Elections and Subjective Well-Being in Sub-Saharan Africa

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Introduction

- Several aspects of high level ethnic diversification in Sub-Saharan Africa have been extensively studied in the macroeconomics literature.
- Is there any visible footprint of the impact on ethnic identification to individual-level subjective well-being when competitive elections are close by?
    - This will be the first paper attempting to answer the question in the literature.
- This is a policy oriented question because ethnicity can help to develop society as socially and economically by mobilizing people to initiate development projects in their communities.

Previous Literature on Ethnicity in Sub-Saharan Africa

- High level of ethnic division of the society affects economic growth [Easterly & Levine, 1997; Montalvo & Reynal-Queral, 2005 and Leigh, 2006].
- A big negative impact of development process
  - through trust and transaction costs [Knack & Keefer, 1997]
  - public good provision [Kimenyi, 2006 and Fosu et al., 2006]
  - contact and contracts [Bates, 2000]
  - the level of investment [Mauro, 1995].
- Social heterogeneity in the society deteriorates the income distribution, creates poverty and affects human development and leads to low level of individual well-being.

Previous Literature on Ethnicity in Sub-Saharan Africa

- Almost all of these studies utilize ethnic fractionalization called (EFL) as a measure of ethnic diversity.
  - Critique of the EFL Measure: Measurement error of the index might lead to a wrong conclusion [Posner, 2004].
- Generating higher levels of public good provision in heterogeneous communities doesn't require the segregation of ethnic groups. The challenge is to generate effective cooperation in diverse societies [HPPPW, 2007].
- Institutions matter for conducting effective policies to overcome high level of ethnic identification.

Previous Literature on Politics in Sub-Saharan Africa

Eifert, Miguel and Posner, 2010 :

- ► Ethnic identification becomes more salient by exposure to political competition compared to other identification such as gender, religion, and class/occupation.

- ► Survey respondents of Afrobarometer are 1.8 percentage points more likely to identify themselves in ethnic terms for every month closer this country is to a competitive presidential election.

Previous Literature on Subjective Well-Being, Elections and Ethnicity

The reported subjective well-being questions are a perfect tool for understanding economic outcomes, and implementing policies accordingly.

- ▶ Ethnicity is an important determinant of people's economic well-being in Ghana [Addai et. al, 2010].
- ▶ Politics and Subjective Well-Being
  - ▶ Elections strongly affect the well-being of partisan losers (for about a week), but minimally impact partisan winners [Pierce, Rogers and Snyder, 2013].
  - ▶ SWB can affect voting behavior but there is no evidence that the results of three recent elections have any effect on SWB [Powdthaveet et. al, 2008].

Hypotheses of the paper

Is there any visible footprint of the impact on ethnic identification to individual-level subjective well-being when competitive elections are close by?

- H_1: Since ethnic identification is more pronounced during the election period, I can test how individual-level subjective well-being changes when the competitive elections are/were around the corner.

- H_2: If there is any impact, I will test whether individual-level subjective well-being changes when ethnicity of the individual is different (same) from (with) ethnicity of the running party when elections are proximate and highly competitive.

Data

- The Afrobarometer measures social, political, and economic atmosphere in Africa in an individual-level.
- I make use of 12 countries and approximately 60,000 number of observations.
- The survey that I employ is in between 1999 and 2009, which covers almost ten years of country.
- In order to account for country fixed effects, all countries exist in each survey round that the paper utilizes.
- To achieve national representativeness, appropriate weights and clustered sampling are used.

Data-Summary Statistics

Variable	Mean	Std.Dev
Dependent Variable		
1-Your Living Conditions	0	1
Your Present Living Conditions	2.66	1.22
Nor. Your Present Living Conditions	-0.41	1.38
Your Living Conditions in 12 Months	3.39	1.25
Nor. Your Living Conditions in 12 Months	0.46	1.35
Your Living Conditions Compared to 12 Months Ago	3.01	1.13
Nor. Your Living Conditions Compared to 12 Months Ago	-0.05	1.20
2-Mental Health	3.05	0.95
3-Your Conditions Compared to Others	0	1
Your Living Conditions Compared to Others	2.73	1.08
Nor. Your Living Conditions Compared to Others	-0.02	1.27
Ethnic Group Economic Conditions to Others	2.8	0.99
Nor. Ethnic Group Economic Conditions to Others	0.02	1.23

Data

- Create summary index: aggregating information across related outcomes [Kling et al., 2007].
    - Outcomes are normalized by subtracting the mean of group and then dividing by the standard deviation of the group.

$$X_i^* = (X_i - \mu_i)/\sigma_i. \tag{1}$$

    - Take the average of normalized outcomes to make the summary index.

