



Political and Social Trust in Pollution Responsibility Attribution

Evidence from 39 African Countries

Ella Henninger
E. Keith Smith

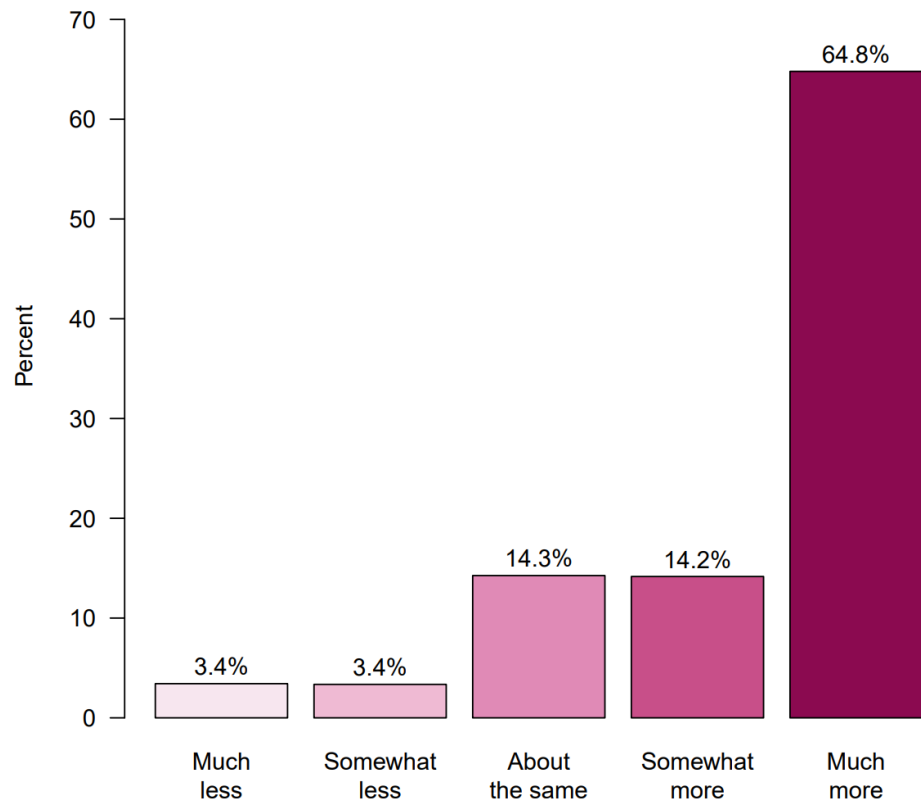
Aarauer Demokratietage 2026
Vertrauen und Demokratie

Panel 4: «*Trustworthy Institutions? Critical perspectives*»

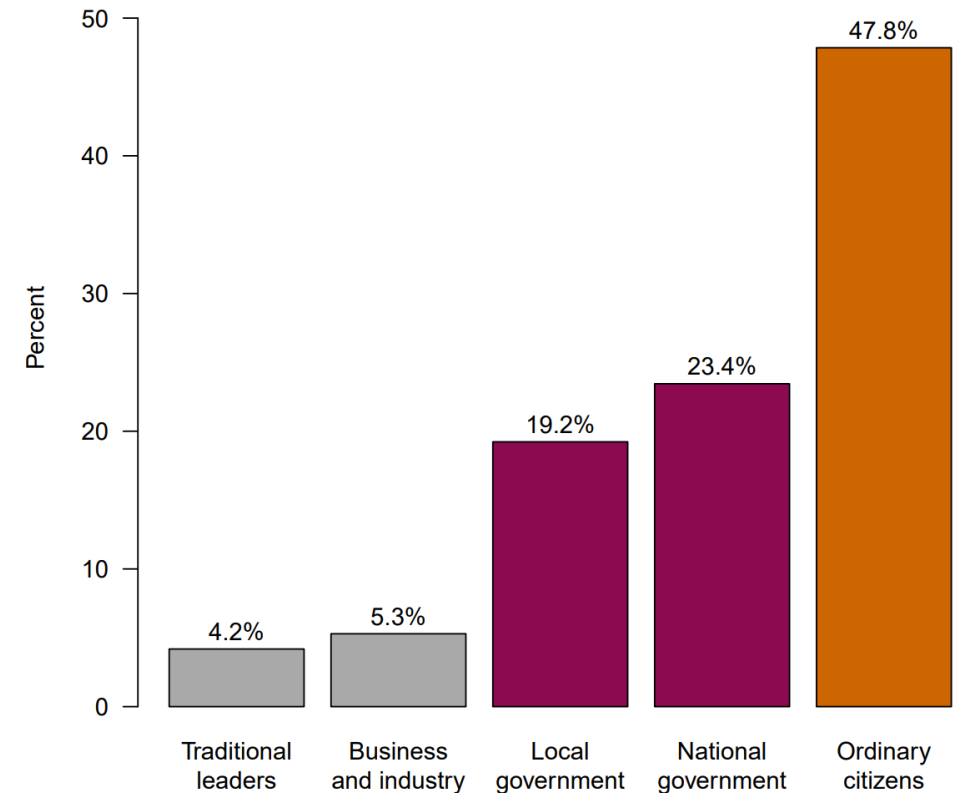
March 13, 2026

Motivation and Contribution

Our government should be doing ... than it is currently doing to limit pollution and protect the environment in this country.



Who do you think should have the primary responsibility for reducing pollution and keeping your community clean?



Motivation and Contribution

- Main outcome of interest: **Responsibility attribution** for pollution mitigation.

