933 (0.259)	0.955 (0.149)	0.879 (0.144)	0.663* (0.151)
Secondary	0.469*** (0.0347)	0.990 (0.171)	0.299*** (0.0718)	0.747 (0.322)	0.373*** (0.0839)	0.406*** (0.122)	0.530*** (0.0948)	0.408*** (0.100)	0.310*** (0.0717)
Post-secondary	0.218*** (0.0221)	0.180*** (0.0752)	0.193*** (0.0962)	0.279*** (0.126)	0.150*** (0.0415)	0.225** (0.150)	0.215*** (0.0645)	0.0801*** (0.0322)	0.222*** (0.0572)
Identification with a political party	1.210*** (0.0663)	1.717*** (0.235)	1.303 (0.253)	1.168 (0.175)	1.485*** (0.205)	1.697** (0.388)	1.076 (0.158)	0.698** (0.120)	0.905 (0.139)
Rural	0.927 (0.0463)	0.922 (0.128)	1.050 (0.175)	1.178 (0.178)	0.838 (0.116)	0.590*** (0.0936)	1.210 (0.141)	0.771* (0.114)	1.079 (0.141)
Country dummies	YES	NO	NO	NO	NO	NO	NO	NO	NO
Observations	9,156	1,060	868	832	1,009	947	1,884	1,038	1,809

Note: The odds ratios from logit estimations are reported. Standard errors are in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1.

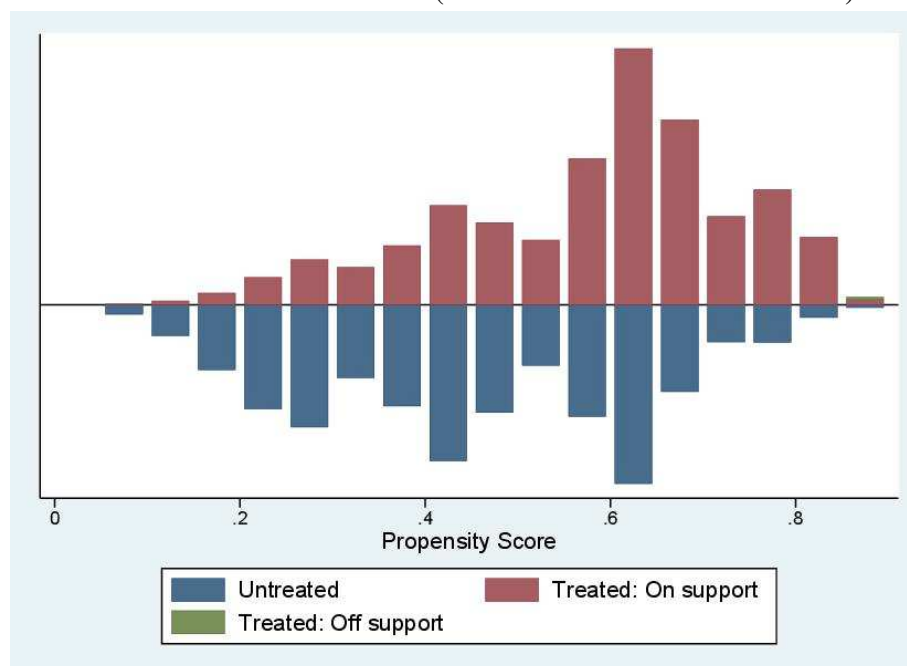
FIGURE A1: PROPENSITY SCORE DISTRIBUTION (NEAREST NEIGHBOUR MATCHING) – ALL COUNTRIES

