

AFRO10 years BAROMETER

Working Paper No. 133

TOO POOR TO CARE? THE SALIENCE OF AIDS IN AFRICA

by Mogens K. Justesen

**A comparative series of national public
attitude surveys on democracy, markets
and civil society in Africa**



Core Partners

Center for Democratic Development (CDD-Ghana)
95 Nortel Ababio Street, North Airport Residential Area
P.O. Box 16 404, Legon-Accra, Ghana
233 21 776 142 • fax: 233 21 763 028
www.cddghana.org

The Institute for Democracy in South Africa (IDASA)
P.O. Box 56950, Pretoria Arcadia, 0007, South Africa
27 12 392 0500 • fax: 27 12 320 2414/5
www.idasa.org.za

Institute for Empirical Research in Political Economy (IREEP)
Campus ENEAM Gbegamey 02 B.P. 372
Cotonou, République du Bénin
229 21 307992 • fax: 229 21 302329
www.ireep.org

with support units at

Michigan State University (MSU)
Department of Political Science
East Lansing, MI 48824
517 353 6590 • fax: 517 432 1091
www.polisci.msu.edu

University of Cape Town (UCT)
Democracy in Africa Research Unit
Centre for Social Science Research
Private Bag Rondebosch 7701 South Africa
Office: 27 21 650 3827 • Dept. 27 21 650 3811
fax: 27 21 650 4657
www.issr.uct.ac.za

www.afrobarometer.org

AFROBAROMETER WORKING PAPERS

Working Paper No. 133

**TOO POOR TO CARE? THE SALIENCE
OF AIDS IN AFRICA**

by Mogens K. Justesen

August 2011

Mogens K. Justesen is Assistant Professor at the Department of Political Science, University of Southern Denmark. E-mail: mju@sam.sdu.dk

AFROBAROMETER WORKING PAPERS

Editor

Michael Bratton

Editorial Board

E. Gyimah-Boadi

Carolyn Logan

Robert Mattes

Leonard Wantchekon

Afrobarometer publications report the results of national sample surveys on the attitudes of citizens in selected African countries towards democracy, markets, civil society, and other aspects of development. The Afrobarometer is a collaborative enterprise of the Centre for Democratic Development (CDD, Ghana), the Institute for Democracy in South Africa (IDASA), and the Institute for Empirical Research in Political Economy (IREEP) with support from Michigan State University (MSU) and the University of Cape Town, Center of Social Science Research (UCT/CSSR). Afrobarometer papers are simultaneously co-published by these partner institutions and the Globalbarometer.

Working Papers and Briefings Papers can be downloaded in Adobe Acrobat format from www.afrobarometer.org.



Idasa



co-published with: **GLOBALBAROMETER™**

Too Poor to Care? The Salience of Aids in Africa¹

Abstract

Sub-Saharan Africa is the part of the world that is most severely affected by HIV/AIDS. Yet, surveys of attitudes to AIDS across African countries show that most people do not attach great importance to the issue. Given the devastating impact of HIV/AIDS, this appears paradoxical. This paper argues that the salience of AIDS is low in Africa because many people are too poor to consider the disease important. This means that AIDS is crowded out by other issues – such as poverty, hunger, and unemployment – that have more immediate consequences for people’s lives. The hypothesis that poverty affects the salience of AIDS is tested using data from the *Afrobarometer*. Given that individuals are surveyed in different countries, the paper uses multilevel regressions to estimate the impact of poverty and material living conditions on AIDS salience. At both the individual and country level, the results show that poverty and material living conditions have significant effects on the likelihood that individuals consider AIDS a salient political issue. These results clearly support the idea that poverty is a constraint on the importance people attach to AIDS.

¹ Supplementary material referred to throughout the text is available at <https://sites.google.com/site/mkjjustesen/>

Introduction

In the last couple of decades, HIV/AIDS has evolved into a global pandemic with disastrous human and economic consequences. Recent statistics show that as of 2007, around 33 million people were infected with HIV worldwide, of which two million were children under the age of 15 (UNAIDS 2008). In terms of mortality, the total death toll from the disease amounts to 25 million people since the first outbreak was discovered 30 years ago, and in 2007 alone, AIDS caused around two million deaths (UNAIDS 2008, 31-32). While the disease affects many developing countries, Africa is – by far – the most severely hit region in the world (Iqbal and Zorn 2010; Barnett and Whiteside 2006; Patterson 2006).² With only 10 percent of the world's population, Africa is home to two thirds of all recorded people infected with HIV. In absolute numbers this amounts to more than 22 million people (UNAIDS 2008, 39; Barnett and Whiteside 2006, 10). In comparison, Latin America accounts for only five percent of HIV infections worldwide, while in Asia the corresponding number is 15 percent (UNAIDS 2008). To make matters worse, in the most severely affected countries – Botswana and Swaziland – more than a fourth of the adult population is infected with HIV (UNAIDS 2008; Patterson 2006, 5). The social and economic implications of the HIV/AIDS crisis are profound. Apart from the obvious human suffering caused by the disease, life expectancy has declined rapidly, mortality rates have increased, and economic growth suffers too (Barnett and Whiteside 2006, 297-299; Sachs 2005, 200-201; van de Walle 2001, 88).

The existing evidence leaves little doubt that the HIV/AIDS pandemic has a major impact on the lives of millions of Africans. It contributes to keep many African countries trapped in poverty and disease, and threatens to transform whole societies. As emphasized by Hyden (2006, 90) “The AIDS epidemic competes with globalization as the main cause of social change in Africa today... because it hits more directly than economic forces at the very core of the continent's social structure”. Indeed, HIV/AIDS not only affects the people carrying the disease, but also their families, friends, and workplaces, e.g. through increased absenteeism (Barnett and Whiteside 2006, 264-265). In spite of this, AIDS does not figure prominently on the public agenda in Africa (Bratton et al. 2004, 102; De Waal 2006, 42-45; Patterson 2006, 63). As shown in Table 1, African citizens do not generally rate AIDS among the most important political issues requiring government action.

Based on surveys conducted by the *Afrobarometer* in 18 African countries, Table 1 shows the proportion of people that consider AIDS as one of the three most important problems their government should address. For comparison, the table also shows the three issues – unemployment, poverty, and food shortage – that are ranked as the most salient by this standard. It is striking that in no country does AIDS top the list of the most salient problems. Indeed, across all 18 countries, less than eight percent of Africans mention AIDS as one of the most important political problems. Given the social and economic impact of AIDS, this is a seemingly very low number, comparable to the percentage of people mentioning transportation (6.2 percent) and electricity (8.1 percent) as important problems. However, the salience of AIDS varies a great deal across countries. In Botswana nearly thirty percent of respondents consider AIDS an important problem, and in Namibia and South Africa too, more than 20 percent mention AIDS as one of the most important problems. This suggests that AIDS may be a high-salience issue only in countries with generalized epidemics, i.e. where HIV has spread into the wider population (World Bank 1997, 87; Barnett and Whiteside 2006, 101; UNAIDS 2008, 100). However, even in countries such as Lesotho, Zimbabwe, Zambia, Malawi, and Mozambique that suffer from generalized epidemics and double-digit infection rates, AIDS is a much less salient issue. In comparison, unemployment, poverty, and food shortage are considered important problems by much larger proportions of the population in most countries. Even in highly affected countries like Botswana, Lesotho, Mozambique, South Africa, Zambia, and Zimbabwe, unemployment and poverty rank higher than AIDS on the list of important problems.

² Africa denotes the sub-Saharan countries.

Table 1. AIDS Salience in Africa

	HIV prevalence	Most important problems			
		AIDS	Unemployment	Poverty	Food shortage
<i>All countries</i>	9.2	7.3	40.2	26.4	23.1
Botswana	25.5	27.4	66.6	35.7	4.0
Lesotho	23.6	5.0	64.9	31.5	21.0
Zimbabwe	18.4	7.8	35.1	16.2	68.9
South Africa	18.1	24.2	64.8	26.5	3.3
Namibia	15.7	23.3	64.9	15.0	9.2
Zambia	13.9	5.6	49.5	40.3	23.1
Malawi	12.1	1.0	8.8	17.3	70.6
Mozambique	11.2	6.6	44.7	19.8	20.7
Kenya	6.8	4.6	38.2	23.4	18.3
Uganda	6.4	6.0	20.2	38.8	16.9
Tanzania	6.2	3.5	10.2	14.9	12.3
Nigeria	3.7	1.8	49.4	46.3	23.4
Ghana	2.0	0.5	40.0	15.1	6.7
Benin	1.3	0.8	25.1	10.0	12.2
Mali	1.2	0.5	14.3	17.3	71.9
Cape Verde	0.8	2.6	73.2	24.4	5.9
Senegal	0.8	0.7	28.8	17.8	29.8
Madagascar	0.2	0.3	17.4	20.1	27.8

HIV prevalence is the percentage of the adult population infected with HIV. Countries in bold have generalized HIV epidemics, defined as prevalence rates of 5 percent or more (World Bank 1997, 87; cf. Barnett and Whiteside 2006, 101). Numbers in rows for ‘most important problem’ are respondents’ answers (in percentages) to the question of what constitute the most important problems the government should address. Numbers show the proportion of 1st, 2nd, and 3rd responses to this question. Numbers do not sum to 100 because respondents can give up to three answers.

