Stefanie Cipriano Roost

# The Cost of Division

## Essays on Political Economy, Social Cohesion, and Public Policies

**PROPOSITIONS**

accompanying the PhD dissertation

# The Costs of Division

## Essays on Political Economy, Social Cohesion, and Public Policies

Stefanie Cipriano Roost

1. "Restoring human dignity to its central place [...] sets off a profound rethinking of economic priorities and the ways in which societies care for their members, particularly when they are in need." (Abhijit Banerjee & Esther Duflo, *Good Economics for Hard Times*, 2019, p. 20)

2. Social cohesion and policy are mutually reinforcing at every stage of the policy process. (Impact)

3. The crisis of trust poses two challenges to policy acceptance: one related to views on institutions and one to expectations about other citizens. Those two dimensions interact, but their nature and effects cannot be equated. (Chapter 2)

4. Improving local bureaucracy can help governments navigate political fatigue and uncertainty, while directly addressing one of the roots of mistrust. (Chapter 2)

5. "New policies create new politics" (Schattschneider, 1935)

6. Effective policy design requires as much deliberation about who is left out as about who is brought in. (Chapters 3 and 4)

7. The political case for universal transfers cannot assume that new beneficiaries will reciprocate with greater support for redistribution. Material gain, on its own, is not a sufficient condition. (Chapter 4)

8. Preferences are grounded in misperceptions that persist because people filter their view of the world through political narratives and resist acquiring information that threatens their self-identity. (Alesina, Miano, Stantcheva, 2020; Benabou, Tirole, 2011)

9. "The reading of the world precedes the reading of the word, such that the subsequent reading of the latter cannot do without the ongoing reading of the former" (Paulo Freire, *The importance of the act of reading*, 1989, p. 3)

10. "If the sun refuses to rise, we will make it rise." (Chimamanda Ngozi Adichie, *Half of a Yellow Sun*)

# The Cost of Division

## Essays on Political Economy, Social Cohesion, and Public Policies

Stefanie Cipriano Roost

2026

© Stefanie Cipriano Roost, Maastricht 2026
Published by Maastricht University Press
ISBN: 978-94-6534-393-8
This book was typeset by the author using LaTeX
Cover by Wendy Schoneveld
Printing: ProefschriftMaken, De Bilt, Netherlands

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission in writing, from the author.

# The Cost of Division

## Essays on Political Economy, Social Cohesion, and Public Policies

DISSERTATION

to obtain the degree of Doctor at Maastricht University,
on the authority of the Rector Magnificus, Prof. Dr. Pamela Habibović,
in accordance with the decision of the Board of Deans,
to be defended in public on Wednesday 20 May 2026, at 16:00 hours

by

Stefanie Cipriano Roost

**Supervisors**

Prof. Dr. Franziska Gassmann, UNU-MERIT/Maastricht University, the Netherlands
Dr. Kaj Thomsson, Maastricht University, the Netherlands

**Assessment Committee**

**Chair**

Prof. Dr. Eleonora Nillesen, UNU-MERIT/Maastricht University, the Netherlands

**Members**

Prof. Dr. Guilhem Cassan, University of Namur, Belgium
Dr. Stephan Dietrich, UNU-MERIT/Maastricht University, the Netherlands
Dr. Giulia Piccillo, Maastricht University, the Netherlands
Prof. Dr. Mariano Tommasi, Universidad de San Andrés, Argentina

# Acknowledgments

Finishing the PhD marks the end of a journey of discovery that my younger self never imagined would bring me here. From doubting my skills in the Social Sciences and being certain I would become a medical researcher, to shifting to the fascinating world of International Relations, then back to Biomedicine, and back again to International Relations, to private sector project management, with a brief detour through Gastronomy somewhere along the way - understanding I am doing what I am supposed to be doing did not come easily to me. As I write these lines, the world of research and development faces serious challenges; nonetheless, looking back to the past almost six years, I am truly happy I chose this path and how I grew along the way.

Picturing the moment I would be writing this acknowledgements section was among the things that motivated me through a few bumps along my PhD trajectory. If others reading this are like me, I suspect this will be, by far, the most-read section of my dissertation. But I am glad if it is: these pages are filled with memories and brilliant people who, directly or indirectly, helped me get where I am now.

My first thanks go to my supervisors, Prof. Dr. Franziska Gassmann and Dr. Kaj Thomsson, for their support throughout my journey. Franziska, thank you for the trust you placed in me. In year one of the PhD, you accepted my invitation to join my supervisory team, after only a couple of online meetings and before we had even met in person. I am very grateful to you for believing in me, and for always challenging me, while helping me remain pragmatic. Kaj, in 2019, I walked into your office for what I thought would be a temporary research assistantship, but in our first chat, it was already clear, despite your Swedishness, how much our interests aligned. You were there for me not only as a supervisor, but also as a colleague and mentor, interested in my professional development and in my life outside research. This meant routinely scheduling 2-hour (and often longer) meetings to ensure we had enough time to cover it all: research, general updates about life, and discussions about the world, all of which I always welcomed and enjoyed. Thank you for always having a door open or a phone call ready.

I would also like to thank the members of my assessment committee: Prof. Dr. Eleonora

Nillesen, Prof. Dr. Guilhem Cassan, Dr. Stephan Dietrich, Prof. Dr. Mariano Tommasi, and Dr. Giulia Piccillo. Thank you for taking the time to read this dissertation and for your insightful comments, which improved this thesis. My gratitude also extends to Dr. Elias Tsakas for joining the defence as part of the Corona.

"I will study a Research Masters, but I will not do a PhD". These were my words when moving to the Netherlands in 2018. Two years later, being back in a research environment reminded me how much I enjoyed pursuing knowledge, and it changed my mind. And I am deeply happy it did. Because of this, I had the opportunity to interact with and learn from many great researchers I would not have met otherwise: Robin Cowan, Neil Foster-McGregor, Eleonora Nillesen, Melissa Siegel, Bernardo Caldarola, Bruno Martorano, Stephan Dietrich, Hampton Wong, Fabiana Visentin, Tommaso Ciarli, and Tatiana Skripka. Thank you for contributing to my growth as a researcher over the years, whether through structured channels like classes and presentations, projects, or simply over coffees and informal talks. I also extend my gratitude to Carlos Scartascini for his input and for giving me the opportunity to contribute to his data collection, which made Chapter 2 possible.

Special thanks to Herman for photographing my defence and, even more, for his invaluable technical support and endless patience with my questions about issues that often turn out to be very simple. Ingeborg, thank you for connecting us to Maastricht through your kind smile and your music! Thank you, Soha and Julia, for the guidance through the defense stage. Micheline, you have my deepest gratitude for your dedication as the PhD director. I know it was difficult at times, but you made me (and, I am sure, other PhDs too) feel heard. Thank you for valuing us and for the talks when I needed them.

As someone interested in the political economy of development, I constantly navigate between the worlds of economics and political science. In 2024, I had the opportunity to do a research visit at the Quality of Government Institute in Gothenburg, where I had the privilege of experiencing research from the other side. *Tack* to all QoG researchers for hosting me, for the fikas, lunches, and the interest in my research. Special thanks to Monika Bauhr, Victor Lapuente, Frida Boräng, and Anna Persson. I look forward to our research paths crossing again.

I also want to thank my colleagues at IDOS for making the end of my PhD smooth and for their continued support throughout the final steps, both practical and emotional. Markus, Francesco, Tekalign: I am extremely grateful to have found such an engaging team to work with. Thank you for welcoming me so warmly and for the work collaboration. Daniele, Charlotte, and Franco, thank you for lending a friendly shoulder during the final stretch of my doctorate.

People often say a PhD is a lonely journey. However, throughout these years, people around me have gone from strangers to colleagues, and from colleagues to friends. With them, I share memories of games in sunny parks, parties, lunch breaks, throwing pebbles into the hole, football-watching-beanie-knitting sessions, and without them, this period would have been undeniably more challenging.

First of all, to Teresa and Fabi, my amazing paranymphs. Teresa, I guess I was proven wrong about that German IB-SBE girl back in 2020, who quickly became my complementary yellow piece to share this great journey with. During the past years, we went through some (alternating) crying moments, but our days were also filled with so much laughter. Thank you for those. Also for the sometimes useful, but mostly failed, brainstorming sessions; for the endless chats about the PhD and life's nonsense; for liking abacaxi and disliking vermelho; and for becoming such a special person to me. Fabi, my dear friend who brings a bit of the feeling of home wherever I am. Thank you for the office coffees with crosswords and the online coffees with drama; for eating my failed sourdough loaves and even complimenting them, and for being the one who actually, and proudly, wears my beanies. For hearing my complaints and for trusting me with yours and for being there for so much more than work. I am so excited to see which corners of the world our friendship visiting tradition will take us to in the years to come.

In September 2020, I embarked on a journey that took an unexpected turn. Shortly after we started our courses, Maastricht entered a harsh lockdown, and the world felt like an alternative reality. However, I was lucky to have amazing people with me during that time. Teresa, Manisha, Tarek, Mercedes, Antônio, Rodrigo, Yağmur, Trang, George, and Negash - my 2020 PhD cohort. Covid-19 isolated us in our houses, under pressure to define our research and adjust to a new chapter in life, all while worrying about our loved ones back home. Even though we had never met before, we were there for each other and made it through together (despite a tiny collective breakdown along the way). I look at each of you and am so proud of the journeys you have taken.

Mercedes, you arrived in Maastricht with one suitcase too few, but many smiles (not) too many, as you always have! We shared a Covid bunker, laughs, theoretical frameworks on the fridge, admiration for Pepe, infamous Jumbo Primitivos, 11 am Champagne, and foot blisters from the Belgian coast. I know we will share many memories in the future. Tarek, you are such a needed energy in our lives. From the beginning of the PhD, you always reminded us that so much else in life is more important, and now more than ever, we need to remember that. I truly admire your values and resilience, and hope that friendships based on mutual enjoyment of weird Scandi movies are even half as strong as you. Manisha, thank you for organising conferences with me, for watching (or judging) Sima Taparia, for loving hairy cows, for the tiny wines, and for being my friend and

my 0.04% cousin. Antônio, even though your intelligence moved you away from the Netherlands and us early on, sharing the first years of the PhD (and of anxiety) with you was such a joy. I miss you - thanks for not disappearing and not letting me do it either. Rodrigo, although you are not even a real Brazilian, your kindness and helpfulness make you such a special person; thank you for always sharing those with me.

Amidst the Dutch greyness, a particular group of Brazilians, real or honorary ones, brought lightness to Maastricht. Rafa, Yannick, Fabi, and Teresa, we managed to make the PhD funnier by sandwiching research between necessary odd debates and jokes. Rafa: sharing the occasional couple (or more) beers made the days lighter. Thank you for being polite when humiliating us at the crosswords, and for failing to enlighten me about football. Yannick, I am so grateful to have such a sweet friend who is there when we need him (I still remember the migraine medicine!), who selflessly finishes pink gins, and, above all, who shares a sharp eye for fashion and the supremacy of denim-on-denim.

Even though the quest has not been easy, I am proud of the stamina of all the PhD representatives who came before and after me. Together, we made small but important achievements, and even though there is still a long road ahead, I am sure the community we built will steadily move us forward. Praachi and Flor, I am happy to have gone through our turn together. Flor, the most Brazilian Argentine, thank you for all the support and friendship from the very beginning. Praachi, thank you for being my comrade in TV shows of dubious quality, NYT and boardgames, and natural wines.

Alex, with you, I have some of the best laughs. Thank you so much for being a friend I can always count on, from White Lotus watch parties to moving countries. Maisha, our chats about cosmic sociology, skincare, and the dismantling of patriarchy are always reinvigorating and a much-needed escape from the weight of the PhD. Gulj, thank you for bringing hygge to my life in Maastricht with the morgonfika at Hermans and the office coffees with chats. Job, you are one of the kindest souls I have met. Thank you for always being so thoughtful (and for taking on the role of our Dutch translator and news correspondent). Soha, your love, which you channeled in your amazing get-togethers, hugged my soul. Tobi and Sneha, thanks for always having a positive outlook and bringing lightness to us. Karthika, thank you for filling the room with excitement for even the smallest things (and for Stefanie Marie). Max, thanks for being my Lumiere buddy and for the unofficial flatmate periods. Thank you also to Mario, Cristina, Ana, Ceci, Conrad, Nathalia, Davide, Michelle, Chen, Paun, Maria, Marijo, Victor, Lalaine, Julieta, Matilde, Lorena, Raquel, and many others who made the PhD sweeter.

Beyond my UNU-MERIT community, I am supported by an amazing network from Brazil. Leon, my Paulista-Nordestino-Danish anxious twin. Thanks for all the many years of laughters, wines with endless talks, hearing about my doubts (PhD or not), and for being

my family, whether in my neighbourhood or on another continent. Rafael, thank you for reminding me of my worth when we are together. Even if years go by without seeing each other, knowing you are less than a country away makes living here easier. Ana Bia, since the years in our Pinheiros flat, you have shown great strength in facing adversity. I admire you deeply, both as a friend and as a scholar. Gabriel, a sweet soul in a 2m frame, thank you for your affection and for sharing my excitement about economics. Clara and Ju Pucci, thank you for being dear friends and making Europe feel homely. Carol and Iri, who are only outranked by my family in how long they have known me. Thank you for having me in so many seasons of your lives.

As a true Latin American, my family is a big part of who I am and where I am today. My grandparents, Marly and Joaquim Cipriano, who always believed in the power of knowledge and learning. The start and end of my PhD were sadly marked by your absences, but your love was always felt despite the distance: from opposite ends in Brazil, from a different continent, and now from a different dimension. I also have the honour of being surrounded by strong women in my family who inspire, encourage, and motivate me. Tia Maninha, tia Rosana, e Verônica: admiro a força de todas vocês, vocês são uma inspiração pessoal e profissional para mim. Obrigada especial pra minha dinda por celebrar todas as minhas conquistas como se fossem suas próprias, e à tia Maninha, minha parceira das atividades manuais, por sempre ser uma fonte de conforto. Obrigada, tio Zé Vicente, por todo o carinho, por entender e sempre me lembrar que temos que nos definir para além da pesquisa. Obrigada às minhas primas e primos Carol, Francisco, Daniel, Lucas, e Madu pelas memórias tão boas, e por serem uma força e ajudarem a navegar dificuldades emocionais na vida, principalmente nesses anos recentes.

To my Roost family in Europe. Selvom vi kom reelt ind i hinandens liv lidt senere end traditionelt, da har I vundet en så vigtig plads i mit hjerte. Trille og Lulu (samt Lucy må jo ikke glemmes!), tak fordi I bød mig velkommen ind i jeres liv med et varmt kram. Fra dengang vi mødtes i 2011, da fik I mig til at føle, at jeg havde en oprigtig støtte samt en nærværende familie på denne side af havet. I fik København til at føles som værende hjemme. Også mange tak til Helle for at deltage! Jeg vil gerne have I skal vide, hvor meget det betyder for mig, tusind tak. Farfar og Sys, jeg er overbevist om, at vi ville have haft mange interessante samtaler om emnerne for denne afhandling (og i betragtning af vores brede og mangfoldige akademiske interesser, da ville Sys og jeg nok være fortsat meget længere endnu!). I er begge i mine tanker og bliver mindet med stor kærlighed.

And to the ones who made everything possible. To my Cipriano Roost family, without your love, support, and investments, including in my education, I would not be here. Far, lige siden jeg var lille, da har du altid troet på min uafhængighed og lært mig at gå efter de ting, jeg ønskede (selvom lektien nogle gange var lidt svær). Tusind tak fordi du har

opdraget mig til at stå på egne ben samt møde verden med åbent sind. Tak også fordi du bliver ved med at minde mig om, at jeg altid har din støtte, uanset hvornår eller hvor i verden jeg befinder mig. Deborah, a pessoa que melhor entende a leveza dos cabelos que ficam e dos filmes que param, mas também a dificuldade de ter duas (ou mais) casas, raízes, e algumas versões de vida, e as dúvidas que vêm disso. Obrigada por esses anos de cumplicidade, e muitos mais que vieram antes e que ainda virão. Mãe, muito obrigada por acompanhar sempre com alegria o meu caminho, que me levou a construir uma vida longe de vocês, apesar disso ser algo que você não necessariamente visualizava. Obrigada pela curiosidade em aprender sobre minha vida, e por sempre estar presente e torcer por mim, mesmo quando meus obstáculos e conquistas profissionais eram coisas desconhecidas para você. Obrigada por me apoiar a me reinventar, e por se permitir isso também.

And lastly, I want to thank myself. For the versions of myself I left along the way, and for the ones I found. Thanks for facing the obstacles and making the journey worth it.

# Contents

**Acknowledgments** **i**

**List of Tables** **5**

**List of Figures** **6**

**1 Introduction** **7**

1.1 Research topic . . . . . 8

1.2 Research questions and the theory of social cohesion . . . . . 14
1.2.1 Social cohesion as a multidimensional concept . . . . . 15
1.2.2 Zooming in on trust . . . . . 18

1.3 Research gaps and contributions . . . . . 24
1.3.1 Study 1: Social cohesion and social resilience . . . . . 24
1.3.2 Study 2: Populism and social cohesion . . . . . 27
1.3.3 Study 3: Welfare policies and Social cohesion . . . . . 33

1.4 Structure of the dissertation . . . . . 38

**2 In trust we reform?** **41**

2.1 Introduction . . . . . 42

2.2 Methodology . . . . . 47
2.2.1 Survey overview . . . . . 47
2.2.2 Data description . . . . . 51
2.2.3 Empirical strategy . . . . . 54

2.3 Results . . . . . 56
2.3.1 Main results . . . . . 56
2.3.2 Extensions . . . . . 59
2.3.3 Robustness checks . . . . . 81

2.4 Conclusion . . . . . 86

Appendices . . . . . 88

2.A Supplementary material . . . . . 88

2.B Survey questionnaire . . . . . 105

**3 Brazil above everything.** **107**

3.1 Introduction . . . . . 108

3.2 Theoretical framework: Economic vs cultural forces . . . . . 111

3.2.1 Economic insecurity . . . 111
3.2.2 Cultural backlash . . . 114
3.2.3 (Bad) politics, as usual... . . . 117
3.3 Methodology . . . 119
3.3.1 Data: The Brazilian electoral study . . . 119
3.3.2 Empirical strategy . . . 120
3.4 Results . . . 126
3.4.1 Main Results . . . 126
3.4.2 Heterogeneous effects: Switchers and Radicalized . . . 130
3.4.3 Extensions . . . 132
3.4.4 Robustness checks . . . 136
3.5 Discussion and conclusion . . . 142
Appendices . . . 146

**4 Who gets what, and who gets resentful. 165**

4.1 Introduction . . . 166
4.2 Background . . . 168
4.3 Methodology . . . 170
4.3.1 Data: The Polish panel survey . . . 170
4.3.2 Empirical strategy . . . 172
4.4 Results . . . 178
4.4.1 Main results . . . 178
4.4.2 Heterogeneous effects . . . 181
4.5 Robustness analysis . . . 183
4.6 Discussion and conclusion . . . 186
Appendices . . . 191
4.A Annex . . . 191
4.B Supplementary material . . . 202

**5 Conclusion 213**

5.1 Main findings and policy implications . . . 214
5.1.1 More than a sum of the parts . . . 218
5.2 Open questions and Future Directions in Research . . . 220

**Bibliography 225**

**Summary 259**

**Impact paragraph 267**

**About the Author 271**

**Dissertation Series 272**

# List of Tables


2.1 Treatment arms: Policy Option A text . . . . . 51
2.2 Summary statistics and randomization balance . . . . . 53
2.3 Summary statistics: main variables . . . . . 54
2.4 Main results: Choice between A and B, Relative to Indifference . . . . . 58
2.5 Extensions: Interaction model . . . . . 61
2.6 Extension: Support for Option A (flexible) . . . . . 64
2.7 Extension: Support for Option B (rigid) . . . . . 65
2.8 Heterogeneity: Main Results restricted matched sample . . . . . 69
2.9 Heterogeneity: subnational governance characteristics . . . . . 70
2.10 Heterogeneity: national governance characteristics . . . . . 71
2.11 Extension: Others preferences - comparison main results . . . . . 78
2.12 Extension: Own preferences and second order beliefs . . . . . 79
2.13 Extension: Second order beliefs: behavior expectations mechanism . . . 80
A2.1 Ordered Logit: Support for Option A (flexible) - Interaction model . . . 88
A2.2 Ordered Logit: Support for Option B (rigid) - Interaction model . . . . 89
A2.3 Heterogeneity according to local characteristics: Interaction model . . . 90
A2.4 Heterogeneity according to local characteristics: Absolute support for A and B . . . . . 91
A2.5 Heterogeneity according to local characteristics (country-level median): Baseline model . . . . . 92
A2.6 Heterogeneity according to local characteristics (country-level median): Absolute support for A and B . . . . . 93
A2.7 Extension: Others prefernces - any treatment . . . . . 94
A2.8 Robustness: alternative political trust measures . . . . . 95
A2.9 Robustness: Country sensitivity, Baseline model . . . . . 96
A2.10 Robustness: Country sensitivity, Interaction model. . . . . 97
A2.11 Robustness: Generalized Ordered Logit . . . . . 98
A2.12 Robustness: 5 categories outcome variable . . . . . 99
A2.13 Robustness: 3 trust levels: No trust, Some trust, and High trust. . . . . 100
A2.14 Robustness: Future discount . . . . . 101
A2.15 Robustness: Excluding speeders and slow respondents . . . . . 102
A2.16 Robustness: Attention check . . . . . 103

A2.17 Robustness: treatment intensity and wording effects . . . . . 104

3.1 Summary Statistics - pro-Bolsonaro votes . . . . . 119
3.2 Results: Controls . . . . . 127
3.3 Results: Economic insecurity and Cultural backlash hypothesis . . . . . 129
3.4 Comparison between 2014 PT voters and 2014 non-PT voters . . . . . 130
3.5 Results: Extension - Switchers and Radicalized . . . . . 131
3.6 Results: Indirect effect . . . . . 135
A3.1 Main independent variables used in the study . . . . . 146
A3.2 Summary Statistics - Controls . . . . . 148
A3.3 Summary Statistics - Main variables . . . . . 148
A3.4 Correlation matrix . . . . . 149
A3.5 Indirect effect: Institutional attitudes . . . . . 151
A3.6 Robustness: Political knowledge . . . . . 152
A3.7 Robustness: Sociotropic concerns . . . . . 153
A3.8 Robustness: Interaction Economic insecurity and Cultural Attitudes . . 154
A3.9 Difference: Spontaneously reported income and only reported income bracket . . . . . 155
A3.10 Different income variables: continuous (per capita) income . . . . . 156
A3.11 Robustness: Religion and religiosity . . . . . 157
A3.12 Vulnerability measures . . . . . 158
A3.13 Robustness: Democratic attitudes . . . . . 159
A3.14 Robustness: Geographic control: Macroregion, state and mesoregion within-variance . . . . . 160
A3.15 Robustness: probit estimations . . . . . 161
A3.16 Robustness: Alternative clustering . . . . . 162
A3.17 Robustness: Different rounds and samples . . . . . 163
A3.18 Economy vs culture: the 2014 vote . . . . . 164

4.1 Summary statistics: Demographics. Balanced Sample . . . . . 171
4.2 Summary statistics: outcome variables per wave . . . . . 176
4.3 Categories of households . . . . . 178
4.4 Effects of the Family 500+ introduction . . . . . 180
A4.1 Redistributive attitudes: description . . . . . 191
A4.2 Tax schedule preferences . . . . . 192
A4.3 Heterogeneous effects: Gender . . . . . 192
A4.4 Heterogeneous effects: Rural - Urban . . . . . 193
A4.5 Heterogeneous effects: Education . . . . . 193
A4.6 Heterogeneous effects: Determinant of success: Hardwork . . . . . 194

A4.7 Heterogeneous effects: If something goes wrong with life, whose fault is it? . . . 194
A4.8 Index breakdown: Input variables . . . 195
A4.9 Specification 2: Breakdown 0 children and low-income categories . . . 196
A4.10 Specification 3: Further income breakdown . . . 197
A4.11 Robustness: Expectation effects . . . 198
A4.12 Robustness: Pension Reform . . . 199
A4.13 Robustness: Educational Reform . . . 200
A4.14 Robustness: GALTAN Restricted sample . . . 201
A4.15 Summary statistics: index input variables, per wave . . . 203
A4.16 Redistributive index: Polychoric correlation matrix . . . 203
A4.17 Redistributive index: Factor analysis using input components . . . 204
A4.18 Redistributive index: Factor loadings (pattern matrix) and unique variances of input variables . . . 204
A4.19 Results comparison of 2008-2018 and 2013-2018 panels. Combined categories. . . . 205
A4.20 Results comparison of 2008-2018 and 2013-2018 panels. . . . 206
A4.21 Number of observations per income quintile and children in the household. Balanced sample 2008 - 2018 . . . 207
A4.22 Categories of households: Specification 2 and Specification 3 . . . 207
A4.23 Parties classification according to CHES - GAL-TAN . . . 208
A4.24 Main results: no time-varying controls . . . 209
A4.25 Main results: No NUTS2 X Wave FE . . . 210
A4.26 Main results: NUTS1 X Wave FE . . . 211
A4.27 Main results controlled for PiS vote in last elections . . . 212

# List of Figures


2.1 Survey flowchart . . . . . 48
2.2 "Regulation" module detailed flowchart: Control group . . . . . 50

3.1 Sample disaggregation . . . . . 124

A4.1 Eligibility criteria throughout the years. . . . . 202
A4.2 Timeline . . . . . 203

# Chapter 1

# Introduction

## 1.1 Research topic

Social cohesion has often been described as the 'glue' that holds communities together and, with other informal institutions, constitutes the culture around which societies organize themselves. Cohesive societies develop behavioral norms that facilitate harmonious and cooperative interactions, including economic transactions and investments between individuals and firms. The aggregate of these interactions translates into a macro benefit that is larger than its individual parts. Governments, research, and international organizations have increasingly acknowledged the importance of social cohesion for sustainable economic development and have begun to explicitly elevate social cohesion as a policy objective crucial for policymaking and economic prosperity. The Organisation for Economic Co-operation and Development (OECD) stresses that cohesion is fundamental to promote strong and democratic economies (OECD, 2022, 2024). The United Nations Development Programme (UNDP) sees social cohesion as foundation for sustainable development and contributes to identifying a conceptual framework and strategies to rebuild cohesion (Sisk, 2020). The InterAmerican Development Bank (IDB) has taken a central role in advancing the research around the causes and consequences of social cohesion, and assists governments in (re)building the social fabric (Keefer & Scartascini, 2022). The World Bank embeds social cohesion both in its outcomes as a goal of interventions, as well as in its processes and involvement of the local community in the development of solutions and service delivery, and has a central role in promoting knowledge sharing with other development organizations (World Bank, 2025).

This first chapter of the dissertation introduces social cohesion, the underlying concept of chapters 2, 3, and 4 of this dissertation. This chapter provides an encompassing overview of the socio-economic relevance of social cohesion and its relation to public policies, a backbone to the findings of the empirical studies in this book. It first highlights how socio-cohesion impacts socio-economic outcomes across individual and aggregate levels, including the central role of cohesion in mobilizing societies around an effective response to adverse shocks, and how its decline constitutes a threat to development and stability worldwide. Next, this chapter defines the concept of social cohesion that is used throughout this dissertation. It emphasizes its multidimensional nature, before zooming into the concept of trust, a central element of cohesion, which has observed a surge in scholarly interest. As a part of the concept definition, the introduction chapter illustrates different views on the origins of trust (as an element of cohesion). Next, the introduction provides a description of the three studies that constitute chapters 2, 3, and 4 of this dissertation, exploring their links to social cohesion and their main findings. This chapter provides concludes with an overview of the remainder of the dissertation.

**On the relevance of social cohesion**

Policy-makers, international organizations, development agencies and researchers agree that various challenges to development require a coordinated collective action, which socially cohesive societies are better equipped to observe. Investments can be propelled if firms and investors do not feel the need to preemptively hedge themselves from potential uncertainty from future actions of their partners. Social groups and organizations are less likely to free-ride on others and engage in conflictual relations if they share a common understanding of belonging. Instead, they are more likely to help each other when in need if they have bonds and care for each other. Governments are less likely to face criticism and opposition to their policies if their constituents do not doubt that they are capable and have their well-being in mind. More broadly, people are more likely not to oppose public investments if they feel like those contribute to the public good, especially as the results are typically materialized after year(s) and tend to benefit some groups more than others.

Indeed, recent studies have empirically shown the positive economic impact of social cohesion. Regions where social cohesion is greater tend to have higher GDP per capita, in both levels and growth, a proxy widely used for development levels. The evidence is vast and ranges from earlier work based on correlational patterns (Knack & Keefer, 1997; Tabellini, 2010) to research employing rigorous quasi-experimental approaches providing a stronger causal claim (Algan & Cahuc, 2010b; Bjørnskov, 2012; Dincer & Uslaner, 2010; Forte, Peiró-Palomino, & Tortosa-Ausina, 2015). The effects are substantial: according to the studies, countries in Africa could have had more than six times higher income per capita if their societies were as cohesive as Sweden (Aghion, Algan, Cahuc, & Shleifer, 2010). This effect is hypothesized to stem from a combination of effects through different and complementary channels. Social cohesion entails better beliefs of economic management by authorities, social stability, and observation of commitments by all parties involved (Besley & Dray, 2024; Bjørnskov, 2012; Keefer & Scartascini, 2022), which increases productivity (Bjørnskov & Méon, 2015) and lowers the imposition of credit constraints and regulations (Aghion et al., 2010). An easier access to credit reduces the pro-cyclicality of firms' investments, promotes macroeconomic stability (Sangnier, 2013), and fosters the diversification of foreign equity investments (Drobetz, Mönkemeyer, Requejo, & Schröder, 2023). Scholars also hypothesize that trust operates on economic growth via its impacts on human capital accumulation. Cohesion can enhance the offer and quality of education, as it lowers the costs associated with employing educated individuals and lowering school dropout (Bjørnskov, 2009; Dearmon & Grier, 2011), and via institutional improvement, improve the supply of public goods, including education (La Porta, Lopez-de Silanes, Shleifer, & Vishny, 1996). As cohesion promotes the sharing of information, it can foster

innovation (Xue, Reed, & van Aert, 2024), even more so when combined with the effect of cohesion on human capital. At the international stage, cohesion boosts financial development as international bilateral trade of goods, assets, and foreign direct investments is higher between two trusting countries (Guiso, Sapienza, & Zingales, 2009).

Cohesion further impacts a wide range of socially desirable outcomes beyond the productive economic sphere. In cohesive societies, there is greater accountability for governmental actions, which is argued to be why trusting societies have a higher supply of quality decisions in the bureaucracy and formal institutions, such as the rule of law and central bank independence, and, therefore, better governance (Berggren, Daunfeldt, & Hellström, 2016; Bjørnskov, 2012; Knack & Keefer, 1997; Peiró-Palomino, Gianmoena, Picazo-Tadeo, & Rios, 2024). This pattern is observed both across countries (Knack & Keefer, 1997), as well as across subnational regions (Peiró-Palomino et al., 2024). Not only does cohesion improve the quality of government and policies, but it also improves overall policy efficiency as it increases citizens' compliance with public guidelines (Besley & Dray, 2024; Marien & Hooghe, 2011), and government demands, including tax payments (Alm, 2019; Hasan, Hoi, Wu, & Zhang, 2017). The shared expectation of civil obedience increases the social and psychological costs associated with criminal behavior, leading to 15% lower crime rates in cohesive societies (Buonanno, Montolio, & Vanin, 2009; Durante, Mastrorocco, Minale, & Snyder, 2025). Where societies are more likely to act collectively and hold political representatives accountable, the management of natural resources, such as the conservation of forests, performs better (Alesina, Gennaioli, & Lovo, 2019).

Although cohesion is conceptually defined as an element that spans beyond the individual to generate (positive) outcomes at the meso and macro levels, its positive influence is also observed privately, especially in the realm of human capital. Individuals who are better included in society are more likely to engage in interpersonal services and trust the quality of publicly provided services. In contrast, the opposite would lead to deprivation of such services. An example is the hesitancy of Black citizens, whose social group has been medically neglected in the USA, to seek medical services, leading to poor health and life expectancy outcomes (Alsan & Wanamaker, 2018). Beyond the positive effects due to cohesion-induced behaviors, a collaborative engagement with other citizens and feelings of social inclusion improve the physiological outcomes, such as mental health, lower anxiety, and better antibody responses to treatments and vaccinations (Gallagher, Howard, Muldoon, & Whittaker, 2022; Zak, Kurzban, & Matzner, 2004). As a result, cohesion has been associated with greater happiness and life satisfaction, which effect is not explained simply by informal sociability but rather to a deeper sense of cohesion (Bjørnskov, 2008b; Gubello, 2025). The effects of cohesion on individual socio-economic circumstances operate in addition to the physiological effects to yield increased wellbeing.

Being embedded in a cohesive environment and having support networks improve the educational outcomes of students, specially of social minorities, as it promotes their access to information, mentoring networks, and learning from other peers (Corno, La Ferrara, & Burns, 2022; Mishra, 2020). The positive effects of cohesion on human capital span beyond education and influence labour outcomes as well. Social cohesion is crucial to explain why individuals integrate in labor markets instead of opting for informal labor exchange arrangements (Tu & Bulte, 2010). This, in turn, has positive effects on income (Tu & Bulte, 2010), another plausible indirect channel via which cohesion improves happiness and personal wellbeing. Households' finances also benefit from cohesion: they get better integrated into the formal financial system (Durante et al., 2025; Guiso, Sapienza, & Zingales, 2004), and choose more sophisticated financial instruments, ranging from stocks to insurances against climate shocks (Cole et al., 2013; Durante et al., 2025; El-Attar & Poschke, 2011; Georgarakos & Pasini, 2011).

The recent COVID-19 pandemic and frequent climate-related disasters brought to the forefront the need for cohesion, collective action, and effective and efficient policies for societies to face ever-growing social threats. In the context of Covid-19, cohesion led communities to adopt behaviors that shielded them from the fast and severe impacts of the disease (Devine, Gaskell, Jennings, & Stoker, 2021; Devine et al., 2024). Firstly, Countries and regions where societies are more cohesive believed less in conspiracy theories and misinformation around Covid-19 (Bavel et al., 2020; Devine et al., 2024). Moreover, an important explanation as to why cohesive societies performed better relies on the fact that policies were more efficient. Not only did people take preemptive and proactive choices that benefited the social welfare, but they also complied more with the guidelines put forward by the governments. This, in turn, facilitated the roll-out of such public measures (Bartscher, Seitz, Siegloch, Slotwinski, & Wehrhöfer, 2021; Ji, Jiang, & Zhang, 2024). As policies were more effective, infection and death rates were lower in those areas, even in the early stages of the pandemic (Ji et al., 2024). Once the vaccine became available, cohesion played a crucial role for people to act collectively in the interest of the common good and not hesitate to follow the public vaccination guidelines (Devine et al., 2024; Montresor & Schiavon, 2025). Collective action is also essential to respond to and build resilience to the increasingly frequent and severe climate disasters. There is a growing body of evidence suggesting that communities that are closely connected recover faster from these shocks (Aldrich, 2011; Sobhaninia, 2024; Sobhaninia, Buckman, & Ortiz-Garcia, 2024). Households with more community ties tend to recover their incomes faster, and such ties foster cooperation such that it can partially make up for potential lower levels of human capital among the affected (Liu, Gerber, Jung, & Agrawal, 2022). This network of mutual assistance encourages evacuees to return to the affected hometowns, allowing for better reconstruction efforts in these communities and improving their

resilience (Shimada, 2015). Beyond the local private actions of communities, stronger resilience is attributed to higher solidarity among the larger society, since recovery efforts often require substantial public assistance and investments (Andrabi & Das, 2017), which a stronger sense of cohesion between affected and non-affected areas is likely to foster (Kuziemko, Norton, Saez, & Stantcheva, 2015; Luna, Andrea, & Francesco, 2023).

### The current scene

In light of the positive impact of social cohesion on different aspects of economic performance, human development, and resilience, it is of great concern that societies are drifting apart in many parts of the world (OECD, 2024). Although changes in social cohesion are not a new phenomenon (Putnam, 2000), recent years have brought changes to the international social and economic systems that constitute threats and put social cohesion under strain (Keefer & Scartascini, 2022; United Nations Economic Commission for Europe, 2023). Particularly concerning is the growth of affective polarization. Different from ideological polarization, which refers to wide differences in policy preferences, affective polarization also entails a division into groups with a negative emotional load attached to these differences (Riera & Madariaga, 2023). The division and deep animosity towards other group(s) leads people to become less trusting of their fellow citizens, expect them not to act with the collective interest in mind, and opt not to collaborate for a common objective (Dimant, 2024; A. H.-Y. Lee, 2022). In short, (affective) polarization is both a symptom of and a threat to social cohesion.

Economically, the combination of low social mobility with the structural transformation of the global economy displaced work and excluded a previously integrated middle class in advanced and emerging economies (Guriev, 2018; Martins-Neto, Mathew, Mohnen, & Treibich, 2024). This group joined the lower-income and economically marginalized groups, who have historically been economically deprived and lacked access to essential services, in feeling socially forgotten. Culturally, international movements - either voluntary or due to forced displacement - and generational changes fueled the (re)emergence of identity politics, weakened the strength of a shared identity, and broad solidarity (Guriev & Papaioannou, 2022; Inglehart & Norris, 2016). Digitalization and the overwhelming expansion of social media enabled echo chambers with the potential to feed cultural cleavages, increase skepticism towards the government, and deepen social cleavages (Campante, Durante, & Tesei, 2022; González-Bailón & Lelkes, 2023; Guriev, Melnikov, & Zhuravskaya, 2021). Geo-political fractures and tensions have been increasingly observed at the global and local stages. Recent wars and conflicts have led to global ruptures and re-entrenchment into social silos and restrict cooperation to a parochial sphere (Bauer et al., 2016; Zakharov & Chapkovski, 2025). As the world observes a period of poly-crisis,

conflicts interact with other natural, health, and economic disasters, which became increasingly complex, severe, and frequent. With the limited social and political will and funding for humanitarian action being further reduced, the ability to assist impacted communities decreases. These communities, in turn, are left to their own device to face the crisis, which further erodes cohesion with a broader society (Fleming, Chong, & Bejarano, 2014; Mackay, Mavisakalyan, & Tarverdi, 2024; Rahman, Lee, Shabnam, & Jayasinghe, 2020), and a vicious cycle if formed. While wars and other collective shocks have the potential to instill a rally-around-the-flag movement, enhancing sense of belonging and cooperation between narrowly defined groups, this comes at the cost of a broader sense of cohesion that is essential to reap its positive effects (Bauer et al., 2016). These complex threats contribute to the growing political polarization in society, both across and within countries.

A clear and important concern that follows is that low cohesion can hinder countries from addressing problems that pose a great threat to humankind as a whole. In an increasingly fragmented global landscape, low cohesion has become a barrier to enacting and implementing solutions to a wide range of pressing socio-economic and political problems. The polarization of beliefs, low cohesion, and consequent ineptitude to agree on a shared collective interest (Bonomi, Gennaioli, & Tabellini, 2021), is observed across different realms, including acknowledging the existence of climate change, the benefits of mask mandates and vaccination, opinions on globalization, and causes and solutions to geopolitical tensions and conflicts. Even when there is public concern and a will to address these looming threats, skepticism towards the government limits its ability to leverage this public opinion. This issue is notably worrying in the context of climate change: even where climate concern is high, public support for the implementation of climate-related policies and taxes is contingent on trusting the political authorities and other citizens (Davidovic & Harring, 2020; Fairbrother, Sevä, & Kulin, 2019; Kitt, Axsen, Long, & Rhodes, 2021; Kulin & Johansson Sevä, 2021).

The challenge extends far beyond climate change and concerns the stability of security in the international sphere. As of the time of writing this chapter, the tensions and conflict in the Middle Eastern region reached all-time high levels in decades, and any solution to the situation is clearly complex. Part of this complexity owes to the involvement (directly or indirectly) of other international powers, such as the US and European countries, and the domestic salience of the situation with the voters in this country. People in these regions are divided in how they interpret conflict, in how they perceive the involvement of their governments, and in how they understand that the attitudes of members of other (political) groups are fundamentally and morally different from theirs. Thus, the absence of cohesion deteriorates the ability of societies to come together in a broad understanding

and hold their government accountable regarding its affairs in the Middle East. Simultaneously, in a context of low cohesion and political skepticism, governments are plausibly unlikely to push for (important) humanitarian agendas, as they are likely to face backlash from their mistrusting constituents. Declining cohesion paints a grim picture for the state of security and the humanitarian efforts.

The erosion of cohesion also reverberates in the global economy. The current escalating trade tensions between the United States, China, and other major economies exemplify how low cohesion—within and between countries—can both fuel and entrench global fragmentation. Domestically, widening socio-economic divides and declining trust in institutions have eroded public support for international trade and multilateral cooperation (Spilker, Schaffer, & Bernauer, 2012), creating fertile ground for economic nationalism (Mutz, 2018). The confrontational trade strategies adopted by populists prioritize short-term domestic gains over global stability. Internationally, the erosion of diplomatic trust and the rise of zero-sum narratives have weakened the institutions designed to arbitrate trade disputes and coordinate collective economic action. In this context, low cohesion becomes not just a driver of conflict, but a barrier to resolution, as polarized societies are less able to generate broad-based support for the compromises and institutional commitments needed to de-escalate tensions. Low cohesion also threatens the management of migration flows, which are projected to increase due to climate change, conflicts, and demographic imbalances (Kaczan & Orgill-Meyer, 2020). Host societies with weak social bonds and low tolerance for diversity are more likely to experience backlash against migrants, political radicalization, and the erosion of democratic norms.

If these trends persist, the socio-economic costs of inaction based on wider social consensus will grow, particularly for vulnerable groups already excluded from political and economic participation. More broadly, cohesion is not only a desirable trait but a necessary precondition for states to exercise legitimate and effective authority in times of uncertainty. It is in this context that the following chapters explore how social cohesion, either through trust in institutions, solidarity across groups, or norms of cooperation, shapes preferences for redistribution, attitudes toward crisis policies, and support for inclusive governance. Together, they shed light on when and how societies may overcome fragmentation to build resilience and legitimacy in the face of contemporary global challenges.

## 1.2 Research questions and the theory of social cohesion

This dissertation focuses on the relevance of social cohesion for policy making and explores the research question of "under what conditions do policies and politics depend on or contribute to social cohesion?". Although there is an overall scholarly consensus that

cohesion is a desirable characteristic in society and is endangered (Keefer, Scartascini, & Vlaicu, 2022; OECD, 2011), there is less of a unanimous understanding of what social cohesion entails (Schiefer & Van der Noll, 2017; United Nations Economic Commission for Europe, 2023). Its initial conception, rooted in the 1950s and 1960s in the sociological and psychological literature, focused strongly on the harmonious and interdependent interactions between individuals within a social system held together by shared values (Schiefer & Van der Noll, 2017). Central to the social cohesion concept is that individuals have warm-glow preferences; namely, they are motivated by more than material payoffs and value the act of cooperating *per se* (Algan & Cahuc, 2014; Keefer et al., 2022). Although some researchers included shared values and common characteristics as a core element of social cohesion, others highlighted that a fruitful interaction between members of heterogeneous groups could reduce prejudices and foster collaboration. As such, social cohesion entails mutual respect and well-functioning interactions beyond individual culturally homogenous groups.

As the concept evolved within and beyond these scholarships, drawing policy and academic attention from other subjects, social cohesion focused less on direct social relations and grew to englobe interactions of the social agents with the political subsystem (United Nations Economic Commission for Europe, 2023). This interaction comprises political participation, legitimacy aspects, and civic engagement. More intangible items reflecting one's positioning in society have also been increasingly referenced to. Particularly, authors have highlighted that cohesion entails, on the one hand, a sense of belonging, connection to the aggregate, and dignity, and on the other, a focus on the common good and respect for others and the system. Lastly, a group of scholars emphasizes the objective dimension of cohesion related to economic inclusion, equality of levels, and especially of opportunities, and social mobility (Easterly, Ritzen, & Woolcock, 2006).

### 1.2.1 Social cohesion as a multidimensional concept

The growing attention to cohesion by policy and various fields within academia resulted in a multi-dimensional concept that encompasses a wide range of socio-economic and political phenomena. While this breadth facilitates adaptability to extensive analytical efforts (Pavanello, Watson, Onyango-Ouma, & Bukuluki, 2018), it comes with criticism from scholars who argue that this wide-encompassing, loose understanding of cohesion hinders a clear proposition-driven research and conflates cohesion with its determinants and outcomes (Durante et al., 2025; Schiefer & Van der Noll, 2017). As a result, efforts have recently emerged to systematize the concept of social cohesion across different traditions, and identify its common core comprising dimensions, and how they relate to the range of socio-economic and political outcomes observed in the literature.

To provide conceptual clarity, Schiefer and Van der Noll (2017) synthesizes the work on social cohesion ranging from academic literature to policy documents issued within the past three decades on the topic. The authors identify that, especially in the policy-related realm, the term social cohesion "is used in a rather all-encompassing way, as a 'catchword' for all types of societal challenges the society faces" (p.582 Schiefer & Van der Noll, 2017), and much of the conceptual breadth stems from specific policy actors utilizing the concept in a way that best fits their agendas. Still, the majority of research and policy approaches capture similar dimensions of cohesion. These three core dimensions - *Social Relations*[1]*, Sense of Belonging, and Orientation Towards a Common Good* - relate closely to the narrow definition proposed by the seminal J. Chan, To, and Chan (2006)[2]. Three other commonly used concepts include (in)equalities, quality of life, and shared values. However, rather than constituting cohesion in itself, these dimensions are attributes that antecede or result from cohesion, in the theoretical understanding. While shared values can facilitate a structured social interaction around shared norms, cohesion relies on the acceptance of diversity and the way how society deals with diversity is what matters[3]. (Horizontal) Inequalities in the distribution of resources, deprivation, and economic cleavages do not *per se* map into levels of cohesion, but they can weaken cohesion by limiting the participation and assimilation of excluded individuals in societal interaction (Bjørnskov, 2008b). Lastly, rather than well-being ensuring society's cohesion, cohesion could contribute to a better quality of life for the members of that society, be that well-being subjective or objective (Bjørnskov, 2008a).

The first dimension of social cohesion identified by Schiefer and Van der Noll (2017), *orientation towards the common good*, refers to the cross-group commitment to the broader good and cooperation for interests that go beyond those of the individuals involved. In the social sphere, this cooperation is closely related to feelings of solidarity and willingness to subordinate personal needs to the broader well-being, and constitutes the backbone of social welfare systems. In the interaction with the institutional subsystem, this dimension entails compliance with laws, norms, and acknowledgment of the legitimacy of the institutions regulating and monitoring the social order.

The second dimension, *sense of belonging* as a valuable member of a larger group, is at the forefront of what is often alluded to as the decline in cohesion in modern times,

[1] Also known as Social Capital.

[2] J. Chan et al. (2006) defines cohesion as "a state of affairs concerning both the vertical and the horizontal interactions among members of a society, as characterized by a set of attitudes and norms that include trust, a sense of belonging, and the willingness to participate and help, as well as their behavioural manifestations"

[3] A second issue Schiefer and Van der Noll (2017) identifies would arise from the role of shared values for social cohesion is the matter of which set of values would promote cohesion. As the authors note, while it is possible that a society shares a set of values, those could be values that themselves undermine cohesion, such as a focus on personal achievements to the detriment of the collective welfare.

such as weaker national identities, and increased (perceived) resulting from the increased cultural heterogeneity and changes in economic conditions (Costa-Font & Cowell, 2015; Shayo, 2020). A crucial element is the shared sense of broad identity that breaks with any narrowly defined cultural, ethnic, and political groups.

The third dimension, *social relations*, is at the core of social cohesion, and is closely related to the concept of social capital (C. Klein, 2013)[4], which in its initial conceptualization in Coleman (1994) and Putnam (2000) referred to the quantity and quality of horizontal relations among individuals. Beyond social networks, this dimension also includes vertical individual-State relations and participation in the political sphere. While several forms of interaction can take place, scholars highlight two particular forms of network interactions: bonding and bridging capital. The former includes the frequent interactions within one's own group. However, strong bonding capital by itself can reinforce within-group connection at the detriment of shared respect and affinity with other groups. Therefore, special attention should be placed on the interactions beyond one's group - the bridging capital - and the mutual tolerance between different cultural and ethnic groups (Laurence, 2011). While a substantive body of research finds that culturally or ethnically fragmented societies have difficulties in cooperating towards the general wellbeing (Alesina, Baqir, & Easterly, 1999; Alesina, Devleeschauwer, Easterly, Kurlat, & Wacziarg, 2003; Dahlberg, Edmark, & Lundqvist, 2012; Desmet, Gomes, & Ortuño-Ortín, 2020; Laurence, 2011; E. F. Luttmer, 2001), this stems from low or hostile interaction between different groups (bridging capital) rather than diversity per se (Alan, Baysan, Gumren, & Kubilay, 2021; Desmet, Ortuño-Ortín, & Wacziarg, 2017; Desmet, Ortuño-Ortín, & Weber, 2017; Laurence, 2011; Meer & Tolsma, 2014; Uslaner, 2010). An important proponent of this argument, the *intergroup contact theory*, argues that when individuals have the opportunity to be in direct contact with people alien to their ethnic, cultural, and class groups, the high-quality interactions reduce prejudices and increase empathy for that group as a whole. As a consequence, these people would be more likely to shift to an inclusive identity and cooperate, rather than focusing on divisive lines between them (Pettigrew & Tropp, 2006)[5].

[4]Formally, (sociology) scholars see strong overlap between both concepts, but deem social capital as belonging to the individual realm, while the elements of social cohesion consider the externalities of social capital, being thus more suitable for referring to a macro-level phenomenon (C. Klein, 2013).

[5]Several authors have pointed out the positive role of public schools and inclusive educational programmes increase intergroup contact and thus, promote social cohesion across culturally and economically diverse individuals. See Gradstein and Justman (2002) and Alan et al. (2021) for examples of theoretical and empirical contributions.

### 1.2.2 Zooming in on trust

A vital element of social relations is trust among citizens, in its political representatives, and in institutions, without which a society is unlikely to stand cohesive (J. Chan et al., 2006). Trust underlies various social and economic interactions, influences an individual's social and political participation (Uslaner & Brown, 2005), and is crucial for the healthy functioning of society, as "virtually every commercial transaction has within itself an element of trust, certainly any transaction conducted over a period of time" (Arrow, 1972, p. 357). A definition laid down by Coleman (1994) and consistently adopted by researchers since, describes trust as a person's readiness to entrust resources to another actor in the absence of formal guarantees that would curb opportunism, driven by the belief that the other will be trustworthy and the outcome will be positive. (Algan, Cahuc, Algan1, & Cahuc2, 2013). From this definition, it is clear that trust is particularly relevant in contexts where uncertainty is present and actions are not fully prescribed or enforceable. With higher trust, societies are better equipped to overcome the "free-rider problem in the pursuit of socially valuable activities" (Guiso, Sapienza, & Zingales, 2011), in other words, to seek cooperation towards the common good.

Schiefer and Van der Noll (2017) and other scholars place trust as a core component of social capital/relations, including Durante et al. (2025), who performs a data-oriented identification of the dimensions of social capital[6], confirming the multi-faceted nature of capital and cohesion. Together with cooperation, which is more loosely defined, trust has notably become the element of cohesion that receiving the most scholarly attention in recent years. The development of experimental tools[7] and the widespread inclusion of questions in harmonized cross-country surveys[8] to quantitatively measure trust contributed to attract the interest of quantitative empirical researchers in the Economics and Political Sciences subjects (Banerjee, 2018; Fehr, 2009; Jin, Yan, & Zhang, 2025; Wilson, 2018).

Trust comprises a horizontal and vertical dimension, both with varying radius or object of trust. The horizontal dimension, also referred to as interpersonal or social trust, refers

[6] With a principal component analysis covering 24 measures related to social capital across more than Italian 600,000 respondents, Durante et al. (2025) retrieve four dimensions of social capital: social participation, political participation, trust in others, and trust in institutions.

[7] The most common experimental method is the trust game, which involves two players - the investor and the trustee. The former has two options: sending (part) of their initial endowment to the trustee, who receives double the amount sent, or keeping the entire endowment. The trustee, in turn, can also keep the entire/most amount or send part of the donation (more than the initial "investment") back to the investor. Trusting behavior is measured by the amount sent by the investor, and trustworthiness by the share sent back by the trustee (Fehr, 2009).

[8] An example is the well-renowned World Values Survey. Typically, the surveys measure trust using the following question, or a close variation: "Generally speaking, would you say that most people can be trusted or that you can't be to careful in dealing with people?"

to trust in other individuals, be they from your close network, as family and friends, or unknown other citizens with whom you share a distant connection (e.g. nationality). Although trusting one's kinship potentially brings many positive outcomes to a person's life, the private aspect of interpersonal trust is necessary, but not sufficient to sustain a cohesive society. Instead, a cohesive society is one where generalized trust is high: people do not think one needs to be skeptical of strangers and believe others would act pro-socially (Rothstein & Uslaner, 2005). Vertical trust, also known as political or institutional trust, shifts the object of trust away from other particular individuals onto public political figures and institutions. As noted by Devine (2024a), political trust is a "dimension of political support [...] bounded by 'diffuse' and 'specific' forms of support, in which the former includes attitudes such as patriotism and support for democratic ideals, and the latter is a targeted evaluation of specific incumbents" (Devine et al., 2024, p. 2243). The vertical element of trust, in specific, comprises beliefs about the honesty and integrity (which acts like corruption involvement might undermine) of the political representatives, as well as the competence of these agents to put decisions in motion (Alessandro, Lagomarsino, Scartascini, Streb, & Torrealday, 2021; Levi & Stoker, 2000).

The relationship between social and political trust is non-trivial: while it is unlikely that one exists without the other, the overlap is not perfect (Martinangeli, Povitkina, Jagers, & Rothstein, 2024). Moreover, there is a complex relationship between formal institutions, social trust, institutions, and political trust (Keefer, 2025). Social trust can lead to so-called better quality political institutions (e.g. rule of law) (Besley, 2020; Knack & Keefer, 1997), and in a dynamic cycle, good (bad) institutions can further enhance (depleate) civic mindedness, identification with the group that is under the same institution, and trust (Aghion et al., 2010; Besley, 2020; Bjørnskov, Borrella-Mas, & Rode, 2022; Buonanno, Ferrari, & Saia, 2024; Martinangeli et al., 2024; Papaioannou, 2020). As institutions shape the delivery and quality of public goods and services (Besley, 2020; Dell, 2010), they influence how well people evaluate the representatives of the government, thus influencing political trust (Arends, Brik, Herrmann, & Roesel, 2023; Besley, 2020; Van der Meer & Zmerli, 2017). As the representatives of the state institutions are not abstract images, but rather people, the experiences with public employees and bureaucrats dictate the opinions people have about them, thus possibly shaping the perception people have about the strange other (Rothstein & Stolle, 2008; Sønderskov & Dinesen, 2014, 2016).

These complex dynamics are part of a larger debate around what generates and changes trust. According to some, trust - in particular social trust - is an informal institution with deep historical roots (Nunn & Wantchekon, 2011), remarkable stability (Uslaner, 2002), even in the face of economic shocks (Ervasti, Kouvo, & Venetoklis, 2019) and changes in individual circumstances (Uslaner, 2002), like migration to another country and trust

culture (Berg, Ostry, Tsangarides, & Yakhshilikov, 2018). Others disagree with this stable feature of trust (Alesina & La Ferrara, 2000; Sønderskov & Dinesen, 2014), although they might acknowledge that substantial variations often only occur in the long run (Algan & Cahuc, 2010a; Devine, 2024b). Broadly speaking, there are two competing views on the origins of trust that address this duality: those who understand it as a stable attribute and those who believe trust to be malleable. The former, called the *Cultural Perspective*, sees trust as a cultural element with an enduring legacy, shaped early in childhood and largely unaffected by subsequent individual experiences. As a cultural element, it is passed down through generations, and this aspect has been methodologically explored by the "epidemiological approach" to measure the effect of trust on a range of outcomes. This approach uses the trust of migrants and their descendants in a host country as a proxy or an instrument for the trust of their country of origin, thus isolating the effect of trust from current-day formal institutions and economic conditions (Algan & Cahuc, 2010a; Guiso et al., 2011; Nunn & Wantchekon, 2011). The other account, the *Experiential Perspective*, explores how experiences in one's life directly or indirectly change one's trust in others and the government. This stands in contrast to the stability emphasized by the cultural perspective, as it understands trust as having a great degree of malleability.

Regardless of the approach, a vast body of literature seeks to uncover the determinants of trust. Departing from the conceptual definition of cohesion, scholars have analyzed how social interactions shape trust. The theory poses that good quality of social interactions creates the preconditions for trust to develop (Putnam, 2000). Inequality can thus affect trust as it limits the opportunities for harmonious ties between different classes, which evidence from experiments, cross-country, and within-country research reviewed in Jordahl (2009) indicates. Even the prospect of greater social assimilation, as opposed to observed interactions, can have a positive effect on generalized trust, as the case studied by (Bjørnskov et al., 2022) suggests, where social trust among Catalans increased as the Catalonia independence came within reach. Besides mattering for social trust, positive interactions with institutions increase people's trust in them, including political and financial institutions (Van der Cruijsen, De Haan, & Roerink, 2023). Civil participation in local government increases political trust, also among those who have are aware of these relations but have not been in direct interaction themselves (Ardanaz, Otálvaro-Ramírez, & Scartascini, 2023). This closer interaction with the local representatives helps to explain why the subnational government often enjoys higher levels of trust than the national level, where power distance is larger (Arends et al., 2023; Kaasa & Andriani, 2022). When direct participation is not possible, transparency of the government's actions may help to improve trust in the government, particularly so if it conveys a positive image of the government's performance (Alessandro et al., 2021). Corruption episodes, on the other hand, erode the belief that officials act to serve the best interests of citizens. Indeed,

cross-national evidence suggests that the decline in political trust (partially) stems from corruption (Levi & Stoker, 2000). More recently, experimental evidence at the individual level confirms the aggregate pattern (Beesley & Hawkins, 2022), and unexpected disclosure of a corruption scandal during a survey collection in Spain revealed that the decay of trust is independent of whether the individual's party alignment aligns with officials involved in the case (Ares & Hernández, 2017).