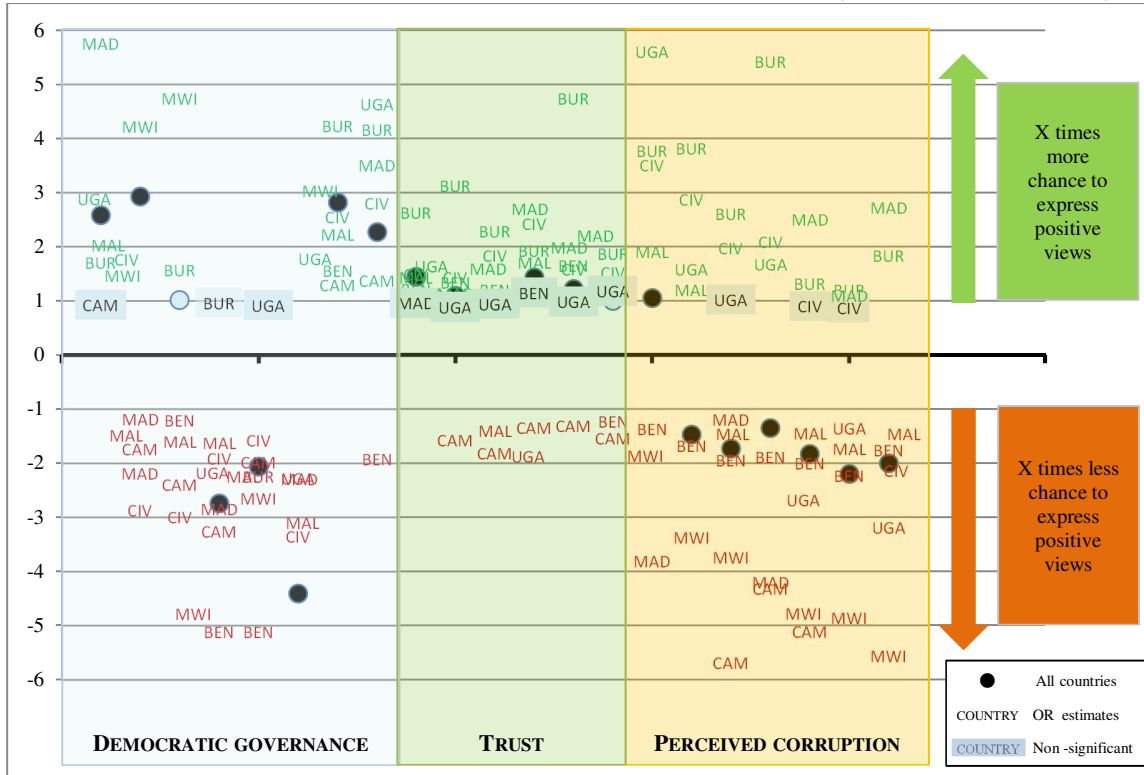
TABLE A7: BALANCE OF COVARIATES AFTER PROPENSITY SCORE MATCHING – ALL COUNTRIES

Variable	Sample	Mean		t-test	p-value
		Treated	Control		
Female	Unmatched	0.516	0.448	6.48	0.00
	Matched	0.515	0.519	-0.41	0.681
Age group (reference: 31 -40 years)					
25 - 30	Unmatched	0.204	0.239	-4.02	0.00
	Matched	0.204	0.212	-0.91	0.363
31 - 40	Unmatched	0.254	0.268	-1.5	0.135
	Matched	0.254	0.253	0.19	0.85
41 - 50	Unmatched	0.162	0.156	0.77	0.439
	Matched	0.162	0.158	0.62	0.538
51 - 60	Unmatched	0.089	0.090	-0.24	0.809
	Matched	0.089	0.090	-0.14	0.886
61 and more	Unmatched	0.070	0.058	2.28	0.022
	Matched	0.070	0.064	1.19	0.234
Level of education (reference: none)					
Primary	Unmatched	0.427	0.307	11.94	0.00
	Matched	0.427	0.439	-1.12	0.264
Secondary	Unmatched	0.275	0.370	-9.77	0.00
	Matched	0.276	0.280	-0.46	0.647
Post-secondary	Unmatched	0.057	0.148	-14.67	0.00
	Matched	0.057	0.052	0.95	0.342
Rural	Unmatched	0.768	0.643	13.26	0.00
	Matched	0.767	0.772	-0.61	0.542
Identification with a political party	Unmatched	0.689	0.640	4.99	0.00
	Matched	0.688	0.700	-1.25	0.212