- Who is seen as responsible for public goods provision matters because it shapes:
 - i. who is **expected** to act.
 - ii. who is held **accountable** when mitigation falls short.
 - iii. whether collective action problems translate into **political demand** or remain framed as matters of **private behaviour**.

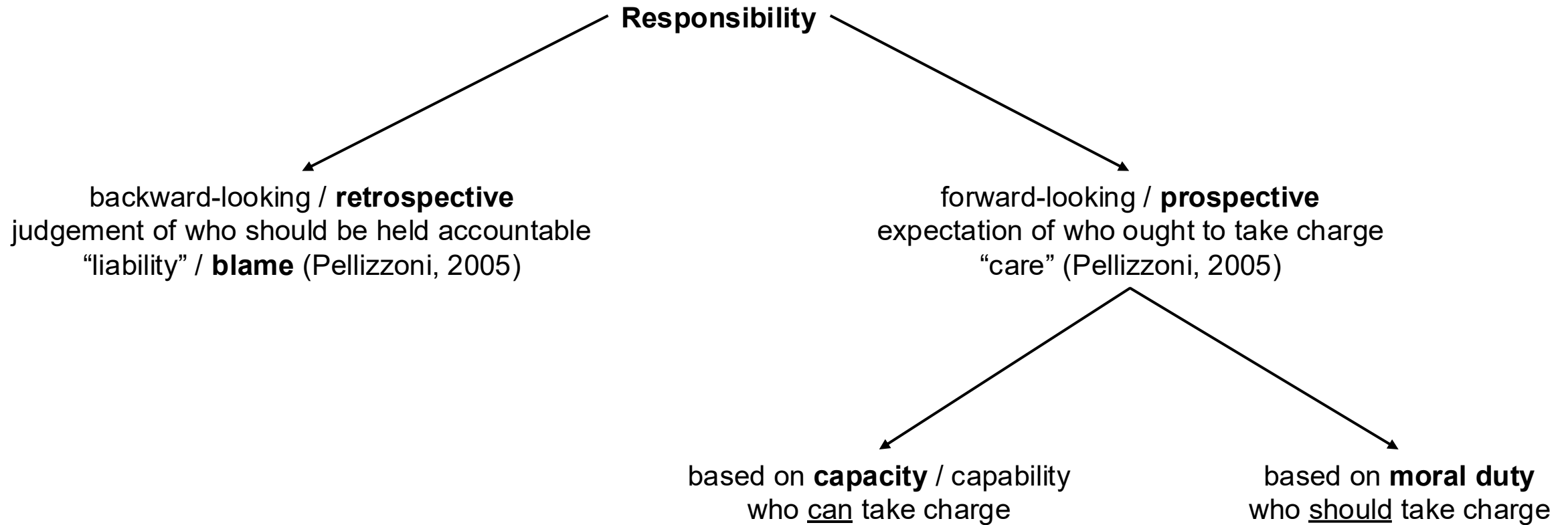
Motivation and Contribution

- Main explanatory variables:
 - **Political trust** = Belief that political institutions / actors will deliver acceptable outcomes without direct oversight.
 - **Social trust** = Expectation that most people, including strangers, will cooperate rather than free-ride.

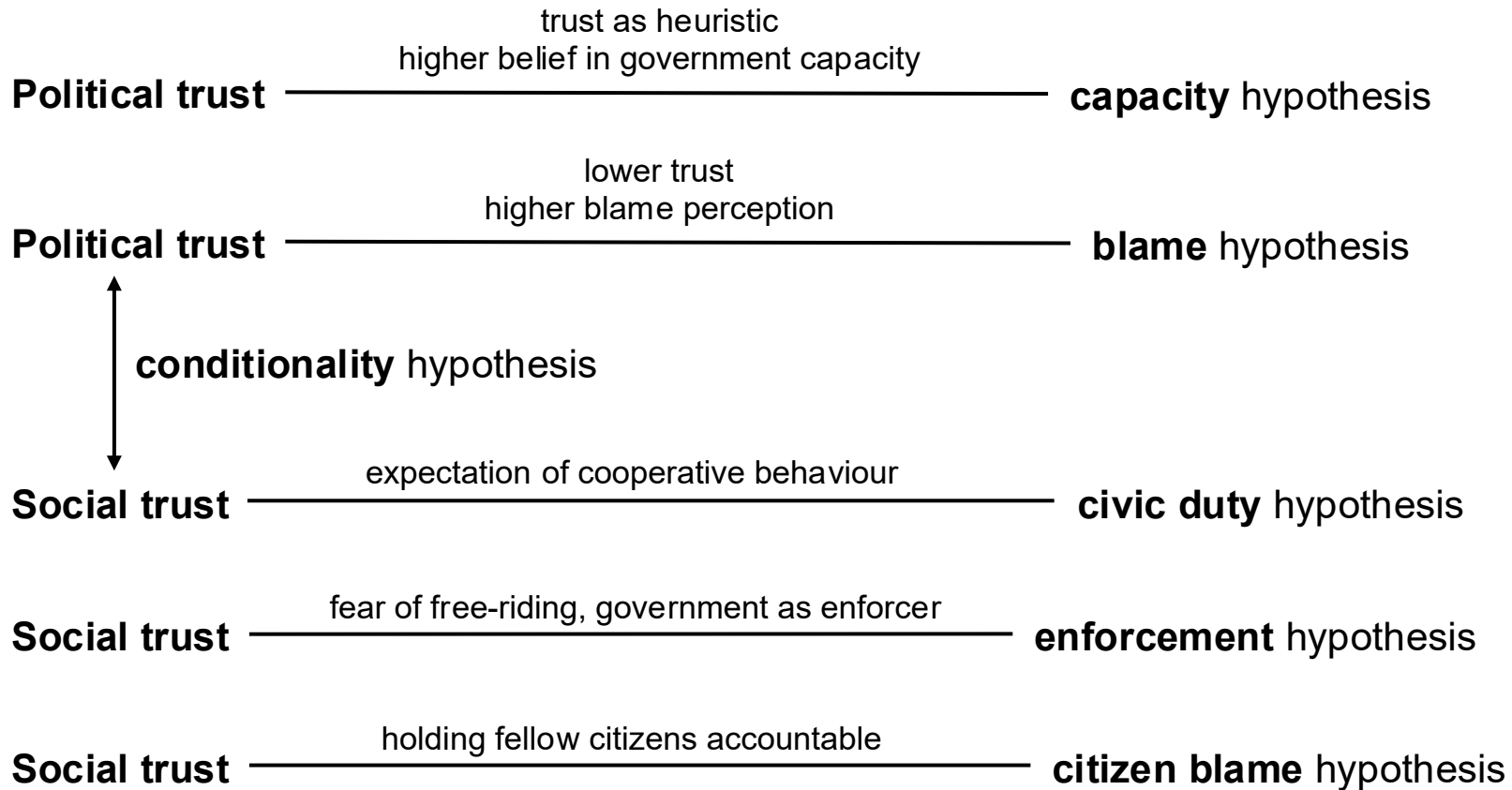
- Trust should matter for responsibility attribution because it relates to:
 - i. how people see the state's role and capacity in public goods provision (**Political trust**).
 - ii. what people expect from fellow citizens (**Social trust**).