The literature suggests that the deep origins of trust could lie precisely in the profile of historical interactions, which Alesina and La Ferrara (2000) suggests when flagging that socially discriminated groups present lower levels of trust. Buggle and Durante (2021) focuses on the role of inter-community exchanges to cope with pre-industrial climate risk, and how these differences were perpetuated to explain the current differences in trust. Nunn and Wantchekon (2011) provides evidence for the long-lasting negative consequences of conflictual interaction for trust, showing that the brutal invasions of African regions during the slave-trade had enduring effects on the trust of individuals whose ancestors were attacked. The latter showcases that though trust is deeply-rooted, large-magnitude events have the potential of changing its steady-state. More recently, economic performance has also been consistently shown to influence trust, particularly in political actors. When people experience economic growth, they are more likely to trust their governments, specially in democratic settings (Besley, Dann, & Dray, 2025). Moreover, while idiosyncratic economic experiences may impact the individual's trust in others and the government (Alesina & La Ferrara, 2000), aggregate shocks have been associated with larger, more enduring, and widespread changes (Giuliano & Spilimbergo, 2024). These collective events are marked by high uncertainty and prompt people to update their beliefs about trustworthiness based on the observed behavior of others and actions by the institutions. Since the effect of shocks on trust is contingent on the responses, the pre-existing socio-political fabric is often found to be a conditioning factor in whether crises will have a positive, negative, or fading effect on trust. Since the early years of research on trust, scholars have explored the link between economic decline and trust. Echoing the correlation between economic struggles and low trust at the individual level (Alesina & La Ferrara, 2000), a body of literature looked at the macro-level economic deterioration. Even though voters might engage in a retrospective pocketbook voting when personal financial conditions erode, depressing effects on trust require a more widespread disillusionment with the competence of the political system. Systematic bad handling of the economy has been consistently associated with decreased political trust (Levi & Stoker, 2000; Van der Meer & Zmerli, 2017), with areas more deeply affected by the crisis and recessions see sharp declines in political and institutional trust (Algan, Guriev, Papaioannou, & Passari, 2017), while the effects on social trust vary between negative and null (Ananyev & Guriev, 2019; Ervasti et al., 2019; Guriev & Melnikov,

2016).

Even though there is notable interest in the relevance of economic crises for trust, aggregate shocks are not restricted only to those of an economic nature. For example, a large body of recent research moves beyond the narrowly defined socio-economic dynamics and explores the effect of the Covid-19 pandemic on trust. In some countries, political trust increased, like in Sweden (Esaiasson, Sohlberg, Ghersetti, & Johansson, 2021), in others the positive effects vanished quickly, such as in Austria (Kritzinger et al., 2021). Due to strong political divides, some societies, such as France, did not reap any positive effect of the pandemic on trust (Kritzinger et al., 2021), and other places observed a decline in political trust. Although pandemics have the potential to either increase or decrease trust, due to the observed competence of the political authorities, there is no clear consensus on what determines the direction of the effect (Devine et al., 2024). A similar heterogeneity of Covid-19 effects is seen with social trust. In Sweden, trust increased, and Esaiasson et al. (2021) argues this owes largely to society's high pre-existing trust and voluntary compliance with regulations. In Switzerland, social trust dropped acutely when the pandemic hit, but quickly rebounded back to pre-pandemic trust levels, supporting the cultural perspective of trust as an enduring cultural element (Saaranen, 2024). Nonetheless, others argue against these findings with effects differing across context and people: having had close contact with Covid-19 cases and the economic consequences of the disease led to an erosion of generalized trust (Brück, Ferguson, Justino, & Stojetz, 2020; Casoria, Galeotti, & Villeval, 2024), even though personal illness has no direct effect (Brück et al., 2020). Moreover, the negative effects of pandemics on trust are potentially long-lasting, as the effect of the 1918 Spanish Flu has been passed down to the descendants (Aassve, Daniele, & Le Moglie, 2018).

With the growing frequency and severity of climate-related hazards, the research interest in their effects on trust has also grown. Natural disasters of intense magnitude have been shown to influence the trusting behavior of affected communities, although the effect might be transitory and conditional on receiving aid and assistance from other citizens. Among others, there are examples from Thailand (Cassar, Healy, & Von Kessler, 2017), Japan (Veszteg, Funaki, & Tanaka, 2015), and Chile (Calo-Blanco, Kovářík, Mengel, & Romero, 2017; Dussaillant & Guzmán, 2014), Indonesia (Bai & Li, 2021), Sri Lanka (Becchetti, Castriota, & Conzo, 2017). As actions following the disaster are crucial, a governance structure that is able to maintain order and deliver aid is an important moderator (Becchetti et al., 2017), and the opportunity of free-riding might dampen gains in social cohesion (Stephane, 2021). Similarly, evidence from Mexico shows that effective disaster relief can buffer the (sharp) decline in political trust following a large-scale natural hazard (Frost, Kim, Scartascini, Zamora, & Zechmeister, 2025), and good

crisis management can even lead to communities rewarding political authorities and having higher trust in them (Stephane, 2021).

As a last remark, it is worth highlighting that while the overall evidence indicates that social cohesion is key to improving socio-economic wellbeing, some scholars have also suggested that high cohesion may carry potential downsides (Xue et al., 2024). One argument is that norms and practices may spread faster within tight communities once adopted by a member, even when these actions result in a socially negative outcome. For instance, towns in Germany with denser civic networks saw a faster rise of the Nazi Party (Satyanath, Voigtlaender, & Voth, 2013), particularly where the federal state governments were less stable. Moreover, when interpersonal trust is high, but mainly restricted to a small radius (e.g. local trust, trust based on social groups and bonding ties), it can limit acceptance of broad social diversity and harm economic and political outcomes. Tight communities are likely to be comprised of similarly minded members (homophily), and it might be harder to defy and change these pre-existing norms and practices. For example, Antonietti and Boschma (2021) shows that Italian regions with higher bonding capital have less diversified economies, as the tight network inhibits the entry of new firms. Favoritism in communities with high bonding capital may also lead to corruption and complacency with deviant behaviors, an association which Wachs, Yasseri, Lengyel, and Kertész (2019) finds support for Hungary. Similarly, high political trust may lead to inefficiencies, as politically trusting individuals are more likely to comply with policies (Besley & Dray, 2024), including inefficient or harmful ones. The recent experience with Covid-19 pandemic constitutes a clear case evidencing the importance of policy quality when linking political trust with desirable social outcomes. In the US, high trust in the federal government (by then led by Donald Trump, a president who often undermined health experts) was associated with a lower adherence to the guidelines recommended by health experts, while the opposite was found for trust in the state and local governments (Suhay, Soni, Persico, & Marcotte, 2022). Moreover, it is crucial for economic development that politicians are held accountable for their administrations, including for any negative outcomes resulting from their policies. However, Nunn, Qian, and Wen (2018) shows that voters in higher-trust regions are less likely to vote the incumbents out after an economic downturn, and 'more willing to allow politicians to blame poor macroeconomic performance on bad luck' (p. 30)[9]. Yet, there seems to be limited space for this dark side of cohesion to be of concern. Taken together, the literature evidences that while low-quality policies may harm socio-economic outcomes under specific contexts when cohesion is high, it is less likely that good-quality policies deliver inclusive development in the absence of a broadly cohesive society.

[9]It is important to note that Nunn et al. (2018) also find that those were the same regions where the economy recovered faster from a shock.

## 1.3 Research gaps and contributions

Although there is a continuously growing consensus that social cohesion is crucial for improving society's welfare, and its decline endangers sustainable development, there are important avenues that have not been fully explained by the existing research, which this dissertation aims to contribute to. This section highlights how the collection of three complementary studies that comprise this dissertation can contribute to the research on the importance of social cohesion for governance and policy making.

### 1.3.1 Study 1: Social cohesion and social resilience

Periods of crisis are critical tests to a society's response to challenges, not only in terms of material preparedness, but also in the strength of its social fabric. As recent global shocks have shown, governments' capacity to respond effectively is deeply intertwined with the willingness of citizens to cooperate, comply with governments' guidelines, and support collective action under uncertainty. Social cohesion, as a foundation for mutual trust and solidarity, plays a central role in enabling such coordinated responses. When cohesion is strong, societies are better positioned to weather disruption and overcome adversity. Yet, despite widespread acknowledgment of its importance, empirical research on the relationship between cohesion and support for crisis policy responses remains limited. This is particularly important given that different crisis responses may demand different levels of discretion, flexibility, and trust in others. This is particularly the case when it comes to understanding how cohesion shapes public attitudes towards the design and delegation of crisis response powers: a question that lies at the intersection of trust, cooperation, and institutional flexibility. As such, understanding how social cohesion influences citizens' preferences for policy design during crises provides crucial insight into the broader question of how cohesion shapes institutional resilience and the capacity to act under uncertainty.

Though political and social trust have some specific mechanisms through which they might exert influence in human behaviour and choices, they share broadly the same framework to explain why trust impacts individuals' decisions and the collective good. In a context of incomplete information, the informal institution of trust acts as a heuristic about the expected others' behavior for individuals to evaluate the possible interactions with other citizens and the government (Algan, 2018; Devine, 2024a; Fehr, 2009; Rudolph, 2017; Uslaner, 2002). The psychological and evolutionary explanation is that trust, as a 'judgemental shortcut', leads people to make decisions that are, on average, *sufficiently good* and in the most efficient manner, without spending unnecessary cognitive load when

the situations are complex (Rudolph, 2017). Trust influences the perceived merit of an action (e.g. behaviors of other citizens, services by companies and policies implemented by a government) (Besley & Dray, 2024) or information provided by the object of trust (Fairbrother, 2017). In that sense, trust helps to cope with the uncertainty over the future allocation of resources involved in an interaction, where positive/negative outcomes are determined by actions taken by both parties (Rudolph, 2017). It becomes particularly relevant when there are material or ideological costs involved in the action[10] (Rudolph & Evans, 2005) or when the topic is particularly relevant and salient to the individual (Hetherington & Husser, 2012). Lastly, it is important to note that the literature makes an effort to highlight a further distinction of the trust family: trust, mistrust, and distrust. The three would constitute different concepts, rather than a mirrored image of each other. Trust includes a positive sense of confidence, distrust a negative orientation of suspicion, and mistrust does not constitute a settled belief (unlike distrust), but entails an ongoing process of information updating regarding the trustworthiness of the other agent (Devine, 2024a; Jennings, Stoker, Valgardhsson, Devine, & Gaskell, 2021; Van der Meer & Zmerli, 2017).

The understanding of trust as heuristics underlies a comprehensive and growing body of work on the effect of trust on different economic and political preferences. Important attention has been given to exploring the link between trust and support for public spending. Broadly speaking, the evidence consistently suggests that higher trust, both vertical and horizontal, is behind what ensures conditional cooperation towards a welfare state and people's support for public expenditure. Individuals will agree to a higher tax burden to fund public and social policies if they believe others are also contributing their part, and are convinced that the government will use the tax revenues efficiently and for the intended purposes (Besley, 2020). As a result, higher trust is associated with tax revenues at the macro-level (Keefer & Scartascini, 2022), and at the micro-level, willingness to pay taxes (Oh & Hong, 2012), preferences for a more progressive tax policy (Stantcheva, 2021), and for public redistribution of income (Alesina, Glaeser, & Sacerdote, 2001; Algan, Cahuc, & Sangnier, 2016; Charron, Harring, & Lapuente, 2021; Daniele & Geys, 2015; Devine, 2024a, 2024b), particularly when governments are more capable and institutions are of high quality (Charron et al., 2021; Daniele & Geys, 2015). Yet, that relationship is not strictly monotonic, and in a context of highly uncivic behavior and low cohesion, people will support a large redistributive state with the expectation of free-riding for personal benefits (Algan et al., 2016). Even though experiments in the laboratory seeking to manipulate political trust have had limited success in explaining preferences for redis-

[10]Examples would be funding redistributive policies via taxes. Material costs would arise from the tax instruments to benefit probably other individuals, while the ideological cost could be observed in the case of a right-wing citizen supporting or not that platform if posed by a politician they trust.

tribution (Devine, 2024b), other experimental approaches that, instead of manipulating levels of political (mis)trust, harness deep pre-existing attitudes confirms that trust is an important factor explaining redistributive attitudes (Kuziemko et al., 2015).

Beyond trust influencing the level of public spending, trust also influences the preferred composition of fiscal policies and the way people think the government should spend, or save, this revenue. When confronted with the reality of fiscal consolidation, low trust limits the government's ability to rely on tax instruments, as mistrusting individuals prefer expenditure adjustments over increased revenue (Ardanaz, Hübscher, Keefer, & Sattler, 2024). People who mistrust their compatriots prefer the use of public revenues for public goods, since this option restricts the possibilities for people to use the investmetn for undesirable actions compared to income transfers. At the same time, mistrust in the government hinders the support of public investments and provision of public goods over transfers, as people are not convinced by the political commitment to the social welfare and will prefer an option that channels subsidies for private solutions over public provided alternatives (Keefer et al., 2022). A similar logic explains the relation between trust and preference for regulation: the more individuals mistrust others in society, the more they will demand that costly regulation that prescribes socio-economic behaviors, so as to curb deviation that harms the social welfare (Aghion et al., 2010). On the other hand, if people are not convinced of the government's competence and integrity to regulate social and economic interactions, they are less likely to support the public involvement (Charron et al., 2021). Despite this, regulation emerges as an alternative to social trust when civicness is absent, even though low trust in the government makes public intervention morally costly for politically mistrusting individuals (Aghion et al., 2010; Charron et al., 2021; Pitlik & Kouba, 2015).

The literature above also documents that the crisis of trust causes a political fatigue where people opt for the 'exit option' that entails a minimum governmental role. Yet, oftentimes societies face challenges, such as large disruptions and crises, where governmental intervention is required. The response to these issues is critical: if governments are perceived to mismanage challenges or do so in a non-legitimate manner, cohesion can be further eroded (Algan et al., 2017; Van der Meer, 2017). Thus, it is imperative that policies reflect the preferences of the population and are deemed legitimate, particularly in the context of countries worldwide struggling with social support. Therefore, it is important to understand how trust sets the political constraints faced by the government when designing and implementing such instruments.

From the literature above, it is clear that there is ample evidence of the influence of trust on whether individuals demand policies or not, namely the effects on preferences for redistribution and regulation, and on the type of policy instrument, including the

exact fiscal instrument among a range of different options. The reality of crisis, however, often restricts the type of policy available to the government to effectively address the problem. For instance, during the Covid-19 pandemic, governments had to take actions to ensure social distancing, mask use, and vaccination. While there might be little room for governments to alter the core content of the policies, adjustments can be made to the features of the policy and its implementation that could help to address underlying social preferences. One example often explored in the political debate concerns the inclusion of conditionalities to cash transfers. Although findings indicate that conditionalities do not help improving the desired welfare outcomes among the poor beneficiary households, they are important to reduce opposition to the transfers by non-beneficiaries who see themselves as different from the recipients (Zucco, Luna, & Baykal, 2020).

The first study sheds light on this issue with the following question: *How does social and political trust shape preferences over policy features?* This paper addresses this question by using a large experimental design, with over 9,000 individuals across 9 different Latin American countries. The survey experiment elicits preferences over policy features using a novel instrument, where respondents chose between two policy alternatives that deliver the same policy instrument - a one-time transfer to businesses harmed by an economic crisis - but differ in their processes, thus with different costs and application structures. An experimental component manipulated the possibility of others or the government to shirk, further enhancing the uncertainty of future outcomes and payoffs of the less codified policy alternative. Consistent with existing literature, social and political mistrust lowers overall support for government involvement. However, as our design imposes a politically provided solution, private solutions are curbed, and politically mistrusting individuals are both unsupportive of and indifferent between the options provided to them. This effect is deeply rooted, salient as it does not require direct emphasis of the government's potential shirking, and particularly pronounced in contexts where bureaucratic quality is low, and is deeply rooted. Social mistrust, on the other hand, is not as salient and influences acceptance for less costly and more uncertain policies when people are reminded that the opportunistic behavior of others is socially costly. The results provide an indication that the expected behavior of others is the channel linking policy uncertainty and demand for costly policy processes.

### 1.3.2 Study 2: Populism and social cohesion

One of the most pressing political tensions societies worldwide face currently is the surge in populist forces. This rise is particularly threatening as it is a result of the combination of supply and demand forces (Guiso, Herrera, Morelli, Sonno, et al., 2017). Not only are populist agendas increasingly more present among the platforms running for elections,

but we also see an increase in calls and support for populist alternatives among the voters. As a result, the number of populists appointed as executive representatives and parliamentary representation has increased dramatically over the past couple of decades (Guriev & Papaioannou, 2022). While this political phenomenon is not a product exclusive to present times, the current profile of populism has changed in both scope and nature compared to what was initially observed in the mid-20$^{th}$ century. Initially, populism was mostly circumscribed as a left-wing Latin American phenomenon (R. R. Barr, 2018; Dornbusch & Edwards, 1990; Edwards, 2019), despite having been initially used and popularized as a political label in the United States earlier in the century (R. R. Barr, 2018). Yet, in recent years, more countries around the globe, including in many advanced economies in the Global North, have seen a populist turn.

A substantial body of research alerts to the dangers populism poses to the well-functioning of the economy. Populist-led governments defy the broadly agreed-upon prescriptions for economic management and engage in myopic economic policy-making that jeopardizes economic performance in the long run. Among other things, populists may employ financially unsustainable fiscal and trade policies that can result in lower economic growth (Edwards, 2019; Funke, Schularick, & Trebesch, 2023). Empirical evidence confirms theoretical predictions and shows that populist governments are followed by greater uncertainty and unsound economic policy, leading to a worsened economic performance both at the national level (Funke et al., 2023) and the local level (Bellodi, Morelli, & Vannoni, 2024). Populist governments increase the public debt, restrict trade with higher tariff rates and lower (financial) globalization, which leads to high increases in inflation rates and sharp drops in the real GDP, and most worryingly, declines of household consumption (Bellodi et al., 2024; Born, Müller, Schularick, & Sedláček, 2019; Funke et al., 2023; Guiso et al., 2017; Guriev & Papaioannou, 2022; Rodrik, 2018). This damaging effect of populist forces is at least partially explained by the corrosion of institutional and bureaucratic quality (Sasso & Morelli, 2021), which, beyond their economic effects, is a worrying development in themselves. Populist governments forcefully replace high-quality bureaucrats with non-experts in an attempt to reduce opposition to the implementation of their agenda (Bellodi et al., 2024), limit freedom of the independent press (Szeidl & Szucs, 2021), and, together with authoritarian tendencies of populist leaders, cause a broad decay of institutions of the liberal democracy (Funke et al., 2023; Inglehart & Norris, 2016).

The harm of populists to the democratic and economic performances has trickle-down effects on social cohesion, which, in light of the crucial role of cohesion for long-run development, can further stagnate socio-economic development. As Schiefer and Van der Noll (2017) highlights, access to economic resources and services is an important determinant of social cohesion. However, the worsening economic performance following populist terms is

associated with economic exclusion, worsened by the underprovision of public services by populists, which the Covid-19 experience made explicit (Bayerlein, Boese, Gates, Kamin, & Murshed, 2021; Guriev & Papaioannou, 2022). The suboptimal economic performance would potentially be less of a concern for cohesion if disparities between social groups were lessened and distribution improved during the populist administration. A central claim of populists is that they act on behalf of the people seeking social justice; yet, their governments do not make substantial progress on tackling inequalities (Funke et al., 2023). Given that inequalities tend to be high and/or increasing in the lead up to the populist elections (Edwards, 2019), there is little room for substantial improvements in social cohesion coming from a more equal and prosperous society. Moreover, given the endogenous coevolution of inclusive institutions and civic capital (Besley, 2020), populists indirectly destabilize cohesion both by harming economic performance and depleting institutional quality (Papaioannou, 2020).

In addition to the indirect deteriorating effects of populism on cohesion, the core populist idea of a dichotomous Manichean world where the corrupt elite takes advantage of the rightful people constitutes a peril to cohesion in itself. This view places a normative value on who constitutes the 'rightful people' and the 'corrupt elite' (Akkerman, Mudde, & Zaslove, 2014; Guriev & Papaioannou, 2022; Inglehart & Norris, 2016; Mudde & Kaltwasser, 2017). By doing so, it directly promotes social and material marginalization and argues for the exclusion of the undeserving groups from the democratic political processes, a direct attack on social cohesion both on horizontal and vertical dimensions (Mudde & Kaltwasser, 2013). While the materialization of indirect effects of populism on cohesion (via changes to the economy and institutions) requires populists to reach power, the populist ideology promotes an exclusionary narrative among its supporters as part of its political and electoral platform, regardless of a populist government being actually constituted (Mudde & Kaltwasser, 2013).

The threat posed by populism to a range of economic, political, and social outcomes makes it imperative to understand what drives support for populism. In order to do so, it is important to first define populism as a concept. Even though the academic community has been gradually converging to a growing conceptual consensus, there are four main schools of thought on how to define populism (Funke et al., 2023; Hawkins, 2009; Mudde & Kaltwasser, 2013). (1) The *structuralist approach*, with strong links to the dependency theory, sees populism as cross-class coalitions to gather popular support for policies that would benefit the periphery, such as import-substituting industrialization and land reforms (Hawkins, 2009). (2) The *political-institutional* approach captures the political behavior as a strategy for mobilizing support, focusing on the institutional elements of a top-down, unmediated political strategy and the presence of a charismatic

leader (R. R. Barr, 2018; Roberts, 2019). (3) The *economic approach* identifies populism by its economic outputs and use of myopic fiscal and monetary policies for redistribution, which often culminate in macroeconomic crisis (Acemoglu, Egorov, & Sonin, 2013; Dornbusch & Edwards, 1990; Edwards, 2019). Lastly, (4) the *ideational approach* takes a discursive view and its development has been largely influenced by the expansion of populism to countries beyond the Americas and with a right-leaning profile. According to this definition, populism is a political narrative style that emphasizes the oppression of the good people, whose will constitutes the source of political legitimacy, by the corrupt elite, who have captured political and economic institutions (Akkerman et al., 2014; Guriev & Papaioannou, 2022; Hawkins, 2009; Kaltwasser & Van Hauwaert, 2020; Mudde & Kaltwasser, 2013, 2017; Rooduijn, 2019).

In contrast to other approaches, the ideational line allows for the study of the supply and demand of populist ideas, a necessary feature to identify the drivers of populist support (Kaltwasser & Van Hauwaert, 2020). Moreover, the ideational approach is the one that most closely speaks to populism as an issue of cohesion, as it highlights the divisive rhetoric of antagonistic groups and an antipluralistic view of civil society based on a homogeneous and narrowly defined population (Rooduijn, 2019). The latter element stands in stark contrast to the current understanding of social cohesion, which argues cohesion entails respect of differences, rather than cultural and ethnic homogeneity (Durante et al., 2025; Schiefer & Van der Noll, 2017). For that reason, there is a vicious populism-cohesion cycle, as populism depletes cohesion, but it is also seen as a manifestation of low cohesion itself (Bolet, 2021; Putnam, 2000). Research argues that the increase in populist support is an issue related to the decreasing feelings of social belonging, shrinking social networks, lower civic association membership, widespread loneliness, low generalized trust, and socio-economic exclusion (Boeri, Mishra, Papageorgiou, & Spilimbergo, 2021; Bolet, 2021; Giuliano & Wacziarg, 2020; Inglehart & Norris, 2016; Langenkamp & Bienstman, 2022; Putnam, 2000). Populism, as a wish to break with the establishment political system, is an ultimate manifestation of political fatigue, speaking to the deepest and most diffuse element of institutional (mis)trust (Devine, 2024a). Following this understanding, two competing accounts aim to provide an explanation for the increased (feeling of) social exclusion that prompts people to seek solutions for their malaise in the populist propositions, namely the economic insecurity explanation and the cultural backlash theory.

The economic insecurity explanation overlaps with what (United Nations Economic Commission for Europe, 2023) identifies as the economic threats to social cohesion. According to this framework, the drivers of the populist vote are primarily of an economic nature, and people vote for populists as these candidates offer a simple economic solution to their

economic problems. Slightly different from the pocketbook voting approach, the body of research exploring the populist vote sees the economic struggles faced by voters as deeper and related to a loss of economic status and broad life quality. Secular trends in the production and trade of goods change the structure of the labor markets, and the individuals employed in occupations harmed by these changes saw themselves 'left behind' by development, with decreasing life quality or even economically insecure. As the two main sources of change mentioned in the literature are the rise in globalization and automation, the findings heavily focus on evidence from high-income countries. The globalization literature looks closely at the so-called *China shock*, where between the mid-1990s and the early 2000s, China's trade with the advanced economies increased exponentially as a result of China's entry into the WTO and consequent declining trade tariffs (Guriev & Papaioannou, 2022). The empirical work takes advantage of differential exposure across industries to Chinese imports before the tariff changes and uses a shift-share IV methodology to investigate the effect of trade and globalization on support for populists, mediated by its effects on jobs. In the United States, the China shock moved the white American voter ideologically to the right and increased election turnout, leading to the election of Tea Party Republicans in districts with greater Chinese penetration (Autor, Dorn, Hanson, & Majlesi, 2020; Rodrik, 2020). In Europe, exposure to the Chinese imports led to higher support for nationalist, far-right, and anti-EU parties across different subnational units (Colantone & Stanig, 2018; Dippel, Gold, & Heblich, 2015; Rodrik, 2018). A similar case is presented for the effect of automation of routine work on populist support among those who lost out from this technological advance. Using an industry-level measure of exposure to task automation, Acemoglu and Restrepo (2020) and Frey, Berger, and Chen (2018) show that the increase in the share of jobs vulnerable to automation increased the vote share of Trump in 2016. Similarly, European NUTS-2 regions where the exposure to automation increased also saw an increase in support for far-right nationalist parties (Anelli, Colantone, & Stanig, 2019).

In addition to the slower trends in the structure of production, a related literature looks into the effect of economic insecurity arising from the deep and sudden recessions, with a special focus on those observed in the 2000s. Their argument poses that voters punish incumbents for weak economic performance, and that the deep recessions, followed by the austerity measures by national governments and supranational powers, were accompanied by a deep disillusionment with the establishment political system to manage the economy and ensure well-being for the individual citizen. The empirical evidence confirms that European regions that were more severely impacted by the Euro-recession and broad disturbances to employment experienced an increase in support for right-wing populists (Algan et al., 2017; Dehdari, 2022; Gidron & Mijs, 2019), particularly so if austerity measures were implemented (Dal Bó, Finan, Folke, Persson, & Rickne, 2018).

The cultural backlash perspective argues that, while economic forces may have contributed marginally to the election of populists, it is rather cultural factors that explain the backbone of its support (Margalit, 2019). In the words of Margalit (2019), economic forces carry an 'outcome significance', tilting the election results in favor of populists, but not a broader 'explanatory significance'. Understanding the latter is crucial for identifying the forces behind the surge in populist demand and informing solutions to address the root causes leading people to seek alternatives that break with liberal democracy. During the years when progressive values advanced (the "Silent Revolution"), such as the move forward of individual rights of ethnic and gender minorities, the formerly dominant groups felt isolated and with their identity and traditional values threatened, leading to a "Silent Revolution in Reverse" (Inglehart & Norris, 2016, 2017). In Europe, correlations where both economic and cultural explanations are simultaneously accounted for, variables measuring cultural elements have a higher explanatory power (Inglehart & Norris, 2017).

Even though this literature defends that (perceived) cultural threats motivate the populist turn, it also acknowledges that cultural grievances do not arise exclusively from cultural shifts. Economic changes, including those mentioned by the economic insecurity literature, have the potential to further increase the salience of the divisions along pre-existing identity lines and trigger (Bonomi et al., 2021; Gidron & Hall, 2017). This pattern is heavily anchored in the social identity literature, which departs from pure economic considerations to other non-material motivations when modeling social choice and behavior. The social-identity framework, initially developed by the psychology literature (Hogg & Turner, 1987; Tajfel, 1974), has been increasingly considered by the economics field (Akerlof & Kranton, 2000, 2005) and political economy (Shayo, 2009, 2020). The framework states that individuals have multiple economic and non-economic identities, and the most salient identity influences a range of political and economic preferences. This view enlightens how and under which conditions individuals deviate from material self-interest to favor political platforms that address other cultural concerns that arise from non-economic identity grievances. Thus, changes in social and identity status, and not economic losses, were at stake, on which populist leaders leveraged (Mutz, 2018). For that reason, this literature stresses important heterogeneities from the economic insecurity literature, which they argue provide evidence to the prominence of the cultural explanation: economic forces matter mostly (or solely) when they affect the culturally dominant group, leading their preferences to be motivated by their cultural identity. In Europe and the USA, economic changes have led to greater authoritarian values and support for populists in only areas with a White national majority (Autor et al., 2020; Ballard-Rosa, Jensen, & Scheve, 2022; Ballard-Rosa, Malik, Rickard, & Scheve, 2021; Colantone & Stanig, 2018). In Brazil, male-specific labour shocks increased support for the populist Bolsonaro in 2018

(Barros & Silva, 2025).

The "culture or economics" is an ongoing and lively debate. The origins of the populist experience heavily gravitated towards Latin American cases, and yet, the scholarly quest to understand what influences the populist vote has mainly focused on the recent Global North experience. The second study in this dissertation examines these two contesting views in an emerging context and addresses the question: To what extent do economic and cultural factors explain the populist vote in Brazil? In 2018, Brazil saw the election of the right-wing populist Jair Bolsonaro, whose profile resembled that of the new wave of right-wing populists in Europe and the US, breaking with the stereotype of left-wing Latin American political defiers. Using individual-level data from the Brazilian Electoral Study, a post-election academic research survey associated to Comparative Study of Electoral Systems Project (CSES), we pitch both explanations against each other to understand to what extent the frameworks echoes explanations centered around the Global North in the context of Brazil. By exploring the correlational patterns with OLS estimations, we show that the populist vote in Brazil is better explained by the cultural account. Economic factors do matter, but not in line with the predictions of the economic insecurity literature. Cultural grievances, on the other hand, follow the framework beyond traditional ideology concerns, and are the attributes shared by the broad populist voters, as well as across groups that radicalized and switched their voting behavior.

### 1.3.3 Study 3: Welfare policies and Social cohesion

Welfare policies, the evolution of the welfare state, and social cohesion are intrinsically marked by their endogenous linkages. On the one hand, welfare policies are conducive to building more cohesive societies. On the other hand, a stable welfare system requires a minimum level of cohesion and solidarity to be able to deliver resilient and encompassing policies. Although social protection programmes have been criticized for their rather discretionary character within the development debate (Devereux, McGregor, & Sabates-Wheeler, 2011), their relevance for promoting social justice is increasingly highlighted in the academic and policy-making circles (Burchi, Loewe, Malerba, & Leininger, 2022; Burchi & Roscioli, 2021; Keefer & Scartascini, 2022).

Welfare policies provide the recipients with material resources and basic services in an attempt to manage risks and to escape the patterns of exclusion. Thus, one of the core function of welfare policies - to protect the recipients' material well-being[11] - is conducive

[11] Although provision of means to improve the livelihood of individuals in need is a central function of the welfare state, and the one most relevant to this Study, it is clearly not its sole objective. Others include macro-efficiency via social investments, micro-efficiency, consumption smoothing of households and risk sharing (N. A. Barr, 2020).

to strengthening social cohesion as it helps beneficiaries to break with the cycle of poverty that lead to their social isolation (Balboni, Bandiera, Burgess, Ghatak, & Heil, 2022), by providing the material means for civic and political engagement (Báez Ramírez, Camacho, Conover, & Zárate, 2012). In addition to enabling their inclusion via their material aspect, welfare policies act on cohesion through social and psychological mechanisms when designed and implemented appropriately (Pavanello et al., 2018). Being included in policies reduces feelings of alienation and nurtures agency and a sense of dignity (Burchi et al., 2022; Roelen, Leon-Himmelstine, & Kim, 2022), without which cohesion is not possible (Schiefer & Van der Noll, 2017). Additionally, the trust literature documents that the existence of positive interactions beyond one's kin is an essential precondition for broader interpersonal trust to arise (Putnam, 2000). Social protection further fosters cohesion as it promotes interactions with other members of the society, either indirectly due to the lowering economic barriers to engagement, or directly when the program entails a participatory component (Pavanello et al., 2018).

The effect of welfare relates not only to the interpersonal dimension of cohesion but also to the relationship between citizens and the government. Social protection programmes are often policy instruments designed, developed, and implemented by political representatives and officers. That way, social protection programmes constitute a venue for the recipients to interact with the bureaucracy and government officials, and from that, shape perceptions and attitudes towards these actors and the political institutions they represent. Social transfers increase vertical trust if recipients are grateful to the actors that support them financially (Burchi et al., 2022), especially so if they regard governments as entities that are responsive to the citizens' concerns (Evans, Holtemeyer, Kosec, et al., 2019).

The materialization of these results, however, is not guaranteed. If not designed and implemented carefully, social interventions risk not only not improving cohesion, but depleting it instead. Non-recipients must believe that the programme was implemented in an impartial and fair manner, which is more challenging when programmes have a selective targeting. If this so-called procedural justice is (perceived to) violated, the broader community might assume that beneficiaries rigged their application status, and the administrators condoned this practice (Rothstein, 2001). As a consequence, policy design and implementation flaws could result in social stigmatization of beneficiaries and lower political trust (Béland, Campbell, & Weaver, 2022; Burchi et al., 2022; Pavanello et al., 2018; Roelen, 2017). Given these strong conditioning factors, it is unsurprising that the empirical evidence of the effect of welfare policies on cohesion is mixed. While some scholars find that a positive effect on personal agency, social inclusion, and trust among beneficiaries (Evans et al., 2019; Evans & Kosec, 2023; Pavanello et al., 2018; Roelen et al.,

2022; Valli, Peterman, & Hidrobo, 2019), others stress that an active participatory component is a necessary condition for the positive effects (Attanasio, Pellerano, & Reyes, 2009; Burchi & Roscioli, 2022; Camacho, 2014; Hamad, Jones, Abuhamad, Baird, & Oakley, 2025). A low benefit level might also hinder these effects, and, most concerning, (perceived) mistargeting has been found to instill feelings of unfairness among non-recipients, particularly if official communication is lacking or unclear, fueling intra-community and citizens-government tensions (Burchi et al., 2022; Camacho, 2014; Cameron & Shah, 2014; Pavanello et al., 2018).

The endogenous linkages between cohesion and welfare policies imply that cohesion is not only an outcome of social policies, either direct or indirect, but also influences those policies themselves. Welfare programmes[12] are typically financed by taxes, which implies that the broad society shares the financing cost evenly, but with uncertain outcomes that are unevenly distributed (Devine, 2024b). Civic societies are grounded on mutually observed moral obligations, which curb freeloading on such a system (Bjørnskov, 2012). Thus, the establishment and broad acceptance of redistributive policies require a compromise grounded on solidarity via willingness to pay taxes to finance welfare and a commitment to respect the limits system. This support of welfare, often at the expense of private gains[13], constitutes an orientation towards the common good, one of the three dimensions of cohesion identified by (Schiefer & Van der Noll, 2017). Furthermore, trust and inclusive identity lead to greater tax morale to achieve this goal (Habibov, Cheung, & Auchynnikava, 2017; ten Kate, Klasing, & Milionis, 2023). A cohesive society also entrusts its government to implement these policies and is willing to support the fiscal means to enable them and comply with their guidelines (Besley, 2020; Kuziemko et al., 2015). Government officials of such societies, in turn, are more likely to act civically and act towards the social welfare. Due to this combination, welfare policies in cohesive societies are more likely to be implemented, be more efficient, and less contested (Besley, 2020; Besley & Dray, 2024; Burchi et al., 2022).

Empirical evidence suggests that cohesion, mainly the social trust element, indeed predicts redistribution and the size of the welfare state (Algan et al., 2016; Bergh & Bjørnskov, 2014; Bjørnskov & Svendsen, 2013; Daniele & Geys, 2015; Gründler & Köllner, 2020). Although it is not entirely clear to what extent policy-makers respond to public demand or to personal interests when designing policies (Chattopadhyay & Duflo, 2004), there are strong political incentives for politicians to implement welfare programmes that benefit their constituents (Zucco, 2011) and reflect their preferences for redistribution (Bellani &

[12] Non-contributory programmes.

[13] It is worth noticing that the literature acknowledges the possibility of indirect private gains for the non-recipients due to spillovers in the form of, for instance, a more active economy and less crime, as a result from the increase in the purchasing power of transfers recipients (Bellani & Scervini, 2020)

Scervini, 2020; Dassonneville, Feitosa, Hooghe, & Oser, 2021). Given the centrality of individuals' redistributive preferences to explain political calculations in the implementation of welfare policies, scholars have attempted to unravel what shapes these preferences.

Initially, the seminal models of Meltzer and Richard (1981) linked inequality to self-centered preferences over redistributive policies (and the corresponding tax schedule to finance such schemes), and ultimately to the observed level of redistribution. When the link between inequality levels and preferences for redistribution did not find empirical support, more sophisticated accounts emerged to explain preferences for redistribution. These included misperceptions about self-placement in the income distribution (Hauser & Norton, 2017) and prospects of upwards mobility (Benabou & Ok, 2001). Beyond the self-interested preferences, other accounts look into other non-economic motivations, including inequality aversion and fairness considerations (Alesina & Angeletos, 2005; Fong, 2001), and social identity and selective altruism explanations (Costa-Font & Cowell, 2015). The initial understanding of identity orbited exclusively around a unidimensional identity based on economic-class lines and was implicitly assumed in research exploring the importance of social proximity for redistribution (Lupu & Pontusson, 2011). However, the social identity theory argues that society can be divided into groups along various categories (Costa-Font & Cowell, 2015), and the endogenous identity approach recognizes that identity is multidimensional, each subject to being activated at different times, depending on the socio-economic and cultural context, which influence salience, status of, and proximity to that group (Bonomi et al., 2021). The higher the status, the salience, and the identification to the group, the greater the influence that group identity will exert in a person's beliefs and preferences (Costa-Font & Cowell, 2015; Klor & Shayo, 2010; Shayo, 2009, 2020). Thus, the influence of identity on the individual's utility function arises not only from possible material gains linked to the preference-induced actions, but also from being in consonance with the members of their identity group (Akerlof & Kranton, 2005; Golman, Loewenstein, Moene, & Zarri, 2016; Klor & Shayo, 2010).

This theoretical framework has important implications for welfare policies since identity groups strongly influence preferences for redistribution - in other words, support for the welfare state. In-group favoritism predicts support for redistribution when such policies benefit their ingroup member (even to the extreme of when not benefiting the individual themselves) (Costa-Font & Cowell, 2015; Shayo, 2009, 2020). Moreover, and arguably most pervasive for welfare systems, out-group discrimination leads to low support or opposition to welfare policies when these benefit members of other groups, as they are perceived as untrustworthy and undeserving (Dimant, 2024). In light of this, the current decline in cohesion and inclusive identity challenges the development of welfare policies. The split of society into identity groups reinforces in-/out-group differentiations and ob-

structs the shared solidarity that would allow for pro-redistributive preferences to emerge. In contexts where individuals do not share mutual feelings of belonging, cross-group collaboration and preferences for redistribution are lower (Dimant, 2024; Shayo, 2020). The identity-grounded argument is a strong explanation for the observed pattern that when cultural diversity increases, the cultural dominant groups (such as ethnically European nationals and white US-Americans) become less supportive of redistribution, particularly so when there are negative stereotypes associated these miniries, even if that runs counter to the financial interests of the high-status cultural groups (Costa-Font & Cowell, 2015; Dahlberg et al., 2012; Fischbacher, Grammling, Hausfeld, & Zíka, 2023; Klor & Shayo, 2010; Shayo, 2009).

As social cleavages threaten the social feasibility of redistributive programmes targeting a narrower group of poor households (who often overlap with the ethnically marginalized communities), it is important to understand what actions can be taken to ensure solidarity and orientation towards a common good. In the context of welfare policies, this would mean understanding how to ensure support for redistributive policies. One logical solution would be to try to address and correct negative stigmas associated with welfare recipients from socially marginalized groups. However, sensitization campaigns approaching the deservingness of those in need have limited effect in counteracting the stigmatization of cultural minorities that benefit from transfers (Alesina, Miano, & Stantcheva, 2023; Marino, Iacono, & Mollerstrom, 2024).

The argument turns then into changing not how society views the (small) group of beneficiaries, but changing the group of beneficiaries itself. If this view takes an exclusionary perspective defended by right-wing populists, it leads to welfare chauvinism, where welfare would only be available to a specific social (not economic) group (Mudde & Kaltwasser, 2013). A more inclusive perspective differs in that it does not seek to change the social profile of beneficiaries by restricting it to one social group. Instead, it defends increasing, and as a consequence diversifying, the pool of beneficiaries to increase support for redistribution (Muñoz & Pardos-Prado, 2019). This logic is a result of two facts deriving from interrelated literature on determinants of preferences for redistribution. First, from the social identity theory, altruism (which is crucial for the higher income households to support a means-tested social programme) does not travel easily across identity lines when social cleavages are deep (Shayo, 2020). According to this perspective, a broadening of the coverage would increase support for redistribution by facilitating solidarity from non-beneficiaries with the part of the pool of eligible households, since this group would then become more diverse. Besides these behavioral motivations, a more universal scheme is argued to receive greater support due to rational and self-interested economic considerations. The main proponents of this perspective investigate the political economy

considerations on the targeting of transfers. According to them, individuals respond both to the overall size of the welfare expenditure and to the coverage of the policies, in other words, to the likelihood that they themselves would benefit from the transfers (Gelbach & Pritchett, 2002; Moene & Wallerstein, 2001). The theory predicts that the majority of the population would have preferences supporting a larger welfare state when the policies are more universal, and oppose redistribution when the measures target only a small group of society, typically the poor households.

However, the evidence linking the nature of the redistributive policies - narrowly targeted or universal - to preferences for redistribution is not conclusive. While experiences with welfare retrenchment support the prediction that society would become less supportive of financing such a new restricted system (Larsen, 2018), experimental evidence from laboratory and survey settings indicates that people are overall supportive of means-tested and restrictive instruments (Muñoz & Pardos-Prado, 2019; Schüring & Gassmann, 2016). The third study thus seeks to address the following question: To what extent does the expansion of a redistributive policy influence individuals' preferences related to redistribution? Using the Polish experience of a large widening of its family benefits towards a semi-universal scheme, the analysis allows for the comparison between different social groups defined by their exposure to the policy change. Since eligibility for the new policy hinged on the household's per capita income and number of children, some households were qualified to receive benefits for all children, others for some of the children, and an important group comprised families with one child but not eligible for any transfers due to their income. Using an event study design with data from POLPAN, a individual-level panel on wide range of socio-economic and political attitudes, the study finds that individuals are not entirely financially motivated, as families benefiting from the transfers did not change their redistributive, tax, and political preferences differently from individuals without children (who are not eligible for the transfers). However, financial interests are important to understand the behavior of non-recipients who were excluded due to the lingering income targeting. Although exclusion from the scheme did not cause this group to oppose redistribution, it led them to retaliate against the incumbent and to prefer a tax scheme that would shift the tax burden to others.

## 1.4 Structure of the dissertation

This dissertation further contributes to the limited evidence of the relevance of trust and social cohesion for individual preferences from settings outside the United States and Western/Northern Europe (Devine, 2024a, 2024b). Since behavioral motivations have a strong contextual influence (Cappelen, Enke, & Tungodden, 2025), it is imperative for

research to address this geographical gap. In sum, when taken together, this ensemble of studies makes a case for the importance of behavioral motivations to understand decision-making of individuals and that the dynamics of (feelings of) cultural and economic exclusion are important factors that policy-makers should consider when designing policies. The remainder of this dissertation is structured as follows:

- The second chapter is titled "In trust we reform: Evidence on trust and crisis response capacity from Latin America" and demonstrates that social and political trust, together with outcomes uncertainty, determines the government's social scope for reform capacity by influencing the set of preferred policies and their stringency levels.
- The third chapter is titled "Brazil above everything: the populist vote in the 2018 Brazilian elections" and provides evidence that the populist vote in Brazil in 2018 are more likely to have been driven by cultural motivations rather than economic insecurity.
- The fourth chapter is titled "Who gets what, and who gets resentful: Political economy of targeting in Poland's Family 500+" and demonstrates how the expansion of welfare policies is unlikely to increase support among the recipients due to self-interested economic motivations, but have the potential of facing backlash and eroding cohesion if there are issues with perceived unfair targeting.
- The fifth and final chapter presents the conclusions, highlighting the policy implications of the studies and pointing to future avenues for further research to pursue.

# Chapter 2

# In trust we reform? Evidence on trust and crisis response capacity from Latin America

## 2.1 Introduction

In this paper, we analyze the underpinnings of reform capacity and the ability of governments to react to severe economic crises and other serious challenges. We focus on the role of trust in determining the level of support a government can expect when attempting to respond swiftly and forcefully to unexpected crises. More specifically, we explore to what extent social and political trust shape individual preferences for crisis-response policies that differ in their speed, flexibility, and level of regulatory oversight. Importantly, our focus lies on the demand side of the policy process, namely, which policy features citizens prefer and are willing to support. To investigate this empirically, we use an original large-scale survey experiment fielded across nine Latin American countries, presenting respondents with a choice between policy alternatives that differ in regulatory rigor, timeliness of implementation, and consequent social costs. We embbed a between-subjects vignette experiment to highlight the uncertainty and salience of the governments' and others' actions for policy success. Our results show that trust matters for preferences toward procedural rigidity, beyond the effect of trust on preferences for policy content identified in the literature. We differentiate between social and political trust and find that both play important, yet distinct, roles in determining which policies citizens will support. We further find that past experience with state bureaucracy is a parallel important predictor of support for different types of policy instruments.

Our work is motivated by the observation that periods of rapid economic growth, or more generally periods of societal progress, do not ensure successful economic development in the long run. To the contrary, successful development in the long run depends crucially on the ability to avoid major crises and, in particular, to prevent that temporary crises turn into prolonged slumps. Hence, long-run development depends on a a government's ability to effectively respond to sudden societal challenges and economic contractions – and this is particularly important in developing economies subjected to frequent and severe downturns (North, Wallis, Weingast, et al., 2009; Rodrik, 1999).

The importance of avoiding major crises and drawn-out slumps highlights the value of knowing which factors contribute to swift and effective actions - and ultimately to the pace of economic recovery. Clearly, governments need to respond with appropriate, context-specific policies, and such policies will differ between crises and across countries. However, more foundational - institutional, cultural and societal - features of a nation's political system and policy-making process will determine its baseline ability to respond effectively to a wide range of challenges. One potentially important feature is whether citizen buy-in and cooperative behavior can be induced by high levels of trust in political institutions and fellow citizens. While the importance of trust has been established for a wide range

of outcomes, this possible role of trust and social cohesion, specifically in the context of crisis-response and recovery, is largely unexplored. With this in mind, we investigate the importance of trust and social cohesion in determining the support for crisis-response policies with different levels of swiftness and flexibility granted to governments by citizens.

Empirical findings consistently show that formal institutions matter for the ability of countries to avoid very severe downturns or to recover quickly when in slumps (Alesina, Ardagna, & Trebbi, 2006; Bluhm, de Crombrugghe, & Szirmai, 2020; Bluhm & Thomsson, 2020; Fernandez & Rodrik, 1991; Laban & Sturzenegger, 1994). However, these existing works neglect possible contributions of informal institutions and cultural attributes, even though the economic importance of (social) trust is well-established: trust is known to theoretically reduce demand for costly regulation (Aghion et al., 2010; Pinotti, 2012), promote economic development (Algan & Cahuc, 2010a; Forte et al., 2015; Knack & Keefer, 1997); improve productivity (Bjørnskov & Méon, 2015), deepen financial development and trade (Ahlerup, Olsson, & Yanagizawa, 2009; Guiso, Sapienza, & Zingales, 2008; Guiso et al., 2009), and protect firms from the deteriorating effects of financial crises (Lins, Servaes, & Tamayo, 2017). The role of institutional (or political) trust has also gained recent traction among scholars, due to its declining level in many countries. The evidence points to the relevance of institutional trust for public policies, as it impacts tax evasion (H. F. Chan, Supriyadi, & Torgler, 2018), the set of policies preferred by citizens (Keefer et al., 2022), timing of action, and ultimately the responsible action agent (public or private) (Dominguez, Frisancho, Hoffmann, et al., 2022). More specifically for the context of this paper, the importance of trust (social and political) has been associated with a wide range of outcomes related to how people interact with and within their political-economic system, including political participation and electoral choices, preferences for redistribution, provision of public services, and regulation. Yet, as Devine (2024a) notes, it lacks a unified framework. Trust is behaviorally conceptualized as a heuristic, with the potential to influence other attitudes by providing a frame of reference for people to adjust beliefs and preferences in cases involving others (Devine, 2024a; Siegrist, 2021).

In this paper, we conceptually and empirically distinguish between political and social trust. **Political trust** is part of a set of attitudes and beliefs towards the nation-state that sit between broad normative values, such as the defense of democracy, and specific, pragmatic opinions, like the evaluation of a specific administration's performance[1]. It captures a dimension of support that, while somewhat stable, is subject to fluctuations,

[1]In the foundational discussion about trust, there is a distinction made between the more diffused form of trust in deep political ideals and a specific concept of trust, related to the evaluation of incumbents. The scholarly literature sometimes refers to the former as institutional trust and the latter as political trust. While we acknowledge the importance of this distinction, we do not explicitly investigate the different levels of trust. Thus, otherwise explicitly stated, this paper uses both terms, institutional and political trust, interchangeably.

including those due to generational changes and collective events. In research, political trust is typically understood as a crucial element that people rely on when evaluating potential hazards and gains in extending the discretion for governmental involvement in socio-economic life. In particular, the *cost* and *salience* hypotheses pose that political trust is particularly relevant to citizens when policies entail a substantial material or ideological cost or risk, influencing support and compliance to policies (Bargain & Aminjonov, 2020), or when tackling issues salient in the public debate (Devine, 2024a; Hetherington & Husser, 2012; Siegrist, 2021).

Evidence from experimental settings reveals it is possible to manipulate (short-term) political trust (Alessandro et al., 2021; Devine et al., 2024; Peyton, 2020) and people respond positively to information about increased transparency and performance of the government, while disclosure of corruption and disruptive activities lowers political trust. However, the experimentally manipulated changes in trust have negligible trickle-down effects on other attitudes, such as preferences for redistribution (Devine et al., 2024; Peyton, 2020). Even though these experimental findings suggest that political trust is malleable, and observational research indicates that trust reacts to broad (collective) events (Algan et al., 2017), such short-term volatility coexists with long-term stability (Devine & Valgardsson, 2024). The combination of such stability with consistent effects found in correlational analysis suggests that this long-term trust deeply rooted in individuals is precisely what matters for a range of political-economic preferences. Among some of the preferences, research has shown political trust to influence support for immigration (Macdonald, 2021), preferences for long-term reforms (Garritzmann, Neimanns, & Busemeyer, 2023), for public provision, investments and redistribution (Hauk, Oviedo, & Ramos, 2022; Keefer et al., 2022; Silva, Morgandi, & Levin, 2016), fiscal adjustments (Ardanaz et al., 2024), as well as compliance to policies aimed at ensuring social coordination (Bargain & Aminjonov, 2020).

**Social trust**, similar to its political counterpart, also refers to a relational attitude, in this case, attitudes towards other citizens[2]. Social trust relates to the expectations people have about the level of honesty and cooperative behavior of others in their communities (Fukuyama, 1995). Social trust is particularly important in a context where people's actions cannot be (accurately) monitored by others (Gambetta, 2000). It facilitates cooperation and is a central element of what "help[s] a group overcome the free-rider problem in the pursuit of socially valuable activities", which is core to the description of civic capital by Guiso, Herrera, Morelli, and Sonno (2019). Trust enters the formation of preferences both by leading people to internalize the negative externalities of their actions (i.e., care

[2]This paper does not discuss different dimensions of social trust - i.e. private and generalized. For a critical view on this point and on the *radius* of trust, see Delhey, Newton, and Welzel (2011)

about how their own actions affect the social welfare), and through the expectation that others will also do so (Barrios, Benmelech, Hochberg, Sapienza, & Zingales, 2021).

The experimental economics literature also provides evidence that trust bolsters cooperative preferences, with more trusting individuals consistently presenting less free-riding behaviors in public good games (*inter alia,* Fehr & Leibbrandt, 2011). The economic implications are that higher (historical) levels of social trust lead to stronger welfare preferences (Daniele & Geys, 2015), with willingness to pay taxes (Habibov et al., 2017) to support a larger welfare state (Bergh & Bjørnskov, 2014). Yet, as social trust is a relational attitude, Algan et al. (2016) finds that society is also likely to develop strong preferences for redistribution in an environment where the shared norm is that of untrustworthiness, as people expect themselves and others to benefit without contributing. Work on preferences for regulation, an important literature related to our paper, posits that socially distrusting societies are more prone to preferring stronger governmental regulation over socio-economic relations (Aghion et al., 2010), with (potentially costly) regulation replacing the lack of civic capital among anonymous social and economic agents (Pitlik & Kouba, 2015). Such demand for regulating the scope of action is larger in the context of higher quality of government (Charron et al., 2021).

Based on the aforementioned research, we conjecture that trust will play an essential role in shaping (the support for) reforms that entail considerate levels of uncertainty and where there is a need for governmental flexibility and (prompt) social coordination. As this topic is largely unexplored, except for health crises (Barrios et al., 2021; Harring, Jagers, & Löfgren, 2021; Rönnerstrand, 2016), it is primarily an empirical question whether we will see trust playing such a (coordinating) role.

When we explore the role of social cohesion in the reform capacity of governments, emphasis is placed on understanding individuals' demand for and acceptance of policy (response). Our hypothesis posits that individuals' preferences over policy features – e.g., the level of process formalization and regulation - are shaped by their levels of trust in others and in the competence of government, as well as the salience of other agents for policy success. Economic recovery, therefore, is not solely determined by the suitability of policy content but also by societal characteristics and (views on) implementation costs, policy timing, and social compliance. Unlike most existing research, we explore situations where government involvement is required. Thus, instead of understanding regulation as whether (and to what extent) the government should be present, we explore 'regulation' as a set of policy features and processes that constrain the government, with the necessity for public involvement taken as given.

To empirically explore these predictions, we collected primary data using an original survey covering over 9,105 individuals across nine Latin American countries: Argentina,

Brazil, Chile, Colombia, Costa Rica, Guatemala, Mexico, Panama, and Peru. The survey examines the interplay between social and political trust, individual policy preferences, salience of the actors involved in the policy implementation, and second-order beliefs of the prevalent policy preferences in society. The context of Latin America is particularly appropriate for our setting, as trust in institutions and trust in others are of great importance for a myriad of socio-economic outcomes in the subcontinent (Keefer & Scartascini, 2022). Moreover, countries in the region were a the time of the survey (and still are) facing current economic hardship, due to lingering effects of the global pandemic and shocks originating from the Russian invasion of Ukraine. The data collection took place in December 2023 and January 2024 and included respondents from countries with various levels of political stability and polarization, as well as institutional and political trust.

We designed questions to capture the tradeoff highlighted by the framework: flexible and uncertain vs strict and costly policy implementation. For the tradeoff, the respondent was presented with two policy scenarios, A and B, that address the same policy content, which the respondent need to choose between. More specifically, the policy alternatives provide the same remedy for the social malaise derived from a crisis context but vary in formalization levels, implementation timing, and costs. All respondents were presented with a scenario of economic crisis involving pressing costs on small and local establishments, which the government would address by providing financial support to such establishments. Next, they were asked about their support for two policy options. The first comprises a quick action in which the government would identify establishments in need and immediately provide them with financial assistance ('fast and flexible' option). The second option would take longer to be implemented and would delay payments to the establishments, as it requires establishments to provide documentation attesting to their existence ('rigid and costly' option), and only those that could demonstrate that the economic conditions had harmed them would receive the payment. Finally, survey respondents were asked to choose between the two options.

As preferences are elicited through choices between hypothetical options in this study, the outcome variables should not reflect supply-side considerations. Moreover, the use of hypothetical policy comparisons alleviates concerns with reverse causality, which would occur when using observational data on actual policies whose observable attributes can influence levels of trust. That said, in order to strengthen our confidence in the direction of causality (of various results in this paper), we conducted a randomized experiment in which we accentuated some of the key features of the theoretical logic outlined above. More specifically, the treatment in this experiment accentuates the role of others in determining the success of different policy alternatives. In the treatment conditions, additional information to the 'flexible and fast' policy is provided. This additional information high-

lights the room for opportunistic behavior of other individuals and/or the competence of political institutions, while holding the 'rigid and costly' policy constant.

Our findings indicate that political and social mistrust are both jointly relevant in this context but operate with distinct dynamics. Politically mistrusting individuals are indifferent between a flexible and regulated policy, but simultaneously disapprove of both alternatives. Without being activated, social mistrust has no effect on the preference for regulation over flexibility. However, when respondents are reminded of the costs associated with the opportunistic behavior of others, their support for a flexible alternative dampens. Concerns around political opportunism and (in)competence appear to be more salient than social opportunism in people's minds. Namely, there is a strong effect of reminding people that opportunistic behavior by other fellow citizens is likely to impact the efficiency of recovery policies. This result contrasts with the lack of overall consistent effect in reminding the respondents that the efficiency of the recovery policy is conditional on the government's competence.

In addition to these core results, focused on the impact of trust and social cohesion, we find rather stark effects on policy preferences (over flexible vs rigid policies) from past experiences with the state and views on the private sector. Most notably, we find that past experience with the state bureaucracy is an important predictor of support for policies and preferences for regulation. Individuals who have had easy (and presumably positive) interactions with the state bureaucracy display low opposition to all policy alternatives - and a strong preference for flexible policy instruments over one that includes costly procedures to curb misbehavior.

## 2.2 Methodology

### 2.2.1 Survey overview

The data used in this project was collected through an online survey in collaboration with the Inter-American Development Bank (IDB) and the Latin American Public Opinion Project (LAPOP), fielded in December 2023 and January 2024. The survey was designed to elicit information on perceptions about the government, experiences with the bureaucracy, and information about preferences for regulation. A total of 9,105 complete interviews were carried out across nine countries (1,864 municipalities) in Latin America. The online survey gathers responses from a non-probability opt-in panel and uses quotas for age, gender, education, and region. Post-stratification weights are used to adjust the quotas, and the weighted sample is representative at the national level on those dimensions. The cross-country coverage of our sample is an important feature, as it results in a

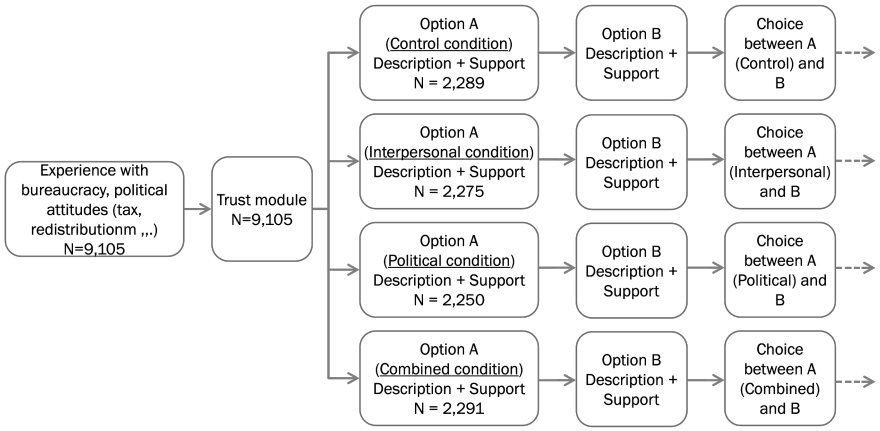


Figure 2.1: Survey flowchart

large total number of observations, consequently improving statistical power. In addition, the results based on different contexts should provide a stronger claim to external validity compared to a single-country/setting sample.

The survey consisted of different modules gauging the respondent's political-economic preferences. First, the respondents replied to broad questions about experience with and preferences for bureaucratic procedures procedures[3], as well as other political and economic attitudes. At a later stage, the respondents indicated their social and political trust using a battery of questions commonly adopted in other international surveys. Following the trust module were questions that gauged preferences for regulation, described in further detail below. Lastly, the survey elicited standard political attitudes, such as left-right self-placement and sociodemographics. See Figure 2.1 for an overview of the survey flow.

