

Online Appendix

**Remittance Dependence, Support for Taxation and Quality of Public Services in Africa**

Table A1: Round 7, surveys year

<b>Country</b>	<b>Survey year</b>
Kenya	2016
Tanzania	2017/2018
Mauritius	2017
Uganda	2016/2017
Botswana	2017
Benin	2016/2017
Zambia	2017/2018
Sierra Leone	2018
Madagascar	2018
Namibia	2017
Tunisia	2018
Malawi	2016/2017
Gabon	2017
Togo	2017
Cote d'Ivoire	2016/2017
Ghana	2017
Sao Tome and Principe	2018
Burkina Faso	2017
Liberia	2018
Guinea	2017/2018
Morocco	2018
Senegal	2017
Eswatini	2018
Mozambique	2018
Mali	2017/2018
Zimbabwe	2017/2018
Cameroon	2018
Sudan	2018
Niger	2018
South Africa	2018
Nigeria	2017
Cape Verde	2017
Lesotho	2017
The Gambia	2018

**Table A2:** Percentage of citizens who depend on remittance and country' level of remittance inflows

<b>Country</b>	<b>Remittance Dependence (%)</b>	<b>Remittance inflows/GDP(%)</b>
Kenya	5.25	2.52
Tanzania	8.98	0.76
Mauritius	12.04	1.89
Uganda	12.54	3.96
Botswana	12.87	0.21
Benin	13.44	1.88
Zambia	13.44	0.36
Sierra Leone	14.45	1.52
Madagascar	14.68	3.07
Namibia	15.9	0.38
Tunisia	16.11	4.78
Malawi	16.36	0.72
Gabon	18.11	0.12
Togo	18.53	8.37
Cote d'Ivoire	18.71	0.60
Ghana	19.39	5.99
Sao Tome and Principe	19.62	4.21
Burkina Faso	21.92	2.94
Liberia	21.92	14.09
Guinea	21.92	0.43
Morocco	22.76	5.87
Senegal	23.94	10.23
Eswatini	24.48	2.67
Mozambique	25.48	2.01
Mali	25.69	5.74
Zimbabwe	26	7.85
Cameroon	26.09	0.86
Sudan	28.87	1.63
Niger	29.14	2.31
South Africa	29.54	0.25
Nigeria	30.28	5.86
Cape Verde	31.11	12.24
Lesotho	37.33	24.79
The Gambia	46.86	12.53
<b>Sample average</b>	<b>21.24</b>	<b>4.52</b>

Sources: Authors calculation using Afrobarometer Round 7, and World Development Indicators

Table A3: Do you agree or disagree that people must pay taxes/revenues owed to the government?

<b>Country</b>	<b>Disagree/Strongly disagree</b>	<b>Neither agree/nor disagree</b>	<b>Agree/strongly Agree</b>
Benin	39.5	1.92	58.58
Botswana	8.63	2.62	88.75
Burkina Faso	26.18	4.31	69.51
Cameroon	22.7	2.47	74.83
Cape Verde	25.53	10.18	64.29
Cote d'Ivoire	27.22	8.81	63.97
Eswatini	15.64	2.48	81.88
Gabon	23.74	2.43	73.83
The Gambia	8.59	1.19	90.22
Ghana	8.2	2.26	89.53
Guinea	37.86	4.75	57.39
Kenya	17.98	4.51	77.5
Lesotho	26.04	3.14	70.82
Liberia	10.28	0.33	89.38
Madagascar	15.23	6.18	78.6
Malawi	58.85	2.92	38.23
Mali	12.75	2.52	84.73
Mauritius	17.57	9.31	73.11
Morocco	20.27	13.03	66.7
Mozambique	11.73	6.33	81.95
Namibia	16.14	6.93	76.93
Niger	27.82	1.35	70.83
Nigeria	24.2	3.53	72.27
Sao Tome and Principe	9.83	2.44	87.73
Senegal	17.61	1.94	80.45
Sierra Leone	4.3	1.67	94.04
South Africa	25.67	7.87	66.46
Sudan	30.23	5.81	63.96
Tanzania	14.3	1.99	83.7
Togo	38.61	6.52	54.87
Tunisia	20.68	0.77	78.55
Uganda	12.47	2.04	85.5
Zambia	10.83	2.22	86.94
Zimbabwe	10.37	4.08	85.55
<b>Total Sample</b>	<b>19.95</b>	<b>4.11</b>	<b>75.94</b>

Sources: Authors' calculations using the Afrobarometer Round 7.

