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Deutsches Institut für
Entwicklungspolitik



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E-Government and Democracy in Botswana

Observational and experimental evidence on the effects
of e-government usage on political attitudes

ONLINE APPENDIX

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APPENDIX A:
Regression results of the observational analysis

In the following we provide the complete regression models of the observational analysis.

Empowerment hypothesis

Table A1: Long chain, empowerment mechanism

	Democracy preferred				
	(1)	(2)	(3)	(4)	(5)
Index using e-services	0.13 (0.13)				
Using e-payment water		0.28* (0.15)			
Using e-payment electricity			0.22** (0.11)		
Using mobile money				-0.26* (0.14)	
Using electronic tax filing					0.23 (0.17)
Satisfaction democracy	0.36*** (0.06)	0.36*** (0.06)	0.37*** (0.06)	0.36*** (0.06)	0.36*** (0.06)
Income	0.15*** (0.04)	0.15*** (0.04)	0.14*** (0.04)	0.17*** (0.04)	0.13*** (0.05)
Frequency news radio	0.07* (0.04)	0.07* (0.04)	0.07* (0.04)	0.08** (0.04)	0.07* (0.04)
Frequency news TV	-0.02 (0.04)	-0.02 (0.04)	-0.02 (0.04)	-0.02 (0.04)	-0.02 (0.04)
Frequency news newspaper	0.09** (0.04)	0.09** (0.04)	0.09** (0.04)	0.09** (0.04)	0.09** (0.04)
Frequency news internet	-0.10** (0.05)	-0.10** (0.05)	-0.10** (0.05)	-0.08* (0.05)	-0.10** (0.05)
Frequency news social media	0.01 (0.05)	0.01 (0.05)	0.00 (0.05)	0.01 (0.05)	0.01 (0.05)
Frequency news talking	0.21*** (0.07)	0.21*** (0.07)	0.21*** (0.07)	0.21*** (0.07)	0.21*** (0.07)
Constant	-1.32*** (0.31)	-1.34*** (0.31)	-1.35*** (0.31)	-1.37*** (0.31)	-1.27*** (0.32)
Observations	1,907	1,907	1,907	1,907	1,907

Note: *p<0.1; **p<0.05; ***p<0.01

Source: Authors

Table A2: Linkage 1, empowerment mechanism

	Raised issue for community				
	(1)	(2)	(3)	(4)	(5)
Index using e-services	0.42*** (0.14)				
Using e-payment water		0.34** (0.15)			
Using e-payment electricity			0.24* (0.13)		
Using mobile money				0.52*** (0.15)	
Using electronic tax filing					0.05 (0.17)
Satisfaction democracy	-0.16** (0.07)	-0.17** (0.07)	-0.16** (0.07)	-0.17** (0.07)	-0.17** (0.07)
Gender	0.45*** (0.12)	0.43*** (0.12)	0.44*** (0.12)	0.43*** (0.12)	0.43*** (0.12)
Income	0.06 (0.05)	0.09** (0.05)	0.09* (0.05)	0.08* (0.05)	0.10* (0.05)
Age	0.02*** (0.01)	0.02*** (0.01)	0.02*** (0.01)	0.03*** (0.01)	0.02*** (0.01)
Frequency news radio	0.04 (0.05)	0.04 (0.05)	0.04 (0.05)	0.04 (0.05)	0.05 (0.05)
Frequency news TV	0.02 (0.05)	0.02 (0.05)	0.02 (0.05)	0.02 (0.05)	0.02 (0.05)
Frequency news newspaper	0.11** (0.05)	0.11** (0.05)	0.11** (0.05)	0.11** (0.05)	0.11** (0.05)
Frequency news internet	0.09 (0.06)	0.11* (0.06)	0.11* (0.06)	0.10* (0.06)	0.12** (0.06)
Frequency news social media	0.12* (0.06)	0.13** (0.06)	0.12** (0.06)	0.13** (0.06)	0.13** (0.06)
Frequency news talking	0.13 (0.10)	0.13 (0.10)	0.13 (0.10)	0.12 (0.10)	0.13 (0.10)
Constant	-3.96*** (0.48)	-4.04*** (0.48)	-4.08*** (0.48)	-4.11*** (0.48)	-4.06*** (0.49)
Observations	1,918	1,918	1,918	1,918	1,918

Note: *p<0.1; **p<0.05; ***p<0.01

Source: Authors

Table A3: Linkage 2, empowerment mechanism

	Democracy preferred
Raised issue for community	0.12 (0.14)
Satisfaction democracy	0.37*** (0.06)
Income	0.16*** (0.04)
Frequency news radio	0.08** (0.04)
Frequency news TV	-0.02 (0.04)
Frequency news newspaper	0.09** (0.04)
Frequency news internet	-0.09* (0.05)
Frequency news social media	-0.00 (0.05)
Frequency news talking	0.21*** (0.07)
Constant	-1.35*** (0.31)
Observations	1,901