In order to elicit the respondents' preferences over policy features, we developed an original instrument that offered respondents choices between two policy alternatives for assisting local commercial establishments in ahigh-inflationary economy where small businesses are failing. The survey stresses the social costs of this crisis economy, and the government has two policy alternatives to mitigate the problems [4]. It is important to highlight that the policy content is held fixed and shared by both policy options. Specifically, the beneficiaries (small business owners), the implementing actor (the government), and the

[3]It is unlikely that consistency bias has (strong) effects. These questions were included in the first survey module of the survey, while our main variables of interest (module regulation), described in detail in this section, were elicited towards the end of the survey, with 35 other questions in between. Moreover, the framing of the questions differs substantially. While the first module asks about broad preferences, the instrument we adopt to measure preference for regulation inquires about a specific scenario and refrains from using words adopted previously to describe bureaucratic procedures.

[4]The full introductory text is described in Appendix 2.B.

action (provision of financial support) are constant across both policy alternatives. The options differed in regulation level (i.e., procedures involved in the action) and cost (time of implementation, connected to social and private costs of high inflation). In the survey, we first describe each policy and gauge the respondent's support for each one, before pitching the two options against each other and asking the respondent which one they prefer (See Figure 2.2). While we are mainly interested in the respondent's answer to the latter question, we ask separately about the support for each alternative for two reasons. Firstly, our setting involves a moderate level of complexity related to its hypothetical nature, as our scenario does not refer to any existing policy that the respondents can readily connect to. In light of this, we opted for first explaining each option separately in order to break down the hypothetical context into smaller and more easily understandable pieces. Moreover, asking for support for each policy at that stage compels the individual to reflect on that option before choosing between both. Secondly, gauging support for each policy, as well as a relative preference between both options, allows us to have a better understanding of policy preferences. The policy implications are substantially different in cases where, for instance, a society prefers policy B over A but supports both options highly, compared to a scenario of B still being preferred over A, yet both having low support levels.

In the first option (henceforth ***Option A***), the government quickly identifies the establishments and delivers an immediate payment to such businesses. In the second option (***Option B***), the respondents are informed that implementation takes longer and payment is not immediate. Option B involves businesses documenting proof of operations and having been harmed by the crisis; and where only establishments in need would become a beneficiary. Immediately after reading the description of each option, the respondents were asked to provide their support for that policy in absolute terms (strongly opposes to strongly supports). After the description of each separate policy option comes the last question of this module, which elicits the relative preferences by asking which of the two options, A and B, the respondents prefer. This last question differs from the first two as it explicitly requests the respondent to compare one policy to the other. See Figure 2.2 for the wording of the questions and Appendix 2.B for more details on the survey.

In addition, we implemented an experimental component in the survey, where the role of other citizens and/or the government was emphasized. First, the experimental component increases uncertainty by explicitly describing the possibility of a lack of efficient cooperation. More specifically, the treatment emphasizes the uncertainty of the situation by highlighting the role of other parties and the room for opportunistic behavior. As trust is a heuristic element that provides orientation when contracts are incomplete, we expect this treatment to influence demand for costly policy features. Secondly, our experiment

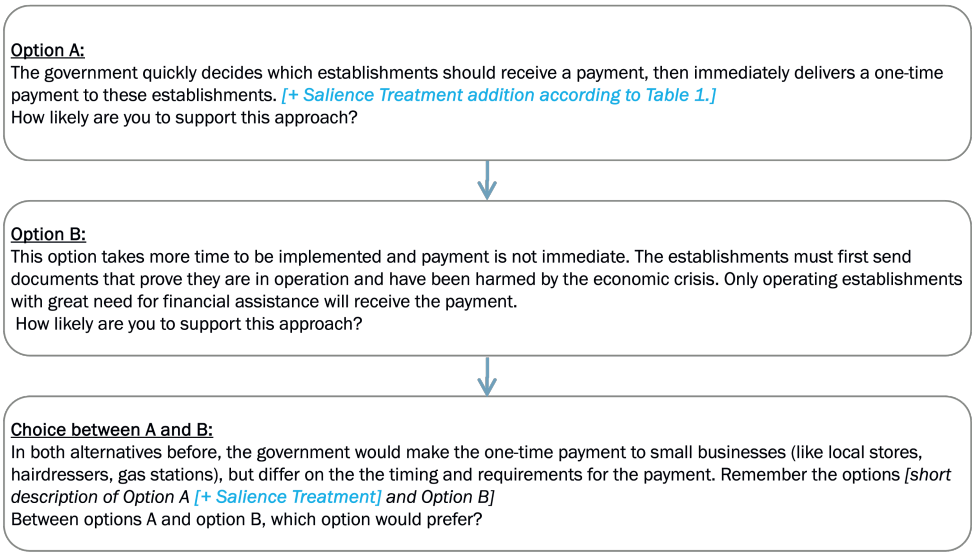


Figure 2.2: "Regulation" module detailed flowchart: Control group

Note: In black is the text all respondents receive. The text in blue refers to the additional treatment information received by respondents in different treatment arm (Table 2.1).

aims to increase the perceived costs associated with an unsuccessful policy response, by highlighting the social cost incurred (lack of sufficient funds) in case others behave in a manner that deviates from socially desirable behavior. As previous research (described above) identifies trust as particularly relevant when the (perceived) potential costs are high, we expect this to be another channel through which the treatment might influence demand for the costly policy option.

In concrete terms, the experiment was carried out by randomizing the participants into four different groups, three treatment and one control group (See Figure 2.1 for a simple survey flowchart). The treatments consist of including an additional sentence to the description of Option A, highlighting the efficiency costs for the policy in case of social opportunism, government's misdoings, or both. Table 2.1 displays Option A's description by treatment condition. Note that the treatment allocation creates a between-subject design, and it is important to highlight that each individual only receives one version of Option A. Thus, if the description of Option A includes the Interpersonal condition in the first question, the short text reminding the respondent of both options when eliciting the choice between Option A and Option B will also include the Interpersonal treatment for Option A. The same rationale applies to the Control, Political, and Combined groups.

Table 2.1: Treatment arms: Policy Option A text

| Role of government \ Role of other citizens | No | Yes |
|---|---|---|
| No | **Control group:** The government quickly decides which establishments should receive a payment, then immediately delivers a one-time payment to these establishments. | **Interpersonal treatment:** The government quickly decides which establishments should receive a payment, then immediately delivers a one-time payment to these establishments. If many people submit false registrations, there will not be enough money to pay to small establishments in need. |
| Yes | **Political treatment:** The government quickly decides which establishments should receive a payment, then immediately delivers a one-time payment to these establishments. If the government does not choose the correct businesses, there will not be enough money to pay to small establishments in need. | **Combined treatment:** The government quickly decides which establishments should receive a payment, then immediately delivers a one-time payment to these establishments. If the government does not choose the correct businesses, or many people submit false registrations, there will not be enough money to pay to small establishments in need. |

### 2.2.2 Data description

Table 2.3 displays summary statistics for our main dependent and independent variables. Table 2.2 presents summary statistics of the main variables for the sample of respondents to our survey instrument.

We have two sets of dependent variables. First, we measure absolute support for flexible and regulated policies, Options A and B, respectively. Support for each policy is measured in a 5-point Likert scale, ranging from 'Strongly Disagree' to 'Strongly Agree'. Second, we elicit a choice between both flexible and rigid options, regardless of the support level for each alternative. In practice, it means that the respondent may prefer one policy over the other, while opposing (or supporting) both. The choice between A and B is measured on a 5-point scale, with indifference between A and B at 3. From the original variable, we compute a 3-level measure indicating whether the respondent prefers option A, is indifferent between A and B, or prefers option B.

Our main variables of interest are the respondent's horizontal and vertical trust and the effect of the salience accentuator treatments on preferences for regulation. Trust attitudes are measured before asking the respondents their preferences for regulation. Respondents

state how trustworthy different social actors are: Not at all, little, somewhat, a lot[5]. We compute dummy variables for Social Mistrust and Political Mistrust for respondents who reply that communities and the president are not at all reliable, respectively.

The experiment randomized the respondents into equally sized control or treatment groups, as described in the previous subsection. Table 2.2 indicates that allocation is broadly random, with few discrepancies[6], which are included as covariates in the regression models. Treatment allocation is indicated with dummy variables for the different treatment arms, with the control group as a baseline.

[5]In the original Spanish (Portuguese): *Nada, poco (pouco), algo, mucho confiables (muito confiáveis).*
[6]Occupation variables listed in Table 2.2 are computed from the same original categorical variables. Thus, the imbalance in the three dummies is due to discrepancies in fewer variables.

Table 2.2: Summary statistics and randomization balance

| | Full Sample | | Difference in means (p-value) | | |
|---|---|---|---|---|---|
| | Mean | S.d. | Interpersonal | Political | Combined |
| | (1) | | (2) | (3) | (4) |
| Demographics | | | | | |
| Age | 39.47 | 44.01 | 0.37 | 0.89 | 0.68 |
| Woman | 0.51 | 0.79 | 0.67 | 0.68 | 0.62 |
| Education | 4.07 | 3.31 | 0.62 | 0.87 | 0.98 |
| Income group | 7.10 | 8.53 | 0.75 | 0.73 | 0.77 |
| Attitudes | | | | | |
| Trust: president | 2.87 | 3.08 | 0.65 | 0.63 | 0.35 |
| Trust: community | 2.40 | 2.40 | 0.39 | 0.35 | 0.65 |
| Ideology | 5.59 | 6.26 | 0.17 | 0.69 | 0.73 |
| Occupation | | | | | |
| Working | 0.55 | 0.83 | 0.68 | 0.11 | 0.88 |
| Working without contract | 0.07 | 0.36 | 0.42 | 0.91 | 0.13 |
| Self-employed | 0.16 | 0.51 | 0.31 | 0.00*** | 0.49 |
| Unemployed | 0.14 | 0.52 | 0.51 | 0.06* | 0.52 |
| Domestic work | 0.14 | 0.52 | 0.21 | 0.05* | 0.41 |
| Countries | | | | | |
| Argentina | 0.11 | 0.39 | 0.97 | 0.92 | 0.51 |
| Brasil | 0.11 | 0.36 | 0.92 | 0.29 | 0.99 |
| Chile | 0.11 | 0.35 | 0.70 | 0.44 | 0.59 |
| Colombia | 0.11 | 0.53 | 0.88 | 0.66 | 0.27 |
| Costa Rica | 0.10 | 0.37 | 0.90 | 0.94 | 0.46 |
| Guatemala | 0.11 | 0.52 | 0.82 | 0.89 | 0.70 |
| Mexico | 0.12 | 0.42 | 0.79 | 0.35 | 0.63 |
| Panama | 0.11 | 0.52 | 0.07* | 0.77 | 0.29 |
| Peru | 0.11 | 0.41 | 0.59 | 0.24 | 0.26 |
| Observations | 9105 | | 4564 | 4539 | 4580 |

Table 2.3: Summary statistics: main variables

| | Mean | S.D. | Min | Max | Obs |
|---|---|---|---|---|---|
| Dependent variables | | | | | |
| Support | | | | | |
| Support A: Fast policy | 3.19 | 3.23 | 0 | 5 | 9097 |
| Support : Delayed policy | 3.50 | 3.40 | 0 | 5 | 9096 |
| Choice between A or B | | | | | |
| Choice A (1) or B (3) | 2.38 | 2.35 | 0 | 3 | 9105 |
| Prefers A | 0.20 | 0.60 | 0 | 1 | 9105 |
| Prefers B | 0.58 | 0.83 | 0 | 1 | 9105 |
| Indifferent A or B | 0.22 | 0.59 | 0 | 1 | 9105 |
| Explanatory variables | | | | | |
| Trust | | | | | |
| Mistrust Political | 0.39 | 0.77 | 0 | 1 | 9105 |
| Mistrust Social | 0.08 | 0.36 | 0 | 1 | 9105 |
| Treatment allocation | | | | | |
| Control | 0.25 | 0.61 | 0 | 1 | 9105 |
| Interpersonal | 0.25 | 0.61 | 0 | 1 | 9105 |
| Political | 0.25 | 0.63 | 0 | 1 | 9105 |
| Combined | 0.25 | 0.64 | 0 | 1 | 9105 |
| Observations | 9105 | | | | |

### 2.2.3 Empirical strategy

#### Baseline model

The empirical investigation of the determinants of preferences for regulation relies on a two-level analysis. To rule out broad cross-sectional sources of unobserved heterogeneity, including institutional contexts, we estimate differences in preferences based on within-country variation[7]. We account for potential confounding factors by including them in the regression specification. Formally, we estimate models of the following form:

$$Choice_{i,c} = \beta_1 PM_{i,c} + \beta_2 SM_{i,c} + \boldsymbol{\beta_T'} \boldsymbol{Treatm_{T,i,c}} + \boldsymbol{\Lambda_K'} \boldsymbol{X_{K,i,c}} + \mu_c + \varepsilon_{i,c} \quad (2.1)$$

Where $Y_{i,c}$ is one of the three outcome variables: Support for option A, Support for option B, or Choice between A and B. $SupportA_{i,c}$ and $SupportB_{i,c}$ are measured in a

[7]The model estimation does not converge when a more granular geographic unit is used. As robustness, we estimate the models using OLS regressions and lower geographic fixed effects - namely states and municipalities - to which the results remain qualitatively robust.

five-point support scale ranging from Strongly Opposed (1) to Strongly Supports (5). Both variables measure support for each policy alternative in absolute terms, meaning that no direct comparisons are made between options A and B. Choice between A and B ($Choice_{i,c}$), on the other hand, makes a direct comparison between options A and B, and the respondent must choose between which of the two options they prefer. The variable is a three-point categorical variable: Prefers A over B (0) and Prefers B over A (2), and Indifference between A and B coded as 1.

Our main explanatory variables are Political Mistrust ($PM_{i,c}$), Social Mistrust ($SM_{i,c}$), and the allocation into treatment groups ($Treatm_{T,i,c}$, with $T = \{I, P, C\}$). Political and Social Mistrust are dummy variables, with a value of 1 when the respondent states that the president and his community cannot be trusted at all, respectively. We create dummies to indicate if the respondent received the Interpersonal ($Treatm_{I,i,c}$), Political ($Treatm_{P,i,c}$), or Combined treatment ($Treatm_{C,I,c}$), or if they were allocated into the Control condition (baseline category).

$\boldsymbol{X_{K,i,c}}$ is a vector of individual-level covariates that includes three broad categories of covariates: socio-demographics, ideology, attitudes towards bureaucracy and policies. Socio-demographic controls include income, education, age, gender, marital status, and occupation. Ideology measures self-placement on a scale of left (1) - right (10). Lastly, the last set of covariates is included to mitigate heterogeneity stemming from different values placed on stringency levels according to past experience and possible endogeneity concerns. We control for past experience with the public bureaucracy in case a previous interaction with public offices explains preferences for regulation but correlates with trust, particularly political. Preference for lower taxes and lower financial assistance controls the possibility that individuals understand Option B as having a more narrowly targeted coverage, as opposed to a better targeting and similar coverage. Lastly, beliefs that inflation is caused by the greed of businessmen[8] accounts for different attitudes towards deservingness/fairness. Finally, $\varepsilon_{i,c}$ is the error term.

Given the categorical nature of the dependent variables, we estimate Equation 2.1 using a Multinomial Logistic Regression model, due to two aspects. First, as the variable $Choice_{i,c}$ involves a relative choice between two options, it is not clear whether factors explaining the preference for one option (e.g. for Option A) are the same as the ones explaining support for the other alternative (Option B), and the Multinomial Logit accommodates this differential dynamic. Secondly, while it might be plausible to establish an order of the values (e.g. Prefers A > Indifference > Prefers B), we restrain from making any assumptions, as the measure is a novel survey instrument. The Multinomial Logit does not

[8]In Spanish/Portuguese, the word empresarios/empresários (businessmen) is commonly associated with owners/high-ranking employees of large(r) corporations.

impose an ordering between the values and is best suited when the outcome is categorical and several explanatory variables violate the proportional odds assumption of an Ordered Logit, making it more appropriate than alternative models for categorical variables[9]. Since the Multinomial Logit does not impose an order of values, an important feature is that it estimates $m-1$ models, where $m$ is the number of levels of the outcome variable. In our case, we define "Indifference" as the referent category. Thus, the Multinomial Logit model estimates two models: one model for "Prefers A" relative to "Indifference", and "Prefers B" relative to "Indifference". For that reason, the output tables for results using the Multinomial Logit present two columns for each regression estimation.

The coefficients of interest are the $\beta$'s, which measure the change in the probability of supporting/preferring a regulation level that is associated with an increase in one of the following measures: political mistrust $PolMis_{i,c}$, social mistrust $SocMis_{i,c}$, receiving each the interpersonal, political, or combined salience treatment $Treatm_{T,i,c}$ ($T = \{I, P, C\}$ ).

## 2.3 Results

### 2.3.1 Main results

Table 2.4 displays the results of the estimation of Equation 2.1, which regresses the relative choice between options A (flexible and immediate policy) and B (delayed and rigid) on the respondent's trust levels and treatment allocation. The table includes the estimations of four different models, where we gradually add the covariates and controls. Each estimation is indicated on the top row by the column numbers 1 to 4. Estimation 1 controls only for country-fixed effects, and socio-demographic controls are added in column 2. The covariates gauging past experience with the bureaucracy, support for public transfers, and attitudes towards businessmen are included in column 3. Lastly, column 4 displays the results for the saturated model, which also controls for self-reported ideology. As explained in the previous section, each estimation (numbered column), estimates 2 models: the first predicts preferring Option A over Indifference, and the second predicts preference for Option B over Indifference. Each one of these models is indicated on the second row (below the column numbers) by Pref A and Pref B, respectively.

The results indicate that political mistrust is strongly connected to a mass of respondents on the midpoint between A and B, denoting indifference between both alternatives[10].

[9] We also estimate the models using a Generalized Logistic Regression of Partial Proportions, a middle term between the Multinomial Logit and Ordered Logit. Unlike Multinomial Logit, the Generalized Logit uses the ordering of the categories and its estimations are more parsimonious. Unlike the Ordered Logit, the Generalized Logit does not assume proportional odds (Williams, 2016).

[10] We also estimate the model in Equation 2.1 using a Generalized Ordered Logit, with results in Ta-

The negative coefficient of political mistrust in Table 2.4 for Prefers A (compared to Indifferent) and Prefers B (compared to indifferent) indicates that politically mistrusting individuals move away from supporting one policy over the other towards indifference[11]. Social mistrust, on the other hand, does not predict which position the respondent takes when choosing between the policy alternatives (or indifference).

The treatments that highlight the role of other citizens were effective in increasing salience and the potential costs of their actions: they move preferences away from the flexible policy to indifference and away from indifference to preferring the costly policy alternative. The interpersonal arm had the strongest negative effect on support for A and a positive effect on support for B. As a result, being informed about the consequential relevance of other individuals for policy success leads the respondents to move away from the flexible option to indifference and from indifference to the more regulated alternative. The combined treatment causes people to prefer B over being indifferent, but does not influence individuals to move away from A. The Political treatment has a negative effect on preferences for A, in line with the hypothesized direction; however, the coefficient does not reach statistical significance. Controlling for the geographic, demographic, attitudes, and ideological covariates does not qualitatively change the results of the variables of interest; on the contrary, it improves the estimation precision.

ble A2.11. The combination of both results indicates the move towards 'Indifference' of politically mistrusting individuals.

[11] Estimations with the multinomial model using Prefers A instead of Indifference as baseline category, corroborate this interpretation. The coefficient for Political mistrust is of small magnitude and statistically zero when estimating Preference for B over A, while larger and significant at a 1% level when estimating Indifference over Preference for A.

Table 2.4: Main results: Choice between A and B, Relative to Indifference

| | (1) | | (2) | | (3) | | (4) | |
|---|---|---|---|---|---|---|---|---|
| | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B |
| Mistrust Political | -0.26*** | -0.09 | -0.24** | -0.17** | -0.21** | -0.22*** | -0.27*** | -0.29*** |
| | (0.09) | (0.09) | (0.10) | (0.09) | (0.10) | (0.09) | (0.10) | (0.09) |
| Mistrust Social | 0.15 | 0.00 | 0.01 | 0.07 | 0.00 | 0.08 | -0.09 | 0.01 |
| | (0.17) | (0.13) | (0.17) | (0.13) | (0.17) | (0.14) | (0.17) | (0.14) |
| Treatments | | | | | | | | |
| Interpersonal | -0.24* | 0.43*** | -0.24* | 0.44*** | -0.25* | 0.48*** | -0.27** | 0.48*** |
| | (0.13) | (0.09) | (0.13) | (0.09) | (0.13) | (0.10) | (0.14) | (0.10) |
| Political | -0.13 | -0.01 | -0.12 | -0.05 | -0.11 | -0.02 | -0.12 | -0.02 |
| | (0.11) | (0.09) | (0.12) | (0.09) | (0.12) | (0.09) | (0.12) | (0.09) |
| Combined | -0.04 | 0.23** | -0.03 | 0.23** | -0.02 | 0.26*** | -0.01 | 0.27*** |
| | (0.12) | (0.10) | (0.12) | (0.10) | (0.12) | (0.10) | (0.12) | (0.10) |
| Attitudes covars | | | | | | | | |
| Experience: complicated | | | | | 0.06 | 0.29*** | 0.03 | 0.27*** |
| | | | | | (0.10) | (0.08) | (0.10) | (0.08) |
| Experience: simple | | | | | 0.54*** | 0.10 | 0.46*** | 0.06 |
| | | | | | (0.13) | (0.11) | (0.13) | (0.11) |
| Businessmen greed | | | | | -0.06 | -0.36*** | -0.05 | -0.31*** |
| | | | | | (0.10) | (0.07) | (0.10) | (0.07) |
| Less assistance | | | | | -0.12 | 0.43*** | -0.08 | 0.43*** |
| | | | | | (0.10) | (0.10) | (0.11) | (0.10) |
| Obs | 9098 | | 9038 | | 9024 | | 9024 | |
| Pseudo $R^2$ | 0.019 | | 0.048 | | 0.064 | | 0.079 | |
| Country FE | yes | | yes | | yes | | yes | |
| Demographics | - | | yes | | yes | | yes | |
| Attitudes | - | | - | | yes | | yes | |
| Ideology | - | | - | | - | | yes | |

*Note:* Table presents coefficients estimates for Eq.2.1 using Multinomial Logistic Regression models with country fixed effects. Each numbered pair of columns presents the estimation for the two models jointly estimated by the Multinomial Logit. The top row displays the category estimated as the outcome variable (reference category: 'Indifference'). Pref A (B) includes individuals who selected Strongly Prefer A (B) and Prefer A (B). See the main text for a description of the control variables and other covariates. Regression estimated using proportional weights. Standard errors clustered at the municipality level in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

### 2.3.2 Extensions

#### Heterogeneous effects to treatment

As explained previously, all three treatment arms are designed to increase uncertainty, accentuate the role of other individuals and/or the government for policy success, and make opportunistic and suboptimal behavior costly in terms of policy efficacy. To the extent that the information provided highlights the relevance of other agents' actions and stresses uncertainties, we expect that one's attitudes towards such agents moderate the effect of the treatment on preferences for regulation. Thus, we investigate the heterogeneous effects of the randomized experiment on the choice between the policy alternatives across different levels of social and political trust. Formally, we estimate the following model:

$$Choice_{i,c} = \beta_1 PM_{i,c} + \beta_2 SM_{i,c} + \boldsymbol{\beta_T'} \boldsymbol{Treatm_{T,i,c}} \tag{2.2}$$

$$\boldsymbol{\beta_H'} \boldsymbol{Treatm_{T,i,c}} \times (PM_{i,c} + SM_{i,c}) + \boldsymbol{\Lambda_K'} \boldsymbol{X_{K,i,c}} + \mu_c + \varepsilon_{i,c} \tag{2.3}$$

Where $Choice_{i,c}$ is the dependent variable that measures the *relative* support for one policy alternative over the other. The independent variables $PM_{i,c}$ and $SM_{i,c}$ refer to Political and Social Mistrust among respondents allocated to the control group - those who do not receive any salience treatment. The vector $\beta_T$ expresses the effects of receiving the treatments common to all respondents, and the vector $\beta_H$ are the additional effects of each treatment among respondents with no social and political trust. The previous section describes the control variables and fixed effects. Similar to the baseline model without interactions, we estimate the regression in Equation 2.2 with a Multinomial Logit method, and the same disclaimer for interpreting the results and tables applies.

Table 2.5 displays the estimation results of the heterogeneous responses to the randomized experiment, which reveals important patterns. While the results for the baseline model in Table 2.4 (repeated in Table 2.5, under column (1)) suggest that social mistrust does not influence individuals' preference between policy options A and B, those estimations hide important heterogeneity. In the model with the interaction terms, the coefficients 'Interpersonal × Mistrust Social' and 'Combined × Mistrust Social' are both significant and negative for Preference for A vs. Indifference. This indicates that social mistrust does, indeed, have an effect on preference for regulation by lowering acceptance of more flexible policy alternatives. However, this impact is activated when the salience of others' actions is high enough, as indicated by the negative and significant interaction terms. The non-interacted 'Mistrust Social' coefficient, which corresponds to socially mistrusting individuals in the control group, remains insignificant after the inclusion of the interactions,

further suggesting that mistrust needs to be triggered.

Moreover, highlighting that the policy might not achieve the desired outcomes is insufficient to activate the effect of mistrust on preferences for A. Instead, the importance of other citizens' behavior and of broad social compliance needs to be explicitly addressed. This is evident from the lack of effects of social mistrust among individuals who receive the political message but significant and negative among those who receive the interpersonal or combined treatment. In addition, the latter interaction mirrors the effect of the interpersonal treatment arm, suggesting that it is precisely information about others that drives the reaction by mistrusing respondents.

After accounting for the heterogeneous treatment effects, the non-interacted coefficient for the Interpersonal treatment arm become insignificant for predicting support for A over Indifference. This means that beyond activating the effect of mistrust, the influence of those treatments on damping support for A was restricted to mistrusting individuals. Nonetheless, all individuals, mistrusting and not, still remain more likely to support a more regulated policy B (compared to indifferent) after hearing of the room for opportunistic behavior by their fellow citizens.

Lastly, the political treatment has no effect on preferences among the broad sample of respondents or across different trust groups. In contrast, political mistrust remains relevant in explaining indifference to regulation level. The combination of these results, together with the evidence for the activation of social mistrust, might hint at the fact that small cues, such as alluding to 'the government', suffice to activate the effect of political mistrust on repudiating policies with a greater degree of uncertainty. While the current data does not allow for a direct test, this possibility is not unlikely, given most of Latin America's highly polarized political environment and the long history of low institutional trust in the subcontinent.

Table 2.5: Extensions: Interaction model

| | Baseline model (1) | | Interaction model (2) | |
|---|---|---|---|---|
| | Pref A vs Indiff | Pref B vs Indiff | Pref A vs Indiff | Pref B vs Indiff |
| Mistrust Political | -0.27*** | -0.29*** | -0.38** | -0.33** |
| | (0.10) | (0.09) | (0.16) | (0.15) |
| Mistrust Social | -0.09 | 0.01 | 0.29 | 0.16 |
| | (0.17) | (0.14) | (0.28) | (0.25) |
| Treatments | | | | |
| Interpersonal | -0.27** | 0.48*** | -0.12 | 0.52*** |
| | (0.14) | (0.10) | (0.17) | (0.14) |
| Political | -0.12 | -0.02 | -0.24 | -0.06 |
| | (0.12) | (0.09) | (0.17) | (0.12) |
| Combined | -0.01 | 0.27*** | -0.03 | 0.27** |
| | (0.12) | (0.10) | (0.16) | (0.13) |
| Interactions | | | | |
| Treatment × Political | | | | |
| Interpersonal × Mistrust Political | | | -0.13 | 0.04 |
| | | | (0.25) | (0.19) |
| Political × Mistrust Political | | | 0.25 | 0.10 |
| | | | (0.26) | (0.22) |
| Combined × Mistrust Political | | | 0.26 | -0.01 |
| | | | (0.25) | (0.21) |
| Treatment × Social | | | | |
| Interpersonal × Mistrust Social | | | -1.19** | -0.56 |
| | | | (0.48) | (0.37) |
| Political × Mistrust Social | | | 0.31 | 0.11 |
| | | | (0.49) | (0.42) |
| Combined × Mistrust Social | | | -0.94** | -0.07 |
| | | | (0.46) | (0.35) |
| Coefficient Equality Test (p-val) | | | | |
| Interp × MP = Pol × MP | | | .212 | .808 |
| Interp × MP = Comb × MP | | | .183 | .832 |
| Comb × MP = Pol × MP | | | .980 | .681 |
| Interp × MS = Pol × MS | | | .007 | .112 |
| Interp × MS = Comb × MS | | | .647 | .171 |
| Comb × MS = Pol × MS | | | .010 | .666 |
| Observations | 9024 | | 9024 | |
| Pseudo $R^2$ | 0.079 | | 0.081 | |
| Country FE | yes | | yes | |
| Demographics | yes | | yes | |
| Attitudes | yes | | yes | |
| Ideology | yes | | yes | |

*Note:* Table presents coefficients estimates for Eq.2.2 and 2.2 using Multinomial Logistic Regression models with country fixed effects. See Table 2.4 for more on estimation method and variable specifications. Standard errors clustered at the municipality level in parentheses. The Coefficient Equality Test panel displays the p-statistics of the Wald test for each pair of coefficients indicated in the row. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

**Approval or opposition to policies**

In our main analysis, we explore how trust relates to preference of certain policy features over others. Yet, it is possible that two individuals with the same preference of A over B might hold different views to each policy alternative in isolation. In other words, the survey instrument explored thus far measures relative support for each alternative ***over*** the other, without evaluating the absolute levels of approval (or disapproval) for each alternative. A case could occur where two individuals state they prefer A over B, yet one approves both alternatives while the other is not satisfied with either options. In this case, both respondents are regarded as equal, even though the second respondent had different motivations for choosing A over B, such as regarding it as a 'less bad of an alternative' rather than truly believing that is a preferrable option. The different cases lead to distinct policy implications, so we provide a more detailed understanding of how trust relates to attitudes regarding policy features. To do so, we explore the two questions eliciting opinions on each policy option, which were asked before the instrument gauging the choice between A and B. As explained in detail in Section 2.2, when presenting the respondents with each alternative, the survey asked how much they approved or disapproved that option. To distinguish between the two sets of dependent variable, we henceforth refer to the questions asking about each option in isolation as *absolute support* or *approval*, and the last question of the module about the choice between A and B as *relative preference*. Formally, we substitute the original dependent variable (relative preference $Choice_{i,c}$) in the Model 2.1 by the two variables that gauge absolute support for option A and for option B according to the Model 2.4 below:

$$Support_{j,i,c} = \beta_1 PM_{i,c} + \beta_2 SM_{i,c} + \boldsymbol{\beta_T' Treatm_{T,i,c}} + \boldsymbol{\Lambda_K' X_{K,i,c}} + \mu_c + \varepsilon_{i,c} \qquad (2.4)$$

Where $Support_{j,i,c}$ is one of the two outcome variables: Support for option A ($Support_{A,i,c}$ ) or Support for option B ($Support_{B,i,c}$ ). $SupportA_{i,c}$ and $SupportB_{i,c}$ are measured in a five-point support scale ranging from Strongly Opposed (1) to Strongly Supports (5). Both variables measure support for each policy alternative in absolute terms, meaning that no direct comparisons are made between options A and B. Given the categorical nature of the dependent variables, we estimate Equation 2.1 using a Ordered Logistic Regression. The Ordered Logit accounts for the ordinal nature of $SupportA_{i,c}$ and $SupportB_{i,c}$, which are expressed in a 5-point scale with a clear and well-established ordering of the values, but unknown distance between them. We estimate the regressions for $Support_{A,i,c}$ and $Support_{B,i,c}$ separately and present the results for the main coefficient of interest in Tables 2.6 and 2.7, respectively. All other variables and their specifications follow the main Model

2.1.

Being mistrusting correlates with an overall lower policy approval rates, regardless of whether they include procedures. This relationship holds for political and social mistrust, as indicated by the negative sign, significant at a 1% level, of both trust coefficients in Tables 2.6 and 2.7. The coefficients remain virtually unaffected by the addition of the sociodemographic, attitudes, and ideology controls in columns 2, 3, and 4, respectively, in each table.

Interestingly, political mistrust lowers the absolute support for both flexible and regulated policy options, but also increases indifference between which of the two alternatives the individual prefers, according to the coefficients in Table 2.4. Taken together, we interpret these results as a corroboration to the argument that there is a political fatigue among mistrusting individuals, and that political mistrust leads individuals to opt for a political exit and prefer private action to address problems over public solutions that involve governmental action. This pattern resonates with findings that mistrust leads to preferences for (re)distribution and subsidies for private solutions over the provision of public goods and public investments (Keefer et al., 2022).

The treatments were effective in increasing the salience and costs of other agents' actions: all three treatment arms strongly decrease absolute support levels for option A (Table 2.6). Yet, only the interpersonal treatment had a broad effect on approval levels for option B (Table 2.7). However, the treatment effects on absolute support are only partially reflected on the main dependent variable that measures relative preference for one option over the other.

The covariates measuring attitudes towards regulation also provide relevant insights. A good and uncomplicated past experience with the bureaucracy strongly predicts a higher degree of approval of policies, while having had a negative experience does not predict disapproval of either policy. When choosing between options, a positive experience relates to the relative preference for A, while having encountered complicated procedures increases demand for B over indifference. This relationship echoes arguments made by *inter alia*, Rothstein (2008); Rothstein and Stolle (2008), where support for (welfare) policies depends on a positive interaction with the public administration.

Respondents who oppose an assistance approach to solving poverty are less supportive of the flexible option (Table 2.6), although an attitude does not relate to approval of the rigid policy (Table 2.7). The insignificant coefficient 'Less assistance' for option B suggests that respondents do not understand option B as having a smaller coverage. Should that have been the case, its coefficient would be positive. Still, despite not influencing approval of B, preferences for less assistance relate to greater relative preferences for B

Table 2.6: Extension: Support for Option A (flexible)

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Mistrust Political | -0.58*** | -0.53*** | -0.50*** | -0.51*** |
| | (0.06) | (0.06) | (0.06) | (0.06) |
| Mistrust Social | -0.46*** | -0.53*** | -0.55*** | -0.57*** |
| | (0.11) | (0.12) | (0.12) | (0.12) |
| Treatment | | | | |
| Interpersonal | -0.76*** | -0.77*** | -0.78*** | -0.79*** |
| | (0.07) | (0.07) | (0.07) | (0.07) |
| Political | -0.27*** | -0.25*** | -0.25*** | -0.26*** |
| | (0.08) | (0.08) | (0.08) | (0.08) |
| Combined | -0.43*** | -0.42*** | -0.44*** | -0.44*** |
| | (0.08) | (0.08) | (0.08) | (0.08) |
| Covariates | | | | |
| Experience: complicated | | | -0.09 | -0.09* |
| | | | (0.06) | (0.06) |
| Experience: simple | | | 0.46*** | 0.44*** |
| | | | (0.10) | (0.10) |
| Businessmen greed | | | 0.15*** | 0.14** |
| | | | (0.06) | (0.06) |
| Less assistance | | | -0.27*** | -0.27*** |
| | | | (0.05) | (0.05) |
| Observations | 9090 | 9034 | 9021 | 9021 |
| Pseudo $R^2$ | 0.020 | 0.029 | 0.036 | 0.037 |
| Country FE | yes | yes | yes | yes |
| Sociodem covars | no | yes | yes | yes |
| Attitudes covars | no | no | yes | yes |
| Ideology covars | no | no | no | yes |

*Note:* Table presents coefficients estimates for Eq.2.4 using Ordered Logistic Regression models with country fixed effects. The outcome variable indicates support for Policy Option A, ranging from 1 (no support) to 5 (great support). See the main text for a description of the control variables and other covariates. Regression estimated using proportional weights. Standard errors clustered at the municipality level in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 2.7: Extension: Support for Option B (rigid)

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Mistrust Political | -0.46*** | -0.49*** | -0.49*** | -0.51*** |
| | (0.06) | (0.06) | (0.06) | (0.06) |
| Mistrust Social | -0.56*** | -0.54*** | -0.53*** | -0.55*** |
| | (0.11) | (0.11) | (0.11) | (0.11) |
| Treatment | | | | |
| Interpersonal | 0.23*** | 0.22*** | 0.22*** | 0.22*** |
| | (0.07) | (0.07) | (0.07) | (0.07) |
| Political | -0.09 | -0.11 | -0.10 | -0.10 |
| | (0.09) | (0.09) | (0.09) | (0.09) |
| Combined | -0.00 | -0.01 | -0.00 | -0.00 |
| | (0.08) | (0.08) | (0.08) | (0.08) |
| Covariates | | | | |
| Experience: complicated | | | 0.03 | 0.02 |
| | | | (0.06) | (0.06) |
| Experience: simple | | | 0.21** | 0.20** |
| | | | (0.10) | (0.10) |
| Businessmen greed | | | -0.09* | -0.07 |
| | | | (0.05) | (0.05) |
| Less assistance | | | 0.05 | 0.05 |
| | | | (0.05) | (0.06) |
| Observations | 9089 | 9032 | 9021 | 9021 |
| Pseudo $R^2$ | 0.013 | 0.018 | 0.018 | 0.020 |
| Country FE | yes | yes | yes | yes |
| Sociodem covars | no | yes | yes | yes |
| Attitudes covars | no | no | yes | yes |
| Ideology covars | no | no | no | yes |

*Note:* Table presents coefficients estimates for Eq.2.4 using Ordered Logistic Regression models with country fixed effects. The outcome variable indicates support for Policy Option B, ranging from 1 (no support) to 5 (great support). See the main text for a description of the control variables and other covariates. Regression estimated using proportional weights. Standard errors clustered at the municipality level in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

over indifference (Main Results, Table 2.4). Lastly, faulting inflation on the greed of businessmen is associated with greater approval of A, and even though it does not predict absolute support for B (Tables 2.6 and 2.7), this attitude moves respondents from B to indifference between policy choices (negative coefficient in Table 2.4).

**Heterogeneity according to governance characteristics**

Previous work has found important conditional effects of trust. Despite differing from our work in the outcome variable, previous research finds that the influence of (social) trust demand for regulation depends on the level of trust in the political institutions (Pitlik & Kouba, 2015), and on bureaucratic and government quality (Charron et al., 2021). To explore the context-specific effects in our model, we inspect the relationship between our explanatory variables of interest and policy preferences in different governance environments[12].

Three of the nine countries in our samples are federative states, and decentralization of the public administration to subnational governments have become increasingly relevant across the entire Latin America over the last decades (Eguino & Radics, 2018). For that reason, we inspect whether our results differ or are driven by specific subnational levels of quality of governance. As the existing indices measuring regional governance, such as the EQI[13], do not cover Latin American countries, we compute subnational governance indicators using individual-level opinion data. Similarly to EQI, we measure how governance takes place as perceived and experienced by the citizens. We compute a regional composite index of local quality of governance based on measures of citizens' satisfaction with different public goods and services measured in opinion surveys. This approach is inspired by the EQI, which includes, *inter alia*, views on the quality of public services (Charron, Lapuente, & Bauhr, 2024), and by the World Bank's Worldwide Governance Indicators, which uses satisfaction with public goods and services from the Gallup World Poll to compute a measure of Government Effectiveness (World Bank, 2024).

Our computed governance measure uses the latest edition of the AmericasBarometer survey project, carried out in 2023 (between March and August) and covering all countries that are also included in our primary data. AmericasBarometer (henceforth, *AB*) is a high-quality survey collecting data on Latin American political views. The data is used by various well-renowned (research) organizations, such as the World Bank, in its Governance indices series. For our index, we use questions eliciting satisfaction with the quality of public medical services, water services, public schools, and roads. In the case of Colombia,

[12]Ideally, we would run the main specification(s) separately for each country. However, the multinominal logit does not converge for single country-level estimations

[13]The European Quality of Government Index, EQI, is computed by the Quality of Government Institute, which covers EU countries.

there was a randomization of survey questions, where half of the sample was asked only about roads and schools, while the other half asked only about medical and water services. Question battery allocation was random, so we imputed the missing data for the other two questions for these individuals [14].

First, compute a simple average of each individual's satisfaction with all services, ranging from 1 to 4. Next, we compute the mean of service satisfaction for the individuals in each of the pre-defined $AB$ provinces[15], generating a province-level index for satisfaction with public services. Next, we match the respondents in our main survey to the index, using the country-province name as a matching key[16]. Lastly, we calculate the median value of the services indicator, and split our sample according to whether individuals reside in provinces with values lower or higher than the median, denoted by Low and High in this section's result tables.

Out of the 195 provinces in the main sample, 172 were also included in the AB survey, which led to a total of 232 individuals with no province-level information. To ensure that heterogeneous effects do not derive from excluding the 232 non-matched individuals, we run our main specifications using this restricted sample. The results, displayed in Table 2.8, replicate the results of the full (matched and unmatched) sample. Table 2.9 displays the results for when we split the sample according to the quality of local government. Ares with high dissatisfaction are used as a proxy for lower quality of local government, and low dissatisfaction for higher quality. The bottom panel of the table displays the p-value

[14] We opt for multiple imputation, instead of listwise deletion, as the latter would incur in either excluding Colombia from our analysis or having limited number of respondents per province for that country (compared to the other countries). Moreover, 'Multiple imputation [...] is consistent and generates correct uncertainty estimates under the less-restrictive assumption that the data are missing randomly conditional on the data included in the imputation procedures.' (Scheve & Slaughter, 2001, p. 278), and the data is missing unconditionally random. We generate 20 imputed values (and average the results per variable x individual), using an ordered logit estimation with the following explanatory variables: municipality, assessment of the economy, support for redistribution, assets (microwave, washer, mobile phone, fridge, flat-screen TV, computer, satellite/cable TV), access to internet (home and mobile), home access to portable water, religion, age, gender, household size, number of children (<13yo) in the household, marital status, total income, change in income past year, receives remittances, satisfaction with democracy, occupational status, nationality, ideology, education, victim of natural disaster, trust in municipality, trust in national government, most serious problem in the country, social assistance recipient.

[15] The AB survey makes no distinction between the Panamá and Panamá Oeste provinces in Panamá. Therefore, we allocate the AB interviewees according to their municipalities to either Panamá (Chepo, Panamá, San Miguelito municipalities) or Panamá Oeste (Arraiján, Capira, La Chorrera municipalities). We use pre-defined probability weights provided by the AB survey to compute the province-level measures.

[16] Due to limits of AB survey regional coverage, the final matched sample does not include 232 individuals from the main dataset: 184 individuals from Argentina (provinces: Catamarca, Chubut, Córdoba, Formosa, Jujuy, La Rioja, Missiones, San Luís, Santa Cruz, and Tierra del Fuego), 9 individuals from Brazil (states: Piauí and Teresina), 23 individuals from Colombia (provinces: Arauca, Anchipélago de San Andrés, Casanare, Guainía, Guaviare, and Quindío), 7 from Panamá (provinces: Comarca Emberá and Comarca Guna Yala) and 8 from Peru (provinces: Madre de Dios and Tumbes).

results of the Wald test for testing the equality of coefficients from the two sub-samples. Since the multinomial logit estimates 2 (N-1) models, we check for the equivalence of each coefficient both when prefers A is the outcome (first column) and when prefers B is the outcome value (second column).

The results in Table 2.9 indicate that much of the precision of the political mistrust coefficient comes from individuals in areas of low governance quality (high dissatisfaction with services). Moreover, the effect of mistrust on indifference between policies seems to be stronger in those areas, compared to respondent provinces with better governance, although the difference is not statistically significant due to high standard errors in the low-dissatisfaction sub-sample. The main results indicate that being reminded that a flexible policy entails room for others to act self-interestedly leads people to move away from supporting that alternative and toward wanting a more structured policy. This section sheds light on these dynamics. While the move away from option to indifference is seen only in regions with low government quality, only individuals in areas of high satisfaction with public goods and services become more supportive of the regulated option. This difference could be interpreted as a result of the (perceived) competence of the government - or lack thereof. Where governments perform better, society likely perceives them as able to handle the additional procedures of the rigid policy to prevent opportunistic behaviors. Where the government quality is lower, individuals are likely to focus on the inability of the government to prevent undeserving individuals from accessing the benefits, while not seeing additional processes as effective replacement mechanisms for the government's (perceived) lack of competence. These differences persist and become more pronounced when we estimate the interaction model in Equation 2.2 for the different samples (see Table A2.3 in the Appendix). While the negative effect of mistrust and increased uncertainty on the absolute support for each policy seems to be stronger in regions of lower governance quality, the coefficients differences between the two subsamples are not statistically significant (see Table A2.4 in the Appendix)

At the country level, we are able to use the Government Effectiveness provided by the World Bank Worldwide Governance Indicators (Table 2.10). The indicator measures governance quality using a collection of measures, *inter alia*, bureaucratic quality, coverage and satisfaction with public services and goods, including satisfaction with roads and educational systems, which dialogues with our subnational measure used above[17]. When we split the sample according to the most recent level of government effectiveness, there is no statistical difference between the coefficients of respondents in countries with indices above and below the median ("Government Effectiveness" column in Ta-

[17]It is important to note that the results are not driven by using the same data source. Even though the AmericasBarometer is used for computing other WB Governance Indicators, it is not a data source for Government Effectiveness.

Table 2.8: Heterogeneity: Main Results restricted matched sample

| | Baseline model | | Interaction model | |
|---|---|---|---|---|
| | (1) | | (2) | |
| | Pref A | Pref B | Pref A | Pref B |
| Mistrust Political | -0.28*** | -0.31*** | -0.43*** | -0.36** |
| | (0.10) | (0.09) | (0.17) | (0.15) |
| Mistrust Social | -0.09 | 0.02 | 0.25 | 0.15 |
| | (0.17) | (0.14) | (0.29) | (0.25) |
| Interpersonal | -0.29** | 0.45*** | -0.15 | 0.47*** |
| | (0.14) | (0.10) | (0.17) | (0.14) |
| Political | -0.11 | -0.02 | -0.26 | -0.08 |
| | (0.12) | (0.09) | (0.17) | (0.13) |
| Combined | -0.04 | 0.24** | -0.10 | 0.23* |
| | (0.12) | (0.10) | (0.16) | (0.13) |
| Interpersonal × Mistrust Political | | | -0.10 | 0.08 |
| | | | (0.25) | (0.20) |
| Political × Mistrust Political | | | 0.29 | 0.10 |
| | | | (0.26) | (0.22) |
| Combined × Mistrust Political | | | 0.35 | 0.03 |
| | | | (0.26) | (0.21) |
| Interpersonal × Mistrust Social | | | -1.24** | -0.55 |
| | | | (0.50) | (0.37) |
| Political × Mistrust Social | | | 0.48 | 0.21 |
| | | | (0.49) | (0.43) |
| Combined × Mistrust Social | | | -0.88* | -0.09 |
| | | | (0.47) | (0.35) |
| Observations | 8795 | | 8795 | |
| Pseudo $R^2$ | 0.079 | | 0.081 | |

*Note:* Table presents coefficients estimates for Eq.2.1 and 2.2 using Multinomial Logistic Regression models with country fixed effects, restricted to the sample where respondents reside in regions also covered in the AmericasBarometer survey. See Table 2.4 for more on estimation method and variable specifications. Standard errors clustered at the municipality level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

ble 2.10). However, when we repeat this exercise using changes between 2018 and 2023 in government effectiveness ("Δ Government Effectiveness" column in Table 2.10), we see similar patterns as in the subnational heterogeneity analysis. Respondents in countries with worse-performing governance drive the effect of political mistrust and the move away from option A when receiving the salience treatments. Respondents in countries with governance improvement above the median also prefer the regulated policy alternative (compared to indifference) more than those in lower-performing countries, albeit this difference is not statistically significant[18].

Table 2.9: Heterogeneity: subnational governance characteristics

| | Dissatisfaction with services | | | |
|---|---|---|---|---|
| | Low | | High | |
| | (1) | | (2) | |
| | Pref A | Pref B | Pref A | Pref B |
| Mistrust Political | -0.20 | -0.18* | -0.38** | -0.43*** |
| | (0.13) | (0.10) | (0.17) | (0.15) |
| Mistrust Social | -0.08 | -0.08 | -0.14 | 0.11 |
| | (0.25) | (0.20) | (0.25) | (0.20) |
| Interpersonal | -0.02 | 0.79*** | -0.59*** | 0.11 |
| | (0.17) | (0.14) | (0.22) | (0.14) |
| Political | -0.17 | 0.10 | -0.14 | -0.16 |
| | (0.17) | (0.12) | (0.17) | (0.14) |
| Combined | -0.12 | 0.26* | -0.01 | 0.26* |
| | (0.16) | (0.13) | (0.18) | (0.15) |
| Observations | 4423 | | 4372 | |
| Pseudo $R^2$ | 0.084 | | 0.100 | |
| Median value province: | Buenos Aires | | | |
| Coefficient Equality Test (p-val) | | | | |
| $MP_{Low} = MP_{High}$ | 0.38 | 0.16 | | |
| $MS_{Low} = MS_{High}$ | 0.87 | 0.51 | | |
| $Interp_{Low} = Interp_{High}$ | 0.04 | 0.00 | | |
| $Pol_{Low} = Pol_{High}$ | 0.90 | 0.15 | | |
| $Comb_{Low} = Comb_{High}$ | 0.67 | 0.99 | | |

*Note:* Table presents the coefficients' estimates for Eq.2.1 using Multinomial Logistic Regression models with country fixed effects, restricted to the sample where respondents reside in regions also covered in the AmericasBarometer survey. The Coefficient Equality Test panel displays the p-statistics of the Wald test for each pair of coefficients indicated in the row, namely difference between the same coefficient in the Low and High subsamples. See Table 2.4 for more on estimation method and variable specifications. Standard errors clustered at the municipality level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

[18]The analysis using changes in governance at the subnational level was not possible due to incompatibility of questions across different waves of the *AB* survey.

Table 2.10: Heterogeneity: national governance characteristics

| | Government Effectiveness | | | | Δ Government Effectiveness | | | |
|---|---|---|---|---|---|---|---|---|
| | Low (1) | | High (2) | | Low (3) | | High (4) | |
| | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B |
| Mistrust Political | -0.26** | -0.21** | -0.39** | -0.41*** | -0.46*** | -0.53*** | -0.10 | -0.22 |
| | (0.13) | (0.10) | (0.16) | (0.12) | (0.14) | (0.12) | (0.16) | (0.15) |
| Mistrust Social | -0.08 | 0.08 | -0.28 | 0.02 | -0.48 | -0.11 | 0.36 | 0.16 |
| | (0.24) | (0.21) | (0.30) | (0.22) | (0.30) | (0.23) | (0.22) | (0.18) |
| Interpersonal | -0.36* | 0.54*** | -0.40** | 0.48*** | -0.51** | 0.50*** | 0.06 | 0.65*** |
| | (0.20) | (0.14) | (0.18) | (0.15) | (0.20) | (0.16) | (0.19) | (0.14) |
| Political | -0.06 | 0.08 | -0.22 | 0.01 | -0.46** | -0.13 | 0.07 | 0.01 |
| | (0.19) | (0.14) | (0.18) | (0.13) | (0.19) | (0.13) | (0.17) | (0.15) |
| Combined | -0.10 | 0.29** | 0.01 | 0.26* | 0.02 | 0.39** | -0.10 | 0.20 |
| | (0.18) | (0.14) | (0.19) | (0.16) | (0.21) | (0.16) | (0.16) | (0.13) |
| Observations | 3992 | | 4026 | | 4129 | | 3899 | |
| Pseudo $R^2$ | 0.099 | | 0.093 | | 0.107 | | 0.087 | |
| Median country (dropped) | Panama | | | | Peru | | | |
| Coefficient Equality Test (p-val) | | | | | | | | |
| | Pref A | Pref B | | | Pref A | Pref B | | |
| $MP_{Low} = MP_{High}$ | 0.53 | 0.21 | | | 0.09 | 0.11 | | |
| $MS_{Low} = MS_{High}$ | 0.60 | 0.85 | | | 0.03 | 0.36 | | |
| $Interp_{Low} = Interp_{High}$ | 0.89 | 0.76 | | | 0.04 | 0.46 | | |
| $Pol_{Low} = Pol_{High}$ | 0.53 | 0.74 | | | 0.04 | 0.49 | | |
| $Comb_{Low} = Comb_{High}$ | 0.68 | 0.91 | | | 0.65 | 0.36 | | |

*Note:* Table presents the coefficients' estimates for Eq.2.1 using Multinomial Logistic Regression models with country fixed effects. The Coefficient Equality Test panel displays the p-statistics of the Wald test for each pair of coefficients indicated in the row, namely the difference between the same coefficient in the Low and High subsamples. See Table 2.4 for more on estimation method and variable specifications. Standard errors clustered at the municipality level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

**Second order beliefs**

This section explores the connection between an individual's beliefs about how other individuals would behave in the context of the new policy and one's own preferences for more regulated policy features. Looking into the expected behavior of others allows us to explore one potential mechanism connecting social trust to preferences for more stringent procedures: the game-theoretical logic that trust plausibly relates to the desire to limit the scope for others to take on undesirable actions. When social coordination is key, the (expected) actions of others might enter one's preference as expected costs and gains from cooperation or defection. If people anticipate that others might abuse a flexible system, they might incorporate that social behavior into their utility function, which leads to greater demand for stringent procedures and rules, even if those come at greater costs - be those direct personal losses, social welfare costs, or administrative burdens (Dannenberg, Haita-Falah, & Zitzelsberger, 2020; Hilo-Merkovich, Peer, & Feldman, 2024). Ultimately, even in contexts where everyone would benefit from collaborating, individuals who (wrongly) expect others to cheat will prefer policies that are socially suboptimal (Dal Bó, Dal Bó, & Eyster, 2018).

In our survey, the respondents answered which policy alternative they think the majority of the population would choose (A or B) in the last question of the module. We assume that beliefs about others' preferences correlate with expectations about people's actions. We opt for eliciting beliefs about others' preferences instead of behavior, as the latter could potentially prime the respondents to expect cheating actions from others. The answer scale is the same as the one used for own relative preferences. Similar to the outcome variable, we identify if the respondent reports believing that the population would support (much more) option A, support (much more) option B, or if others would be indifferent between A and B. In Table 2.11, we include those elicited beliefs as additional explanatory variables to the main models (variables 'Others: pref A' and 'Others: pref B'), with the omitted category being others' indifference between A and B. Since the respondents were first asked about their own preferences before stating other-regarding beliefs, it is unlikely that social desirability or priming drives the results[19].

The estimated coefficients in Table 2.11 indicate that beliefs about others' preferences strongly predict one's own preferences. Individuals who indicate believing that others have a preference for either policy also tend not to report indifference over A and B. The stronger effect of perceived preferences on the dependent variable when referring to the

[19]Ideally, one would randomize the order in which the questions were asked: eliciting own preferences before or after eliciting beliefs about preferences of others. Unfortunately, due to limitations on the scope for design of the survey, we were not able to include another dimension to the sample randomization in addition to our treatment allocation.

same policy option (others' A predicting own A, and others' B predicting own B) suggests a convergence between individual and perceived majority preferences. This relationship by itself could indicate a strategic behavior given the expected action by others, but could also include other accounts. A plausible alternative explanation is the fact that humans have a preference for belief consonance. This could stem from a desire to connect to a social group (in our setting, the 'majority of the people'), or from the fact that they view their own opinions as protected assets that are morally costly to have challenged (in our setting, acknowledging that their opinion is not regarded as the most suitable choice) (Farjam & Loxbo, 2024; Golman et al., 2016). Previous research has shown that individuals tend to conform their preferences with the preferences of the majority (Furth-Matzkin & Sunstein, 2017), both for uncontroversial policy issues, as well as socially divisive topics (Farjam & Loxbo, 2024). This desire for conformity is a complex phenomenon and includes the popular *bandwagon effect* when referring to political preferences. Research has found this herding behavior to hinge not necessarily on the actual social performance of a political platform but rather on the perception of large and increasing social support for it (Van der Meer, Hakhverdian, & Aaldering, 2016). Nonetheless, we perform additional analyses to explore whether the game-theoretical logic - which explains trust as an element that matters when the expectations about actions of others impact own outcomes - accounts for the link between perceived preferences of others and own preferences. While the results constitute suggestive evidence and should be interpreted with caution, we believe that the combination of different strategies should provide qualitative arguments in favor of this explanation. We proceed in four steps to test the mechanism based on strategic preference formation outlined above. If the game theoretical argument is correct, this implies four things. First, the inclusion of the second order preferences influences mainly the effect of other variables in the model that relate to the role of other people. Second, those who believes others prefer A comprise a heterogeneous group of individuals, and for that reason, the 'Others: pref A' coefficient can predict either preferences for a flexible policy or for more stringent processes. Third, since the vignette treatments influence the perceived possibility for opportunistic behavior of others, their effects on own behavior is heterogeneous across what people believe others would prefer. Lastly, social trust plays a role in explaining support for the flexible alternative particularly among people believe others would prefer policy A in a context of uncertainty.

In our first test, we assess the impact that the addition of the second-order preferences has on other variables in the main model, particularly those referring to other people. Once preference of others are accounted for, the coefficients of 'Interpersonal' and 'Interpersonal × Mistrust Social' become insignificant, and their magnitude is reduced by half (see Table 2.11, column 4 compared to column 2). This dynamic suggests that the effect of being informed about others found in the main results runs through the mechanism of beliefs

about what the majority of the population would prefer. Although other coefficients (e.g. 'Combined' or 'Mistrust Political') also become insignificant, this is mainly due to loss of precision, and not smaller coefficient magnitude. The fact that the coefficient magnitude fell considerably only among variables that referred solely to other people constitutes an additional indication that the inclusion of others' preferences captures the effect of the proposed mechanism. As social trust and the treatment that emphasizes the role of others are the main impacted coefficients, the changes are more likely to be due to the incorporation of others' preferences in one's own utility function rather than the limited variation left after the inclusion of the additional variables.

Next, we inspect whether the relation between own second-order preferences reflects people taking into account a strategic reaction to the expected behavior of others, beyond the desire to conform to norms of a group. While the convergence of preferences (*others A/B* predicting own A/B) can, in theory, be driven by a desire for preference alignment, the fact that 'Others A/B' predicts 'Own B/A' suggests that other factors are also at play. One way of testing whether the expectation of others' behavior (proxied by the expectation about their preferences) is one of these accounts is to compare the coefficients of what respondents think others prefer. If beliefs about others' preferences reflect indeed expectations about their behavior, the group of respondents who believe others' would prefer A would likely be more heterogeneous than respondents who believe others would prefer B. Among respondents who believe that others would prefer A, some would think so due to believing others would have the *right*[20] preference, while others would do so because they believe others would prefer having a less strict system to be able to cheat it. In the case of the former, thinking others prefer A would lead the respondent themselves to prefer A as well, while in the latter, the respondent is skeptical about the motivations of others and would prefer the stricter policy B. It is less likely that people who report others would choose B would expect that they would do so to act self-interestedly. As a consequence, the coefficient of 'Others A' on 'Own A' would be lower than 'Others B' on 'Own B', which the test of coefficients equivalence (bottom panel of table 2.11) indicates to be the case. Moreover, the fact that the effect of expecting others to prefer the flexible alternative on demanding strict procedures is stronger (although not significant) than the expectation of others preferring strict on own acceptance of the flexible alternative is also suggestive that aversion to free-riding motivates preferences for strict processes[21].

In a third step, we depart from the model in Table 2.11 and assess heterogeneities to the treatment, which could indicate that own preference formation is a response to the

[20] *Right* preference in the eyes of the repondent.