Table A4: Percentage of people with a positive appraisal of how their governments handle public services

Country	Health services	Education	Water and sanitation	Electricity	At least one public service
Benin	51.31	55.45	37.06	34.91	74.21
Botswana	72.01	67.19	65.51	75.28	92.41
Burkina Faso	66.78	62.31	41.7	30.778	81.79
Cameroon	58.48	62.33	33.33	29.6	76.85
Cape Verde	47.68	55.24	46.32	58.76	80.23
Cote d'Ivoire	59.02	64.94	37.18	51.09	82.48
Eswatini	84.34	83.85	64.51	57.56	94.96
Gabon	28.83	15.24	15.67	25.1	45.40
The Gambia	54.08	59.91	57.27	65.92	84.68
Ghana	69.35	83.13	65.33	75.45	91.26
Guinea	40.94	39.51	17.78	17.96	58.62
Kenya	69.2	76.75	49.29	69.93	90.28
Lesotho	66.26	62.21	43.86	43.12	85.18
Liberia	49.92	59.65	52.34	41.01	79.30
Madagascar	44.99	54.17	35.02	13.84	69.92
Malawi	41.15	42.39	40.74	14.89	63.10
Mali	62.45	49.54	49.58	28.33	83.79
Mauritius	67.69	70.94	61.45	84.74	88.52
Morocco	18.22	19.12	46.25	63.96	70.40
Mozambique	60.16	64.24	46.71	52.71	76.20
Namibia	68.1	68.24	57.12	51.52	84.52
Niger	46.16	38.82	38.08	27.87	64.42
Nigeria	50.91	50.57	39.99	36.19	70.17
Tome and Principe	60.19	72.74	59.98	53.76	86.04
Senegal	54.15	52.06	58.52	61.18	87.13
Sierra Leone	55.79	78.33	49.02	50.87	88.89
South Africa	42.34	50.98	44.93	46.69	70.57
Sudan	29.54	28.81	28.96	38.28	56.80
Tanzania	58.96	73.32	48.16	50.13	84.38
Togo	37.69	37.7	36.57	42.3	68.23
Tunisia	33.27	23.83	41.98	62.62	73.19
Uganda	46.72	52.94	47.01	44.08	78.28
Zambia	57.69	60.24	38.98	44.14	76.17
Zimbabwe	44.64	55.34	35.25	46.46	74.70
Total	53.57	57.06	45.61	47.8	77.88

Source: Authors calculations using the Afrobarometer Round 7.

Table A5: Remittance dependence and support for taxation (Model with class=1 and gclass=1)

Dependent variable: Probability to support taxation	[1]
Remittance dependent	-0.1403 [0.0282]***
Control Corruption	0.0105 [0.0286]
Female	-0.0302 [0.0237]
Some primary education	-0.036 [0.0382]
Primary education completed	0.2176 [0.0344]***
Secondary education	0.294 [0.0427]***
Post-secondary education	0.2603 [0.0452]***
Age (18-25)	-0.1385 [0.0293]***
Age (26-35)	-0.0788 [0.0284]***
Urban	0.0667 [0.025]***
Access information	0.1518 [0.0357]***
Employed	0.2198 [0.0288]***
Unemployed	0.1558 [0.0297]***
Bribe payment	-0.1032 [0.0326]***
Poverty index	-0.1977 [0.0153]***
GDP/Capital (logs)	-0.1156 [0.0197]***
Remittances/GDP (logs)	0.0567 [0.0099]***
OECD income tax/GDP(logs)	-0.4236 [0.1711]**
Intercept	2.2611
Number of observations	42,521
Number of countries	34