Note: *p<0.1; **p<0.05; ***p<0.01

Source: Authors

Appeasement hypothesis

Table A4: Long chain, appeasement mechanism

	Direction of the country				
	(1)	(2)	(3)	(4)	(5)
Index using e-services	-0.18 (0.12)				
Using e-payment water		-0.17 (0.14)			
Using e-payment electricity			-0.39*** (0.11)		
Using mobile money				-0.03 (0.13)	
Using electronic tax filing					0.08 (0.16)
Income	0.11*** (0.04)	0.10*** (0.04)	0.12*** (0.04)	0.09** (0.04)	0.08* (0.04)
Education	-0.06 (0.09)	-0.07 (0.09)	-0.03 (0.09)	-0.08 (0.09)	-0.09 (0.09)
Constant	0.27 (0.37)	0.35 (0.37)	0.24 (0.37)	0.37 (0.37)	0.42 (0.38)
Observations	1,678	1,678	1,678	1,678	1,678

Note: *p<0.1; **p<0.05; ***p<0.01

Source: Authors

Table A5: Linkage 1, appeasement mechanism

	Needs addressed				
	(1)	(2)	(3)	(4)	(5)
Index using e-services	-0.03**				
	(0.01)				
Using e-payment water		0.02			
		(0.02)			
Using e-payment electricity			-0.03***		
			(0.01)		
Using mobile money				-0.03**	
				(0.02)	
Using electronic tax filing					-0.00
					(0.02)
Education	-0.04***	-0.04***	-0.03***	-0.04***	-0.04***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Income	0.02***	0.02***	0.02***	0.02***	0.02***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Constant	0.46***	0.48***	0.47***	0.47***	0.48***
	(0.04)	(0.04)	(0.04)	(0.04)	(0.05)
Observations	1,952	1,952	1,952	1,952	1,952

Note: *p<0.1; **p<0.05; ***p<0.01

Source: Authors

Table A6: Linkage 2, appeasement mechanism

	Direction of the country
Needs addressed	2.74***
	(0.23)
Education	0.04
	(0.09)
Living conditions	0.22***
	(0.05)
Constant	-1.68***
	(0.41)
Observations	1,707

Note: *p<0.1; **p<0.05; ***p<0.01

Source: Authors

Equal treatment hypothesis

Table A7: Long chain, equal treatment mechanism

	Interpersonal trust				
	(1)	(2)	(3)	(4)	(5)
Index using e-services	-0.21 (0.26)				
Using e-payment water		0.21 (0.27)			
Using e-payment electricity			-0.51** (0.23)		
Using mobile money				-0.55* (0.32)	
Using electronic tax filing					-0.04 (0.29)
Income	0.23*** (0.07)	0.19*** (0.07)	0.24*** (0.07)	0.22*** (0.07)	0.20** (0.08)
Age	0.02*** (0.01)	0.02*** (0.01)	0.02*** (0.01)	0.02*** (0.01)	0.02*** (0.01)
Index transparency	0.05 (0.41)				
Transparency WUC		-0.01 (0.44)			
Transparency BPC			0.19 (0.35)		
Transparency mobile money				0.02 (0.38)	
Transparency BURS					0.27 (0.36)
Constant	-4.42*** (0.34)	-4.44*** (0.35)	-4.30*** (0.34)	-4.33*** (0.35)	-4.44*** (0.35)
Observations	1,953	1,953	1,953	1,953	1,953

Note: *p<0.1; **p<0.05; ***p<0.01

Source: Authors

Table A8: Linkage 1, equal treatment mechanism

	Unequal treatment				
	(1)	(2)	(3)	(4)	(5)
Index using e-services	0.04***				
	(0.01)				
Using e-payment water		0.03**			
		(0.02)			
Using e-payment electricity			0.04***		
			(0.01)		
Using mobile money				0.04**	
				(0.02)	
Using electronic tax filing					0.01
					(0.02)
Income	-0.01	-0.00	-0.00	-0.00	-0.00
	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)
Age	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Education	-0.01	-0.01	-0.01	-0.01	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Index transparency	0.02				
	(0.02)				
Transparency WUC		-0.02			
		(0.02)			
Transparency BPC			0.01		
			(0.02)		
Transparency mobile money				0.01	
				(0.02)	
Transparency BURS					0.02
					(0.02)
Constant	0.59***	0.57***	0.59***	0.57***	0.58***
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Observations	1,898	1,898	1,898	1,898	1,898

Note: *p<0.1; **p<0.05; ***p<0.01

Source: Authors

Table A9: Linkage 2, equal treatment mechanism

Interpersonal trust

Unequal treatment	-1.34*** (0.43)
Income	0.15** (0.08)
Age	0.03*** (0.01)
Education	0.14 (0.20)
Constant	-4.29*** (0.99)
<hr/>	
Observations	1,879

Note: *p<0.1; **p<0.05; ***p<0.01

Source: Authors

APPENDIX B: Survey design

Structure of the questionnaire

The questionnaire is arranged in the following order: (1) identification and basic information, (2) individual questions, (3) public services, (4) daily life and means of communication, (5) electronic services, (6) closing information. In total, the questionnaire consists of 67 questions,¹ four of which focus on each causal mechanism.² Each interview was scheduled to take around 25 minutes, including a briefing and debriefing of subjects. However, it took only 13.05 minutes on average.

The centrepiece of the first block is the briefing. It informs the subjects that our research is independent from the government or any political party and that respondents are randomly chosen. Furthermore, it provides information about the topic of our study, which is framed as “investigate the usage of electronic government services”. The briefing is followed by an oral informed consent that gives information about the confident and anonymised use and storage of data. The informed consent is signed at the end of the interview for reasons of feasibility.