On the one hand, the numbers in Table 1 reflect the fact that the political agenda in Africa is crowded because of the many economic problems related to poverty and unemployment that continue to plague the region (van de Walle 2001; Moss 2007). On the other hand, it appears paradoxical that a life-and-death issue like AIDS is not, in general, given a higher priority by Africans, and that, compared to other issues, the salience of AIDS is relatively low even in many highly affected countries. In other words, the question is why the salience of AIDS is so low in Africa? While there are obviously many factors – such as national prevalence rates and personal loss due to the disease – that affect AIDS salience, the explanation emphasized in this paper is that the low salience of the AIDS issue is in large part a consequence of the widespread poverty that exists throughout the African continent. Recent estimates show that more than 50 percent of the population in Africa lives in poverty, defined as incomes below \$1.25 a day (UN 2009, 6-7). For these groups, poverty, low income, and poor material living conditions in general are not only constraints on their consumption opportunities; they also affect which political issues people are mainly concerned with. Specifically, individuals living in conditions of poverty are more likely to value policies that improve their current consumption opportunities and discount the value of policies that increase consumption in the future. Therefore, the main worry for poor people is coping with the lack of basic material necessities on a short-term basis. In comparison, HIV does not necessarily have a major impact on people’s lives in the short term. Rather, it is an infection people can live with for years. Recent research suggests that, in the absence of treatment, the median survival time after infection with HIV is between 9 and 11 years (Morgan et al. 2002; UNAIDS 2008, 32). Moreover, people can live without significant symptoms for a large part of this time (Dionne 2011, 59). Therefore, for people facing acute material constraints, there is less reason to worry about the threat of dying from AIDS years into the future. In contrast, wealthier people that do not face the strains of poverty can better afford to worry about issues and policies that have long-term benefits.

In terms of the salience people attach to political issues, this means that poor people are likely to worry more about policies that address immediate concerns like hunger and poverty than policies, such as prevention and treatment of HIV/AIDS, which may yield tangible benefits only in a relatively distant future. The harsh

implication is that destitute and materially deprived groups are simply too poor to care about HIV/AIDS. All else equal, this implies that as material living conditions improve, people start to care relatively less about issues that benefit them in the short term and more about issues that increase their long-term welfare. The key hypothesis of this paper is therefore that the salience of AIDS as a political issue is low for poor groups and increases as people's material living conditions improve.

Consequently, this paper provides an explanation of why the salience of AIDS is so low in Africa, despite the fact that it is the most severely affected region in the world. In doing so, the paper makes two novel contributions to the literature. Firstly, while previous work by Whiteside et al. (2002, 19) and Patterson (2006, 2) have suggested that economic deprivation may be linked to AIDS salience, this paper develops a theoretical argument emphasizing the specific mechanisms linking individual-level wealth and poverty to the importance people attach to AIDS. This argument contributes to explain why AIDS does not figure more prominently on the public agenda in Africa. Secondly, the paper provides what appears to be the first systematic, quantitative analysis of the hypothesis linking wealth and poverty to AIDS salience.³ It does so using data from the third wave (2005–2006) of the *Afrobarometer* survey. Since the survey contains individual-level data from 18 African countries, the empirical tests are conducted using multilevel regression models that examine the simultaneous impact of individual- and country-level variables on the salience of AIDS. In addition, to examine the generic implications of the theoretical argument, the paper also tests the link between poverty on the one hand and the salience of unemployment, poverty, and food shortage on the other hand. The empirical findings overwhelmingly support the hypothesis that poverty and material living conditions affect the importance people attach to AIDS in Africa. Likewise, variations in poverty contribute to explain the salience of unemployment, poverty, and food shortage. That is, poor people tend to worry less about AIDS and more about material concerns that affect their short term consumption opportunities.

These results shed light on an issue that has attracted only little attention in political science. The paper therefore contributes to the small but growing literature trying to explain the status (and absence) of AIDS as an issue on the agenda of the public and their political representatives in Africa (Whiteside et al. 2002; De Waal 2006; Patterson 2006; Lieberman 2007; Dionne 2011). In a broader perspective, the paper is also related to the literature on policy salience and government responsiveness (Jones and Baumgartner 2004; Hobolt and Klemmensen 2008; Soroka and Wlezien 2010). Unlike this literature, however, the paper is not directly concerned with the link between issue salience and government responsiveness, but rather tries to explain why the salience of AIDS varies across individuals and countries.

The remainder of the paper is organized as follows. The next section develops the theoretical argument and outlines the key hypotheses. The following section describes the data and methods used in the empirical part. The section after that presents the empirical results, and the final section concludes on the main findings.

Linking Poverty to Policy Salience

It is widely accepted that the salience of policy issues matters for the extent to which these appear on the public agenda (Page and Shapiro 1983; Baumgartner and Jones 2004; Hobolt and Klemmensen 2008; Soroka and Wlezien 2010). This, in turn, may affect which issues politicians, parties, and governments address and put on the legislative agenda. While the importance voters attach to different political issues may be important for the extent to which governments are responsive to public opinion (Hobolt and Klemmensen 2008; Soroka and Wlezien 2010), a related, quite fundamental, question is why the salience of different policy issues varies across individuals and national contexts. Intuitively, it would seem that issues and problems that deeply affect the everyday lives of large groups of people would be prime candidates for high-salience issues on the public agenda. In this respect, the HIV/AIDS issue in Africa is an interesting case. On the one hand, AIDS tends to be a more salient issue in countries with high prevalence rates, as shown in Table 1. On the other hand, in a number of countries, the relationship between prevalence rates and salience

³ A short briefing paper by *Afrobarometer* (2004) reports a bivariate correlation between poverty and citing AIDS as the most important issue, but does not control for confounding individual- and country-level variables.

does not match the intuition particularly well. Although HIV/AIDS directly affects large parts of the population in many African countries, the salience of the issue is surprisingly low.

The Economics of AIDS Salience

An important part of the explanation of why AIDS is a low-salience issue originates in the economic and material conditions people live under. Indeed, there are good theoretical reasons to expect that economic conditions affect the importance people attach AIDS. The mechanism linking wealth and poverty to the salience of AIDS rest on the assumption that the marginal utility of consumption is higher for poor and low-income groups compared to wealthier groups (Przeworski and Limongi 1997, 166; Chakraborty 2004). This is parallel to saying that the marginal utility of future consumption, i.e. savings, is increasing with increasing wealth. In other words, for poor and low-income groups the marginal utility derived from current consumption is higher than the marginal utility from future consumption. As a consequence, poor individuals tend to develop short time horizons, precisely because poverty has severe short-term consequences that reduce the probability of surviving into the future (Azariadis 2006, 20-21; Chakraborty 2004, 120; Lorentzen et al. 2008). By implication, poor people will tend to spend most of their economic resources on consuming basic goods like food, shelter, and clean water to cover their short-term needs. In contrast, more well-to-do groups have higher discount factors and care relatively more about future consumption, and typically do not need to worry too much about their short-term material needs.

Variations in poverty and living conditions not only affect the utility derived from current relative to future consumption. It is also likely to affect the importance people attach to particular policy issues. For poor groups, the policies they consider to be salient are likely to be the ones that yield tangible, short-term benefits and increase their immediate consumption, and which therefore increases the probability of surviving in the near future. In comparison, people living in better conditions can better afford to give priority to policies that have a long-term impact and benefit them in the future. As a consequence, poor people care more about policies that yield benefits in the immediate future and discount policies that produce payoffs only in the long run.

Poverty therefore imposes an uncomfortable inter-temporal tradeoff, given by the choice between giving priority to policies that produce immediate benefits versus policies that yield payoffs in some distant future. In the extreme, this means that if you are poor and destitute, you worry about surviving until tomorrow; you do not worry about what might kill you the day after that, let alone years into the future (Chakraborty 2004; Azariadis 2006; Lorentzen et al. 2008). These considerations are important for understanding the status of AIDS on the public agenda in Africa. Even without treatment with anti-retroviral drugs, HIV-positive people can survive for several years without significant symptoms before developing and dying of AIDS (Morgan et al. 2002; UNAIDS 2008; Dionne 2011). This means that while hunger and poverty-related disease can kill you today or in the near future, HIV/AIDS will kill you only in the longer term. The salience of AIDS is therefore likely to be low for poor and low-income groups and increase with increasing levels of wealth, while issues such as poverty, hunger, and unemployment will be much more salient among poor people.

Pushing AIDS off the Public Agenda

The implication of this argument is that AIDS as a political issue does not figure highly on the agenda in Africa because many people are poor and compelled to worry about the pressing material concerns that affect them in the short term. Relative to other problems, AIDS therefore becomes a neglected issue (van de Walle 2001, 85-86; Whiteside et al 2002; Bratton et al. 2004, 102; de Waal 2006; Patterson 2006). This leads to a situation where large groups of voters, because of the strains of poverty, do not consider AIDS an important issue, at least not in comparison with other issues. Instead, the public agenda will tend to be dominated by issues such as poverty and unemployment, because these are perceived to be more urgent problems. However, if AIDS is not salient to voters – or at least less salient than other issues – it may not attract much attention from politicians and governments, who, in turn, are less likely to respond effectively to the problems caused by HIV/AIDS. Ultimately, this implies that neither the public and nor their political representatives pay much attention to the issue, despite its fatal consequences. In this perspective, it is not

surprising that HIV/AIDS has not been given much attention in recent elections in many African countries (Patterson 2006, 63-65; de Waal 2006, 42-45).

If the argument of this paper is valid, the widespread poverty that exists in most African countries is an important part of the explanation of the low salience of AIDS. This argument can be transformed into two empirically testable hypotheses: One hypothesis concerning HIV/AIDS, and one concerning unemployment, poverty, and food shortage – the three most salient issues across nearly all countries in the 2005–06 *Afrobarometer* survey.

Hypothesis 1: The salience of AIDS is lowest among poor groups and increases with increasing levels of wealth and decreasing levels of poverty.

Hypothesis 2: The salience of poverty, hunger, and unemployment is highest among poor groups and decreases with increasing levels of wealth and decreasing levels of poverty.

Both hypotheses are specific implications of a generic argument. Indeed, while Hypothesis 1 relates specifically to the case of AIDS, the point of Hypothesis 2 is precisely to test the validity of the broader implications of the theoretical argument.

Data and Methods

To test the hypotheses in an African context, the paper employs multilevel logistic regressions, using data from the third round of the *Afrobarometer*, which has collected surveys of individuals in 18 countries based on a set of standardized questions.⁴ The surveys were conducted between March 2005 and February 2006. The sample design is based on a stratified multistage procedure that produces a randomly selected and broadly representative cross-section of adult individuals within each country (Bratton et al. 2004, 54). Respondents were interviewed face-to-face, which should decrease the likelihood that the sample is not only representative of, e.g., people with (cell) phones (Mattes 2007, 116). The standard sample size is 1200 respondents for each country, but increases to 2400 in a few highly fractionalized countries, e.g. South Africa and Nigeria.