$$X^* = \sum_i X_i^*/I. \tag{2}$$

Data-Summary Statistics

Variable	Mean	Std.Dev
Individual Characteristics		
Male	0.50	0.5
Age	36.79	14.89
Urban	0.37	0.48
Post-Graduate	0.004	0.06
University	0.03	0.16
High School	0.07	0.25
Secondary School	0.37	0.48
Primary School	0.36	0.48
Informal Schooling	0.03	0.18
No schooling	0.13	0.34
Employed	0.37	0.48
# of observations	60,050	

Data-Summary Statistics

Variable	Mean	Std.Dev
Individual Characteristics		
Income related	0	1
How often gone without food	3.02	1.07
Nor. how often gone without food	0.12	1.30
How often gone without water	3.04	1.15
Nor. how often gone without water	0.20	1.35
How often gone without medical care	2.86	1.13
Nor. how often gone without medical care	0.013	1.33
How often gone without cash income	2.53	1.19
Nor. how often gone without cash income	-0.34	1.41
Following news	0	1
Newspaper	1.33	1.59
Nor. newspaper	-0.61	1.28
Radio	3.19	1.44
Nor. radio	0.87	1.06
Television	1.66	1.81
Nor. television	-0.26	1.47
Trust national electoral commission	1.56	1.1

Data-Summary Statistics

Variable	Mean	Std.Dev
Personal Identification		
Occupation/Class	0.35	0.47
Language/Ethnic/Tribe Group	0.26	0.44
Religion	0.16	0.36
Gender	0.04	0.20
Other	0.17	0.38

Table : SUMMARY STATISTICS. Afrobarometer, Round 1-2-3-4. Weights are calculated as 1/(number of observations of that country). Stated number of observation is for independent variables in all rounds. Number of observation for each dependent variable is noted in estimation results.

Economic and Political Characteristics of Countries

Country and Survey Year	Economic Characteristics			Political Characteristics	
	GDP per capita($)	%Urban	Month to Election	Vote Margin	Ruling Party
Botswana,1999	7,727	52	-1	0.31	BDP
Botswana,2003	9,366	56	15	0.25	BDP
Botswana,2005	11,177	57	-8	0.25	BDP
Botswana,2008	14,104	60	12	0.31	BDP
Ghana,1999	1,390	43	12	0.04	NPP
Ghana,2002	1,560	45	22	0.08	NPP
Ghana,2005	2,030	57	-8	0.08	NPP
Ghana,2008	2,486	50	4	0	NDC
Lesotho,2000	1,019	19	-23	0.36	LCD
Lesotho,2003	1,172	22	-10	0.32	LCD
Lesotho,2005	1,330	23	19	0.28	NIP
Lesotho,2008	1,648	25	-20	0.28	NIP
Malawi,1999	556	14	-6	0.14	UDF
Malawi,2003	561	15	12	0.08	Coalition
Malawi,2005	605	15	-13	0.08	Coalition
Malawi,2008	727	15	6	0.36	DPP
Mali,2001	727	29	16	0.92	ADEMA
Mali,2002	747	29	-6	0.3	Coalition
Mali,2005	914	31	22	0.52	ADP
Mali,2008	998	33	-20	0.52	ADP
Namibia,1999	3,872	32	3	0.66	SWAPO
Namibia,2003	4,405	34	14	0.69	SWAPO
Namibia,2006	5,998	36	-15	0.69	SWAPO
Namibia,2008	6,596	37	13	0.64	SWAPO
Nigeria,2000	1,131	42	-10	0.26	Coalition
Nigeria,2003	1,597	44	-6	0.3	PDP
Nigeria,2005	1,795	46	18	0.51	PDP
Nigeria,2008	2,149	48	-13	0.51	PDP
South Africa,2000	6,653	57	-13	0.57	ANC
South Africa,2002	7,195	58	19	0.57	ANC
South Africa,2006	9,319	60	-22	0.57	ANC
South Africa,2008	10,250	61	6	0.49	ANC
Tanzania,2001	823	23	-7	0.53	CCM
Tanzania,2003	938	23	29	0.69	CCM
Tanzania,2005	1,073	24	4	0.69	CCM
Tanzania,2008	1,313	25	28	0.36	CCM
Uganda,2000	763	12	10	0.42	YKM
Uganda,2002	866	13	-17	0.42	NRM
Uganda,2005	1,014	13	10	0.22	NRM
Uganda,2008	1,268	14	30	0.42	NRM
Zambia,1999	899	35	26	0.04	MMD
Zambia,2003	1,055	36	-17	0.04	MMD
Zambia,2005	1,073	37	13	0.14	Coalition
Zambia,2009	1,367	38	-8	0.02	MMD
Zimbabwe,1999	885	33	7	0.02	ZANU-PF
Zimbabwe,2004	314	35	-26	0.14	ZANU-PF
Zimbabwe,2005	477	36	1	0.53	ZANU-PF
Zimbabwe,2009	425	38	-14	0.05	MDC

Table 2: ECONOMIC AND POLITICAL CHARACTERISTICS OF COUNTRIES. Macroeconomic variables are taken from World Development Indicators. Political variables come from African Election Database (http://africanelections.tripod.com/). Months to election is the number of months to the nearest national election, with negative numbers signaling that the nearest election is in the past. Vote margin is defined as the gap between vote share of the winner and the runner-up in the most recent presidential election.

