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Gender difference in support for democracy in sub-Saharan Africa

Do social institutions matter?

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Abstract: Little investigation has been made to explain why women are less likely than are men to support democracy in sub-Saharan Africa. This gender difference in politics has been found in numerous studies and may hinder the much needed legitimation of democracy in this region. This paper addresses the question of whether this observed gender gap is due to the omission of social institutions related to gender inequality, something that affects women's daily life and deprives them of autonomy at home. We hypothesize that women who live under autocracy at home are less likely to support democracy outside, because it does not affect their private life; this follows the idea that the way women are treated in a society might have major implications for the economic, social, and political functioning of that society. We find that the gender difference in support for democracy is no longer significant after we control for gender discrimination in the family code, in physical integrity or in civil liberties. This study also provides evidence that women living in countries with favorable laws toward women are more supportive of democracy than women who do not, suggesting that democratic regimes may be more willing than are authoritarian regimes to protect laws friendly to women.

Keywords: support for democracy, gender difference, social institutions

JEL classification: J16, O120, O38, O55

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Tables are at the end of the paper.

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1 Introduction

An extensive macroeconomic literature has widely documented the major determinants of countries levels of democracy using cross-sectional data. At the micro level, recent work has focused on the extent to which individuals in a society *support democracy*, in line with the political view that has emphasized the importance of democratic legitimacy¹ on enhancing the level of democracy in a country (Diamond 1999).² What can explain the degree of *support for democracy* in a country? Thanks to the growing number of available surveys, an influential literature has studied the impact of numerous individual socio-economic characteristics on the degree of endorsement and acceptance of democratic regimes. For instance, some scholars have pointed out the impact of citizens' level of education (e.g, Bratton et al. 2005; Evans and Rose 2007b) based on the work of Lipset, which claims that education is a pre-condition for democracy. Others have looked at the relation between religion and democracy (Rowley and Smith 2009; Maseland and van Hoorn 2011). This previous work controls for gender and surprisingly finds a gender difference in support for democracy in developing countries, in particular in sub-Saharan Africa (SSA), where women are less likely than men to assert that democracy is the best political regime.

Yet this recurrent gender gap has received little attention in the literature and remains an important research question that needs further investigation. As far as we know, an exception is the analysis in Garcia-Peñalosa and Konte (2014) where we have tried to test potential explanations of this gap, focusing on both, differences in socio-economic characteristics between the two genders and the institutional environment of the countries in which the women live. The main result is that the socio-economic variables are less important than the institutional variables. Indeed, an increase in the level of the Human Development Indicator and in political rights moderates the magnitude of this gender difference in support for democracy, but controlling for these institutional variables does not offset it. Overall, at this stage we are still left wondering what explains this gender difference in support for democracy in SSA, despite the desirable features of democracy and the prominent role of women attitudes in promoting development.³

The present paper seeks to contribute to this literature and adds to the analysis the discrimination in social institutions that has been omitted in previous studies. Gender equality has many distinct dimensions and also involves social institutions.⁴ Social institutions are long-lasting norms, traditions and codes of conduct that find expression in traditions, customs and cultural practices, informal and formal laws, and guide people behavior and interaction (Branisa and Ziegler 2011). An inequality in social institutions deprives women of autonomy and bargaining power in the family and in the household, limits their access to different resources, which may in turn generate additional external forms of inequality between the two genders.

¹ The definition of legitimacy attitudes by Lipset (1963) is 'Belief that the existing political institutions are the most appropriate ones for the society' (see Fails and Pierce 2010).

² Diamond (1999) argues that the stability of democratic systems requires a belief in the legitimacy of democracy by people. Besides, Mattes and Bratton (2007) report that 'No matter how well or badly international aid donors or academic think tanks rate the extent of democracy in a given country, this form of regime will only consolidate if ordinary people believe that democracy is being supplied'.

³ See the 2012 *World Development Report*, Ashraf et al. (2010), Chattopadhyay and Duflo (2004), and Clots-Figueras (2011) for some evidence on the role of women for development.

⁴ Among the different dimensions of the gender equality we cannot the economic participation, health and well-being, political empowerment and education attainment.

Discriminatory social institutions that restrict women's access to resources are detrimental to welfare and are associated with bad economic and social features—see for instance OECD (2010) for the impact of social institutions on some of the Millennium Development Goals, and OECD (2012) and Asian Development Bank (2013) for the investigation on food security. So far, studies that have focused on the importance of social institutions on women's behavior in politics have been scarcer, while women's empowerment in politics has been a focal point when discussing issues related to gender equality.

Yet, this paper fills this gap and attempts to emphasize the extent to which social institutions are related to gender and democracy, and tests whether this observed difference in support for democracy in SSA is due to the weak quality of social institutions related to gender inequality, something which affects women's daily lives and deprives them of autonomy at home. Our main hypothesis is that women who live under autocracy at home are less likely to support democracy outside, because it does not affect their private life. This assumption follows the idea that the way women are treated in a society might have major implications for the economic, social, and political functioning of the society (Branisa et al. 2013). Indeed, the overall findings of this paper claim that the gender discrimination in social institutions that has been previously blamed for slowing down some strategies of development in poverty reduction, schooling and food security may also inhibit women's attitudes in politics, hindering the much needed democratic legitimacy in their own countries.

The analysis is conducted using the Afrobarometer data, a series of national surveys on the attitudes of citizens towards democracy, markets, civil society and other aspects of development in SSA countries. We start using the most recent Afrobarometer data, round 4, before moving to a larger sample where we add rounds 2 and 3 in order to take into account simultaneously the time effects and the country fixed-effects, something that has been ignored in the related literature. Round 4 is a combination of surveys that took place in 20 countries between March 2008 and June 2009. Rounds 2 and 3 include fewer countries; the interviews were between the years 2002-03⁵ for the former, and between 2005-06 for the latter.

To define *support for democracy*, we follow the previous literature—e.g, Evans and Rose (2007b), Evans and Rose (2007a), Garcia-Peñalosa and Konte (2014) among others—and create a dichotomous variable that takes the value of one for people who assert that democracy is the best political regime and zero for all the alternative responses that are proposed in the surveys (see Section 3). To measure social institutions, we use the recent OECD Gender Institutions and Development Database and the five sub-components of the OECD Social Institutions and Gender Index (SIGI). These indicators inform us about gender discrimination in the family code, gender discrimination in terms of civil liberties, physical integrity, access to different forms of resources, and the degree of preference for boys in a society. An influential literature has recently used this OECD data at the macro level in order to determine the importance of social institutions for various economic and social outcomes—e.g, Branisa et al. (2013); Branisa and Ziegler (2011); OECD (2010, 2012); Jütting et al. (2010).

We estimate a multilevel logit model where the dependent variable is the probability of supporting democracy conditional on numerous individual socio-economic and demographic characteristics. Our main focus is the sign and the significance of the coefficient on the dummy female which takes a value of 1 for women and 0 for men. We also control for citizens' understanding of the meaning of democracy and their involvement in politics as well as their participation in public affairs.

⁵ For Zimbabwe, the interviews for round 2 took place in 2004.

Individuals are nested within countries in order to take into account heterogeneity at the country level, capturing the fact that individuals within countries are more likely to have similar behavior.

The results show that there is a significant gender difference in support for democracy in the sample. This finding confirms the previous studies and it is robust to the use of alternative measures of support for democracy, to the use of different Afrobarometer samples, and to the inclusion of both time and country fixed-effects. Interestingly, this gap becomes no longer significant after we control for particular social institutions such as gender discrimination in the family code, in physical integrity and in civil liberties. We also find that women living in a country with favorable laws toward women have a higher degree of support for democracy than other women. This can be explained by the hypothesis that democratic regimes are more willing to protect such laws, friendly to women, than are authoritarian.

The rest of the present paper is organized as follows. The next section presents a review of literature related to this paper. Section 3 describes the data, starting with a description of the Afrobarometer surveys before moving on to the measures of social institutions used in this paper. Section 4 sets up the empirical model that will be estimated, then Section 5 presents the results. Some concluding comments are provided in Section 6.

