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# Individual attitudes toward anti-corruption policies in Sub-Saharan Africa: Microeconometric evidence

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# Abstract

This study examines African populations` attitudes toward anti-corruption policies. Previous studies only look at individuals` experiences or attitudes with respect to corruption itself or its prevalence. Relying on micro data from six Sub-Saharan African countries and using ordered probit models, we show that social factors (education, employment, living conditions, etc.) significantly affect the citizens` attitudes toward anti-corruption strategies. We also highlight the importance of political characteristics such as access to information (press, media, radio); trust in the court of appeal; participations in demonstrations.

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#### **1- Introduction**

In the recent decades, thanks partly to growing research (see for example Andvig and Moene, 1990; Mauro, 1995; 1998; Mo, 2001; Gerlagh and Pellegrini, 2004) and policy campaigns led by international organizations (Transparency International, World Bank, African Development Bank, United Nations Development Program, etc.) awareness about perverse effects of corruption have been increasing among public authorities as well as among citizens. In order to fight the plague, many developing countries have therefore launched anti-corruption programs. In Sub-Saharan African countries, a number of national anti-corruption and crime activities in the public sphere. Anti-corruption policies include strong measures such as prosecution, punishment of corrupted officials, jails, etc. As part of this agenda, these countries have also approved different treaties: the African Parliamentarians' Network against Corruption (1999), the United Nations convention against corruption (2003), etc.

The objective of this paper is to investigate citizen attitudes toward anti-corruption policies in six selected sub-Saharan African countries (Ghana, Mali, Nigeria, Tanzania, Uganda and South Africa). There has been remarkably little empirical work aiming at evaluating the anti-corruption policy undertaken by public authorities in these countries. So far, attention was given to the perception of corruption and its microeconomic factors (Čábelková, 2001; Reinikka and Svensson, 2003, 2005; Guerrero and Rodríguez-Oreggia, 2008; Mocan, 2008). Previous studies highlighted the importance of individual, social and political factors, reflecting the extent to which individuals participate in corrupt transactions, express their experience (their own or that of their relatives) vis-à-vis corruption in public services. Focusing on attitudes toward handling of corruption, the present paper considers the role of citizens in the evaluation of the performance of anti-corruption policies.

## 2- Econometric analysis 2.1- The empirical methodology

The method used in this study is based on a pseudo panel in which we have survey data on individuals from different countries over the same period. Our dependent variable of interest is the individual perception of the anti-corruption handling which is observed for each individual in the dataset. The explanatory variables, suggested by the micro-evidences of corruption perception, include demographic factors (sex, age, education, employment status), living condition (index of poverty) and political characteristics (level of democracy, press freedom, trust in court of appeal, etc.)

Our estimation method is the ordered probit with unknown parameters. Such an approach is justified by the fact that corruption data used here are rankings. The ordinary least squares model is not appropriate insofar as it treats equally the difference between 1 and 2 as that between 3 and 4 (Greene, 2003). The probit or logit models would also fail to account for the ordinal nature of the dependent variable.

The interest of pooling data from different countries is to have a maximum of information. Through this approach, we presuppose that behavior is uniform across the different countries studied. However, in order to control for the heterogeneity between countries, we included country dummy variables in the equations.

## 2.2- Data source and description

The data used in this analysis come from the first round of Afrobarometer households' surveys in six countries in Africa over the period 1999-2001<sup>1</sup>.

Our investigations are based on the following question: "How well would you say the government is handling [...] corruption?"

The answer to this question has four modalities: 1=Very badly/Not at all well. 2=Quite badly/Not very well. 3=Fairly well. 4=Very well. The other explanatory variables are described in table 1 below.

Age	Age of the individual (continue)					
Sex	Female = 1; Male = $0$					
Rural	= 1 if the individual lives in rural areas and 0 in the city					
Education	Level of education: 0 = no formal education; 1 = Primary 2 = Secondary; 3 = Post-secondary (treated as a continuous variable)					
Indicator of poverty	= $(povfoo + povhth + povinc + povwat + pfeerd + pfenow) / 6$ (simple average of indicators of access to food, health care, drinking water, with no income, living conditions and economic situation in the country) 0 = never; 1 = rarely; 2 = often; 3 = forever					
Level of general trust	1 = You can have confidence in most people; $2 =$ You should be careful.					
Member of an association	= 1 if the respondent is a member of a local development association. religion or a business association, O otherwise					
Take part in a demonstration	if the respondent has participated in a demonstration (community meetings. political demonstrations) 0 = never; 1 = once or twice; 2 = only a few times; 3 = often					
Write to the press	Write to the press: $0 = never$ ; $1 = once or twice$ ; $2 = only a few times$ ; $3 = often$					
Listen to the radio	(medrad) 0 = never; 1 = less than once per month; 2 = roughly once a month; 3 = roughly once a week; 4 = Several times a week; 5 = Every day					
Watching TV	(medtv) 0 = never ;1 = less than once a month; 2 = roughly once a month; 3 = roughly once a week; 4 = Several times a week; 5 = Every day					
Read newspapers	(mednew) 0 = never; 1 = less than once a month; 2 = roughly once a month; 3 = roughly once a week; 4 = Several times a week; 5 = Every day					
Access to information	1 if (medrad> = $3 \mid \text{medtv} > = 1 \mid \text{mednew} > = 1$ ); 0 otherwise					
Democracy	=1 if respondent considers that democracy means "voting/electoral choice/ competition multiparty" and =0 otherwise					
Confidence in the Court of Appeal	1 = not at all; 2 = a  few times; 3 = most of the time; 4 = always.					
Unemployed	1 = if the interviewee says that he is unemployed; 0 otherwise					
informal worker	= 1 if the individual works in the informal sector; 0 otherwise					
Businessman	1 = if the interviewee is a businessman; 0 otherwise					
Officer	1 = if the respondent is an official; 0 otherwise					
NGOs	= 1 if the respondent works in an NGO ;0 otherwise					
Farmer	= 1 if the respondent is a farmer; 0 otherwise					
Politician	1 = if the interviewee is a politician; 0 otherwise					