The individual questions of block two gather general information as well as individual and household information. The third block of questions consists of questions that are derived from the causal mechanisms and therefore focus on the three outcome variables of support for democracy, satisfaction with the regime and interpersonal trust. This requires particular attention.

The questions on daily life and means of communication are designed to collect data on digital literacy and inclination. Block five equally deals with digital inclination but focuses on selected government services, for example income tax returns. At the end of the questionnaire, contact information is recorded to allow for the possibility of conducting a follow-up interview. At this point, respondents are asked to sign the verbally confirmed consent form with their initials or an abbreviation. At the end of the interview, the interviewer can leave a comment or document whether respondents reacted conspicuously to questions.

Preparation

For the implementation of the survey, we worked together with experienced local research assistants recommended by our partner. Many of them had already worked on Afrobarometer or StatisticsBotswana surveys. Building on local research assistants had the additional benefit of inducing less bias than white foreign interviewers presumably would.

1 The total number of questions is more than 67 questions. The latter is the minimum number of questions that were asked, among them no questions that were answered by the research assistants.

2 The exact number of questions depends on the respondent's behaviour. Some more questions are only to be filled out by the research assistants themselves.

Before the actual field work started, we had to train the research assistants at the University of Botswana to ensure a smooth procedure. The training was scheduled for two days and served as a chance for everyone to get to know each other, explain the purpose of the study, explain and practice the questions and train the research assistants in establishing a positive interview atmosphere. Additionally, it allowed us to discuss the questionnaire with the research assistants to validate the questions. This discussion determined whether our questions were comprehensible, whether answer options were comprehensive and allowed us to record the duration of an interview. This was highly relevant, since we encountered a cultural bias in the understanding of specific questions and terms. Of course, we could not fully anticipate how the differences in linguistic structures or cultural norms would influence responses. We revised and adapted the questionnaire before starting the implementation to prevent major misinterpretations. The second training day contained a pilot test in an area close to Gaborone. One day after the pilot test, the actual field work started. We selected 24 research assistants to conduct our survey based on their experience and performance during the training.

The pilot test served to test the survey in advance to see how smoothly our setup runs in practice. During the pilot test, we explored how many people we reached in a given time and how they reacted to the questions. Furthermore, it was important to take into account the number of people who aborted the interview to estimate an approximate attrition rate. The pilot test also revealed the necessity to change or adapt the sampling strategy, the questionnaire and logistics, such as the time calculated per interview.

During the field work, the research assistants were divided into groups of four supervised by one member of the research team each. The role of the supervisor was to monitor the interview quality and discuss potential issues that might come up. Furthermore, the supervisor was expected to advise and motivate the team, solve potential conflicts and keep an eye on logistics such as ensuring that the tablets and power banks were working and fully charged. To reach the respective enumeration areas (EAs), we hired six cars, one per supervisor. Every research assistant was equipped with a tablet to record the interview by digital means. Collected data was downloaded every evening. The research team constantly checked the survey quality in the field and analysed the data quality daily to prevent incomplete or biased data collection.

APPENDIX C: Questionnaire

Note:

Several questions are taken over in their exact formulations or inspired by the Afrobarometer Round 7 survey questionnaire, as they are established and well-tested. Furthermore, this allowed us to compare data and to check if the collected responses were representative. Additionally, some questions are drawn from other sources, for example Asianbarometer, for the same reason. The relevant questions are indicated by footnotes.

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Block 1: Identification and basic information

Basic information about this block:

This block is the preparation and introduction to the survey. A random dwelling unit and a random person are identified here.³

Dwelling unit selection procedure:

Interviewer: It is your job to select a random (this means any) dwelling unit. Start your walk pattern from the start point that has been randomly chosen by your Field Supervisor. Team members must walk in opposite directions to each other. If A walks towards the sun, B must walk away from the sun; C and D must walk at right angles to A and B.⁴

Use a 5 interval pattern to select a dwelling unit. That is, walking in your designated direction away from the start point, select the fifth dwelling unit⁵ for the first interview, counting dwelling units on both the right and the left (and starting with those on the right if they are opposite each other). Once you leave your first interview, continue on in the same direction, this time selecting the 10th dwelling unit, again counting dwelling units on both the right and the left. If the settlement comes to an end and there are no more houses, turn at right angles to the right and keep walking, continuing to count until finding the 15th dwelling unit. If the start point is a block of flats, or if the walk pattern includes a block of flats, then start on the top floor and work your way downwards, stopping at the fifth, counting flats on both the right and the left.

If a call is unsuccessful, circle a code number for the reason. If no one is at home (i.e. premises empty), try again later. If you do not find anyone present at the time of the call-back, substitute the dwelling unit with the very next dwelling unit, continuing with the walking pattern.

-
- 3 In the beginning of the interview, information is automatically saved on the tablet when Survey CTO is started, among other things: the date and start time of the interview, the device number of the tablet and the user ID of the research assistant. The end time of the interview is automatically saved when closing the interview, too.
 - 4 This procedure is inspired by the approach of Afrobarometer (Round 7).
 - 5 If the enumeration area is very small or the respondent rate is expected to be very low in an enumeration area, it is possible to select the third or even second dwelling unit – depending on the instruction of the Supervisor. Respective interviews are marked in the comment sections.