[21] It is worth noting that when the model in Table 2.11 is estimated using a Generalized Order logit, the non-linearity of expected preferences of others on own preferences is only found for 'Others: A', and not for 'Other B'.

expected behavior of others. If a strategic calculation that incorporates others' preferences drives the results, we should observe different dynamics of the treatments depending on what people expect others to prefer. As described in previous sections, the treatments increase the salience of other individuals. Their effect would be contingent on how the respondents suppose others would behave, as their (expected) misbehavior would become more consequential and costly in that context. In Table 2.12, we interact the treatment indicator with the preferences of others to test this possibility. The interactions reveal that, even though the treatment dummies explain preferences beyond the second-order preferences (Column 1), that effect decreases considerably and loses significance when we look into the heterogeneous treatment effects according to beliefs about others (Column 2). The effect of the interpersonal treatment on demanding stricter regulations is mainly driven by individuals who think others will prefer the flexible option. The coefficient has a p-value of 0.101, which is likely due to the little variation left with the inclusion of multiple covariates. When we redefine our treatment variables in Columns 3 and 4 and create an indicator 'Social Treatment' for whether the respondent got a treatment arm that alludes to the role of others (Interpersonal and Combined treatments) or not (Political and Control treatments), the point estimate of the 'Treatment × Others: pref A' becomes better defined, and is significant at an 8% level. Hearing about the role of others is key. If we aggregate the treatment arms according to being informed about the role of the government, the results are insignificant and with qualitatively different interpretation; and if the treatment variable identifies those who receive any treatment versus the control group, the results emulate those by the 'Social Treatment', but become noisier (Table A2.7.).

Lastly, if the game-theoretical argument holds, we will observe that the effect of having positive opinions about others on tolerating a more flexible policy is strongly influenced by what people expect others to prefer. This relationship would be particularly relevant in a context where the actions of others carry heavy consequences for the success of a policy and the social well-being. For this last test, it is important to note that even though the results of the model in Section 2.3.1 and 2.3.2 indicate that social mistrust has no effect unless activated by a treatment, the robustness test in Table A2.13 shows that individuals who have high social trust are more accepting of the flexible alternative. This relationship survives the inclusion of the beliefs about preferences of others in society (Table 2.13), but it contains important heterogeneities across subgroups. To unpack the effect of high social trust on 'Own: pref A' that is not absorbed by the inclusion of the second-order preferences in Column-pair 1, we interact the dummy for high social trust with the beliefs these individuals have of others. However, this would not be sufficient to differentiate between strategic game-theoretical motivations from a desire to conform. It is very plausible that

high-trusting individuals have a stronger desire[22] to align their preferences to those of others (whom they trust). If the association between own preferences and second-order preferences of high-trusting individuals (the interaction term *Others: Pref A* × *High Social Trust* were solely driven by a desire for preference alignment, the situation where these preferences are formed would not matter. Alternatively, if the expectation of obedience or shirking of others to a flexible policy influences this result, having high trust in others and believing that they would prefer option A would be particularly important when the stakes related to option A are costlier and there is room for others to act opportunistically. For that reason, we include in column 3 a triple interaction term between second-order preferences, social trust, and treatment group arm, where the last term would capture this context element. After accounting for the heterogeneous effects of trust according to the expectation about others' preferences, the coefficient of High Social Trust on 'Own: Pref A' not only becomes insignificant, but also sees a short drop in magnitude. The results of these (triple) interaction terms indicate that preference alignment motivations do not fully explain the link between own preference for a flexible policy and high social trust. When we look into heterogeneity in that group (Table 2.13), we are able to identify that the effect is largely driven by highly trusting respondents who, upon being informed about the costs associated with free-riding, think others will prefer A. The coefficients fall slightly short of conventional significance: 'Others: pref A × High trust' with a p-value of 0.12 in model 2, and 'Others: pref A × High trust × Social treatment' with a p-value of 0.12 in model 3. The latter moderating effect suggests that lower-trusting individuals who are primed to think about others attach a negative value to the belief that others will prefer the flexible alternative, unlike their high-trusting counterparts. The fact that the social treatment condition is particularly relevant for these heterogeneous effects (i.e. the triple interaction term) is suggestive that our variable captures expectations about (mis)behavior.

One might be concerned that due to the order of the questions, the respondents were not able to differentiate between the questions asking about their own preferences and beliefs about what society would prefer. In that case, the explanatory variable (second-order preferences) and outcome variable (own preferences) would be capturing the same measure, and the model would be regressing the outcome on itself. However, the results in Table 2.11 suggest this not to be the case. First, the relationship between one's own preference and the perceived preferences of others is not trivial, and the correlation is non-linear. It is not the case that individuals simply report the same answer for their own preferences and those of others due to the design of the survey. Should that be the

[22] In our setting, we cannot (and do not claim to) differentiate between a desire to conform to the preferences of others or a belief that others think similarly to oneself. The former would imply a malleability of one's own preferences, and the latter could stem from high degrees of social trust inducing a perception of shared group identity.

case, only 'Others: prefer A' would be significant and positively predicting own 'Pref A'. Yet, we observe that both 'Others: pref A' and 'Others: pref B' predict own 'Pref A' (and 'Pref B'). Moreover, had the respondents misinterpreted the survey question and restated their own policy choices, there would have been limited variation left once the second-order preferences had been included. Only the latter coefficients would have any significant effect on the outcome variable. Yet, the negative effect of political mistrust on preferences for the rigid option, as well as the effect of social mistrust on individuals who received the combined treatment message, remains significant.

While much work connecting trust with different policy and institutional preferences assumes expectations about the behavior of others as a potential explanation linking the explanatory and outcome variables, we attempt to directly test this assumption. Namely, we show that 1) the negative effect of (activated) social mistrust is offset when second-order policies are included; 2) the expectation that others would prefer the flexible policy predicts people to prefer both a more flexible and a more rigid policy, and these non-linear effects are less strong for the expecation that others will prefer a more rigid policy; 3) The effect of increasing uncertainty on demanding a rigid policy is stronger for people who believe others would prefer that flexible policy and 4) the positive effect of having high trust on others for accepting a flexible policy is mainly due to high trusting respondent who believe others will also prefer a flexible policy alternative. Even though other factors, such as desire for preference consonance, are likely to contribute to the link between trust, own preferences and (perceived) preferences of others, we hope that the collection of results in this section provides indications that, indeed, the mechanism grounded on a game-theoretical rationale explains (part of the) results.

Table 2.11: Extension: Others preferences - comparison main results

| | Main results | | | | With Others preferences | | | |
|---|---|---|---|---|---|---|---|---|
| | (1) | | (2) | | (3) | | (4) | |
| | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B |
| No trust president | -0.27*** | -0.29*** | -0.38** | -0.33** | -0.18 | -0.21** | -0.30 | -0.41* |
| | (0.10) | (0.09) | (0.16) | (0.15) | (0.11) | (0.10) | (0.20) | (0.21) |
| No trust community | -0.09 | 0.01 | 0.29 | 0.16 | -0.08 | 0.14 | 0.21 | 0.10 |
| | (0.17) | (0.14) | (0.28) | (0.25) | (0.20) | (0.19) | (0.32) | (0.31) |
| Interpersonal | -0.27** | 0.48*** | -0.12 | 0.52*** | -0.31** | 0.41*** | -0.29 | 0.28 |
| | (0.14) | (0.10) | (0.17) | (0.14) | (0.16) | (0.13) | (0.19) | (0.18) |
| Political | -0.12 | -0.02 | -0.24 | -0.06 | -0.02 | 0.06 | -0.14 | -0.10 |
| | (0.12) | (0.09) | (0.17) | (0.12) | (0.14) | (0.12) | (0.19) | (0.16) |
| Combined | -0.01 | 0.27*** | -0.03 | 0.27** | -0.03 | 0.27** | 0.01 | 0.22 |
| | (0.12) | (0.10) | (0.16) | (0.13) | (0.14) | (0.12) | (0.19) | (0.17) |
| Interpersonal × Mistrust Political | | | -0.13 | 0.04 | | | 0.07 | 0.34 |
| | | | (0.25) | (0.19) | | | (0.29) | (0.28) |
| Political × Mistrust Political | | | 0.25 | 0.10 | | | 0.26 | 0.39 |
| | | | (0.26) | (0.22) | | | (0.30) | (0.27) |
| Combined × Mistrust Political | | | 0.26 | -0.01 | | | 0.10 | 0.09 |
| | | | (0.25) | (0.21) | | | (0.32) | (0.30) |
| Interpersonal × Mistrust Social | | | -1.19** | -0.56 | | | -0.60 | -0.16 |
| | | | (0.48) | (0.37) | | | (0.57) | (0.57) |
| Political × Mistrust Social | | | 0.31 | 0.11 | | | 0.12 | 0.07 |
| | | | (0.49) | (0.42) | | | (0.54) | (0.48) |
| Combined × Mistrust Social | | | -0.94** | -0.07 | | | -0.95* | 0.24 |
| | | | (0.46) | (0.35) | | | (0.51) | (0.40) |
| Others: Pref A | | | | | 3.04*** | 2.19*** | 3.04*** | 2.19*** |
| | | | | | (0.14) | (0.12) | (0.14) | (0.12) |
| Others: Pref B | | | | | 1.92*** | 3.95*** | 1.91*** | 3.96*** |
| | | | | | (0.15) | (0.12) | (0.15) | (0.12) |
| Observations | 9024 | | 9024 | | 9024 | | 9024 | |
| Pseudo $R^2$ | 0.079 | | 0.081 | | 0.335 | | 0.337 | |
| | | | | | Diff | p-value | Diff | p-value |
| Across own preferences: same second-order | | | | | | | | |
| $Others A_A - Others A_B$ | | | | | 0.85 | 0.00 | 0.84 | 0.00 |
| $Others B_A - Others B_B$ | | | | | -2.04 | 0.00 | -2.05 | 0.00 |
| Matched and mismatched predictors | | | | | | | | |
| *Matched:* $Others A_A - Others B_B$ | | | | | -0.91 | 0.00 | -0.92 | 0.00 |
| *Mismatched:* $Others A_B - Others B_A$ | | | | | 0.28 | 0.15 | 0.28 | 0.15 |

*Note:* Table presents the coefficients' estimates using Multinomial Logistic Regression models with country fixed effects. Others: Pref A (B) is a dummy variable with the value of 1 if the respondent answers most people would prefer policy option A (B). The Coefficient Equality Test panel displays the p-statistics of the Wald test for each pair of coefficients indicated in the row. See Table 2.4 for more on estimation method and variable specifications. Standard errors clustered at the municipality level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 2.12: Extension: Own preferences and second order beliefs

| | Original Treatments | | | | Social Treatment | | | |
|---|---|---|---|---|---|---|---|---|
| | (1) | | (2) | | (3) | | (4) | |
| | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B |
| | Other regarding beliefs | | | | | | | |
| Others: Pref A | 3.04*** | 2.19*** | 3.03*** | 2.00*** | 3.04*** | 2.19*** | 3.01*** | 1.98*** |
| | (0.14) | (0.12) | (0.28) | (0.23) | (0.14) | (0.12) | (0.18) | (0.17) |
| Others: Pref B | 1.92*** | 3.95*** | 1.89*** | 3.83*** | 1.92*** | 3.95*** | 1.90*** | 3.83*** |
| | (0.15) | (0.12) | (0.27) | (0.22) | (0.15) | (0.12) | (0.20) | (0.15) |
| Interpersonal | -0.31** | 0.41*** | -0.43 | 0.14 | | | | |
| | (0.16) | (0.13) | (0.31) | (0.26) | | | | |
| Political | -0.02 | 0.06 | -0.02 | 0.06 | | | | |
| | (0.14) | (0.12) | (0.27) | (0.22) | | | | |
| Combined | -0.03 | 0.27** | 0.11 | 0.09 | | | | |
| | (0.14) | (0.12) | (0.28) | (0.20) | | | | |
| Interpersonal × Others: Pref A | | | 0.40 | 0.58 | | | | |
| | | | (0.40) | (0.36) | | | | |
| Interpersonal × Others: Pref B | | | 0.08 | 0.28 | | | | |
| | | | (0.44) | (0.33) | | | | |
| Political × Others: Pref A | | | -0.04 | -0.03 | | | | |
| | | | (0.39) | (0.35) | | | | |
| Political × Others: Pref B | | | 0.02 | 0.00 | | | | |
| | | | (0.37) | (0.30) | | | | |
| Combined × Others: Pref A | | | -0.22 | 0.29 | | | | |
| | | | (0.40) | (0.32) | | | | |
| Combined × Others: Pref B | | | 0.02 | 0.24 | | | | |
| | | | (0.39) | (0.30) | | | | |
| Social Treatment | | | | | -0.14 | 0.31*** | -0.11 | 0.08 |
| | | | | | (0.10) | (0.09) | (0.19) | (0.16) |
| Social Treatment × Others: Pref A | | | | | | | 0.06 | 0.44* |
| | | | | | | | (0.27) | (0.25) |
| Social Treatment × Others: Pref B | | | | | | | 0.02 | 0.26 |
| | | | | | | | (0.28) | (0.21) |
| Observations | 9024 | | 9024 | | 9024 | | 9024 | |
| Pseudo $R^2$ | 0.335 | | 0.336 | | 0.334 | | 0.334 | |

*Note:* Table presents the coefficients' estimates using Multinomial Logistic Regression models with country fixed effects. Others: Pref A (B) is a dummy variable with the value of 1 if the respondent answers that most people would prefer policy option A (B). Social Treatment is a dummy for individuals in the Interpersonal or Combined treatment arms. See Table 2.4 for more on estimation method and variable specifications. Standard errors clustered at the municipality level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 2.13: Extension: Second order beliefs: behavior expectations mechanism

| | (1) | | (2) | | (3) | |
|---|---|---|---|---|---|---|
| | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B |
| High Social Trust | 0.39** | 0.09 | -0.01 | 0.15 | -0.01 | 0.43 |
| | (0.17) | (0.16) | (0.33) | (0.34) | (0.46) | (0.46) |
| Social treatment | -0.14 | 0.32*** | -0.15 | 0.32*** | -0.12 | 0.15 |
| | (0.10) | (0.09) | (0.10) | (0.09) | (0.20) | (0.17) |
| Pref A | 3.04*** | 2.19*** | 2.96*** | 2.20*** | 2.98*** | 2.02*** |
| | (0.14) | (0.12) | (0.15) | (0.13) | (0.19) | (0.17) |
| Pref B | 1.91*** | 3.95*** | 1.89*** | 3.95*** | 1.89*** | 3.87*** |
| | (0.15) | (0.12) | (0.16) | (0.12) | (0.20) | (0.16) |
| Pref A × High Social Trust | | | 0.69 | -0.08 | 0.27 | -0.34 |
| | | | (0.45) | (0.47) | (0.59) | (0.64) |
| Pref B × High Social Trust | | | 0.30 | 0.00 | 0.13 | -0.38 |
| | | | (0.45) | (0.43) | (0.61) | (0.54) |
| Social treatment × Pref A | | | | | -0.04 | 0.37 |
| | | | | | (0.29) | (0.27) |
| Social treatment × Pref B | | | | | -0.00 | 0.18 |
| | | | | | (0.30) | (0.22) |
| Pref A × High Social Trust × Social treatment | | | | | 0.93 | 0.11 |
| | | | | | (0.60) | (0.65) |
| Pref B × High Social Trust × Social treatment | | | | | 0.43 | 0.27 |
| | | | | | (0.62) | (0.47) |
| Observations | 9024 | | 9024 | | 9024 | |
| Pseudo $R^2$ | 0.335 | | 0.335 | | 0.336 | |

*Note:* Table presents the coefficients' estimates using Multinomial Logistic Regression models with country fixed effects. Others: Pref A (B) is a dummy variable with the value of 1 if the respondent answers that most people would prefer policy option A (B). Social Treatment is a dummy for individuals in the Interpersonal or Combined treatment arms. See Table 2.4 for more on estimation method and variable specifications. Standard errors clustered at the municipality level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

### 2.3.3 Robustness checks

In this section, we perform a series of robustness checks, where we test alternative sample compositions, estimation methods, and model specifications, to test for the stability of the results in the main section. All output tables are displayed in the Appendix of this chapter.

#### Political trust measures

Our preferred political trust uses trust in the president as the element of trust. This choice was driven by the research context. All countries included in the analysis are presidential systems, where the executive and the legislative have separate attributions. Latin America, in particular, the image of the president is of particular importance: historically, presidents of countries in the subcontinent enjoy relatively large legislative prerogatives (Santos, Pérez-Liñán, & García Montero, 2014)[23], and often are seen by society as the (main) responsible actors for different policies[24]. For the first robustness test, we use alternative subjects of trust, namely the Municipality, Judicial System, and Congress. Trust in the municipality would represent trust in the local-level executive; the judicial system would represent a non-partisan institution that is supposed to be impartial, thus arguably captures a deeper element of trust; and the National Congress would capture a plural-partisan political institution. Table A2.8 displays the results for the main model, replacing the political mistrust variable with dummy variables equaling one when the individual does not trust each alternative institution (in the first row). In the last column of Table A2.8, we identify individuals who indicate they have no trust in either the municipality or the president. With the exception of Mistrust in Congress, the estimated coefficients of all other alternative political trust variables maintain the qualitative interpretation, with occasional changes in significance level and magnitude. The smaller and insignificant coefficient of mistrust in the Congress is not surprising, both for the reasons explained above and the fact that in many countries, the opposition held either the majority of the seats or represented a large group[25]. For that reason, one

[23]Research suggests recent political developments caused a decline of presidential dominance over the legislative process, particularly in the case of Chile (Mimica & Navia, 2024). Yet, for our research, perceived rather than *de jure* or *de fato* presidential importance is key, which is plausible to be heavily influenced by historical patterns.

[24]Such understanding might be either from wrong misperceptions or from presidents falsely claiming sole responsibility for political deliberations. One example is the case of Jair Bolsonaro in Brazil, who has claimed authorship of the emergency benefit during the Covid-19 pandemic, which was, in reality, initially proposed and pushed by Congress (Burni & Tamaki, 2021)

[25]Argentina: Javier Milei was elected in 2023, and the Peronist opposition, 'Unión por la Pátria' (center-left), opposition, was the largest coalition. Brazil: 2022 elections, elected president Luís Inácio Lula da Silva (Left-wing, Partido dos Trabalhadores, Brasil da Esperança coalition), elected in 2022, and Partido Liberal (right-wing) and the parties that constitute the 'Centrão' (right-leaning) holds the majority of the Brazilian Congress. Chile: Gabriel Boric (Convergencia Social), the Congress was

could expect the group of Congress-mistrusting individuals to be highly heterogeneous regarding political views, which would result in insignificant effects of that variable.

**Country drop**

Next, we inspect whether a single outlier country drives the results. For that, we re-estimate our baseline and interaction models, dropping one country at a time. Tables A2.9 and A2.10 display the result: each pair of columns corresponds to one multinomial logit estimation (two jointly estimated models), and the bottom row lists which country was dropped in that model. Despite the occasional changes in the precision of the point estimates, the qualitative interpretation of the main coefficients - mistrusts and treatments - and most of their significance levels remain stable.

**Generalized Ordered Logit of Proportional Odds**

In the main analysis, we estimate the model predicting the relative choice between A and B using the Multinomial Logit (MLogit) specification. As a robustness, we estimate the baseline and interaction models using the Generalized Logit of Partial Proportions (GOLogit). The GOLogit 'selectively relaxes the assumptions of the ordered logit model' (Williams, 2016, p.7) fixed coefficient effect, and takes the ordered nature of the outcome variable into account, which the MLogit disregards. Table A2.11 displays the results for the baseline and interaction models, including the main results obtained with the Multinomial Logit for comparison. The outcome variable, $ChoiceAB_i$, is constructed so that higher values represent a preference for greater regulation: Prefers A (1), Indifferent (2), Prefers B (3). Thus, a positive GOLogit coefficient means that the variable is associated with a greater probability of the respondent preferring a value greater than the one indicated on the column's top row (i.e., more rigid). In contrast, a negative value denotes a greater probability of answering a lower value (e.g. more flexible), up to the one displayed on the top row.

split, and the opposition center-right coalition 'Chile Podemos Más' remained the largest block in the 2021 elections. Colombia: last elections, 2022, Elected president: Gustavo Petro (Left-wing, Colombia Humana, Pacto Histórico coalition), Congress mostly independent or in opposition to the president ( Liberal Party (center-right), Conservative Party (right), and U Party (center-right) hold the most seats). Costa Rica: last elections, 2022; elected president Rodrigo Chaves (Social Democratic Progress Party, PPSD; centrist), the PLN (center-left), the largest party in the Congress, constitutes the opposition. Guatemala: 2023 elections, Bernardo Arévalo (center-left) elected president, 'Vamos' is the largest party in the Congress (center-right), and constitutes the opposition. Mexico: 2018 elections, López Obrador (AMLO, left-wing, Morena Party, Juntos Haremos Historia coalition) elected president; the pro-president coalition held a majority in both Congress chambers. Panamá: 2019 elections, elected president Laurentino "Nito" Cortizo (Left-leaning, Democratic Revolutionary Party, PRD), PRD and MOLIRENA, pro-presidents, secured majority in the National Assembly, and aligned with the president. Peru: 2021 elections, elected president Pedro Castillo (Left-wing, Free Peru party, Peru Libre) and Dina Boluarte (since December 2022), fragmented Congress often opposed Castillo and Boluarte.

The GOLogit results remain qualitatively similar to the Multinomial Logit ones, in that the treatments lead to greater demand for regulation and that socially mistrusting individuals who receive the interpersonal treatment move away from Option A towards Indifference. The coefficients of political mistrust are insignificant in the GOLogit estimations. Taken together with the significant MLogit coefficients, the results suggest a non-linear relation and indicate that political mistrust relates to a concentration on Indifference, and there is no difference between preferring Options A and B.

**Full specification of the outcome variable specification**

In the main analysis, we use a three-category outcome variable to describe the choice between options A and B: Prefers A, Indifferent, and Prefers B. The original survey instrument measures the choice between A and B using a 5-point scale: supports much more A (1) – supports much more B (5), with indifference as 3. In Table A2.12, we re-estimate our main specifications (baseline model and interaction model) using a Generalized Logit to account for the intensity of preferences.

The estimations obtained with this specification indicate that the Interpersonal and Combined treatments operate on the extensive and intensive margins of the policy preferences. Those treatments shift respondents away from A to B (as also suggested by the model with three outcome values) and influence the extreme positions: not only do people move away from A to indifference and from indifference to B, but also move from weakly preferring B (/strongly preferring A) to strongly preferring (/weakly preferring A). Moreover, the new specification reveals that the political treatment, which the main results showed not to shift preferences across the different alternatives, did in fact act on strong opinions on A. Even though the Political Treatment did not flip preferences from A to B, it made respondents who preferred A less extreme about their choice.

**Different trust specifications**

The original trust question measures trust on a 4-point scale. In the main analysis, we focus on the role of having **no** trust in the president/community. In Table A2.13, we re-estimate the models using a further breakdown of the trust variables into 3 categories: no trust, some trust (low or some), and high trust. The results confirm the effect of political mistrust found in the main analysis and the latent role of social mistrust once activated by increased uncertainty costs around others' actions. Furthermore, the disaggregation of social trust indicates that those with high trust in others are more inclined to prefer the flexible policy than those with lower social trust. The precision of this coefficient, however, relies on the bundling of highly socially trusting respondents who were allocated to different treatment groups.

**Future discounting**

In the next test, we explore whether the results we obtain are driven by other behavioral explanations. In case those are the true drivers of the results, the results would be endogenous if trust correlates with them. In our setting, (social) costs related to additional procedural requirements are imposed as delayed subsidy payments. Thus, one could be concerned that the results reflect one's attitudes towards future discounting rather than (mis)trust. Our survey included a question that measures attitudes towards the future, asked before the experimental module. More specifically, it asks the respondents to what extent they are willing to abdicate present gains for even larger gains in the future. In Table A2.14, we include a *heavy future discount* dummy variable for individuals who answered that question with 1 or 2, on a scale from 1 (not at all) to 5 (very willing). While individuals who discount the future heavily are indeed more likely to choose the immediate payment and reject the delayed policy option, the inclusion of that variable does not alter the effect of other variables in the main results.

**Respondents' attention**

The main findings indicate that mistrusting individuals display lower support for both policy alternatives A and B, but do not have a preference for either over the other. These results would be threatened if politically mistrusting individuals are more likely to become disengaged throughout the survey, and select the "neutral" response option due to inattentiveness to the questions. We perform two robustness tests to address this concern. First, we exclude the individuals who either completed the survey too fast or took too long to finish the survey. In the first case, individuals could not have had enough time to attentively read the questions. In the latter, a long response time could indicate disengagement. In Table A2.15, we trim the sample to exclude respondents at the top and bottom of the survey completion time distribution[26]. The main results survive this sample restriction. In addition, the survey included an attention-control question, in which respondents were explicitly asked to select the answer "Chicago" to the question asking which city was not located in the USA. We then create a dummy for individuals who responded accordingly and test whether the results are driven by a lack of attention. Table A2.16 includes that dummy as a control (models 1 and 2), and models 3 and 4 re-run the estimations on a restricted sample containing only individuals who answer 'correctly'. The results remain qualitatively stable to these two tests, with only occasional changes in significance.

[26]We exclude respondents in the bottom 1% (survey response time less than 6.08 minutes) and top 1% (more than 1123.81 minutes) percentiles in models 1 and 2, and respondents in the 5% (less than 10.2 minutes) and top 5% (more than 110.4 minutes) percentiles in models 3 and 4.

**Differences in treatment intensity**

The main results indicate that preferences respond to interpersonal treatment, but political treatment does not induce changes in preferences. In the main text, we provide an explanation for this difference arguing that the role of the government is already salient in Latin American societies, compounded by the low levels of institutional trust in the region (Keefer & Scartascini, 2022). However, given that the treatments used slightly different wording, one might be concerned that the observed differences stem from differences in treatment intensity resulting from explicit/implicit negative framings, rather than from differences in the content delivered with the vignettes. While the available data do not allow a direct test of the wording effect vis-à-vis the content effect, we argue that wording effects are unlikely to drive the results.

Negative framings are more cognitively demanding, leading respondents to process treatments less clearly, although this cognitive demand is present both for implicit (e.g. *bad*) and explicit negative adjectives (e.g. *not good*) (Kamoen, Holleman, Mak, Sanders, & Van Den Bergh, 2017). One could nonetheless argue that, in our setting, the explicit negative framing (*not correct*) conveys a weaker negative valence than the implicit negative framing (*false*), potentially attenuating treatment intensity in the political condition.

However, *false* and *correct* are as absolute (or non-gradable) adjectives.[27] Experimental evidence shows that people understand the explicit negation of an absolute adjective (e.g. *not correct*) as close to its absolute antonym (e.g. *incorrect*) to a significantly greater degree than for relative adjectives (e.g. *not small* and *large*) (Alexandropoulou & Gotzner, 2024). In our context, the use of *not correct* in the political treatment is therefore expected to deliver a message close to *incorrect*, a synonym for *false*.

Nevertheless, *false* may carry stronger connotations than *incorrect*, and *not correct* may not equate to *incorrect* for all respondents, leaving open the possibility of residual framing effects. While a precise test to this point requires a dedicated experimental setting, prior work establishes that political knowledge sophistication moderates wording and framing effects on political preferences (Holleman, Kamoen, Krouwel, Pol, & Vreese, 2016). If the observed difference between treatments reflects wording rather than content, low-sophistication respondents (who are most susceptible to such effects; Holleman et al.,

[27] Absolute adjectives are not interpreted relative to a comparison class, instead, they require solely to a non-zero degree of the measured property (*false*: the presence of any *false* information renders the application false) or maximum degree (*correct*: any incorrect feature renders a business *incorrect*) (Kennedy & McNally, 2005). Adjectives that are not absolute are relatively gradable and require a context reference to determine their nature. Expensive/cheap are examples of relative adjectives: a computer can be expensive compared to a coffee, but cheap compared to a car (Kennedy, 2007). Gradability has been studied primarily in English, but Kennedy and McNally (2005) indicates that this typology is also found for other languages, including Spanish.

2016) should exhibit the largest gap between the interpersonal and political treatment coefficients. Table A2.17 tests this prediction by comparing treatment intensity gaps across three definitions of sophistication. In Table A2.17, Column 1 uses a dummy equal to 1 if the respondent answered at least one of the two economic knowledge questions about supply and demand effects incorrectly [28]. Column 2 proxies sophistication by the reported number of books in the respondent's household at age 16, with low sophistication defined as up to 10 books. Column 3 defines low sophistication as not having started a higher (tertiary) education. The bottom panel indicates that the difference between the gap between the sophistication groups is not statistically distinguishable from zero, suggesting wording effects are not driving the results.

In an analogous fashion, Column 4 assesses the difference in the differences of treatment effects according to attention levels, as defined in the previous robustness test. If framing effects are driving the results, high-attention respondents are more likely to carefully process small differences in wording, and the difference between the treatments would be larger for that group. The absence of any statistically significant difference between attention groups in the gap in treatment effects, further supports the conclusion that the null effect of the political treatment stems from the information provided by the vignette rather than the choice of *not correct* over *false*.

## 2.4 Conclusion

In this paper, we study the role of trust - horizontal and vertical - in shaping people's policy preferences in specific circumstances. In particular, we focus on times of crises when (some form of) governmental action is necessary. In such circumstances, trust can shape the level of support a government can expect when attempting to respond swiftly and forcefully. We empirically explore the connection between trust and preferences over policies with different levels of swiftness and flexibility with data from 9 countries in Latin America. The focus on Latin America expands the scholarly literature beyond the Global North, where the vast majority of research on trust has taken place (Devine, 2024a).

Our findings reveal that political and social mistrust jointly shape preferences for regulation, but they operate through fundamentally different mechanisms. *Political mistrust* creates a pervasive skepticism that reduces support for any form of government interven-

[28]The first question ask what would happen to the prices of goods if more supermarkets would open in the neighbourhood (increase, decrease, not change). The second question asks what would happen to rent prices if a rent price ceiling were to be established (more landlords would want to rent out their properties, and there would be more properties available; fewer landlords would decide to rent out, and fewer properties would become available; there would be no change). An answer is classified as incorrect if it contradicts basic supply-and-demand predictions, namely that goods prices would increase and more rental properties would become available.

tion, leading to widespread indifference between policy alternatives. This suggests that politically mistrusting individuals lack confidence in the state's ability to effectively implement recovery policies, irrespective of their design. Interestingly, reminders of government competence yield inconsistent effects, further suggesting a deeper skepticism toward institutional performance and a phenomenon of political fatigue and preferences for exit options.

In contrast, *social mistrust* functions conditionally and requires the costs associated with others' misbehavior to be salient. When respondents are reminded of the potential for opportunistic behavior among fellow citizens, their support for flexible policies diminishes sharply, substantiating the importance of perceived social opportunism in shaping attitudes. Without such prompts, social mistrust has no discernible effect on preferences, suggesting latent rather than inherent influence.

The results imply a divergence of salience for the narratives determining whether people prefer more flexible versus rigid policies. Concerns about political opportunism and government (in)competence dominate public perceptions, whereas fears of social opportunism emerge only when explicitly brought to attention. This has important implications for social communication when coordination is required. Firstly, our findings suggest that it is important for governments (or other implementing bodies) to avoid drawing attention to the negative implications related to a lack of social coordination. A narrative centered around 'we will only overcome this challenge if we all act together', which was oftentimes prevalent amidst the Covid-19 pandemic, might have unintended consequences of reminding low-trusting individuals of the externalities of others' actions and leading them to question the intentions of others. Instead, the focus should be drawn to the examples of positive behaviors. Moreover, it is crucial for governments to be aware of how the facts (or misinformation) are presented across different networks and adjust expectations accordingly.

Ultimately, this study illustrates the critical role of trust — both political and social — in shaping the capacity for effective policy response during crises. We also find that improving the experience with the bureaucracy and streamlining processes constitutes an alternative approach for lowering demands for costly regulation. While one might expect this effect to operate (partially) through political trust, our results suggest that both mechanisms operate with a certain level of independence. By identifying the distinct and conditional pathways through which mistrust influences preferences, our findings thus contribute to a deeper understanding of the societal foundations required for swift governmental action with broad-based support and legitimacy.

# Appendices

## 2.A Supplementary material

Table A2.1: Ordered Logit: Support for Option A (flexible) - Interaction model

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Mistrust Political | -0.65*** | -0.62*** | -0.55*** | -0.55*** |
| | (0.10) | (0.10) | (0.10) | (0.10) |
| Mistrust Social | -0.56*** | -0.64*** | -0.66*** | -0.67*** |
| | (0.20) | (0.20) | (0.20) | (0.20) |
| Treatments | | | | |
| Interpersonal | -0.87*** | -0.89*** | -0.89*** | -0.89*** |
| | (0.09) | (0.09) | (0.09) | (0.09) |
| Political | -0.33*** | -0.32*** | -0.29*** | -0.29*** |
| | (0.10) | (0.11) | (0.11) | (0.11) |
| Combined | -0.41*** | -0.41*** | -0.41*** | -0.41*** |
| | (0.10) | (0.10) | (0.10) | (0.10) |
| Interactions | | | | |
| Treatment × Political | | | | |
| Interpersonal × Mistrust Political | 0.25* | 0.27* | 0.22 | 0.21 |
| | (0.15) | (0.15) | (0.14) | (0.14) |
| Political × Mistrust Political | 0.13 | 0.14 | 0.07 | 0.06 |
| | (0.15) | (0.15) | (0.16) | (0.16) |
| Combined × Mistrust Political | -0.08 | -0.05 | -0.09 | -0.10 |
| | (0.16) | (0.17) | (0.16) | (0.16) |
| Treatment × Social | | | | |
| Interpersonal × Mistrust Social | 0.05 | 0.13 | 0.14 | 0.13 |
| | (0.29) | (0.29) | (0.29) | (0.30) |
| Political × Mistrust Social | 0.27 | 0.21 | 0.20 | 0.20 |
| | (0.36) | (0.35) | (0.36) | (0.36) |
| Combined × Mistrust Social | 0.14 | 0.13 | 0.14 | 0.15 |
| | (0.31) | (0.32) | (0.32) | (0.32) |
| Observations | 9090 | 9034 | 9021 | 9021 |
| Pseudo $R^2$ | 0.021 | 0.030 | 0.036 | 0.037 |
| Country FE | yes | yes | yes | yes |
| Demographics | no | yes | yes | yes |
| Attitudes | no | no | yes | yes |
| Ideology | no | no | no | yes |

*Note:* Table presents coefficients estimates for Eq.2.2 using Ordered Logistic Regression models with country fixed effects. The outcome variable indicates support for Policy Option B, ranging from 1 (no support) to 5 (great support). See the main text for a description of the control variables and other covariates. Regression estimated using proportional weights. Standard errors clustered at the municipality level in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A2.2: Ordered Logit: Support for Option B (rigid) - Interaction model

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Mistrust Political | -0.44*** | -0.46*** | -0.45*** | -0.46*** |
| | (0.11) | (0.11) | (0.11) | (0.11) |
| Mistrust Social | -0.46** | -0.44** | -0.42** | -0.44** |
| | (0.21) | (0.21) | (0.21) | (0.21) |
| | Treatments | | | |
| Interpersonal | 0.26*** | 0.24** | 0.26*** | 0.27*** |
| | (0.10) | (0.10) | (0.10) | (0.10) |
| Political | -0.07 | -0.10 | -0.08 | -0.07 |
| | (0.11) | (0.11) | (0.11) | (0.11) |
| Combined | 0.02 | 0.02 | 0.04 | 0.04 |
| | (0.10) | (0.10) | (0.10) | (0.10) |
| | Interactions | | | |
| Treatment × Political | | | | |
| Interpersonal × Mistrust Political | -0.06 | -0.06 | -0.08 | -0.10 |
| | (0.15) | (0.15) | (0.15) | (0.15) |
| Political × Mistrust Political | 0.06 | 0.07 | 0.05 | 0.04 |
| | (0.15) | (0.15) | (0.15) | (0.15) |
| Combined × Mistrust Political | -0.09 | -0.11 | -0.12 | -0.14 |
| | (0.15) | (0.15) | (0.15) | (0.15) |
| Treatment × Social | | | | |
| Interpersonal × Mistrust Social | -0.02 | -0.01 | -0.02 | -0.00 |
| | (0.29) | (0.29) | (0.29) | (0.29) |
| Political × Mistrust Social | -0.60** | -0.60** | -0.62** | -0.60** |
| | (0.30) | (0.30) | (0.30) | (0.30) |
| Combined × Mistrust Social | 0.12 | 0.14 | 0.11 | 0.10 |
| | (0.31) | (0.31) | (0.31) | (0.31) |
| Observations | 9089 | 9032 | 9021 | 9021 |
| Pseudo $R^2$ | 0.014 | 0.018 | 0.019 | 0.021 |
| Country FE | yes | yes | yes | yes |
| Demographics | no | yes | yes | yes |
| Attitudes | no | no | yes | yes |
| Ideology | no | no | no | yes |

*Note:* Table presents coefficients estimates for Eq.2.2 using Ordered Logistic Regression models with country fixed effects. The outcome variable indicates support for Policy Option B, ranging from 1 (no support) to 5 (great support). See the main text for a description of the control variables and other covariates. Regression estimated using proportional weights. Standard errors clustered at the municipality level in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A2.3: Heterogeneity according to local characteristics: Interaction model

| | Dissatisfaction with services | | | |
|---|---|---|---|---|
| | Low (1) | | High (2) | |
| | Pref A | Pref B | Pref A | Pref B |
| Mistrust Political | -0.22 | -0.15 | -0.76*** | -0.62*** |
| | (0.25) | (0.22) | (0.23) | (0.22) |
| Mistrust Social | 0.35 | -0.14 | 0.15 | 0.54 |
| | (0.37) | (0.34) | (0.47) | (0.41) |
| Interpersonal | 0.24 | 0.87*** | -0.75*** | -0.05 |
| | (0.22) | (0.18) | (0.28) | (0.21) |
| Political | -0.23 | 0.05 | -0.42 | -0.23 |
| | (0.20) | (0.16) | (0.31) | (0.22) |
| Combined | -0.10 | 0.31* | -0.20 | 0.19 |
| | (0.20) | (0.17) | (0.27) | (0.22) |
| Interpersonal × Mistrust Political | -0.55 | -0.12 | 0.55 | 0.46 |
| | (0.38) | (0.28) | (0.34) | (0.29) |
| Political × Mistrust Political | 0.23 | 0.05 | 0.45 | 0.20 |
| | (0.37) | (0.31) | (0.41) | (0.35) |
| Combined × Mistrust Political | 0.20 | -0.13 | 0.55 | 0.17 |
| | (0.36) | (0.30) | (0.38) | (0.31) |
| Interpersonal × Mistrust Social | -1.33** | -0.35 | -1.29* | -0.88 |
| | (0.63) | (0.49) | (0.77) | (0.56) |
| Political × Mistrust Social | 0.08 | 0.68 | 0.75 | -0.43 |
| | (0.66) | (0.61) | (0.74) | (0.62) |
| Combined × Mistrust Social | -0.86 | -0.05 | -0.92 | -0.34 |
| | (0.67) | (0.50) | (0.70) | (0.52) |
| Observations | 4423 | | 4372 | |
| Pseudo $R^2$ | 0.087 | | 0.104 | |
| Median value: Buenos Aires | | | | |
| Coefficient Equality Test (p-val) | | | | |
| $MP_{Low} = MP_{High}$ | 0.12 | 0.12 | | |
| $MS_{Low} = MS_{High}$ | 0.74 | 0.20 | | |
| $Interp_{Low} = Interp_{High}$ | 0.00 | 0.00 | | |
| $Pol_{Low} = Pol_{High}$ | 0.60 | 0.31 | | |
| $Comb_{Low} = Comb_{High}$ | 0.78 | 0.66 | | |
| $Int * MP_{Low} = Int * MP_{High}$ | 0.03 | 0.15 | | |
| $Pol * MP_{Low} = Pol * MP_{High}$ | 0.70 | 0.75 | | |
| $Comb * MP_{Low} = Comb * MP_{High}$ | 0.50 | 0.49 | | |
| $Int * MS_{Low} = Int * MS_{High}$ | 0.97 | 0.48 | | |
| $Pol * MS_{Low} = Pol * MS_{High}$ | 0.49 | 0.20 | | |
| $Comb * MS_{Low} = Comb * MS_{High}$ | 0.95 | 0.69 | | |

*Note:* Table presents the coefficients' estimates for Eq.2.2 using Multinomial Logistic Regression models with country fixed effects, restricted to the sample where respondents reside in regions also covered in the AmericasBarometer survey. The Coefficient Equality Test panel displays the p-statistics of the Wald test for each pair of coefficients indicated in the row, namely difference between the same coefficient in the Low and High subsamples. See Table 2.4 for more on estimation method and variable specifications. Standard errors clustered at the municipality level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A2.4: Heterogeneity according to local characteristics: Absolute support for A and B

| | Policy A | | | Policy B | | |
|---|---|---|---|---|---|---|
| | Main results | Dissatisfaction | | Main results | Dissatisfaction | |
| | | Low | High | | Low | High |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Mistrust Political | -0.52*** | -0.49*** | -0.53*** | -0.52*** | -0.54*** | -0.50*** |
| | (0.06) | (0.09) | (0.09) | (0.06) | (0.09) | (0.09) |
| Mistrust Social | -0.59*** | -0.54*** | -0.66*** | -0.57*** | -0.56*** | -0.59*** |
| | (0.12) | (0.17) | (0.16) | (0.11) | (0.15) | (0.16) |
| Interpersonal | -0.77*** | -0.69*** | -0.87*** | 0.22*** | 0.31*** | 0.12 |
| | (0.07) | (0.10) | (0.10) | (0.07) | (0.09) | (0.11) |
| Political | -0.26*** | -0.20* | -0.31** | -0.10 | -0.03 | -0.15 |
| | (0.08) | (0.10) | (0.12) | (0.09) | (0.10) | (0.16) |
| Combined | -0.44*** | -0.35*** | -0.53*** | 0.00 | 0.05 | -0.03 |
| | (0.08) | (0.10) | (0.15) | (0.08) | (0.11) | (0.13) |
| Observations | 8792 | 4423 | 4369 | 8792 | 4423 | 4369 |
| $R^2$ | | | | | | |
| Coefficient Equality Test (p-val) | | | | | | |
| Mistrust Political | | 0.7506 | | | 0.7436 | |
| Mistrust Social | | 0.6117 | | | 0.8851 | |
| Interpersonal | | 0.2146 | | | 0.1851 | |
| Political | | 0.4984 | | | 0.5313 | |
| Combined | | 0.3136 | | | 0.6524 | |

*Note:* Table presents coefficients estimates for Eq.2.2 using Ordered Logistic Regression models with country fixed effects. The outcome variable indicates support for Policy Option A/B, ranging from 1 (no support) to 5 (great support). See the main text for a description of the control variables and other covariates. Regression estimated using proportional weights. Standard errors clustered at the municipality level in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A2.5: Heterogeneity according to local characteristics (country-level median): Baseline model

| | Dissatisfaction with services | | | |
|---|---|---|---|---|
| | Low | | High | |
| | (1) | | (2) | |
| | Pref A | Pref B | Pref A | Pref B |
| Mistrust Political | -0.17 | -0.27** | -0.50*** | -0.41*** |
| | (0.13) | (0.12) | (0.18) | (0.14) |
| Mistrust Social | -0.09 | -0.06 | -0.11 | 0.11 |
| | (0.22) | (0.18) | (0.28) | (0.22) |
| Interpersonal | -0.16 | 0.62*** | -0.48* | 0.20 |
| | (0.17) | (0.12) | (0.26) | (0.17) |
| Political | -0.26* | -0.06 | 0.15 | 0.03 |
| | (0.15) | (0.12) | (0.21) | (0.17) |
| Combined | -0.02 | 0.25** | -0.12 | 0.18 |
| | (0.15) | (0.13) | (0.22) | (0.16) |
| Observations | 5828 | | 2967 | |
| Pseudo $R^2$ | 0.095 | | 0.092 | |
| Coefficient Equality Test (p-val) | | | | |
| $MP_{Low} = MP_{High}$ | 0.14 | 0.43 | | |
| $MS_{Low} = MS_{High}$ | 0.95 | 0.56 | | |
| $Interp_{Low} = Interp_{High}$ | 0.32 | 0.04 | | |
| $Pol_{Low} = Pol_{High}$ | 0.12 | 0.66 | | |
| $Comb_{Low} = Comb_{High}$ | 0.72 | 0.72 | | |

*Note:* Table presents the coefficients' estimates for Eq.2.2 using Multinomial Logistic Regression models with country fixed effects, restricted to the sample where respondents reside in regions also covered in the AmericasBarometer survey. The Coefficient Equality Test panel displays the p-statistics of the Wald test for each pair of coefficients indicated in the row, namely the difference between the same coefficient in the Low and High subsamples. See Table 2.4 for more on estimation method and variable specifications. Standard errors clustered at the municipality level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A2.6: Heterogeneity according to local characteristics (country-level median): Absolute support for A and B

| | Policy A | | | Policy B | | |
|---|---|---|---|---|---|---|
| | Main results | Dissatisfaction | | Main results | Dissatisfaction | |
| | | Low | High | | Low | High |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Mistrust Political | -0.52*** | -0.45*** | -0.69*** | -0.52*** | -0.51*** | -0.57*** |
| | (0.06) | (0.08) | (0.11) | (0.06) | (0.07) | (0.12) |
| Mistrust Social | -0.59*** | -0.59*** | -0.59*** | -0.57*** | -0.60*** | -0.58*** |
| | (0.12) | (0.15) | (0.20) | (0.11) | (0.15) | (0.17) |
| Interpersonal | -0.77*** | -0.79*** | -0.77*** | 0.22*** | 0.23** | 0.20 |
| | (0.07) | (0.09) | (0.12) | (0.07) | (0.09) | (0.12) |
| Political | -0.26*** | -0.26** | -0.27** | -0.10 | -0.09 | -0.13 |
| | (0.08) | (0.11) | (0.11) | (0.09) | (0.13) | (0.13) |
| Combined | -0.44*** | -0.50*** | -0.33** | 0.00 | 0.03 | -0.03 |
| | (0.08) | (0.11) | (0.14) | (0.08) | (0.10) | (0.14) |
| Observations | 8792 | 5827 | 2965 | 8792 | 5826 | 2966 |
| Pseudo $R^2$ | 0.037 | 0.039 | 0.046 | 0.021 | 0.022 | 0.032 |
| Coefficient Equality Test (p-val) | | | | | | |
| $\beta LOW = \beta HIGH$ | | | | | | |
| $MP_{Low} = MP_{High}$ | | 0.08 | | | 0.65 | |
| $MS_{Low} = MS_{High}$ | | 0.99 | | | 0.92 | |
| $Interp_{Low} = Interp_{High}$ | | 0.91 | | | 0.83 | |
| $Pol_{Low} = Pol_{High}$ | | 0.94 | | | 0.85 | |
| $Comb_{Low} = Comb_{High}$ | | 0.31 | | | 0.74 | |

*Note:* Table presents coefficients estimates for Eq.2.2 using Ordered Logistic Regression models with country fixed effects. The outcome variable indicates support for Policy Option A/B, ranging from 1 (no support) to 5 (great support). See the main text for a description of the control variables and other covariates. Regression estimated using proportional weights. Standard errors clustered at the municipality level in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A2.7: Extension: Others prefernces - any treatment

| | Any Treatments | | | | Government Treatment | | | |
|---|---|---|---|---|---|---|---|---|
| | (1) | | (2) | | (3) | | (4) | |
| | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B |
| Others: Pref A | 3.03*** | 2.20*** | 3.02*** | 2.00*** | 3.04*** | 2.20*** | 3.18*** | 2.27*** |
| | (0.14) | (0.12) | (0.28) | (0.24) | (0.14) | (0.12) | (0.22) | (0.18) |
| Others: Pref B | 1.91*** | 3.96*** | 1.89*** | 3.83*** | 1.91*** | 3.96*** | 1.92*** | 3.98*** |
| | (0.15) | (0.12) | (0.27) | (0.22) | (0.15) | (0.12) | (0.20) | (0.18) |
| Any Treatment | -0.11 | 0.25** | -0.08 | 0.09 | | | | |
| | (0.12) | (0.10) | (0.23) | (0.19) | | | | |
| Any Treatment × Others: Pref A | | | 0.02 | 0.28 | | | | |
| | | | (0.33) | (0.27) | | | | |
| Any Treatment × Others: Pref B | | | 0.02 | 0.18 | | | | |
| | | | (0.31) | (0.25) | | | | |
| Government Treatment | | | | | 0.10 | -0.03 | 0.21 | 0.01 |
| | | | | | (0.11) | (0.09) | (0.22) | (0.15) |
| Government Treatment × Others: Pref A | | | | | | | -0.28 | -0.13 |
| | | | | | | | (0.30) | (0.24) |
| Government Treatment × Others: Pref B | | | | | | | -0.01 | -0.03 |
| | | | | | | | (0.29) | (0.22) |
| Observations | 9024 | | 9024 | | 9024 | | 9024 | |
| Pseudo $R^2$ | 0.333 | | 0.333 | | 0.331 | | 0.332 | |

*Note:* Table presents the coefficients' estimates using Multinomial Logistic Regression models with country fixed effects. Others: Pref A (B) is a dummy variable with the value of 1 if the respondent answers that most people would prefer policy option A (B). Government Treatment is a dummy for individuals in the Political or Combined treatment arms. Any Treatment is a dummy for individuals who are not in the Control arm. See Table 2.4 for more on estimation method and variable specifications. Standard errors clustered at the municipality level in parentheses. $^{*}$ $p < 0.10$, $^{**}$ $p < 0.05$, $^{***}$ $p < 0.01$.

Table A2.8: Robustness: alternative political trust measures

| Political Institution: | Municipality (1) | | Judicial (2) | | Congress (3) | | Executive (4) | |
|---|---|---|---|---|---|---|---|---|
| | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B |
| Mistrust Political | -0.21* | -0.30*** | -0.23** | -0.19** | -0.09 | -0.01 | -0.25* | -0.49*** |
| | (0.12) | (0.08) | (0.11) | (0.08) | (0.11) | (0.09) | (0.14) | (0.10) |
| Mistrust Social | -0.09 | 0.04 | -0.10 | 0.00 | -0.12 | -0.04 | -0.09 | 0.07 |
| | (0.17) | (0.14) | (0.17) | (0.14) | (0.17) | (0.14) | (0.17) | (0.14) |
| Interpersonal | -0.28** | 0.47*** | -0.27** | 0.48*** | -0.28** | 0.48*** | -0.27** | 0.48*** |
| | (0.14) | (0.10) | (0.13) | (0.10) | (0.13) | (0.10) | (0.14) | (0.10) |
| Political | -0.12 | -0.02 | -0.12 | -0.01 | -0.12 | -0.02 | -0.12 | -0.02 |
| | (0.12) | (0.09) | (0.12) | (0.09) | (0.12) | (0.09) | (0.12) | (0.09) |
| Combined | -0.01 | 0.26*** | -0.01 | 0.27*** | -0.01 | 0.27*** | -0.01 | 0.27*** |
| | (0.12) | (0.10) | (0.12) | (0.10) | (0.12) | (0.10) | (0.12) | (0.10) |
| Observations | 9024 | | 9024 | | 9024 | | 9024 | |
| Pseudo $R^2$ | 0.076 | | 0.076 | | 0.075 | | 0.077 | |

*Note:* Table presents the coefficients' estimates using Multinomial Logistic Regression models with country fixed effects. The top row displays the institution to which the 'Mistrust Political' variable refers. See Table 2.4 for more on estimation method and variable specifications. Standard errors clustered at the municipality level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A2.9: Robustness: Country sensitivity, Baseline model

| | (1) | | (2) | | (3) | | (4) | | (5) | | (6) | | (7) | | (8) | | (9) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B |
| Mistrust Political | -0.30*** | -0.31*** | -0.24** | -0.30*** | -0.24** | -0.24** | -0.21* | -0.23** | -0.29*** | -0.33*** | -0.27** | -0.30*** | -0.27** | -0.32*** | -0.32*** | -0.28*** | -0.26** | -0.32*** |
| | (0.11) | (0.10) | (0.11) | (0.10) | (0.11) | (0.10) | (0.11) | (0.09) | (0.11) | (0.09) | (0.11) | (0.09) | (0.11) | (0.10) | (0.10) | (0.08) | (0.11) | (0.10) |
| Mistrust Social | -0.20 | -0.02 | -0.13 | 0.02 | -0.14 | -0.04 | -0.05 | 0.02 | -0.11 | -0.00 | -0.01 | 0.07 | 0.01 | 0.10 | -0.17 | 0.02 | -0.04 | -0.02 |
| | (0.19) | (0.15) | (0.19) | (0.16) | (0.18) | (0.15) | (0.18) | (0.14) | (0.18) | (0.14) | (0.18) | (0.14) | (0.18) | (0.15) | (0.18) | (0.15) | (0.18) | (0.15) |
| Interpersonal | -0.35** | 0.39*** | -0.23 | 0.51*** | -0.26* | 0.47*** | -0.25* | 0.47*** | -0.30** | 0.45*** | -0.23* | 0.45*** | -0.23 | 0.54*** | -0.37*** | 0.51*** | -0.23 | 0.54*** |
| | (0.14) | (0.10) | (0.15) | (0.11) | (0.14) | (0.11) | (0.14) | (0.10) | (0.15) | (0.10) | (0.14) | (0.10) | (0.15) | (0.10) | (0.13) | (0.10) | (0.15) | (0.11) |
| Political | -0.15 | -0.03 | -0.15 | -0.01 | -0.11 | -0.03 | -0.13 | 0.01 | -0.13 | -0.08 | -0.02 | -0.01 | -0.05 | 0.02 | -0.14 | 0.04 | -0.18 | -0.07 |
| | (0.13) | (0.10) | (0.13) | (0.10) | (0.13) | (0.10) | (0.12) | (0.10) | (0.13) | (0.10) | (0.12) | (0.10) | (0.13) | (0.10) | (0.13) | (0.10) | (0.13) | (0.10) |
| Combined | -0.04 | 0.20* | 0.11 | 0.36*** | 0.01 | 0.26** | -0.10 | 0.24** | -0.00 | 0.28*** | -0.02 | 0.23** | 0.04 | 0.30*** | -0.05 | 0.28*** | -0.04 | 0.28*** |
| | (0.13) | (0.11) | (0.13) | (0.11) | (0.13) | (0.11) | (0.12) | (0.10) | (0.13) | (0.10) | (0.12) | (0.10) | (0.13) | (0.10) | (0.13) | (0.10) | (0.13) | (0.11) |
| Observations | 8035 | | 8014 | | 7994 | | 8019 | | 8130 | | 8027 | | 7927 | | 8018 | | 8028 | |
| Pseudo $R^2$ | 0.082 | | 0.082 | | 0.079 | | 0.080 | | 0.079 | | 0.075 | | 0.083 | | 0.084 | | 0.081 | |
| Country dropped | Argentina | | Brazil | | Chile | | Colombia | | Costa Rica | | Guatemala | | Mexico | | Panama | | Peru | |

*Note:* Table presents the coefficients' estimates of model 2.1 using Multinomial Logistic Regression models with country fixed effects. The bottom row displays the country dropped in each set of estimations. See Table 2.4 for more on estimation method and variable specifications. Standard errors clustered at the municipality level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A2.10: Robustness: Country sensitivity, Interaction model.

| | (1) | | (2) | | (3) | | (4) | | (5) | | (6) | | (7) | | (8) | | (9) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B |
| Mistrust Political | -0.49*** | -0.41** | -0.42** | -0.38** | -0.38** | -0.30* | -0.40** | -0.35** | -0.42** | -0.37** | -0.28* | -0.26* | -0.37** | -0.30* | -0.38** | -0.35** | -0.30* | -0.27* |
| | (0.18) | (0.16) | (0.17) | (0.16) | (0.17) | (0.16) | (0.17) | (0.16) | (0.17) | (0.16) | (0.17) | (0.16) | (0.17) | (0.16) | (0.19) | (0.16) | (0.17) | (0.16) |
| Mistrust Social | 0.22 | 0.33 | 0.23 | 0.00 | 0.45 | 0.22 | 0.26 | 0.14 | 0.19 | 0.22 | 0.24 | 0.10 | 0.36 | 0.18 | 0.21 | 0.16 | 0.40 | 0.12 |
| | (0.33) | (0.27) | (0.30) | (0.27) | (0.30) | (0.28) | (0.29) | (0.26) | (0.30) | (0.26) | (0.30) | (0.26) | (0.31) | (0.27) | (0.31) | (0.27) | (0.30) | (0.26) |
| Interpersonal | -0.24 | 0.41*** | -0.08 | 0.51*** | -0.10 | 0.49*** | -0.15 | 0.45*** | -0.19 | 0.48*** | -0.12 | 0.52*** | -0.05 | 0.60*** | -0.15 | 0.56*** | -0.00 | 0.63*** |
| | (0.18) | (0.14) | (0.18) | (0.15) | (0.17) | (0.15) | (0.18) | (0.14) | (0.18) | (0.15) | (0.16) | (0.14) | (0.18) | (0.15) | (0.17) | (0.14) | (0.18) | (0.14) |
| Political | -0.30 | -0.07 | -0.33* | -0.08 | -0.22 | -0.08 | -0.31* | -0.09 | -0.29 | -0.13 | -0.03 | -0.03 | -0.15 | 0.02 | -0.26 | -0.06 | -0.26 | -0.05 |
| | (0.19) | (0.13) | (0.18) | (0.13) | (0.18) | (0.13) | (0.18) | (0.13) | (0.18) | (0.13) | (0.17) | (0.13) | (0.19) | (0.14) | (0.17) | (0.13) | (0.18) | (0.13) |
| Combined | -0.13 | 0.18 | 0.04 | 0.29** | 0.02 | 0.29** | -0.17 | 0.21 | -0.01 | 0.32** | -0.01 | 0.25* | -0.02 | 0.30** | -0.04 | 0.29** | -0.00 | 0.33** |
| | (0.17) | (0.14) | (0.17) | (0.14) | (0.17) | (0.14) | (0.16) | (0.14) | (0.18) | (0.14) | (0.16) | (0.13) | (0.18) | (0.14) | (0.16) | (0.13) | (0.17) | (0.14) |
| Interpersonal × Mistrust Political | -0.05 | 0.13 | -0.15 | 0.08 | -0.06 | 0.12 | -0.04 | 0.14 | -0.03 | 0.07 | -0.07 | -0.07 | -0.17 | -0.03 | -0.36 | 0.02 | -0.29 | -0.10 |
| | (0.26) | (0.20) | (0.27) | (0.21) | (0.27) | (0.21) | (0.26) | (0.20) | (0.26) | (0.20) | (0.25) | (0.21) | (0.26) | (0.21) | (0.28) | (0.21) | (0.27) | (0.21) |
| Political × Mistrust Political | 0.30 | 0.13 | 0.39 | 0.13 | 0.28 | 0.13 | 0.43 | 0.24 | 0.29 | 0.13 | -0.09 | -0.02 | 0.18 | -0.02 | 0.31 | 0.24 | 0.17 | -0.07 |
| | (0.28) | (0.24) | (0.28) | (0.23) | (0.28) | (0.24) | (0.27) | (0.24) | (0.27) | (0.23) | (0.25) | (0.22) | (0.28) | (0.23) | (0.28) | (0.23) | (0.28) | (0.23) |
| Combined × Mistrust Political | 0.40 | 0.10 | 0.38 | 0.12 | 0.25 | -0.06 | 0.35 | 0.08 | 0.19 | -0.08 | 0.16 | -0.06 | 0.30 | -0.03 | 0.13 | -0.03 | 0.15 | -0.08 |
| | (0.27) | (0.22) | (0.27) | (0.22) | (0.27) | (0.23) | (0.25) | (0.22) | (0.27) | (0.22) | (0.27) | (0.22) | (0.27) | (0.22) | (0.28) | (0.22) | (0.28) | (0.23) |
| Interpersonal × Mistrust Social | -1.22** | -0.85** | -1.21** | -0.33 | -1.54*** | -0.70* | -0.99** | -0.39 | -1.08** | -0.70* | -0.94* | -0.42 | -1.18** | -0.54 | -1.14** | -0.59 | -1.45*** | -0.53 |
| | (0.53) | (0.38) | (0.55) | (0.41) | (0.51) | (0.39) | (0.50) | (0.39) | (0.50) | (0.38) | (0.50) | (0.38) | (0.50) | (0.40) | (0.52) | (0.39) | (0.49) | (0.39) |
| Political × Mistrust Social | 0.27 | -0.24 | 0.39 | 0.24 | 0.00 | -0.06 | 0.21 | 0.04 | 0.48 | 0.03 | 0.66 | 0.47 | 0.33 | 0.14 | 0.20 | 0.14 | 0.27 | 0.20 |
| | (0.54) | (0.45) | (0.52) | (0.44) | (0.53) | (0.46) | (0.51) | (0.43) | (0.51) | (0.44) | (0.51) | (0.42) | (0.53) | (0.46) | (0.48) | (0.44) | (0.52) | (0.44) |
| Combined × Mistrust Social | -1.02** | -0.25 | -1.17** | 0.14 | -1.20** | -0.18 | -0.78* | -0.12 | -0.80* | -0.15 | -0.81* | 0.02 | -0.80 | 0.13 | -0.76 | 0.01 | -1.14** | -0.21 |
| | (0.52) | (0.37) | (0.51) | (0.39) | (0.49) | (0.37) | (0.47) | (0.35) | (0.48) | (0.36) | (0.48) | (0.36) | (0.49) | (0.37) | (0.48) | (0.38) | (0.51) | (0.36) |
| Observations | 8035 | | 8014 | | 7994 | | 8019 | | 8130 | | 8027 | | 7927 | | 8018 | | 8028 | |
| Pseudo $R^2$ | 0.084 | | 0.085 | | 0.081 | | 0.082 | | 0.081 | | 0.077 | | 0.085 | | 0.086 | | 0.083 | |
| Country dropped | Argentina | | Brazil | | Chile | | Colombia | | Costa Rica | | Guatemala | | Mexico | | Panama | | Peru | |

