

## Supplementary Materials:

# In the Mood for Democracy? Democratic Support as Thermostatic Opinion

### Contents

<b>1</b>	<b>Survey Projects and Questions Used to Measure Democratic Mood</b>	<b>1</b>
<b>2</b>	<b>Additional Tables</b>	<b>6</b>

# 1. Survey Projects and Questions Used to Measure Democratic Mood

## 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 (AfroBarometer).
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 doesn't 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).
7. Here are three opinions about political systems. Which one comes closest to your own way of thinking? Democracy is the best political system in all circumstances. In certain circumstances a dictatorship could be a good thing. Whether we live in a democracy or under a dictatorship makes no difference to people like me (EuroBarometer).
8. Which one of the following three statements do you agree with most? Democracy is preferable to any other kind of government. In certain situations, a dictatorial government can be preferable to a democratic one. It doesn't matter to people like me whether we have democratic or non-democratic governance (South Asian Barometer).

## Churchill items

9. 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)

10. Democracy may have its problems, but it is better than any other form of government. To what extent do you agree or disagree? (ArabBarometer)
11. 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)
12. 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)
13. 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**

14. 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)
15. Best to get rid of Parliament and elections and have a strong leader who can quickly decide everything. What do you think? (AsianBarometer)
16. 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)
17. 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)
18. 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. (AfroBarometer)
19. 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)
20. 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)
21. I'm going to describe various types of political systems and ask what you think about each as a way of governing our country. For each one, would it be a very good, somewhat good, somewhat bad or very bad way of governing this country? A democratic system where representatives elected by citizens decide what becomes law (Pew Global Attitudes)

22. 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)
23. 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)
24. 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)
25. There are different ways in which a country may be governed. I will read out some suggestions. For each of these would you say that you strongly agree, agree, disagree or strongly disagree? We should have a strong leader who does not have to bother about elections (South Asian Barometer)

### **Military rule items**

26. The army should govern the country. What do you think? (New Democracies Barometer)
27. The army should govern the country. What do you think? (AsianBarometer)
28. 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)
29. 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)
30. 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)
31. There are different ways in which a country may be governed. I will read out some suggestions. For each of these would you say that you strongly agree, agree, disagree or strongly disagree? The country should be governed by the Army (South Asian Barometer)
32. I'm going to describe various types of political systems and ask what you think about each as a way of governing our country. For each one, would it be a very good, somewhat good, somewhat bad or very bad way of governing this country? The military rules the country (Pew Global Attitudes)

### **One party rule items**

33. 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)

34. 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**

35. 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)
36. 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)
37. 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)
38. I'm going to describe various types of political systems and ask what you think about each as a way of governing our country. For each one, would it be a very good, somewhat good, somewhat bad or very bad way of governing this country? A democratic system where representatives elected by citizens decide what becomes law (Pew Global Attitudes)

### **Elections items**

39. There are different ways in which a country may be governed. I will read out some suggestions. For each of these would you say that you strongly agree, agree, disagree or strongly disagree? The country should be governed by those chosen by the people in a fair election (South Asian Barometer)

### **Democracy suitable items**

40. 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)
41. 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)
42. How suitable is democracy for our country - very suitable, suitable, not suitable or not at all suitable? (South Asian Barometer)

### **Importance items**

43. 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)
44. 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)
45. How important for you to live in democratically governed country? (European Social Survey)

### **Desire for democracy items**

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

### **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 Kurzman 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

## 2. Additional Tables

**Table S1.** Tests of Stationarity

Variable	Im-Pesharan-Shin Test		Levin-Lin-Chu Test	
	Statistic	P-value	Statistic	P-value
Mood (69 countries, 20 years)	-4.960	0.000	-4.151	0.000
Mood (121 countries, 10 years)	-40.978	0.000	-108.858	0.000
$\Delta$ Mood (65 countries, 20 years)	-6.777	0.000	-5.147	0.000
$\Delta$ Mood (120 countries, 10 years)	-33.567	0.000	-78.330	0.000
Liberal democracy	-10.932	0.000	-16.234	0.000
Change in democracy	-37.535	0.000	-32.031	0.000
GDP growth	-30.180	0.000	-24.871	0.000
log GDP per capita	-18.420	0.000	-28.573	0.000
Corruption	-11.614	0.000	-24.273	0.000
Minoritarian democracy	-15.229	0.000	-29.463	0.000
Electoral democracy	-13.444	0.000	-16.678	0.000

Because these tests require square panels, the mood panels were trimmed as described. All other panels comprise 134 countries and 30 years. With the alternative hypothesis for both tests being stationarity, the null can be rejected in all cases.

**Table S2.** Multilevel Models

Intercept	-.007 (.025)	-.037 (.031)	-.006 (.026)	-.039 (.031)
Democratic mood <sub>t-1</sub>	.469* (.018)	.457* (.018)	.467* (.018)	.455* (.018)
Democratic mood <sub>t-2</sub>	-.484* (.018)	-.476* (.018)	-.483* (.018)	-.474* (.018)
Δ Liberal democracy	-.060* (.018)	-.061* (.018)		
Liberal democracy <sub>t-1</sub>	-.001 (.004)	.000 (.005)		
Δ Electoral democracy			.015 (.018)	.016 (.018)
Electoral democracy <sub>t-1</sub>			.001 (.006)	.005 (.006)
Δ Minoritarian democracy			-.055* (.018)	-.056* (.018)
Minoritarian democracy <sub>t-1</sub>			-.004 (.006)	-.006 (.006)
Log GDP per capita <sub>t-1</sub>	.000 (.003)	.003 (.003)	-.000 (.003)	.003 (.003)
GDP growth rate	.001 (.000)	.001 (.000)	.000 (.000)	.001 (.000)
Corruption <sub>t-1</sub>	-.010* (.004)	-.006 (.004)	-.011* (.004)	-.007 (.004)
Country random effects	✓	✓	✓	✓
UN Regional random effects		✓		✓
N	2290	2290	2290	2290