B1 Q01. Enumeration area no.						
0						

B1 Q02. What number in your walking pattern does this dwelling have?		
---	--	--

B1 Q03. Before knocking on the door, what building are you about to enter?	
<i>Highrise</i>	4
<i>Multi-dwelling</i>	3
<i>Single-dwelling</i>	2
<i>Other</i>	1

B1 Q04. GPS coordinates
<i>This is important: Please try until the GPS code is shown. If it is repeatedly not working you may proceed. If so, please let us know.</i>

B1 Q05. Is this attempt to reach someone successful?	
<i>Yes</i>	1
<i>No</i>	0
[If B1 Q05 = 0]	B1 Q05A. Reasons for unsuccessful calls⁶
<i>Refused to be interviewed</i>	3
<i>Nobody was at home</i>	2
<i>Other. Please specify: _____</i>	1
<i>Not applicable</i>	9

6 This table is inspired by Afrobarometer (Round 7).

[If B1 Q05A = 2]

If this was your first attempt at this location, please return towards the end of your shift to this enumeration area. Then proceed with your walking pattern and again select the fifth dwelling you encounter. If this was your second attempt, try to reach the very next dwelling.

When you find a dwelling unit with someone at home, please introduce yourself using the following script. You must learn this introduction so that you can say it exactly as it is written below.

B1 Q06. Introduction:

Good day. My name is _____. I am from the University of Botswana and the German Development Institute, an independent research organisation. I do not represent the government or any political party. We investigate the usage of electronic government services. Every person in the Gaborone metropolitan area has an equal chance of being included in this study. Your household has been chosen by chance. We would like to discuss these issues with a member of your household. The interview will take up to 25 minutes and will be conducted in English language. We would like to choose an adult who lives here. Would you help us pick one? Note that the person will be chosen by the computer, and I am only allowed to interview this very person.⁷

Respondent selection procedure:

*Within the dwelling unit, list the initials of all adult persons (18 years and above) and note down their gender, age and whether they pay income tax and whether they use electronic filing for income tax returns. The software then randomly selects a respondent. If the selected person is not present, ask if the respondent is within 10 minutes walking distance and go to the respective location for the interview. Otherwise, make an appointment and return at a later time. Only if the selected respondent is not present at the time of the call-back, you may substitute the dwelling unit with the very next dwelling unit. If the interview is refused, also go to the very next dwelling unit. From there, continue with your walking pattern. **Never substitute another individual in the same dwelling unit for an eligible respondent selected randomly by the tablet.***

⁷ This introduction is inspired by Afrobarometer (Round 7).

B1 Q07. Please tell me the first names and ages of all males and females

who presently live in this household, including those who do not speak English. I additionally ask you to indicate if these persons are paying income tax and whether they file their income tax return on paper or by electronic means. I only want this information from persons who are 18 years and older.

[List all eligible persons living in this dwelling unit who are 18 years or older, even those not presently at home but who will return to the house at any time that day. If taxpayers file both paper-based and electronic tax returns, select “electronic”.]

B1 Q07A. How many people with the age of 18 or above live in your household?

B1 Q07B. What is the first name of person 1?

B1 Q07C. How old is [name 1 displayed by software]?⁸

B1 Q07D. What gender is [name 1 displayed by software]?

Female	2
Male	1

B1 Q07E. Is [name 1 displayed by software] present right now?

Yes	1
No	0

⁸ Only values above 18 are valid.

B1 Q07F. Is [name 1 displayed by software] an income taxpayer or is tax deducted from his/her income by the employer?	
Yes	2
No	1
<i>Do not know/Does not respond [Do NOT read]</i>	9
B1 Q07G. Does [name 1 displayed by software] file income tax returns on paper or by electronic means?	
By electronic means	2
On paper	1
<i>Do not know/Does not respond [Do NOT read]</i>	9

B1 Q08. [Name displayed by software] has been randomly chosen. Is [name displayed by software] available for an interview now?⁹	
Yes	1
No	0
<i>[If B1 Q08 = 0]</i>	B1 Q08A. Is [name displayed by software] within 10 minutes walking distance?
Yes	1
No	0

9 The formulation is inspired by Afrobarometer.

B1 Q08. [Name displayed by software] has been randomly chosen. Is [name displayed by software] available for an interview now?⁹	
<i>[If B1 Q08A = 1]</i>	B1 Q08B. Where can I find [name displayed by software]? <i>[Thank for the information and say goodbye. Walk to the specified location.]</i>
<i>[If B1 Q08A = 0]</i>	B1 Q08C. Can we make an appointment with [name displayed by software], preferably today or not later than 8 March?
Yes	1
No	0
<i>[If B1 Q08C = 1]</i>	Appointment on another day [calendar displayed by software]. <i>[Note agreed appointment for yourself. Please share the appointment you enter below.]</i>
<i>[If B1 Q08C = 1]</i>	B1 Q08D. May I have your phone number so I can reach you for the appointment? <i>[Please click the “save this form” button at the top of the screen and open a new form. Once you make the appointment, open this form again under “saved forms” and swipe back to the question: “Is the person available right now?” and click: Yes. Continue the interview.]</i>
<i>[If B1 Q08C = 0]</i>	Thank you very much for your time. I have to select another household.