*Note:* Table presents the coefficients' estimates of model 2.2 using Multinomial Logistic Regression models with country fixed effects. The bottom row displays the country dropped in each set of estimations. See Table 2.4 for more on estimation method and variable specifications. Standard errors clustered at the municipality level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A2.11: Robustness: Generalized Ordered Logit

| | Multinomial Logit | | | | Generalized Logit | | | |
|---|---|---|---|---|---|---|---|---|
| | (1) | | (2) | | (3) | | (4) | |
| | Option A | Option B | Option A | Option B | More regulated than Option A | Inddif | More regulated than Option A | Indiff |
| Mistrust Political | -0.27*** | -0.29*** | -0.38** | -0.33** | 0.04 | -0.15** | 0.11 | -0.10 |
| | (0.10) | (0.09) | (0.16) | (0.15) | (0.08) | (0.07) | (0.12) | (0.12) |
| Mistrust Social | -0.09 | 0.01 | 0.29 | 0.16 | 0.04 | 0.04 | -0.24 | 0.01 |
| | (0.17) | (0.14) | (0.28) | (0.25) | (0.11) | (0.11) | (0.20) | (0.20) |
| Treatments | | | | | | | | |
| Interpersonal | -0.27** | 0.48*** | -0.12 | 0.52*** | 0.60*** | 0.60*** | 0.57*** | 0.57*** |
| | (0.14) | (0.10) | (0.17) | (0.14) | (0.08) | (0.08) | (0.11) | (0.11) |
| Political | -0.12 | -0.02 | -0.24 | -0.06 | 0.07 | 0.07 | 0.10 | 0.10 |
| | (0.12) | (0.09) | (0.17) | (0.12) | (0.08) | (0.08) | (0.10) | (0.10) |
| Combined | -0.01 | 0.27*** | -0.03 | 0.27** | 0.14 | 0.29*** | 0.16 | 0.33*** |
| | (0.12) | (0.10) | (0.16) | (0.13) | (0.09) | (0.08) | (0.11) | (0.10) |
| Interaction | | | | | | | | |
| Treatment × Political | | | | | | | | |
| Interpersonal × Mistrust Political | | | -0.13 | 0.04 | | | 0.04 | 0.04 |
| | | | (0.25) | (0.19) | | | (0.15) | (0.15) |
| Political × Mistrust Political | | | 0.25 | 0.10 | | | -0.06 | -0.06 |
| | | | (0.26) | (0.22) | | | (0.16) | (0.16) |
| Combined × Mistrust Political | | | 0.26 | -0.01 | | | -0.19 | -0.19 |
| | | | (0.25) | (0.21) | | | (0.17) | (0.17) |
| Treatment × Social | | | | | | | | |
| Interpersonal × Mistrust Social | | | -1.19** | -0.56 | | | 0.65* | -0.07 |
| | | | (0.48) | (0.37) | | | (0.38) | (0.33) |
| Political × Mistrust Social | | | 0.31 | 0.11 | | | -0.11 | -0.11 |
| | | | (0.49) | (0.42) | | | (0.32) | (0.32) |
| Combined × Mistrust Social | | | -0.94** | -0.07 | | | 0.77** | 0.37 |
| | | | (0.46) | (0.35) | | | (0.35) | (0.29) |
| Observations | 9024 | | 9024 | | 9024 | | 9024 | |
| Pseudo $R^2$ | 0.079 | | 0.081 | | 0.079 | | 0.081 | |

*Note:* Table presents the coefficients' estimates of models 2.1 and 2.2 using Multinomial Logit and Generalized Ordered Logit Regression models with country fixed effects. In the Generalized Logit, the top row indicates that the outcome variable is "more regulated than" the option indicated. Thus, a negative coefficient indicates that the variable relates to preferences for an option at least as flexible as the outcome in the top row. See Table 2.4 for more on the Multinomial Logit estimation method and variable specifications. Standard errors clustered at the municipality level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A2.12: Robustness: 5 categories outcome variable

| | Baseline | | | | Interaction | | | |
|---|---|---|---|---|---|---|---|---|
| | (1) | | | | (1) | | | |
| Dependent variable | More regulated than | | | | More regulated than | | | |
| | Strong A | A | Neutral | B | Strong A | A | Neutral | B |
| Mistrust Political | -0.07 | 0.03 | -0.15** | -0.10 | 0.12 | 0.12 | -0.08 | 0.02 |
| | (0.09) | (0.08) | (0.07) | (0.07) | (0.12) | (0.11) | (0.11) | (0.11) |
| Mistrust Social | 0.10 | 0.10 | 0.10 | 0.10 | -0.07 | -0.28 | -0.03 | 0.04 |
| | (0.10) | (0.10) | (0.10) | (0.10) | (0.22) | (0.20) | (0.19) | (0.19) |
| Interpersonal | 0.55*** | 0.55*** | 0.55*** | 0.55*** | 0.55*** | 0.55*** | 0.55*** | 0.55*** |
| | (0.07) | (0.07) | (0.07) | (0.07) | (0.10) | (0.10) | (0.10) | (0.10) |
| Political | 0.33*** | 0.16* | 0.02 | 0.10 | 0.39*** | 0.19* | 0.05 | 0.12 |
| | (0.10) | (0.09) | (0.08) | (0.08) | (0.12) | (0.11) | (0.09) | (0.10) |
| Combined | 0.26*** | 0.26*** | 0.26*** | 0.26*** | 0.45*** | 0.24** | 0.36*** | 0.34*** |
| | (0.08) | (0.08) | (0.08) | (0.08) | (0.15) | (0.12) | (0.10) | (0.11) |
| | Interaction | | | | | | | |
| Treatment × Political | | | | | | | | |
| Interpersonal × Mistrust Political | | | | | -0.05 | -0.05 | -0.05 | -0.05 |
| | | | | | (0.14) | (0.14) | (0.14) | (0.14) |
| Political × Mistrust Political | | | | | -0.08 | -0.08 | -0.08 | -0.08 |
| | | | | | (0.16) | (0.16) | (0.16) | (0.16) |
| Combined × Mistrust Political | | | | | -0.49** | -0.23 | -0.18 | -0.34** |
| | | | | | (0.23) | (0.19) | (0.16) | (0.16) |
| Treatment × Social | | | | | | | | |
| Interpersonal × Mistrust Social | | | | | 0.11 | 0.81** | 0.10 | 0.04 |
| | | | | | (0.41) | (0.36) | (0.31) | (0.29) |
| Political × Mistrust Social | | | | | -0.03 | -0.03 | -0.03 | -0.03 |
| | | | | | (0.30) | (0.30) | (0.30) | (0.30) |
| Combined × Mistrust Social | | | | | -0.07 | 0.87** | 0.36 | 0.40 |
| | | | | | (0.40) | (0.34) | (0.28) | (0.28) |
| Observations | 9017 | | | | 9017 | | | |
| Pseudo $R^2$ | 0.082 | | | | 0.085 | | | |

*Note*: Table presents the coefficients' estimates of models 2.1 and 2.2 using the Generalized Ordered Logit Regression models with country fixed effects, with the full range of values for the outcome variable, ranging from "Strong Preference for A" to "Strong Preference for B". In the Generalized Logit, the top row indicates that the outcome variable is "more regulated than" the option indicated. Thus, a negative coefficient indicates that the variable relates to preferences for an option at least as flexible as the outcome in the top row. See Table 2.4 for more on the variable specifications. Standard errors clustered at the municipality level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A2.13: Robustness: 3 trust levels: No trust, Some trust, and High trust.

| | Baseline model | | Interaction model | |
|---|---|---|---|---|
| | (1) | | (2) | |
| | Pref A | Pref B | Pref A | Pref B |
| No trust political | -0.44*** | -0.44*** | -0.49** | -0.36* |
| | (0.14) | (0.12) | (0.24) | (0.21) |
| Some trust political | -0.20 | -0.18 | -0.13 | -0.03 |
| | (0.15) | (0.12) | (0.27) | (0.26) |
| No trust social | -0.48** | -0.07 | -0.06 | -0.03 |
| | (0.22) | (0.19) | (0.41) | (0.37) |
| Some trust social | -0.46*** | -0.10 | -0.42 | -0.22 |
| | (0.16) | (0.14) | (0.31) | (0.30) |
| Interpersonal | -0.26* | 0.48*** | 0.33 | 0.68 |
| | (0.14) | (0.10) | (0.48) | (0.43) |
| Political | -0.11 | -0.01 | -0.77* | -0.07 |
| | (0.12) | (0.09) | (0.39) | (0.34) |
| Combined | 0.00 | 0.27*** | 0.57 | 0.31 |
| | (0.12) | (0.10) | (0.45) | (0.40) |
| Interpersonal × No trust political | | | -0.16 | -0.20 |
| | | | (0.38) | (0.33) |
| Interpersonal × Some trust political | | | -0.03 | -0.30 |
| | | | (0.41) | (0.36) |
| Political × No trust political | | | 0.58 | 0.13 |
| | | | (0.38) | (0.36) |
| Political × Some trust political | | | 0.42 | 0.05 |
| | | | (0.40) | (0.35) |
| Combined × No trust political | | | -0.32 | -0.37 |
| | | | (0.37) | (0.33) |
| Combined × Some trust political | | | -0.74* | -0.44 |
| | | | (0.38) | (0.36) |
| Interpersonal × No trust social | | | -1.63*** | -0.50 |
| | | | (0.63) | (0.55) |
| Interpersonal × Some trust social | | | -0.49 | 0.08 |
| | | | (0.44) | (0.41) |
| Political × No trust social | | | 0.51 | 0.08 |
| | | | (0.64) | (0.52) |
| Political × Some trust social | | | 0.24 | -0.02 |
| | | | (0.42) | (0.38) |
| Combined × No trust social | | | -0.95* | 0.26 |
| | | | (0.58) | (0.49) |
| Combined × Some trust social | | | -0.03 | 0.36 |
| | | | (0.42) | (0.40) |
| Observations | 9009 | | 9009 | |
| Pseudo $R^2$ | 0.080 | | 0.084 | |

*Note:* Table presents coefficients estimates for Eq.2.2 and 2.2 using Multinomial Logistic Regression models with country fixed effects. See Table 2.4 for more on estimation method and variable specifications. No trust, Some trust, High trust (baseline) correspond to individuals answering they can have "No", "Little" or "Some", and "A lot" of trust, respectively, in the president/communities. Standard errors clustered at the municipality level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A2.14: Robustness: Future discount

| | Baseline model (1) | | Interaction model (2) | |
|---|---|---|---|---|
| | Pref A | Pref B | Pref A | Pref B |
| Mistrust: Political | -0.29*** | -0.28*** | -0.41** | -0.31** |
| | (0.10) | (0.09) | (0.16) | (0.15) |
| Mistrust: Social | -0.12 | 0.03 | 0.26 | 0.18 |
| | (0.17) | (0.14) | (0.28) | (0.25) |
| Interpersonal | -0.27* | 0.48*** | -0.12 | 0.51*** |
| | (0.14) | (0.10) | (0.17) | (0.14) |
| Political | -0.12 | -0.02 | -0.24 | -0.06 |
| | (0.12) | (0.09) | (0.17) | (0.12) |
| Combined | -0.01 | 0.27*** | -0.03 | 0.27** |
| | (0.12) | (0.10) | (0.16) | (0.13) |
| Interpersonal × Mistrust Political | | | -0.12 | 0.04 |
| | | | (0.25) | (0.19) |
| Political × Mistrust Political | | | 0.26 | 0.10 |
| | | | (0.26) | (0.22) |
| Combined × Mistrust Political | | | 0.27 | -0.01 |
| | | | (0.25) | (0.21) |
| Interpersonal × Mistrust Social | | | -1.17** | -0.58 |
| | | | (0.48) | (0.37) |
| Political × Mistrust Social | | | 0.30 | 0.11 |
| | | | (0.49) | (0.42) |
| Combined × Mistrust Social | | | -0.94** | -0.06 |
| | | | (0.46) | (0.35) |
| Heavy future discount | 0.26** | -0.21** | 0.26** | -0.21** |
| | (0.12) | (0.10) | (0.12) | (0.10) |
| Observations | 9024 | | 9024 | |
| Pseudo $R^2$ | 0.081 | | 0.083 | |

*Note:* Table presents coefficients estimates for Eq.2.2 and 2.2 using Multinomial Logistic Regression models with country fixed effects. See Table 2.4 and main text for more on estimation method and variable specifications. Standard errors clustered at the municipality level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A2.15: Robustness: Excluding speeders and slow respondents

| | Excluding bottom and top 1% | | | | Excluding bottom and top 5% | | | |
|---|---|---|---|---|---|---|---|---|
| | (1) | | (2) | | (3) | | (4) | |
| | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B |
| Mistrust: Political | -0.28*** | -0.30*** | -0.42** | -0.35** | -0.31** | -0.34*** | -0.45** | -0.41** |
| | (0.11) | (0.09) | (0.17) | (0.16) | (0.12) | (0.10) | (0.19) | (0.17) |
| Mistrust: Social | -0.05 | 0.01 | 0.41 | 0.16 | -0.06 | -0.07 | 0.51* | 0.18 |
| | (0.18) | (0.14) | (0.29) | (0.26) | (0.18) | (0.15) | (0.30) | (0.28) |
| Interpersonal | -0.27** | 0.48*** | -0.12 | 0.51*** | -0.23* | 0.54*** | 0.01 | 0.60*** |
| | (0.13) | (0.10) | (0.16) | (0.14) | (0.14) | (0.11) | (0.18) | (0.15) |
| Political | -0.12 | -0.02 | -0.25 | -0.09 | -0.15 | -0.05 | -0.31* | -0.12 |
| | (0.12) | (0.10) | (0.17) | (0.13) | (0.13) | (0.11) | (0.18) | (0.14) |
| Combined | 0.01 | 0.28*** | -0.01 | 0.29** | -0.04 | 0.30*** | -0.06 | 0.32** |
| | (0.13) | (0.10) | (0.16) | (0.13) | (0.14) | (0.11) | (0.18) | (0.15) |
| Interpersonal × Mistrust Political | | | -0.11 | 0.05 | | | -0.26 | 0.05 |
| | | | (0.25) | (0.20) | | | (0.28) | (0.22) |
| Political × Mistrust Political | | | 0.29 | 0.14 | | | 0.33 | 0.15 |
| | | | (0.26) | (0.22) | | | (0.26) | (0.22) |
| Combined × Mistrust Political | | | 0.27 | -0.02 | | | 0.35 | 0.01 |
| | | | (0.26) | (0.22) | | | (0.28) | (0.24) |
| Interpersonal × Mistrust Social | | | -1.23** | -0.59 | | | -1.65*** | -0.78** |
| | | | (0.48) | (0.37) | | | (0.48) | (0.39) |
| Political × Mistrust Social | | | 0.23 | 0.14 | | | 0.31 | 0.14 |
| | | | (0.48) | (0.41) | | | (0.49) | (0.44) |
| Combined × Mistrust Social | | | -1.09** | -0.08 | | | -1.41*** | -0.28 |
| | | | (0.46) | (0.36) | | | (0.46) | (0.37) |
| Observations | 8845 | | 8845 | | 8128 | | 8128 | |
| Pseudo $R^2$ | 0.079 | | 0.081 | | 0.082 | | 0.086 | |

*Note:* Table presents coefficients estimates for Eq.2.2 and 2.2 using Multinomial Logistic Regression models with country fixed effects. The sample in columns 1 and 2 excludes the 1% quickest and 1% slowest survey respondents, and sample in columns 3 and 4 excludes the 5% quickest and 5% slowest survey respondents. See Table 2.4 and main text for more on estimation method and variable specifications. Standard errors clustered at the municipality level in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A2.16: Robustness: Attention check

| | Attention dummy | | | | High attention sample | | | |
|---|---|---|---|---|---|---|---|---|
| | (1) | | (2) | | (3) | | (4) | |
| | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B |
| No trust president | -0.27*** | -0.29*** | -0.38** | -0.33** | -0.38** | -0.39*** | -0.33 | -0.41* |
| | (0.10) | (0.09) | (0.16) | (0.15) | (0.16) | (0.13) | (0.26) | (0.23) |
| No trust community | -0.09 | 0.02 | 0.29 | 0.16 | 0.13 | 0.19 | 0.53 | 0.22 |
| | (0.17) | (0.14) | (0.29) | (0.25) | (0.24) | (0.21) | (0.41) | (0.37) |
| Interpersonal | -0.26* | 0.49*** | -0.11 | 0.52*** | -0.28 | 0.46*** | -0.04 | 0.51*** |
| | (0.14) | (0.10) | (0.17) | (0.14) | (0.19) | (0.14) | (0.23) | (0.20) |
| Political | -0.12 | -0.02 | -0.24 | -0.07 | -0.23 | -0.12 | -0.15 | -0.15 |
| | (0.12) | (0.09) | (0.17) | (0.12) | (0.17) | (0.13) | (0.25) | (0.18) |
| Combined | -0.00 | 0.28*** | -0.03 | 0.28** | -0.19 | 0.26* | -0.21 | 0.25 |
| | (0.12) | (0.10) | (0.16) | (0.13) | (0.18) | (0.13) | (0.24) | (0.19) |
| Interpersonal × Mistrust Political | | | -0.13 | 0.04 | | | -0.34 | -0.04 |
| | | | (0.25) | (0.19) | | | (0.36) | (0.29) |
| Political × Mistrust Political | | | 0.25 | 0.10 | | | -0.31 | -0.00 |
| | | | (0.26) | (0.22) | | | (0.38) | (0.28) |
| Combined × Mistrust Political | | | 0.26 | -0.00 | | | 0.38 | 0.09 |
| | | | (0.25) | (0.21) | | | (0.38) | (0.33) |
| Interpersonal × Mistrust Social | | | -1.19** | -0.57 | | | -1.23* | -0.32 |
| | | | (0.48) | (0.36) | | | (0.72) | (0.54) |
| Political × Mistrust Social | | | 0.31 | 0.11 | | | 0.81 | 0.79 |
| | | | (0.49) | (0.41) | | | (0.68) | (0.67) |
| Combined × Mistrust Social | | | -0.93** | -0.06 | | | -1.55** | -0.39 |
| | | | (0.46) | (0.35) | | | (0.64) | (0.52) |
| High attention | 0.13 | 0.22*** | 0.13 | 0.23*** | | | | |
| | (0.09) | (0.07) | (0.09) | (0.07) | | | | |
| Observations | 9024 | | 9024 | | 4723 | | 4723 | |
| Pseudo $R^2$ | 0.080 | | 0.082 | | 0.091 | | 0.095 | |

*Note:* Table presents coefficients estimates for Eq.2.2 and 2.2 using Multinomial Logistic Regression models with country fixed effects. High attention is a dummy with the value of 1 for individuals who correctly answered the attention check, and the 'High attention sample' restricts the analysis to those individuals. See Table 2.4 and main text for more on estimation method and variable specifications. Standard errors clustered at the municipality level in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A2.17: Robustness: treatment intensity and wording effects

| Sophistication measure: | Economic knowledge | | Books | | Education | | Attention | |
|---|---|---|---|---|---|---|---|---|
| | (1) | | (2) | | (3) | | (4) | |
| | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B | Pref A | Pref B |
| Interpersonal | -0.08 | 0.42*** | -0.26 | 0.55*** | -0.51** | 0.40*** | -0.25 | 0.49*** |
| | (0.19) | (0.14) | (0.21) | (0.14) | (0.20) | (0.12) | (0.20) | (0.16) |
| Political | 0.12 | -0.02 | -0.04 | 0.08 | -0.13 | 0.02 | -0.04 | 0.09 |
| | (0.18) | (0.15) | (0.19) | (0.15) | (0.15) | (0.14) | (0.17) | (0.15) |
| Combined | 0.18 | 0.26* | -0.22 | 0.18 | -0.26* | 0.22** | 0.15 | 0.29* |
| | (0.18) | (0.14) | (0.18) | (0.15) | (0.15) | (0.11) | (0.18) | (0.15) |
| Low soph. | 0.35* | -0.58*** | 0.18 | 0.10 | 1.51** | 0.88 | 0.25 | 0.23 |
| | (0.18) | (0.16) | (0.18) | (0.14) | (0.67) | (0.70) | (0.17) | (0.15) |
| Interpersonal × Low soph. | -0.30 | 0.12 | -0.02 | -0.13 | 0.30 | 0.11 | -0.04 | -0.03 |
| | (0.27) | (0.21) | (0.27) | (0.19) | (0.25) | (0.17) | (0.26) | (0.22) |
| Political × Low soph. | -0.44* | -0.02 | -0.15 | -0.19 | 0.01 | -0.05 | -0.19 | -0.22 |
| | (0.25) | (0.25) | (0.26) | (0.21) | (0.22) | (0.18) | (0.24) | (0.20) |
| Combined × Low soph. | -0.34 | -0.02 | 0.40 | 0.19 | 0.32 | 0.06 | -0.36 | -0.04 |
| | (0.24) | (0.21) | (0.27) | (0.21) | (0.22) | (0.17) | (0.25) | (0.20) |
| Observations | 9024 | | 9024 | | 9024 | | 8701 | |
| Pseudo $R^2$ | 0.089 | | 0.080 | | 0.079 | | 0.077 | |
| Coefficient Difference equivalence: $(Interp_{HS} - Pol_{HS}) - (Interp_{LS} - Pol_{LS})$ | | | | | | | | |
| Coeff | -0.14 | -0.14 | -0.13 | -0.06 | -0.30 | -0.16 | -0.14 | -0.19 |
| p-value | 0.59 | 0.54 | 0.63 | 0.76 | 0.17 | 0.38 | 0.59 | 0.37 |

## 2.B Survey questionnaire

All participants are presented the following text:

- "Currently, all countries in Latin America (including your COUNTRY) are having serious economic problems, which hinders economic stability, employment, and family income. If the situation gets worse, many small establishments (for instance local stores, hairdressers and gas stations, taxi drivers) will have to close their operations and fire people. Many establishments need help quickly. The current government can try to prevent this by providing financial support for the establishments. In what follows, we will show you a series of policy options. We would like your opinion on how the government should act."

Next, the respondents need to state their support for each of the policy alternatives: A (flexible and fast) and B (rigid and costly). The respondents are randomly allocated in 4 groups (3 treatments and 1 control), which differ in the text about Option A (see Table 2.1)

- Option A (control condition): The government quickly decides which establishments should receive a payment, then immediately delivers a one-time payment to these establishments. [TREATMENT according to Table 2.1] How likely are you to support this approach? (5 point scale)
- Option B: This option takes more time to be implemented and payment is not immediate. The establishments must first send documents that prove they are in operation and have been harmed by the economic crisis. Only operating establishments with great need for financial assistance will receive the payment. How likely are you to support this approach? (5 point scale)

Lastly, the respondents are asked to choose between Option A and Option B:

- In both alternatives before, the government would make the one-time payment to small businesses (like local stores, hairdressers, gas stations), but differ on the the timing and requirements for the payment.

  Remember the options:

  - An immediate payment to some establishments directly chosen by the government.

- A delayed payment to establishments who can prove that they really need the financial support.

Between options A and option B, which option would prefer? (5 point scale)

# Chapter 3

# Brazil above everything: The populist vote in the 2018 Brazilian Elections

## 3.1 Introduction

Over the past decade, we have witnessed a rise in the success and salience of political leaders labeled as populists, which has ushered in major changes in the economic, political, and social fabric of a number of countries spanning all parts of the world. While these populist leaders are sometimes successful at generating economic growth in the short run, they are typically thought to harm longer-run socio-economic performance due to increases in financial volatility, inflation, investment, and uncertainty (Absher, Grier, & Grier, 2020; Gavin & Manger, 2023). Populist leaders also tend to challenge the foundations of democratic political institutions through attacks on freedom of the press, independence of the judiciary, and constraints on the executive (Funke et al., 2023; Houle & Kenny, 2018; Kenny, 2020). This chapter focuses less on these possible effects of populism and instead aims to provide a better understanding of what might bring populist leaders to power in a democracy. In particular, we investigate whether the individual-level determinants of the Bolsonaro vote are better captured by economic insecurity or by cultural conservatism. Using the 2018 Brazilian Electoral Survey, an opinion survey and nationally representative dataset of the voting population, we show that, among other things, dissatisfaction with modern cultural and social structures was an important contributing factor in bringing Jair Bolsonaro to victory in the 2018 Brazilian presidential election. While other studies on Brazilian populist voting indirectly suggest the current relevance of cultural forces, this paper directly tests the two theories against each other and finds that, between economic and cultural motivations, the latter takes primacy in Brazil's 2018 elections.

While the success of populist leaders, and accompanying scholarly interest, has increased recently, it is by no means a new phenomenon. Populism has a long history in Latin America in particular; it has heavily shaped the region's political history throughout the $20^{th}$ and $21^{st}$ centuries, with leaders like Juan Peron in Argentina and Hugo Chávez in Venezuela among the most well-known populists. Until recently, populism was almost exclusively associated with left-wing governments in that region[1]. This scenario changed, and in recent years, we have seen an increase in successful right-wing populists in other parts of the world, with well-known examples including Donald Trump in the USA, Nigel Farage and UKIP in the UK, and the success of far-right, ethno-nationalist parties in Europe. Jair Bolsonaro in Brazil is the first example of a Latin American president in this "movement" of recently successful right-wing populist leaders.

Despite the rising interest in populism, there has been a lack of clarity and unified under-

[1]The strong connection between populism and left-wing orientation does not imply an exclusive relationship. Scholars in the 1990s-2000s acknowledged the right-wing populism experience in the late $20^{th}$ century Latin America in figures like the Peruvian President Fujimori (Roberts, 1995). Yet, Latin American neoliberal populists were heavily outnumbered by their left-wing counterparts (Edwards, 2019).

standing of the meaning of the term, which for a long time held back scholarly exchange and intellectual progress. However, after a surge in conceptual and theoretical work, the scholarly literature across subjects has recently moved closer to an agreement around the defining characteristics of populism. In particular, the *ideational approach* has become the most widely used definition by political scientists, sociologists, and economists alike. It understands populism as a thin ideology, which means that it has a limited programmatic scope and needs to be coupled with another ideology that can range from socialism to neo-liberalism (Mudde & Rovira Kaltwasser, 2018). Unlike other definitions focusing on the use of unsustainable policies to achieve redistribution, the ideational approach can incorporate current right-wing populist experiences in addition to historical left-wing examples. The core component of this political style is the allusion to the constant oppression of *the common, good, and pure people* by *the corrupt elite* that dominates the established political institutions. The specific composition of those two groups - common people and elite - is context- and platform-dependent: right-wing populists tend to focus on ethnic definitions of the pure people, whereas left-wing populists typically focus on the corrupt economic elite and praise the economically deprived as members of the people (Mudde & Kaltwasser, 2013). Popular will is, in either case, the source of political legitimacy, and populist politicians claim to be the rightful and sole representative of this popular will. As a result, a crucial corollary follows: whoever does not belong to the rightful group should be excluded from the political process (Müller, 2016)[2].

Authors, like Rodrik (2018), argue that the current wave of populist backlash was predictable and seek to unravel its reasons. Predictable or not, an intense scholarly debate has emerged around the underpinnings and the drivers of this recent surge in populism. Two main theoretical frameworks - partially overlapping yet clearly competing - have emerged, each claiming to explain what constitutes the deep determinants of populist voting behavior. The first of these theoretical frameworks include authors like Dorn, Hanson, Majlesi, et al. and focuses on *economic* forces: it explains the populist success with the support of individuals who are disadvantaged and/or have experienced a worsening of their personal economic situation (Dorn et al., 2020). This account holds that, even in circumstances when the consequences of recent economic changes - for instance due to increased international trade, immigration or automation – have lead to aggregate positive effects, different social groups did not equally benefit from growth. As a

[2]There is no full consensus for the ideational approach. A group of scholars, represented by Kenneth Roberts and Kurt Weyland follow the *political approach* and understand populism as a top-down, unmediated political strategy. Unlike the ideational approach, this definition does not incorporate the discourses' content as a core element to define leaders or movements as populists. R. R. Barr (2018) reviews the political strategy approach and Hawkins (2018) the ideational approach, including overlaps and divergences. While our analysis speaks more directly to the ideational concept of populism, important proponents of the political strategy approach also deem Bolsonaro populist (Roberts, 2019; Zanotti & Roberts, 2021).

consequence, individuals excluded from economic progress have found themselves in a more vulnerable state, either in absolute or in relative terms. Based on this theory, the success of the populist leaders comes from having offered protection to those voters with appealing promises that contrast their current material concerns with the stability of a (sometimes real and sometimes imagined) glorious past.

A rich literature confirms that specific groups, most notably men with limited education employed in manufacturing positions, are more likely to face increasing levels of economic insecurity (David & Dorn, 2013, inter alia). However, those are also the same individuals who tend to hold more conservative values and report feeling threatened by the advancement of progressive ideas. This is precisely the point stressed by scholars like Inglehart and Norris, who have developed another theoretical framework, which instead of economic forces focuses on the primacy of *cultural* forces in order to explain the recent politic success of populists (Inglehart & Norris, 2016). According to this framework, economic shocks and individual economic features are confounders distracting from the true driver of populist voting: a culturally motivated reaction to the cosmopolitan lifestyle that erodes traditional values.

In this chapter, we enter this debate by investigating the micro-level drivers for the populist vote in the 2018 Brazilian presidential election. Before this election, the rise of populist candidates and parties had shifted the scholarly attention away from Latin America, due to the different nature of the new populist trend compared to the traditional form of (left-wing) Latin American populism. The new focus was on right-wing populism driven by established democracies, including the USA and Western Europe but also low and middle-income countries such as with the election of Modi in India, Orbán in Hungary, and Erdoğan in Turkey. Latin American countries, it turned out, were not immune from this trend. Brazil, the region's largest economy, saw the victory of the socially conservative and nationalist Jair Bolsonaro in the voting ballots in October 2018 using his signature campaign slogan: *Brazil above everything, God above everyone*[3]. Bolsonaro, quickly tagged as the "Trump of the Tropics" in the popular press, fits the populist category based on the ideational definition; both individual researchers (e.g. Jan-Werner Müller and Funke, Schularick, and Trebesch) and research groups (e.g. Team Populism), classify Jair Bolsonaro as populist according to the ideational approach, and place him in the same category of political (populist) leaders as Donald Trump and Viktor Orbán[4].

Using individual-level data on a range of demographics, opinions, and political measures, we explore the economic vs cultural question in the Brazilian context. Our results expand

[3]Own translation from the original "Brasil acima de tudo, Deus acima de todos"

[4]Other approaches include the economic take on populism, that involves leaders that make use of "unsustainable policies (micro and macro) to attain redistribution" (Edwards, 2019). Jair Bolsonaro also fits this profile and researchers like Edwards acknowledge him as populist, accordingly.

this scholarly debate on contemporary populism and contribute by providing evidence from a country that has, with few exceptions, so far been largely underexplored. Our study may be viewed as a test of whether a consolidated framework, developed with industrialized economies in mind, can explain analogous events in a developing country context. Our findings suggest that, even though Brazilian society is in many ways more traditional than richer industrialized nations, a sentiment of cultural threat emerged in the lead-up to the 2018 election. We find conservative attitudes to be closely associated with Bolsonaro support, regardless of the person's ideology and material conditions. Thus, the cultural backlash hypothesis transcends the boundaries between rich(er) and developing countries: changes that move policies and debates towards a more cosmopolitan society can trigger cultural forces in countries at different levels of development. This suggests an additional layer to the logic of economic voting, which plays a relevant role in Latin American elections (Singer & Carlin, 2013). Although the economic *insecurity* hypothesis does not find support in our results, individual material conditions do still have explanatory power for the vote choice between a populist leader and establishment politicians. Our results point to the opposite role of economic insecurity, where deprived individuals would be less likely to support Bolsonaro. Finally, we also find that traditional explanations centered on institutional attitudes are still highly relevant in Latin America and operate simultaneously with economic and cultural motivations. Our findings align with and complement recent research such as Rennó (2020) and Amaral (2020).

The remainder of the chapter is organized as follows. Section 3.2 discusses the main theories behind the economic vs cultural debate, contextualizing the Brazilian experience within this framework. Section 3.3 describes this study's data and empirical strategy. We describe the main results, as well as alternative explanations and extensions in Section 3.4. Section 3.5 concludes, with a summary of the main results and a discussion of the continued relevance of the 2018 presidential election for the current political context of Brazil. In particular, we explain how the 2018 election ushered in a new political landscape in Brazil, and how our findings can shed light on the nature of that new landscape, where an emboldened and more organized (culturally) conservative movement has become a persistent political presence.

## 3.2 Theoretical framework: Economic vs cultural forces

### 3.2.1 Economic insecurity

As described in the introduction, one influential strand of thought emphasizes the economic forces driving populist voting behavior. Different explanations within this literature

point to a common pattern: populist leaders capitalize on voters who face personal economic vulnerabilities by offering immediate solutions to economic grievances. The exact content of these solutions is context-specific, but typically includes trade restrictions and approaches to curb migrant workforce inflow.

While this branch of research is unified in its emphasis on the connection between economic insecurity and populist voting[5], there is no consensus on the factors generating the economic insecurity leading to populist support[6]. A first argument explains the success of populist policies through the role of widespread macroeconomic instability. Social scientists have traditionally related a broad dissatisfaction with the (weak) economic performance to the success of populist leaders in 20$^{th}$ century Latin America, with an important framework put forward by Dornbusch and Edwards (Dornbusch & Edwards, 1991). However, recently this literature has shifted focus to the experience of high-income Western countries with economic downturns in the 21$^{st}$ century (Guriev & Papaioannou, 2022). Several studies have shown that in regions of Europe where the recession impacted employment more severely, support for populist candidates was higher (e.g., Algan et al., 2017; Dehdari, 2022; Gidron & Mijs, 2019). Furthermore, Guiso et al. argue that the effect of economic anxiety might not be noticeable at first, since it operates along two margins: it discourages voters to vote and, conditional on voting, it fosters voters to choose populist options (Guiso et al., 2017). Austerity measures may induce (additional) economic distress during both crisis and situations of relative economic tranquility (Dal Bó, Finan, et al., 2018; Fetzer, 2019).

A related body of research does not see economic downturns and policy mismanagement as a necessary condition for the success of populism. The focus is rather on unequal opportunities associated with (recent) economic growth that splits society into winners and losers[7]. Increased competition in the global market, immigration, and automation have redefined the (global) division of labor, inducing job polarization within countries. Individuals harmed by these labor shifts find themselves in either unemployment or job vulnerability linked to uncertainty around future shocks, potentially with lower wages, leaving them economically insecure and, supposedly, receptive to populist and anti-establishment arguments (Abou-Chadi & Kurer, 2021). Empirical work during the past decade has provided correlational and causal evidence linking such trends to economic anxiety and populist vote, with automation (Acemoglu & Restrepo, 2020; Anelli et al., 2019; Frey et al., 2018), intensified international trade (Colantone & Stanig, 2018; Dippel et al., 2015; Dorn et

[5]Guiso et al. (2017) presents a simple formal model connecting economic insecurity and populist support.
[6]No formalized theory unifies the economic insecurity literature, which expands on Acemoglu et al. (2013). Instead, the existing work consists of a collection of empirical research.
[7]See Margalit (2019) and Guriev and Papaioannou (2022) for a more in-depth explanation of the argument.

al., 2020; Rodrik, 2018), and immigration (Dustmann, Schönberg, & Stuhler, 2017; Edo, Giesing, Öztunc, & Poutvaara, 2019) leading to polarization and providing fertile grounds for populist politicians in Europe and the US.

While economic processes in Brazil are somewhat distinct from those in higher-income countries, it is certainly possible that similar developments have created the necessary conditions for the emergence of economically insecure groups likely to support a populist candidate. In 2003, the leftist *Partido dos Trabalhadores* (Brazilian Workers Party - henceforth PT) came to power with President Luís Inácio Lula da Silva. Despite initial market uncertainty due to the shift towards the left, Brazil experienced a period of comparatively favorable macro-economic developments during beginnig of the new millennium (Werner, 2019).

But against this backdrop of economic growth, there is evidence (though not conclusive) of incipient job polarization in the Brazilian labor market. It has been suggested that automation and digitalization during late 1990s throughout the 2010s contributed to job losses in routine tasks and there are incipient signs of wage polarization (Almeida, Leite Corseuil, & Poole, 2017; Lewandowski, Park, & Schotte, 2020; Maloney & Molina, 2019). In parallel, Brazil reinforced its openness to international competition in the early 1990s, and the country underwent extensive sector-tariff restructuring, which Iacoella, Justino, and Martorano link to the support for Bolsonaro in 2018 (Iacoella et al., 2020). More recently, the intensification of Chinese-Brazilian trade occurred against a backdrop of favorable terms of trade due to high commodity prices and the discovery of large reserves of Brazilian oil. While the commercial relationship between rich industrial economies and China is often characterized by competition in manufacturing, exchanges between developing countries and China tend to be more complementary, as China is a large importer of primary goods exported by those countries. As a result, instead of the Chinese shock inducing a within-sector labor polarization, Brazil experienced relative between-sector polarization, as primary-good exporters benefited from the favorable trade conditions vis-à-vis the industrial sector (Costa, Garred, & Pessoa, 2016).

The end of the commodity upcycle in 2014 severely harmed the positive economic performance of the 2000s. In the face of this, the government under Dilma Rousseff (PT) introduced a new macroeconomic orientation, which deteriorated the government's credibility with the markets, and investments decreased as a response. While those key elements explained the onset of the economic slowdown starting in 2014, a combination of additional factors, including a corruption scandal and a political crisis, further deepened the economic slump and ushered in a severe economic recession during 2014-2017 (Spilimbergo, Srinivasan, & Walutowy, 2018). Brazil's GDP decreased by nearly 8% during that period, leading to the impeachment of President Dilma Rousseff in August 2016. Center-

right Michel Temer became president and implemented a series of austerity reforms and limited social spending. The measures were, however, unable to bring the economy back on a positive path: growth came late and was shy. Economic anxiety was high during the pre-election period, as the recession raised unemployment and underemployment to 12.7% and 23.8%, respectively (Hunter & Power, 2019). According to the economic insecurity hypothesis, this share of the population would be particularly susceptible to the Bolsonaro appeal. Indeed, Barros and Silva find that the male population was more likely to have cast a vote for Bolsonaro in 2018 if the municipalities where they reside underwent negative labor shocks during the economic recession (Barros & Silva, 2025).

In summary, research centered around the economic roots of populist voting behavior implicitly investigates the impact of the pledge made by populists to end the insecurity of people's livelihood. Even though the Brazilian experience during the 21$^{st}$ century does not follow the exact path of high-income countries, it is quite possible that the dynamics of economic growth in the last decade in Brazil, with sectoral imbalances and a deep recession, created a mass of economically insecure voters who Bolsonaro could capitalize on. We summarize this section's theoretical arguments as follows:

**Hypothesis 1**: Economically insecure voters are more likely to vote for a populist politician like Jair Bolsonaro.

### 3.2.2 Cultural backlash

A competing framework, represented for instance by Margalit, acknowledges that economic anxiety might contribute on the margin; still, deeper cultural concerns play primary role in explaining the electoral success of populists (Margalit, 2019). This second explanation, often referred to as the cultural backlash theory, poses that populist politicians gain leverage by proposing direct and immediate solutions to issues that are salient in voters' minds. However, instead of pocketbook issues, the content of the propositions addresses the voters' non-monetary preferences, in particular, the social values of traditionally dominant groups. Inglehart and Norris, perhaps the most well-known proponents of the cultural backlash hypothesis, suggest that younger individuals hold more progressive values than older generations, and slow-moving cultural and generational changes have led society to become increasingly socially liberal. This, the theory goes, has lead members of older and traditionally dominant groups to believe that their identities and traditional values are endangered and to find shelter on the populist promises around these realms. This theory does acknowledge a catalyst role of economic forces, by arguing that recent recessions and unequal economic growth have decreased the sense of existential

security and activated a cultural resentment also among younger cohorts. Furthermore, broader concerns with declining ethnic and cultural homogeneity may emerge from intensified migratory flows, together with feelings of cultural threat from advancements of underprivileged groups, including women and the LGBTQ+ community, and increased environmental awareness (Inglehart & Norris, 2016, 2017)

Using data from Europe and the US, the proponents of the cultural backlash theory suggest that after empirically accounting for cultural motivations, economic insecurity does not predict populist voting (Inglehart & Norris, 2016, 2017), or impacts it only along the intensive margin (Gidron & Hall, 2017; Mutz, 2018). Socially conservative values, on the other hand, have an impact that is both statistically significant and of meaningful magnitude (Margalit, 2019). In the US context, experimental work highlights that dominant groups - white citizens - believe that a social move towards greater acceptance of underprivileged Black communities comes at the expense of their own cultural safety. Cultural threat influences feelings towards ethnic minorities, which generates demand for a populist platform (Major, Blodorn, & Major Blascovich, 2018; Sides, Tesler, & Vavreck, 2018). This is also consistent with findings for post-communist democracies from 1991 to 2012. The ability of progressive parties to extract policy concessions favoring underrepresented social segments activates a social backlash in following elections (Bustikova, 2014).

Proponents of the cultural hypothesis argue that, should economic insecurity be the main source of populist voting behavior, a surge in populist support would be as likely to occur with a left-wing orientation as with a conservative focus. However, this is not the case; the worldwide increase in populism is primarily driven by right-leaning politicians (Rodrik, 2018). Including a cultural dimension may explain right-wing choices made by lower-income voters. If culture is salient, individuals would move away from their class-driven interest and align with other dimensions, such as nationality or race, when forming their political preferences. Theories of endogenous identity suggest that, beyond the advancement in a progressive agenda, economic trends may cleave society along cultural lines. The interplay between those two dimensions would drive the evolution of political preferences, for which there is supporting empirical evidence from Europe and the US (Bonomi et al., 2021; Grossman & Helpman, 2021; Shayo, 2009). Furthermore, analyses of votes for populists following economic shocks unveiled heterogeneous effects along gender (Barros & Silva, 2025) and ethnic (Colantone & Stanig, 2018; Dorn et al., 2020) lines. This suggests that insecurity could be relevant as an impetus for a populist reaction, but mainly among those voters whose identities are at stake, thus corroborating the theoretical interplay between economic and cultural dimensions while hinting a primacy of the latter.

Turning to Brazil: as the economy became relatively more stable during the (late) 1990s,

politics turned to other, non-traditional realms and politicians were increasingly expected to issue their opinions on topics such as abortion and the rights of minorities. Before the onset of the 2014-2017 crisis, Brazilian society changed, with broad movements towards less traditional values and lifestyles (Inglehart et al., 2020), and policies reflected this trend. During the 21st century, greater political and socio-economic inclusion of minority groups became an important topic in the political debate around Brazilian policies and regulations. A legislative gender quota was introduced in 1997 (Archenti & Tula, 2017), with a lower-bound of 30% of the electoral budget dedicated to female candidates implemented in early 2018 (Magro, 2018). In 2011, Dilma Rousseff became the first woman to occupy the presidency, challenging gender social norms (Krook & Sanín, 2020). In 2012, public universities were legally required to establish a combination of social and racial quotas to 50% of their positions (D.O.U., 2012). Greater access to education, as De Micheli (2021) argues, contributed to the self-reclassification of beneficiaries as racial minorities and to a politicization of ethnic identities. The establishment of the National Council for Indigenous Policies in 2015 aimed at improving the representativeness of indigenous communities in the political process (D.O.U., 2015). Prohibition of same-sex partnership was declared unconstitutional in 2011 (STF, 2011), and notaries have been required to register same-sex marriage since 2013.

These progressive advancements, while lauded by some, were controversial within broad segments of the Brazilian population. Gatto and Power note that the political elite was distinct from the broader Brazilian society and displayed more liberal values (Gatto & Power, 2016). Eventually, the progressive trend yielded a reaction by traditionalists. Sexism was characteristic of Rousseff's opposition and part of the impetus for her impeachment (Encarnación, 2017; Krook & Sanín, 2020). Similarly, the growth in recent decades of the (Neo-)Pentecostal religious denominations can be understood as a form of cultural backlash. Followers of those denominations came from close, but less strict, religions and hold more traditional values and lower tolerance of different beliefs. According to Costa, Marcantonio, and Rocha, this shift is associated with the election of strongly religious and increasingly conservative federal deputies in later years (Costa et al., 2023).

Beyond cultural transformations, economic performance during the 2000s and early 2010s might also have contributed to activating ideological preferences leading to the populist vote. Ethnic minorities are overly represented among Brazil's poorest segments, which have benefited from the pro-poor growth and social programs in the early 21st century. Although still high, differences in income and educational attainment across ethnic lines have decreased during that period (Leivas & dos Santos, 2018; Ñopo, 2012). Social programs, such as education financing and improved economic conditions, allowed racial and religious minorities to occupy spaces previously dominated by the white middle class,

including institutions of higher education and leisure facilities (Gilioli, 2017). Socio-economic classes became ethnically more heterogeneous, which according to Shayo would decrease class cohesion in favor of group identification along an ethnic-cultural dimension (Shayo, 2009). Indeed, the white and Catholic traditional middle class reacted by refusing to incorporate the black "new middle class" as part of their own (C. H. Klein, Mitchell, & Junge, 2018).

Clearly, the cultural changes in Brazil are distinct from those observed in the countries for which the cultural backlash framework was developed. Nonetheless, it is plausible that the voting behavior in Brazil mirrors that of the Global North, with a deepening of cultural cleavages following periods of cultural and social change. Brazilian politics and society clearly moved towards more progressive values during the 2010's. Moreover, while Brazil was relatively secluded from migratory inflows, marginalized (non-immigrant) groups, such as Blacks, indigenous peoples, women, and the queer community, acquired stronger positions in society and politics. Given this evolution, a culturally motivated vote for Bolsonaro would be plausible, as recognized by Rennó (2020). and Layton, Smith, Moseley, and Cohen (2021). We summarize this section's theoretical framework with the following hypothesis:

**Hypothesis 2:** Characteristics capturing attachment to traditional values, or a sense of threat to the nation's social and cultural fabric, determines the propensity of a citizen to vote for a populist politician like Jair Bolsonaro.

### 3.2.3 (Bad) politics, as usual...

The key current debate around the determinants of the populist vote, where we situate our work, takes place primarily between the cultural and economic explanations. Each claims to provide a framework that accounts for the populist success at the exclusion of the other. However, any theoretical framework(s) that claims to be the single explanation for a social phenomenon is bound to leave out relevant explanatory features. In this section, we survey features that partially overlap but cannot be neatly captured within the economics vs culture debate, in particular explanations that move beyond individual grievances and see populism as reflecting broader discontent with the mainstream political system and institutions of liberal democracy.

The rise of populist governments has been associated with a crisis of trust in mainstream parties, whom disgruntled voters view as unable to address their most pressing issues (Algan et al., 2017; Doyle, 2011). This perceived inadequacy of mainstream politicians is frequently seen as the materialization of politicians' greed. The appeal of populist speech

comes then from its anti-establishment tone, rather than the content of proposed policies. According to the populists, the politicians' self-interested motivations and constitutional constraints hold back the popular will (Belanger & Aarts, 2006; Rooduijn, Van Der Brug, & De Lange, 2016). This type of explanation has traditionally featured in the work of scholars focused on 20$^{th}$ century Latin American populism (Doyle, 2011; Edwards, 2019). Recently, scholars have (partially) reconciled the economic insecurity theory and, to a lesser extent, cultural accounts, with the explanations grounded in institutional mistrust, by acknowledging that personal malaise could impact populist voting both directly and indirectly through institutional disillusionment in Europe (Algan et al., 2017; Guiso et al., 2017) and the US (Ballard-Rosa et al., 2022). We incorporate these possible mechanisms by adding trust in the political system and, in particular, concerns about (political) corruption to our baseline framework in the empirical part of this chapter. Experimental and empirical research shows that individuals become more concerned with threats to society and more inclined to support populist platforms when exposed to information about corruption (Busby, Doyle, Hawkins, & Wiesehomeier, 2018), and that the effects of corruption scandals may persist for long periods of time (Aassve et al., 2018). But while Latin America has a long history of abuse of entrusted power by politicians, with Brazil as no exception (Gonçalves & Srinivasan, 2019), politicians have rarely been directly punished for involvement in those acts (Winters & Weitz-Shapiro, 2013). Recently, however, the topic of widespread corruption became particularly salient during the so-called operation *Lava-Jato* in 2014, which revealed the largest corruption scandal in Brazilian history. Many leading figures of the major right- and left-wing mainstream parties, PSDB and PT respectively, were caught in accusations amidst *Lava-Jato* investigations, although the media coverage focused heavily on PT's involvement (Campello, Schiffrin, Belarmino, & Thome, 2020; Hunter & Power, 2019). Frustration with the existing political situation emerged as one of the country's main problems in voters' minds, according to the Latínobarómetro surveys, and it is frequently argued that Brazil's high levels of perceived corruption contributed to Bolsonaro's victory, though the extent to which this actually was the case is not rigorously established.

Instead of viewing this as an independent explanation, we understand the issues above as providing different ways to characterize the grievances of regular citizens and interact this type of explanation with the debate centered around the culture-vs-economy framework.

## 3.3 Methodology

### 3.3.1 Data: The Brazilian electoral study

To empirically evaluate the theoretical frameworks outlined above, we use the fifth wave of the Brazilian Electoral Study (Estudo Eleitoral Brasileiro - ESEB[8]), an individual-level survey conducted in 2018 by the Center of Public Opinion Studies of the State University of Campinas. The project integrates the Comparative Study of Electoral Systems Project, coordinated by the University of Michigan, and contains various political and attitude measures, plus a great number of demographic variables.

The ESEB dataset includes 2,506 interviewed citizens and is representative of the Brazilian voting population across the country's five different macroregions. The survey was conducted between November 10 and 24, 2018, shortly after the elections (35 and 14 days after the first and second rounds, respectively), making it the closest to the voting day compared to alternative datasets (e.g. Latinobarómetro and Americasbarometer). Timeliness is of high importance to understand the 2018 Brazilian elections, since support for Jair Bolsonaro gained traction in the month approaching the first election round.

The results released by the official electoral authorities report that, in the first round, Bolsonaro obtained 33.5%, 42.0%, 46.% of the eligible votes, total votes, and valid votes, respectively[9]. In the runoff, Bolsonaro received 39.2%, 49.9%, 55.1% of the eligible votes, total votes, and valid votes, respectively (TSE, 2018). The ESEB data reflects this situation: the share of respondents who reported having voted for Bolsonaro lies close to the official results for both rounds. Table 3.1 shows that there is no statistical difference between the actual electoral results and the survey representation of self-reported votes. The results for the first round, in particular, are of high relevance to our analysis, with small differences that do not reach conventional significance levels.

Table 3.1: Summary Statistics - pro-Bolsonaro votes

| | Mean | S.d. | Min | Median | Max | Count | Official results | $\Delta$ = Official − Survey | p-value ($H_0$: Survey ≠ Official) |
|---|---|---|---|---|---|---|---|---|---|
| Bolsonaro vote (1st round - eligible votes) | 0.334 | 0.47 | 0 | 0 | 1 | 2506 | 0.335 | 0.001 | 0.99 |
| Bolsonaro vote (1st round - total votes) | 0.416 | 0.49 | 0 | 0 | 1 | 2014 | 0.42 | 0.004 | 0.73 |
| Bolsonaro vote (1st round - valid votes) | 0.449 | 0.5 | 0 | 0 | 1 | 1868 | 0.46 | 0.011 | 0.31 |
| Bolsonaro vote (2nd round - eligible votes) | 0.408 | 0.49 | 0 | 0 | 1 | 2506 | 0.392 | -0.016 | 0.11 |
| Bolsonaro vote (2nd round - total votes) | 0.514 | 0.5 | 0 | 1 | 1 | 1991 | 0.499 | -0.015 | 0.17 |
| Bolsonaro vote (2nd round - valid votes) | 0.568 | 0.5 | 0 | 1 | 1 | 1802 | 0.551 | -0.017 | 0.16 |

[8] The dataset is available in the Cesop repository, https://www.cesop.unicamp.br/por/banco_de_dados/v/4538

[9] "Eligible votes" comprise votes of citizens between 18 and 70 years old, and registered voters between 16 and 18 years old and above 70 years old. "Total votes" exclude abstentions. "Valid votes" exclude null votes from "total votes".

### 3.3.2 Empirical strategy

#### The economy vs culture: operationalizing the hypotheses

In the core econometric specifications in this chapter, the main dependent variable, intended to capture populist voting behavior, is a measure of self-reported vote choice, taking the value of one in case of a Bolsonaro vote and zero otherwise. Its dichotomous nature indicates that bivariate models are the most adequate for our setup. We follow standard econometric recommendations and estimate logistic regressions using maximum likelihood. Standard errors are clustered by municipalities to account for the sample design (Abadie, Athey, Imbens, & Wooldridge, 2023)[10].

We restrict our analysis to the self-reported vote in the election's first round. In the runoff, voters are restricted to choosing between the two most-voted candidates in the first round. Thus, it is possible that in the runoff, individuals opt to vote for a certain candidate, not due to preference for him/her but rather because they radically oppose the alternative contestant. In particular *antipetism* - the intense negative attitudes towards PT that date back to pre-Lula political times (Samuels & Zucco, 2018) - deepened with *Lava-Jato* and got particularly strong in the period leading up to the 2018 elections (Hunter & Power, 2019)[11]. Indeed, with ESEB variables historically used to investigate votes in preceding elections, Amaral (2020) finds that positive and negative partisanship strongly correlates with the 2018 runoff Bolsonaro vote. Therefore, we cannot exclude a strategic vote in the 2018 runoff, as Bolsonaro competed against Fernando Haddad (PT). In this case, the respondents' choices would not necessarily reveal their true preferences (Doyle, 2011).

To investigate the impact of the different theoretical explanations, self-reported vote for Bolsonaro is regressed on a range of individual-level economic and cultural variables. We operationalize this analysis with the regression models in the equations 3.1, 3.2, 3.3.

$$Bolsonaro_i = \alpha + \sum_{j \in E,C} \boldsymbol{X_{j,i}}\,\boldsymbol{\beta_j} + Z_i + \varepsilon_i \tag{3.1}$$

$$Bolsonaro_i = \alpha + \sum_{j \in E,C} \boldsymbol{X_{j,i}}\,\boldsymbol{\beta_j} + Z_i + \mu_l + \varepsilon_i \tag{3.2}$$

[10] Probit estimations and alternative clustering levels yield similar results (Table A3.15, Appendix 3.4.4).

[11] *Antipetism* (*antipetismo* in Portuguese) is a Brazilian phenomenon linked to negative partisanship. Individuals who display *antipetism* are highly critical of PT and resent the party, sharing the anti-PT position, rather than necessarily having a political platform which they agree on (Samuels & Zucco, 2018).

$$Bolsonaro_i = \alpha + \sum_{j \in E,C} \boldsymbol{X_{j,i}}\,\boldsymbol{\beta_j} + Z_i + \mu_l + I_i + \varepsilon_i \tag{3.3}$$

Our outcome variable, $Bolsonaro_i$, refers to the self-declared vote choice with the value of 1 when the individual $i$ declared having voted for Bolsonaro and 0 otherwise. $X_{j,i}$, with $j \in \{E, C\}$ are vectors of explanatory variables for each of the 2 competing theories: economic insecurity ($E$) and cultural backlash ($C$). We gradually include individual-level controls ($Z_i$), region fixed effects ($\mu_l$) and political ideology ($I_i$). The latter should be taken with caution, as the left-right placement has been found to be problematic in the Brazilian context (Power & Zucco Jr, 2009, 2012) and self-reported ideology might behave as a proxy for the outcome variable.

The economic and cultural dimensions are captured by groups of variables, each addressing a specific aspect of those dimensions. We include three aspects meant to cover the possible sources of voters' economic insecurity. The first group, *economic necessity*, measures the most *immediate* threat to one's sense of material safety. It is plausible to expect that lower-income households or those whose provider is unemployed are economically distressed. Thus, we include dummy variables for different self-reported household income brackets, and a dummy for unemployed head of household. Additionally, we include a dummy indicating whether the household has recently been a recipient of the Bolsa Família Cash Transfer Programme, which targets individuals in extreme poverty. The second group of variables within the economics framework, *economic vulnerability*, addresses individuals whose current financial stability is not ensured. This instability may arise from the sector in which the family provider works, which may not have benefited from the earlier economic development or was perhaps deeply affected by the recession. The literature on job polarization suggests signs of emerging polarization between the agricultural and industry sectors. Moreover, the 2015-2017 recession heavily impacted the construction, oil and gas, and the car industry sectors (Spilimbergo & Srinivasan, 2019), which investments were hampered by the *Lava-Jato* probe. For these reasons, we include information on whether the interviewee works in the construction or process industry sectors. Another possible source of instability is the employment type, where those in informal work are in vulnerable situation due to lack of access to benefits and social insurance. Like Costa et al. (2016), we define informal workers as self-employed individuals and employees not registered at the Ministry of Labour and Employment ("sem carteira assinada").

