# Online Supplementary Materials:

# "Estimating Smooth Country-Year Panels of Public Opinion"

## Christopher Claassen

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## **Contents**

1	Included Survey Items and Survey Projects	2
2	Excluded Survey Items	5
3	Additional Tables and Figures	6

#### 1. Included Survey Items and Survey Projects

#### Three statements items

- 1. Which of these three statements is closest to your own opinion?: Democracy is preferable to any other kind of government, under some circumstances, an authoritarian government can be preferable to a democratic one, for someone like me, it does not matter what kind of government we have (Pew Global Attitudes).
- 2. Which of these three statements is closest to your own opinion?: Democracy is preferable to any other kind of government, under some circumstances, an authoritarian government can be preferable to a democratic one, for someone like me, it does not matter what kind of government we have (Afro-Barometer).
- 3. Which of the following statements do you agree with most? Democracy is preferable to any other kind of government. In certain situations, an authoritarian government can be preferable to a democratic one. To people like me it doesn't matter whether we have a democratic government or a non-democratic government (LatinoBarometer).
- 4. Which of the following statements do you agree with most? Democracy is preferable to any other kind of government. In certain situations, an authoritarian government can be preferable to a democratic one. To people like me it doesn't matter whether we have a democratic government or a non-democratic government (European Social Survey).
- 5. With which of the following phrases are you in most agreement: For people like me, it doesnt matter whether a regime is democratic or non-democratic, democracy is preferable to any other type of government, under some circumstances an authoritarian government can be preferable to a democratic one (Latin American Public Opinion Project).
- 6. Which of the following statements comes closest to your own opinion? For people like me, it does not matter whether we have a democracy, under some circumstances, an authoritarian government can be preferable, democracy is always preferable to any other kind of government (AsianBarometer)

#### **Churchill items**

- 7. Democracy may have its problems, but it is better than any other form of government. To what extent do you agree or disagree? (World Values Survey)
- 8. Democracy may have its problems, but it is better than any other form of government. To what extent do you agree or disagree? (ArabBarometer)
- 9. Do you strongly agree, agree, disagree or strongly disagree with the following statements: Democracy may have problems but it is the best system of government (LatinoBarometer)
- 10. With which of the following phrases do you most agree: in general, despite its problems, democracy is the best form of government, there are other forms of government that can be just as good or even better than democracy, don't know (Latin American Public Opinion Project)
- 11. Please tell me how strongly you agree or disagree with the following statement: Democracy may have problems but it's better than any other form of government (Comparative Study of Electoral Systems)

#### Strong leader items

12. Best to get rid of Parliament and elections and have a strong leader who can quickly decide everything. What do you think? (New Democracies Barometer)

- 13. Best to get rid of Parliament and elections and have a strong leader who can quickly decide everything. What do you think? (AsianBarometer)
- 14. On some occasions, democracy doesn't work. When that happens there are people that say we need a strong leader who doesn't have to be elected through voting. Others say that even if things don't function, democracy is always the best. What do you think? (Latin American Public Opinion Project)
- 15. There are people who say that we need a strong leader that does not have to be elected. Others say that although things may not work, electoral democracy, or the popular vote, is always best. What do you think? (Latin American Public Opinion Project)
- 16. There are many ways to govern a country. Would you disapprove or approve of the following alternatives? Elections and Parliament are abolished so that the president can decide everything. (Afro-Barometer)
- 17. I'm going to describe various types of political systems and ask what you think about each as a way of governing this country. For each one, would you say it is a very good, fairly good, fairly bad or very bad way of governing this country? Having a strong leader who does not have to bother with parliament and elections (World Values Survey)
- 18. Some feel that we should rely on a democratic form of government to solve our country's problems. Others feel that we should rely on a leader with a strong hand to solve our country's problems. Which comes closer to your opinion? (Pew Global Attitudes)
- 19. I will describe different political systems to you, and I want to ask you about your opinion of each one of them with regard to the countrys governance for each one would you say it is very good, good, bad, or very bad? (ArabBarometer)
- 20. I will describe different political systems to you, and I want to ask you about your opinion of each one of them with regard to the countrys governance for each one would you say it is very good, good, bad, or very bad? (ArabBarometer)
- 21. I'm going to describe various types of political systems. Please indicate for each system whether you think it would be very good, fairly good or bad for this country. Governance by a powerful leader without the restriction of parliament or elections (AsiaBarometer)