- Empirical case: 39 African countries, based on Afrobarometer wave 9 (2021/23).

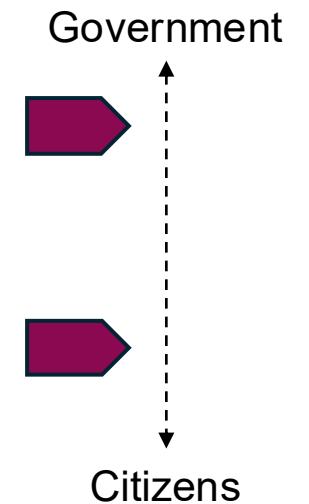
Conceptualisation of Responsibility



Trust and Responsibility Attribution

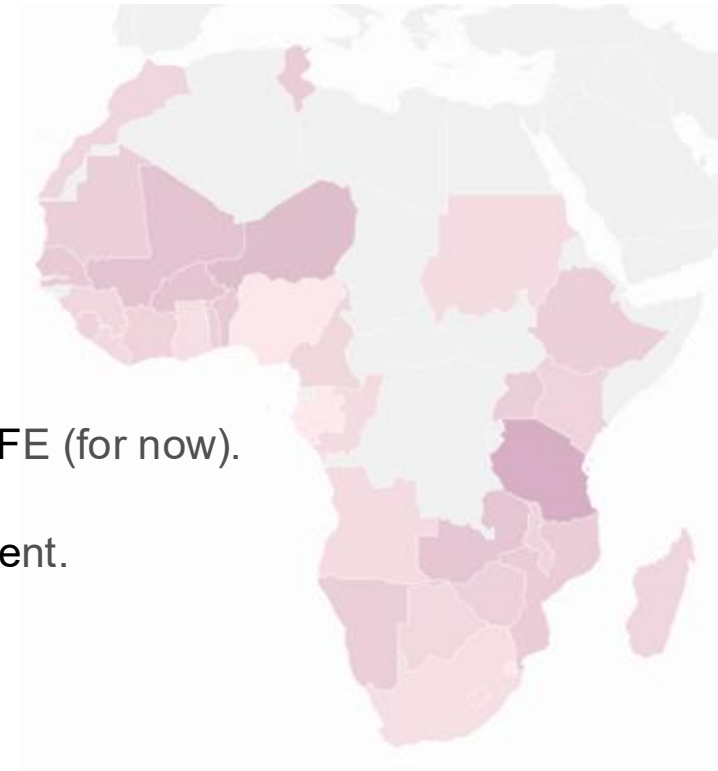


Responsibility

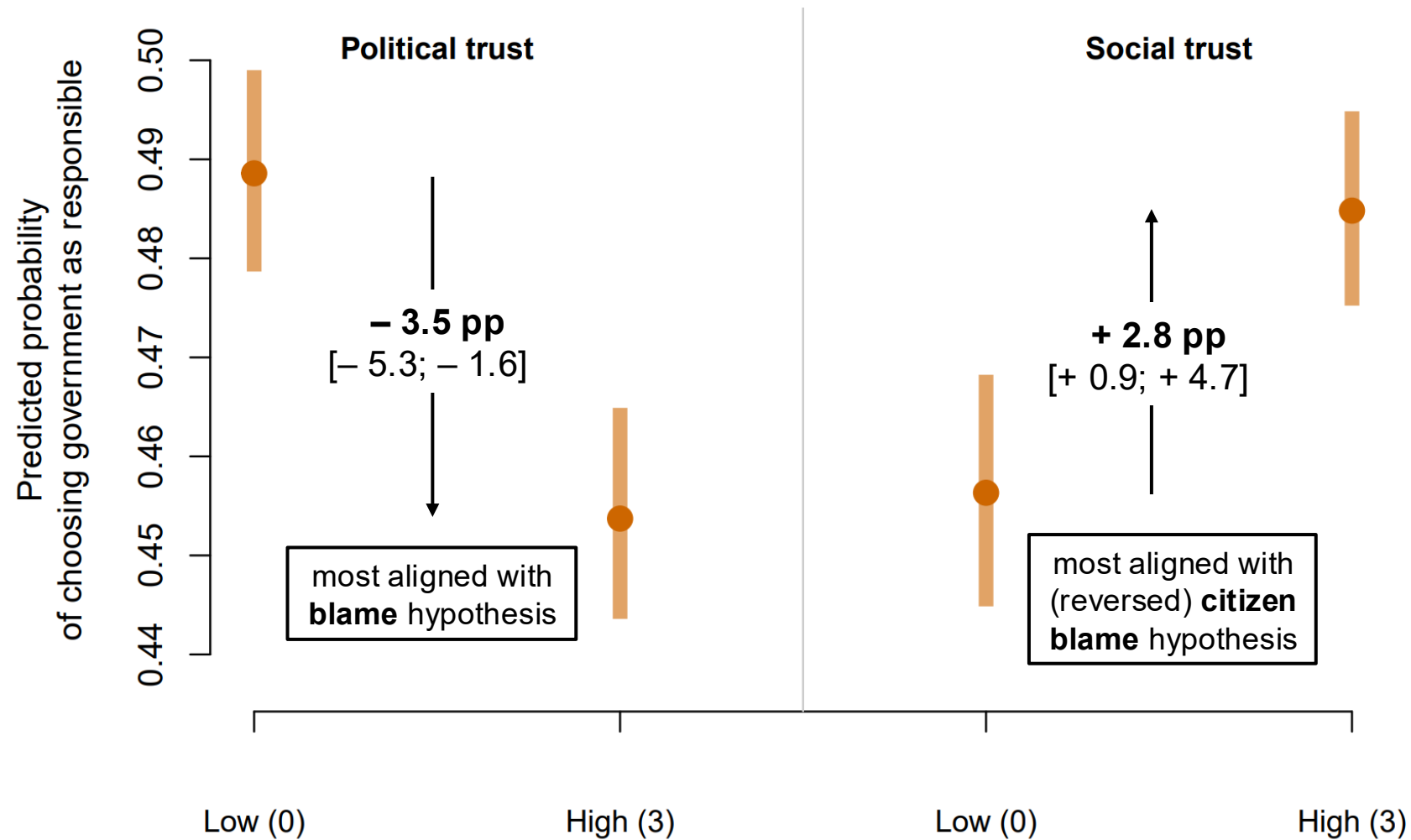


Data and Empirical Strategy

- **Data.** Afrobarometer, Wave 9 (2021-2023), with nationally representative samples for 39 African countries.
- **Dependent variable.** “Who do you think should have the primary responsibility for reducing pollution and keeping your community clean?”
 - Traditional leaders
 - Business and industry
 - Local government
 - The national government
 - Ordinary citizens
- **Main independent variables:** Composite measures for political and social trust.
- **Controls.** Age, gender, educational attainment, occupation, ethnic background. Country FE (for now).
- **Estimation.** Binary logit models, where 1 equals attributing responsibility to the government.