The third, slightly different, category of economic variables captures self-reported *social class* and how individuals believe their social position changed between 2010 and 2018. A body of literature suggests that concerns with relative economic position and status affect a range of individual preferences, including pro-populist voting patterns (Gidron &

Hall, 2017; Gingrich, 2019). Differently from a pure necessity perspective, concerns with class relate to a *relative* position and whether that position is perceived as at risk. Hence, for this to drive populist voting, the social class to which an individual belongs to (or feels belonging to) should not be too low, as bottom positions imply no status being at risk. Yet, class belonging should not be so high and solidified that upward mobility from lower classes would not be enough to pose a threat. Based on this reasoning, we include a dummy variable for whether the individual reports belonging to the "traditional middle class" (upper-middle class)[12], which has historically been associated with the Brazilian middle. Moreover, variables for perceived upwards/downwards mobility in the recent decade capture some of the recent dynamics in Brazil.

We use two groups of variables to represent the cultural backlash hypothesis. The first contains different markers for the *socially dominant races and religions*. Unlike many industrialized countries, where social divides often revolve around nationality, race and indigenous background are the main elements defining ethnic identity in Latin America (Desmet, Ortuño-Ortín, & Wacziarg, 2017). The history of European colonization and heavy influence of African-slave institutions persisted throughout time, resulting in a racially hierarchical society. Whites enjoy high prestige, while Black, Indigenous, and Mixed populations often constitute the socially marginalized groups (De Ferranti, 2004). Thus, we group individuals belonging to these latter minority groups, to distinguish them from individuals of white or Asian ascendancy[13]. We also include variables for two of the most relevant religions according to the theoretical predictions, namely Catholics and (Neo-)Pentecostal Evangelicals. Catholicism represents a traditional religion held by the majority of the Brazilian population (Skirbekk, Stonawski, & Goujon, 2011), dating back to colonial times, while Evangelicals account for the recent rise in a more fundamentalist form of Christianity, linked to more conservative values. Additionally, as a second culturally oriented group of variables, we use two opinion measures reflecting the advancement of a *progressive agenda* during recent years. The first variable concerns views on racial quotas, a topic that is widely discussed in the Brazilian society. Even though official requirements for making use of quotas involve economic criteria and quotas are embedded around a broader class-centered framing of positive actions, the topic of social quotas still evoked strong feelings towards the debate of racial inclusion and meritocracy (Da Silva & Larkins, 2019). The second measure covers views on prioritizing policies targeting the inclusion of minorities vis-à-vis a focus on economic growth. While no particular policies

[12]The traditional middle class in Brazil deviates from the statistical middle. Typical characteristics include having a university degree and professions deemed as prestigious, such as non-manual workers and managers, with a stable income well above the national mean (Salata, 2015).

[13]The largest share of Asian (Japanese) immigration took place in the early 20$^{th}$ century, as part of a policy to provide labour following the the abolishment of slavery, as well as an attempt of a broader social whitening promoted by the government at the time (Dos Santos, 2002). For the latter reason, we distinguish whites/Asians from other racial groups.

are specified, the variable covers other racial policies and alludes to minorities other than racial groups, as the question asks about gender policies.

We further use a number of individual socio-economic control variables commonly considered in the literature on populist voting: the respondent's age, gender, marital status and education level; and we disregarded observations with missing values[14]. Table A3.1 (Appendix 3.5) compiles all the explanatory variables used in this study with a short description of each and their possible values[15].

**Heterogeneous effects: Switchers and radicalized**

While the specifications above assess the general characteristics of Bolsonaro's voters, we also test whether the reasons for switching political preferences are the same as the factors leading voters to radicalize their voting behavior. In other words, we investigate the motivations for moving from PT in 2014 to Bolsonaro in 2018 (Switchers) and the motivations for moving from a non-PT mainstream party in 2014 to Bolsonaro in 2018 (Radicalized)[16]. The role of switchers, who, in the course of four years, shifted from the left to the right-wing realm, is notably relevant to understanding the factors driving populism. This stems from the fact that, according to the ideational approach, populism is centered on a political style rather than on specific economic left-right ideologies. With this exercise, we aim to unravel potential heterogeneity in motivations across different political groups.

In order to analyze switchers and radicalized separately, we split the total sample into two sub-samples according to the individuals' voting behaviour in the 2014 elections. The first sample includes only individuals who voted for PT in the 2014 runoff (left column in Figure 3.1) and is used to investigate the factors among those voters that lead to a change in support from the main left-wing party in 2014 to a right-wing populist alternative in 2018. The outcome variable here equals 1 for voters who swapped preferences (switchers) and zero otherwise (non-switchers). The second sample (Figure 3.1) consists of the remaining voters who did not vote for PT in 2014; instead, either voted for the alternative right-wing candidate (Aécio Neves) or did not cast a (valid) vote in the runoff. We are interested in understanding the drivers for those who supported Bolsonaro in 2018 (radicalized), compared to those who did not (non-radicalized). Similarly to the first sample, the main outcome variable is 1 for radicalized and 0 for non-radicalized.

[14] "Do not know", "Did not answer" and "Do not know what it means" were coded as missing.

[15] One might be concerned that our selected measures overlap heavily. However, this case is unlikely, as our measures are at best weakly correlated (Table A3.4, Appendix 3.5.

[16] It's important to note that among individuals who consistently voted against PT in 2014 and 2018, only those who voted for Bolsonaro in 2018 constitute the radicalized group. Simply voting for another non-PT candidate in the first round does not classify the respondent as radicalized.

| | | 2014 elections: Voted for PT? | |
|---|---|---|---|
| | | Yes | No |
| 2018 elections: Voted for Bolsonaro ? | Yes | Switchers | Radicalized |
| | No | Non-Switchers | Non-Radicalized |

Figure 3.1: Sample disaggregation

We estimate the models 3.1, 3.2, and 3.3 to each of these sub-samples: model 3.4 investigates the role of economic and cultural concerns to explain the vote of switchers, and model 3.5 focuses on radicalized.

$$Bolsonaro_i = \alpha + \sum_{j \in E,C} \boldsymbol{X_{j,i}}\,\boldsymbol{\beta_j} + Z_i(+\mu_l + I_i) + \varepsilon_i \text{ if PT'14=YES} \tag{3.4}$$

$$Bolsonaro_i = \alpha + \sum_{j \in E,C} \boldsymbol{X_{j,i}}\,\boldsymbol{\beta_j} + Z_i(+\mu_l + I_i) + \varepsilon_i \text{ if PT'14=NO} \tag{3.5}$$

### Extensions

### Indirect effects

We run additional models to understand whether the economic and cultural hypotheses indirectly influence populist voting by changing other political opinions and preferences. The measures we assess are political trust, trust in the media and companies, dissatisfaction with democracy and support for the democratic regime. The idea is to test whether voters' economic and cultural circumstances have indirect effects via political attitudes. For that to be the case, two conditions must be satisfied: (i) economic and/or cultural variables determine political and institutional attitudes, and (ii) political and institutional attitudes predict the Bolsonaro vote. Both conditions can be inspected with the model specified in equations 3.6, if we include individual institutional attitudes as additional regressors to the benchmark specification in model 3.1. Similar to the baseline analysis, we gradually add region fixed effects ($\mu_l$) and ideology ($I_i$) to our estimations. Should indirect effects be present and condition (i) be satisfied, the inclusion of institutional attitudes should change $\boldsymbol{\beta_E}$ and $\boldsymbol{\beta_C}$ in the direction of decreasing magnitudes. Any demand effects of economic insecurity and cultural anxiety that do not influence the electoral

choice by shaping institutional attitudes are captured by $\boldsymbol{\beta_E}$ and $\boldsymbol{\beta_C}$. Next, condition (ii) is satisfied when the coefficients $\boldsymbol{\beta_k}$ are significant and estimated in the direction that represents lower levels of trust and weaker democratic values predicting the populist vote.

$$Bolsonaro_i = \alpha + \sum_{j \in E,C} \boldsymbol{X_{j,i}}\,\boldsymbol{\beta_j} + \boldsymbol{InstAttitudes_{k,i}}\boldsymbol{\beta_k} + Z_i(+\mu_l + I_i) + \varepsilon_i \tag{3.6}$$

**Alternative explanations**

Beyond the indirect effects posited by the populist framework, one could argue that other Brazilian-specific factors explain the victory of the populist Bolsonaro. More specifically, the salience of generalized corruption, as well as antipetism sentiments, could be relevant forces. As most of the politicians investigated by *Lava-Jato* were affiliated with PT and the media coverage heavily emphasized those cases, frustration with corruption deepened, alongside *antiestablishment*, *antipetism* attitudes. A vote for Bolsonaro could represent a strategic vote to select a candidate who was perceived to be able to win over the PT candidate in the runoff. To test for the role of frustration with corruption in Brazil and antipetism, we include variables that capture those attitudes as regressors to our benchmark estimation. Namely, the vector $\boldsymbol{W_{k,i}}$ includes dummies for intolerance to corruption, perception that corruption is unpunished, and antipetism. Should the estimated coefficients $\boldsymbol{\theta_k}$ be significant and altering $\boldsymbol{\beta_j}$, antipetism and corruption concerns may represent either confounder forces or constitute indirect effect of economic and cultural factors. Any direct influence of economic and cultural variables that are orthogonal from the present alternative explanations is captured by the coefficients $\boldsymbol{\beta_j}$.

$$Bolsonaro_i = \alpha + \sum_{j \in E,C} \boldsymbol{X_{j,i}}\,\boldsymbol{\beta_j} + \boldsymbol{W_{k,i}}\boldsymbol{\theta_k} + Z_i(+\mu_l + I_i) + \varepsilon_i \tag{3.7}$$

We end the description of the empirical setup with a word of caution. There are obvious limitations to the conclusions one is able to draw from a study using non-longitudinal data without availability of exogenous variation as our analysis. While we strongly believe that the questions asked in this chapter are worth analyzing even absent a perfectly *clean* empirical setup, we are cautious when interpreting individual coefficients, and throughout the results and conclusion sections we refrain from making strong statements based on the magnitudes of the coefficients. Yet, our main goal is to provide a general understanding on the *relative* importance of different factors. Results that consistently speak against a given hypothesis are strong indications that the latter does not constitute an important driver of the (populist) vote choice. Additionally, while outcomes corroborating a specific

hypothesis may not be the final (or only) word in favor of the primacy of that factor, such outcomes do indicate that a particular explanation is relevant for understanding the populist vote. An experimental setting with external variation of that factor would in turn pin down its precise impact. Hence, this chapter may be seen as the big picture, or the starting point, necessary for establishing the relative importance of specific factors rather than the final word.

## 3.4 Results

### 3.4.1 Main Results

To provide an initial picture of the voting patterns, Table 3.2 displays the effect of the control variables on the probability of having voted for Bolsonaro in the first round of elections. All coefficients are presented in odds ratio - above 1 symbolizes a positive impact, and below 1 a negative impact on the dependent variable. Column 1 starts with individual demographics; column 2 adds regional dummies; and column 3 ideology. Like their US and European counterparts, married men are more likely to vote for populist candidate, in this case Bolsonaro. The educational level of Bolsonaro's voters is higher than other individuals, although this relationship is not linear. Those characteristics predict the Bolsonaro vote at a 0.1% significance level. While populist voters tend to be older in developed countries, Bolsonaro supporters are not characterized by any particular age group. The inclusion of fixed effects for macro-regions reveals a clear regional voting pattern, but accounting for any geographic effects has little impact on other individual-level controls, meaning that the socio-demographic composition does not explain the impact of regions. As expected, right-wing voters are more likely to cast a pro-Bolsonaro vote, while there are no indications that ideologies are strongly characterized by gender, age, or educational attainment.

Table 3.3 displays the results from the baseline regression models: (3.1), (3.2) and (3.3). We first start by investigating the isolated impact of the economic and cultural explanations on the probability of having voted for Bolsonaro. In columns 1-3, we gradually include the different sets of variables gauging economic insecurity: necessity (column 1), vulnerability (column 2), and social class (column 3). Column 4 adds all variables simultaneously. Columns 5-7 assess the role of cultural motivations, including characteristics (column 5) and attitudes (column 6), separately (columns 5 and 6) and simultaneously (column 7). In columns 9 and 10, we add both economic and cultural factors as regressors, and columns 11 and 12 introduce regional and ideological controls to the regressions, respectively. From these baseline regressions, we see that Bolsonaro voters are clearly

Table 3.2: Results: Controls

| | Bolsonaro vote | | |
|---|---|---|---|
| | (1) | (2) | (3) |
| *Individual controls* | | | |
| Male | 1.585*** | 1.589*** | 1.493*** |
| | (0.140) | (0.141) | (0.137) |
| Married | 1.556*** | 1.575*** | 1.676*** |
| | (0.163) | (0.164) | (0.177) |
| Age | 1.004 | 1.004 | 1.003 |
| | (0.003) | (0.003) | (0.003) |
| Incomplete primary education | 1.534 | 1.367 | 1.335 |
| | (0.555) | (0.491) | (0.478) |
| Incomplete secondary education | 1.937* | 1.770+ | 1.775+ |
| | (0.627) | (0.575) | (0.584) |
| Incomplete high school | 1.669 | 1.487 | 1.483 |
| | (0.553) | (0.492) | (0.494) |
| Complete high school | 3.035** | 2.774** | 2.947** |
| | (1.048) | (0.937) | (1.002) |
| Incomplete tertiary education | 2.569** | 2.268* | 2.475* |
| | (0.932) | (0.807) | (0.899) |
| Complete tertiary education | 1.888+ | 1.692 | 1.860+ |
| | (0.639) | (0.568) | (0.628) |
| *Regional dummies* | | | |
| 2. Nordeste | | 0.348*** | 0.362*** |
| | | (0.084) | (0.090) |
| 3. Sudeste | | 0.538** | 0.583* |
| | | (0.121) | (0.132) |
| 4. Sul | | 0.610* | 0.667 |
| | | (0.149) | (0.166) |
| 5. Centro Oeste | | 0.640 | 0.771 |
| | | (0.181) | (0.227) |
| *Ideology* | | | |
| Left-wing | | | 0.816 |
| | | | (0.299) |
| Center | | | 1.401 |
| | | | (0.477) |
| Right-wing | | | 3.636*** |
| | | | (1.261) |
| Does not know ideology | | | 1.527 |
| | | | (0.550) |
| Observations | 2506 | 2506 | 2506 |
| Pseudo $R^2$ | 0.030 | 0.043 | 0.092 |

Note: $Y = 1$ when individual voted for Bolsonaro in the first round of the 2018 elections. Coefficients reported in odds ratio; Clustered standard errors (municipality level) in parentheses. Regressions are estimated using logistic models. For a description of the variables, see Table A3.1 in Appendix 3.5. Source: ESEB 2018. $^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

not characterized by economic necessity; the coefficients on income, Bolsa Família, and employment status rather point to the opposite. Individuals with higher incomes, who belong to the traditional middle class, who are not unemployed or recipients of Bolsa Família, are more likely to be Bolsonaro voters[17]. Furthermore, economic vulnerability, as we operationalize it in this chapter, does not seem to play a role; the coefficients on informal (unregistered) status and vulnerable activity are insignificant (if anything, vulnerability appears to make people less likely to vote for Bolsonaro). This goes against any prediction that economic insecurity should be the driver of populist voting behavior, and it contrasts with the profile of populist voters in many developed countries. Furthermore, the finding that Bolsonaro voters see themselves as part of the traditional middle class is not a simple reflection of identification with specific ideological groups, as the coefficient for middle class is robust to the introduction of self-ideology, in column 12[18].

Contrary to the economic variables, the measures operationalizing the cultural backlash hypothesis behave largely in accordance with the corresponding hypothesis. The coefficients for many of the cultural variables are both statistically significant and point in the predicted direction. This holds most clearly for the variables capturing evangelicalism and opposition to minority-focused progressive policies, but also to some extent the race variable (white or Asian). That said, while white and Asian individuals are more likely to vote for Bolsonaro, the driver of this difference seems to be group clustering in specific areas, as the significance drops considerably after inclusion of regions fixed effects (column 10). The absence of a race-based preference echos findings by Bueno and Dunning, who emphasise that racial concerns play a role in ethnic political underrepresentation despite a lack of direct in-group favouritism in the ballots (Bueno & Dunning, 2017). Interestingly, the respondents' attitudes towards racial quotas, strong predictors of a populist vote, seem to be orthogonal to their self-identified race. When it comes to the variables capturing religious identification, (pentecostal and neo-Pentecostal) Evangelicals are significantly more likely to vote for Bolsonaro, while being Catholic plays no role in determining populist preferences. The relevance of more fundamentalist religions partially reflects regional divisions and ideological orientation, yet the direct effect persists after the inclusion of those control variables. Lastly, conservative values are robust predictors of the Bolsonaro vote, where each measure captures a specific dimension of the cultural backlash; both coefficients are significant at the 1% level.

[17]Individuals in the highest income category are not statistically supportive of Bolsonaro than the extreme poor, after accounting for cultural variables. The statistical null-effect is likely due to the small size (49 observations) of this category.

[18]We include ideology instead of party identification, as PSL, the party by which Bolsonaro ran in 2018, was a midget party (with only 1 Congressional seat) prior to Bolsonaro's affiliation in 2018 (when it won 52 seats). Table A3.6 (Appendix 3.4.4) includes the estimations with partisanship as additional regressors .

Table 3.3: Results: Economic insecurity and Cultural backlash hypothesis

| | Bolsonaro vote | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (9) | (10) | (11) | (12) |
| 1 to 2 minimum wages | 1.268 | | | 1.319$^{+}$ | | | | 1.364$^{+}$ | 1.352$^{+}$ | 1.310 | 1.338$^{+}$ |
| | (0.199) | | | (0.214) | | | | (0.219) | (0.228) | (0.217) | (0.229) |
| 2 to 5 minimum wages | 1.440$^{*}$ | | | 1.508$^{**}$ | | | | 1.575$^{**}$ | 1.541$^{**}$ | 1.477$^{*}$ | 1.519$^{**}$ |
| | (0.211) | | | (0.225) | | | | (0.236) | (0.240) | (0.224) | (0.243) |
| 5 to 10 minimum wages | 1.428 | | | 1.351 | | | | 1.454 | 1.465 | 1.392 | 1.367 |
| | (0.314) | | | (0.318) | | | | (0.341) | (0.350) | (0.312) | (0.317) |
| 10+ minimum wages | 1.907$^{+}$ | | | 1.775$^{+}$ | | | | 1.874$^{+}$ | 1.754 | 1.660 | 1.460 |
| | (0.679) | | | (0.618) | | | | (0.675) | (0.637) | (0.569) | (0.500) |
| Unemployed | 0.605$^{**}$ | | | 0.631$^{*}$ | | | | 0.620$^{*}$ | 0.618$^{*}$ | 0.653$^{*}$ | 0.654$^{*}$ |
| | (0.107) | | | (0.117) | | | | (0.119) | (0.125) | (0.133) | (0.141) |
| Bolsa Família | 0.747$^{*}$ | | | 0.731$^{*}$ | | | | 0.721$^{**}$ | 0.717$^{*}$ | 0.737$^{*}$ | 0.708$^{*}$ |
| | (0.092) | | | (0.092) | | | | (0.091) | (0.097) | (0.101) | (0.099) |
| Self-employed | | 1.136 | | 1.080 | | | | 1.070 | 1.106 | 1.099 | 1.136 |
| | | (0.102) | | (0.111) | | | | (0.112) | (0.122) | (0.118) | (0.130) |
| Employed: unregistered | | 0.788 | | 0.718 | | | | 0.684$^{+}$ | 0.626$^{*}$ | 0.645$^{*}$ | 0.685$^{+}$ |
| | | (0.159) | | (0.150) | | | | (0.143) | (0.136) | (0.143) | (0.154) |
| Vulnerable activity | | 0.904 | | 0.856 | | | | 0.827 | 0.863 | 0.849 | 0.807 |
| | | (0.129) | | (0.133) | | | | (0.134) | (0.141) | (0.142) | (0.136) |
| Middle class | | | 1.623$^{**}$ | 1.568$^{**}$ | | | | 1.529$^{*}$ | 1.479$^{*}$ | 1.495$^{*}$ | 1.350 |
| | | | (0.271) | (0.266) | | | | (0.258) | (0.258) | (0.266) | (0.253) |
| Downwards mobility | | | 1.172 | 1.127 | | | | 1.080 | 1.135 | 1.116 | 1.120 |
| | | | (0.164) | (0.171) | | | | (0.173) | (0.190) | (0.187) | (0.188) |
| Upwards mobility | | | 0.908 | 0.886 | | | | 0.861 | 0.926 | 0.928 | 0.912 |
| | | | (0.118) | (0.123) | | | | (0.121) | (0.133) | (0.136) | (0.139) |
| White or Asian | | | | | 1.177 | | 1.212$^{+}$ | 1.088 | 1.123 | 1.122 | 1.126 |
| | | | | | (0.117) | | (0.133) | (0.119) | (0.130) | (0.127) | (0.131) |
| Catholic | | | | | 1.072 | | 1.038 | 1.059 | 1.016 | 1.012 | 0.958 |
| | | | | | (0.149) | | (0.147) | (0.145) | (0.143) | (0.142) | (0.138) |
| Evangelical | | | | | 1.751$^{***}$ | | 1.687$^{***}$ | 1.696$^{***}$ | 1.640$^{***}$ | 1.531$^{**}$ | 1.382$^{*}$ |
| | | | | | (0.234) | | (0.218) | (0.255) | (0.235) | (0.221) | (0.190) |
| Opposes racial quotas | | | | | | 1.617$^{***}$ | 1.613$^{***}$ | | 1.598$^{***}$ | 1.577$^{***}$ | 1.447$^{***}$ |
| | | | | | | (0.150) | (0.154) | | (0.161) | (0.158) | (0.154) |
| Opposes minorities policies | | | | | | 1.450$^{***}$ | 1.422$^{***}$ | | 1.477$^{***}$ | 1.546$^{***}$ | 1.447$^{**}$ |
| | | | | | | (0.143) | (0.142) | | (0.159) | (0.168) | (0.165) |
| Individual controls | x | x | x | x | x | x | x | x | x | x | x |
| Regional dummies | | | | | | | | | | x | x |
| Ideology | | | | | | | | | | | x |
| Observations | 2244 | 2488 | 2383 | 2164 | 2426 | 2324 | 2271 | 2112 | 2015 | 2015 | 2015 |
| Pseudo $R^2$ | 0.043 | 0.032 | 0.032 | 0.046 | 0.041 | 0.049 | 0.060 | 0.057 | 0.076 | 0.087 | 0.131 |

Note: Coefficients reported in odds ratio; Clustered standard errors (municipality level) in parentheses. Regressions are estimated using logistic models. $Y = 1$ occurs when the individual voted for Bolsonaro in the first round of the 2018 elections. For controls, see Table 3.2. For a description of the variables, see Table A3.1 in Appendix 3.5. Source: ESEB 2018. $^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

Next, we pit the two hypothesis against each other. The simultaneous inclusion of variables reflecting both theoretical frameworks reveal, first of all, that culturally conservative groups are not (perfectly) mapped onto economic groups. (Had this been the case, the significance and magnitude of the coefficients belonging to one of the hypotheses would have vanished.) The role of social class is a partial exception; individuals who see themselves as belonging to the traditional middle class remain more likely to vote for Bolsonaro, but the effect partially reflects other characteristics of this social class, such as religion. The remaining estimated coefficients do not drastically change in terms of magnitude or significance level, though income and social class are not robust to the inclusion of ideology. Most importantly, the estimated coefficients for the economic variables do not fall below 1, which would have provided some evidence in favor of the economic insecurity hypothesis[19].

### 3.4.2 Heterogeneous effects: Switchers and Radicalized

Table 3.4: Comparison between 2014 PT voters and 2014 non-PT voters

| | 2014 non-PT voters | | 2014 PT voters | | Difference | |
|---|---|---|---|---|---|---|
| | Mean | S.d. | Mean | S.d. | $\Delta$ | t |
| Income | 2.446 | 1.072 | 2.252 | 0.997 | 0.194*** | (4.437) |
| Unemployed | 0.088 | 0.284 | 0.091 | 0.287 | -0.003 | (-0.220) |
| Bolsa Família | 0.279 | 0.449 | 0.369 | 0.483 | -0.090*** | (-4.701) |
| Self-employed | 0.279 | 0.449 | 0.313 | 0.464 | -0.034 | (-1.839) |
| Employed: unregistered | 0.062 | 0.240 | 0.076 | 0.265 | -0.015 | (-1.402) |
| Vulnerable activity | 0.103 | 0.304 | 0.123 | 0.329 | -0.020 | (-1.541) |
| Middle class | 0.083 | 0.276 | 0.067 | 0.250 | 0.016 | (1.474) |
| Downwards mobility | 0.087 | 0.281 | 0.110 | 0.313 | -0.023 | (-1.850) |
| Upwards mobility | 0.156 | 0.363 | 0.215 | 0.411 | -0.059*** | (-3.636) |
| White or Asian | 0.375 | 0.484 | 0.296 | 0.457 | 0.078*** | (4.071) |
| Catholic | 0.466 | 0.499 | 0.568 | 0.496 | -0.102*** | (-5.045) |
| Evangelical | 0.285 | 0.452 | 0.250 | 0.434 | 0.035 | (1.927) |
| Opposes racial quotas | 0.293 | 0.455 | 0.270 | 0.444 | 0.024 | (1.264) |
| Opposes minorities policies | 0.475 | 0.500 | 0.469 | 0.499 | 0.006 | (0.273) |
| Observations | 1474 | | 1032 | | 2506 | |

$^{+}\ p < 0.10$, $^{*}\ p < 0.05$, $^{**}\ p < 0.01$, $^{***}\ p < 0.001$

In the previous section, we explore whether economic and cultural forces explain the broad support for Bolsonaro in 2018. While this comparison is useful to identify the drivers that differentiate all Bolsonaro supporters from individuals with other vote preferences, it may obscure heterogeneity across different political groups. To investigate whether partisan groups differ in terms of the drivers of the Bolsonaro support, we analyse subsamples

[19]The effects found in this section are not driven by party identification (see Table A3.6, Appendix 3.4.4).

Table 3.5: Results: Extension - Switchers and Radicalized

| | Bolsonaro vote | | | | | |
|---|---|---|---|---|---|---|
| | (1) | | (2) | | (3) | |
| | Rad | Swi | Rad | Swi | Rad | Swi |
| 1 to 2 minimum wages | 1.676* | 1.017 | 1.749** | 0.914 | 1.883** | 0.910 |
| | (0.365) | (0.257) | (0.379) | (0.231) | (0.426) | (0.236) |
| 2 to 5 minimum wages | 1.902** | 1.225 | 1.984*** | 1.104 | 2.003** | 1.176 |
| | (0.391) | (0.305) | (0.408) | (0.276) | (0.450) | (0.308) |
| 5 to 10 minimum wages | 1.814+ | 0.944 | 1.851* | 0.833 | 1.813+ | 0.869 |
| | (0.574) | (0.385) | (0.575) | (0.332) | (0.606) | (0.349) |
| 10+ minimum wages | 2.058* | 1.195 | 2.122* | 0.913 | 1.943+ | 0.844 |
| | (0.750) | (1.155) | (0.749) | (0.853) | (0.725) | (0.821) |
| Unemployed | 0.582* | 0.670 | 0.635+ | 0.663 | 0.644 | 0.645 |
| | (0.152) | (0.203) | (0.159) | (0.202) | (0.180) | (0.202) |
| Bolsa Família | 0.756 | 0.706+ | 0.737+ | 0.738 | 0.708+ | 0.703+ |
| | (0.131) | (0.140) | (0.128) | (0.148) | (0.129) | (0.146) |
| Self-employed | 0.926 | 1.442* | 0.930 | 1.406* | 0.994 | 1.445+ |
| | (0.133) | (0.248) | (0.133) | (0.243) | (0.149) | (0.273) |
| Employed: unregistered | 0.515* | 0.819 | 0.517* | 0.835 | 0.521* | 0.875 |
| | (0.155) | (0.261) | (0.164) | (0.280) | (0.166) | (0.286) |
| Vulnerable activity | 0.881 | 0.875 | 0.895 | 0.870 | 0.824 | 0.819 |
| | (0.196) | (0.217) | (0.206) | (0.224) | (0.196) | (0.212) |
| Middle class | 1.590* | 1.248 | 1.578+ | 1.236 | 1.507+ | 1.081 |
| | (0.377) | (0.355) | (0.375) | (0.362) | (0.371) | (0.329) |
| Downwards mobility | 1.200 | 1.103 | 1.226 | 1.041 | 1.088 | 1.145 |
| | (0.234) | (0.297) | (0.239) | (0.282) | (0.229) | (0.313) |
| Upwards mobility | 0.852 | 1.097 | 0.859 | 1.089 | 0.766 | 1.130 |
| | (0.160) | (0.217) | (0.164) | (0.212) | (0.154) | (0.233) |
| White or Asian | 0.880 | 1.594* | 0.898 | 1.599** | 0.874 | 1.661** |
| | (0.121) | (0.297) | (0.125) | (0.281) | (0.127) | (0.296) |
| Catholic | 1.196 | 0.890 | 1.193 | 0.892 | 1.106 | 0.850 |
| | (0.199) | (0.203) | (0.197) | (0.206) | (0.187) | (0.208) |
| Evangelical | 1.730** | 1.582* | 1.631** | 1.439 | 1.493* | 1.283 |
| | (0.312) | (0.361) | (0.296) | (0.336) | (0.265) | (0.309) |
| Opposes racial quotas | 1.494** | 1.609** | 1.433** | 1.553* | 1.204 | 1.596** |
| | (0.196) | (0.275) | (0.192) | (0.269) | (0.173) | (0.288) |
| Opposes minorities policies | 1.494** | 1.458* | 1.524** | 1.597** | 1.524** | 1.428* |
| | (0.208) | (0.256) | (0.213) | (0.284) | (0.220) | (0.249) |
| Individual controls | x | x | x | x | x | x |
| Regional dummies | | | x | x | x | x |
| Ideology | | | | | x | x |
| Observations | 1161 | 854 | 1161 | 854 | 1161 | 854 |
| Pseudo $R^2$ | 0.085 | 0.087 | 0.098 | 0.101 | 0.149 | 0.131 |

Note: $Y = 1$ when the individual voted for Bolsonaro in the first round of the 2018 elections. The subsample "Switchers" includes all individuals who voted for PT in the 2014 runoff elections. The subsample "Radicalized" consists of all individuals who did not vote for PT in the 2014 runoff elections. For controls and estimation method, see Table 3.2. For a description of the variables, see Table A3.1 in Appendix 3.5. Source: ESEB 2018. $^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

divided according to voting behavior in the 2014 elections. As explained in Section 3.3.2, we split the original sample according to the respondents' vote in the 2014 runoff: pro-Rousseff or not (see Figure 3.1).

First, it is important to note that there are important differences between individuals who voted for PT in the runoff of 2014 elections (henceforth 2014 PT voters) and those who did not (2014 non-PT voters), as evidenced in Table 3.4. 2014 non-PT voters are on average younger, wealthier, less benefited by social assistance schemes, have higher levels of education, and experienced lower levels of upwards social mobility in recent years. Even though 2014 PT and non-PT voters are different in terms of race and religion, they display similar levels of conservative values on average.

Next, we estimate the Bolsonaro vote for the different subsamples. The estimations start with the benchmark model, which results are displayed in Table 3.5, column 1. Regions and ideology controls are gradually added in Columns 2 and 3, respectively. The positive association between better individual economic conditions and populist support is particularly relevant for the radicalized's vote. Conservative values and more stringent religions, by contrast, are common motivators that differentiate switchers and radicalized from other 2014 PT voters and 2014 PT opposition, respectively. While those who opposed PT in 2014 tend to be whiter than those who supported PT in the ballot boxes, among the latter, belonging to a socially dominant race plays an important role to understand electoral choices. The finding that among 2014 PT voters - on average less wealthy than 2014 non-PT voters - being white or Asian is predicative of a right-wing populist vote resonates with theoretical predictions of authors such as Shayo (2009), and Bonomi et al. (2021)[20]. Those scholars pose that, under certain circumstances, materially deprived individuals emulate the preferences of the ethnic group with whom they identify, leading to choices not aligned with their economic class. Such effect is robust to the inclusion of regional and ideological controls.

### 3.4.3 Extensions

#### Indirect effects

Having established the baseline empirical results, we proceed to test whether the cultural and economic motivations have any indirect effect, running through institutional trust and other attitudes. As indirect channels, we select variables that measure trust in establishment institutions (political organizations, media and companies) and attitudes towards democracy (preferences for a democratic regime and satisfaction with democracy

[20]Similar results are obtained when economic necessity is interacted with other variables (Table A3.8, Appendix 3.4.4).

in the country)[21].

The connections between various institutional attitudes and support for populist leaders are potentially complex. Rooduijn et al. find that the role of discontent with the existing political establishment on the populist voting is potentially overestimated by the existing literature, as populist candidates fuel such sentiment among their voters with their speech criticizing such establishment (Rooduijn et al., 2016). More generally, the regressions in this subsection are quite possibly the ones where the non-existence of longitudinal data presents the greatest challenge to our econometric specifications. Hence, the results in this section should be interpreted with caution[22].

In Table A3.5, Appendix 3.5 , we regress this range of political attitudes on our choice of economic and cultural variables to understand how the latter impacts institutional and democratic measures. Altogether, the results are somewhat inconclusive, but there are signs that economic insecurity might impact levels of institutional trust, while cultural backlash matters in ways that might be seen as surprising considering the previously presented effect of cultural variables on the Bolsonaro vote.

The inclusion of institutional trust and attitudes towards democracy as regressors predicting the Bolsonaro vote sheds light on the seemingly conflicting findings from Tables 3.3 and A3.5. Our benchmark specification (Column 1, Table 3.6) is the regression estimating the Bolsonaro vote on the full range of economic and cultural measures, to which we gradually add the political attitudes and further controls. Table 3.6 displays the results of the model introduced in equation 3.6, starting the the inclusion of trust measures (Column 2). While those who are economically vulnerable are indeed less trusting of the political system, political mistrust itself is negatively correlated with the Bolsonaro vote, which contrasts with findings for other contexts[23]. Trust in the media and corporations enter the regression in the expected direction: lower trust predicts support for populists. Next, attitudes towards the political regime are added (Column 3). Surprisingly, dissatisfaction with democracy is negatively correlated with support for Bolsonaro. This outcome possibly stems from the timing of the data collection. Interviews were conducted shortly after Bolsonaro's victory, which might have influenced how pleased individuals were with democracy at that moment. By contrast, variables measuring regimes preferences, widely used by renowned international surveys, might capture deeper, and arguably more stable, attitudes. According to the results, the Brazilian case here aligns with the experience

[21]For an explanation of the variables, see Table A3.1, Appendix 3.5

[22]Implementing experimental methods or simultaneous equation model analysis are alternatives to minimizing those concerns. Unfortunately, both approaches are unfeasible in our case. An experimental approach would take place in the current post-elections, when Bolsonaro no longer is a political outsider and the dynamics dictating approval of an incumbent would take place. Simultaneous equation modeling is not possible due to failure to satisfy rank and order conditions with available variables.

[23]E.g. Algan et al. 2017

in the industrialized world (Ballard-Rosa et al., 2022), where tolerance for authoritarian regimes is associated with the Bolsonaro vote . The estimated coefficients for trust and regime opinions are fairly robust to the introduction of macroregions and ideology controls, as well as to the simultaneous inclusion of all political attitudes[24]. Overall, the political attitudes analyzed here are crucial elements linked to the Bolsonaro vote. Nonetheless, their indirect effect is limited, as the direct impact of economic and cultural motivations on the Bolsonaro vote persists after the inclusion of trust measures and regime preferences.

**Alternative explanations**

The establishment of the largest corruption probe in Brazilian history marked the backdrop for the 2018 elections. The topic of abuse of entrusted power, often present in daily conversations, was undoubtedly salient and amplified by the media in the run-up to the elections. While the media coverage focused heavily on PT's involvement in the corruption scheme (Campello et al., 2020), actions of other mainstream parties, including right-leaning ones, were not exempt from being brought to public attention. Bolsonaro made use of this context and embedded a strong anti-corruption, as well as *antipetism*, stance to his campaign rhetoric (Hunter & Power, 2019). However, for this message to resonate with the public, voters need to deem the measures in place insufficient to address the problem and/or not tolerate the misuse of political power for private gains.

We investigate this possibility in columns 7 to 9 (Table 3.6). Once again, the inclusion of alternative explanations does not capture the effect of the most relevant benchmark variables. Moreover, the results do not imply a situation where corruption attitudes are only relevant due to activating cultural and/or economic motivations. Had this been the case, the perception that self-serving politicians retrieve personal gains at the cost of ordinary (and vulnerable) citizens would highlight the voter's financial distress. In turn, the latter would be the driver of vote preferences, while the effect of attitudes towards corruption would vanish. Instead, the estimated coefficient for intolerance to corruption is significant and in the expected direction. Overall, focus on and frustration with corruption are very predictive of the Bolsonaro vote, also for individuals sharing the same ideological leaning (Column 9). Yet, this explanation works *in addition to* cultural and economic forces identified in the main analysis[25].

[24]Bolsonaro's victory could have influenced who his supporters thought of when asked about political representatives, which would explain the positive impact of political trust. However, Column 4 suggests that greater political trust does not capture optimism with the election results, as the simultaneous inclusion of political trust and satisfaction with democracy does not substantially impact their coefficients.

[25]Table A3.7 (Appendix 3.4.4) includes dissatisfaction with other policies to inspect the role of other sociotropic concerns. Any significant role played by sociotropic motivations does not capture the effect

Table 3.6: Results: Indirect effect

| | Bolsonaro vote | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| 1 to 2 minimum wages | 1.352$^{+}$ | 1.269 | 1.371$^{+}$ | 1.300 | 1.270 | 1.295 | 1.325 | 1.284 | 1.321 | 1.261 | 1.254 | 1.305 |
| | (0.228) | (0.216) | (0.237) | (0.228) | (0.220) | (0.230) | (0.231) | (0.222) | (0.231) | (0.229) | (0.225) | (0.235) |
| 2 to 5 minimum wages | 1.541$^{**}$ | 1.535$^{**}$ | 1.543$^{**}$ | 1.563$^{**}$ | 1.512$^{**}$ | 1.570$^{**}$ | 1.447$^{*}$ | 1.388$^{*}$ | 1.441$^{*}$ | 1.336$^{+}$ | 1.319$^{+}$ | 1.389$^{+}$ |
| | (0.240) | (0.240) | (0.249) | (0.255) | (0.241) | (0.263) | (0.230) | (0.218) | (0.237) | (0.218) | (0.214) | (0.233) |
| 5 to 10 minimum wages | 1.465 | 1.438 | 1.442 | 1.436 | 1.379 | 1.370 | 1.343 | 1.280 | 1.276 | 1.254 | 1.233 | 1.260 |
| | (0.350) | (0.346) | (0.356) | (0.356) | (0.322) | (0.329) | (0.329) | (0.295) | (0.302) | (0.312) | (0.297) | (0.307) |
| 10+ minimum wages | 1.754 | 1.578 | 1.749 | 1.606 | 1.530 | 1.381 | 1.643 | 1.553 | 1.374 | 1.354 | 1.320 | 1.238 |
| | (0.637) | (0.607) | (0.623) | (0.610) | (0.550) | (0.494) | (0.627) | (0.561) | (0.498) | (0.513) | (0.487) | (0.450) |
| Unemployed | 0.618$^{*}$ | 0.681$^{+}$ | 0.681$^{+}$ | 0.720 | 0.762 | 0.770 | 0.612$^{*}$ | 0.643$^{*}$ | 0.640$^{*}$ | 0.627$^{*}$ | 0.655$^{+}$ | 0.658$^{+}$ |
| | (0.125) | (0.139) | (0.139) | (0.149) | (0.156) | (0.166) | (0.127) | (0.133) | (0.142) | (0.139) | (0.144) | (0.153) |
| Bolsa Família | 0.717$^{*}$ | 0.730$^{*}$ | 0.734$^{*}$ | 0.746$^{*}$ | 0.769$^{+}$ | 0.743$^{*}$ | 0.731$^{*}$ | 0.758$^{*}$ | 0.728$^{*}$ | 0.800 | 0.825 | 0.795 |
| | (0.097) | (0.100) | (0.103) | (0.106) | (0.111) | (0.110) | (0.100) | (0.106) | (0.103) | (0.115) | (0.118) | (0.117) |
| Self-employed | 1.106 | 1.093 | 1.127 | 1.099 | 1.094 | 1.115 | 1.099 | 1.093 | 1.127 | 1.031 | 1.023 | 1.057 |
| | (0.122) | (0.122) | (0.126) | (0.126) | (0.121) | (0.132) | (0.122) | (0.117) | (0.131) | (0.129) | (0.122) | (0.132) |
| Employed: unregistered | 0.626$^{*}$ | 0.597$^{*}$ | 0.645$^{*}$ | 0.596$^{*}$ | 0.611$^{*}$ | 0.651$^{+}$ | 0.629$^{*}$ | 0.645$^{*}$ | 0.682$^{+}$ | 0.617$^{*}$ | 0.627$^{*}$ | 0.661$^{+}$ |
| | (0.136) | (0.132) | (0.144) | (0.136) | (0.142) | (0.155) | (0.137) | (0.144) | (0.156) | (0.142) | (0.148) | (0.158) |
| Vulnerable activity | 0.863 | 0.868 | 0.904 | 0.896 | 0.881 | 0.827 | 0.857 | 0.846 | 0.798 | 0.896 | 0.889 | 0.846 |
| | (0.141) | (0.146) | (0.150) | (0.153) | (0.154) | (0.145) | (0.141) | (0.141) | (0.134) | (0.157) | (0.157) | (0.152) |
| Middle class | 1.479$^{*}$ | 1.395$^{+}$ | 1.491$^{*}$ | 1.422$^{+}$ | 1.432$^{+}$ | 1.287 | 1.483$^{*}$ | 1.504$^{*}$ | 1.364$^{+}$ | 1.521$^{*}$ | 1.534$^{*}$ | 1.432$^{+}$ |
| | (0.258) | (0.249) | (0.269) | (0.260) | (0.264) | (0.251) | (0.260) | (0.269) | (0.257) | (0.307) | (0.314) | (0.303) |
| Downwards mobility | 1.135 | 1.125 | 1.126 | 1.114 | 1.082 | 1.092 | 1.127 | 1.108 | 1.114 | 1.100 | 1.087 | 1.099 |
| | (0.190) | (0.194) | (0.193) | (0.197) | (0.193) | (0.195) | (0.196) | (0.193) | (0.197) | (0.205) | (0.202) | (0.205) |
| Upwards mobility | 0.926 | 0.891 | 0.914 | 0.884 | 0.876 | 0.868 | 0.931 | 0.936 | 0.911 | 0.915 | 0.909 | 0.877 |
| | (0.133) | (0.124) | (0.133) | (0.125) | (0.126) | (0.132) | (0.137) | (0.140) | (0.142) | (0.137) | (0.140) | (0.140) |
| White or Asian | 1.123 | 1.145 | 1.157 | 1.195 | 1.197 | 1.196 | 1.118 | 1.128 | 1.139 | 1.072 | 1.089 | 1.107 |
| | (0.130) | (0.136) | (0.138) | (0.146) | (0.148) | (0.151) | (0.131) | (0.130) | (0.135) | (0.132) | (0.135) | (0.139) |
| Catholic | 1.016 | 0.933 | 0.949 | 0.881 | 0.877 | 0.855 | 1.032 | 1.034 | 0.989 | 1.144 | 1.137 | 1.082 |
| | (0.143) | (0.137) | (0.135) | (0.130) | (0.129) | (0.128) | (0.146) | (0.145) | (0.143) | (0.159) | (0.157) | (0.155) |
| Evangelical | 1.640$^{***}$ | 1.598$^{**}$ | 1.550$^{**}$ | 1.528$^{**}$ | 1.421$^{*}$ | 1.319$^{+}$ | 1.681$^{***}$ | 1.560$^{**}$ | 1.415$^{*}$ | 1.724$^{***}$ | 1.612$^{***}$ | 1.506$^{**}$ |
| | (0.235) | (0.233) | (0.224) | (0.223) | (0.209) | (0.187) | (0.247) | (0.232) | (0.198) | (0.246) | (0.230) | (0.209) |
| Opposes racial quotas | 1.598$^{***}$ | 1.648$^{***}$ | 1.572$^{***}$ | 1.618$^{***}$ | 1.597$^{***}$ | 1.465$^{***}$ | 1.637$^{***}$ | 1.613$^{***}$ | 1.472$^{***}$ | 1.465$^{***}$ | 1.450$^{***}$ | 1.372$^{**}$ |
| | (0.161) | (0.173) | (0.160) | (0.173) | (0.169) | (0.162) | (0.168) | (0.166) | (0.160) | (0.158) | (0.155) | (0.154) |
| Opposes minorities policies | 1.477$^{***}$ | 1.470$^{***}$ | 1.490$^{***}$ | 1.473$^{***}$ | 1.553$^{***}$ | 1.459$^{**}$ | 1.490$^{***}$ | 1.567$^{***}$ | 1.462$^{***}$ | 1.410$^{**}$ | 1.478$^{***}$ | 1.425$^{**}$ |
| | (0.159) | (0.163) | (0.167) | (0.169) | (0.182) | (0.177) | (0.160) | (0.169) | (0.168) | (0.157) | (0.165) | (0.166) |
| Trust: political | | 2.444$^{**}$ | | 2.248$^{**}$ | 2.211$^{*}$ | 1.885$^{*}$ | | | | | | |
| | | (0.719) | | (0.689) | (0.682) | (0.592) | | | | | | |
| Trust: companies and media | | 0.517$^{**}$ | | 0.482$^{**}$ | 0.505$^{**}$ | 0.437$^{**}$ | | | | | | |
| | | (0.127) | | (0.123) | (0.129) | (0.114) | | | | | | |
| Democracy:dissatisfied | | | 0.713$^{***}$ | 0.751$^{**}$ | 0.742$^{**}$ | 0.772$^{*}$ | | | | | | |
| | | | (0.073) | (0.081) | (0.082) | (0.092) | | | | | | |
| Democracy:supports | | | 0.640$^{***}$ | 0.606$^{***}$ | 0.636$^{***}$ | 0.656$^{***}$ | | | | | | |
| | | | (0.074) | (0.071) | (0.075) | (0.078) | | | | | | |
| Corruption: no tolerance | | | | | | | 1.478$^{***}$ | 1.497$^{***}$ | 1.450$^{***}$ | | | |
| | | | | | | | (0.157) | (0.163) | (0.162) | | | |
| Corruption: not punished | | | | | | | 1.128 | 1.153 | 1.260$^{*}$ | | | |
| | | | | | | | (0.108) | (0.108) | (0.122) | | | |
| Antipetism | | | | | | | | | | 4.180$^{***}$ | 4.135$^{***}$ | 3.364$^{***}$ |
| | | | | | | | | | | (0.456) | (0.453) | (0.389) |
| Individual controls | x | x | x | x | x | x | x | x | x | x | x | x |
| Regional dummies | | | | | x | x | | x | x | | x | x |
| Ideology | | | | | | x | | | x | | | x |
| Observations | 2015 | 1878 | 1950 | 1833 | 1833 | 1833 | 1979 | 1979 | 1979 | 1885 | 1885 | 1885 |
| Pseudo $R^2$ | 0.076 | 0.079 | 0.084 | 0.088 | 0.098 | 0.142 | 0.085 | 0.097 | 0.142 | 0.145 | 0.154 | 0.177 |

Note: $Y = 1$ when the individual voted for Bolsonaro in the first round of the 2018 elections. For controls and estimation method, see Table 3.2. For a description of the variables, see Table A3.1 in Appendix 3.5. Source: ESEB 2018. $^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

We perform a separate analysis to assess the role of individual opinions directly linked to PT, given the importance of *antipetism* - the extreme resentment of PT - at that point (Hunter & Power, 2019)',[26]. The inclusion of *antipetism* as an additional explanatory factor of the populist vote in columns 10 to 12 reveals that this attitude matters heavily to understand the outcome of the 2018 Brazilian elections. However, similarly to the corruption-based motivations, PT support does not capture the direct effect of cultural anxiety and economic motivations (with the exception of the drop in the significance levels of the income coefficient).

### 3.4.4 Robustness checks

We perform a series of robustness tests to assess whether our main findings are sensitive to sample and other specifications. In all, the main findings discussed in the article are stable to alternative specifications, variables, samples, and other robustness tests. In this section, we present the results of selected robustness tests (Tables displayed in the Appendix of this chapter)[27].

#### Alternative explanations

**Political knowledge:** We also assess whether cultural and economic measures might correlate with a lack of political knowledge, which in turn would be the driver of the populist vote. As a measure of political knowledge, we assess how precisely the individuals report the ideological position of the five main Brazilian political parties in 2018 (namely PT PSL, PSDB, PP, and MDB). To do so, we compute an individual-level index for political knowledge following equation 3.8 that gauges how far the individual place each party on the left-right scale ($I_{i,g}$) from the party's true position ($I_g$), which we proxy by the assessment of three experts found in the Brazilin macro report provided by the CSES. The original variable on ideological position of the party ranges from 0 (most left-wing) to 10 (most right-wing). We square the differences so that larger deviations will carry a heavier weight and normalize the indices across individuals between 0 and 1, with larger values indicating higher political knowledge.

of economic and cultural explanations.

[26] In Table A3.5 (Appendix 3.5) Column 5, we regress *antipetism* on our range of economic and cultural variables. The findings mirror the results in Table 3.3, although there are differences in significance levels of estimated coefficients

[27] A description of how variables used in the study were constructed is available upon request.

$$PolKnow_i = \sum_{g \in G} (I_{i,g} - I_g)^2 \text{ , where } G = \{PT, PSL, PSDB, PP, MDB\} \tag{3.8}$$

Columns 2 to 7, Table A3.6, display the results with the addition of the individual's political knowledge. Although higher political knowledge surprisingly predicts the Bolsonaro vote, other cultural and economic variables are not disturbed by the inclusion of this additional regressor.

**Partisanship:** Preexisting party identification is known to largely determine the voters' choice of candidate. By controlling for partisanship, we account for the possibility that the individual characteristics used to assess populist voting, in reality, determine party identification. In turn, affinity with a specific party could be responsible for voters' choice of candidate for consistency reasons. Therefore, the inclusion of party preferences raises the requirements for determining which factors influence vote choice, as party identification accounts for most of the variance in vote choice. Columns 8 to 10 in Table A3.6 display the estimated coefficients to the regressions containing party identification. As expected, proximity to PSL is associated to statistically higher odds of having voted for Bolsonaro in the first round. More interestingly is the significant (and negative) impact of party identification with PT. Since the effect of positive partisanship is already accounted for by the inclusion of "proximity to PSL", we can infer that the impact of "proximity to PT" relates to negative (affective) partisanship. The inclusion of party identities suggests that the impact of economic factors - income, Bolsa Família and social class - operate largely via the characteristics of political groups. Cultural factors, in contrast, are hardly affected by the shift towards an analysis of within-party drivers of the populist vote.

**Sociotropic concerns:** Table A3.7 shows the results for other sociotropic concerns, beyond corruption attitudes, as factors that would possibly explain the Bolsonaro vote. We look into dissatisfaction with policies regarding control of police violence (column 2), decrease in inequality, control of criminality, respect for the law, and unemployment reduction. We create dummies identifying individuals who are dissatisfied with the policies, which equals one when the individual's level of satisfaction is lower than the sample's average satisfaction for that policy.

Dissatisfaction with policies may occur when an individual disagrees with the policy and thinks that the present policy should be dismantled, as well as when a person agrees with the policy and wishes for it to be scaled up further. We attempt to disentangle those two

cases by interacting the dissatisfaction dummy variable with proxies for whether people would be supportive of that policy or not. For the reduction in inequality and unemployment, we use a measure for whether the individual strongly agrees with the statement that the government should reduce inequalities in society. For control of criminality and police violence, we interact policy dissatisfaction with whether the individual has high levels of trust in the federal police. Lastly, we interact dissatisfaction with respect for the law with whether the individual is highly trustful of the judiciary.

Sociotropic concerns around economic and safety matters played a role in explaining the voters' choice in the ballots by accounting for individuals who are less likely to vote for Bolsonaro. Interestingly, while anecdotal accounts suggest that Bolsonaro's firm speech against crime would have helped him in the presidential race, we find that the effect stems solely from those who are dissatisfied with violence control and oppose the police. Dissatisfaction with economic policies is the driver of the vote for those who defend the greater presence of the state in matters of income distribution.. Optimism about the economic situation is negatively correlated with the Bolsonaro vote, as the economic insecurity hypothesis would have predicted. Moreover, higher trust in the military is positively associated with the Bolsonaro vote, which is not of surprise, given Bolsonaro's history in the army. Yet, the inclusion of those alternative sociotropic explanations does not capture the effect of the other individual-centered variables, meaning that the former are not confounders of the cultural anxiety and individual economic factors.

**Interaction: economic and culture:** The estimations in Table A3.8 assess whether economic insecurity might have an indirect effect by activating or intensifying the cultural motivations for the populist vote. We do so by interacting a dummy variable for economic necessity with our measures of cultural forces. In columns 2 to 5, we define this dummy as whether the individual's household income is below the sample's median income; and in columns 5 to 9, the dummy equals one when the household income is below one minimum wage. With the exception of the interaction term "Low-income × White/Asian", none of the estimated coefficients reach conventional levels of statistical significance. It is possible that the significance of "Low-income × White/Asian" reflects the same phenomenon as the positive impact of being a White/Asian switcher on voting for Bolsonaro. Both could be associated to the primary group identification changing from class to ethnicity, as reported by Bonomi et al. (2021); Shayo (2009).

### Alternative measures

**Income: alternative measures:** The ESEB 2018 survey asks the interviewee to spontaneously report their household income, prior to providing the option of reporting income brackets to individuals who did not inform their specific income. The precise and spontaneous income is arguably a better measure to be used for two reasons. First, this spontaneous variables is continuous and diminishes the likelihood of categorization errors occurring. Second, using the continuous income allows us to compute income per capita, which is arguably a better measure for economic well-being than household income. However, not only is number of observations with information on continuous income limited, but, more importantly those who do not spontaneously report their income differ from those who report their income brackets in important characteristics relevant to the populist vote (see Table A3.9).

For those reasons, we refrain from using the limited sample in the main analysis, but include the results for selected estimations using measures for spontaneous household income (columns 1 to 4) and household per capita income[28] (columns 5 to 8) in Table A3.10. Both income variables are reported using log income. The original main findings survive the use of a different measure for income, despite the baseline differences between the samples used.

**Religion and religiosity:** In Table A3.11, we include a dummy variable for whether the individual is actively religious, which we define as attending religious gatherings at least once per week. We interact this variable with the dummies for different religions in columns 4, 5, and 6. Should observant Catholics differ from "social" Catholics and voters of other religions, the interaction terms would capture this effect. Yet, the results do not support this explanation. In other words, the lack of significant effect for Catholics do not stem from the fact that Brazil is a historically Catholic country and people might report being Catholics without in fact being observant of the religion.

**Vulnerability measures:**In Table A3.12 we explore alternative measures for vulnerable workers. One could argue that "vulnerable activity" captures only between-sector disparities, while job polarization (and consequentially insecurity) could take place at the within-sector level. Similarly, it could be the case that unregistered employment and self-employment hosts a wide range of professionals, ranging from informal low-skilled workers to entrepreneurs and consultants on a micro-company B2B contract. We build

[28]The data reports the number of people living in the same household. There is no information about those members' age or gender, so we simply divide income by the household size - with each member accounting for one person - to obtain measure of income per capita.

alternative variables based on the combination of sector of employment and employment type. In Columns 1 and 2, we consider self-employed workers, Columns 3 and 4 we focus on unregistered workers, columns 5 and 6 contain self-employed or unregistered worker. The in the last column, we consider instead whether the individual's income falls below the sample median income. Thus, the coefficient for "Agriculture" consists of: (i) self-employed workers in agriculture in columns 1 and 2, (ii) unregistered workers in agriculture in columns 3 and 4, (iii) self-employed or unregistered workers in agriculture in columns 5 and 6, and (iv) low-income agricultural workers in columns 7 and 8. The same logic applies to other activities. With the exception of industry workers in non-standard contracts, who are less likely to have voted for Bolsonaro, none of the coefficients are precisely estimated.

**Interaction: Democracy satisfaction and tolerance:** This robustness exercise explores whether the impact of dissatisfaction with democracy is contingent on support for the regime. We cannot, *ex-ante*, determine what direction the effect should take. It is possible that individuals associate the term *democracy* to the institutions of liberal democracy, where the will of the people is not unconditional and the rights - including of existance and political participation - of minorities are respected. In that case, we would expect the interaction term to be negative. Alternatively, *democracy* might be primarily understood as comprising only the will of the many. Should this be the case, the interaction term would be positive, as only people who are supportive of this narrow sense of democracy and are dissatisfied with the liberal turn the regime took would feel contemplated by the populist narrative. Results in Table A3.13 suggest no strong evidence towards either cases: even though the coefficient is negative, it is not statistically different from exerting no effect on probability of casting a pro-populist vote.

### Alternative empirical specifications

**Sub-region fixed effects:** In Table A3.14, we replace the dummies for macroregions (columns 1 and 2), by 26 dummies for states (columns 3 and 4), 96 dummies for mesoregions (columns 5 and 6), and lastly 130 microregions (columns 7 and 8). The role of economic and cultural variables cannot be explained by differences between states, meso or microregions, as the coefficients remain relatively stable to the estimation of those alternative specifications.

**Probit estimations and clustering:** Tables A3.15 and A3.16 explores different econometric specifications, namely estimating the regressions using a Probit model and cluster-

ing errors at different levels. The overall findings are consistent for a different functional form: the results of selected models in Table A3.15 show no substantial changes compared to the estimations using Logit. Clustering the errors at different levels - namely microregion, mesoregion and state - does not change the picture found when errors are clustered at the municipality level (columns 1 to 3). As the estimated coefficients by definition remain the same, any differences will occur at their significance level. The relevance of cultural backlash forces and the importance of economic factors running contrary to the populist framework are robust to different clustering of errors, with significance level slightly decreasing when errors are clustered at a broader geographical scope.

**Different rounds and sample composition:** In Table A3.17 we investigate whether there are any significant differences between the drivers of the votes in the first round (Columns 1, 2, and 3) and in the runoff (Columns 4, 5, and 6). We vary our sample composition ranging from including (i) all individuals who are eligible to vote, i.e. the entire ESEB sample (columns 1 and 4) (ii) only individuals who did not abstain from voting in the election days (columns 2 and 5), and (iii) only the respondents who case a *valid* vote, i.e. excluding individuals who cast a blank or null vote (columns 3 and 6). The overall conclusions we obtain with the main analysis are also present in all the different sample specifications. The role of economic motivations seems to be more relevant during the runoff, but to the extent that the coefficients for income become better specified. *Economic insecurity* does not explain the populist vote in either rounds or sample composition, meaning that in the Brazilian case, the effect of economic insecurity is not obscured by its negative impact on the likelihood to cast a vote, differently from the findings of Guiso, Herrera, Morelli, and Sonno (2024); Guiso et al. (2017).