2 Related literature

This paper is related to three strands of the literature. First, it contributes to the literature addressing the determinants of support for democracy in developing countries using survey data. Education is one of the standard candidates that have been shown to affect positively the degree of support for democracy, and influential evidence can be found in Bratton et al. (2005); Evans and Rose (2007b); Evans and Rose (2007a), among others. These analyses have used different frameworks but they can all be linked to the theory of Lipset that claims that education is prerequisite for democracy. Bratton et al. (2005) have provided evidence that educated people in SSA are more likely to support democratic regimes even though the authors claim that ‘awareness of the meaning of democracy and knowledge of leaders’ remains more important than formal schooling. Evans and Rose (2007b) go beyond and provide a more accurate framework to address the impact of formal education on the support for democracy in Malawi, decomposing the level of education into its different stages. They conclude that primary schooling, which is the level of education of the majority of educated people in Africa, is sufficient for the endorsement of democracy and the rejection of non-democratic regimes in Malawi. Their recent investigation on the relation between education and support for democracy in Evans and Rose (2007a) considers a larger sample of African countries and their results still concord with their previous conclusion.⁶ Recently, Mattes and Mughogho (2009) have also contributed to this strand of the literature, focusing on both the direct and the indirect impacts of education on the support for democracy through access to the media and political participation using the latest Afrobarometer data similar to our small sample in this paper.⁷

⁶ Furthermore, Evans and Rose (2007a) have figured out mechanisms through which education affects support for democracy and argue that ‘the mechanisms through which schooling influences democratic support relate to cognitive elements of political comprehension and involvement that are consistent with an intrinsic model of the effect of education on democratic values and outcomes rather than a view of education as a marker of resource inequalities’.

⁷ See also Shafiq (2010) for further investigation of the impact of education on support for democracy in other developing countries. Using the Pew Global Attitudes Project surveys, Shafiq (2010) finds that education has a strong effect on support for democracy in Lebanon, Jordan, and Pakistan.

Additional work has been devoted to alternative potential determinants of support for democracy such as religion and the notion of ‘the democratic paradox of Islam’⁸ which has been resulted from this evidence. Using the World Value Surveys, Rowley and Smith (2009) find that predominantly Muslim countries have a higher degree of support for democracy than other countries. In their seminal work, Maseland and van Hoorn (2011) challenge this Islam’s paradox, arguing that the positive attitudes of citizens in Muslim countries towards democracy are not limited to Muslim countries and can be fairly explained by the theory of decreasing marginal utility, which suggests that people more highly value scarcer goods.

In these papers, scholars have controlled for gender in their empirical models and have found a significant gender difference in the support for democracy, with a sign indicating that women are less supportive than men of democratic regimes. This recurrent gender gap has received little attention in this literature. An exception is the analysis of the gender gap in democratic attitudes in SSA countries by Garcia-Peñalosa and Konte (2014), which showed the importance of some institutions in quantifying the magnitude of this gap but failed to determine what really explain such a gender difference in this region.

Second, closely related to the present paper is the research that has analyzed various aspects of the gender difference in African political behavior. For instance, Coffe and Bolzendahl (2011) have focused on the gender gap in political participation. They show that individual socio-economic characteristics that have been found to be important determinants of the gender gap in political participation in Western countries (see Burns (2007) are not very appropriate for explaining the gender gap in political participation in African countries. Instead, they find a strong correlation between a country’s level of formal institutions and the level of the gender gap in political participation. These findings have been one of the focal points of the paper by Garcia-Peñalosa and Konte (2014), who have included countries institutional climate as one of the potential explanations of the gender gap in the support for democracy in SSA countries. Using the Afrobarometer data, round 4, they found that the levels of Human Development Indicator and of political rights do not offset this gender gap: instead, they just help quantify its magnitude.

Finally, our paper also follows the influential literature that has focused on the negative impact of the different forms of gender inequality and discrimination against women on various economic outcomes such as education and employment (e.g, Abu-Ghaida and Klasen (2004); Klasen and Lamanna (2009). Based on this finding, it is worth looking at the origin of this gender discrimination. Thus, recently Branisa et al. (2013) have posited that gender inequalities are rooted in gender roles that evolve from (often informal) institutions that shape everyday life and form role models that people try to fulfill and satisfy. Indeed, considering social institutions that affect individual’s daily lives and deprive women of autonomy in the home is of major interest for development studies related to gender issues. Previously, a number of studies have examined the relation between women’s autonomy and their fertility decisions at the household level. For example, one can note the analysis by Hindin (2000) for a case study in Zimbabwe, Gage (1995) for Togo, Balk (1994) for a case study in Bangladesh, among others.

At the cross-country level, it has been more difficult to address the impact of social institutions on economic outcomes due to the scarcity of data of this category of institutions. Recently, Jütting et al. (2008) have presented the OECD data from the Gender, Institutions and Development database that complements the existing gender discrimination indexes. This is the first data on gender

⁸ This paradox expressed by Rowley and Smith (2009) is the fact that democracy is popular, but rare in Muslim-majority countries

inequality that takes into account different measures of social norms, traditions and family laws. Branisa and Ziegler (2011) have used this data in order to re-examine the relation between gender inequality and corruption and add in the measures of social institutions, a variable that had been omitted in the previous literature. They have provided evidence that the level of corruption in a country depends strongly on the extent to which social institutions deprive women of the freedom to participate in social life.

In addition, the OECD Development Center (2010) has examined the relation between discriminatory social institutions and some of the height Millennium Development Goals (MDGs). These studies have specifically concentrated on the eradication of extreme poverty (MDG 1), the achievement of universal primary education (MDG 2) and the improvement of maternal health (MDG 5). They show that more gender equality in decision-making power in the household enables women to allocate efficiently the resources, which in turn will increase the welfare of the family, reducing the intensity of poverty, hunger and malnutrition. They have also provided evidence that an increase of women's decision-making power in the household will expand females' ability to ensure complete schooling for their children. They have further shown that domestic violence against women and genital mutilation of women decrease women's rights and decision-making power, and this is detrimental to maternal health and fertility control.

In the same spirit, Branisa et al. (2013) have created a social institutions and gender-related index (hereafter SIGI) which is an aggregate measure of the different indicators presented in Jütting et al. (2008). Using cross-country data, Branisa et al. (2013) have analyzed the effect of the SIGI on various development outcomes. They have found that social institution lower female secondary education and increase fertility rates, child mortality and the level of corruption. Indeed this study has shown the importance of considering social institutions in the choice of policies intended to address gendered development outcomes. Using the SIGI index, Jütting et al. (2010) have analyzed the impact of gender discrimination in social institutions on discrimination between men and women in the job market for 44 developing countries. Their results highlight that social institutions are crucial for activity patterns and job quality for women.

3 Data

3.1 The Afrobarometer surveys

To carry out our empirical analysis, we start with the most recent available data of the Afrobarometer, round 4. For the purpose of robustness, we will combine round 4 with rounds 3 and 2 in order to include simultaneously the time and the country fixed-effects as well as any variations in the indicators of social institutions over time. The Afrobarometer, round 4, is a collection of surveys that took place in 20 African countries between March 2008 and June 2009. In total 27,713 individuals between 18 and 64 years of age were interviewed in these following countries: Benin, Botswana, Burkina Faso, Cape Verde, Ghana, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mozambique, Namibia, Nigeria, Senegal, South Africa, Tanzania, Uganda, Zambia and Zimbabwe. It is a face-to-face interview where the questions are in the local language. The method of random selection is used at each stage of the sample in order to provide a representative cross-sectional sample of all the citizens of voting age within countries.⁹ Due to missing data for social institutions for Cape Verde, we prefer to exclude it from our data for the rest of the analysis.

⁹ Further details on the data are available at: <http://www.afrobarometer.org/survey>.