A couple of issues relating to the *Afrobarometer* survey are worth considering. Firstly, the third round of the survey is used instead of the more recent fourth round for the following reason. The third round surveys were conducted in 2005 and 2006 whereas the fourth round was administered from 2008 to 2009, when the global financial crisis started to affect the performance of African economies through reductions in, for instance, terms of trade, tourism, exports, and capital inflows (Kasekende et al. 2010). By using the third rather than the fourth round of the *Afrobarometer*, we can therefore be confident that respondents' answers and policy priorities were not affected by the international financial and economic crisis. Secondly, the countries included in the *Afrobarometer* are not a random sample from the sub-Saharan region. Indeed, the selected countries are deliberately unrepresentative, since a requirement for entering the survey is that countries are minimally democratic and not involved in armed (domestic) conflict (Bratton et al. 2004, 54-55). With respect to civil conflict and democracy, the sample countries therefore differ from the remainder of the countries in sub-Saharan Africa and are not representative of region. Accordingly, the results should not be generalized to the region as a whole (Bratton et al. 2004, 54-55).⁵

⁴ Detailed descriptions of the questionnaires, methodology, and sampling procedures used in the surveys can be found in Bratton et al. (2004) and on the *Afrobarometer* website <http://Afrobarometer.org/>. For a discussion of the challenges involved in doing survey research in developing countries, see Mattes (2007).

⁵ However, simple *t-tests* show that in terms of GDP per capita, life expectancy and secondary schooling, the sample countries do not differ significantly from the sub-Saharan average. For details, see the supplementary appendix.

Dependent variable

The salience of AIDS is measured using the following survey question: “*In your opinion, what are the most important problems facing this country that the government should address?*” This question is widely used in the literature to evaluate the salience voters attach to different political issues, i.e. the extent to which voters give priority to a given issue and consider it important (Jones and Baumgartner 2004; Hobolt and Klemmensen 2008, 316-17; Soroka and Wlezien 2010, 100). An advantage of the wording of the ‘most important problem’ (MIP) question is that respondents can only name up to three problems, which forces people to prioritize and select those problems they consider the *most* important. However, we cannot know with confidence if the first answer is considered the most important problem; the second answer the second-most important problem etc. Nor do we have any way of knowing which of the problems respondents find most important in absolute terms, or how much more importance is attached to one problem relative to another (Eifert et al. 2010, 498). Therefore, AIDS salience is coded as a dichotomous variable: If a respondent mentions ‘AIDS’ as one of the three most important problems, the variable is coded as one (1), and zero (0) otherwise. This metric is then used to measure the salience individuals attach to the AIDS issue.

Although the MIP question is the standard way to measure the salience of policy issues on the public agenda (Jones and Baumgartner 2004; Hobolt and Klemmensen 2008), there a number of problems attached to the question (Wlezien 2005; Soroka and Wlezien 2010). For instance, a policy ‘issue’ may be important to voters, even though it is not considered a ‘problem’ (Soroka and Wlezien 2010, 101). In relation to HIV/AIDS, another problem is that open discussions about the disease may be considered taboo in some communities (De Waal 2006, 18), which may make people less inclined to mention AIDS as an important problem. Although this can create a downward bias in the salience of AIDS, the problem is mitigated by the fact that the *Afrobarometer* interviews are conducted in private, with confidentiality, and by people outside the local community, allowing people to speak frankly without fear of social repercussions (Eifert et al. 2010, 498). The MIP question therefore seems to be the best available indicator of the priorities citizens give to different policy problems, including AIDS, in Africa.

To test Hypothesis 2, the salience of unemployment, poverty, and food shortage have also been coded as dichotomous variables, following the same procedure described above. These three issues are, on aggregate, the most salient issues for the African public, and are therefore useful for testing the reverse side of theoretical argument – that poor people care more about material issues that affect them in the short term. Summary statistics for the dependent variables are shown in Table 1 and the supplementary appendix.

Explanatory variables: Indicators of poverty and material living conditions

Measuring wealth and poverty at the individual level in Africa is no easy task. Indeed, measuring formal cash income directly for random samples of African citizens is very difficult (Bratton et al. 2004; Bratton 2008). Firstly, many people in Africa do not have a clear account of how much money they make on an annual basis. Secondly, a substantial proportion of people in Africa work outside the formal economy, particularly in rural areas (Bratton 2008). Formally, these people may not have large incomes. But this does not imply that they are poor, since they may be self-sustaining and cater for their own lives, for instance through farming, making formal income a relatively poor indicator of material well-being and poverty (Bratton 2008, 31-32). Rather than measuring income directly, we therefore need a reasonably valid scale of individual wealth and poverty applicable to people in both urban and rural areas. Fortunately, the *Afrobarometer* includes a number of options that enable us to construct such measures.

The best way to assess the material living conditions of respondents in the survey is arguably to construct a direct measure of poverty, based on people’s lack of basic necessities (Mattes et al. 2003; Bratton et al. 2004; Bratton 2008). The *Afrobarometer* contains six questions concerning respondents’ experience with lack of basic necessities. Specifically, respondents are asked how often during the past year, they or anyone in their family have gone without: a) enough food to eat, b) enough clean water for home use, c) medicines or

medical treatment, d) enough fuel to cook food, e) a cash income, f) school expenses for children.⁶ Answers are given using a five-point scale from “never” to “always”. I follow Mattes et al. (2003), Bratton et al. (2004), and Bratton (2008) and combine these six items into an index of poverty – often referred to as the Index of Lived Poverty – with low values reflecting a state of poverty.⁷ The strength of this index is that it assesses poverty in terms of the extent to which people experience a lack of basic material necessities like food and water on a regular basis. However, the poverty index does not work as a scale ranging from poor to rich. While low values reflect that people are poor and destitute, high values do not imply that people are ‘rich’ in any way. Rather, high values simply reflect that people are ‘not poor’, but this does not mean that they have high incomes and nor that their material living conditions are particularly good in absolute or relative terms.

An alternative to the index of poverty is to use two questions asking respondents to assess their own material living conditions. The wording of the first question is: “*In general, how would you rate: Your living conditions compared to those of those of other [Ghanaians/Kenyans/etc.]?*” Respondents can then answer using a five-point scale ranging from “much worse” to “much better”. The second question asks: “*In general, how would you describe: Your own present living conditions?*” Again, answers are given using a five-point scale from “very bad” to “very good”. Note that these questions measure qualities that are somewhat different from the poverty index.⁸ Rather than measuring poverty as lack of basic necessities, these questions attempt to measure individuals’ self-assessed material living conditions, with high values indicating good living conditions and low values indicating poor living conditions. High values are therefore taken to reflect that people are well-off materially, while low values indicate that people are poor. Crucially, for both questions, high values accommodate people with high incomes, but it does not require people to have a large cash income in the formal economy in order to be well-off; people living under good material conditions may also be the ones who possess large quantities of livestock or arable land, which ensures their material welfare (Bratton 2008, 31-32). The key difference between the two questions is that the first measures living conditions in relative terms, while the second is a measure of absolute living conditions. Individuals’ assessments of their relative and absolute living conditions need not be closely related, which is also reflected by the fact that the simple correlation between the variables is only 0.50 ($p < 0.001$). There are strengths and weaknesses of assessing living conditions in absolute and relative terms, respectively. However, as Bratton (2008, 30) notes, poor people are likely to be more aware of their own situation in societies with relatively unequal income distributions. Moreover, in the questionnaire, the second question follows immediately after a question asking people to assess the present economic condition of their country, and may therefore capture respondents’ evaluations of the national economy rather than their personal living conditions. While these considerations seem to favor the measure of relative living conditions, both variables are used in the empirical analyses. At the very least, this allows us to test the robustness of the results. The measures of poverty and material living conditions have all been recoded to a scale from 0-1 with low values indicating poverty and poor living conditions and high values indicating absence of poverty and good living conditions.

Finally, the macro implication of the theoretical argument is that individuals living in wealthier countries are expected to consider AIDS a more salient issue. To test the impact of variations in national wealth, a measure of GDP per capita is included in the regressions. Data are from the Penn World Tables (Summers et al. 2002). Summary statistics are available as supplementary material in the appendix.

⁶ An alternative would be to use the survey items measuring ownership of consumer goods, e.g. bicycles, cars, and motorcycles (Q93A-F). However, these questions do not necessarily say much about poverty in the sense of lack of basic necessities. For instance, not owning a car or motorcycle does not imply that a person is poor.

⁷ Results from principal components analysis confirm that that the six items load onto a single factor. The Eigenvalue is 3.2 and Cronbach’s alpha equals 0.82.

⁸ This is also evident from the fact that the correlation between the poverty index and the indicators of living conditions is around 0.36 ($p < 0.001$).

Additional explanatory variables

The regressions include a number of additional explanatory variables. At the individual level (Level-1), 14 variables from the *Afrobarometer* survey are included. A potentially important explanation of differences in AIDS salience may be that people who have *personal experience with AIDS* are likely to consider the issue more important. If respondents have close relations to people who suffer from HIV/AIDS or know people who have died of AIDS, it is likely that they will give greater priority to the issue. To capture this effect, a dummy variable is included and coded as one if the respondent has close friends or relatives who have died of AIDS. Similarly, it is plausible that people who suffer from personal illness – possibly related to AIDS – are more likely to consider the disease a salient issue. Therefore, a variable is included that measures how much respondents' *physical health* has reduced the amount of work they do inside or outside their home. This serves as a proxy for the state of respondents' physical health and the effect of personal disease burden on AIDS salience.