Notes: This table reports the results where we assume that there is one class of individuals (i.e, class=1 and gclass=1). Year dummies are included Standard errors in parenthesis. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A6: Remittance dependence, support for taxation and public services quality (second and third best models)

Dependent variable: Probability to support taxation	Second best model (g=5, k=2)		Third best model (g=3, k=2)	
	Class1 ( $\pi_1=76.6\%$ )	Class2 ( $\pi_2=23.4\%$ )	Class1 ( $\pi_1=68.1\%$ )	Class2 ( $\pi_2=31.9\%$ )
Remittance dependent	-0.0355 [0.2144]	-0.1042 [0.049]**	0.771 [0.2744]***	-0.2804 [0.0871]***
Female	0.0335 [0.1695]	-0.1344 [0.0423]***	-0.0095 [0.1434]	-0.1838 [0.0696]***
Some primary education	-0.3324 [0.2684]	0.1513 [0.0756]**	-0.0403 [0.2272]	0.1139 [0.1327]
Primary education completed	-0.3649 [0.2439]	0.3732 [0.0697]***	-0.2202 [0.2118]	0.4851 [0.1226]***
Secondary education	0.0181 [0.4257]	0.3945 [0.0825]***	0.1737 [0.3254]	0.5095 [0.1407]***
Post-secondary education	0.3658 [0.5171]	0.5434 [0.0855]***	0.6084 [0.4142]	0.6648 [0.1441]***
Age (18-25)	0.3372 [0.2381]	-0.2506 [0.0535]***	0.3749 [0.1861]**	-0.4261 [0.1003]***
Age (26-35)	0.0984 [0.2022]	-0.1327 [0.0502]***	0.3261 [0.1762]*	-0.2752 [0.0873]***
Urban	1.3897 [0.3621]***	-0.0413 [0.0457]	0.3362 [0.1713]**	-0.0068 [0.0715]
Access information	-0.4978 [0.2907]*	0.2309 [0.0709]***	-0.6103 [0.2392]***	0.515 [0.1455]***
Employed	0.1431 [0.2177]	0.0157 [0.0519]	-0.251 [0.1907]	0.1237 [0.0858]
Unemployed	0.5181 [0.3251]	-0.0671 [0.0542]	0.1098 [0.2149]	-0.0226 [0.0901]
Corruption tax officials	1.0755 [0.4138]***	-0.3604 [0.068]***	0.0258 [0.2383]	-0.3535 [0.113]***
Poverty index	-0.2972 [0.1272]**	-0.2545 [0.0283]***	-0.3524 [0.1069]***	-0.3846 [0.0648]***
GDP/Capital (logs)	5.9118 [1.0296]***	-0.2828 [0.0411]***	3.7512 [0.3686]***	-0.4982 [0.0793]***
Remittances/GDP (logs)	2.5911 [0.3599]***	-0.0803 [0.0226]***	0.6159 [0.1218]***	-0.0545 [0.0312]*
OECD income tax/GDP(logs)	26.7813 [5.1797]***	0.2347 [0.3607]	-2.5382 [1.8256]*	2.8582 [0.5633]***
Control Corruption	-2.6299 [0.7184]***	0.7298 [0.0801]***	-1.1821 [0.2675]***	0.4931 [0.0981]***
Intercept	-116.2379 [20.9426]***	1.7091 [0.9018]*	-21.1831 [3.9542]***	-4.2434 [1.3657]***
<b>Concomitant variable</b>				
Quality of public services		-0.3661 [0.0437]***		-0.3272 [0.0374]***
Total number of observations		42521		42521
Total number of countries		34		34

Notes: This table reports the results of the second and third best models. Year dummies are included. Standard errors in parenthesis.