#### Military rule items

- 22. The army should govern the country. What do you think? (New Democracies Barometer)
- 23. The army should govern the country. What do you think? (AsianBarometer)
- 24. There are many ways to govern a country. Would you disapprove or approve of the following alternatives? The army comes in to govern the country (AfroBarometer)
- 25. I'm going to describe various types of political systems and ask what you think about each as a way of governing this country. For each one, would you say it is a very good, fairly good, fairly bad or very bad way of governing this country? Having the army rule (World Values Survey)
- 26. I'm going to describe various types of political systems. Please indicate for each system whether you think it would be very good, fairly good or bad for this country Military government (AsiaBarometer)

#### One party rule items

27. There are many ways to govern a country. Would you disapprove or approve of the following alternatives? Only one political party is allowed to stand for election and hold office (AsianBarometer)

28. There are many ways to govern a country. Would you disapprove or approve of the following alternatives? Only one political party is allowed to stand for election and hold office (AfroBarometer)

#### **Evaluate democracy items**

- 29. I will describe different political systems to you, and I want to ask you about your opinion of each one of them with regard to the country's governance for each one would you say it is very good, good, bad, or very bad? A democratic political system (public freedoms, guarantees equality in political and civil rights, alternation of power, and accountability and transparency of the executive authority). (ArabBarometer)
- 30. I'm going to describe various types of political systems and ask what you think about each as a way of governing this country. For each one, would you say it is a very good, fairly good, fairly bad or very bad way of governing this country? Having a democratic political system (World Values Survey)
- 31. I'm going to describe various types of political systems. Please indicate for each system whether you think it would be very good, fairly good or bad for this country A democratic political system (AsiaBarometer)

#### **Democracy suitable items**

- 32. Here is a similar scale of 1 to 10 measuring the extent to which people think democracy is suitable for our country. If 1 means that democracy is completely unsuitable for [name of country] today and 10 means that it is completely suitable, where would you place our country today? (AsianBarometer)
- 33. Suppose there was a scale from 0-10 measuring the extent to which democracy is suitable for your country, with 0 meaning that democracy is absolutely inappropriate for your country and 10 meaning that democracy is completely appropriate for your country. To what extent do you think democracy is appropriate for your country? (ArabBarometer)

#### Importance to you items

- 34. How important is it to you to live in a country where honest elections are held regularly with a choice of at least two political parties? Is it very important, somewhat important, not too important or not important at all? (Pew Global Attitudes)
- 35. How important is it for you to live in a country that is governed democratically? On this scale where 1 means it is "not at all important" and 10 means "absolutely important" what position would you choose? (World Values Survey)
- 36. How important for you to live in democratically governed country? (European Social Survey)

#### Desire for democracy items

37. To what extent do you want our country to be democratic now? (AsianBarometer)

### 2. Excluded Survey Items

World Values Survey responses for the following item, countries, and years were not included in the analysis due to evidence of, or suspicion of, poor translations and severe bias (see Kurzmann 2014):

• Vietnam: Army rule 2001; Strong leader 2001

• Albania: Army rule 1998

• Indonesia: Army rule 2001 & 2006

• Iran: Army rule 2000; Strong leader 2000 & 2005

• India: Strong leader, all years.