The analyses also include three variables capturing cognitive aspects of AIDS salience. The first is a measure of *cognitive political engagement*. This variable equals the sum of two items measuring interest in public affairs and the frequency with which respondents discuss politics with friends or family. If people tend to express interest in public affairs and discuss political issues on a regular basis, they may be more likely to view AIDS as an important political issue. Including this variable also minimizes concerns that the measures of poverty and living conditions capture the effect of low levels of cognitive political engagement among poor people. Second, a measure of individuals' *educational background* is included with the expectation that higher levels of education may raise awareness to the problems caused by AIDS and increase the capacity of respondents to follow politics. This variable is measured on a 10-point scale from zero to nine, with zero indicating no formal schooling and nine indicating a post-graduate degree. And thirdly, a measure of how often respondents receive news from the radio is included to address the role of *information* in shaping individuals' perceptions of the salience of AIDS, with the anticipation that higher levels of information increase the importance individuals attach to AIDS. This variable is measured on a five-point scale with high values indicating that respondents frequently listen to radio news.⁹

To capture the impact of cultural values and beliefs, three variables are included. Whiteside et al. (2002, 18) suggest that people with conservative social values may view AIDS as a consequence of fate, low personal morals or immorality. Likewise, conservative, patriarchal values may lead people to see AIDS as a disease attached to people exposed to high levels of risk, e.g. female sex workers. Such beliefs may imply that AIDS is not considered an issue that governments should address. To allow for such effects, two variables are included, with high values indicating conservative/patriarchal values. First, as a proxy for generic *conservative social values* a variable measuring the extent to which respondents believe that people should 'show more respect for authorities' is used. Second, to capture the effect of *patriarchal values* a variable relating to the status of women in society is included. This variable comprises the sum of two items measuring attitudes to women's rights and women as political leaders. Recent work by Lieberman (2007) suggests that ethnic divisions may have a negative effect on people's perception of AIDS as a shared risk. At the micro-level, this could imply that people with strong *ethnic affiliations* are less likely to consider AIDS an important political issue. The analyses therefore include a variable measuring whether respondents mainly have a national or an ethnic identity, where high values indicate that ethnic group identities are highly salient. Note that including the three cultural variables means that the number of observations decreases, since most of these questions were not asked in Zimbabwe. Therefore, the regressions are run both with and without these variables. Importantly, this also works as a test of whether the results are robust to excluding Zimbabwe – the only *Afrobarometer* country rated as 'not free' by Freedom House in 2005 and 2006 – from the sample.¹⁰

⁹ The regressions have been replicated using measures of TV and newspaper use instead of radio use. This does not change the results for poverty and living conditions. Details are available as supplementary material.

¹⁰ 'Freedom in the World Country Ratings' at www.freedomhouse.org

The salience of AIDS may also be affected by Africans' attitudes to the role of governments in responding to HIV/AIDS. Firstly, it is possible that many Africans do not think AIDS is an issue that governments should address. To control for this possibility, a variable measuring *attitudes to government spending on AIDS* is included. This variable measures whether respondents believe governments should use more resources to combat AIDS or devote resources to other problems. Secondly, people who are *dissatisfied with the efforts of the current government in relation to HIV/AIDS* may give higher priority to the issue. To capture this possibility, a variable is included that measures how well (or badly) respondents believe their government is handling HIV/AIDS. High values reflect preferences for higher spending on AIDS and satisfaction with government efforts towards HIV/AIDS. The main problem with using attitudes to government spending and government performance as explanatory variables is that both may be endogenous to salience. For instance, people who find AIDS important may prefer more spending and may also be more critical towards government efforts on the issue. Since this possibility cannot be ruled out, I run models both with and without these two variables.

Finally, a series of demographic control variables are included. A dummy variable indicating whether respondents live in *urban* (1) or *rural* (0) areas accounts for the possibility that AIDS prevalence is higher in urban areas, and may therefore be more salient among urban dwellers. Moreover, controlling for urban versus rural residence is also important to ensure that the poverty and living condition variables do not capture effects of differences in wealth and poverty between people living in urban and rural areas. Similarly, to ensure that differences in poverty and living conditions do not reflect variations in *employment status*, a dummy variable indicating whether respondents are employed (1) or not (0) is included. The regressions also control for *gender* (females=1) and *age* (in years), since prevalence rates are higher among women and young people in Africa (Moss 2007, 178), who might therefore consider the issue more salient.

Since there are data for only 18 countries it is important to limit the number of control variables at the country-level (Level-2). Other than GDP per capita, the country-level equation controls for the nation-wide *prevalence of HIV* (percentage of the adult population), which is important to address the possibility that differences in HIV prevalence may cause systematic variation in the salience of AIDS across national contexts. Data are from the World Health Organization. Although AIDS has typically not attracted much attention during *elections* in Africa, there are nonetheless examples of elections which have put AIDS on the agenda, e.g. in Namibia, South Africa, Botswana, Ghana, and Malawi (Patterson 2006, 66-68). To allow for the possibility that the salience of AIDS may increase during elections, a dummy variable is included and coded as one if the *Afrobarometer* survey in each country was conducted within a year of a parliamentary or presidential election. Data are from the African Elections Database. Finally, the perceived ability of governments to deliver solutions to problems like HIV/AIDS may also matter. Some models therefore include a measure of *government effectiveness* from the Worldwide Governance Indicators (Kaufman et al. 2009). This variable measures (perceptions of) the quality of public services and the ability of governments to implement policies, with high values indicating effective government. To test the robustness of the results to including other country-level variables, the regressions have been replicated in models where government effectiveness has been replaced by economic growth (2000–2005), secondary school enrolment rates, life expectancy, and the nation-wide prevalence of tuberculosis, respectively. Doing so has practically no effect on the results. Detailed results are available upon request. Further variable descriptions and summary statistics are available as appendix in the supplementary material.

Estimation Method: The Multilevel Model

Given that individuals are surveyed in different national contexts, the paper uses a multilevel/hierarchical model to estimate the impact of poverty on AIDS salience. These models have become popular in political science in a variety of areas (Steenbergen and Jones 2002; Hobolt et al. 2008; Lax and Phillips 2009) and allow us to estimate the simultaneous impact of individual- and country-level variables while taking unobserved group-level heterogeneity into account (Steenbergen and Jones 2002; Gelman and Hill 2007; Rabe-Hesketh and Skrondal 2008). Since the dependent variable is dichotomous, all models are estimated using logistic multilevel regressions, where individuals' responses to the AIDS-related *MIP* question are

modelled as a function of individual- and country-level variables. Applying the logit link function and indexing individuals with i ($i=1, \dots, N$) and countries with j ($j=1, \dots, J$), the individual-level (level-1) equation becomes:

$$\Pr(y_{ij} = 1) = \text{logit}^{-1}(\alpha_j + \beta_1 \text{Poverty}_{ij} + \beta_2 \mathbf{Z}_{ij}) \quad (1)$$

where $\Pr(y_{ij}=1)$ is the probability that individual i in country j considers AIDS a salient issue, conditional on the set of explanatory variables. The main interest is in the coefficient, β_1 , of the individual-level poverty measure. \mathbf{Z} denotes a vector of control variables (outlined above) with corresponding coefficients. A level-1 residual term is not included in (1) since it is derived straight from the probability estimates (Hobolt et al. 2009, 104). Given the hierarchical structure of the data, country-level characteristics are allowed to affect AIDS salience between countries by modeling the level-1 constant in the level-2 equation:

$$\alpha_j = \mu + \gamma_1 \text{GDP}_j + \gamma_2 \mathbf{C}_j + \eta_j \quad (2)$$

Here, the constant term, α_j , is a function of country-level GDP per capita and a vector of level-2 controls (outlined above), \mathbf{C}_j , that vary only between countries and are therefore constant across individuals within countries. η_j is a country-specific random intercept varying around an average, μ , common to all countries. The incorporation of η_j is important because it models unobserved country-specific heterogeneity that is unaccounted for by the explanatory variables in (2). Substituting (2) into (1) we end up with the multilevel model:

$$\Pr(y_{ij} = 1) = \text{logit}^{-1}(\beta_1 \text{Poverty}_{ij} + \beta_2 \mathbf{Z}_{ij} + \gamma_1 \text{GDP}_j + \gamma_2 \mathbf{C}_j + \mu + \eta_j) \quad (3)$$

where $\eta_j \sim N(0, \sigma^2)$ is a random intercept drawn from a normal distribution. Equation (3) is basically a logistic random effects model (Gelman and Hill 2007, 301-304; Rabe-Hesketh and Skrondal 2008, 247), with a fixed part consisting of the regression coefficients and a random part summarised by its variance around the intercept. This multilevel – or random effects – model is used to estimate the impact of individual- and country-level wealth and poverty on the salience of AIDS in Africa.¹¹

Results

Explaining AIDS salience

Table 2 shows results from a series of logistic multilevel regressions for the probability that individuals consider AIDS a salient issue, corresponding to tests of *Hypothesis 1*. Models 1, 4 and 7 use the index of poverty; models 2, 5 and 8 use the measure of relative living conditions; and models 3, 6 and 9 substitute these for the measure of absolute living conditions. The individual-level cultural variables are excluded from models 1-3 since responses are not available for Zimbabwe. Similarly, the variables measuring attitudes to government spending on AIDS and satisfaction with government efforts towards HIV/AIDS are included only in models 7-9, since they may be endogenous to AIDS salience. Including or excluding these variables makes practically no difference to the results. Three country-level variables – GDP per capita, HIV prevalence, and election year – appear in all models, while government effectiveness is included only in models 7-9. The country-level variance component is shown below the regression coefficients.

¹¹ The models have been replicated in a series of (conditional) fixed effects logistic regressions. The motivation for doing so is threefold: First, the countries in the analysis are not a random sample; second, the fixed effects model eliminates the effect of all factors – including those unaccounted for by the random effects models – that are common to all individuals *within* countries; third, while the random effects model rests on the assumption that the random effects and the regressors are uncorrelated, the fixed effects model requires no such assumption. The cost of using fixed effects is that we cannot estimate the impact of inherently interesting country-level variables like GDP. Therefore the random effects models are reported here, while the fixed effects results are available as supplementary material. Using the fixed effects model hardly changes the results, and the magnitude of the coefficients and their significance are very similar to the random effects estimates.