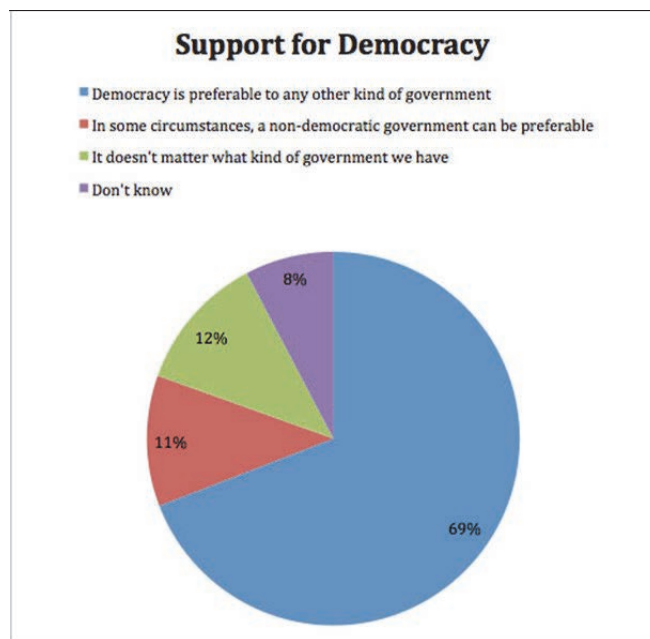
Dependent variable: support for democracy

The main dependent variable is the support for democracy. To build this variable, we use question 30 of the survey,¹⁰ which is: ‘which of these three statements is closest to your opinion?’ The possible choices are:

- (1) democracy is preferable to any other kind of government
- (2) in some circumstances, a non-democratic government can be preferable
- (3) for someone like me, it does not matter what kind of government we have
- (4) I don’t know.

Figure 1 presents the repartition of respondents into the different possible answers. Sixty-nine per cent of people answer (1), the remaining 31 per cent are divided into 11 per cent for answer (2), 12 per cent for (3) and 8 per cent ‘don’t know’. For the purpose of this analysis, all the categories other than ‘democracy is preferable to any other kind of government’ are aggregated because it is not obvious how to order them in terms of preference for a democratic regime (see also Evans and Rose (2007b) for this purpose). We code the dummy *democracy as* equal to 1 if the response is (1), meaning that the individual supports democracy and *democracy equals* 0 for any of the alternative responses.

Figure 1: Support for democracy



Source: see text.

Furthermore, additional measures that can be seen as important issues when we define a democratic regime will be also considered in the analysis to check the robustness of the results. We particularly define a dummy *election* that informs us about the process through which elections are set; a dummy *plurality* for the existence of multiple political parties; a dummy *media* to capture support for democracy according to the freedom of the media; and finally a dummy *constitution* related to the number of terms that should be allowed to the president. Questions 31, 32, 35 and 38, respectively, help code these proxies for democracy. Hence we code *election* as 1 for respondents who agree that the leader should be chosen through regular, open and honest elections; *plurality* equals 1 for people who think that many political parties are needed to make sure that citizens

¹⁰ It refers to the question number 37 for round 3, and 38 for round 2.

have real choices in who governs them; *media* equals 1 for those who agree that the media should constantly investigate and report on corruption and the mistakes made by the government, and finally the dummy *constitution* takes the value of 1 for individuals who share the idea that we should limit the president to serving a maximum of two terms in office.

Table 1 reports some descriptive statistics of the Afrobarometer variables used in this paper. Overall in this data African citizens register a significant degree of support for democracy with 69 per cent of them asserting that democracy is the best political regime; 79 per cent agree that elections should be regular, open and honest; 69 per cent are in favor of the existence of multiple political parties in their country; 75 per cent support the freedom of the media; finally 73 per cent of African people agree that the number of terms for a leader should not exceed two.

Explanatory variables

Our primary explanatory variable is *female*, which takes the value of 1 for a woman and 0 for a man. The data have 50.07 per cent women and 49.93 per cent men. Table 2 presents the degree of support for democracy by gender. The last column of this table informs us about the test of equality between the proportion of men and the proportion of women who give similar responses for the question 30 on individual's preference for democracy. We observe that the test of the equality of the proportion of men and the proportion of women is rejected for the different categories except for the category 'in some circumstances a non-democratic regime can be preferable'. The next table, Table 3, shows similar results using the alternative proxies for support for democracy.

The choice of the additional explanatory variables is based on the existing theories as well as on the previous literature in this field. As standard independent variables, we include education, age, location, head of household, employment status, access to media, understanding of the meaning of democracy, and variables to proxy people's interest in politics and their experience of corruption. Education is divided into five categories: no-formal schooling, which includes 20 per cent of the people, incomplete primary school (18 per cent), completed primary (35 per cent), secondary (15 per cent), and post-secondary, which has the lowest rate, including less than 11 per cent of the sample. We expect that education increases significantly the degree of support for democracy because educated people are more likely to be interested in politics and are more able to understand the importance of democracy. This is in line with the theory of Lipset that claims that education is prerequisite for democracy.

To look at whether the degree of support for democracy is associated with the people's experience, we group individuals into three different categories of age: those who are aged between 18 and 25 years (27 per cent of the sample), people between 26-35 (29 per cent), and people older than 35 (43 per cent of the sample). For the place of residence we have distinguished between people living in rural areas (63 per cent) versus urban areas (36 per cent). Employment status has three categories: inactive, accounting for 31 per cent of the sample and active, sorted into unemployed (34 per cent) and employed (33 per cent). To measure the access to media, we consider separately the access to news from radio, from TV, and from newspapers. For each of them, the variable access to media is a dummy equal to 0 if the individual attests never having had access to media from the given source, and 1 otherwise. In the sample, almost 87 per cent have access to news from radio, against 54 per cent for TV. Indeed, access to TV remains costly in developing countries, especially for people living in rural areas. Finally, only 40.61 per cent have access to news from newspapers, a number which is not surprising given the fact that reading newspapers requires some level of education, yet in this dataset 20 per cent of the people do not have formal schooling and 18 per cent haven't completed their primary degree.

One of the major disadvantages of the Afrobarometer data is the lack of information for income at the individual level, a variable that may be crucial for people's attitudes toward democracy. The two possibilities that we have chosen for dealing with this issue are, first, to try to measure the level of poverty by using the questions of the survey that ask people how often they (or their family) have gone without food, water, medicine or cash. Only 45 per cent have never gone without food, as against 52 per cent for water, 41 per cent for medicine and 22 per cent for cash. Second we will also include in the analysis the natural logarithm of the gross domestic product (GDP)/per capita at the country level.

Another aspect that we will also consider in our analysis is people's understanding and involvement in public affairs and politics. To proxy an individual's understanding of the meaning of democracy, they are asked how democratic is their country and they have different possible answers: 'not a democracy', 'a full democracy', 'a democracy with minor or major problems', 'do not understand the question' or 'do not understand what democracy is'. With this information, we will create four different categories: the control group is people who think that their country is a full democracy, the second is for those who think that it is not a democracy, the third category includes people who believe that their country is a democracy with minor or major problems, and the last group includes all people who do not understand the meaning of democracy. Finally, individuals are asked whether they have voted in the last election and whether they are interested in public and political affairs.

3.2 Measuring social institutions

Different indexes of gender inequality have been proposed in the literature. The most widely used are the UNDP's gender development index (GDI) and the 'gender empowerment measure' (GEM). The GDI is an unweighted measure of gender differences in income, life expectancy at birth, and education. The GEM is a measure of the political and economic position of women and is an average of the following dimensions: the share of women in parliament, the male/female ratio among workers (administrators, managers, professional and technical workers), and the ratio of female/male GDP per capita. A key common issue with these measures of gender inequality is that they rather indicate the gender discrimination in terms of outcome, but they don't really inform us about the discrimination related to social institutions that may affect individuals' daily life in their own home.

To measure social institutions, this paper uses the OECD's SIGI. This data provides a series of indexes on discriminatory social institutions for over one hundred developed and developing countries. For the purpose of this paper, we will consider the aggregate SIGI measure and its five components in order to characterize the types of inequality in social institutions that really matter for the endorsement and acceptance of democracy by women. These five indicators of the SIGI are the degree of discrimination in the family code (hereafter FC), the restricted physical integrity (PI), the son bias index (SON), the restricted resources and entitlements index (resource), and the restricted civil liberties index (CL). These data were first launched in 2009 and were recently updated in 2012.