[Only if the selected respondent is not the same person that you first met, repeat introduction]

B1 Q09. Introduction:

Good day. My name is _____. I am from the University of Botswana and the German Development Institute, an independent research organisation. I do not represent the government or any political party. We investigate the usage of electronic government services. Every person in the Gaborone metropolitan area has an equal chance of being included in this study. Your place has been chosen by chance. I would like to discuss these issues with you. It will take up to 25 minutes.¹⁰

[Only if the selected respondent is encountered not at home, repeat the following introduction]

B1 Q09A. Introduction:

Good day. My name is _____. I am from the University of Botswana and the German Development Institute, an independent research organisation. I do not represent the government or any political party. We investigate the usage of electronic government services. Every person in the Gaborone metropolitan area has an equal chance of being included in this study. You were selected by chance and someone from your house told me I can find you here. I would like to discuss the topic of electronic government services with you. It will take up to 25 minutes.¹¹

B1 Q10. Consent form:	
Your answers will be treated strictly confidentially. They will be pooled with the answers of 2,000 other persons. It will be impossible to pick your personal answers out of all answers, so do not hesitate to answer honestly. There is no penalty for refusing to participate or refusing to answer single questions. Would you like to continue? ¹²	
Yes	1
No	0

10 This introduction is inspired by Afrobarometer (Round 7).

11 This introduction is inspired by Afrobarometer (Round 7).

12 The formulation is inspired by Afrobarometer (Round 7).

B1 Q10. Consent form:		
[If B1 Q10 = 0]	B1 Q10A. Would you explain why you do not consent? Multiple answers possible.	
	<i>I think that you are from the government</i>	<i>1</i>
	<i>I don't trust you</i>	<i>2</i>
	<i>I did not understand why I have to consent</i>	<i>3</i>
	<i>I don't have time</i>	<i>4</i>
	<i>Other. Please specify: _____</i>	<i>5</i>
[If B1 Q10A = 3]	You did not understand the consent, please let me try to explain it. <i>[Explain it again and swipe back to the question: consent: would you like to continue?]</i>	

[If B1 Q10 = 0]	B1 Q11. Reasons for unsuccessful continuation	
	<i>Refused to be interviewed</i>	<i>4</i>
	<i>Selected respondent was not at home</i>	<i>3</i>
	<i>Deaf / Did not speak a survey language</i>	<i>2</i>
	<i>Other. Please specify: _____</i>	<i>1</i>
	<i>Not applicable</i>	<i>9</i>

[If B1 Q07F = 9]	B1 Q12. The person I talked to in the beginning said he/she did not know whether you are an income taxpayer or not. Are you?	
Yes		<i>2</i>
No		<i>1</i>
<i>Do not know/Does not respond [Do NOT read]</i>		<i>9</i>

[If B1 Q07G = 9]	B1 Q13. Do you file income tax returns on paper or by electronic means? [Electronic means includes BURS e-services and the mtax app]	
By electronic means		<i>2</i>
On paper		<i>1</i>
<i>Do not know/Does not respond [Do NOT read]</i>		<i>9</i>

Block 2: Individual questions

Basic information about the block:

This block covers basic information such as demographics. The questions are ascendingly sensitive and need to be asked in the given order.

B2 Q01. Are you able to communicate in English?

I can write, speak, read and listen	5
I can speak, read and listen	4
I can read and listen	3
I can listen	2
Not at all	1
<i>[If B2 Q01 ≤ 2]</i>	<i>Stop interview. Explain that the interview was prepared in English and can't be held in another language.</i>

B2 Q02. What is the highest degree or level of school you have completed?

[Do NOT read options]

<i>University</i>	5
<i>Secondary school</i>	4
<i>Primary school</i>	3
<i>No formal school</i>	2
<i>No school</i>	1
<i>Do not know/Does not respond</i>	9

B2 Q03. What is the country of your citizenship?¹³	
<i>[Do NOT read options]</i>	
<i>Botswana</i>	<i>001</i>
<i>Malawi</i>	<i>004</i>
<i>Namibia</i>	<i>006</i>
<i>South Africa</i>	<i>007</i>
<i>Zambia</i>	<i>009</i>
<i>Zimbabwe</i>	<i>010</i>
<i>Other. Please specify: _____</i>	<i>999</i>
<i>Do not know/Does not respond</i>	<i>9999</i>

B2 Q04. What is your ethnic community, cultural group or tribe?¹⁴			
<i>[Do NOT read options]</i>			
<i>Mokgatla</i>	<i>140</i>	<i>Mokwena</i>	<i>141</i>
<i>Mongwato</i>	<i>142</i>	<i>Mongwaketse</i>	<i>143</i>
<i>Motlokwa</i>	<i>144</i>	<i>Moherero</i>	<i>145</i>
<i>Morolong</i>	<i>146</i>	<i>Mosarwa</i>	<i>147</i>
<i>Mokalaka/Mokalanga</i>	<i>148</i>	<i>Mosubeya</i>	<i>149</i>
<i>Motawana</i>	<i>150</i>	<i>Mokgalagadi</i>	<i>151</i>
<i>Moyeyi/Moyei</i>	<i>152</i>	<i>Mohurutshe</i>	<i>153</i>
<i>Mokhurutshe</i>	<i>154</i>	<i>Mmirwa</i>	<i>155</i>
<i>Mongologa</i>	<i>156</i>	<i>Modamara</i>	<i>157</i>
<i>Mombukushu</i>	<i>158</i>	<i>Molete</i>	<i>159</i>
<i>Motswapong</i>	<i>160</i>	<i>Motlharo</i>	<i>161</i>
<i>Motlhaping</i>	<i>162</i>	<i>Mokgothu</i>	<i>163</i>