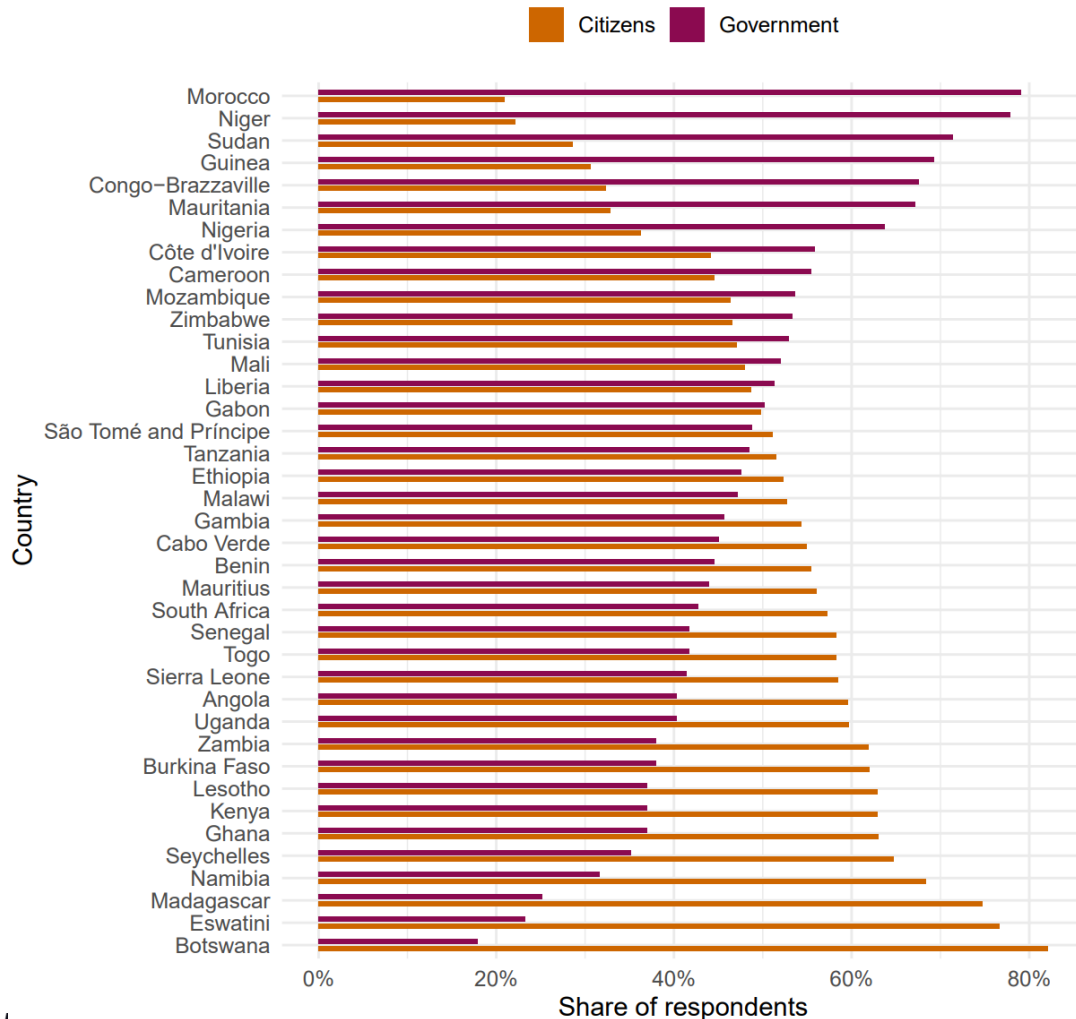


Regression Results – Main Effects in Substantive Terms

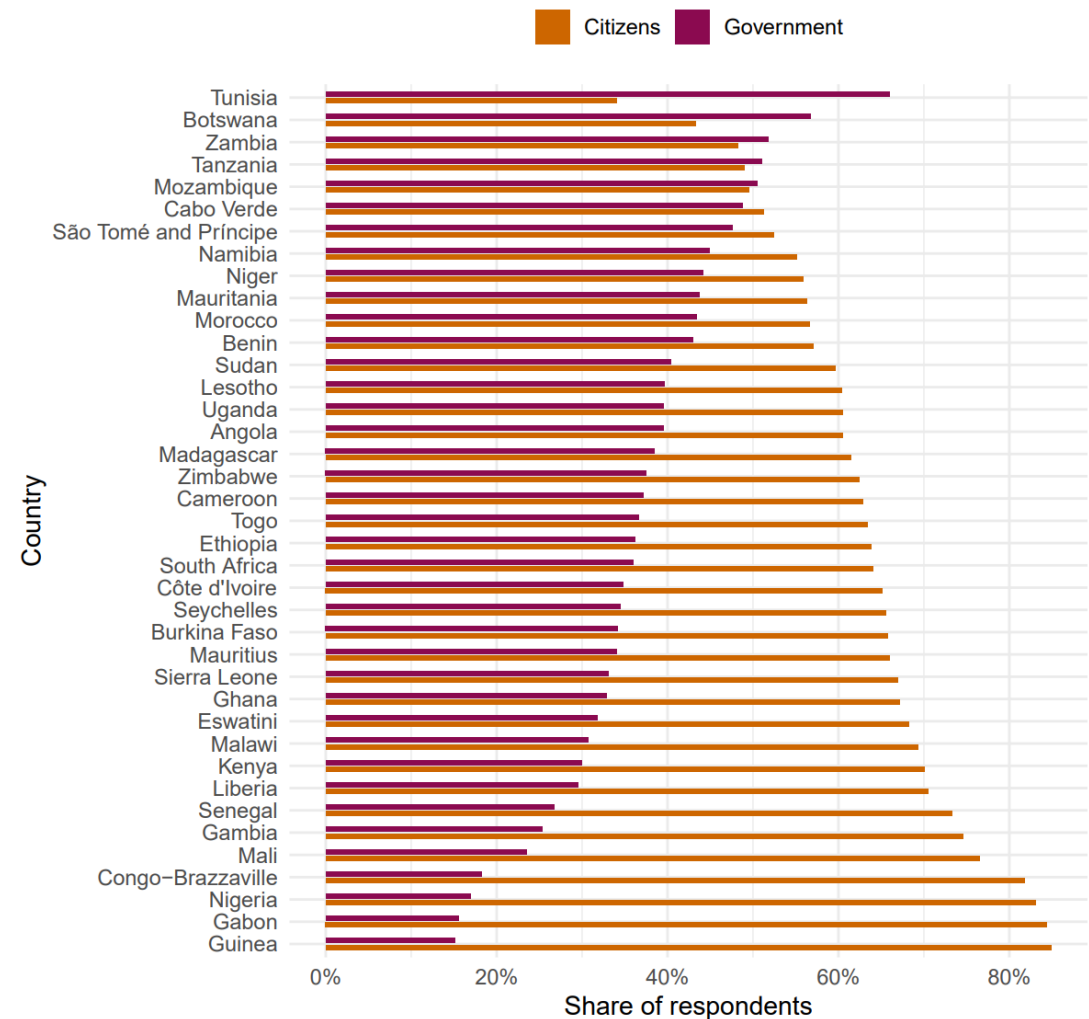


Descriptives

Who is primarily responsible for reducing pollution?



Trust score is higher for ...



Summary and Outlook

- **Key (preliminary) findings:**

1. Higher **political trust** is negatively associated with attributing **responsibility** to the **government** (→ mostly blame hypothesis).
2. Higher **social trust** is positively associated with attributing **responsibility** to the **government** (→ mostly citizen blame hypothesis).

- **Next steps:**

- Identify ways to explore the **mechanisms** (e.g., additional survey items or contextual variables).
- Explore **cross-country heterogeneity**.
- Integrate more literature covering **Majority World perspectives**.

Thank you for your attention!

Ella Henninger
ETH Zürich
Haldeneggsteig 4, 8092 Zurich
ella.henninger@ir.gess.ethz.ch

Appendix

Responsibility attribution: “How do you think should have the primary responsibility for reducing pollution and keeping your community clean?”