- FC captures institutions that influence the decision-making of women in the household and gives information on whether women are discriminated in terms of minimum age of marriage as well as in terms of parental authority (both during marriage and after divorce) and in inheritance rights. This index also takes into account the intensity of women's early and forced marriages.

- The PI component informs us about violence against women and the existence of legal protection for women from rape, domestic violence, and genital mutilation. It also measures the extent to which women are free to engage in family planning.
- CL measures the freedom of participation of women taking into account the restrictions of women in moving alone and accessing public space without the agreement of their husband or other male family member.
- The resource index measures the access of women to several types of property, such as agricultural or non-agricultural lands, bank loans and any others form of credits.
- The component ‘son’ indicates the degree of missing women and the preference for boys in a society.

The method of polychronic principal component analysis is applied for the computation of each of these five aggregate indexes of social institutions related to gender discrimination. These indexes take values between 0 and 1, where 1 represents the highest level gender discrimination and 0 represents no discrimination. The aggregate SIGI index is obtained using the formula of Foster-Greer-Thorbecke.¹¹ Table 4 shows countries’ levels of social institutions, while table 5 shows the descriptive statistics. We observe that for the recent data on social institutions provided in 2012, Mali has the highest value for the discrimination in FC, PI and also in CL along with Nigeria. Benin and Uganda record the worst value for the discrimination in access to resources. In contrast, South Africa has the best position in terms of FC, PI and CL, while Lesotho has a value of zero for access to resources. Liberia and Mozambique have the lowest index of son preference.

4 Empirical strategy

We have data for $J = 1, 2, \dots, 19$ countries, and n_j defines the number of observations per country that varies across countries. The variable of interest is support for democracy denoted by *democracy*. For each individual in the sample we attribute a value of 1 or 0 as follow:

$$democracy_{ij} = \begin{cases} 1 & \text{if the individual } i \text{ living in country } j \text{ supports democracy} \\ 0 & \text{otherwise} \end{cases} \quad (1)$$

Given the structure of the variable of interest which is a dichotomous we estimate a varying-intercept multilevel (or hierarchical) logit model where individuals are nested within countries. Hence, we will consider a two-level model where the highest level is the country and the lowest level is the respondent. We follow the same specification than in the previous studies, in particular the one in Garcia-Peñalosa and Konte (2014). Let us denote π_{ij} the probability that the individual i living in country j supports democracy. This probability is given as follow:

$$\pi_{ij} = Prob(democracy_{ij} = 1, \omega_{ij}) \quad (2)$$

More explicitly we can express this probability as:

$$\pi_{ij} = \frac{1}{1 + \exp(-\omega_{ij})} \quad (3)$$

¹¹ Further details on the SIGI index can be found in Branisa et al. (2009).

Where,

$$\omega_{ij} = \beta_0 + \beta_1 female_{ij} + \beta_2 X_{ij} + \varepsilon_{ij} \quad (4)$$

Our parameter of interest is β_1 which tells us about the impact of gender on the probability to support democracy. A negative sign means that being female decreases the probability to support democracy compared to male. The vector X_{ij} contains the socio-economic characteristics of individual i in country j . Individuals who live in the same country may not be independent thus standard errors may be underestimated with the traditional regression techniques. Multilevel modeling has the advantage to take into account such a clustering effect. By allowing the intercept to vary across countries we have then:

$$\text{Level 1: } \omega_{ij} = \beta_{0j} + \beta_1 female_{ij} + \beta_2 X_{ij} + \varepsilon_{ij}, \quad \varepsilon_{ij} \sim N(0, \sigma^2) \quad (5)$$

$$\text{Level 2: } \beta_{0j} = \beta_{00} + u_j, \quad u_j \sim N(0, \gamma^2)$$

Thus the general model can be written as follow:

$$\omega_{ij} = \beta_{00} + \beta_1 female_{ij} + \beta_2 X_{ij} + u_j + \varepsilon_{ij} \quad (6)$$

The term $u_j + \varepsilon_{ij}$ in equation 6 represents the random part of the model where, u_j is the country-specific effect and ε_{ij} is the individual-level error term.

The main focus in this paper is to test whether the gender gap in support for democracy is explained by the low quality of social institutions related to gender inequality that affect women daily life and deprive them from autonomy at home. To test this hypothesis we include both countries aggregate measures of social institutions as well as the term of interaction between social institutions and gender to control for the indirect impact of being female on the probability to support democracy through social institutions. In fact the inclusion of this term of interaction between gender and social institutions will allow us to compare the degree of support for democracy between women living in different countries with different level of social institutions. Following is the general model including social institutions:

$$\omega_{ij} = \beta_{00} + \beta_1 female_{ij} + \beta_2 X_{ij} + \beta_3 SI_j + \beta_4 female_{ij} * SI_j + u_j + \varepsilon_{ij} \quad (7)$$

Where, SI_j is the indicator of social institutions in country j . The estimated value of β_4 tells us whether female's support for democracy depends on the environment in which they live that is determined by the quality of the social institutions in the domestic country.

To measure the correlation between individuals that share the same country we use a measure of intraclass correlation, which indicates the proportion of the variance that is explained by the clustering structure. The formula for the interclass correlation ρ is given by:

$$\rho = \frac{\delta^2}{\delta^2 + \sigma^2}$$

The parameter δ^2 is the variance of the error term u_j , and by convention in a multilevel logit model the parameter σ^2 is fixed and is given by: $\frac{\pi^2}{3} \approx 3.329$ (see Hox (2010) where π is the mathematical constant is approximately equals to 3.14).

5 Results

5.1 Support for democracy

Table 6 presents the results of the estimations of the multilevel logit model without controlling for social institutions. The dependent variable is the probability of asserting that democracy is the best political regime. The intra-class correlation is equal to 0.146 meaning that more than 14 per cent of the variance is explained by the country characteristics. This confirms that taking into account the clustering effect may improve the quality of the estimations of the standard errors. We now start with column [1] where the dummy female is the only covariate and later on the next rows we substantially control for additional individual socio-economic characteristics.

Across these columns we can see that the coefficient on *female* is negative and significant at the conventional level of 1 per cent, meaning that being *female* decreases significantly the probability of asserting that democracy is the best political regime. Indeed, the coefficient on *female* decreases across columns when we control for additional variables, but it still remains significant at the 1 per cent level. This table provides evidence that in our data there is a gender difference in the support for democracy, and this confirms the previous results in the literature.

Turning now to the other individual characteristics included in the regression, we find that education increases the probability of supporting democracy and this effect increases with the level of education. The variable age is an important determinant of support for democracy and we find that young people support democracy less than their elders. Little attention has been given to explaining the behavior of Africa's youth in politics, but some evidence can be found Resnick and Casale (2011), who find that youth in SSA has a lower incentive to vote compare to the rest of the population and are also less partisan than their elders. Urban residents are more supportive of democracy than those from rural areas, but this effect becomes insignificant once we control for employment status and access to different sources of media. We do not find a significant difference between employed and inactive individuals, but being unemployed decreases the probability of supporting democracy. The results also show that people who are getting news from the radio are more democratic than people who do not have access to media from any source. However, access to media from newspapers is not a robust determinant of support for democracy and TV remains insignificant.

We have investigated the impact of people's understanding of democracy, and column [4] shows that people who know the meaning of democracy are more likely than others to support democracy. Also, the participation in political and public activities is an important determinant of an individual's preference for democracy. For instance, people who have not voted in the last election are less likely to support democracy than people who have voted. Besides, individuals who are not interested in public affairs are less likely than others to assert that democracy is the best political regime. In addition, individuals who have experienced corruption favor democracy less than those who have never experienced corruption. This is in line with the existing literature, which has noted the negative correlation between corruption and democracy.