13 The formulation is inspired by the Population and Housing Census of the Republic of Botswana (2011).

14 The formulation is inspired by Afrobarometer (Round 7).

<i>Motswana only, or “Do not think of myself in those terms”</i>	9990	<i>Other. Please specify:</i> _____	999
<i>Do not know/Does not respond</i>	9999		

B2 Q05. What is your religion, if any?¹⁵ <i>[Do NOT read options]</i>	
<i>Christian only</i>	1
<i>Roman Catholic</i>	2
<i>Anglican</i>	5
<i>Lutheran</i>	6
<i>Methodist</i>	7
<i>Dutch Reformed</i>	30
<i>Evangelical</i>	12
<i>Pentecostal</i>	13
<i>Independent</i>	14
<i>Zionist Christian Church</i>	33
<i>Seventh Day Adventist</i>	16
<i>Muslim only</i>	18
<i>Traditional / ethnic religion</i>	25
<i>Atheist (do not believe in God)</i>	29
<i>Jewish</i>	34
<i>Other. Please specify: _____</i>	990
<i>Do not know/Does not respond</i>	999

Thanks for all that information. Now we would like to know a bit more about your income.

15 The formulation is inspired by Afrobarometer (Round 7).

B2 Q06. Over the past six months, which of the following has been your principal activity? Multiple answers possible.

State employee	6
Private-sector employee	5
Self-employed	4
Unemployed	3
Student	2
Retired	1
<i>Do not know/Does not respond [Do NOT read]</i>	9

B2 Q07. Can you give me an estimate of your yearly income,¹⁶ including all work and non-work-related sources of revenue, such as cattle?¹⁷

From...	To...	
144,001	up	6
108,001	144,000	5
72,001	108,000	4
36,001	72,000	3
1	36,000	2
0	0	1
<i>Do not know/Does not respond</i>	<i>[Do NOT read]</i>	9

Many thanks for all this valuable information. Next, we would like to talk about your opinion on public services.

¹⁶ Tax rates increase depending on the income ranges, which are defined as: 36,000-72,000 (5 per cent); 72,001-108,000 (12.5 per cent); 108,001-144,000 (18.75 per cent); and 144,001 and up (25 per cent).

¹⁷ In general, cattle is still used as a traditional means of exchange for trade – and therefore as income or as a bride price. Since the import of cattle is banned, Batswana recognise it as a good investment.

Block 3: Public services

Basic information about this block:

This block is about the perception and usage of public services in general. The questions are asked in a random order to prevent biased answering of questions. The randomisation is provided by the software.

B3 Q01. How often do you access information about public services?

Every day	4
A few times a week	3
A few times a month	2
Less than once a month	1
Never	0
<i>Do not know/Does not respond [Do NOT read]</i>	9

B3 Q02. For what purposes do you use information about public services? Multiple answers are possible.

To understand procedures	A
To inform myself about my rights	B
To share information with others	C
To contact state officials	D
None of the above	E
<i>Do not know/Does not respond [Do NOT read]</i>	9

B3 Q03. Which of these three statements is closest to your opinion? Only one option to be chosen.¹⁸	
Statement 1: Democracy is preferable to any other kind of government.	3
Statement 2: In some circumstances, a non-democratic government can be preferable.	2
Statement 3: For someone like me, it doesn't matter what kind of government we have.	1
<i>Do not know/Does not respond [Do NOT read]</i>	9

B3 Q04. Here is a list of actions that people sometimes take when they are dissatisfied with government performance. For each of these, please tell me whether you have done any of these things during the past year.¹⁹						
	(Yes) Often	(Yes) Several times	(Yes) Once or twice	(No) Would if I had the chance	(No) Would never do this	<i>Do not know/Do not respond [Do NOT read]</i>
A. Joined others in your community to request action from government	4	3	2	1	0	9
B. Contacted the media, like calling a radio programme or writing a letter to a newspaper						
C. Contacted a government official to ask for help or make a complaint	4	3	2	1	0	9
D. Withheld tax payment	4	3	2	1	0	9
E. Participated in a demonstration or protest march	4	3	2	1	0	9

18 The formulation is inspired by Afrobarometer (Round 7).

19 The formulation is inspired by Afrobarometer (Round 7).

<i>[If B2 Q03 = 001]</i>	B3 Q05. Let's talk about general elections.²⁰		
	<i>Yes</i>	<i>No</i>	<i>Do not know/Does not respond [Do NOT read]</i>
A. Did you vote in 2019?	2	1	9
B. Did you attend election rallies in 2019?	2	1	9
C. Did you discuss the 2019 elections with your family or friends?	2	1	9
D. Did you vote in 2014?	2	1	9
E. Did you vote for the same party in 2014 and 2019?	2	1	9

B3 Q06. To what extent do you feel that government officials are addressing your needs?	
A great deal	5
Quite a lot	4
Somewhat	3
Not very much	2
Not at all	1
<i>Do not know/Does not respond [Do NOT read]</i>	9