Table 1: Definitions of the other variables

<sup>&</sup>lt;sup>1</sup> The data are available on <u>www.afrobarometer.org</u>.

#### **2.3- Descriptive statistics**

Table 2 presents the salient features of these data by country. Countries could be classified in two groups. In the first group, which can be described as "most inefficient", Ghana and South African Republic are at the top. The actions of government in these countries are perceived as inefficient, according to a global assessment by over 33% of the male population as against only 28% of women. Thus, in Ghana nearly 61% of respondents felt that the anti-corruption policy is very poor. This view seems to be shared by people in other countries including the South African Republic and Mali where the figure is respectively 67% and 51%. The second category of countries, the "most efficient", includes Nigeria, Tanzania and Uganda with 64%, 55% and 51%<sup>2</sup> of people surveyed who consider public actions have some effectiveness. In all cases, there was no clearcut distinction between urban and rural populations.

Countries	Very badly	Quite badly	Fairly well	Very well	Don't know	Missing	Total
Ghana	43.46	17.81	21.86	9.38	7.14	0.35	100
Mali	25.71	25.51	21.11	14.84	12.83	0.00	100
Nigeria	14.85	16.40	45.16	19.04	4.55	0.00	100
South Africa	39.50	27.64	20.64	8.23	4.00	0.00	100
Tanzania	25.25	17.52	37.63	17.06	2.55	0.00	100
Uganda	18.32	19.29	36.50	14.88	10.52	0.48	100
All countries	17.57	13.52	21.44	9.65	4.45	33.37	100

Table 2- Handling of corruption in six selected African countries

Source: our calculation, based on Afrobarometer data

The opinion differs according to occupation or employment status. While more than a third of the unemployed, religious leaders and employers rated anti-corruption policy poorly or very poorly, politicians, soldiers and officials had a (very) favorable opinion (48%, 67%, 40% respectively). It is tempting to conclude that officials appreciate the positive actions of the State. In contrast, the police negatively appreciate (24%) the same policy.

#### **3- Results**

Before interpreting the results, a few points are worth noting. First, the interpretation of coefficients obtained by the ordered probit model is not straightforward (Greene, 2003). It is also necessary to clarify the direction in which the indicator of corruption varies. As for the variable representing the fight against corruption, 4 means that the policies implemented by public authorities are considered very effective.

Econometric results are reported in table 3. Four columns are presented so as to take into account the interactions between poverty and access to information. When we look at the evaluation of anti-corruption policy, in all specifications, older people are non skeptical toward the authorities corruption handling. In both cases, the probability of perception decreases after a certain threshold. This threshold is estimated approximately to be 54-55 years. Women perceive anti-corruption policies to be more efficient. This finding suggests that women may perceive differently *corruption itself* and *handling of corruption* since other

<sup>&</sup>lt;sup>2</sup> These figures are obtained by adding proportions in "fairly well" and "very well".

international analyses (Swamy et al., 2001; Gatti et al., 2003) show that females are less prone to corrupt behavior.

People who interact less frequently with public administration seem to perceive anticorruption policy as more effective. This is the case of rural inhabitants, for example. Furthermore, the poorer people are, the better they evaluate anti-corruption policy. These results are also consistent with the appreciation of peasants who consider that public authorities undertake more effective anti-corruption policy. On the contrary, major differences appear among different employment categories which have intensive interactions with public administrations. There is no difference in the evaluation of anti-corruption policy between public officials, businessmen and other categories of workers. The non-significance of NGO dummy is surprising since, as independent organizations, they are supposed to support anti-corruption programs (Khemani, 2009).

Furthermore, more educated people consider that corruption is not well handled by public authorities. They probably evaluate more severely the performance of public administration.

General trust in the society (proxy for the social capital) and trust in the court of appeal (proxy for law enforcement) have two opposing effects. The higher is the former, the less effective corruption handling is; whereas the higher the latter the more effective corruption combating is evaluated. Even though these factors do not affect the payment of bribe as shown by Guerrero and Rodríguez-Oreggia (2008) in Mexico, they are important in handling of corruption.