Table 7 presents additional estimations using alternative proxies for support for democracy. We first consider the fact that women may be likely to answer less extremely or go for ‘don’t know’ in general. Thus, we create two new dummies, dem1 and dem2: the former excludes people who reply either ‘for someone like me it does not matter what type of government we have’ or ‘I don’t know’. The latter measure of democracy, dem2, excludes only individuals who give the response ‘I don’t know’. Results using dem1 and dem2 are presented in columns [1] and [2] and highlight that the coefficient on *female* remains negative and significant at the 1 per cent conventional level, even though the magnitude of the coefficients on gender becomes lower than in Table 6. Furthermore, we use alternative proxies for support for democracy: *election*, *plurality*, freedom of the *media* and constraint on the *constitution*. We find that there is a gender difference in support for democracy but this difference disappears once we use *election* as proxy for support for democracy. We have shown in this section that there is a gender difference in support for democracy in SSA that is robust to the use of alternative measures for support for democracy. This result is again a confirmation of the findings in the previous literature—e.g, Evans and Rose (2007b), Garcia-Peñalosa and Konte (2014), among others. Yet, little attention has been paid to explaining this gap and we are still left wondering what explains this gender difference in support for democracy in this region where democracy is a relatively new concept. The next section tries to give a plausible answer by considering the role of gender discrimination in social institutions.

5.2 Support for democracy and social institutions related to gender discrimination

This section investigates the role of social institutions in the degree of support for democracy in SSA, testing whether this observed gender difference can be explained by the low quality of the social institutions related to the gender inequality that affects women’s daily life and deprives them of autonomy at home. We hypothesize that women who live under autocracy at home are less likely to support democracy outside, because it does not affect their private life; this follows the idea that the way women are treated in a society might have major implications for the economic, social, and political functioning of that society. To measure the discrimination in social institutions we use the 2012 OECD Gender Institutions and Development Database which provides series of consistent indexes on discrimination against women for several countries. We now add these different measures of social institutions and their interaction terms with *female* to our baseline model in order to take into account both the direct and the indirect impacts of social institutions on the degree of support for democracy. The results are presented in Table 8, and show that controlling for some of the social institutions related to gender discrimination offsets the gender difference in support for democracy. The first column of Table 8 reports the results where we have controlled for the index of the FC. The direct impact of *female* on the probability of supporting democracy becomes insignificant. Turning to the coefficients on FC, we find that for men, discrimination in the family code does not affect their degree of support for democracy, but such discrimination has a negative impact on the degree of support for democracy by women. Indeed, in countries with a high degree of discrimination in the family code women exhibit a lower degree of support for democracy than do women who live in countries with less discrimination.

The results are similar when we replace the discrimination in the family code by discrimination in physical integrity as in the column [2]. In column [3], social institutions are measured using gender discrimination in civil liberties, and the results show that the gender gap in support for democracy becomes insignificant but the interaction between *female* and CL is significant only at 10 per cent. Column [4] shows the estimates of the baseline model when we have controlled for the index of inequality in access to resources (hereafter resource), which measures the degree of restriction of access by women to different types of resources. We do not find that the gender difference disappears once we control for the discrimination in access to resources, a variable that has been

crucial in other studies that have focused on economic outcomes using cross-sectional data. In addition, the discrimination in access to resources increases the degree of support for democracy by men but it does not have any impact on the degree of support for democracy by women. Finally, the last column of the table shows the results using the sub-index ‘son’ bias, which measures the extent to which boys are preferred to girls as well as the number of missing women. We find that the coefficient on *female* becomes insignificant but neither the coefficient on son nor the interaction term with *female* remains significant.

This section has evidenced clearly the role of social institutions related to gender inequality in the gender difference in preference for democratic regimes in 19 SSA countries. The results have confirmed our main hypothesis, which posited that the gender difference in the support for democracy can be explained by the gender discrimination that affects women within their own family, asserting that women who live under autocracy at home are less likely to support democracy outside, because it does not affect their private life. Indeed, Table 8 has shown that after controlling for FC, PI and CL, the gender difference in support for democracy becomes insignificant, and furthermore women who live in countries with a high level of discrimination are less likely to support democracy than women who live in countries with more equitable social institutions. This last point implies that gender attitudes and preferences in politics can be determined by the bias of laws toward women. Indeed, women living in a country with equitable laws toward women are more supportive of democracy since democratic regime can enforce these laws better than an authoritarian regime.

5.3 Large sample: time effects

The previous sections have dealt with the gender difference in democratic attitudes using the Afrobarometer, round 4, which is the more recent data and also has the advantage of covering more countries than the previous Afrobarometer surveys. In this section, we propose to combine round 4 with rounds 3 and 2 in order to take into any time and country fixed-effects, but we will then have an unbalanced sample since some countries are missing in rounds 2 and 3. Round 3 contains only 18 countries since it excludes Burkina Faso and Liberia, while round 2 includes neither these two countries nor Benin or Madagascar. In the combined data, 65.7 per cent of the population support democracy against 34.26 per cent who do not. Across genders, we observe that 61.2 per cent of women have chosen democracy as the best political regime against 70.3 per cent for men, yielding a gender gap of 9 points, one point higher than the value recorded when we only considered round 4.¹²

We now move to the Table 9, where we use the large sample to test whether the gender difference in support for democracy holds in this data. Let us mention that due to missing information on individual attitudes during the last elections in round 2, we have not controlled for the variable *vote* for the rest of the analysis. Across the different specifications, the coefficients on *female* remain negative and significant at the 1 per cent level. The coefficients on *female* are very close to the ones reported in columns [4] and [5] of Table 6. When we focus on the other explanatory variables included in the estimations, one can note that there are no important changes between Table 9 and Table 6. The results are robust across columns and are not sensitive to the inclusion of time fixed-effects, country fixed-effects, or GDP/per capita.

To shed light on the role of social institutions in the explanations of this significant gender difference, we will use the two unique datasets on inequality in social institutions provided by the

¹² For round 3 the gender gap is equal to 12.84 points, and decreases to 7.4 for round 2.

OECD Development Centre. The first dataset was presented in 2009 and the second one was launched recently in 2012 and it improves significantly the quality of the previous data in 2009. To collect the information on the SIGI sub-indicators for 2012, the OECD Development Center has taken, for each country, the most recent available information up to 2011 and most of the information is between 2003-05. Since we believe that the level of gender discrimination embedded in social institutions may explain people's attitudes and their support for democracy, the measures of social institutions that we consider should be available before or at the starting date of the surveys. Given that, we propose to combine the data in 2009 and in 2012 following three different strategies. First, we simply use the values of 2012 for all three rounds. However, in this manner, we might be ignoring the variation in social institutions over time even though we expect that these types of institutions are persistent and do not vary a lot over time. In the second strategy, we propose to use the measure of 2012 for rounds 4 and 3, and the value in 2009 for round 2. Finally, the last strategy is to use data in 2012 for round 4 and the data in 2009 for rounds 3 and 2. We then denote the first possibility by *SI*, *SI1* denotes the second, and *SI2* for the last one, where *SI* stands for 'social institutions'.

The next table, Table 10 presents the results where we add substantially the measures of social institutions, particularly those that were previously significant: inequality in the family code, physical integrity and civil liberties. In the different specifications, we have controlled for both time fixed-effects and country fixed-effects. We find that across the rows (1)-(6), after controlling for the different measures of FC and PI, the coefficients on *female* become insignificant. However, the interaction terms between *female* and social institutions are significant in all of these columns, supporting the previous conclusion where we argued that women living in countries with high level of discrimination in social institutions are less likely to support democracy than are other women. These various results fit well with the earlier results we got with the smaller sample, where we ignored any possible time variation. However, in the last three columns, where we controlled for the indicators of social institutions related to inequality in civil liberties, we find that the coefficient on gender remains negative and significant at the conventional level of 1 per cent. In this section, we have combined the three rounds of the Afrobarometer to be able to capture the time dimension. The results have shown that the gender difference in support for democracy hold in this larger sample and becomes insignificant once we control for discrimination in the family code and in physical integrity.