**The 2014 vote:**

Lastly, in Table A3.18 we use our benchmark specification to predict the 2014 vote by our choice of economic and cultural forces. We do not aim to explain the 2014 vote, as clearly some variables are susceptible to change between 2014 and 2018. Instead, we explore whether our choice of variables are able to explain other non-populist preferences. In particular, should the relationship found in the main analysis be spurious or explain broad vote choices not restricted to populist candidates, the results in Table A3.18 should mirror the main results. Yet, the estimated models in Table A3.18 do not suggest this scenario. The estimated results for the coefficients of interest either become insignificant or flip their directions. Moreover, it is plausible that some variables - such as employment status - are more prone to change over the course of four years than others - e.g. religion and ethnicity. Supposing that preferences and perceptions, although malleable, have a core

component that change slowly (E. F. P. Luttmer & Singhal, 2011), Table A3.18 suggests that traditional cultural factors do not predict the non-populist vote of 2014[29] Neither do other economic variables that predict the Bolsonaro vote enter the estimations in the same direction or significance. High income is - as expected - related to opposition towards PT, but impacts candidate choice mainly through the candidate's left-right leaning, as the effect of income vanishes after inclusion of the respondent's ideology. Unsurprisingly, being a beneficiary of Bolsa Família relates to supporting the PT candidate in 2014. Moreover, being employed in the construction or industry sectors and having a non-standard employment contract relates to a pro-Rousseff vote in 2014. Differently from the Bolsonaro vote, social mobility between 2010 and 2018 correlates with the 2014 vote behavior[30], while social class itself has no statistical impact.

## 3.5 Discussion and conclusion

The recent surge in populism has largely been a rich-country phenomenon. However, populism has historically been more frequently observed in low and middle-income countries (Guriev & Papaioannou, 2022). Latin America, in particular, has a long and well-known history of populists, with most found towards the left of the political spectrum. The rise of Jair Bolsonaro is a rare case of a successful right-wing Latin American populist (Edwards, 2019). This right-wing populism aligns Brazil more with the recent populism of rich(er) countries, and allows us to test the extent to which theoretical frameworks and debates from those countries carry over to a developing country context.

Popular accounts point to disillusionment with corrupt politicians as the reason for Bolsonaro's electoral success. According to critics of the PT years, the party entrenched itself in power and corrupted the political system (Hunter & Power, 2019). After 13 years of PT administrations, the only alternative to avoid the continuation of the PT dominance would be to choose a political outsider, a role that Jair Bolsonaro managed to claim. Yet, the backdrop for the 2018 elections is complex and a result of years of economic and cultural changes in Brazilian society. Economically, Brazil underwent periods of (socially uneven) growth as well as years of deep recession. Culturally, the advances in minorities' rights and cosmopolitan values sparked a conservative reaction. Thus, both economics-

[29] The positive impact of the Catholicism is likely to reflect the role played by Catholic clergy on strengthening the party during the 1980s, based on shared pro-poor positions, as discussed by Trejo and Bizzarro (2015).

[30] Note that the upwards or downwards change could could have taken place either before or after the 2014 elections, since the question in 2018 asks about changes in the past eight years. Downwards mobility, for instance, could refer to individuals whose social position improved prior to 2014 but fell in the social ladder between 2014 and 2018. Therefore, we do not make any interpretations of their effects on the 2014 voting behavior.

oriented and culture-based theories could, *a priori*, explain the sources of social grievance that enabled Bolsonaro to rise to power democratically. This backdrop provides us with fertile ground for testing the contemporary populism frameworks beyond the rich(est), industrialized countries.

Using individual-level data from a survey conducted shortly after Bolsonaro's victory, we find that various measures of culture are important predictors of the Bolsonaro vote. The estimated coefficients of the variable we use to operationalize the cultural backlash hypothesis, including measures of fundamentalist religious beliefs and cultural conservatism, are consistently significant across a wide range of model specifications and samples. Furthermore, attachment to traditional values is the one feature shared by voters who switched from PT in the 2014 election to Bolsonaro in 2018, and individuals who were already voting for parties other than PT in 2014 and voted for Bolsonaro in 2018. In contrast, our results do not support the hypothesis that populist support is driven by economic insecurity.

We find that institutional trust and support for democracy matter independently of cultural and economic factors. While variables capturing trust in media and in large companies behave as expected, political trust has the opposite effect - higher levels predicting support for Bolsonaro. Moreover, both low levels of tolerance for corruption and frustration with the measures to curb corrupt behavior are highly predictive of the candidate choice. Hence, we find some indications of a general populism effect beyond the culture vs economics debate, though the effects are not always the ones we anticipated.

The 2018 election was not just a one-off event. It is becoming increasingly clear that this election had important consequences for proceeding ones; a culturally motivated voting behavior was brought to the forefront in 2018, and 2022 proved that cultural issues settled in as an important dimension in Brazilian politics. Although Bolsonaro did not win a second term, the 2022 elections were the closest in Brazilian democratic history, and Bolsonaro received 49.10% of the total vote despite being widely criticized from many different angles, including not only issues such as the highly polemic environmental agenda but also the handling of the pandemic, the economic performance, and the way Brazil became largely isolated from much of the international community (Angelos, 2022; World Bank Group, 2023). Lula, who once enjoyed approval ratings in the levels of 80s%, just barely managed to edge out an election victory despite running with the backing of a broad political coalition ranging from the left to the center-right[31], winning with a margin of just over 2 (out of 156) million votes (TSE, 2023).

[31]This collision included former president Fernando Henrique Cardoso and Geraldo Alckmin, a historical rival, who ran in 2023 as Lula's vice president; and the center-right Simone Tebet, a critic of Lula's economic agenda, widely circulated in the media (Iglesias, 2022).

We interpret the tightness of the 2022 elections through the lens of existing research indicating that populists often enjoy the core support of highly motivated voters regardless of their governance record (Hunter & Power, 2023). While a meta-culture around the principles of stable and reasonable governability partially explains Lula's victory, the activation of conservative cultural issues, brought to the forefront in 2018, likely held down engagement among voters who were willing to support establishment alternatives. As shown by the results of this chapter, cultural issues now matter in Brazil even as one controls for institutional attitude features such as political trust and corruption tolerance. Consistent with this interpretation, when Lula openly defended the legalization of abortion during the 2022 election campaign, he was met with strong backlash from prospective voters and a celebratory reaction by the Bolsonaro campaign. Even though Lula attempted to revert the statement, a culturally conservative voting base had been activated[32].

The year 2018 also marked the emergence of evangelicals as a strong united front with heavy political clout. On an extensive margin, the size of the group has grown sizeably and quickly: Datafolha estimates that in 2019 nearly one in every three Brazilians is evangelical, from one in every five in 2010[33]. On the intensive margin, evangelicals have, in recent years, organized themselves around a preferred candidate, which had not been the case before 2018. The role played by evangelical pastors in choosing candidates, aggregating pre-existing conservative preferences, and mobilizing voters in their congregations or using social media platforms is crucial to understanding the evangelical unified political response in both the 2018 elections and the sturdy electoral performance of Bolsonaro in 2022. Our results corroborate this line of argument, put forth by authors like Smith (2019). While Lula has attempted to address some grievances of the evangelical community directly, and partner with leftist pastors[34], the absence of left-leaning ministers at the same stature as the Bolsonarists Silas Malafaia or Edir Macedo (Pagliarini, 2023) has left this initiative largely toothless.

We close by noting that pro-PT votes have, at least since 2006, been historically concentrated in lower-income states and municipalities, largely in the Brazilian Northeast region. Those areas also held the lowest rates of approval of the Bolsonaro administration in 2018. As the 2022 elections were approaching, Bolsonaro implemented a series of expansionary fiscal measures, justified by a state of emergency with questionable legal basis[35]. Those measures covered cooking gas and fuel subsidies, as well as a substantial

[32]Brazilian and international news media have broadcasted the topic extensively; some examples include Rosati (2022), Sadi (2022), and G1 (2022)
[33]Some of the main Datafolha findings were published in the newspaper article by Balloussier (2020).
[34]For English news, see Kang (2022).
[35]Those arguments have been raised publicly in the Brazilian and international media, examples include Suzuki (2022) and Bethônico (2022a).

expansion of the Bolsa Família program[36], which included an increase in the coverage and benefit value, a 13$^{th}$ installment and anticipation of the payment scheme during the period between the first and runoff rounds. Despite a small increase in Bolsonaro's government approval ratings among those who benefited from program expansion, most of that social group still indicated an intention to vote for Lula[37]. This marginal electoral influence of the expansionary economic measures in 2022 mirrors our findings for 2018, with economic motivations shown to have only limited influence on switching votes from PT to Bolsonaro. That is, the pattern of the 2022 election reinforces the argument that economic drivers of the populist vote appear to be of limited importance.

Even though this chapter explores the specific case of Brazil, some of the broader insights can also be valuable for other countries, especially those in Latin America. The Brazilian case shows that the international inflow of migrants that are culturally distant from the native population is not a necessary condition for populist forces to resonate with voters. Inclusive policies are not only a reality but also a necessary tool to address historic economic and, most importantly, social inequalities that afflict the societies of low- and middle-income countries. If such measures are implemented for the benefit of an increasingly and explicitly inclusive platform, in a world (seen as) growingly more progressive, democracies might face the risk of a cultural backlash by those who are not benefited by the measures. The establishment of such resentment is particularly threatening, as it cuts through income and (negative) partisanship lines, operating in parallel to other institutional and sociotropic grievances.

To summarize this concluding discussion, the 2018 presidential election appears to have ushered in a new political landscape in Brazil. Consistent with Barros and Silva, we find that perceived threats against the stability of a conservative (segment of) society may spark a counter-reaction, in Brazil as well as in countries such as the United States and the United Kingdom. In Brazil, an emboldened and more organized (culturally) conservative movement has become a political force to be reckoned with. We hope to see future research map out the exact changes to Brazilian politics and society brought about by the rise of this emboldened force.

[36] In November 2021, president Bolsonaro renamed Bolsa Família as Auxílio Brasil (Porcella & Rodrigues, 2022). However, in the first months of his third term, Lula relaunched the scheme under the name of Bolsa Família.

[37] According to results from Datafolha electoral poll, available in Folha de São Paulo's news article (Bethônico, 2022b)

# Appendices

## Variables description

Table A3.1: Main independent variables used in the study

| Variable | Short description | Values |
|---|---|---|
| <1 minimum wage (baseline) | Up to 954.00 BRL | 0/1 (dummy) |
| 1 to 2 minimum wages | More than 954.00 BRL up to 1,908.00 BRL | 0/1 (dummy) |
| 2 to 5 minimum wages | More than 1,908.00 BRL up to 4,770.00 BRL | 0/1 (dummy) |
| 5 to 10 minimum wages | More than 4,770.00 BRL up to 9,540.00 BRL | 0/1 (dummy) |
| 10+ minimum wages | More than 9,540.00 BRL | 0/1 (dummy) |
| Unemployed | Unemployed individual and looking for job | 0/1 (dummy) |
| Bolsa Familia | Household is recipient of Bolsa Família | 0/1 (dummy) |
| Self-employed | Individual is self-employed | 0/1 (dummy) |
| Employed: unregistered | Individual is employed without formal registration | 0/1 (dummy) |
| Vulnerable activity | Individual works in the industry or with construction | 0/1 (dummy) |
| Traditional middle class | Individual belongs to the upper-middle class | 0/1 (dummy) |
| Upwards mobility | Individual's social class impoved in the past 8 years | 0/1 (dummy) |
| Downwards mobility | Individual's social class worsened in the past 8 years | 0/1 (dummy) |
| White or Asian | Individual is white or Asian (IBGE classification) | 0/1 (dummy) |
| Catholic | Invididual is Catholic | 0/1 (dummy) |
| Evangelical | Invididual is (neo-)Pentecostal Evangelic | 0/1 (dummy) |
| Opposes racial quotas | Individual strongly agrees that racial quotas harms people who are more worthy | 0/1 (dummy) |
| Opposes minorities policies | Individual strongly agrees that issues affecting minorities should be solved after economic matters | 0/1 (dummy) |
| Political trust | Trust in the political system (index: higher values indicate greater levels of trust | 0-1 (continuous) |
| Private trust | Trust in companies and media (index: higher values indicate greater levels of trust) | 0-1 (continuous) |
| Democracy: dissatisfied | Individual reports being highly dissatisfied with the functioning of democracy | 0/1 (dummy) |
| Democracy: supportive | Individual believes that democracy is better than any other form of government | 0/1 (dummy) |
| Antipetism | Individual spontaneously reported disliking PT | 0/1 (dummy) |
| Corruption no tolerance | Individual is not tolerant of corruption (index: higher values indicate lower tolerance) | 0-1 (continuous) |
| Corruption: not punished | Individual believes that corruption is not punished in Brazil | 0/1 (dummy) |

Note: Indices measuring political and private trust were computed with factor analysis using questions measuring levels of trust in different organizations. A detailed description of the indices construction is available upon request.

## Summary statistics and correlation matrix

Tables A3.2 and A3.3 display the summary statistics of the control and main explanatory variables for the survey sample. The average population is female, unmarried, and with incomplete high school. The average income, between 2 to 5 minimum wages, is higher than the median income. By design, the sample is representative of the 5 Brazilian macroregions. Thus, the share of the population residing in each region roughly equals the mean value of regional dummies. The sample's unemployment rate, of 9%, is slightly lower than the actual unemployment rate of 2018 (11.7%) due to the inclusion of the inactive population in the sample[38]. 32% of the sample households are Bolsa Família beneficiaries, a number that is higher than the actual figure (around 21% of the Brazilian households) since the sample asks whether the household has received the Bolsa Família at any point in the three years previous to 2018. 36% of the sample is either unemployed or self-employed, and 11% works in the industry or construction sectors. Over 8 years, more people ascended than descended social classes, likely due to the commodities boom growth and pro-social policies of the 21$^{st}$ century. 34% of the sample does not identify as Black, Indigenous or mixed, and Catholicism, the main religion in Brazil, is the religion reported by 50.4% of the total sample. 45% of the respondents in the sample do not believe that issues affecting specific social groups should be prioritized over economic performance, while only 27% of the respondents oppose racial quotas due to meritocracy concerns. This could reflect the different framing of those two attitudinal questions and indicate that opposition to specific social groups on the grounds of economic reasons is viewed as more socially acceptable (Margalit, 2019).

One might be concerned that our selected measures the grasp the impact of economic and cultural forces overlap and do not capture distinct phenomena, i.e. that different variables are strongly correlated. However, our measures are at best weakly correlated, as shown in table A3.4.

[38]When the inactive population is not considered in the calculation, the sample's unemployment rate rises to 12.96%, when excluding stay at home individuals, or 11.33%, when including stay-at-home individuals.

Table A3.2: Summary Statistics - Controls

| | Mean | S.d. | Min | Median | Max | Count |
|---|---|---|---|---|---|---|
| Male | 0.47 | 0.50 | 0 | 0 | 1 | 2506 |
| Education | 4.41 | 1.54 | 1 | 5 | 7 | 2506 |
| Married | 0.36 | 0.48 | 0 | 0 | 1 | 2506 |
| Age | 41.62 | 15.70 | 16 | 41 | 92 | 2506 |
| North (Norte) | 0.08 | 0.27 | 0 | 0 | 1 | 2506 |
| Northeast (Nordeste) | 0.26 | 0.44 | 0 | 0 | 1 | 2506 |
| Southeast (Sudested) | 0.44 | 0.50 | 0 | 0 | 1 | 2506 |
| South (Sul) | 0.15 | 0.36 | 0 | 0 | 1 | 2506 |
| Midwest (Centro-Oeste) | 0.08 | 0.27 | 0 | 0 | 1 | 2506 |
| Left-wing | 0.15 | 0.35 | 0 | 0 | 1 | 2506 |
| Center | 0.20 | 0.40 | 0 | 0 | 1 | 2506 |
| Right-wing | 0.43 | 0.50 | 0 | 0 | 1 | 2506 |
| Ideology: does not know | 0.18 | 0.38 | 0 | 0 | 1 | 2506 |
| Ideology: missing | 0.03 | 0.18 | 0 | 0 | 1 | 2506 |

Note: Source: ESEB 2018

Table A3.3: Summary Statistics - Main variables

| | Mean | S.d. | Min | Median | Max | Count |
|---|---|---|---|---|---|---|
| Income | 2.36 | 1.04 | 1 | 2 | 7 | 2266 |
| Up to 1 minimum wage | 0.24 | 0.43 | 0 | 0 | 1 | 2266 |
| 1 to 2 minimum wages | 0.3 | 0.46 | 0 | 0 | 1 | 2266 |
| 2 to 5 minimum wages | 0.35 | 0.48 | 0 | 0 | 1 | 2266 |
| 5 to 10 minimum wages | 0.09 | 0.28 | 0 | 0 | 1 | 2266 |
| 10+ minimum wages | 0.02 | 0.15 | 0 | 0 | 1 | 2266 |
| Unemployed | 0.09 | 0.29 | 0 | 0 | 1 | 2488 |
| Bolsa Família | 0.32 | 0.46 | 0 | 0 | 1 | 2494 |
| Self-employed | 0.29 | 0.46 | 0 | 0 | 1 | 2488 |
| Employed: unregistered | 0.07 | 0.25 | 0 | 0 | 1 | 2488 |
| Vulnerable activity | 0.11 | 0.31 | 0 | 0 | 1 | 2506 |
| Middle class | 0.08 | 0.27 | 0 | 0 | 1 | 2387 |
| Downwards mobility | 0.1 | 0.29 | 0 | 0 | 1 | 2383 |
| Upwards mobility | 0.18 | 0.38 | 0 | 0 | 1 | 2383 |
| White or Asian | 0.34 | 0.47 | 0 | 0 | 1 | 2445 |
| Catholic | 0.51 | 0.5 | 0 | 1 | 1 | 2485 |
| Evangelical | 0.27 | 0.44 | 0 | 0 | 1 | 2485 |
| Opposes racial quotas | 0.28 | 0.45 | 0 | 0 | 1 | 2379 |
| Opposes minorities policies | 0.47 | 0.5 | 0 | 0 | 1 | 2394 |

Note: Source: ESEB 2018

Table A3.4: Correlation matrix

| | Income | Unemployed | Bolsa família | Self employed | Employed: unregistered | Vulnerable activity | Middle class | Downwards mobility | Upwards mobility | Non minorities | Catholic | Evangelical | Opposes racial quotas | Opposes minorities policies |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Income | 1.00 | | | | | | | | | | | | | |
| Unemployed | -0.17*** | 1.00 | | | | | | | | | | | | |
| Bolsa família | -0.35*** | 0.10*** | 1.00 | | | | | | | | | | | |
| Self employed | 0.03 | -0.20*** | 0.02 | 1.00 | | | | | | | | | | |
| Employed: unregistered | -0.02 | -0.08*** | 0.04* | -0.17*** | 1.00 | | | | | | | | | |
| Vulnerable activity | 0.07*** | -0.07*** | 0.01 | 0.16*** | 0.00 | 1.00 | | | | | | | | |
| Middle class | 0.09*** | -0.06** | -0.05* | -0.01 | -0.01 | -0.00 | 1.00 | | | | | | | |
| Downwards mobility | 0.01 | 0.03 | -0.04* | -0.00 | 0.00 | 0.00 | -0.07*** | 1.00 | | | | | | |
| Upwards mobility | 0.06** | -0.03 | 0.01 | 0.02 | -0.00 | 0.02 | 0.20*** | -0.17*** | 1.00 | | | | | |
| Non minorities | 0.15*** | -0.09*** | -0.19*** | 0.00 | -0.02 | -0.00 | 0.02 | 0.04 | -0.06** | 1.00 | | | | |
| Catholic | -0.02 | -0.02 | -0.05** | -0.01 | -0.01 | -0.03 | 0.01 | -0.05* | -0.04 | 0.04* | 1.00 | | | |
| Evangelical | -0.06** | 0.04* | 0.10*** | 0.01 | -0.01 | 0.03 | 0.03 | 0.03 | 0.04* | -0.06** | -0.61*** | 1.00 | | |
| Opposes racial quotas | 0.03 | -0.03 | -0.02 | 0.03 | 0.02 | 0.01 | 0.02 | 0.00 | -0.04* | -0.00 | 0.02 | 0.03 | 1.00 | |
| Opposes minorities policies | -0.03 | -0.00 | 0.01 | 0.01 | 0.01 | -0.00 | -0.02 | 0.01 | -0.07*** | -0.01 | 0.01 | 0.03 | 0.24*** | 1.00 |
| *N* | 2506 | | | | | | | | | | | | | |

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Amongst the economic variables, the highest correlation is found between Bolsa Família recipients and their income levels, with a weak-moderate correlation of 35%[39]. Besides the considerate negative correlation between Evangelical and Catholic dummies, which should by definition behave as such, there are no concerns of overlaping variables. Conservative values are positively correlated, but it is clear that the two questions touch upon distinct dimensions, as the correlation between opinions on racial policies and other affirmative actions is weak.

## Impact of economic and cultural forces on political attitudes

In Table A3.5 we test whether individual-level cultural and economic forces influence other political attitudes, namely political trust/trust in the media and in corporations, and attitudes towards democracy. We execute this by regressing those attitudes on our baseline set of economic and cultural variables. While economic variables impact the Bolsonaro vote in ways contrary to the economics-based theory of populism, there are signs that *economic vulnerability* specifically negatively affects satisfaction with establishment political institutions, and is associated with dissatisfaction with democracy and institutional mistrust, according to the results presented in Table A3.5. Self-employed individuals, and those working in the industry and construction sectors, are particularly prone to this phenomenon. Religious individuals, in contrast, are more trustful of both the political institutions as well as media and companies. Negative attitudes around racial quotas are related to higher levels of institutional trust, but to lower satisfaction with the current state of democracy.

In Table A3.5 Column 5, we regress *antipetism* on our range of economic and cultural variables. The findings in Column 5 mirror the results obtained for the Bolsonaro vote in Table 3.3, although there are differences in significance levels of estimated coefficients. Unsurprisingly, being a beneficiary of the Bolsa Família programme negatively impacts the odds of reporting animosity towards PT. Bolsa Família became vastly associated to Lula and PT (despite having origins in the previous administration), which the literature suggests had significant and lasting electoral effects (Zucco Jr, 2013, 2015). Similarly, individuals with lower income levels are more supportive of PT, possibly due to memories of pro-poor growth in the first decade of the 21$^{st}$ century. The effects of race and religion are not conclusive, while conservative values are strong and significant predictors of *antipetist* attitudes.

[39]Beyond the weak-moderate correlation levels, it is important to account for the electoral effects of CCT programmes in favour of parties and politicians associated to those policies (Zucco Jr, 2013)

Table A3.5: Indirect effect: Institutional attitudes

| | Trust: Political | Trust: Media and companies | Democracy: Dissatisfied | Democracy: Supportive | Opposes PT |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| 1 to 2 minimum wages | -0.020 | -0.053** | -0.009 | 0.191 | 0.422* |
| | (0.016) | (0.017) | (0.131) | (0.151) | (0.183) |
| 2 to 5 minimum wages | -0.043** | -0.067*** | -0.114 | 0.280* | 0.737*** |
| | (0.016) | (0.017) | (0.130) | (0.142) | (0.179) |
| 5 to 10 minimum wages | -0.030 | -0.083** | -0.234 | 0.174 | 0.840*** |
| | (0.023) | (0.025) | (0.236) | (0.226) | (0.255) |
| 10+ minimum wages | -0.062* | -0.076* | -0.442 | 0.739 | 1.110*** |
| | (0.029) | (0.032) | (0.292) | (0.477) | (0.323) |
| Unemployed | 0.002 | 0.001 | 0.181 | 0.299 | -0.188 |
| | (0.022) | (0.021) | (0.174) | (0.216) | (0.203) |
| Bolsa Família | 0.008 | 0.039** | -0.074 | 0.171 | -0.403** |
| | (0.013) | (0.013) | (0.119) | (0.135) | (0.139) |
| Self-employed | -0.027* | -0.009 | 0.242* | -0.120 | 0.247* |
| | (0.012) | (0.013) | (0.098) | (0.105) | (0.121) |
| Employed: unregistered | 0.013 | -0.007 | 0.125 | -0.038 | 0.091 |
| | (0.023) | (0.023) | (0.195) | (0.204) | (0.190) |
| Vulnerable activity | -0.044** | -0.030 | 0.146 | 0.091 | -0.069 |
| | (0.016) | (0.018) | (0.164) | (0.187) | (0.170) |
| Middle class | -0.004 | 0.023 | -0.037 | -0.053 | 0.269 |
| | (0.020) | (0.021) | (0.194) | (0.197) | (0.210) |
| Downwards mobility | -0.006 | 0.013 | 0.076 | 0.062 | 0.263 |
| | (0.018) | (0.022) | (0.161) | (0.187) | (0.182) |
| Upwards mobility | 0.031* | 0.028+ | -0.084 | 0.346* | -0.127 |
| | (0.013) | (0.016) | (0.137) | (0.158) | (0.156) |
| White or Asian | 0.005 | -0.002 | 0.005 | 0.163 | 0.145 |
| | (0.011) | (0.012) | (0.105) | (0.107) | (0.121) |
| Catholic | 0.045*** | 0.059*** | -0.542*** | 0.137 | -0.285* |
| | (0.012) | (0.013) | (0.127) | (0.157) | (0.121) |
| Evangelical | 0.033* | 0.032* | -0.241+ | -0.028 | 0.231 |
| | (0.014) | (0.015) | (0.129) | (0.150) | (0.152) |
| Opposes racial quotas | -0.003 | 0.003 | 0.064 | -0.179 | 0.542*** |
| | (0.012) | (0.014) | (0.114) | (0.125) | (0.095) |
| Opposes minorities policies | 0.023* | 0.039*** | 0.224* | -0.177+ | 0.345** |
| | (0.011) | (0.011) | (0.100) | (0.093) | (0.108) |
| Observations | 1920 | 1927 | 1988 | 1975 | 1885 |
| Pseudo $R^2$ | | | 0.024 | 0.023 | 0.075 |

Note: Coefficients reported in odds ratio; Clustered standard errors (municipality level) in parentheses. Regressions are estimated using OLS method. Outcome variables are: Political trust, an index with continuous values ranging from 0 (lowest) to 1 (highest) in Column 1; Trust in the media and companies, an index with continuous values ranging from 0 (lowest) to 1 (highest) in Column 2; Dissatisfaction with democracy in Brazil, a dummy variable in Column 3; Support for the democratic regime vis-à-vis other forms of government, a dummy variable in Column 4; and *Antipetism*, a dummy variable in Column 5. For controls, see Table 3.2. For a description of the variables, see Table A3.1 in Appendix 3.5. Source: ESEB 2018. $^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

Table A3.6: Robustness: Political knowledge

| | Bolsonaro vote | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Political knowledge | | | | | | | Partisanship | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| 1 to 2 minimum wages | 1.352$^{+}$ | 1.390$^{+}$ | 1.330 | 1.368$^{+}$ | 1.351$^{+}$ | 1.307 | 1.321 | 1.229 | 1.221 | 1.248 |
| | (0.228) | (0.241) | (0.237) | (0.251) | (0.225) | (0.216) | (0.226) | (0.220) | (0.213) | (0.224) |
| 2 to 5 minimum wages | 1.541$^{**}$ | 1.470$^{*}$ | 1.391$^{+}$ | 1.414$^{+}$ | 1.540$^{**}$ | 1.473$^{*}$ | 1.501$^{*}$ | 1.318 | 1.315$^{+}$ | 1.345$^{+}$ |
| | (0.240) | (0.246) | (0.235) | (0.253) | (0.240) | (0.225) | (0.243) | (0.222) | (0.218) | (0.231) |
| 5 to 10 minimum wages | 1.465 | 1.214 | 1.123 | 1.105 | 1.447 | 1.368 | 1.355 | 1.305 | 1.287 | 1.249 |
| | (0.350) | (0.330) | (0.292) | (0.295) | (0.342) | (0.306) | (0.312) | (0.333) | (0.310) | (0.313) |
| 10+ minimum wages | 1.754 | 1.967$^{+}$ | 1.778$^{+}$ | 1.572 | 1.723 | 1.622 | 1.443 | 1.258 | 1.238 | 1.141 |
| | (0.637) | (0.703) | (0.605) | (0.547) | (0.618) | (0.549) | (0.491) | (0.452) | (0.429) | (0.405) |
| Unemployed | 0.618$^{*}$ | 0.633$^{*}$ | 0.666$^{*}$ | 0.654$^{*}$ | 0.615$^{*}$ | 0.650$^{*}$ | 0.659$^{*}$ | 0.570$^{*}$ | 0.603$^{*}$ | 0.614$^{*}$ |
| | (0.125) | (0.127) | (0.132) | (0.140) | (0.124) | (0.131) | (0.140) | (0.128) | (0.136) | (0.144) |
| Bolsa Família | 0.717$^{*}$ | 0.706$^{*}$ | 0.726$^{*}$ | 0.707$^{*}$ | 0.712$^{*}$ | 0.732$^{*}$ | 0.720$^{*}$ | 0.755$^{+}$ | 0.763$^{+}$ | 0.737$^{*}$ |
| | (0.097) | (0.108) | (0.114) | (0.114) | (0.098) | (0.102) | (0.103) | (0.110) | (0.113) | (0.111) |
| Self-employed | 1.106 | 1.147 | 1.141 | 1.172 | 1.110 | 1.103 | 1.127 | 1.071 | 1.053 | 1.083 |
| | (0.122) | (0.143) | (0.138) | (0.153) | (0.122) | (0.118) | (0.130) | (0.124) | (0.117) | (0.129) |
| Employed: unregistered | 0.626$^{*}$ | 0.578$^{*}$ | 0.590$^{*}$ | 0.592$^{*}$ | 0.622$^{*}$ | 0.640$^{*}$ | 0.672$^{+}$ | 0.665$^{+}$ | 0.682$^{+}$ | 0.701 |
| | (0.136) | (0.136) | (0.145) | (0.146) | (0.137) | (0.144) | (0.153) | (0.146) | (0.153) | (0.157) |
| Vulnerable activity | 0.863 | 0.917 | 0.887 | 0.843 | 0.865 | 0.851 | 0.806 | 0.891 | 0.886 | 0.853 |
| | (0.141) | (0.165) | (0.165) | (0.161) | (0.142) | (0.143) | (0.137) | (0.157) | (0.159) | (0.153) |
| Middle class | 1.479$^{*}$ | 1.687$^{**}$ | 1.736$^{**}$ | 1.501$^{*}$ | 1.494$^{*}$ | 1.511$^{*}$ | 1.361 | 1.320 | 1.327 | 1.235 |
| | (0.258) | (0.319) | (0.335) | (0.305) | (0.263) | (0.271) | (0.258) | (0.238) | (0.243) | (0.242) |
| Downwards mobility | 1.135 | 1.260 | 1.224 | 1.198 | 1.141 | 1.120 | 1.123 | 1.330 | 1.326 | 1.296 |
| | (0.190) | (0.240) | (0.228) | (0.226) | (0.192) | (0.188) | (0.189) | (0.241) | (0.240) | (0.232) |
| Upwards mobility | 0.926 | 0.879 | 0.891 | 0.893 | 0.901 | 0.906 | 0.887 | 0.979 | 0.972 | 0.954 |
| | (0.133) | (0.138) | (0.142) | (0.150) | (0.130) | (0.133) | (0.137) | (0.155) | (0.155) | (0.159) |
| White or Asian | 1.123 | 1.209 | 1.244$^{+}$ | 1.240 | 1.120 | 1.119 | 1.114 | 1.106 | 1.130 | 1.127 |
| | (0.130) | (0.160) | (0.164) | (0.170) | (0.129) | (0.127) | (0.131) | (0.127) | (0.129) | (0.132) |
| Catholic | 1.016 | 0.964 | 0.968 | 0.934 | 1.012 | 1.009 | 0.974 | 1.101 | 1.093 | 1.041 |
| | (0.143) | (0.153) | (0.155) | (0.155) | (0.139) | (0.139) | (0.138) | (0.159) | (0.156) | (0.154) |
| Evangelical | 1.640$^{***}$ | 1.574$^{**}$ | 1.427$^{*}$ | 1.293 | 1.608$^{***}$ | 1.498$^{**}$ | 1.365$^{*}$ | 1.640$^{***}$ | 1.534$^{**}$ | 1.415$^{*}$ |
| | (0.235) | (0.245) | (0.225) | (0.208) | (0.226) | (0.213) | (0.187) | (0.240) | (0.223) | (0.204) |
| Opposes racial quotas | 1.598$^{***}$ | 1.836$^{***}$ | 1.799$^{***}$ | 1.668$^{***}$ | 1.612$^{***}$ | 1.591$^{***}$ | 1.468$^{***}$ | 1.393$^{**}$ | 1.382$^{**}$ | 1.298$^{*}$ |
| | (0.161) | (0.220) | (0.217) | (0.210) | (0.166) | (0.163) | (0.159) | (0.145) | (0.144) | (0.143) |
| Opposes minorities policies | 1.477$^{***}$ | 1.466$^{**}$ | 1.560$^{***}$ | 1.400$^{**}$ | 1.502$^{***}$ | 1.575$^{***}$ | 1.462$^{***}$ | 1.425$^{**}$ | 1.478$^{***}$ | 1.418$^{**}$ |
| | (0.159) | (0.179) | (0.194) | (0.179) | (0.164) | (0.174) | (0.167) | (0.157) | (0.165) | (0.163) |
| Political knowledge | | 1.017$^{***}$ | 1.016$^{***}$ | 1.018$^{***}$ | | | | | | |
| | | (0.004) | (0.004) | (0.004) | | | | | | |
| Political knowledge: low | | | | | 1.062 | 1.082 | 0.782 | | | |
| | | | | | (0.167) | (0.167) | (0.153) | | | |
| Political knowledge: high | | | | | 1.349$^{*}$ | 1.370$^{*}$ | 1.111 | | | |
| | | | | | (0.199) | (0.203) | (0.212) | | | |
| Reported proximity to PT | | | | | | | | 0.122$^{***}$ | 0.124$^{***}$ | 0.135$^{***}$ |
| | | | | | | | | (0.040) | (0.042) | (0.044) |
| Reported proximity to PSDB | | | | | | | | 1.105 | 1.161 | 0.882 |
| | | | | | | | | (0.438) | (0.467) | (0.356) |
| Reported proximity to PSL | | | | | | | | 7.884$^{***}$ | 8.098$^{***}$ | 6.053$^{***}$ |
| | | | | | | | | (2.070) | (2.108) | (1.644) |
| Reported proximity to MDB | | | | | | | | 2.159$^{*}$ | 2.323$^{**}$ | 2.250$^{**}$ |
| | | | | | | | | (0.654) | (0.705) | (0.697) |
| Individual controls | x | x | x | x | x | x | x | x | x | x |
| Regional FE | | | x | x | | x | x | | x | x |
| Ideology | | | | x | | | x | | | x |
| Observations | 2015 | 1622 | 1622 | 1622 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 |
| Pseudo $R^2$ | 0.076 | 0.097 | 0.111 | 0.158 | 0.079 | 0.090 | 0.134 | 0.149 | 0.159 | 0.186 |

Note: $Y = 1$ when individuals voted for Bolsonaro in the first round of the 2018 elections. The baseline category for political knowledge in estimations 5 to 7 is missing information on political knowledge. For controls and estimation methods, see Table 3.2 in the main text. For a description of the variables, see Table A3.1 in Appendix 3.5. Source: ESEB 2018. $^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

Table A3.7: Robustness: Sociotropic concerns

| | Bolsonaro vote | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1 to 2 minimum wages | 1.310 | 1.329$^{+}$ | 1.315$^{+}$ | 1.319$^{+}$ | 1.317$^{+}$ | 1.306 | 1.296 | 1.384$^{+}$ |
| | (0.217) | (0.220) | (0.217) | (0.218) | (0.218) | (0.216) | (0.216) | (0.234) |
| 2 to 5 minimum wages | 1.477$^{*}$ | 1.502$^{**}$ | 1.489$^{**}$ | 1.494$^{**}$ | 1.489$^{**}$ | 1.482$^{**}$ | 1.451$^{*}$ | 1.573$^{**}$ |
| | (0.224) | (0.230) | (0.225) | (0.228) | (0.225) | (0.226) | (0.224) | (0.246) |
| 5 to 10 minimum wages | 1.392 | 1.381 | 1.380 | 1.410 | 1.404 | 1.386 | 1.344 | 1.428 |
| | (0.312) | (0.314) | (0.308) | (0.320) | (0.313) | (0.310) | (0.305) | (0.320) |
| 10+ minimum wages | 1.660 | 1.734 | 1.666 | 1.699 | 1.713 | 1.609 | 1.605 | 1.740 |
| | (0.569) | (0.611) | (0.571) | (0.588) | (0.585) | (0.552) | (0.553) | (0.622) |
| Unemployed | 0.653$^{*}$ | 0.649$^{*}$ | 0.647$^{*}$ | 0.653$^{*}$ | 0.648$^{*}$ | 0.661$^{*}$ | 0.666$^{*}$ | 0.640$^{*}$ |
| | (0.133) | (0.135) | (0.132) | (0.134) | (0.132) | (0.134) | (0.133) | (0.128) |
| Bolsa Família | 0.737$^{*}$ | 0.726$^{*}$ | 0.727$^{*}$ | 0.738$^{*}$ | 0.729$^{*}$ | 0.733$^{*}$ | 0.737$^{*}$ | 0.733$^{*}$ |
| | (0.101) | (0.100) | (0.101) | (0.101) | (0.100) | (0.101) | (0.102) | (0.099) |
| Self-employed | 1.099 | 1.108 | 1.113 | 1.110 | 1.103 | 1.112 | 1.106 | 1.100 |
| | (0.118) | (0.121) | (0.119) | (0.120) | (0.118) | (0.119) | (0.120) | (0.118) |
| Employed: unregistered | 0.645$^{*}$ | 0.647$^{*}$ | 0.644$^{*}$ | 0.660$^{+}$ | 0.646$^{*}$ | 0.644$^{*}$ | 0.655$^{+}$ | 0.641$^{*}$ |
| | (0.143) | (0.143) | (0.144) | (0.146) | (0.143) | (0.144) | (0.145) | (0.141) |
| Vulnerable activity | 0.849 | 0.852 | 0.846 | 0.849 | 0.857 | 0.847 | 0.844 | 0.867 |
| | (0.142) | (0.140) | (0.142) | (0.141) | (0.143) | (0.141) | (0.141) | (0.144) |
| Middle class | 1.495$^{*}$ | 1.452$^{*}$ | 1.467$^{*}$ | 1.487$^{*}$ | 1.491$^{*}$ | 1.464$^{*}$ | 1.471$^{*}$ | 1.490$^{*}$ |
| | (0.266) | (0.258) | (0.263) | (0.262) | (0.265) | (0.265) | (0.264) | (0.264) |
| Downwards mobility | 1.116 | 1.125 | 1.143 | 1.096 | 1.130 | 1.146 | 1.124 | 1.115 |
| | (0.187) | (0.193) | (0.195) | (0.186) | (0.188) | (0.194) | (0.189) | (0.191) |
| Upwards mobility | 0.928 | 0.927 | 0.926 | 0.925 | 0.923 | 0.933 | 0.919 | 0.901 |
| | (0.136) | (0.135) | (0.136) | (0.136) | (0.136) | (0.138) | (0.137) | (0.129) |
| White or Asian | 1.122 | 1.105 | 1.109 | 1.114 | 1.114 | 1.107 | 1.119 | 1.101 |
| | (0.127) | (0.124) | (0.125) | (0.125) | (0.126) | (0.126) | (0.128) | (0.125) |
| Catholic | 1.012 | 0.961 | 0.997 | 1.000 | 1.002 | 1.001 | 0.979 | 0.984 |
| | (0.142) | (0.135) | (0.140) | (0.141) | (0.141) | (0.140) | (0.139) | (0.139) |
| Evangelical | 1.531$^{**}$ | 1.486$^{**}$ | 1.521$^{**}$ | 1.536$^{**}$ | 1.515$^{**}$ | 1.514$^{**}$ | 1.486$^{**}$ | 1.497$^{**}$ |
| | (0.221) | (0.211) | (0.221) | (0.220) | (0.220) | (0.219) | (0.216) | (0.216) |
| Opposes racial quotas | 1.577$^{***}$ | 1.581$^{***}$ | 1.594$^{***}$ | 1.579$^{***}$ | 1.592$^{***}$ | 1.588$^{***}$ | 1.580$^{***}$ | 1.562$^{***}$ |
| | (0.158) | (0.158) | (0.162) | (0.159) | (0.161) | (0.160) | (0.159) | (0.161) |
| Opposes minorities policies | 1.546$^{***}$ | 1.517$^{***}$ | 1.555$^{***}$ | 1.536$^{***}$ | 1.551$^{***}$ | 1.574$^{***}$ | 1.541$^{***}$ | 1.485$^{***}$ |
| | (0.168) | (0.165) | (0.169) | (0.169) | (0.169) | (0.172) | (0.168) | (0.163) |
| | | Police violence | Inequality | Criminality | Law enforcement | Unemployment | | |
| Pro and dissatisfied | | 0.861 | 0.715$^{**}$ | 1.082 | 0.806 | 0.749$^{**}$ | | |
| | | (0.123) | (0.080) | (0.163) | (0.172) | (0.081) | | |
| Con and dissatisfied | | 0.591$^{***}$ | 0.913 | 0.747$^{*}$ | 0.854$^{+}$ | 1.014 | | |
| | | (0.066) | (0.125) | (0.086) | (0.081) | (0.137) | | |
| Current economic situation compared to 12 months prior | | | | | | | 0.926$^{+}$ | |
| | | | | | | | (0.043) | |
| Trusts the military | | | | | | | | 1.685$^{***}$ |
| | | | | | | | | (0.179) |
| Individual controls | x | x | x | x | x | x | x | x |
| Regional dummies | x | x | x | x | x | x | x | x |
| Observations | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 1991 | 2015 |
| Pseudo $R^2$ | 0.087 | 0.095 | 0.091 | 0.091 | 0.088 | 0.090 | 0.087 | 0.096 |

Note: Coefficients are displayed in odds ratio; Clustered standard errors (at municipality level) in parentheses. All regressions are estimated using logistic models. The outcome $Y = 1$ occurs when the individual reports having voted for Bolsonaro in the first round of the 2018 elections. Baseline income category: below one minimum wage. IFor controls, see Table 3.2 in the main text. For a description of the variables, see Table A3.1 in Appendix 3.5. Source: ESEB 2018. $^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

Table A3.8: Robustness: Interaction Economic insecurity and Cultural Attitudes

| | Bolsonaro vote | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Benchmark | Low-income | | | | Lowest-income | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | 9 |
| 1 to 2 minimum wages | 1.352$^{+}$ | 1.334$^{+}$ | 1.326$^{+}$ | 1.285 | 1.308 | 1.007 | 0.882 | 0.874 | 0.915 |
| | (0.228) | (0.226) | (0.225) | (0.214) | (0.225) | (0.374) | (0.334) | (0.318) | (0.372) |
| 2 to 5 minimum wages | 1.541$^{**}$ | 1.614$^{+}$ | 1.438 | 1.379 | 1.435 | 1.155 | 1.013 | 0.993 | 1.048 |
| | (0.240) | (0.437) | (0.432) | (0.398) | (0.447) | (0.419) | (0.376) | (0.354) | (0.416) |
| 5 to 10 minimum wages | 1.465 | 1.591 | 1.423 | 1.352 | 1.354 | 1.114 | 0.979 | 0.952 | 0.962 |
| | (0.350) | (0.523) | (0.502) | (0.453) | (0.483) | (0.466) | (0.421) | (0.390) | (0.429) |
| 10+ minimum wages | 1.754 | 1.943 | 1.749 | 1.644 | 1.491 | 1.343 | 1.177 | 1.136 | 1.032 |
| | (0.637) | (0.868) | (0.814) | (0.723) | (0.672) | (0.677) | (0.606) | (0.553) | (0.529) |
| Unemployed | 0.618$^{*}$ | 0.621$^{*}$ | 0.625$^{*}$ | 0.663$^{*}$ | 0.667$^{+}$ | 0.635$^{*}$ | 0.637$^{*}$ | 0.673$^{+}$ | 0.679$^{+}$ |
| | (0.125) | (0.126) | (0.127) | (0.134) | (0.145) | (0.132) | (0.132) | (0.140) | (0.151) |
| Bolsa Família | 0.717$^{*}$ | 0.732$^{*}$ | 0.731$^{*}$ | 0.751$^{*}$ | 0.723$^{*}$ | 0.723$^{*}$ | 0.722$^{*}$ | 0.739$^{*}$ | 0.713$^{*}$ |
| | (0.097) | (0.099) | (0.098) | (0.103) | (0.101) | (0.097) | (0.097) | (0.101) | (0.100) |
| Self-employed | 1.106 | 1.107 | 1.107 | 1.103 | 1.139 | 1.105 | 1.106 | 1.100 | 1.137 |
| | (0.122) | (0.121) | (0.121) | (0.117) | (0.130) | (0.121) | (0.121) | (0.117) | (0.130) |
| Employed: unregistered | 0.626$^{*}$ | 0.613$^{*}$ | 0.613$^{*}$ | 0.634$^{*}$ | 0.665$^{+}$ | 0.621$^{*}$ | 0.627$^{*}$ | 0.647$^{+}$ | 0.682$^{+}$ |
| | (0.136) | (0.132) | (0.133) | (0.140) | (0.149) | (0.136) | (0.138) | (0.145) | (0.155) |
| Vulnerable activity | 0.863 | 0.867 | 0.868 | 0.853 | 0.817 | 0.856 | 0.856 | 0.843 | 0.801 |
| | (0.141) | (0.144) | (0.144) | (0.144) | (0.139) | (0.141) | (0.140) | (0.141) | (0.134) |
| Middle class | 1.479$^{*}$ | 1.451$^{*}$ | 1.456$^{*}$ | 1.470$^{*}$ | 1.319 | 1.458$^{*}$ | 1.459$^{*}$ | 1.474$^{*}$ | 1.327 |
| | (0.258) | (0.257) | (0.258) | (0.265) | (0.250) | (0.257) | (0.258) | (0.264) | (0.250) |
| Downwards mobility | 1.135 | 1.104 | 1.094 | 1.072 | 1.072 | 1.131 | 1.124 | 1.106 | 1.109 |
| | (0.190) | (0.178) | (0.176) | (0.173) | (0.174) | (0.186) | (0.184) | (0.181) | (0.183) |
| Upwards mobility | 0.926 | 0.905 | 0.909 | 0.910 | 0.889 | 0.912 | 0.911 | 0.914 | 0.894 |
| | (0.133) | (0.130) | (0.131) | (0.134) | (0.137) | (0.131) | (0.131) | (0.134) | (0.136) |
| White or Asian | 1.123 | 0.904 | 0.906 | 0.902 | 0.840 | 1.054 | 1.056 | 1.055 | 1.037 |
| | (0.130) | (0.146) | (0.148) | (0.143) | (0.136) | (0.137) | (0.138) | (0.133) | (0.135) |
| Catholic | 1.016 | 1.028 | 1.030 | 1.015 | 0.988 | 1.097 | 1.094 | 1.086 | 1.033 |
| | (0.143) | (0.191) | (0.191) | (0.185) | (0.185) | (0.167) | (0.167) | (0.163) | (0.158) |
| Evangelical | 1.640$^{***}$ | 1.888$^{**}$ | 1.883$^{**}$ | 1.777$^{**}$ | 1.598$^{*}$ | 1.741$^{***}$ | 1.738$^{***}$ | 1.631$^{**}$ | 1.477$^{**}$ |
| | (0.235) | (0.404) | (0.402) | (0.380) | (0.321) | (0.271) | (0.270) | (0.255) | (0.218) |
| Opposes racial quotas | 1.598$^{***}$ | 1.608$^{***}$ | 1.590$^{***}$ | 1.621$^{***}$ | 1.418$^{*}$ | 1.607$^{***}$ | 1.662$^{***}$ | 1.652$^{***}$ | 1.467$^{***}$ |
| | (0.161) | (0.163) | (0.222) | (0.225) | (0.205) | (0.163) | (0.184) | (0.181) | (0.170) |
| Opposes minorities policies | 1.477$^{***}$ | 1.472$^{***}$ | 1.653$^{***}$ | 1.709$^{***}$ | 1.649$^{***}$ | 1.479$^{***}$ | 1.526$^{***}$ | 1.576$^{***}$ | 1.491$^{***}$ |
| | (0.159) | (0.158) | (0.237) | (0.246) | (0.243) | (0.157) | (0.168) | (0.176) | (0.176) |
| Low-income × White/Asian | | 1.580$^{*}$ | 1.574$^{*}$ | 1.580$^{*}$ | 1.867$^{**}$ | | | | |
| | | (0.360) | (0.360) | (0.365) | (0.452) | | | | |
| Low-income × Catholic | | 0.955 | 0.962 | 0.983 | 0.913 | | | | |
| | | (0.252) | (0.253) | (0.255) | (0.253) | | | | |
| Low-income × Evangelical | | 0.766 | 0.772 | 0.757 | 0.756 | | | | |
| | | (0.225) | (0.226) | (0.219) | (0.227) | | | | |
| Low-income × Opposes racial quotas | | | 1.029 | 0.963 | 1.065 | | | | |
| | | | (0.218) | (0.204) | (0.237) | | | | |
| Low-income × Opposes minorities policies | | | 0.786 | 0.806 | 0.755 | | | | |
| | | | (0.157) | (0.160) | (0.153) | | | | |
| Lowest income × White/Asian | | | | | | 1.483 | 1.461 | 1.453 | 1.660 |
| | | | | | | (0.467) | (0.455) | (0.451) | (0.525) |
| Lowest income × Catholic | | | | | | 0.582 | 0.610 | 0.619 | 0.591 |
| | | | | | | (0.226) | (0.239) | (0.242) | (0.252) |
| Lowest income × Evangelical | | | | | | 0.640 | 0.662 | 0.646 | 0.620 |
| | | | | | | (0.250) | (0.261) | (0.247) | (0.260) |
| Lowest income × Opposes racial quotas | | | | | | | 0.820 | 0.792 | 0.957 |
| | | | | | | | (0.224) | (0.220) | (0.267) |
| Lowest income × Opposes minorities policies | | | | | | | 0.833 | 0.891 | 0.836 |
| | | | | | | | (0.223) | (0.243) | (0.231) |
| Observations | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 |
| Pseudo $R^2$ | 0.076 | 0.079 | 0.079 | 0.090 | 0.135 | 0.078 | 0.079 | 0.089 | 0.133 |

Note: $Y = 1$ when individuals voted for Bolsonaro in the first round of the 2018 elections. Low-income: household income below the sample's median. Lowest-income: household income below one minimum wage. For controls and estimation method, see Table 3.2 in the main text. For a description of the variables, see Table A3.1. Source: ESEB 2018. $^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

Table A3.9: Difference: Spontaneously reported income and only reported income bracket

| | Spontaneous income | | Only income bracket | | Difference | |
|---|---|---|---|---|---|---|
| | mean | sd | mean | sd | b | t |
| Bolsonaro vote | 0.346 | 0.476 | 0.286 | 0.453 | 0.060* | (2.225) |
| Trust: political | 0.346 | 0.225 | 0.337 | 0.239 | 0.009 | (0.612) |
| Trust: companies and media | 0.411 | 0.258 | 0.414 | 0.272 | -0.003 | (-0.198) |
| Reported animosity against PT | 0.279 | 0.449 | 0.256 | 0.437 | 0.023 | (0.890) |
| Democracy:dissatisfied | 0.375 | 0.484 | 0.419 | 0.494 | -0.043 | (-1.479) |
| Democracy:supports | 0.716 | 0.451 | 0.602 | 0.490 | 0.114*** | (3.950) |
| Corruption: no tolerance | 0.433 | 0.496 | 0.380 | 0.486 | 0.053 | (1.839) |
| Corruption: not punished | 0.513 | 0.500 | 0.515 | 0.501 | -0.002 | (-0.072) |
| Unemployed | 0.090 | 0.286 | 0.075 | 0.264 | 0.015 | (0.923) |
| Bolsa Família | 0.320 | 0.466 | 0.316 | 0.466 | 0.003 | (0.122) |
| Middle class | 0.071 | 0.257 | 0.078 | 0.269 | -0.007 | (-0.438) |
| Downwards mobility | 0.090 | 0.286 | 0.093 | 0.291 | -0.003 | (-0.197) |
| Upwards mobility | 0.184 | 0.388 | 0.142 | 0.349 | 0.043* | (2.015) |
| Self-employed | 0.289 | 0.453 | 0.310 | 0.463 | -0.021 | (-0.773) |
| Employed: unregistered | 0.073 | 0.260 | 0.036 | 0.187 | 0.037** | (3.104) |
| Vulnerable activity | 0.116 | 0.320 | 0.072 | 0.259 | 0.044** | (2.723) |
| Opposes racial quotas | 0.285 | 0.451 | 0.223 | 0.417 | 0.062* | (2.473) |
| Opposes minorities policies | 0.473 | 0.499 | 0.413 | 0.493 | 0.060* | (2.060) |
| White or Asian | 0.337 | 0.473 | 0.349 | 0.477 | -0.012 | (-0.433) |
| Catholic | 0.506 | 0.500 | 0.518 | 0.500 | -0.012 | (-0.417) |
| Evangelical | 0.269 | 0.443 | 0.259 | 0.439 | 0.010 | (0.377) |
| Male | 0.481 | 0.500 | 0.461 | 0.499 | 0.020 | (0.675) |
| Education | 4.445 | 1.534 | 4.181 | 1.546 | 0.264** | (2.877) |
| Married | 0.361 | 0.481 | 0.349 | 0.477 | 0.012 | (0.424) |
| Age | 41.905 | 15.302 | 40.768 | 17.368 | 1.137 | (1.120) |
| Left-wing | 0.153 | 0.360 | 0.142 | 0.349 | 0.011 | (0.526) |
| Center | 0.213 | 0.410 | 0.163 | 0.370 | 0.050* | (2.257) |
| Right-wing | 0.457 | 0.498 | 0.383 | 0.487 | 0.075* | (2.569) |
| Does not know ideology | 0.150 | 0.358 | 0.268 | 0.444 | -0.118*** | (-4.582) |
| Observations | 1934 | | 332 | | 2266 | |

Table A3.10: Different income variables: continuous (per capita) income

| | Bolsonaro vote | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Continuous income | | | | | | | Continuous per capita income | | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | | (7) | (8) | (9) | (10) | (11) | (12) | | |
| | | | | | | Rad | Swi | | | | | | Rad | Swi | |
| Continuous income | 1.233* | 1.209* | 1.214* | 1.196+ | 1.115 | 1.286** | 1.130 | | | | | | | | |
| | (0.116) | (0.108) | (0.119) | (0.116) | (0.107) | (0.124) | (0.196) | | | | | | | | |
| Continuous per capita income | | | | | | | | 1.222* | 1.188* | 1.202* | 1.193* | 1.080 | 1.245* | 1.130 | |
| | | | | | | | | (0.103) | (0.092) | (0.105) | (0.104) | (0.095) | (0.132) | (0.172) | |
| Unemployed | 0.582** | 0.619* | 0.685+ | 0.576** | 0.607* | 0.517* | 0.632 | 0.589* | 0.623* | 0.694+ | 0.584* | 0.605* | 0.522* | 0.638 | |
| | (0.118) | (0.131) | (0.143) | (0.119) | (0.134) | (0.138) | (0.196) | (0.121) | (0.133) | (0.146) | (0.122) | (0.133) | (0.141) | (0.200) | |
| Bolsa Família | 0.712* | 0.707* | 0.715* | 0.728* | 0.789 | 0.730+ | 0.733 | 0.731* | 0.720* | 0.732* | 0.749* | 0.789 | 0.745+ | 0.745 | |
| | (0.099) | (0.100) | (0.105) | (0.102) | (0.115) | (0.122) | (0.159) | (0.102) | (0.101) | (0.108) | (0.106) | (0.114) | (0.126) | (0.166) | |
| Self-employed | 1.115 | 1.142 | 1.123 | 1.112 | 1.052 | 0.947 | 1.394+ | 1.122 | 1.148 | 1.128 | 1.117 | 1.054 | 0.961 | 1.393+ | |
| | (0.132) | (0.139) | (0.138) | (0.132) | (0.142) | (0.144) | (0.272) | (0.134) | (0.141) | (0.140) | (0.134) | (0.143) | (0.147) | (0.273) | |
| Employed: unregistered | 0.623* | 0.684+ | 0.600* | 0.625* | 0.614* | 0.556+ | 0.726 | 0.623* | 0.681+ | 0.599* | 0.626* | 0.611* | 0.551+ | 0.727 | |
| | (0.139) | (0.157) | (0.143) | (0.142) | (0.146) | (0.172) | (0.244) | (0.139) | (0.156) | (0.143) | (0.142) | (0.146) | (0.171) | (0.246) | |
| Vulnerable activity | 0.796 | 0.745+ | 0.825 | 0.790 | 0.837 | 0.788 | 0.843 | 0.796 | 0.746+ | 0.825 | 0.789 | 0.838 | 0.783 | 0.846 | |
| | (0.138) | (0.132) | (0.150) | (0.137) | (0.157) | (0.185) | (0.217) | (0.138) | (0.133) | (0.150) | (0.137) | (0.157) | (0.183) | (0.218) | |
| Middle class | 1.455* | 1.285 | 1.396+ | 1.454+ | 1.467+ | 1.542+ | 1.230 | 1.460* | 1.292 | 1.401+ | 1.457+ | 1.476+ | 1.558+ | 1.236 | |
| | (0.277) | (0.261) | (0.275) | (0.279) | (0.309) | (0.386) | (0.374) | (0.281) | (0.264) | (0.277) | (0.283) | (0.314) | (0.393) | (0.376) | |
| Downwards mobility | 0.918 | 0.895 | 0.918 | 0.912 | 0.901 | 0.920 | 0.991 | 0.932 | 0.909 | 0.928 | 0.924 | 0.906 | 0.938 | 0.996 | |
| | (0.170) | (0.167) | (0.171) | (0.179) | (0.188) | (0.204) | (0.272) | (0.169) | (0.167) | (0.170) | (0.178) | (0.187) | (0.209) | (0.272) | |
| Upwards mobility | 0.970 | 0.950 | 0.941 | 0.970 | 0.953 | 0.939 | 1.135 | 0.969 | 0.948 | 0.940 | 0.968 | 0.957 | 0.939 | 1.132 | |
| | (0.142) | (0.150) | (0.136) | (0.145) | (0.150) | (0.190) | (0.243) | (0.141) | (0.148) | (0.136) | (0.144) | (0.149) | (0.189) | (0.244) | |
| White or Asian | 1.086 | 1.093 | 1.182 | 1.082 | 1.036 | 0.841 | 1.490* | 1.067 | 1.081 | 1.162 | 1.064 | 1.033 | 0.826 | 1.477+ | |
| | (0.152) | (0.153) | (0.171) | (0.154) | (0.157) | (0.137) | (0.301) | (0.149) | (0.152) | (0.168) | (0.151) | (0.158) | (0.136) | (0.297) | |
| Catholic | 0.902 | 0.842 | 0.792 | 0.903 | 1.014 | 1.056 | 0.790 | 0.904 | 0.841 | 0.792 | 0.905 | 1.013 | 1.049 | 0.794 | |
| | (0.126) | (0.124) | (0.117) | (0.127) | (0.143) | (0.173) | (0.185) | (0.126) | (0.124) | (0.117) | (0.127) | (0.144) | (0.172) | (0.185) | |
| Evangelical | 1.519** | 1.263 | 1.411* | 1.544** | 1.555** | 1.617* | 1.399 | 1.523** | 1.264 | 1.409* | 1.547** | 1.556** | 1.608* | 1.406 | |
| | (0.220) | (0.184) | (0.215) | (0.230) | (0.230) | (0.305) | (0.325) | (0.220) | (0.184) | (0.215) | (0.230) | (0.230) | (0.303) | (0.327) | |
| Opposes racial quotas | 1.758*** | 1.587*** | 1.763*** | 1.805*** | 1.586*** | 1.663*** | 1.750** | 1.761*** | 1.591*** | 1.766*** | 1.807*** | 1.586*** | 1.679*** | 1.748** | |
| | (0.194) | (0.188) | (0.209) | (0.201) | (0.188) | (0.226) | (0.334) | (0.193) | (0.188) | (0.209) | (0.201) | (0.188) | (0.227) | (0.334) | |
| Opposes minorities policies | 1.423** | 1.400** | 1.398** | 1.439** | 1.395** | 1.352* | 1.553* | 1.428** | 1.405** | 1.406** | 1.444** | 1.396** | 1.351* | 1.562* | |
| | (0.168) | (0.175) | (0.172) | (0.169) | (0.171) | (0.204) | (0.295) | (0.168) | (0.175) | (0.173) | (0.169) | (0.172) | (0.204) | (0.300) | |
| Trust: political | | | 1.606 | | | | | | | 1.600 | | | | | |
| | | | (0.520) | | | | | | | (0.515) | | | | | |
| Trust: companies and media | | | 0.587* | | | | | | | 0.577* | | | | | |
| | | | (0.157) | | | | | | | (0.153) | | | | | |
| Democracy:dissatisfied | | | 0.736** | | | | | | | 0.736** | | | | | |
| | | | (0.081) | | | | | | | (0.082) | | | | | |
| Democracy:supports | | | 0.567*** | | | | | | | 0.568*** | | | | | |
| | | | (0.074) | | | | | | | (0.074) | | | | | |
| Corruption: no tolerance | | | | 1.416** | | | | | | | 1.417** | | | | |
| | | | | (0.158) | | | | | | | (0.157) | | | | |
| Corruption: not punished | | | | 1.161 | | | | | | | 1.166 | | | | |
| | | | | (0.119) | | | | | | | (0.120) | | | | |
| Reported animosity against PT | | | | | 4.000*** | | | | | | | 4.009*** | | | |
| | | | | | (0.466) | | | | | | | (0.470) | | | |
| Observations | 1740 | 1740 | 1599 | 1707 | 1629 | 973 | 767 | 1740 | 1740 | 1599 | 1707 | 1629 | 973 | 767 | |
| Pseudo $R^2$ | 0.077 | 0.134 | 0.087 | 0.086 | 0.142 | 0.084 | 0.088 | 0.077 | 0.134 | 0.087 | 0.087 | 0.142 | 0.084 | 0.088 | |