The press freedom significantly affects corruption handling. People believe that if they can easily write to the press to denounce the abuse of public officials, then the anticorruption policy might be more effective. However, listening to radio, watching TV and reading news have only a limited effect in the evaluation of anti-corruption policy. While press freedom's result is consistent with the important role of information in curbing corruption as evidenced by other authors (Reinikka and Svensson, 2005; Brunetti and Weder, 2002), our results suggest that people must take part actively in information delivery. People do not have just to listen to radio or to watch TV but they must express their voice on corruption practices and experiences, may it be in participating in public debates or attending demonstrations. Though, consistent with other empirical analysis (Paldam, 2002; Treisman, 2000; Rose-Ackerman, 1999; Serra, 2006), democracy, considered as a political system open to voting, electoral choice and multiparty competition, does not significantly affect the citizens' attitudes toward anti-corruption policies.

One may question whether most of previous results are not driven by the poverty. For example, not all poor people can afford radio or TV. As they are also less educated, they have less access to information. So, the coefficients associated with these factors are likely to be biased. Our main results do not fundamentally change when we exclude the poverty variable from the specifications (cf. columns (3) and (4)).

	Handling corruption (pfpcr1)						
	(1)	(2)	(3)	(4)			
Age	-0.017***	-0.017***	-0.016***	-0.016***			
5	(3.35)	(3.28)	(3.23)	(3.23)			
Age squared	0.000***	0.000***	0.000**	0.000**			
	(2.74)	(2.62)	(2.54)	(2.52)			
Gender (Female=1)	0.118***	0.113***	0.117***	0.115***			
· · · · · ·	(4.11)	(3.99)	(4.07)	(4.09)			
Rural	0.172***	0.159***	0.205***	0.198***			
	(4.79)	(4.69)	(5.80)	(6.01)			
Education	-0.072***	-0.066***	-0.085***	-0.084***			
	(3.69)	(3.54)	(4.30)	(4.40)			
Indicator of poverty	0.295***	0.296***					
1	(5.29)	(5.28)					
General trust in the society	-0.047***	-0.048***	-0.046***	-0.046***			
	(3.38)	(3.46)	(3.31)	(3.34)			
Being member of an association	-0.035	-0.026	-0.004	-0.004			
	(1.06)	(0.79)	(0.11)	(0.11)			
Participate in a demonstration	0.099***	()	()	()			
	(2.62)						
Write to the press	0.046***	0.048***	0.054***	0.054***			
	(4.01)	(4.21)	(4.67)	(4.65)			
Listen to radio	-0.010	(=-)	-0.011	()			
	(1.07)		(1.17)				
Watching TV	0.008		0.006				
	(0.91)		(0.63)				
Reading news	-0.001		-0.005				
	(0.13)		(0.46)				
Access to information	(0.00)	-0.075	(0110)	-0.092*			
		(1.51)		(1.86)			
Democracy	-0.077	-0.076	-0.084	-0.084			
	(1.42)	(1.41)	(1.56)	(1.56)			
Trust in the court of appeal	0.144***	0.144***	0.148***	0.148***			
	(13.60)	(13.55)	(13.96)	(13.95)			
Unemployed	0.195*	0.195*	0.171	0.169			
enemployed	(1.87)	(1.87)	(1.61)	(1.59)			
Dummy informal worker	-0.017	-0.024	-0.011	-0.014			
	(0.42)	(0.60)	(0.27)	(0.35)			
Dummy businessman	0.068	0.069	0.077	0.081			
	(1.04)	(1.06)	(1.20)	(1.25)			
Dummy official	0.032	0.037	0.048	0.053			
	(0.23)	(0.26)	(0.34)	(0.37)			
Dummy NGO	0.189	0.184	0.200	0.196			
Summy 1000	(1.48)	(1.45)	(1.58)	(1.56)			
Dummy peasant	0.260*	0.261*	0.330**	0.328**			
	(1.87)	(1.89)	(2.38)	(2.37)			
Dummy politician	0.364	0.347	0.358	0.356			
Pointoimi	(1.53)	(1.48)	(1.60)	(1.61)			
Country dummies	YES	YES	YES	YES			
	6312	6312	6312	6312			

Table 3: Microeconomic determinants of the perception of handling of corruption

z statistics in parentheses; \*\*\* p<0.01. \*\* p<0.05. \* p<0.1

#### 4- Concluding remarks

The purpose of the paper was to investigate the public attitude toward the handling of corruption in six selected African countries using Afrobarometer households' survey data. Hence, effectiveness of anti-corruption policies is considered. Existing works, focusing mostly on perception of corruption, pay a little if not any attention to this issue.

The econometric results emphasize the importance of individual, social and political factors in evaluating the efficiency of anti-corruption strategies. Some results are consistent with empirical analyses of determinants of corruption. Education, gender, the press freedom have active role to play in designing efficient anti-corruption strategies. Democracy does not significantly affect the performance of corruption handling. Emphasis should be put on political factors: trust in the court of appeal, participation in demonstrations.

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