- [Traditional leaders; Business and industry; Local government; National government; Ordinary citizens]

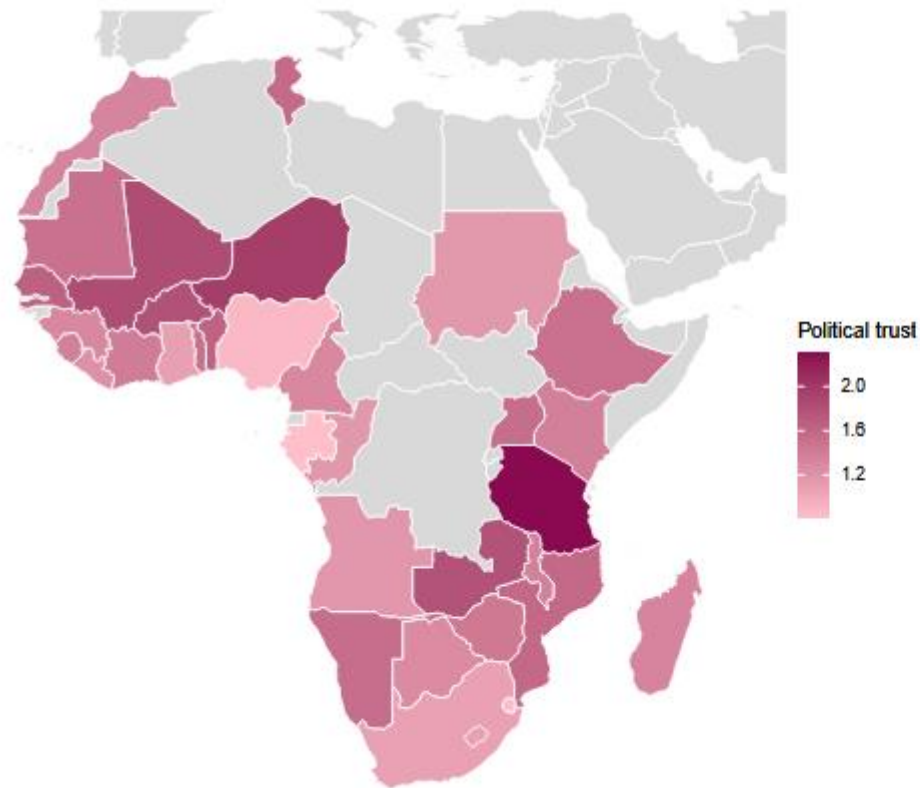
Political trust: How much do you trust each of the following:

- [President, Parliament/national assembly; National electoral commission; elected local government council; Ruling party; Police; Army; Courts of law]

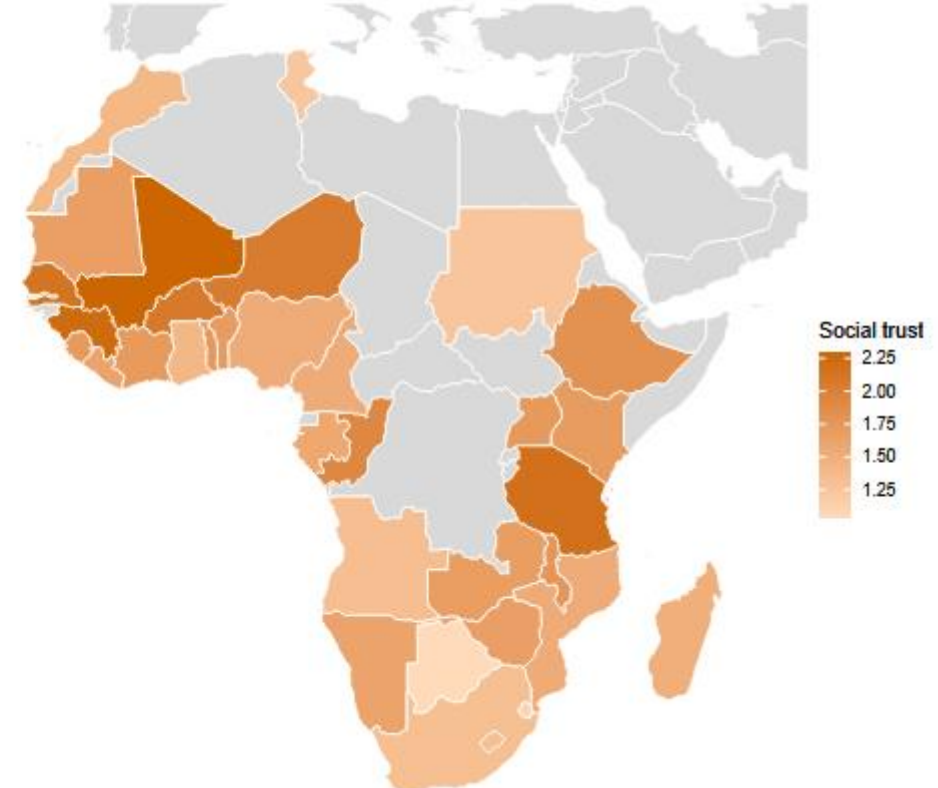
Social trust: How much do you trust each of the following:

- [Other [Kenyans]; Neighbours; Other people you know; People from other religions; People from other ethnic groups]