Table 2. Multilevel Estimates of the Salience of AIDS in Africa

Model	1	2	3	4	5	6	7	8	9
<i>Individual-level regressors</i>									
Poverty Index	0.45*** (3.09)	-	-	0.47*** (2.94)	-	-	0.49*** (3.06)	-	-
Relative living conditions	-	0.48*** (4.24)	-	-	0.53*** (4.38)	-	-	0.58*** (4.67)	-
Absolute living conditions	-	-	0.35*** (3.50)	-	-	0.36*** (3.43)	-	-	0.39*** (3.62)
AIDS experience	0.31*** (4.71)	0.33*** (5.31)	0.36*** (5.82)	0.26*** (3.72)	0.28*** (4.22)	0.31*** (4.75)	0.23*** (3.29)	0.25*** (3.66)	0.27*** (4.15)
Physical health	0.07 (0.90)	-0.01 (-0.08)	-0.01 (-0.17)	0.05 (0.62)	-0.02 (-0.23)	-0.03 (-0.43)	0.05 (0.62)	-0.02 (-0.19)	-0.03 (-0.41)
Cognitive engagement	0.01 (0.60)	0.00 (0.04)	0.00 (0.02)	0.03 (1.25)	0.01 (0.38)	0.01 (0.49)	0.03 (1.36)	0.01 (0.33)	0.01 (0.49)
Education	0.05** (2.37)	0.05*** (2.58)	0.05*** (2.65)	0.03 (1.52)	0.04* (1.89)	0.04* (1.85)	0.04* (1.80)	0.04** (2.10)	0.04** (2.11)
Radio news	0.07** (2.51)	0.09*** (3.35)	0.10*** (3.72)	0.08*** (2.60)	0.11*** (3.55)	0.11*** (3.89)	0.08** (2.55)	0.10*** (3.37)	0.11*** (3.72)
Authority values	-	-	-	0.01 (0.53)	0.03 (1.59)	0.03 (1.34)	0.01 (0.51)	0.03 (1.56)	0.03 (1.31)
Patriarchal values	-	-	-	-0.08*** (-2.66)	-0.07*** (-2.74)	-0.08*** (-3.03)	-0.08*** (-2.58)	-0.07*** (-2.62)	-0.08*** (-2.91)
Ethnic salience	-	-	-	-0.04 (-1.55)	-0.02 (-0.80)	-0.03 (-1.03)	-0.03 (-1.08)	-0.00 (-0.17)	-0.01 (-0.42)
AIDS spending preference	-	-	-	-	-	-	0.11*** (5.36)	0.12*** (5.78)	0.12*** (5.90)
Satisfaction govt. efforts	-	-	-	-	-	-	-0.12*** (-3.22)	-0.09*** (-2.65)	-0.10*** (-2.96)
Employed	-0.08 (-1.23)	-0.07 (-1.16)	-0.07 (-1.22)	-0.07 (-0.94)	-0.06 (-0.85)	-0.06 (-0.98)	-0.05 (-0.68)	-0.04 (-0.58)	-0.04 (-0.66)
Urban residence	0.20*** (3.21)	0.22*** (3.63)	0.20*** (3.44)	0.23*** (3.45)	0.25*** (3.92)	0.23*** (3.66)	0.23*** (3.39)	0.25*** (3.91)	0.23*** (3.65)
Gender	0.09 (1.45)	0.10* (1.82)	0.09* (1.70)	0.07 (1.07)	0.08 (1.28)	0.07 (1.20)	0.07 (1.06)	0.08 (1.28)	0.07 (1.21)
Age	-0.01*** (-3.98)	-0.01*** (-4.02)	-0.01*** (-3.87)	-0.01*** (-4.29)	-0.01*** (-4.33)	-0.01*** (-4.36)	-0.01*** (-4.02)	-0.01*** (-4.23)	-0.01*** (-4.25)
<i>Country-level regressors</i>									
GDP per capita.	0.19***	0.19***	0.19***	0.18**	0.19***	0.19***	0.35***	0.35***	0.34***

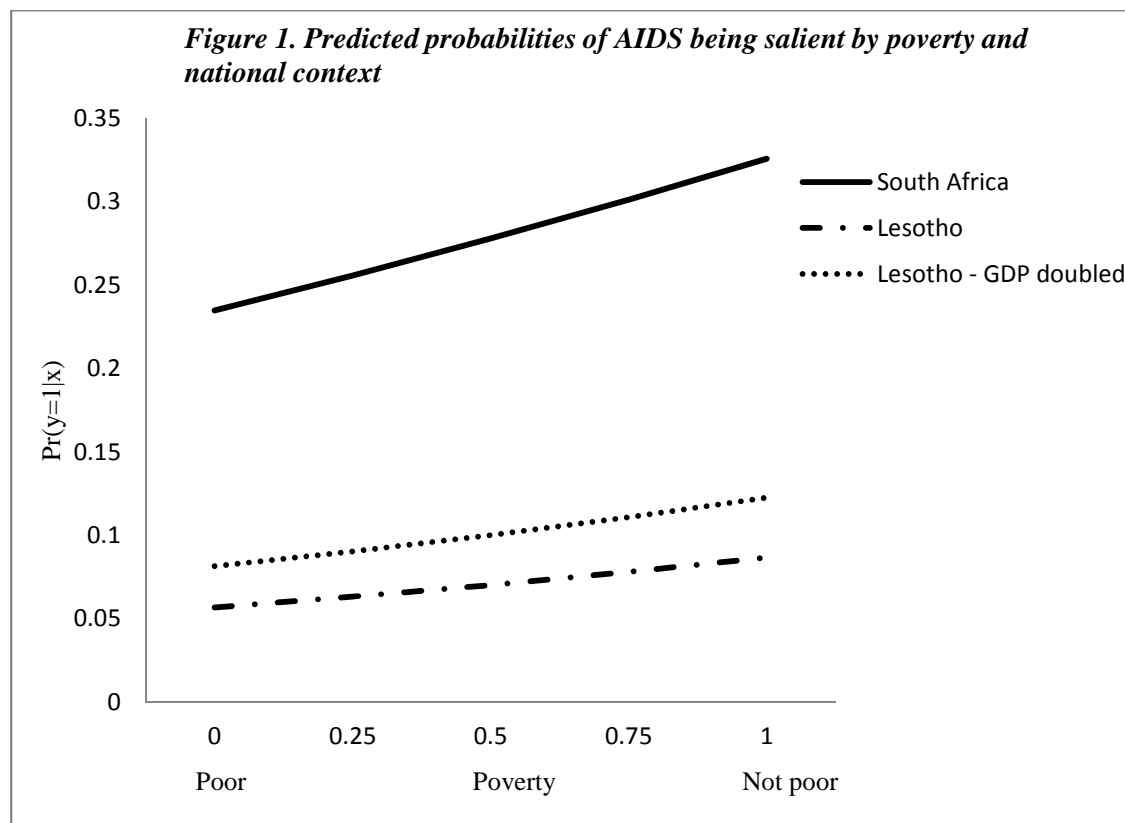
	(3.07)	(3.49)	(3.48)	(2.39)	(2.95)	(2.96)	(3.08)	(3.63)	(3.52)
HIV prevalence	0.10***	0.10***	0.10***	0.11***	0.11***	0.11***	0.12***	0.11***	0.11***
	(4.82)	(5.34)	(5.39)	(4.15)	(4.71)	(4.75)	(4.79)	(5.46)	(5.45)
Election year	0.36	0.37	0.35	0.35	0.42	0.38	0.59*	0.62**	0.58**
	(1.21)	(1.39)	(1.31)	(0.98)	(1.34)	(1.22)	(1.74)	(2.17)	(2.01)
Govt. effectiveness	-	-	-	-	-	-	-1.13*	-1.04**	-0.98*
							(-1.85)	(-2.03)	(-1.90)
Intercept	-5.66***	-5.65***	-5.61***	-5.52***	-5.62***	-5.50***	-6.65***	-6.69***	-6.49***
	(-16.58)	(-18.83)	(-18.81)	(-13.51)	(-15.98)	(-15.82)	(-9.81)	(-11.79)	(-11.53)
<i>Random effects</i>									
Level-2 variance component (σ_{η})	0.58***	0.52***	0.52***	0.66***	0.57***	0.57**	0.56***	0.48***	0.49***
Log likelihood	-4090.6	-4688.3	-4833.8	-3561.5	-4090.4	-4216.3	-3453.9	-3957.8	-4080.9
Pseudo R^2	0.23	0.12	0.10	0.33	0.23	0.21	0.35	0.26	0.24
Individuals	19069	22540	23283	16914	19978	20575	15854	18643	19169
Countries	18	18	18	17	17	17	17	17	17

Coefficients are log odds from multilevel logistic models (z-statistics in parentheses), obtained using *xtmelogit* in Stata 10. The pseudo R^2 is the improvement in the log-likelihood (ll) of the full model compared to the null model without explanatory variables, $(ll_{null}-ll_{full})/ll_{null}$. *** p<0.01, ** p<0.05, * p<0.1.

The results in Table 2 are quite clear. Model 1 shows that poverty has a statistically significant effect on the probability that AIDS is considered a salient political issue. As hypothesized, low values on the poverty index – corresponding to lack of basic material necessities on a regular basis – does seem to decrease the likelihood that individuals consider AIDS salient. Similarly, people who do not experience poverty (high values on the index) tend to find AIDS more salient. Substituting the poverty index with the measures of relative and absolute material living conditions in models 2 and 3 produces nearly identical results, and suggests that better material living conditions increase the likelihood of AIDS being an important issue. These results are robust to including the individual-level culture variables, and to adding the full set of regressors in models 7-9. As expected, throughout all models, a higher level of GDP also has significantly positive effects on the likelihood that individuals in a given country attach importance to AIDS.