20 The formulation is inspired by Afrobarometer (Round 7).

B3 Q07. Overall, how satisfied are you with the way democracy works in Botswana?²¹ Are you:	
Very satisfied	4
Fairly satisfied	3
Not very satisfied	2
Not at all satisfied	1
<i>Botswana is not a democracy [Do NOT read]</i>	0
<i>Do not know/Does not respond [Do NOT read]</i>	9

B3 Q08. Would you say that the country in general is going in the wrong direction or going in the right direction?²² <i>[If asked in what sense, say: In political, economic and social terms.]</i>	
Going in the right direction	2
Going in the wrong direction	1
<i>Do not know/Does not respond [Do NOT read]</i>	9

B3 Q09. How much trust do you have in the national government?²³	
A great deal	5
Quite a lot	4
Somewhat	3
Not very much	2
None at all	1
<i>Do not know/Does not respond [Do NOT read]</i>	9

21 The formulation is inspired by Afrobarometer (Round 7).

22 The formulation is inspired by Afrobarometer (Round 7).

23 The formulation is inspired by Asianbarometer.

B3 Q10. In your opinion, how often are people treated unequally under the law in this country?²⁴	
Always	5
Often	4
Sometimes	3
Rarely	2
Never	1
<i>Do not know/Does not respond [Do NOT read]</i>	9

B3 Q11. In this country, how likely do you think it is that an ordinary person could pay a bribe or use personal connections to get away with doing things such as not paying taxes or avoiding going to court?²⁵	
<i>[If asked by respondents, explain: An ordinary person is a person like you and me.]</i>	
Very likely	3
Somewhat likely	2
Not very likely	1
Not at all likely	0
<i>Do not know/Does not respond [Do NOT read]</i>	9

24 The formulation is inspired by Afrobarometer (Round 7).

25 The formulation is inspired by Afrobarometer (Round 7).

B3 Q12. Generally speaking, would you say most people can be trusted or that you need to be very careful in dealing with people?²⁶	
Most people can be trusted	2
You must be very careful in dealing with people	1
<i>Do not know/Does not response [Do NOT read]</i>	9

<i>[If B2 Q03 = 001]</i>	B3 Q13. How proud are you being a citizen of Botswana?
Very proud	5
Proud	4
Cannot decide	3
Rather not proud	2
Not at all proud	1
<i>Do not know/Does not response [Do NOT read]</i>	9

<i>[If B2 Q03 ≠ 9999]</i>	B3 Q14. How proud are you being a [ethnicity displayed by software (B2 Q04)]?
Very proud	5
Proud	4
Cannot decide	3
Rather not proud	2
Not at all proud	1
<i>Do not know/Does not response [Do NOT read]</i>	9

²⁶ The formulation is inspired by Asianbarometer.

B3 Q15. In the last year, did you join effort with people from other backgrounds to raise an issue that you consider to be relevant for the whole community?	
Yes	2
No	1
<i>Do not know/Does not response [Do NOT read]</i>	9

<i>[If B3 Q15 = 2]</i>	B3 Q16. What was this issue?
<i>[Specify briefly]</i> _____	

Thank you. Now I would also like to ask you some questions about your means of communication. Let's start with some general questions.

Block 4: Daily life and means of communication

Basic information about this block:

These questions in this block build on each other and need to be asked in the given order.

B4 Q01. Which of these things do you personally own?²⁷

	Yes (personally owns)	No, but someone else in the household owns	No one in this household owns	<i>Do not know/Does not respond [Do NOT read]</i>
A. Radio	3	2	1	9
B. Television	3	2	1	9
C. Computer	3	2	1	9
D. Bank account	3	2	1	9
E. Cell phone	3	2	1	9

B4 Q02. How often do you use:

	Every day	A few times a week	A few times a month	Less than once a month	Never	<i>Do not know/Does not respond [Do NOT read]</i>
A. A cell phone	4	3	2	1	0	9
B. The internet	4	3	2	1	0	9

²⁷ The formulation is inspired by Afrobarometer (Round 7).

B4 Q03. How often do you get news from the following sources?²⁸

	Every day	A few times a week	A few times a month	Less than once a month	Never	<i>Do not know/Does not respond [Do NOT read]</i>
A. Radio	4	3	2	1	0	9
B. Television	4	3	2	1	0	9
C. Newspaper	4	3	2	1	0	9
D. Internet	4	3	2	1	0	9
E. Social media such as Facebook or Twitter	4	3	2	1	0	9
F. Talking to friends, family, etc.	4	3	2	1	0	9

B4 Q04. In general, how would you rate your living conditions compared to other Batswana?²⁹

Much better	5
Better	4
Same	3
Worse	2
Much worse	1
<i>Do not know/Does not response [Do NOT read]</i>	9

28 The formulation is inspired by Afrobarometer (Round 7).

29 The formulation is adapted from Afrobarometer (Round 7).

B4 Q05. What would you say, how often do you interact with ministries, government departments or parastatals?	
Weekly	4
Monthly	3
Yearly	2
Less than once a year	1
Never	0
<i>Do not know/Does not response [Do NOT read]</i>	9

Thank you for your responses so far. We are almost finished. Now let's talk for a moment about specific electronic services.