• Pakistan: Army rule 1996 & 2001; Strong leader 1996 & 2001

• Kyrgyzstan: Strong leader 2003 & 2011

• Romania: Strong leader 1998, 2005 & 2012

• Egypt: Strong leader 2012

### 3. Additional Tables and Figures

4000 3000  $y_{ikt}/s_{ikt}$ 2000 0.4 1000 0.0  $\widetilde{y}_{ikt}/s_{ikt}$ 0.6 1000 2000 3000 4000 0.2 8.0 1.0  $\widetilde{y}_{ikt}$ 

Figure S1. Posterior Predictive Checks: Simulated Vs. Observed Reponse Counts and Proportions

The left panel displays, on the x-axis, the simulated number of respondents, per survey question, who support democracy  $(\tilde{y}_{ikt})$ . On the y-axis is the actual, observed number of supportive respondents  $(y_{ikt})$ . The right panel displays the simulated and observed proportions of supportive respondents (i.e.,  $\tilde{y}_{ikt}/s_{ikt}$  and  $y_{ikt}/s_{ikt}$ ).

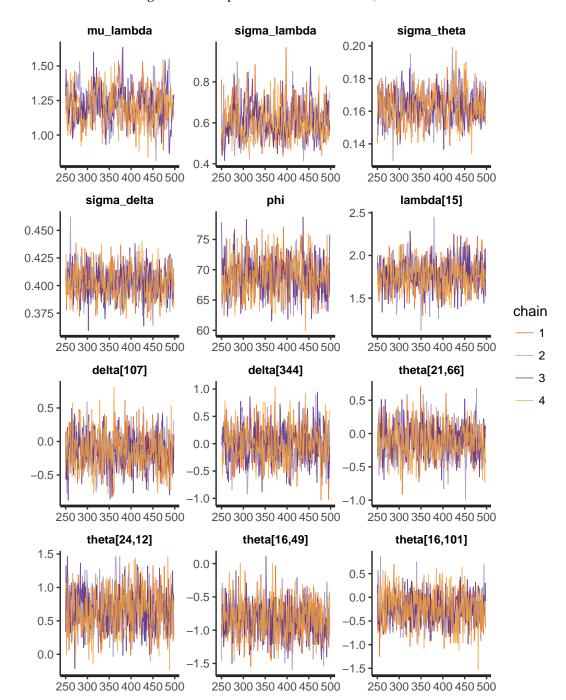


Figure S2. Traceplot of Selected Parameters, Model 5

Each plot shows Markov chain sampling for a particular parameter, across the four chains used in the estimation of model 5. The 500 post-warmup iterations are displayed. This observed pattern of chain mixing indicates convergence, with R-hat statistics all close to 1.

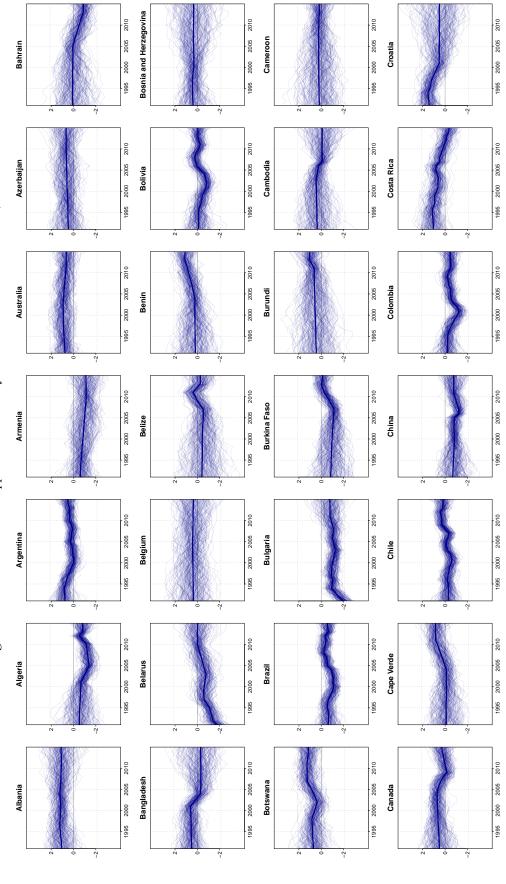


Figure S3. Smooth Panels of Support for Democracy for 132 Countries and 24 Years, I