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

Table A7: Remittance dependence, support for taxation, and different public services quality (Glass=4, Class=2)

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Class 1	Class 2	Class 1	Class 2	Class 1	Class 2	Class 1	Class 2	Class 1	Class 2	Class 1	Class 2
	( $\pi_1=68.6\%$ )	( $\pi_2=31.4\%$ )	( $\pi_1=65\%$ )	( $\pi_2=35\%$ )	( $\pi_1=72\%$ )	( $\pi_2=28\%$ )	( $\pi_1=72\%$ )	( $\pi_2=28\%$ )	( $\pi_1=74\%$ )	( $\pi_2=26\%$ )	( $\pi_1=77\%$ )	( $\pi_2=23\%$ )
Remittance dependence	0.1242 [0.0995]	-0.1576 [0.0615]**	0.1539 [0.1081]	-0.1859 [0.0569]***	0.0904 [0.1009]	-0.202 [0.0683]***	0.0477 [0.101]	-0.1711 [0.0658]***	0.1715 [0.116]	-0.1751 [0.0635]***	0.0738 [0.1081]	-0.2016 [0.1025]**
<b>Concomitant variables</b>												
Education (Good)		-0.2015 [0.048]***		-0.3845 [0.0415]***								
Health (Good)		-0.1425 [0.0476]***				-0.2832 [0.0383]***						
Water and sanitation (Good)		-0.1153 [0.0466]**						-0.2523 [0.0389]***				
Electricity (Good)		-0.1912 [0.046]***								-0.3607 [0.0432]***		
Public service index												-0.2989 [0.0257]***
Number of observations	40329		41912		41987		41887		41436			40329
Number of countries	34		34		34		34		34			34

Notes: The dependent variable is the probability to agree that a citizen must pay taxes. Each model contains the same controls as in the baseline model (See Table 2). Standard errors in parenthesis. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A8: Remittance dependence, support for taxation, and public services quality with additional concomitant variables

Dependent variable: Probability to support taxation	Class1 ( $\pi_1 = 76\%$ )	Class2 ( $\pi_2 = 24\%$ )
Remittance dependence	0.1168 [0.1376]	-0.3434 [0.1044]***
<b>Concomitant variables</b>		
Quality of public services (Good)		-0.2385 [0.0396]***
Bribe payment		0.1647 [0.0458]***
No trust President		0.2822 [0.0504]***
No trust local councilors		0.1641 [0.0401]***
No trust parliament		0.1849 [0.0540]***
Access information		-0.1401 [0.1099]
Female		0.1401 [0.0653]**
Primary education completed		-0.3016 [0.0776]***
Secondary education		-0.7759 [0.1148]***
Post-secondary education		-1.0555 [0.1248]***
Unemployed		-0.2073 [0.0753]***
Poverty index		0.1925 [0.0225]***
Number of observations		38718
Number of countries		34

Notes: The dependent variable is the probability to agree that a citizen must pay taxes. The estimations include the same controls as in the baseline model (see Table 2 in the paper). Standard errors in parenthesis. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$



Table A9: Receiving remittances, support for taxation, and public services quality (Rounds 4 & 6)

	Class1 ( $\pi 1 = 50\%$ )	Class2 ( $\pi 2 = 50\%$ )
Remittance receiver	-0.139 [0.1675]	-0.1719*** [0.029]
<b>Concomitant variables</b>		
Education (Good)		-0.275*** [0.0423]
Health (Good)		-0.2112*** [0.0417]
Water and sanitation (Good)		-0.1178*** [0.0389]
Electricity (Good)		-0.1137*** [0.038]
Number of observations	73862	
Number of countries	35	

NOTES: The dependent variable is the probability to agree that a citizen must pay taxes, rounds 4 & 6 of the Afrobarometer. The estimations include the same controls as in the baseline model (see Table 2 in the paper) and time dummies. Standard errors in parenthesis. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$