Block 5: Electronic services

Basic information about this block:
These questions in this block build on each other and need to be asked in the given order.

B5 Q01. Did you receive a short message on your phone from BURS within the last four weeks suggesting that you start using electronic income tax return filing?	
Yes	2
No	1
<i>Do not know/Does not respond [Do NOT read]</i>	9

B5 Q01A. If you are registered with BURS, what is the last digit of the phone number you signed up with?	
9	9
8	8
7	7
6	6
5	5
4	4
3	3
2	2
1	1
0	0
<i>I did not register with BURS</i>	99
<i>Do not know/Does not respond [Do NOT read]</i>	999

B5 Q02. Which of the following public services do you pay personally?	
Water and electricity provision	4
Water provision	3
Electricity provision	2
None of the above	1
<i>Do not know/Does not respond [Do NOT read]</i>	9

<i>[If B5 Q02 ≠ 1]</i>	B5 Q03. How often do you use any of the following e-services?					
	Weekly	Monthly	Yearly	Less than once a year	Never	<i>Do not know/Does not respond [Do NOT read]</i>
A. Paying water supply by electronic means such as your cell phone	4	3	2	1	0	9
B. Buying electricity by electronic means such as Orange money or electronic funds transfer (ETF)	4	3	2	1	0	9

B5 Q04. How often do you use mobile money transfer by cell phone?	
Daily	4
Weekly	3
Monthly	2
Less than once a month	1
Never	0
<i>Do not know/Does not respond [Do NOT read]</i>	9

B5 Q05. How satisfied are you with the following services and their providers?

	Very satisfied	Fairly satisfied	Neither good nor bad	Fairly unsatisfied	Not at all satisfied	<i>Do not know/Does not respond [Do NOT read]</i>
A. Tax matters by Botswana Unified Revenue Service (BURS)	5	4	3	2	1	9
B. Electricity provision by Botswana Power Corporation (BPC)	5	4	3	2	1	9
C. Water provision by Water Utilities Corporation (WUC)	5	4	3	2	1	9

B5 Q06. I will now name various electronic services. In your opinion, how would you describe them? Multiple answers possible.

	Complicated	Risky	Unreliable	Unnecessary	Transparent	Fast	Fair	Other. Please specify:	<i>Do not know/ Does not respond [Do NOT read]</i>
A. Electronic filing of income tax returns	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>	<i>9</i>
B. Electronic payment for water	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>	<i>9</i>
C. Electronic payment for electricity	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>	<i>9</i>
D. Mobile money transfer by cell phone	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>	<i>9</i>

B5 Q07. Given a choice, would you like to use more e-services?

Yes	<i>2</i>
No	<i>1</i>
<i>Do not know/Does not respond [Do NOT read]</i>	<i>9</i>

B5 Q08. In October, we would like to question some of the interview partners – such as you – again. We would like to contact you for this purpose only, again. Are you willing to give us your phone number?	
Yes	<i>1</i>
No	<i>0</i>
B5 Q08A. Phone number [Enter number below]	
+267	

B5 Q09. We would like you to sign this consent form to confirm your agreement. [Present consent form.] Your signature is in no way linked to any of your answers. You may also sign only with your initials. Would you like to sign?³⁰	
Yes	<i>1</i>
No	<i>0</i>

Thanks so much for your valuable time and important insights. This was very helpful!

[END INTERVIEW -- DON'T FORGET TO COMPLETE NEXT BLOCK. ALL SUBSEQUENT QUESTIONS SHOULD BE ANSWERED BY THE INTERVIEWER AFTER THE INTERVIEW IS CONCLUDED]

30 For phone interviews, only oral consent is possible. All interviews are evaluated independently from the fact of a signed consent form.

Block 6: Closing information

Basic information about this block:

This block asks for remarks of the INTERVIEWER.

B6 Q01. Do you think anyone influenced the respondent's answers during the interview?³¹

<i>Yes</i>	<i>1</i>
------------	----------

<i>No</i>	<i>0</i>
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B6 Q02. What proportion of the questions do you feel the respondent had difficulties answering?³²

<i>All</i>	<i>4</i>
------------	----------

<i>Most</i>	<i>3</i>
-------------	----------

<i>Some</i>	<i>2</i>
-------------	----------

<i>Few</i>	<i>1</i>
------------	----------

<i>None</i>	<i>0</i>
-------------	----------

B6 Q03. Do you have any comments on the interview? For example, did anything else significant happen during the interview?³³

<i>Yes, [specify] _____</i>	<i>1</i>
-----------------------------	----------

<i>No</i>	<i>2</i>
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31 The formulation is inspired by Afrobarometer (Round 7).

32 The formulation is inspired by Afrobarometer (Round 7).

33 The formulation is inspired by Afrobarometer (Round 7).

Interviewer certification

I hereby certify that this interview was conducted in accordance with instructions received during training. All responses recorded here are those of the respondent who was chosen by the appropriate selection method.³⁴

[Answered by Supervisor only]

Supervisor certification

I hereby certify that this interview was conducted in accordance with instructions given to interviewers during training. All responses have been checked for completeness and accuracy. The information about the EA on the first page is based on observations I personally made in an area chosen by the appropriate sampling method.³⁵

34 The formulation is inspired by Afrobarometer (Round 7).

35 The formulation is inspired by Afrobarometer (Round 7).