\**p* < 0.05



**Table S3. Including Additional Covariates, Liberal Democracy Models**

Intercept	-.006 (.024)	.054 (.038)	-.009 (.027)	.044 (.040)
Democratic mood <sub>t-1</sub>	.470* (.026)	.469* (.028)	.461* (.026)	.470* (.028)
Democratic mood <sub>t-2</sub>	-.485* (.025)	-.489* (.027)	-.478* (.026)	-.491* (.027)
Δ Liberal democracy	-.068* (.025)	-.080* (.031)	-.070* (.024)	-.081* (.035)
Liberal democracy <sub>t-1</sub>	-.001 (.004)	-.002 (.005)	-.000 (.005)	-.001 (.005)
GDP growth rate	.001 (.000)	.001 (.000)	.001 (.000)	.001 (.001)
Log GDP per capita <sub>t-1</sub>	-.000 (.002)	-.004 (.003)	.001 (.003)	-.001 (.004)
Δ Corruption	-.020 (.022)	-.031 (.028)	-.026 (.025)	-.031 (.028)
Corruption <sub>t-1</sub>	-.011* (.004)	-.014* (.006)	-.010* (.005)	-.014* (.006)
Inflation <sub>t-1</sub>	.000 (.001)			.000 (.002)
Gini <sub>t-1</sub>		-.001* (.000)		-.001* (.000)
Years of education <sub>t-1</sub>			-.000 (.001)	-.002 (.001)
Adjusted $R^2$	.255	.261	.249	.260
$N$	2263	1968	2156	1919

\*  $p < 0.05$ . Linear models with robust standard errors in parentheses. Inflation data are from the IMF and are transformed using a sign-log transformation. Gini coefficient data are from SWIID (version 5). Years of education are from the V-Dem dataset.

**Table S4.** Including Additional Covariates, Electoral and Minoritarian Democracy Models

Intercept	-.005 (.024)	.059 (.038)	-.007 (.026)	.049 (.040)
Democratic mood <sub><i>t</i>-1</sub>	.468* (.026)	.469* (.028)	.460* (.026)	.470* (.028)
Democratic mood <sub><i>t</i>-2</sub>	-.483* (.025)	-.488* (.027)	-.477* (.025)	-.491* (.027)
Δ Electoral democracy	.016 (.031)	.015 (.042)	.015 (.031)	.019 (.046)
Electoral democracy <sub><i>t</i>-1</sub>	.002 (.006)	.002 (.006)	.002 (.006)	.003 (.007)
Δ Minoritarian democracy	-.059* (.022)	-.069* (.027)	-.062* (.024)	-.068* (.028)
Minoritarian democracy <sub><i>t</i>-1</sub>	-.004 (.005)	-.005 (.006)	-.003 (.005)	-.005 (.006)
GDP growth rate	.001 (.000)	.001 (.000)	.001 (.000)	.001 (.000)
Log GDP per capita <sub><i>t</i>-1</sub>	-.000 (.002)	-.004 (.003)	.000 (.003)	-.001 (.004)
Δ Corruption	-.017 (.022)	-.023 (.027)	-.022 (.025)	-.025 (.029)
Corruption <sub><i>t</i>-1</sub>	-.011* (.004)	-.015* (.005)	-.011* (.004)	-.015* (.005)
Inflation <sub><i>t</i>-1</sub>	-.000 (.002)			-.000 (.002)
Gini <sub><i>t</i>-1</sub>		-.001* (.000)		-.001* (.000)
Years of education <sub><i>t</i>-1</sub>			-.000 (.001)	-.002 (.001)
Adjusted <i>R</i> <sup>2</sup>	.254	.259	.248	.259
<i>N</i>	2263	1968	2156	1919

\**p* < 0.05. Linear models with robust standard errors in parentheses. Inflation data are from the IMF and are transformed using a sign-log transformation. Gini coefficient data are from SWIID (version 5). Years of education are from the V-Dem dataset.

**Table S5.** Modeling Interactive Effects of Democracy on Instrumental Performance

Intercept	-.005 (.024)
Democratic mood <sub><i>t</i>-1</sub>	.463 (.026)*
Democratic mood <sub><i>t</i>-2</sub>	-.481 (.026)*
Δ Liberal democracy	-.064 (.023)*
Liberal democracy <sub><i>t</i>-1</sub>	-.000 (.004)
GDP growth rate	.001 (.000)
Log GDP per capita <sub><i>t</i>-1</sub>	-.001 (.003)
Δ Corruption	-.013 (.020)
Corruption <sub><i>t</i>-1</sub>	-.007 (.005)
Liberal democracy <sub><i>t</i>-1</sub> × GDP growth rate	.000 (.000)
Liberal democracy <sub><i>t</i>-1</sub> × Δ Corruption	.040 (.031)
Liberal democracy <sub><i>t</i>-1</sub> × Corruption <sub><i>t</i>-1</sub>	-.010 (.003)*
Adjusted <i>R</i> <sup>2</sup>	.258
<i>N</i>	2290

\**p* < 0.05. Linear models with robust standard errors in parentheses.

## References

Kurzman, Charles. 2014. "World Values Lost in Translation." *Washington Post* September 2, <https://www.washingtonpost.com/news/monkey-cage/wp/2014/09/02/world-values-lost-in-translation/>.