The magnitude of the coefficients for the individual level measures of poverty and living conditions are quite stable throughout all models. Based on Model 1, a one unit increase in the poverty index – corresponding to a change from the lowest to the highest value – increases the estimated log odds of AIDS salience by 0.45, which is similar to a multiplicative effect on the odds ratio of the magnitude $e^{0.45}=1.57$ (Gelman and Hill 2007, 82-83; Rabe-Hesketh and Skrondal 2008, 249). Therefore, a movement from being very poor to not being poor, i.e. changing the variable by one unit, multiplies the odds of finding AIDS salient by 1.57, relative to the initial odds ratio. However, it is difficult to give the coefficients in Table 2 a simple interpretation, since logistic regressions model non-linear relationships where the effect of a given explanatory variable depends on the value at which the other regressors are evaluated. To see how the likelihood of AIDS being salient varies with poverty, Figure 1 therefore plots the predicted probabilities of considering AIDS salient based on Model 1 (plots of the other models provide similar results).

Figure 1 shows the effect of poverty with all other individual-level variables held constant, assuming the respondent is female, 37 years old, unemployed, lives in an urban area, has completed primary school, knows someone who has died of AIDS, has few physical health problem, and receives radio news and has a level of cognitive political engagement corresponding to the sample average.



The effect of variations in poverty for this individual is shown for two different national contexts (allowing for different random effects). The bold line represents a case where the country-level characteristics are set equal to the values of South Africa, the wealthiest country in the sample. The punctuated line shows predicted probabilities for an individual living in a country with GDP per capita and HIV prevalence matching Lesotho's. *Afrobarometer* surveys in these two countries were not conducted within a year of a national election, so this variable is set to zero. Note that since the values of the country-level variables are not equal, the two lines in Figure 1 do not represent comparisons with all other country-level variables held constant. However, South Africa and Lesotho both have very high levels of HIV prevalence – 18 and 24 percent of the adult population, respectively – but differ markedly in their level of GDP per capita, with South Africa being nearly five times as wealthy as Lesotho. Figure 1 therefore gives a rough illustration of how AIDS salience differs for two countries with fairly similar levels of HIV prevalence, but significantly different levels of economic development.

Across national contexts, the plot shows that the probability of considering AIDS an important issue increases as poverty is reduced and material living conditions improve. In the South African case, the predicted probability of AIDS being salient increases by 10 percentage points as the poverty index increases from the lowest (very poor) to the highest (not poor) value. Specifically, an individual who is poor and experiences a frequent lack of basic material necessities has a 23 percent probability of finding AIDS salient, while the corresponding probability is 33 percent for a similar individual who is not poor. In the case of Lesotho, the probabilities for persons who are not poor increase by only three percentage points compared to people who are poor. The latter result illustrates that the likelihood that a person in Lesotho considers AIDS salient is much lower than in South Africa for all values of the poverty index. This is also evident from the prediction lines, which clearly show the strong impact of differences in GDP on national levels of AIDS salience. That is, citizens living in countries with higher levels of wealth are generally much more likely to consider AIDS an important issue compared to people in poorer countries. Indeed, most of the difference between the prediction lines for South Africa and Lesotho is attributable to differences in GDP per capita. To illustrate how an increase in GDP affects AIDS salience, the dotted line in Figure 1 shows a hypothetical situation for Lesotho, where its GDP per capita is assumed to be doubled relative to its factual level. Compared to the factual salience probabilities, this increases the country-level salience probabilities by more than 40 percent across all values of individual-level poverty. Overall, the results in Table 2 clearly support *Hypothesis 1*, and show that at both the micro and macro level, poverty and material living conditions affect the salience of AIDS as a political issue. Differences in wealth and poverty therefore do appear to be important parts of the reason why the salience of AIDS varies across both individuals and national contexts in Africa.

The results for the other explanatory variables in Table 2 also shed light on some important reasons for variations in the likelihood that AIDS is considered important. For the individual-level regressors, having personally known someone who has died of AIDS tends to increase the likelihood that AIDS is salient. However, the state of people's general physical health appears to be less important. Cognitive political engagement has no statistically significant relationship with AIDS salience, while education increases AIDS salience. Similarly, information from radio news is also important and significantly increases the probability that AIDS is salient. In terms of the cultural variables in models 4-9, authority values and ethnic salience play little role. However, people expressing patriarchal values care significantly less about AIDS as a political issue, indicating that people's view of the status and role of women in society is an important cultural determinant of AIDS salience. In models 7-9, attitudes to government spending on AIDS is positively related to AIDS salience, while satisfaction with government efforts to combat HIV/AIDS is negatively related, meaning that people who are dissatisfied with government responses towards HIV/AIDS tend to find the issue more important. However, these results may reflect endogeneity in the relationship with AIDS salience, and should be interpreted with caution. Nonetheless, two things are important to notice in models 7-9. First, the results for the individual-level measures of poverty and living conditions are largely unaffected by adding the full set of regressors. Second, including the attitude variables means that

Zimbabwe is excluded from the sample, but this has no effect on the results. Finally, in terms of the demographic controls, urban residents find the AIDS issue more important than people living in rural areas. While there are no systematic differences related to employment or gender, age has a significantly negative effect, meaning that the probability that AIDS is salient declines with increasing age. In other words, younger people care more about AIDS than older people. Other than GDP per capita, only HIV prevalence has a robust and significant impact on national levels of AIDS salience, which shows that AIDS is generally a more salient issue in countries with high levels of HIV prevalence. Interestingly, there are some indications that the salience of AIDS increases slightly within a year of national elections, but the relationship is generally not very strong. Overall, while these results show that many factors are important and must be accounted for when we try to understand the salience of AIDS, they also suggest that poverty and material living conditions constitute an important part of the explanation of the status of AIDS as a political issue in Africa.

Testing generic implications: The salience of unemployment, poverty, and hunger

While the main subject of this paper is the relationship between poverty, material living conditions, and AIDS salience, the theoretical argument has generic implications. Specifically, issues like poverty, hunger, and unemployment are likely to be important for poor and low-income groups because these issues compel people to worry about policies that increase their short-term consumption opportunities. The salience of unemployment, poverty, and hunger (food shortage) should therefore be highest among poor groups and decrease with decreasing levels of poverty and improvements in material living conditions, as stated in *Hypothesis 2*.

To test this proposition, Table 3 shows results from multilevel logistic regressions, where the dependent variables are the probabilities that unemployment (models 1-3), poverty (models 4-6), and food shortage (models 5-7) are considered salient political issues. Table 3 employs the battery of regressors used above with the exception that 'AIDS experience', 'physical health', the culture and AIDS attitude variables, and 'HIV prevalence' are excluded since it is unclear why these should affect the salience of unemployment, poverty, and food shortage.

The results in Table 3 are generally consistent with *Hypothesis 2*. However, in model 1, the poverty index is positively related to unemployment salience in the sense that people who do not experience a lack of basic necessities – that is, those with high scores on the index – are more likely to find unemployment salient compared to poor people (who have low scores on the index). In contrast, the measures of living conditions in models 2 and 3 behave as expected and are negatively and significantly related to the salience of unemployment. While the result for the poverty variable is contrary to the expectation, part of the explanation may be found by inspecting the findings in models 4-9.

Substituting unemployment salience with the probability that poverty and food shortage are considered salient clearly shows that both the poverty index and the living condition variables have negative and statistically significant effects. That is, poor people are more likely to consider poverty and food shortage salient compared to people who are better off and do not lack basic necessities on a regular basis. The salience of poverty and food shortage therefore increases as poverty increases and living conditions deteriorate. Indeed, the large coefficient of the poverty index in model 7 suggests that hunger is a particularly salient issue among poor groups, for whom spending on food constitutes a large proportion of their household incomes. The fact that the salience of poverty and food shortage is higher for poor groups may partly explain why unemployment seems to be less important for poor people. Precisely because the poor worry about poverty, destitution, and food shortage, formal employment may not be an issue that – in relative terms – tops the list of important problems. If so, poor and low-income groups in Africa may simply be too destitute to worry about other things than poverty and shortage of basic necessities like food.

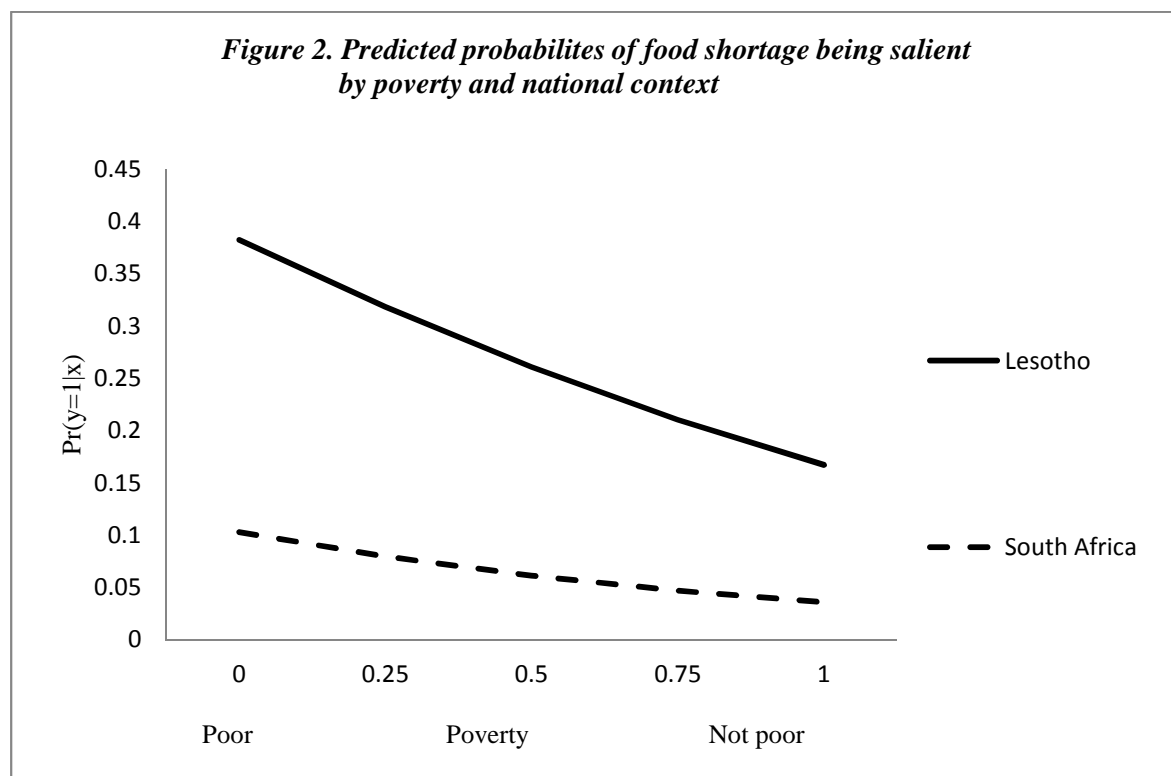
Table 3. Multilevel Estimates of the Salience of Unemployment, Poverty, and Food Shortage in Africa