6 Concluding remarks

Despite the many desirable features of democracy and the prominent role of women's attitudes in promoting development, a wide range of studies have recently highlighted that women are less likely than men to support democracy in SSA. This observed difference raises the question of whether women's behavior may hinder the much needed legitimacy of democracy in SSA, a region in which democracy is a relatively a new concept. Yet, little effort has been made to address this issue, and at this stage we are still left wondering what really explain this difference between the genders.

This paper re-examines the link between the support for democracy and gender, and adds a new, previously omitted variable: social institutions, which captures the extent to which women are discriminated against in a society. Social institutions related to gender inequality are long-lasting norms, traditions, and codes of conduct that deprive women of autonomy and bargaining power at home and limit their access to different types of resources. An influential literature has documented the importance of social institutions on several development strategies but so far, studies that have

focused on the importance of these institutions for women's behavior in politics have been scarcer, while women's political empowerment is of great interest when addressing gender equality.

This paper tries to incorporate gender discrimination in social institutions into this framework and tests the hypothesis that women who live under autocracy at home are less likely to support democracy outside, because it does not affect their private life, following the idea that the way women are treated in a society might have major implications for the economic, social, and political functioning of that society. Our analysis is conducted using three rounds of the Afrobarometer data, a series of national surveys on the attitudes of citizens towards democracy, markets, civil society and other aspects of development in a number of SSA countries. To measure social institutions we use the recent OECD data on social institutions and gender index (SIGI) and its five sub-components: 'family code', 'civil liberties', 'physical integrity', 'son preference' and 'restrictions on access' to different forms of resources.

The results show that there is a significant gender difference in the support for democracy in the sample, but this gap is no longer significant after we control for gender discrimination in the family code, in physical integrity and in civil liberties. The results are robust to the use of different Afrobarometer surveys and to the inclusion of time and country fixed-effects. This study has also provided evidence that policies that are intended to fight against females' early and forced marriages, to make effective laws against different types of violence against women, and to promote their freedom of movement and access to public space have the potential of increasing the degree of support by women for democracy. This can be explained by the fact that democratic regimes may be more willing to enforce than authoritarian regimes such gender-equitable laws.

These findings support the proposition that social institutions are causes of the gender gap in the political arena, reducing the level of democratic legitimacy in SSA countries, which may in turn hamper the supplied amount of democracy in these countries. This paper is an additional confirmation of the importance of promoting policies that will have the potential to improve the quality of social institutions. Indeed fighting against discrimination in social institutions remains difficult because it requires some cultural changes which is a matter of individual beliefs in cultural codes and norms.

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Table 1: Afrobarometer: descriptive statistics

Variable	Question		Nb	Percentage
Support for democracy	q30	Yes	18285	69.15
		No*	8159	30.85
Free elections	q31	Yes	20324	79.05
		No*	5386	20.95
Multiple parties	q32	Yes	17435	69.4
		No*	7689	30.6
Freedom of media	q35	Yes	18792	75.81
		No*	5996	24.19
Limited turns for presidents	q38	Yes	18137	73.71
		No*	6468	26.29
Female	q101	Male*	13207	49.93
		Female	13242	50.07
Education	q89	No formal*	5454	20.65
		Some primary	4780	18.1
		Primary	9348	35.4
		Secondary	4033	15.27
		Post-secondary	2793	10.58
Age	q101	<26*	7176	27.48
		<36	7734	29.61
		>35	11206	42.91
Location	URBRUR	Urban	9761	36.9
		Rural*	16688	63.1
Head of the Household	q2	Yes*	13646	52.01
		No	12590	47.99
Employment status	q94	Inactive	8386	31.82
		Unemployed*	9042	34.19
		Employed	8930	33.88
Access to media via radio	q12a	Yes	22878	86.7
		No*	3539	13.4
Access to media via TV	q12b	Yes	13931	52.8
		No*	12451	47.2
Access to media via paper	q12c	Yes	10583	40.2
		No*	15744	59.8
Gone without food	q8a	No*	12305	44.5
		Yes	15346	55.5

Table 1 continues ...

Gone without water	q8b	No*	14324	51.77
		Yes	13345	48.23
Gone without medicine	q8c	No*	11299	41.01
		Yes	16254	58.99
Gone without cash	q8d	No*	6017	21.84
		Yes	21534	78.16
Corrupted	q51	No*	20510	78.43%
		Yes*	5641	21.57
Extent of democracy	q42a	Full democracy*	7310	26.38
		Not a democracy	1875	6.77
		Don't understand	1202	4.34
		Don't know	1724	6.22
Vote during last elections	q23d	Has voted*	18503	69.96
		No (for personal	1552	5.9
		No(others reasons)	6214	23.62
Interested in public affairs	q13	No*	4674	17.67
		not very or somewhat	12468	47.59
		Yes	9051	34.22

Note: *indicates the reference group in the estimations.

Source: Afrobarometer, round 4.

Table 2: Support for democracy by gender

	Male %	Female %	Gender Gap
Democracy is preferable	73.58	65.64	7.94 (0.0055)***
Sometimes a non-democratic regime can be preferable	10.78	11.39	0.61 (0.0038)
For some like me it does not matter	10.32	12.76	2.44 (0.0038)***
I don't know	5.31	10.21	4.9 (0.00038)***

Note: standard errors are in parenthesis. ***significant at 1% level.

Source: Afrobarometer, round 4.

Table 3: Support for democracy by gender using alternative measures

	Male %	Female %	Gender Gap
Election	79.94	78.91	1.03(0.00497)**
Plurality	72.19	64.47	7.72(0.00575)***
Media	78.18	73.60	4.58(0.00531)***
Constitution	75.66	71.48	4.18(0.00547)***

Note: Standard errors are in parenthesis. **significant at 1% level; ***significant at 1% level.

Source: Afrobarometer, round 4.

Table 4: Social Institutions related to gender inequality, 2012

country	SIGI	FC	PI	SON	RESOURCE	CL
Benin	0.4567	0.534	0.512	0.401	1	0.758
Botswana	-	0.375	0.229	-	0.507	0.760
Burkina Faso	0.369	0.706	0.917	0.382	0.507	0.324
Ghana	0.2622	0.429	0.378	0.479	0.689	0.529
Kenya	0.2487	0.383	0.551	0.519	0.649	0.319
Lesotho	-	0.456	-	0.368	0	0.264
Liberia	0.344	0.551	0.823	0.423	0	0.749
Madagascar	0.168	0.544	0.210	0.452	0.179	0.513
Malawi	0.218	0.298	0.313	0.391	0.507	0.702
Mali	0.601	1	0.964	0.347	0.179	0.962
Mozambique	0.22	0.510	0.276	0.325	0.507	0.633
Namibia	0.1358	0.330	0.251	0.428	0.507	0.258
Nigeria	0.442	0.601	0.413	0.52	0.676	0.976
Senegal	0.2304	0.611	0.566	0.450	0.167	0.477
South Africa	0.104	0.022	0.172	0.439	0.507	0.193
Tanzania	0.252	0.726	0.513	0.393	0.507	0.241
Uganda	0.3836	0.523	0.639	0.419	1	0.245
Zambia	0.305	0.585	0.502	0.344	0.507	0.746
Zimbabwe	-	0.575	-	0.456	0.339	0.719

Source: OECD (2012).

Table 5: Descriptive statistics for social institutions

Variable	Nb Country	Mean	Std	Min	Max
SIGI	16	0.296	0.131	0.104	0.601
FC	19	0.514	0.199	0.022	
PI	17	0.484	0.244	0.172	0.964
CL	19	0.546	0.255	0.193	0.976
Resource	19	0.470	0.280	0	1
SON	18	0.419	0.056	0.325	0.52

Source: OECD (2012).