TABLE A8: NUMBER OF OBSERVATIONS FOR RCT-LIKE ESTIMATIONS

	All countries	Benin	Burundi	Cameroon	Ivory Coast	Madagascar	Malawi	Mali	Uganda
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Satisfaction with democracy	103,047	41,048	14,057	5,913	4,112	8,169	13,427	16,321	3,338
Regime where the power is in the hands of									
One leader	103,188	41,084	14,061	5,914	4,146	8,176	13,506	16,301	N/a
The army	103,150	41,065	14,067	5,896	4,152	8,189	13,508	16,273	
Freedom is respected									
Speech	40,038	41,118	14,132	5,963	4,165	8,295	13,575	16,335	3,397
Political	40,008	41,119	14,131	5,945	4,158	8,290	13,570	16,335	3,392
Vote	40,034	41,119	14,139	5,956	4,164	8,293	13,580	16,334	3,403
Listen to people									
MPs	103,415	41,109	14,111	5,895	4,154	8,292	13,552	16,302	3,338
Local government	73,576	41,110	14,123	5,907	4,142	8,294	N/a	N/a	3,361
Trust in:									
President	61,621	41,121	14,110	N/a	4,167	8,294		16,333	3,372
Parliament	67,534	41,106	14,090	5,940	4,160	8,289		16,328	3,264
Army	67,579	41,107	14,109	5,966	4,171	8,293	N/a	16,335	3,315
Courts of law	67,529	41,093	14,119	5,954	4,149	8,292		16,333	3,280
Tax/customs	67,454	41,086	13,960	5,939	4,103	8,287		16,326	3,181
Police	67,592	41,115	14,129	5,973	4,171	8,294		16,333	3,402
Perceived level of corruption:									
President	97,029	41,079	13,920	N/a	4,106	8,282	13,329	16,313	3,209
Government officials	94,713	41,088	13,944	5,882	4,120	N/a	13,353	16,326	3,265
MPs	102,878	41,072	13,913	5,852	4,109	8,283	13,322	16,327	3,269
Local government	73,421	41,104	14,027	5,893	4,110	8,287	N/a	N/a	3,305
Courts of law officials	103,101	41,062	14,061	5,908	4,125	8,285	13,330	16,330	3,169
Tax/custom officials	102,960	41,073	14,006	5,919	4,113	8,278	13,246	16,325	3,178
Police	103,261	41,097	14,059	5,925	4,150	8,290	13,410	16,330	3,350

FIGURE A2: IMPACT OF BEING INTERVIEWED BY A NSO AGENT (AB VS. GPS-SHASA)



Notes: This figure provides a visual presentation of Tables 10 and 11. Each point corresponds to a distinct estimation (for one country, except for the estimation for the whole sample, and for one question).

For example, for one question on democracy functioning, Ugandan people (UGA) have 2.6 times more chance to express positive views if they are interviewed by NSOs agents (GPS-SHAsA surveys) than by AB interviewers. For two questions on democracy functioning, adults from Cote d'Ivoire (CIV) have about 3 times less chance to express positive views if they are interviewed by NSOs agents (GPS-SHAsA surveys) than by AB interviewers.

OR>6 are not presented for reasons of space.

Sources: AB surveys, rounds 6, GPS-SHAsA surveys; Authors' calculations.

TABLE A9: INTERPERSONAL TRUST AND AB/GPS-SHASA SURVEY SPONSOR

	Trust in relatives			Trust in neighbours		
	Burundi (1)	Cameroon (2)	Uganda (3)	Burundi (4)	Cameroon (5)	Uganda (6)
GPS-SHAsA respondent	0.389*** (0.0534)	0.440*** (0.0334)	1.076 (0.0734)	1.634*** (0.102)	2.270*** (0.172)	0.648*** (0.0462)
Observations	14,080	5,985	3,429	14,137	5,998	3,431

Note: OR reported. Robust standard errors (bootstrapped 100 times) are in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1. Each OR corresponds to a separate estimation. Italic estimates correspond to logistic regressions, otherwise ordered logit are estimated. All estimations include individual controls (gender, age group, level of education, identification with a political party and area of residence).