Appendix

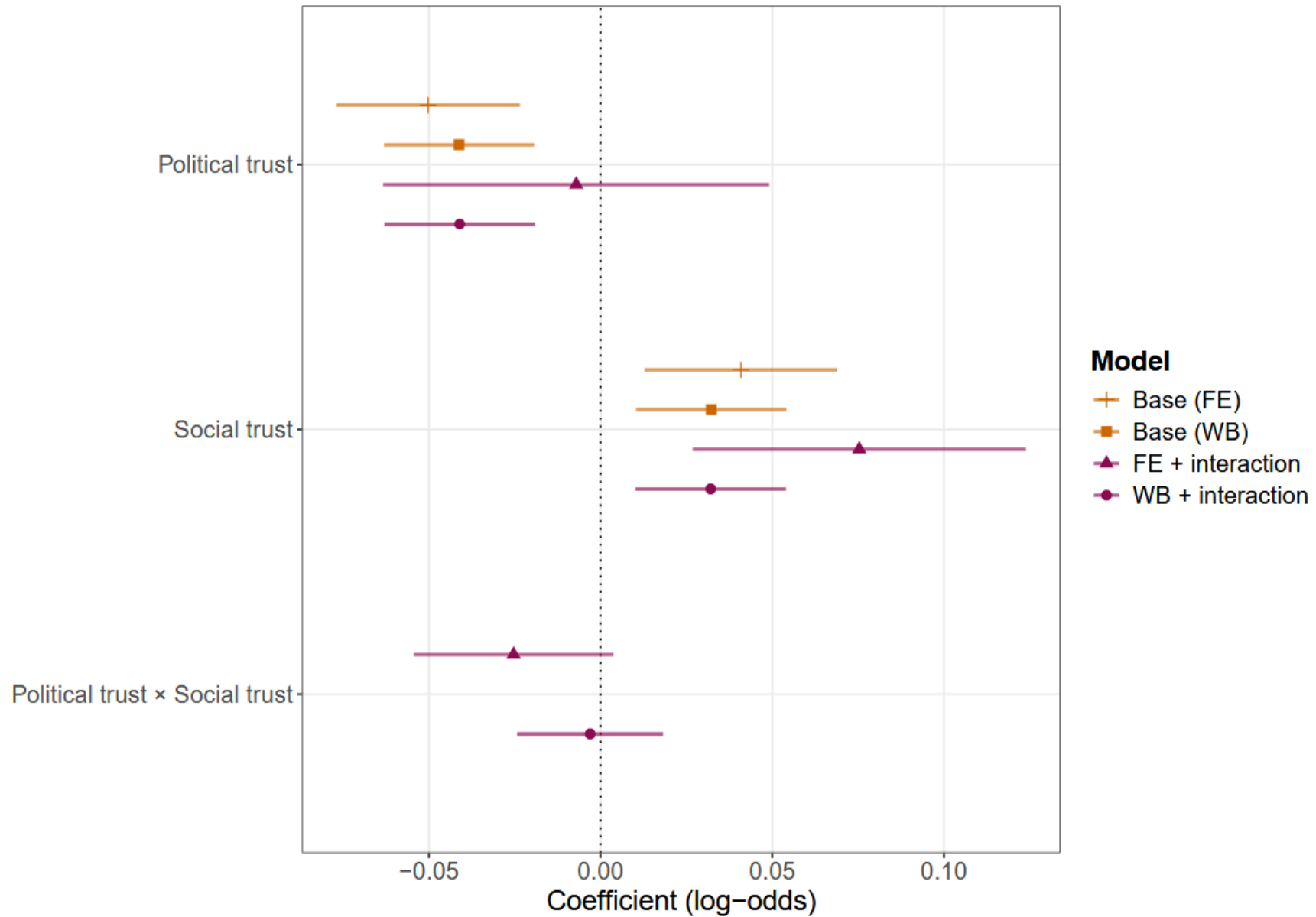


Political trust across 39 African countries

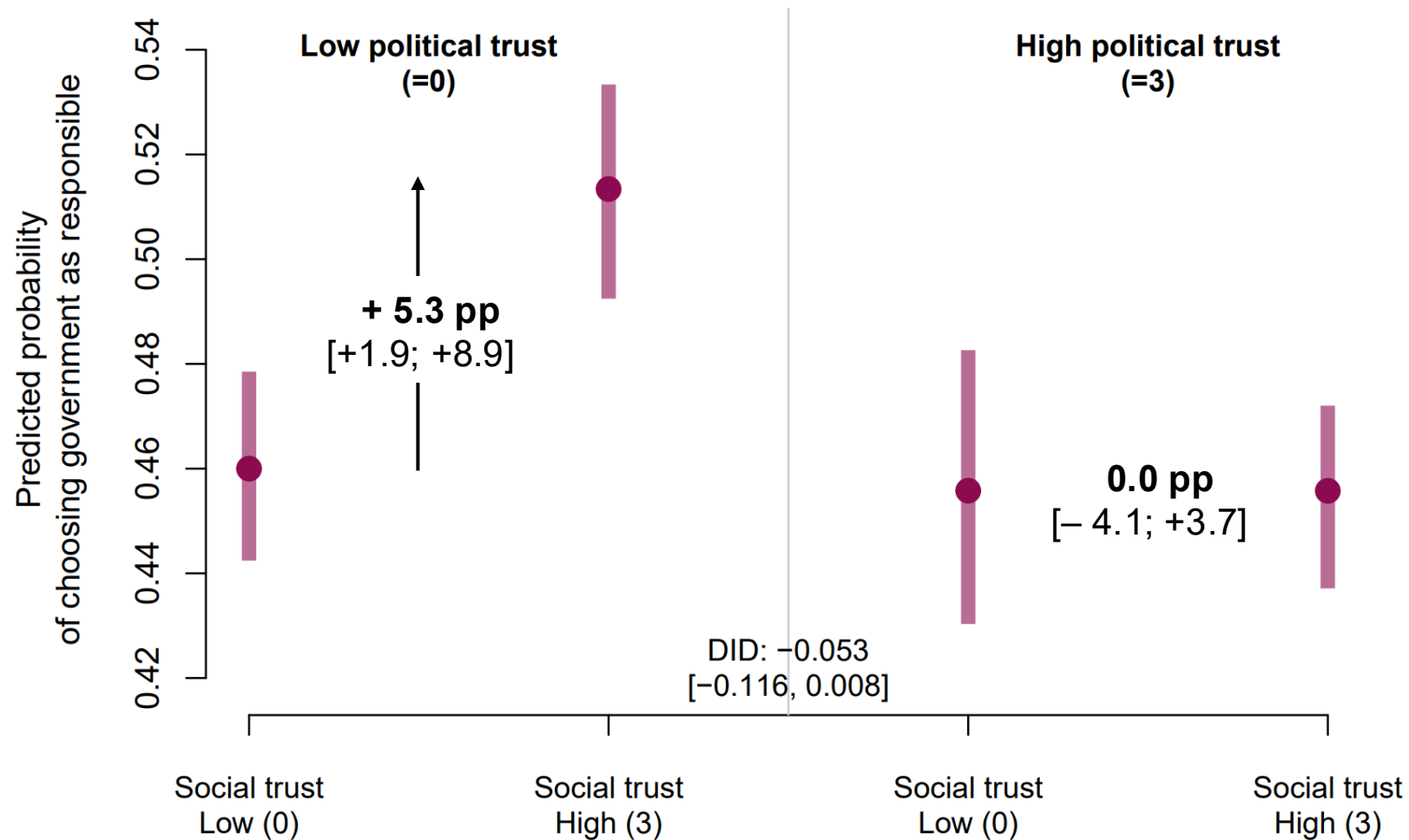


Social trust across 39 African countries

Appendix



Regression Results – Interaction in Substantive Terms



Appendix

Table A1: Political and Social Trust and Government Responsibility - Fixed effects

	Government responsibility			
	Model PT	Model ST	Model PT + ST	Model PT x ST
Political trust	-0.04*** (0.01)		-0.05*** (0.01)	-0.01 (0.03)
Social trust		0.03* (0.01)	0.04*** (0.01)	0.08*** (0.02)
Political x Social trust				-0.03* (0.01)
Constant	0.12 (0.09)	0.03 (0.09)	0.08 (0.09)	0.03 (0.10)
Individual-level controls	✓	✓	✓	✓
Country-level controls	✗	✗	✗	✗
Country FE	✓	✓	✓	✓
AIC	60561.65	60644.00	60527.38	60526.47
BIC	61094.95	61177.38	61069.40	61077.23
Log Likelihood	-30219.83	-30261.00	-30201.69	-30200.23
Deviance	60439.65	60522.00	60403.38	60400.47
Num. obs.	46285	46348	46266	46266

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Appendix

Table A2: Political and Social Trust and Government Responsibility - Within-between effects

	Government responsibility				
	Model PT + ST Within	Model PT + ST Within-between	Model PT * ST Within-between	Model PT * ST both Within-between	Model PT x ST both + c Within-between
Political trust	-0.04*** (0.01)	-0.04*** (0.01)	-0.04*** (0.01)	-0.04*** (0.01)	-0.04*** (0.01)
Social trust	0.03*** (0.01)	0.03*** (0.01)	0.03*** (0.01)	0.03*** (0.01)	0.03*** (0.01)
Political x Social trust			-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)