Table 6: Support for democracy in sub-Saharan Africa

Reference	Variable	(1)	(2)	(3)	(4)	(5)
Male	Female	-0.409*** (0.028)	-0.289*** (0.031)	-0.301*** (0.032)	-0.198*** (0.033)	-0.198*** (0.033)
No formal	educ1		0.183*** (0.048)	0.178*** (0.049)	0.094* (0.053)	0.097* (0.053)
	educ2		0.508*** (0.047)	0.507*** (0.047)	0.286*** (0.051)	0.290*** (0.051)
	educ3		0.614*** (0.059)	0.609*** (0.060)	0.372*** (0.064)	0.375*** (0.064)
	educ4		0.781*** (0.068)	0.752*** (0.069)	0.516*** (0.072)	0.518*** (0.072)
< 26	age2		0.098** (0.039)	0.111*** (0.039)	0.002 (0.043)	0.003 (0.043)
	age3		0.300*** (0.041)	0.305*** (0.041)	0.142*** (0.046)	0.144*** (0.046)
rural	Urban		0.047 (0.034)	0.043 (0.035)	0.049 (0.036)	0.049 (0.036)
Yes	head		-0.042 (0.035)	-0.037 (0.035)	-0.018 (0.037)	-0.018 (0.037)
Unemployed	Employed		-0.017 (0.032)	0.0048 (0.033)	-0.018 (0.034)	-0.017 (0.034)
	Inactive		-0.184*** (0.062)	-0.148** (0.064)	-0.173** (0.067)	-0.172** (0.067)
No	tv		0.061 (0.039)	0.056 (0.039)	0.051 (0.042)	0.050 (0.042)
No	radio		0.288*** (0.043)	0.278*** (0.044)	0.121** (0.048)	0.121** (0.048)
No	paper		0.082** (0.039)	0.075* (0.040)	-0.012 (0.042)	-0.011 (0.042)
No	food			-0.169*** (0.035)	-0.145*** (0.037)	-0.144*** (0.037)
No	water			0.018 (0.033)	0.012 (0.035)	0.012 (0.035)
No	medicine			-0.049 (0.036)	-0.042 (0.038)	-0.044 (0.038)
No	cash			-0.013 (0.042)	0.022 (0.044)	0.022 (0.044)
No	corruption			-0.161*** (0.037)	-0.227*** (0.039)	-0.229*** (0.039)

Table 6 continues ...

Full democracy	extent1				-0.547***	-0.546***
					(0.065)	(0.065)
	extent2				-0.324***	-0.323***
					(0.038)	(0.039)
	extent3				-2.199***	-2.196***
					(0.062)	(0.062)
No	publicinterest1				0.232***	0.232***
					(0.042)	(0.042)
	publicinterest2				0.379***	0.380***
					(0.046)	(0.046)
No	vote				0.298***	0.296***
					(0.036)	(0.036)
	Constant	1.056***	0.204	0.391**	0.748***	1.271***
		(0.132)	(0.147)	(0.152)	(0.144)	(0.120)
	Fixed-effect	NO	NO	NO	NO	YES
	BIC	30912	29512	28738	26619	26706
	Deviance	30881	29350	28526	26346	26251
	Nb obs	26,444	25,654	25,112	24,817	24,817
	Nb country	19	19	19	19	19

Note: Table reports the coefficients from the logit estimation, the dependent variable is the probability to support democracy using round 4. Standard errors are in parenthesis. ***significant at 1%; **significant at 5%; *significant at 10%.

Source: Afrobarometer, round 4.

Table 7: Alternative indicators for democracy

Reference	Variable	(1)	(2)	(3)	(4)	(5)	(6)
Male	Female	-0.149*** (0.046)	-0.156*** (0.035)	-0.041 (0.036)	-0.175*** (0.031)	-0.205*** (0.034)	-0.137*** (0.034)
No formal	educ1	0.069 (0.075)	0.051 (0.057)	0.029 (0.059)	-0.019 (0.049)	0.145*** (0.055)	0.239*** (0.054)
	educ2	0.247*** (0.072)	0.188*** (0.055)	0.027 (0.056)	0.106** (0.048)	0.138*** (0.052)	0.346*** (0.052)
	educ3	0.277*** (0.088)	0.274*** (0.067)	0.108 (0.069)	0.174*** (0.059)	0.262*** (0.065)	0.501*** (0.065)
	educ4	0.359*** (0.097)	0.431*** (0.076)	0.209*** (0.077)	0.310*** (0.067)	0.343*** (0.074)	0.566*** (0.074)
< 26	age2	-0.002 (0.059)	-0.010 (0.045)	0.064 (0.045)	-0.067* (0.041)	0.058 (0.044)	0.072 (0.044)
	age3	0.117* (0.063)	0.127*** (0.048)	0.180*** (0.049)	-0.063 (0.043)	0.0433 (0.047)	0.0938** (0.047)
Rural	Urban	0.026 (0.049)	0.020 (0.038)	0.043 (0.039)	0.046 (0.034)	0.129*** (0.038)	0.207*** (0.038)
Yes	head	0.005 (0.052)	-0.036 (0.039)	0.083** (0.040)	0.022 (0.035)	0.048 (0.038)	-0.036 (0.03)
Unemployed	Employed	-0.009 (0.048)	-0.044 (0.036)	-0.121*** (0.037)	0.025 (0.032)	0.047 (0.035)	-0.012 (0.035)
	Inactive	-0.274*** (0.089)	-0.232*** (0.069)	-0.236*** (0.072)	-0.095 (0.063)	-0.028 (0.072)	-0.147** (0.069)
No	tv	0.012 (0.058)	0.028 (0.044)	0.005 (0.045)	0.014 (0.039)	0.069 (0.043)	-0.028 (0.043)
No	radio	-0.058 (0.072)	0.110** (0.051)	-0.042 (0.054)	0.042 (0.046)	0.004 (0.050)	0.065 (0.049)
No	paper	-0.059 (0.057)	-0.044 (0.044)	0.034 (0.045)	0.059 (0.039)	-0.044 (0.043)	0.060 (0.043)
No	food	-0.133*** (0.051)	-0.143*** (0.039)	-0.131*** (0.039)	-0.0457 (0.034)	0.0439 (0.038)	-0.148*** (0.038)
No	water	-0.014 (0.049)	0.022 (0.037)	-0.105*** (0.038)	0.044 (0.033)	-0.087** (0.036)	0.085** (0.036)
No	medicine	-0.080 (0.052)	-0.038 (0.039)	0.024 (0.041)	-0.038 (0.036)	0.007 (0.039)	0.056 (0.039)
No	cash	0.051 (0.060)	0.012 (0.046)	-0.017 (0.048)	-0.045 (0.041)	0.101** (0.044)	0.075* (0.045)
No	corruption	-0.301*** (0.052)	-0.252*** (0.040)	-0.136*** (0.041)	-0.043 (0.037)	0.087** (0.041)	-0.031 (0.041)

Table 7 continues ...

Full democracy	extent1	-0.649*** (0.088)	-0.576*** (0.068)	-0.332*** (0.069)	0.0972 (0.064)	0.535*** (0.073)	0.462*** (0.071)
	extent2	-0.351*** (0.053)	-0.366*** (0.040)	-0.0842** (0.040)	0.113*** (0.035)	0.347*** (0.037)	0.390*** (0.037)
	extent3	-0.731*** (0.106)	-1.349*** (0.071)	0.0700 (0.073)	-0.219*** (0.059)	-0.0262 (0.064)	-0.0477 (0.063)
No	publicintere	0.086 (0.059)	0.214*** (0.044)	0.198*** (0.045)	0.035 (0.041)	0.025 (0.044)	0.083* (0.044)
	publicintere	0.249*** (0.065)	0.371*** (0.048)	0.245*** (0.049)	0.080* (0.044)	0.106** (0.048)	0.090* (0.047)
No	vote	0.246*** (0.049)	0.328*** (0.037)	0.177*** (0.038)	0.130*** (0.034)	0.164*** (0.037)	0.0962*** (0.037)
	Constant	2.177*** (0.163)	1.411*** (0.126)	1.199*** (0.123)	0.592*** (0.107)	0.972*** (0.123)	0.530*** (0.117)
Fixed-effect		YES	YES	YES	YES	YES	YES
LL		-7592	-11922	-11729	-14344	-12445	-12413
BIC		15621	24286	23902	29132	25332	25269
Deviance		15185	23844	23458	28776	24890	24826
Nb obs		20,206	23,121	24,236	23,732	23,430	23,253
Nb country		19	19	19	19	19	19

Note: Table reports coefficients from the logit estimation, the dependent variable is the probability to support democracy using alternative measures. The dependent variable is dem1 in [1], dem2 in [2], election in [3], plurality in [4], media in [5] and constitution in [6]. Standard errors are in parenthesis. ***significant at 1%; **significant at 5%; *significant at 10%.