Methodology

$$\omega_{ict} = \beta_0 + \beta_1 \mathbf{X}_{ict} + \beta_2 \mathbf{pro}_{ct} + \beta_3 \mathbf{compet}_{ct} + \beta_4 \mathbf{pro*compet}_{ct} + \epsilon_{ict}$$
$$\tag{3}$$

- where $\mathbf{X}_{ict}$ contains individual-level variables.
- Electoral proximity is -1*|months to election|, so that larger numbers imply increasing proximity.
- Electoral competitiveness is -1*(Vote Margin). Larger numbers indicate increasing competitiveness.

Politics and Subjective Well-Being

Dependent Variable	Your Living Conditions	Mental Health	Your Living Condition Compared to Others
Electoral Proximity	0.017***	0.011***	0.14***
	(0.0026)	(0.003)	(0.0255)
Electoral Competitiveness	1.62***	0.057	3.58***
	(0.105)	(0.11)	(0.88)
Proximity*Competitiveness	0.028***	0.011***	0.168***
	(0.0034)	(0.0035)	(0.0316)
N	41,250	31,1186	28,879
$Adj.R^2$	0.1840	0.1157	0.1781

Table : MARGINAL EFFECTS dP(Y)/d(X). *, **, *** indicate the 10%, 5%, and 1% significance levels, respectively. Standard errors, clustered at the country level, are reported in parentheses. Regressions are controlled for individual characteristics, country dummies and round dummies. Weights are 1/(number of observations of that country).

Replication of Posner et al, 2010

Language/Tribe/Ethnic Group	OLS	Logit
Electoral Proximity	0.012***	0.018***
	(0.002)	(0.14)
Electoral Competitiveness	0.63	0.643
	(0.746)	(0.425)
Proximity*Competitiveness	0.010***	0.091***
	(0.0034)	(0.022)
N	20,735	20,735
Adj.R²	0.0742	0.0696

Table : [REPLICATION OF POSNER ET AL., 2010] Marginal effects
dP(Y)/d(X). *, **, *** indicate the 10%, 5%, and 1% significance
levels, respectively. Standard errors, clustered at the country level, are
reported in parentheses. Regressions are controlled for individual
characteristics, country dummies and round dummies. Weights are
1/(number of observations of that country).

Importance of Subjective Well-being on Ethnicity

Dependent Variable	Your Living Conditions	Mental Health	Your Living Condition Compared to Others
Language/Ethnic/Tribe Group	-0.043**	0.108***	0.043**
	(0.017)	(0.022)	(0.018)
Religion	0.07***	0.007	0.149***
	(0.019)	(0.025)	(0.0209)
Gender	-0.038	0.095***	0.104***
	(0.034)	(0.035)	(0.038)
Other	0.015	0.058**	0.016
	(0.020)	(0.024)	(0.023)
N	20,123	14,484	17,554
Adj.R²	0.1496	0.1178	0.1537

Table : ESTIMATION RESULT. Occupation/Class is taken as a reference point. Regressions are controlled for individual characteristics, country dummies, and election variables. *, **, *** indicate the 10%, 5%, and 1% significance levels, respectively. Standard errors, clustered at the country level, are reported in parentheses. Weights are 1/(number of observations of that country).

Further Work

Ethnicity is the most salient dimension of political competition.

- ▶ Way to define the ethnicity of ruling party
  - ▶ Keefer's method (2010) - endogeneity
  - ▶ Partisan preferences: "Which political party do you feel close?" and ethnicity of individual

- ▶ Round restriction

- ▶ Less variety on ruling party

- ▶ Methodology

Further Work

Dependent Variable	Your Living Conditions	Mental Health	Your Living Condition Compared to Others
Winning Dummy	0.0401***	0.010	0.029**
	(0.0099)	(0.011)	(0.0117)
Trust Nat. Electoral Commission	0.0389***	0.006	0.0253***
	(0.0044)	(0.0053)	(0.0050)
Following News	0.096*	-0.0026	0.0433***
	(0.0054)	(0.0065)	(0.0064)
N	41,186	31,120	28,844
$Adj.R^2$	0.1845	0.0980	0.1347

Table : WINING THE ELECTION *, **, *** indicate the 10%, 5%, and 1% significance levels, respectively. Standard errors, clustered at the country level, are reported in parentheses. Regressions are controlled for individual characteristics, country dummies, round dummies and election variables. Weights are 1/(number of observations of that country).