Model	1	2	3	4	5	6	7	8	9
Dependent variable	Unemp.	Unemp.	Unemp.	Poverty	Poverty	Poverty	Hunger	Hunger	Hunger
Individual-level regressors									
Poverty Index	0.15* (1.94)	-	-	-0.18** (-2.29)	-	-	-1.13*** (-12.65)	-	-
Relative living conditions	-	-0.38*** (-6.09)	-	-	-0.34*** (-5.17)	-	-	-0.58*** (-7.52)	-
Absolute living conditions	-	-	-0.22*** (-4.15)	-	-	-0.46*** (-8.19)	-	-	-0.49*** (-7.43)
Cognitive engagement	-0.02 (-1.34)	-0.03** (-2.46)	-0.03*** (-2.71)	-0.03** (-2.29)	-0.03** (-2.28)	-0.03** (-2.35)	-0.04** (-2.42)	-0.04** (-2.55)	-0.03** (-2.43)
Education	0.09*** (8.91)	0.11*** (11.81)	0.11*** (11.60)	-0.03*** (-2.59)	-0.03*** (-3.04)	-0.03*** (-2.77)	-0.09*** (-6.80)	-0.10*** (-8.91)	-0.10*** (-9.23)
Radio news	0.07*** (4.63)	0.08*** (6.36)	0.08*** (6.51)	-0.01 (-0.86)	-0.02 (-1.50)	-0.02* (-1.66)	-0.07*** (-4.11)	-0.07*** (-4.52)	-0.07*** (-4.60)
Employed	0.01 (0.19)	-0.01 (-0.34)	-0.01 (-0.33)	-0.08** (-2.18)	-0.08** (-2.44)	-0.08** (-2.40)	-0.19*** (-4.22)	-0.24*** (-5.70)	-0.24*** (-5.85)
Urban residence	0.50*** (14.09)	0.51*** (15.90)	0.51*** (15.96)	0.15*** (3.87)	0.14*** (4.06)	0.14*** (4.12)	0.09* (1.89)	0.02 (0.41)	0.01 (0.28)
Gender	-0.04 (-1.15)	-0.05 (-1.56)	-0.05* (-1.66)	0.18*** (5.24)	0.17*** (5.48)	0.18*** (5.87)	0.20*** (4.91)	0.21*** (5.52)	0.21*** (5.62)
Age	-0.01*** (-6.63)	-0.01*** (-8.55)	-0.01*** (-8.66)	0.00 (1.37)	0.00 (1.40)	0.00 (1.06)	0.01*** (3.55)	0.01*** (4.37)	0.01*** (3.92)
Country-level regressors									
GDP per capita.	0.32*** (3.63)	0.31*** (3.51)	0.31*** (3.55)	0.07 (1.01)	0.07 (0.93)	0.06 (0.87)	-0.08 (-0.80)	-0.09 (-0.89)	-0.09 (-0.93)
Election year	-0.06 (-0.18)	-0.06 (-0.20)	-0.05 (-0.16)	-0.34 (-1.32)	-0.34 (-1.36)	-0.36 (-1.39)	-0.81** (-2.37)	-0.79** (-2.29)	-0.80** (-2.36)
Government effectiveness	-0.40 (-0.96)	-0.35 (-0.84)	-0.36 (-0.87)	-0.20 (-0.59)	-0.17 (-0.50)	-0.13 (-0.38)	-1.23*** (-2.74)	-1.27*** (-2.79)	-1.26*** (-2.82)
Intercept	-1.99*** (-4.61)	-1.71*** (-3.98)	-1.78*** (-4.17)	-1.24*** (-3.42)	-1.12*** (-3.21)	-1.06*** (-3.00)	-0.25 (-0.53)	-0.68 (-1.44)	-0.71 (-1.54)
Random effects									
Level-2 variance component (σ_η)	0.65***	0.66***	0.66***	0.54***	0.53***	0.54***	0.71***	0.72***	0.70***
Log likelihood	-11180.4	-13191.6	-13652.8	-10746.2	-12751.4	-13132.2	-8287.7	-9832.6	-10139.1
Pseudo R^2	0.23	0.10	0.06	0.22	0.07	0.04	0.23	0.09	0.06
Individuals	19745	23299	24078	19745	23299	24078	19745	23299	24078
Countries	18	18	18	18	18	18	18	18	18

Unemployment, poverty, and food shortage are binary indicators of responses to the ‘most important problems’ question (see text for details). Coefficients are log odds from multilevel logistic models (z-statistics in parentheses), obtained using *xtmelogit* in Stata 10. For other details, see notes to Table 2. *** p<0.01, ** p<0.05, * p<0.1.

This suggests that there is a ‘poverty threshold’ below which unemployment is simply never a salient issue. Particularly for poor people operating outside the formal economy, hunger and poverty will always be more salient issues than formal (un)employment, which may make little difference to their subsistence. Nonetheless, the results of Table 3 generally indicate that material living conditions and poverty matter for the salience people attach to unemployment, poverty, and food shortage. However, since experiencing poverty mainly affects the probability that poverty and food shortage are salient political issues, *Hypothesis 2* receives only conditional support.

To illustrate the impact of poverty on the salience of food shortage, Figure 2 plots predicted probabilities based on model 7. The probabilities are shown for countries similar to South Africa and Lesotho on the level-2 variables. In Figure 2, the bold line shows predicted probabilities for an individual living in Lesotho, while the punctuated line shows similar probabilities for an individual living in South Africa.¹² The plots therefore show effects of differences in poverty both within and between countries. Regardless of national context, the lines show that the likelihood that food shortage is salient is decreasing with decreasing levels of poverty. Equivalently, food shortage is a more important issue for people who are poor.



Although GDP per capita is insignificant in models 7-9, it is clear that food shortage is much more salient in Lesotho than in South Africa. Specifically, a poor individual living in Lesotho has a 38 percent probability of considering food shortage salient. In comparison, the probability for a similar individual who never experiences poverty is 17 percent, corresponding to a 21 percentage point difference caused by poverty alone. In other words, a poor individual in Lesotho is more than twice as likely to consider hunger salient compared to someone who is not poor. In South Africa, these probabilities are much lower, as Figure 2 clearly illustrates.

Finally, the control variables suggest that cognitive political engagement is significantly negative across nearly all models, indicating that these (economic) issues are apparently less important for politically interested people. Similarly, higher levels of education decrease the salience of poverty and

¹² The individual is assumed to be 37 years, unemployed, female, urban resident, who has completed primary school, and receives radio news and has a level of cognitive engagement equal to the sample average.

hunger, but increase the likelihood that unemployment is salient. Information (radio news) increases the salience of unemployment, but decreases the likelihood that food shortage is salient. Employment status seems to be unrelated to the salience of unemployment. Instead, people without jobs care more about poverty and hunger. Urban dwellers generally find unemployment and poverty more salient than people in rural areas, perhaps because the latter are more likely to be self-sustaining. Gender appears to be insignificantly related to unemployment salience, while women care more about poverty and hunger. Unemployment is generally a more salient issue for young people, while the salience of hunger increases with age. Among the country-level regressors, unemployment salience increases with GDP. Somewhat surprisingly, proximity to elections makes food shortage a less salient issue, while having an effective government lowers the salience of hunger.

Conclusion

HIV/AIDS in Africa has transformed from mainly being a health issue to being a major issue of human and economic development with devastating effects on the lives of millions of Africans. Nonetheless, surveys show that citizens in African democracies do not in general rank AIDS among the most important problems requiring government action. This paper has tried to shed new light on why AIDS is a low-salience issue for many Africans, and how we can explain variations in AIDS salience across individuals and national contexts. This explanation has emphasized that the salience of different policy issues is to a large extent endogenous to poverty and material living conditions. Using survey data from the *Afrobarometer*, the empirical evidence clearly shows that wealth and poverty have significant effects on AIDS salience at both the micro and macro level. Poor groups and people experiencing bad material living conditions are significantly less likely to consider AIDS an important political issue compared to wealthier groups. Moreover, compared to richer African countries like South Africa, the salience of AIDS is significantly lower among people living in less developed and poorer countries. Differences in poverty therefore constitute an important part of the explanation of variations in the salience of AIDS in Africa. A consequence of the widespread poverty in the region is simply that people care more about issues like poverty and food shortage and relatively less about AIDS.

Two implications seem to follow in the wake of these findings. Firstly, if AIDS is not salient to voters, it is less likely to attract attention from their political representatives and governments. If so, government responses to HIV/AIDS may not be very effective. However, the AIDS issue has attracted some attention during recent election campaigns in a few of Africa's poorer countries (Patterson 2006, 66-68). This suggests that even when the circumstances are unfavorable, there are conditions under which AIDS becomes a salient issue during elections in Africa. While we know very little about what these conditions are, it is a question that clearly deserves further attention. Secondly, the fight against poverty and the fight against AIDS are related. Lifting people out of poverty not only relaxes the constraints on their time horizons and improves their material living conditions; it also means that AIDS is likely to become a salient issue to more people and thereby attain a more prominent position on the public agenda than it currently has. Therefore, actions by governments and international organizations to combat poverty – both at the individual and country level – may indirectly contribute to place the AIDS issue more highly on the public agenda in Africa.