Country-level					
Political trust		-0.16 (0.35)	-0.16 (0.35)	-0.05 (0.35)	0.40 (0.33)
Social trust		0.40 (0.32)	0.40 (0.32)	0.38 (0.32)	-0.26 (0.32)
Political x Social trust				-0.70 (0.59)	-0.85* (0.50)
Constant	0.00 (0.11)	0.01 (0.11)	0.01 (0.11)	0.08 (0.12)	0.09 (0.10)
Individual-level controls	✓	✓	✓	✓	✓
Country-level controls	✗	✗	✗	✗	✓
Country FE	✗	✗	✗	✗	✗
AIC	60674.88	60677.14	60679.06	60679.67	60673.64
BIC	60893.43	60913.17	60923.84	60933.20	60962.14
Log Likelihood	-30312.44	-30311.57	-30311.53	-30310.84	-30303.82
Num. obs.	46266	46266	46266	46266	46266
Num. groups: country_name	39	39	39	39	39
Var: country_name (Intercept)	0.41	0.39	0.39	0.37	0.26

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Appendix

Table A3: Political and Social Trust and Government Responsibility - Multinomial

	<i>Dependent variable: Responsibility attribution (Reference cat: Citizens)</i>							
	Other	Gov't	Other	Gov't	Other	Gov't	Other	Gov't
Political trust	0.031 (0.022)	-0.038*** (0.013)			0.025 (0.023)	-0.050*** (0.014)	0.096** (0.047)	-0.003 (0.029)
Social trust			0.028 (0.023)	0.028** (0.014)	0.020 (0.024)	0.043*** (0.014)	0.078* (0.041)	0.081*** (0.025)
Political x Social trust							-0.042* (0.025)	-0.028* (0.015)
Constant	-1.729*** (0.136)	-0.287*** (0.082)	-1.731*** (0.137)	-0.373*** (0.083)	-1.751*** (0.138)	-0.335*** (0.084)	-1.842*** (0.147)	-0.394*** (0.089)
Akaike Inf. Crit.	91,016.330	91,016.330	91,152.900	91,152.900	90,971.930	90,971.930	90,971.280	90,971.280

Note:

* p<0.1; ** p<0.05; *** p<0.01

Appendix