Source: Afrobarometer, round 4.

Table 8: Gender difference for support in democracy and social institutions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Male									
Female	-0.106	-0.047	-0.058	-0.099	-	-0.003	0.047	-0.001	-0.193
	(0.079)	(0.075)	(0.071)	(0.067)	0.251***	(0.245)	(0.266)	(0.303)	(0.223)
SocialInstitutions									
SIGI	1.744**								
SIGI*Female	(0.795)								
FC	-0.355								
	(0.245)								
		0.464					0.600		
		(0.590)					(0.604)		
FC*Female		-0.313**					-0.334**		
		(0.140)					(0.151)		
PI			0.693					0.748	
			(0.451)					(0.491)	
PI*Female			-0.317**					-0.330**	
			(0.134)					(0.152)	
CL				0.825*					0.851**
				(0.434)					(0.428)
CL*Female				-0.190*					-0.187*
				(0.113)					(0.113)
RES					0.844**				
					(0.369)				
RES*Female					0.111				
					(0.111)				
SON						1.499			
						(2.134)			
SON*Female						-0.471			
						(0.573)			
Ln(GDP)							0.075	0.026	0.059
							(0.092)	(0.094)	(0.084)
Ln(GDP)*Female							-0.008	-0.005	0.009
							(0.022)	(0.025)	(0.021)
Constant	0.269	0.520	0.505*	0.304	0.350	0.072	-0.299	0.218	-0.306
	(0.273)	(0.335)	(0.259)	(0.274)	(0.218)	(0.904)	(1.060)	(1.069)	(0.898)
No. obs	21,355	24,817	22,524	24,817	24,817	23,648	24,817	22,524	24,817
No. pays	16	19	17	19	19	18	19	17	19

Note: Table reports coefficients from the logit estimation, the dependent variable is the probability to support democracy. All the additional variables that are in Table 6 are included in the estimations but are not reported. Standard errors are in parenthesis. ***significant at 1%; **significant at 5%; *significant at 10%.

Source: Afrobarometer, round 4.

Table 9: Large sample: support for democracy

Reference	Variable	(1)	(2)	(3)	(4)
Male	Female	-0.169*** (0.020)	-0.169*** (0.020)	-0.169*** (0.020)	-0.169*** (0.020)
No formal	educ1	0.082** (0.033)	0.077** (0.033)	0.084*** (0.033)	0.079** (0.033)
	educ2	0.273*** (0.032)	0.265*** (0.032)	0.275*** (0.032)	0.267*** (0.032)
	educ3	0.361*** (0.039)	0.349*** (0.039)	0.363*** (0.039)	0.351*** (0.039)
	educ4	0.522*** (0.044)	0.506*** (0.044)	0.524*** (0.044)	0.508*** (0.044)
< 26	age2	0.093*** (0.025)	0.089*** (0.025)	0.094*** (0.025)	0.089*** (0.025)
	age3	0.244*** (0.027)	0.237*** (0.027)	0.245*** (0.027)	0.238*** (0.027)
Rural	Urban	-0.034 (0.022)	-0.031 (0.022)	-0.034 (0.022)	-0.032 (0.022)
Yes	head	0.004 (0.023)	-0.001 (0.023)	0.004 (0.023)	-0.001 (0.023)
Unemployed	Employed	-0.0419* (0.022)	-0.0759*** (0.023)	-0.0417* (0.022)	-0.076*** (0.023)
	Inactive	-0.074 (0.065)	-0.198*** (0.067)	-0.074 (0.065)	-0.198*** (0.067)
No	tv	0.094*** (0.025)	0.081*** (0.025)	0.094*** (0.025)	0.081*** (0.025)
No	radio	0.136*** (0.032)	0.150*** (0.032)	0.135*** (0.032)	0.150*** (0.032)
No	paper	-0.019 (0.024)	0.002 (0.025)	-0.019 (0.024)	0.002 (0.025)
	food	-0.134*** (0.022)	-0.138*** (0.022)	-0.134*** (0.022)	-0.138*** (0.022)
No	water	0.007 (0.021)	0.005 (0.021)	0.007 (0.021)	0.005 (0.021)
No	medicine	-0.018 (0.023)	-0.016 (0.023)	-0.018 (0.023)	-0.017 (0.023)
No	cash	0.060** (0.026)	0.056** (0.026)	0.059** (0.026)	0.056** (0.026)
No	corruption	-0.221*** (0.023)	-0.221*** (0.023)	-0.223*** (0.023)	-0.222*** (0.023)

Table 9 continues ...

Full democracy	extent1	-0.879*** (0.039)	-0.866*** (0.039)	-0.879*** (0.039)	-0.867** (0.039)
	extent2	-0.384*** (0.025)	-0.370*** (0.025)	-0.385*** (0.025)	-0.370*** (0.025)
	extent3	-3.142*** (0.039)	-3.114*** (0.039)	-3.143*** (0.039)	-3.114*** (0.039)
No	publicinterest	0.299*** (0.026)	0.314*** (0.026)	0.299*** (0.026)	0.315*** (0.026)
	publicinterest	0.420*** (0.029)	0.391*** (0.031)	0.421*** (0.029)	0.391*** (0.031)
	Constant	0.812*** (0.117)	0.717*** (0.118)	1.379*** (0.079)	1.266*** (0.081)
	Time fixed-	NO	YES	NO	YES
	Country fixed-	NO	NO	YES	YES
	Nb obs	67,448	67,448	67,448	67,448
	Nb country	19	19	19	19

Note: Table reports coefficients from the logit estimation, the dependent variable is the probability to support democracy. Standard errors are in parenthesis. ***significant at 1%; ** significant at 5%; *significant at 10%.

Source: Afrobarometer rounds 4, 3, and 2.

Table 10: Large sample: support for democracy and social insitutions

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Male	Female	-0.106 (0.079)	-0.047 (0.075)	-0.058 (0.071)	-0.099 (0.067)	-0.251*** (0.062)	-0.003 (0.245)	0.047 (0.266)	-0.001 (0.303)	-0.193 (0.223)
Social Institutions										
	SIGI	1.744** (0.795)								
	SIGI*Female	-0.355 (0.245)								
	FC		0.464 (0.590)					0.600 (0.604)		
	FC*Female		-0.313** (0.140)					-0.334** (0.151)		
	PI			0.693 (0.451)					0.748 (0.491)	
	PI*Female			-0.317** (0.134)					-0.330** (0.152)	
	CL				0.825* (0.434)					0.851** (0.428)
	CL*Female				-0.190* (0.113)					-0.187* (0.113)
	RES					0.844** (0.369)				
	RES*Female					0.111 (0.111)				
	SON						1.499 (2.134)			
	SON*Female						-0.471 (0.573)			
	Ln(GDP)							0.075 (0.092)	0.026 (0.094)	0.059 (0.084)
	Ln(GDP)*Female							-0.008 (0.022)	-0.005 (0.025)	0.009 (0.021)
	Constant	0.269 (0.273)	0.520 (0.335)	0.505* (0.259)	0.304 (0.274)	0.350 (0.218)	0.072 (0.904)	-0.299 (1.060)	0.218 (1.069)	-0.306 (0.898)
	Nb obs	21,355	24,817	22,524	24,817	24,817	23,648	24,817	22,524	24,817
	Nb pays	16	19	17	19	19	18	19	17	19

Note: Table reports coefficients from the logit estimation, the dependent variable is the probability to support democracy. Standard errors are in parenthesis. ***significant at 1%; ** significant at 5%; *significant at 10%.

Source: Afrobarometer rounds 4, 3, and 2.