References

- Afrobarometer (2004). *Public Opinion and HIV/AIDS: Facing Up to the Future?* Afrobarometer Briefing Paper No. 12. www.afrobarometer.org
- Azariadis, Costas (2006). 'The theory of poverty traps: What have we learned?' In Samuel Bowles, Steven N. Durlauf, and Karla Hoff, eds., *Poverty Traps*. New Jersey: Princeton University Press, 17-40.
- Barnett, Tony, and Alan Whiteside 2006. *AIDS in the Twenty-First Century: Disease and Globalization*. Basingstoke, Hampshire: Palgrave Macmillan.
- Bratton, Michael, Robert Mattes and E. Gyimah-Boadi (2004). *Public Opinion, Democracy, and Market Reform in Africa*. Cambridge: Cambridge University Press.
- Bratton, Michael (2008). 'Poor people and democratic citizenship in Africa'. In Anirudh Krishna, ed., *Poverty, Participation, and Democracy: A Global Perspective*. Cambridge: Cambridge University Press.
- Chakraborty, Shankha (2004). 'Endogenous life time and economic growth'. *Journal of Economic Theory* 116, 119-137.
- De Waal, Alex (2006). *AIDS and Power: Why There Is No Political Crisis – Yet*. London: Zed Books.
- Dionne, Kim Yi (2011). 'The role of executive time horizons in state responses to AIDS in Africa'. *Comparative Political Studies* 44(1), 55-77.
- Eifert, Benn, Edward Miguel and Daniel N. Posner (2010). 'Political competition and ethnic identification in Africa'. *American Journal of Political Science* 54(2), 494-510.
- Gelman, Andrew and Jennifer Hill (2007). *Data Analysis Using Regression and Multilevel/Hierarchical Models*. New York: Cambridge University Press.
- Hobolt, Sara B. and Robert Klemmensen (2008). 'Government responsiveness and political competition in comparative perspective'. *Comparative Political Studies* 41(3), 309-337.
- Hobolt, Sara B., Jae-Jae Spoon, and James Tilley (2008). 'A vote against Europe? Explaining defection at the 1999 and 2004 European Parliament elections'. *British Journal of Political Science* 39, 93-115.
- Hyden, Goran (2006). *African Politics in Comparative Perspective*. New York: Cambridge University Press.
- Iqbal, Zaryab, and Christopher Zorn 2010. 'Violent conflict and the spread of HIV/AIDS in Africa'. *Journal of Politics* 72 (1): 149-162.
- Jones, Bryan D. and Frank R. Baumgartner (2004). 'Representation and agenda-setting'. *The Policy Studies Journal* 32(1), 1-24.
- Kasakende, Louis, Zuzana Brixova and Leonce Ndikumana (2010). 'Africa's counter-cyclical policy responses to crisis'. *Journal of Globalization and Development* 1(1), article 16.
- Kaufmann, Daniel, Aart Kray and Massimo Mastruzzi (2009). 'Governance Matters VIII: Aggregate and Individual Governance Indicators 1996-2008'. Policy Research Working Paper 4978. Washington: The World Bank.
- Lax, Jeffrey R. and Justin H. Phillips (2009). 'How should we estimate public opinion in the states?' *American Journal of Political Science* 53(1), 107-121.
- Lieberman, Evan S. (2007). 'Ethnic politics, risk, and policy-making: A cross-national statistical analysis of government responses to HIV/AIDS'. *Comparative Political Studies* 40(12), 1407-1432.
- Lorentzen, Peter, John McMillan and Romain Wacziarg (2008). 'Death and development'. *Journal of Economic Growth* 13, 81-124.

- Mattes, Robert (2007). 'Public opinion research in emerging democracies'. In Wolfgang Donsbach and Michael W. Traugott, eds., *The SAGE Handbook of Public Opinion Research*. London: SAGE Publication inc., 113-120.
- Mattes, Robert, Michael Bratton and Yul Derek Davids (2003). *Poverty, Survival, and Democracy in Southern Africa*. Afrobarometer Paper no. 23. www.afrobarometer.org
- Morgan, Dilys, Cedric Mahe, Billy Mayanja, J. Martin Okongo, Rosemary Lubega and James A.G. Whitworth (2002). 'HIV-1 infection in rural Africa: Is there a difference in median time to AIDS and survival compared with that in industrialized countries?' *AIDS* 16, 597-603.
- Moss, Todd J. (2007). *African Development: Making Sense of the Issues and Actors*. Boulder, CO: Lynne Rienner Publishers, Inc.
- Page, Benjamin I. and Robert Y. Shapiro (1983). 'Effects of public opinion on policy'. *American Political Science Review* 77(1), 175-190.
- Patterson, Amy 2006. *The Politics of AIDS in Africa*. Boulder, CL: Lynne Rienner Publishers.
- Przeworski, Adam and Fernando Limongi (1997). 'Modernization: Theories and facts'. *World Politics* 49(2), 155-183.
- Rabe-Hesketh, Sophia and Anders Skrondal (2008). *Multilevel and Longitudinal Modeling Using Stata (2nd edition)*. Texas: Stata Press.
- Sachs, Jeffrey 2005. *The End of Poverty: How we can make it happen in our lifetime*. London: The Penguin Press.
- Soroka, Stuart N. and Christopher Wlezien (2010). *Degrees of Democracy: Politics, Public Opinion, and Policy*. Cambridge: Cambridge University Press.
- Steenbergen, Marco R. and Bradford S. Jones (2002). 'Modeling multilevel data structures'. *American Journal of Political Science* 46(1), 218-237.
- Summers, Robert, Alan. Heston and Bettina Aten (2002). *Penn World Tables, Mark 6.1*, Center for International Comparisons, University of Pennsylvania.
- UN (2009). *The Millennium Development Goals Report 2009*. New York: United Nations.
- UNAIDS (2008). *Report on the Global AIDS Epidemic*. Geneva: Joint United Nations Programme on HIV/AIDS.
- van de Walle, Nicholas (2001). *African Economies and the Politics of Permanent Crisis, 1979-1999*. Cambridge: Cambridge University Press.
- Whiteside, Alan, Robert Mattes, Samantha Willan, and Ryann Manning (2002). 'Examining HIV/AIDS in Southern African through the eyes of ordinary Southern Africans'. Afrobarometer Working Paper No. 21. www.afrobarometer.org
- Wlezien, Christopher (2005). 'On the salience of political issues: The problems with "the most important problem"'. *Electoral Studies* 24, 555-579.
- World Bank (1997). *Confronting AIDS: Public Priorities in a Global Epidemic*. Oxford: Oxford University Press.

AFROBAROMETER WORKING PAPERS

- No.132 Kasara, Kimuli "Separate and Suspicious: Local Social and Political Context and Ethnic Tolerance in Kenya" 2011
- No.131 Mattes, Robert "The "Born Frees": The Prospects for Generational Change in Post-Apartheid South Africa" 2011.
- No.130 Baldwin, Kate. "When Politicians Cede Control of Resources: Land, Chiefs and Coalition-Building in Africa" 2011.
- No.129 Conroy-Krutz, Jeffrey and Dominique Lewis. "Mapping Ideologies in African Landscapes" 2011.
- No.128 Logan, Carolyn. "The Roots of Resilience: Exploring Popular Support for African Traditional Authorities" 2011.
- No.127 Bratton, Michael, Ravi Bhavnani and Tse-Hsin Chen "Voting Intentions in Africa: Ethnic, Economic or Partisan?" 2011.
- No.126 D'Arcy, Michelle. "Why Do Citizens Assent to Pay Tax? Legitimacy, Taxation and the African State" 2011.
- No.125 LeBas, Adrienne. "Ethnicity and the Willingness to Sanction Violent Politicians: Evidence from Kenya" 2010.
- No.124 Mattes, Robert, Francis Kibirige and Robert Sentamu. " Understanding Citizens Attitudes to Democracy in Uganda " 2010.
- No.123 Logan, Carolyn and Robert Mattes "Democratizing the Measurement of Democratic Quality: Public Attitude Data and the Evaluation " 2010.
- No.122 Bratton, Michael. "Anchoring the "D-Word" in Africa". 2010
- No.121 Isaksson, Ann-Sofie. "Political participation in Africa: Participatory inequalities and the role of resources". 2010
- No.120 Harding, Robin. "Urban-Rural Differences in Support for Incumbents Across Africa ". 2010.
- No. 119 Bratton, Michael. "Citizen Perceptions of Local Government Responsiveness in Sub-Saharan Africa". 2010.
- No. 118 Keefer, Philip. "The Ethnicity Distraction? Political Credibility and Partisan Preferences in Africa." 2010
- No.117 Gadzala, Aleksandra and Marek Hanusch "African Perspectives on China-Africa: Gauging Popular Perceptions and their Economic and Political Determinants." 2010.
- No.116 Chang, Eric and Nicholas Kerr. "Do Voters Have Different Attitudes toward Corruption? The Sources and Implications of Popular Perceptions and Tolerance of Political Corruption." 2009.
- No.115 Young, Daniel. "Support You Can Count On? Ethnicity, Partisanship, and Retrospective Voting in Africa." 2009.
- No. 114 Kramon, Eric. "Vote-Buying and Political Behavior: Estimating and Explaining Vote-Buying's Effect on Turnout in Kenya." 2009.
- No. 113 McCauley, John F., E. Gyimah-Boadi. "Religious Faith and Democracy: Evidence from the Afrobarometer Surveys" 2009.
- No. 112 Robinson, Amanda Lea. "National versus Ethnic Identity in Africa: State, Group, and Individual Level Correlates of National Identification" 2009.
- No.111 Kirwin, Mathew and Wonbin Cho. "Weak States and Political Violence in sub-Saharan Africa." 2009.
- No.110 Cho, Wonbin and Carolyn Logan. "Looking Toward the Future: Alternations in Power and Popular Perspectives on Democratic Durability in Africa." 2009.

No.109 Mattes, Robert and Dangalira Mughogho . "The Limited Impacts of Formal Education on Democratic Citizenship in Africa." 2009.