Note: Coefficients are displayed in odds ratio; Clustered standard errors (at municipality level) in parentheses. All regressions are estimated using logistic models. The outcome $Y = 1$ occurs when the individual reports having voted for Bolsonaro in the first round of the 2018 elections. Income variables are computed using log of reported household monthly income. For controls, see Table 3.2 in the main text. For a description of the variables, see Table A3.1 in Appendix 3.5. Source: ESEB 2018.$^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

Table A3.11: Robustness: Religion and religiosity

| | Bolsonaro vote | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| 1 to 2 minimum wages | 1.366$^{+}$ | 1.323$^{+}$ | 1.346$^{+}$ | 1.376$^{+}$ | 1.333$^{+}$ | 1.352$^{+}$ |
| | (0.229) | (0.218) | (0.229) | (0.230) | (0.219) | (0.229) |
| 2 to 5 minimum wages | 1.563$^{**}$ | 1.499$^{**}$ | 1.532$^{**}$ | 1.574$^{**}$ | 1.508$^{**}$ | 1.538$^{**}$ |
| | (0.243) | (0.227) | (0.245) | (0.245) | (0.229) | (0.247) |
| 5 to 10 minimum wages | 1.495$^{+}$ | 1.420 | 1.383 | 1.509$^{+}$ | 1.434 | 1.393 |
| | (0.353) | (0.314) | (0.318) | (0.355) | (0.316) | (0.320) |
| 10+ minimum wages | 1.802 | 1.707 | 1.489 | 1.794 | 1.697 | 1.485 |
| | (0.659) | (0.591) | (0.513) | (0.650) | (0.581) | (0.509) |
| Unemployed | 0.619$^{*}$ | 0.654$^{*}$ | 0.655$^{*}$ | 0.618$^{*}$ | 0.654$^{*}$ | 0.656$^{+}$ |
| | (0.125) | (0.132) | (0.141) | (0.125) | (0.132) | (0.141) |
| Bolsa Família | 0.720$^{*}$ | 0.739$^{*}$ | 0.711$^{*}$ | 0.722$^{*}$ | 0.742$^{*}$ | 0.713$^{*}$ |
| | (0.097) | (0.101) | (0.100) | (0.097) | (0.102) | (0.100) |
| Self-employed | 1.096 | 1.091 | 1.130 | 1.101 | 1.096 | 1.134 |
| | (0.121) | (0.117) | (0.130) | (0.121) | (0.117) | (0.130) |
| Employed: unregistered | 0.612$^{*}$ | 0.631$^{*}$ | 0.674$^{+}$ | 0.607$^{*}$ | 0.625$^{*}$ | 0.671$^{+}$ |
| | (0.132) | (0.139) | (0.151) | (0.131) | (0.138) | (0.151) |
| Vulnerable activity | 0.865 | 0.851 | 0.808 | 0.867 | 0.852 | 0.810 |
| | (0.142) | (0.143) | (0.136) | (0.143) | (0.143) | (0.137) |
| Middle class | 1.478$^{*}$ | 1.495$^{*}$ | 1.352 | 1.468$^{*}$ | 1.485$^{*}$ | 1.346 |
| | (0.258) | (0.266) | (0.253) | (0.259) | (0.266) | (0.254) |
| Downwards mobility | 1.137 | 1.119 | 1.123 | 1.133 | 1.114 | 1.120 |
| | (0.189) | (0.186) | (0.188) | (0.186) | (0.183) | (0.186) |
| Upwards mobility | 0.916 | 0.918 | 0.904 | 0.911 | 0.912 | 0.901 |
| | (0.131) | (0.133) | (0.137) | (0.130) | (0.133) | (0.137) |
| White or Asian | 1.134 | 1.133 | 1.132 | 1.135 | 1.134 | 1.133 |
| | (0.133) | (0.129) | (0.133) | (0.133) | (0.130) | (0.133) |
| Catholic | 0.999 | 0.996 | 0.948 | 1.100 | 1.102 | 1.020 |
| | (0.141) | (0.139) | (0.137) | (0.211) | (0.209) | (0.194) |
| Evangelical | 1.524$^{**}$ | 1.421$^{*}$ | 1.317$^{*}$ | 1.789$^{*}$ | 1.685$^{*}$ | 1.462$^{+}$ |
| | (0.222) | (0.208) | (0.184) | (0.418) | (0.399) | (0.322) |
| Opposes racial quotas | 1.591$^{***}$ | 1.570$^{***}$ | 1.443$^{***}$ | 1.597$^{***}$ | 1.576$^{***}$ | 1.447$^{***}$ |
| | (0.162) | (0.159) | (0.155) | (0.164) | (0.161) | (0.155) |
| Opposes minorities policies | 1.468$^{***}$ | 1.536$^{***}$ | 1.441$^{**}$ | 1.460$^{***}$ | 1.528$^{***}$ | 1.435$^{**}$ |
| | (0.157) | (0.166) | (0.163) | (0.156) | (0.165) | (0.163) |
| Attends religious cerimonies > 1/week | 1.246$^{*}$ | 1.249$^{*}$ | 1.158 | 1.597$^{+}$ | 1.622$^{+}$ | 1.383 |
| | (0.123) | (0.124) | (0.117) | (0.402) | (0.419) | (0.372) |
| Catholic × Active | | | | 0.752 | 0.741 | 0.809 |
| | | | | (0.216) | (0.217) | (0.248) |
| Evangelical × Active | | | | 0.695 | 0.680 | 0.783 |
| | | | | (0.236) | (0.233) | (0.272) |
| Individual controls | x | x | x | x | x | x |
| Regional dummies | | x | x | | x | x |
| Ideology | | | x | | | x |
| Observations | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 |
| Pseudo $R^2$ | 0.078 | 0.089 | 0.131 | 0.079 | 0.089 | 0.132 |

Note: $Y = 1$ when individuals voted for Bolsonaro in the first round of the 2018 elections. For controls and estimation method, see Table 3.2 in the main text. For a description of the variables, see Table A3.1. Source: ESEB 2018. $^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

Table A3.12: Vulnerability measures

| | Bolsonaro vote | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Vulnerability: | Self-employed | | Unregistered | | Self-empoloyed or unregistered | | Low-income | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1 to 2 minimum wages | 1.316 | 1.344$^{+}$ | 1.292 | 1.327$^{+}$ | 1.313 | 1.344$^{+}$ | 1.303 | 1.332 |
| | (0.224) | (0.235) | (0.214) | (0.226) | (0.223) | (0.235) | (0.224) | (0.235) |
| 2 to 5 minimum wages | 1.479$^{*}$ | 1.514$^{*}$ | 1.471$^{*}$ | 1.520$^{**}$ | 1.481$^{*}$ | 1.519$^{*}$ | 1.474$^{*}$ | 1.524$^{*}$ |
| | (0.228) | (0.247) | (0.222) | (0.243) | (0.229) | (0.249) | (0.254) | (0.276) |
| 5 to 10 minimum wages | 1.426 | 1.388 | 1.395 | 1.379 | 1.423 | 1.391 | 1.430 | 1.407 |
| | (0.320) | (0.323) | (0.313) | (0.321) | (0.320) | (0.325) | (0.344) | (0.349) |
| 10+ minimum wages | 1.731 | 1.517 | 1.744 | 1.556 | 1.749 | 1.540 | 1.760 | 1.552 |
| | (0.587) | (0.518) | (0.600) | (0.536) | (0.600) | (0.531) | (0.617) | (0.546) |
| Unemployed | 0.670$^{*}$ | 0.669$^{+}$ | 0.652$^{*}$ | 0.648$^{*}$ | 0.656$^{*}$ | 0.659$^{*}$ | 0.666$^{*}$ | 0.661$^{+}$ |
| | (0.132) | (0.141) | (0.128) | (0.135) | (0.130) | (0.139) | (0.133) | (0.140) |
| Bolsa Família | 0.733$^{*}$ | 0.703$^{*}$ | 0.733$^{*}$ | 0.707$^{*}$ | 0.736$^{*}$ | 0.706$^{*}$ | 0.730$^{*}$ | 0.701$^{*}$ |
| | (0.101) | (0.099) | (0.101) | (0.100) | (0.101) | (0.099) | (0.101) | (0.099) |
| → *Employment type* | Self-employed | | Unregistered | | Self-emp or Unreg | | Low-income | |
| ↓ *Activity of vulnerable worker* | | | | | | | | |
| Agriculture | 1.154 | 1.140 | | | 1.006 | 1.011 | 0.872 | 0.886 |
| | (0.396) | (0.397) | | | (0.343) | (0.348) | (0.321) | (0.333) |
| Industry | 0.646 | 0.708 | 0.289 | 0.314 | 0.527$^{+}$ | 0.581 | 0.967 | 0.991 |
| | (0.258) | (0.272) | (0.236) | (0.287) | (0.189) | (0.209) | (0.354) | (0.364) |
| Construction | 0.891 | 0.881 | 0.805 | 0.782 | 0.862 | 0.858 | 0.876 | 0.824 |
| | (0.236) | (0.237) | (0.697) | (0.741) | (0.221) | (0.225) | (0.261) | (0.251) |
| Transportation | 1.039 | 1.167 | 2.028 | 2.449 | 1.054 | 1.192 | 0.934 | 1.183 |
| | (0.392) | (0.475) | (2.785) | (4.950) | (0.385) | (0.478) | (0.451) | (0.681) |
| Services | 1.168 | 1.250 | 0.784 | 0.894 | 1.089 | 1.182 | 1.142 | 1.164 |
| | (0.193) | (0.221) | (0.299) | (0.313) | (0.168) | (0.189) | (0.205) | (0.213) |
| Middle class | 1.504$^{*}$ | 1.351 | 1.513$^{*}$ | 1.364$^{+}$ | 1.510$^{*}$ | 1.356$^{+}$ | 1.503$^{*}$ | 1.355$^{+}$ |
| | (0.264) | (0.249) | (0.264) | (0.250) | (0.264) | (0.250) | (0.263) | (0.249) |
| Downwards mobility | 1.102 | 1.106 | 1.109 | 1.114 | 1.112 | 1.116 | 1.114 | 1.121 |
| | (0.184) | (0.186) | (0.188) | (0.190) | (0.186) | (0.188) | (0.187) | (0.189) |
| Upwards mobility | 0.931 | 0.918 | 0.939 | 0.922 | 0.932 | 0.919 | 0.933 | 0.917 |
| | (0.137) | (0.140) | (0.137) | (0.140) | (0.136) | (0.139) | (0.137) | (0.141) |
| White or Asian | 1.117 | 1.123 | 1.122 | 1.126 | 1.118 | 1.122 | 1.114 | 1.120 |
| | (0.126) | (0.131) | (0.127) | (0.131) | (0.126) | (0.131) | (0.126) | (0.130) |
| Catholic | 1.007 | 0.954 | 1.008 | 0.953 | 1.003 | 0.951 | 1.010 | 0.954 |
| | (0.141) | (0.139) | (0.141) | (0.137) | (0.141) | (0.137) | (0.141) | (0.137) |
| Evangelical | 1.530$^{**}$ | 1.389$^{*}$ | 1.525$^{**}$ | 1.377$^{*}$ | 1.524$^{**}$ | 1.384$^{*}$ | 1.524$^{**}$ | 1.376$^{*}$ |
| | (0.218) | (0.190) | (0.218) | (0.187) | (0.216) | (0.188) | (0.217) | (0.188) |
| Opposes racial quotas | 1.566$^{***}$ | 1.436$^{***}$ | 1.584$^{***}$ | 1.449$^{***}$ | 1.565$^{***}$ | 1.434$^{***}$ | 1.566$^{***}$ | 1.436$^{***}$ |
| | (0.156) | (0.152) | (0.157) | (0.153) | (0.156) | (0.152) | (0.157) | (0.153) |
| Opposes minorities policies | 1.546$^{***}$ | 1.447$^{**}$ | 1.561$^{***}$ | 1.463$^{***}$ | 1.552$^{***}$ | 1.452$^{**}$ | 1.542$^{***}$ | 1.445$^{**}$ |
| | (0.167) | (0.164) | (0.170) | (0.167) | (0.168) | (0.165) | (0.166) | (0.164) |
| Individual controls | x | x | x | x | x | x | x | x |
| Regional dummies | x | x | x | x | x | x | x | x |
| Ideology | | x | | x | | x | | x |
| Observations | 2015 | 2015 | 2012 | 2012 | 2015 | 2015 | 2015 | 2015 |
| Pseudo $R^2$ | 0.086 | 0.129 | 0.086 | 0.130 | 0.086 | 0.130 | 0.085 | 0.129 |

Note: $Y = 1$ when individuals voted for Bolsonaro in the first round of the 2018 elections. For controls and estimation method, see Table 3.2 in the main text. For a description of the variables, see Table A3.1. Source: ESEB 2018. $^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

Table A3.13: Robustness: Democratic attitudes

| | Bolsonaro vote | | | | |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| 1 to 2 minimum wages | 1.352$^{+}$ | 1.371$^{+}$ | 1.371$^{+}$ | 1.321 | 1.363$^{+}$ |
| | (0.228) | (0.237) | (0.237) | (0.224) | (0.237) |
| 2 to 5 minimum wages | 1.541$^{**}$ | 1.543$^{**}$ | 1.543$^{**}$ | 1.467$^{*}$ | 1.530$^{**}$ |
| | (0.240) | (0.249) | (0.249) | (0.228) | (0.250) |
| 5 to 10 minimum wages | 1.465 | 1.442 | 1.442 | 1.362 | 1.384 |
| | (0.350) | (0.356) | (0.356) | (0.314) | (0.328) |
| 10+ minimum wages | 1.754 | 1.749 | 1.749 | 1.634 | 1.477 |
| | (0.637) | (0.623) | (0.623) | (0.550) | (0.493) |
| Unemployed | 0.618$^{*}$ | 0.681$^{+}$ | 0.681$^{+}$ | 0.717 | 0.720 |
| | (0.125) | (0.139) | (0.139) | (0.146) | (0.155) |
| Bolsa Família | 0.717$^{*}$ | 0.734$^{*}$ | 0.734$^{*}$ | 0.752$^{*}$ | 0.725$^{*}$ |
| | (0.097) | (0.103) | (0.103) | (0.107) | (0.105) |
| Self-employed | 1.106 | 1.127 | 1.127 | 1.123 | 1.159 |
| | (0.122) | (0.126) | (0.126) | (0.123) | (0.135) |
| Employed: unregistered | 0.626$^{*}$ | 0.645$^{*}$ | 0.645$^{*}$ | 0.662$^{+}$ | 0.706 |
| | (0.136) | (0.144) | (0.144) | (0.152) | (0.163) |
| Vulnerable activity | 0.863 | 0.904 | 0.903 | 0.892 | 0.846 |
| | (0.141) | (0.150) | (0.150) | (0.151) | (0.143) |
| Middle class | 1.479$^{*}$ | 1.491$^{*}$ | 1.491$^{*}$ | 1.509$^{*}$ | 1.345 |
| | (0.258) | (0.269) | (0.269) | (0.277) | (0.260) |
| Downwards mobility | 1.135 | 1.126 | 1.126 | 1.103 | 1.092 |
| | (0.190) | (0.193) | (0.194) | (0.191) | (0.189) |
| Upwards mobility | 0.926 | 0.914 | 0.914 | 0.911 | 0.895 |
| | (0.133) | (0.133) | (0.133) | (0.134) | (0.137) |
| White or Asian | 1.123 | 1.157 | 1.157 | 1.157 | 1.156 |
| | (0.130) | (0.138) | (0.139) | (0.137) | (0.140) |
| Catholic | 1.016 | 0.949 | 0.949 | 0.942 | 0.905 |
| | (0.143) | (0.135) | (0.135) | (0.134) | (0.132) |
| Evangelical | 1.640$^{***}$ | 1.550$^{**}$ | 1.549$^{**}$ | 1.436$^{*}$ | 1.326$^{*}$ |
| | (0.235) | (0.224) | (0.223) | (0.209) | (0.184) |
| Opposes racial quotas | 1.598$^{***}$ | 1.572$^{***}$ | 1.572$^{***}$ | 1.555$^{***}$ | 1.430$^{***}$ |
| | (0.161) | (0.160) | (0.160) | (0.157) | (0.151) |
| Opposes minorities policies | 1.477$^{***}$ | 1.490$^{***}$ | 1.490$^{***}$ | 1.566$^{***}$ | 1.459$^{**}$ |
| | (0.159) | (0.167) | (0.167) | (0.178) | (0.171) |
| Democracy:dissatisfied | | 0.713$^{***}$ | 0.710$^{*}$ | 0.700$^{*}$ | 0.759 |
| | | (0.073) | (0.122) | (0.123) | (0.143) |
| Democracy:supports | | 0.640$^{***}$ | 0.638$^{**}$ | 0.667$^{**}$ | 0.684$^{*}$ |
| | | (0.074) | (0.096) | (0.099) | (0.103) |
| Democracy: dissatisfied × Support | | | 1.007 | 1.015 | 1.005 |
| | | | (0.211) | (0.216) | (0.225) |
| Observations | 2015 | 1950 | 1950 | 1950 | 1950 |
| Pseudo $R^2$ | 0.076 | 0.084 | 0.084 | 0.094 | 0.136 |

Note: $Y = 1$ when individuals voted for Bolsonaro in the first round of the 2018 elections. For controls and estimation method, see Table 3.2 in the main text. For a description of the variables, see Table A3.1. Source: ESEB 2018. $^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

Table A3.14: Robustness: Geographic control: Macroregion, state and mesoregion within-variance

| | Bolsonaro vote | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Macroregion | | State | | Mesoregion | | Microregion | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1 to 2 minimum wages | 1.310 | 1.338$^{+}$ | 1.300 | 1.329 | 1.404$^{+}$ | 1.442$^{+}$ | 1.435$^{+}$ | 1.482$^{*}$ |
| | (0.217) | (0.229) | (0.222) | (0.233) | (0.255) | (0.269) | (0.266) | (0.284) |
| 2 to 5 minimum wages | 1.477$^{*}$ | 1.519$^{**}$ | 1.394$^{*}$ | 1.431$^{*}$ | 1.561$^{**}$ | 1.605$^{**}$ | 1.578$^{**}$ | 1.621$^{*}$ |
| | (0.224) | (0.243) | (0.220) | (0.240) | (0.267) | (0.292) | (0.276) | (0.305) |
| 5 to 10 minimum wages | 1.392 | 1.367 | 1.246 | 1.225 | 1.284 | 1.275 | 1.252 | 1.242 |
| | (0.312) | (0.317) | (0.285) | (0.295) | (0.322) | (0.334) | (0.320) | (0.332) |
| 10+ minimum wages | 1.660 | 1.460 | 1.470 | 1.275 | 1.507 | 1.302 | 1.465 | 1.249 |
| | (0.569) | (0.500) | (0.495) | (0.432) | (0.525) | (0.472) | (0.502) | (0.448) |
| Unemployed | 0.653$^{*}$ | 0.654$^{*}$ | 0.598$^{**}$ | 0.597$^{*}$ | 0.598$^{*}$ | 0.613$^{*}$ | 0.568$^{*}$ | 0.589$^{*}$ |
| | (0.133) | (0.141) | (0.119) | (0.128) | (0.131) | (0.144) | (0.127) | (0.141) |
| Bolsa Família | 0.737$^{*}$ | 0.708$^{*}$ | 0.759$^{+}$ | 0.722$^{*}$ | 0.778 | 0.746$^{+}$ | 0.771 | 0.747$^{+}$ |
| | (0.101) | (0.099) | (0.107) | (0.105) | (0.122) | (0.119) | (0.125) | (0.122) |
| Self-employed | 1.099 | 1.136 | 1.089 | 1.127 | 1.104 | 1.147 | 1.070 | 1.112 |
| | (0.118) | (0.130) | (0.116) | (0.127) | (0.122) | (0.134) | (0.122) | (0.134) |
| Employed: unregistered | 0.645$^{*}$ | 0.685$^{+}$ | 0.655$^{+}$ | 0.688$^{+}$ | 0.642$^{+}$ | 0.669 | 0.589$^{*}$ | 0.620$^{+}$ |
| | (0.143) | (0.154) | (0.148) | (0.156) | (0.159) | (0.164) | (0.153) | (0.159) |
| Vulnerable activity | 0.849 | 0.807 | 0.835 | 0.799 | 0.845 | 0.807 | 0.859 | 0.825 |
| | (0.142) | (0.136) | (0.140) | (0.133) | (0.150) | (0.140) | (0.158) | (0.148) |
| Middle class | 1.495$^{*}$ | 1.350 | 1.512$^{*}$ | 1.358 | 1.421$^{+}$ | 1.268 | 1.408$^{+}$ | 1.262 |
| | (0.266) | (0.253) | (0.277) | (0.265) | (0.280) | (0.273) | (0.285) | (0.277) |
| Downwards mobility | 1.116 | 1.120 | 1.156 | 1.156 | 1.106 | 1.119 | 1.136 | 1.150 |
| | (0.187) | (0.188) | (0.201) | (0.202) | (0.207) | (0.209) | (0.223) | (0.226) |
| Upwards mobility | 0.928 | 0.912 | 0.945 | 0.926 | 0.959 | 0.958 | 0.950 | 0.955 |
| | (0.136) | (0.139) | (0.142) | (0.146) | (0.157) | (0.165) | (0.162) | (0.171) |
| White or Asian | 1.122 | 1.126 | 1.133 | 1.142 | 1.125 | 1.146 | 1.133 | 1.151 |
| | (0.127) | (0.131) | (0.134) | (0.138) | (0.139) | (0.146) | (0.150) | (0.157) |
| Catholic | 1.012 | 0.958 | 0.999 | 0.938 | 0.952 | 0.902 | 0.949 | 0.901 |
| | (0.142) | (0.138) | (0.142) | (0.138) | (0.146) | (0.139) | (0.148) | (0.144) |
| Evangelical | 1.531$^{**}$ | 1.382$^{*}$ | 1.510$^{**}$ | 1.365$^{*}$ | 1.551$^{**}$ | 1.399$^{*}$ | 1.519$^{**}$ | 1.371$^{*}$ |
| | (0.221) | (0.190) | (0.220) | (0.191) | (0.239) | (0.203) | (0.244) | (0.209) |
| Opposes racial quotas | 1.577$^{***}$ | 1.447$^{***}$ | 1.586$^{***}$ | 1.468$^{***}$ | 1.600$^{***}$ | 1.471$^{**}$ | 1.608$^{***}$ | 1.453$^{**}$ |
| | (0.158) | (0.154) | (0.166) | (0.163) | (0.186) | (0.181) | (0.191) | (0.182) |
| Opposes minorities policies | 1.546$^{***}$ | 1.447$^{**}$ | 1.532$^{***}$ | 1.451$^{**}$ | 1.496$^{***}$ | 1.423$^{**}$ | 1.505$^{***}$ | 1.426$^{**}$ |
| | (0.168) | (0.165) | (0.169) | (0.168) | (0.174) | (0.174) | (0.182) | (0.182) |
| Observations | 2015 | 2015 | 2015 | 2015 | 1980 | 1980 | 1952 | 1952 |
| Pseudo $R^2$ | 0.087 | 0.131 | 0.104 | 0.145 | 0.133 | 0.174 | 0.140 | 0.182 |

Note: Coefficients are displayed in odds ratio; Clustered standard errors (at municipality level) in parentheses. All regressions are estimated using logistic models. The outcome $Y = 1$ occurs when the individual reports having voted for Bolsonaro in the first round of the 2018 elections. Baseline income category: below one minimum wage. For controls, see Table 3.2 in the main text. For a description of the variables, see Table A3.1 in Appendix 3.5. Source: ESEB 2018. $^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

Table A3.15: Robustness: probit estimations

| | Bolsonaro vote | | | | | |
|---|---|---|---|---|---|---|
| | Whole sample | | | | Rad | Swi |
| | (1) | (2) | (3) | (4) | (5) | |
| 1 to 2 minimum wages | 0.159$^{+}$ | 0.172$^{+}$ | 0.152 | 0.170$^{+}$ | 0.363$^{**}$ | -0.049 |
| | (0.096) | (0.099) | (0.098) | (0.100) | (0.129) | (0.154) |
| 2 to 5 minimum wages | 0.243$^{**}$ | 0.254$^{**}$ | 0.231$^{*}$ | 0.252$^{**}$ | 0.402$^{**}$ | 0.119 |
| | (0.089) | (0.092) | (0.090) | (0.094) | (0.127) | (0.154) |
| 5 to 10 minimum wages | 0.173 | 0.216 | 0.186 | 0.179 | 0.340$^{+}$ | -0.100 |
| | (0.142) | (0.145) | (0.136) | (0.140) | (0.197) | (0.240) |
| 10+ minimum wages | 0.344 | 0.332 | 0.301 | 0.227 | 0.383$^{+}$ | -0.070 |
| | (0.214) | (0.222) | (0.212) | (0.210) | (0.227) | (0.554) |
| Unemployed | -0.276$^{*}$ | -0.292$^{*}$ | -0.261$^{*}$ | -0.245$^{*}$ | -0.243 | -0.269 |
| | (0.107) | (0.118) | (0.117) | (0.122) | (0.157) | (0.176) |
| Bolsa Família | -0.191$^{*}$ | -0.201$^{*}$ | -0.177$^{*}$ | -0.197$^{*}$ | -0.206$^{+}$ | -0.194 |
| | (0.075) | (0.081) | (0.082) | (0.084) | (0.107) | (0.123) |
| Self-employed | 0.047 | 0.064 | 0.058 | 0.076 | 0.004 | 0.213$^{+}$ |
| | (0.062) | (0.066) | (0.064) | (0.068) | (0.089) | (0.111) |
| Employed: unregistered | -0.195 | -0.281$^{*}$ | -0.252$^{+}$ | -0.226$^{+}$ | -0.381$^{*}$ | -0.088 |
| | (0.124) | (0.129) | (0.130) | (0.131) | (0.183) | (0.194) |
| Vulnerable activity | -0.092 | -0.090 | -0.097 | -0.132 | -0.123 | -0.116 |
| | (0.095) | (0.100) | (0.101) | (0.100) | (0.143) | (0.152) |
| Middle class | 0.275$^{**}$ | 0.235$^{*}$ | 0.236$^{*}$ | 0.173 | 0.250$^{+}$ | 0.019 |
| | (0.105) | (0.106) | (0.108) | (0.114) | (0.148) | (0.184) |
| Downwards mobility | 0.070 | 0.076 | 0.064 | 0.062 | 0.048 | 0.059 |
| | (0.093) | (0.101) | (0.102) | (0.102) | (0.126) | (0.165) |
| Upwards mobility | -0.068 | -0.045 | -0.043 | -0.054 | -0.157 | 0.066 |
| | (0.083) | (0.086) | (0.087) | (0.091) | (0.120) | (0.122) |
| White or Asian | | 0.069 | 0.068 | 0.069 | -0.084 | 0.296$^{**}$ |
| | | (0.069) | (0.068) | (0.069) | (0.086) | (0.105) |
| Catholic | | 0.011 | 0.007 | -0.020 | 0.065 | -0.091 |
| | | (0.085) | (0.084) | (0.086) | (0.102) | (0.139) |
| Evangelical | | 0.300$^{***}$ | 0.256$^{**}$ | 0.196$^{*}$ | 0.242$^{*}$ | 0.144 |
| | | (0.086) | (0.087) | (0.083) | (0.106) | (0.140) |
| Opposes racial quotas | | 0.289$^{***}$ | 0.281$^{***}$ | 0.231$^{***}$ | 0.121 | 0.289$^{**}$ |
| | | (0.061) | (0.061) | (0.064) | (0.085) | (0.106) |
| Opposes minorities policies | | 0.232$^{***}$ | 0.258$^{***}$ | 0.217$^{**}$ | 0.246$^{**}$ | 0.206$^{*}$ |
| | | (0.065) | (0.065) | (0.068) | (0.086) | (0.101) |
| Observations | 2164 | 2015 | 2015 | 2015 | 1161 | 854 |
| Pseudo $R^2$ | 0.046 | 0.076 | 0.087 | 0.130 | 0.149 | 0.130 |

Note: Coefficients are displayed in odds ratio; Clustered standard errors (at municipality level) in parentheses. All regressions are estimated using probabilistic models. $Y = 1$ occurs when the individual reports having voted for Bolsonaro in the first round of the 2018 elections. Baseline income category: below one minimum wage. For controls, see Table 3.2 in the main text. For a description of the variables, see Table A3.1 in Appendix 3.5. Source: ESEB 2018. $^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

Table A3.16: Robustness: Alternative clustering

| | Bolsonaro vote | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Municipality | | | Microregion | | | Mesoregion | | | State | | |
| | (1) | (2) | (3) | (1) | (2) | (3) | (1) | (2) | (3) | (1) | (2) | (3) |
| 1 to 2 minimum wages | 0.172$^{+}$ | 0.152 | 0.170$^{+}$ | 0.172$^{+}$ | 0.152 | 0.170$^{+}$ | 0.172$^{+}$ | 0.152 | 0.170$^{+}$ | 0.172$^{*}$ | 0.152$^{*}$ | 0.170$^{*}$ |
| | (0.099) | (0.098) | (0.100) | (0.100) | (0.099) | (0.100) | (0.099) | (0.098) | (0.098) | (0.078) | (0.071) | (0.080) |
| 2 to 5 minimum wages | 0.254$^{**}$ | 0.231$^{*}$ | 0.252$^{**}$ | 0.254$^{**}$ | 0.231$^{*}$ | 0.252$^{**}$ | 0.254$^{*}$ | 0.231$^{*}$ | 0.252$^{*}$ | 0.254$^{*}$ | 0.231$^{**}$ | 0.252$^{*}$ |
| | (0.092) | (0.090) | (0.094) | (0.095) | (0.091) | (0.094) | (0.104) | (0.098) | (0.099) | (0.108) | (0.089) | (0.099) |
| 5 to 10 minimum wages | 0.216 | 0.186 | 0.179 | 0.216 | 0.186 | 0.179 | 0.216 | 0.186 | 0.179 | 0.216 | 0.186 | 0.179 |
| | (0.145) | (0.136) | (0.140) | (0.146) | (0.135) | (0.140) | (0.148) | (0.136) | (0.143) | (0.176) | (0.153) | (0.175) |
| 10+ minimum wages | 0.332 | 0.301 | 0.227 | 0.332 | 0.301 | 0.227 | 0.332 | 0.301 | 0.227 | 0.332 | 0.301 | 0.227 |
| | (0.222) | (0.212) | (0.210) | (0.222) | (0.212) | (0.221) | (0.256) | (0.246) | (0.265) | (0.345) | (0.335) | (0.371) |
| Unemployed | -0.292$^{*}$ | -0.261$^{*}$ | -0.245$^{*}$ | -0.292$^{*}$ | -0.261$^{*}$ | -0.245$^{*}$ | -0.292$^{**}$ | -0.261$^{*}$ | -0.245$^{*}$ | -0.292$^{*}$ | -0.261$^{*}$ | -0.245$^{+}$ |
| | (0.118) | (0.117) | (0.122) | (0.114) | (0.112) | (0.119) | (0.112) | (0.109) | (0.115) | (0.124) | (0.125) | (0.128) |
| Bolsa Família | -0.201$^{*}$ | -0.177$^{*}$ | -0.197$^{*}$ | -0.201$^{*}$ | -0.177$^{*}$ | -0.197$^{*}$ | -0.201$^{*}$ | -0.177$^{*}$ | -0.197$^{*}$ | -0.201$^{**}$ | -0.177$^{*}$ | -0.197$^{*}$ |
| | (0.081) | (0.082) | (0.084) | (0.079) | (0.081) | (0.081) | (0.083) | (0.086) | (0.088) | (0.071) | (0.076) | (0.077) |
| Self-employed | 0.064 | 0.058 | 0.076 | 0.064 | 0.058 | 0.076 | 0.064 | 0.058 | 0.076 | 0.064 | 0.058 | 0.076 |
| | (0.066) | (0.064) | (0.068) | (0.065) | (0.063) | (0.067) | (0.059) | (0.058) | (0.062) | (0.057) | (0.057) | (0.062) |
| Employed: unregistered | -0.281$^{*}$ | -0.252$^{+}$ | -0.226$^{+}$ | -0.281$^{*}$ | -0.252$^{+}$ | -0.226$^{+}$ | -0.281$^{*}$ | -0.252$^{*}$ | -0.226$^{+}$ | -0.281$^{+}$ | -0.252 | -0.226 |
| | (0.129) | (0.130) | (0.131) | (0.128) | (0.130) | (0.130) | (0.123) | (0.126) | (0.125) | (0.146) | (0.159) | (0.153) |
| Vulnerable activity | -0.090 | -0.097 | -0.132 | -0.090 | -0.097 | -0.132 | -0.090 | -0.097 | -0.132 | -0.090 | -0.097 | -0.132 |
| | (0.100) | (0.101) | (0.100) | (0.104) | (0.107) | (0.105) | (0.102) | (0.105) | (0.104) | (0.096) | (0.099) | (0.097) |
| Middle class | 0.235$^{*}$ | 0.236$^{*}$ | 0.173 | 0.235$^{*}$ | 0.236$^{*}$ | 0.173$^{+}$ | 0.235$^{*}$ | 0.236$^{*}$ | 0.173$^{+}$ | 0.235$^{*}$ | 0.236$^{*}$ | 0.173$^{+}$ |
| | (0.106) | (0.108) | (0.114) | (0.099) | (0.102) | (0.104) | (0.093) | (0.095) | (0.097) | (0.094) | (0.095) | (0.102) |
| Downwards mobility | 0.076 | 0.064 | 0.062 | 0.076 | 0.064 | 0.062 | 0.076 | 0.064 | 0.062 | 0.076 | 0.064 | 0.062 |
| | (0.101) | (0.102) | (0.102) | (0.097) | (0.098) | (0.096) | (0.100) | (0.102) | (0.097) | (0.119) | (0.124) | (0.114) |
| Upwards mobility | -0.045 | -0.043 | -0.054 | -0.045 | -0.043 | -0.054 | -0.045 | -0.043 | -0.054 | -0.045 | -0.043 | -0.054 |
| | (0.086) | (0.087) | (0.091) | (0.078) | (0.080) | (0.086) | (0.079) | (0.081) | (0.086) | (0.082) | (0.083) | (0.094) |
| White or Asian | 0.069 | 0.068 | 0.069 | 0.069 | 0.068 | 0.069 | 0.069 | 0.068 | 0.069 | 0.069 | 0.068 | 0.069 |
| | (0.069) | (0.068) | (0.069) | (0.065) | (0.064) | (0.067) | (0.064) | (0.065) | (0.068) | (0.056) | (0.062) | (0.068) |
| Catholic | 0.011 | 0.007 | -0.020 | 0.011 | 0.007 | -0.020 | 0.011 | 0.007 | -0.020 | 0.011 | 0.007 | -0.020 |
| | (0.085) | (0.084) | (0.086) | (0.083) | (0.084) | (0.088) | (0.088) | (0.088) | (0.091) | (0.093) | (0.090) | (0.095) |
| Evangelical | 0.300$^{***}$ | 0.256$^{**}$ | 0.196$^{*}$ | 0.300$^{***}$ | 0.256$^{**}$ | 0.196$^{*}$ | 0.300$^{**}$ | 0.256$^{**}$ | 0.196$^{*}$ | 0.300$^{*}$ | 0.256$^{*}$ | 0.196 |
| | (0.086) | (0.087) | (0.083) | (0.089) | (0.092) | (0.088) | (0.091) | (0.095) | (0.090) | (0.120) | (0.125) | (0.120) |
| Opposes racial quotas | 0.289$^{***}$ | 0.281$^{***}$ | 0.231$^{***}$ | 0.289$^{***}$ | 0.281$^{***}$ | 0.231$^{***}$ | 0.289$^{***}$ | 0.281$^{***}$ | 0.231$^{**}$ | 0.289$^{***}$ | 0.281$^{***}$ | 0.231$^{**}$ |
| | (0.061) | (0.061) | (0.064) | (0.064) | (0.064) | (0.068) | (0.072) | (0.072) | (0.076) | (0.070) | (0.070) | (0.075) |
| Opposes minorities policies | 0.232$^{***}$ | 0.258$^{***}$ | 0.217$^{**}$ | 0.232$^{***}$ | 0.258$^{***}$ | 0.217$^{**}$ | 0.232$^{***}$ | 0.258$^{***}$ | 0.217$^{***}$ | 0.232$^{***}$ | 0.258$^{***}$ | 0.217$^{**}$ |
| | (0.065) | (0.065) | (0.068) | (0.065) | (0.066) | (0.069) | (0.060) | (0.061) | (0.064) | (0.068) | (0.066) | (0.067) |
| Individual controls | x | x | x | x | x | x | x | x | x | x | x | x |
| Regional dummies | | x | x | | x | x | | x | x | | x | x |
| Ideology | | | x | | | x | | | x | | | x |
| Observations | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 |
| Pseudo $R^2$ | 0.076 | 0.087 | 0.130 | 0.076 | 0.087 | 0.130 | 0.076 | 0.087 | 0.130 | 0.076 | 0.087 | 0.130 |

Coefficients are displayed in odds ratio; Clustered standard errors (at different levels indicated in the column headers) in parentheses. All regressions are estimated using logistic models. The outcome $Y = 1$ occurs when the individual reports having voted for Bolsonaro in the first round of the 2018 elections. Baseline income category: below one minimum wage. For controls, see Table 3.2 in the main text. For a description of the variables, see Table A3.1 in Appendix 3.5. Source: ESEB 2018. $^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

Table A3.17: Robustness: Different rounds and samples

| | Bolsonaro vote | | | | | |
|---|---|---|---|---|---|---|
| | 1st round | | | Runoff | | |
| | Eligible (1) | Voted (2) | Voted valid (3) | Eligible (4) | Voted (5) | Voted valid (6) |
| 1 to 2 minimum wages | 1.310 | 1.381$^{+}$ | 1.396$^{+}$ | 1.404$^{*}$ | 1.352$^{+}$ | 1.396$^{+}$ |
| | (0.217) | (0.254) | (0.258) | (0.209) | (0.222) | (0.240) |
| 2 to 5 minimum wages | 1.477$^{*}$ | 1.602$^{**}$ | 1.500$^{*}$ | 1.679$^{***}$ | 1.800$^{***}$ | 1.883$^{***}$ |
| | (0.224) | (0.266) | (0.258) | (0.250) | (0.292) | (0.314) |
| 5 to 10 minimum wages | 1.392 | 1.512$^{+}$ | 1.346 | 1.497$^{*}$ | 1.608$^{*}$ | 1.682$^{*}$ |
| | (0.312) | (0.364) | (0.329) | (0.301) | (0.363) | (0.420) |
| 10+ minimum wages | 1.660 | 2.126$^{*}$ | 1.965 | 1.408 | 1.560 | 1.450 |
| | (0.569) | (0.786) | (0.844) | (0.456) | (0.531) | (0.626) |
| Unemployed | 0.653$^{*}$ | 0.680$^{+}$ | 0.693 | 0.808 | 0.753 | 0.657$^{*}$ |
| | (0.133) | (0.149) | (0.157) | (0.139) | (0.145) | (0.133) |
| Bolsa Família | 0.737$^{*}$ | 0.745$^{*}$ | 0.693$^{*}$ | 0.681$^{**}$ | 0.683$^{**}$ | 0.590$^{***}$ |
| | (0.101) | (0.104) | (0.105) | (0.089) | (0.097) | (0.091) |
| Self-employed | 1.099 | 1.194 | 1.222$^{+}$ | 1.171 | 1.250$^{+}$ | 1.212 |
| | (0.118) | (0.133) | (0.146) | (0.127) | (0.143) | (0.160) |
| Employed: unregistered | 0.645$^{*}$ | 0.720 | 0.794 | 0.987 | 0.927 | 1.011 |
| | (0.143) | (0.167) | (0.186) | (0.191) | (0.191) | (0.221) |
| Vulnerable activity | 0.849 | 0.922 | 1.001 | 0.840 | 0.753 | 0.795 |
| | (0.142) | (0.178) | (0.194) | (0.130) | (0.143) | (0.165) |
| Middle class | 1.495$^{*}$ | 1.491$^{*}$ | 1.664$^{**}$ | 1.867$^{***}$ | 2.299$^{***}$ | 2.632$^{***}$ |
| | (0.266) | (0.272) | (0.311) | (0.351) | (0.507) | (0.677) |
| Downwards mobility | 1.116 | 0.982 | 0.822 | 1.077 | 0.884 | 0.791 |
| | (0.187) | (0.182) | (0.164) | (0.169) | (0.160) | (0.166) |
| Upwards mobility | 0.928 | 0.822 | 0.750$^{+}$ | 0.855 | 0.684$^{*}$ | 0.571$^{***}$ |
| | (0.136) | (0.124) | (0.121) | (0.117) | (0.106) | (0.096) |
| White or Asian | 1.122 | 1.088 | 1.158 | 1.114 | 1.095 | 1.181 |
| | (0.127) | (0.130) | (0.140) | (0.132) | (0.141) | (0.167) |
| Catholic | 1.012 | 0.917 | 0.800 | 0.957 | 0.870 | 0.779 |
| | (0.142) | (0.148) | (0.133) | (0.115) | (0.130) | (0.127) |
| Evangelical | 1.531$^{**}$ | 1.583$^{**}$ | 1.598$^{*}$ | 1.360$^{*}$ | 1.424$^{*}$ | 1.427$^{+}$ |
| | (0.221) | (0.265) | (0.295) | (0.185) | (0.238) | (0.274) |
| Opposes racial quotas | 1.577$^{***}$ | 1.738$^{***}$ | 1.850$^{***}$ | 1.420$^{***}$ | 1.519$^{**}$ | 1.604$^{***}$ |
| | (0.158) | (0.212) | (0.235) | (0.142) | (0.195) | (0.222) |
| Opposes minorities policies | 1.546$^{***}$ | 1.640$^{***}$ | 1.661$^{***}$ | 1.516$^{***}$ | 1.649$^{***}$ | 1.644$^{***}$ |
| | (0.168) | (0.192) | (0.201) | (0.150) | (0.182) | (0.210) |
| Individual controls | x | x | x | x | x | x |
| Regional dummies | x | x | x | x | x | x |
| Observations | 2015 | 1636 | 1469 | 2015 | 1620 | 1444 |
| Pseudo $R^2$ | 0.087 | 0.111 | 0.124 | 0.084 | 0.122 | 0.152 |

Note: Coefficients are displayed in odds ratio; Clustered standard errors (at municipality level) in parentheses. All regressions are estimated using logistic models. $Y = 1$ occurs when the individual reports having voted for Bolsonaro in the first round of the 2018 elections. Baseline income category: below one minimum wage. For controls, see Table 3.2 in the main text. For a description of the variables, see Table A3.1 in Appendix 3.5. Source: ESEB 2018. $^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

Table A3.18: Economy vs culture: the 2014 vote

| Dependent variable | PT vote (1st round) | | | PT vote (runoff) | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| 1 to 2 minimum wages | 0.817 | 0.958 | 0.941 | 0.816 | 0.935 | 0.925 |
| | (0.107) | (0.131) | (0.130) | (0.114) | (0.133) | (0.133) |
| 2 to 5 minimum wages | 0.756* | 0.948 | 0.921 | 0.753* | 0.911 | 0.893 |
| | (0.105) | (0.128) | (0.127) | (0.106) | (0.120) | (0.122) |
| 5 to 10 minimum wages | 0.696+ | 0.889 | 0.825 | 0.651* | 0.799 | 0.751 |
| | (0.146) | (0.183) | (0.170) | (0.126) | (0.147) | (0.139) |
| 10+ minimum wages | 0.580 | 0.737 | 0.708 | 0.393* | 0.481+ | 0.479+ |
| | (0.199) | (0.256) | (0.252) | (0.154) | (0.190) | (0.192) |
| Unemployed | 1.081 | 1.031 | 1.021 | 1.059 | 1.006 | 0.992 |
| | (0.185) | (0.175) | (0.178) | (0.191) | (0.180) | (0.180) |
| Bolsa Família | 1.821*** | 1.655*** | 1.623*** | 1.768*** | 1.611*** | 1.581*** |
| | (0.211) | (0.195) | (0.194) | (0.196) | (0.181) | (0.182) |
| Self-employed | 1.119 | 1.119 | 1.101 | 1.145 | 1.133 | 1.116 |
| | (0.118) | (0.118) | (0.117) | (0.134) | (0.132) | (0.130) |
| Employed: unregistered | 1.450* | 1.316 | 1.300 | 1.402+ | 1.296 | 1.274 |
| | (0.243) | (0.234) | (0.233) | (0.244) | (0.238) | (0.236) |
| Vulnerable activity | 1.262 | 1.348* | 1.371* | 1.257 | 1.334+ | 1.369* |
| | (0.183) | (0.194) | (0.201) | (0.194) | (0.205) | (0.213) |
| Middle class | 0.739 | 0.714+ | 0.741 | 0.723+ | 0.687* | 0.720+ |
| | (0.149) | (0.143) | (0.146) | (0.131) | (0.127) | (0.132) |
| Downwards mobility | 1.434* | 1.515* | 1.555** | 1.362+ | 1.425* | 1.461* |
| | (0.246) | (0.252) | (0.258) | (0.231) | (0.235) | (0.239) |
| Upwards mobility | 1.628*** | 1.551*** | 1.524*** | 1.735*** | 1.676*** | 1.647*** |
| | (0.203) | (0.198) | (0.194) | (0.231) | (0.225) | (0.221) |
| White or Asian | 0.780* | 0.871 | 0.885 | 0.755* | 0.825 | 0.836 |
| | (0.089) | (0.106) | (0.107) | (0.092) | (0.105) | (0.108) |
| Catholic | 1.672*** | 1.630*** | 1.639*** | 1.765*** | 1.724*** | 1.749*** |
| | (0.206) | (0.200) | (0.202) | (0.206) | (0.203) | (0.207) |
| Evangelical | 1.124 | 1.231 | 1.246 | 1.257+ | 1.368* | 1.389* |
| | (0.157) | (0.170) | (0.175) | (0.163) | (0.176) | (0.185) |
| Opposes racial quotas | 0.812+ | 0.805+ | 0.825+ | 0.816+ | 0.811+ | 0.829+ |
| | (0.089) | (0.089) | (0.093) | (0.090) | (0.090) | (0.094) |
| Opposes minorities policies | 1.002 | 0.942 | 0.977 | 0.956 | 0.904 | 0.940 |
| | (0.090) | (0.087) | (0.091) | (0.093) | (0.087) | (0.093) |
| Individual controls | x | x | x | x | x | x |
| Regional dummies | | x | x | | x | x |
| Ideology | | | x | | | x |
| Observations | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 |
| Pseudo $R^2$ | 0.047 | 0.070 | 0.078 | 0.057 | 0.074 | 0.082 |

Note: $Y = 1$ voted for Dilma Rousseff in the first round (columns 1 to 3) or runoff (columns 4 to 6) of the 2014 elections. For controls and estimation method, see Table 3.2 in the main text. For a description of the variables, see Table A3.1. Source: ESEB 2018. $^{+}$ $p < 0.10$, $^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

# Chapter 4

# Who gets what, and who gets resentful: Political economy of targeting in Poland's Family 500+

## 4.1 Introduction

The question about who should benefit from social transfers interests academics and policy-makers alike. During the 1990s and early 2000s, international organizations, such as the IMF and World Bank, advocated for more efficient social protection system where only individuals in real need would be eligible for assistance. More recently, a move towards more universal social protection systems has been promoted, amongst others, by the ILO (2021). The support for poverty-targeted transfers derives from the argument that, for a fixed budget, focusing on groups most in need would allow for higher individual benefits and, consequently, improve the livelihood of the poor (Coady, Grosh, & Hoddinott, 2004). Leakage of resources to the non-poor is considered undesirable, as it decreases the efficiency and effectiveness of anti-poverty schemes. Yet, the ability of targeting methods to identify those most in need depends on factors such as country context and administrative implementation capacity (Barrientos & Hulme, 2016; Coady et al., 2004; Devereux et al., 2017; Gugushvili & Hirsch, 2014). Researchers also draw attention to social and political considerations that influence the feasibility of (highly) selective targeting programs beyond the concerns related to economic efficiency. The social costs of targeting include the negative stereotyping of residual benefits recipients, leading to feelings of shame or inferiority (Baekgaard, Herd, & Moynihan, 2023), particularly when eligibility is restrictive and based on economic requirements (Van Oorschot & Roosma, 2015).

Work on the political considerations of whether or not to target focuses on the feasibility of implementation and the sustainability of welfare policies. From the supply side, institutional characteristics and the political game between actors with veto power within the government may determine the stability or change of the status quo of welfare policies (Angelova, Bäck, Müller, & Strobl, 2018; Däubler, 2008). From the demand side, benefit and beneficiary characteristics are argued to influence how likely the society is to support political platforms advocating for higher or lower social spending. Contrary to standard economic theory, research on the political economy of targeting does not take the social budget as fixed. Instead, it argues that it reacts to the level of targeting (Gelbach & Pritchett, 2002). According to the theory, individuals are more likely to support policies from which they either immediately benefit or from which they perceive a greater probability of benefiting in the future. In democratic settings, the social budget is determined via majority voting, and cross-class coalitions are needed to ensure the success of a political platform, which will reflect the voters' political, tax, and redistributive preferences. When welfare policies are restricted to a small group of low-income voters with low levels of leakage, preferences around tax rate and depth of welfare policies of the middle class (the pivotal voters in the model) will align with those of high-income earners towards low

support for redistribution and taxes to finance the budget allocated for social protection (De Donder & Hindriks, 1998; Gelbach & Pritchett, 2002; Moene & Wallerstein, 2001). As a consequence, the overall budget available for social assistance contracts, leading to the 'paradox of redistribution' (Korpi & Palme, 1998), where welfare policies with high levels of targeting have lower support from the population, leading to less poverty relief compared to a more universal approach.

Early anecdotal and qualitative evidence suggested that the level and coverage of the benefits are connected to the public acceptance of the policy (Lindert, 2004) and motivated further quantitative analysis at the country level, which has, so far, remained inconclusive (McKnight, 2015; Van Oorschot & Roosma, 2015). Micro-level evidence casts doubts on whether support is indeed lower for means-tested benefits *vis-a-vis* universal schemes (Muñoz & Pardos-Prado, 2019; Schüring & Gassmann, 2016). Laenen, Van Hootegem, and Rossetti (2023); Rincón, Vlandas, and Hiilamo (2022) find that conditionalities imposed on beneficiaries are relevant to explain the acceptance of means-tested transfers while the unconditional character of more inclusive transfers echos priors on (un)deservingness of beneficiaries and opposition to the transfers. Rincon (2023), on the other hand, provides evidence that such views might depend on other institutional or socio-economic characteristics. Her evidence from experiments in Spain, for instance, suggests that unconditionality does not activate unpopular opinions around universal transfers (Rincon, 2023).

In this chapter, I analyze the extent to which a change in the targeting of social transfers influences people's attitudes toward redistribution, using individual-level panel data. If political economy models hold, a change to more narrow targeting would lead to a decrease in its political support and vice versa. We exploit a real-life policy change to empirically test the validity of the theory. In 2016, Poland introduced a quasi-universal child benefit in parallel to a means-tested family allowance, the Family 500+ program. We use three waves of the Polish Panel Survey (POLPAN), which is conducted every five years by the Polish Academy of Sciences, including before (2013) and after (2018) the change in the child benefit policy. To the best of my knowledge, this chapter is the first to test the theoretical predictions in a real-world setting, using individual longitudinal data. To do so, this chapter investigates how the widening of policy coverage influences people's redistributive and political preferences, and their attitudes toward the allocation of tax burden. While existing work focuses on recipients or analyzes hypothetical policy changes using (survey) experiments, we distinguish between the responses of both (potential) beneficiaries and individuals who were likely excluded from the expansion. Our findings corroborate the literature that identifies path dependence and relative cultural stability of redistributive preferences (E. F. Luttmer, 2001) given a person's view of the world. However, tax

preferences are more sensitive to policy change. Lastly, we find that individuals who are in a disadvantaged position and may not benefit from the transfers, despite partially fulfilling eligibility requirements, tend to be less supportive of the political agent responsible for the change.

The remainder of the chapter first describes the Polish context around the policy change (Section 2). This is followed by a description of the data and methodology (Section 3). Section 4 presents the results and Section 5 concludes.

## 4.2 Background

From 2003 to July 2016, Poland's child benefits consisted of a set of means-tested family transfers, the main one being a family allowance available only to families with a monthly income below a threshold of PLN 674/EUR 137[1] (threshold value for January 2016). The system also included child tax credits, and additional supplements, such as a childbirth grant, an allowance for single parents, and special allowances for children with disabilities, (Sowa, 2016). Prior to Family 500+, welfare policies followed a social investment approach, where spending on contributory schemes largely overshadowed their non-contributory counterparts, accounting for ca. 15% and 1% of GDP, respectively (Goraus-Tanska & Inchauste, 2016). The difference is mainly explained by the low amount and the narrowly targeted nature of non-contributory schemes, which in 2015 reached only those in extreme poverty by 2015[2] (Goraus-Tanska & Inchauste, 2016).

The targeted nature of family benefits radically changed in 2016. On April 1, 2016, the government, led by the recently elected PiS (*Law and Justice Party*)[3], launched the Family 500+ program (in Polish *Rodzina 500+*), with the intention of providing financial support to families raising children and increasing fertility rates in Poland. In its initial form, the program had a quasi-universal profile and consisted of two branches. The first branch provided a monthly payment of 500 PLN/EUR 115 for the second and every subsequent child below the age of 18 . The second branch included an income-tested transfer of 500 PLN to the oldest child in low-income families with a net monthly income of up to 800 PLN per capita[4]. The child benefit was tax-free and did not affect the eligibility of

[1]The benefit amount depended on the child's age (increasing in child's age), but ranged from PLN 89 to PLN 129 per child per month.
[2]See Figure A4.1, Supplementary Material, for eligibility criteria and benefit value over the years.
[3]PiS first came to power in 2005 and ruled until 2007, losing two consecutive parliamentary elections in 2007 and 2011, before winning the 2015 presidential elections in June and securing a majority of seats in the Parliament in October of the same year (Jacuński et al., 2021).
[4]For families with a disabled child, the threshold for receiving the child benefit for the oldest child was set at 1,200 PLN (Sowa, 2016).

families for other social transfers, such as family allowances or social assistance benefits[5].

Applications to the new scheme could be submitted from April 1st to July 1st, 2016, and resubmitted every year (Sowa, 2016). Payments started already in April 2016, and by June 2016, 1.6 million out of the 2.5 million submitted applications had been processed. By the end of 2016, around 2.5 million families had benefited from Family 500+ transfers, totaling PLN 17 billion in transfers that year (GUS, 2017). The number of beneficiary families remained roughly the same in 2017 and 2018 (2.5 million and 2.4 million, respectively). Overall, more than PLN 20 billion were allocated to the transfers (23.2 billion in 2017 and 22.2 billion in 2018). By the end of 2018, over 50% of the Polish children up to 18 years old benefited from Family 500+ transfers (GUS, 2018; GUS, 2019). In July 2019, the Family 500+ program was extended to cover all children in all families, regardless of family income. Since then, the program has become a fully universal unconditional child benefit and reached 6.1 million children in the second semester of 2019 (GUS, 2020), benefiting mainly families in upper-income deciles (Myck, Król, Trzciński, & Oczkowska, 2021)[6].

The provision of generous family benefits to increase fertility rates was linked to two important aspects of PiS electoral promises and the broader political agenda. In 2013, the Civic Platform, a center-right party that ruled Poland between 2011 and 2015, passed in 2013 a resolution that would gradually raise the retirement age to 67 years old for both men and women to address the issue of the aging population. In 2015, an important point in the PiS electoral campaign was the promise to reverse the retirement age back to 65 (men) and 60 (women) (Deloy, 2015).[7] The generous Family 500+ benefits would lead to higher birth rates and ensure the future pension system's sustainability. The Family 500+ program was also part of a broader shift towards a conservative understanding of society rooted in traditional family roles (Orenstein & Bugarič, 2022). The proposed welfare system would be central to its social policy, characterized by traditional gender roles and disincentivizing dual-earner families through the provision of natalist benefits, lack of investment in public childcare, and differential retirement ages, confining women to the caring role (Meardi & Guardiancich, 2022).

Opinion polls suggest that changes introduced after 2015 have influenced public opinion on family benefit policies. Between 1996 and 2013, the Polish family policy was assessed as merely adequate or even inadequate (CBOS, 2017). This has changed considerably after

[5]In 2016, the Family 500+ was worth 27% of the gross minimum wage in Poland (Magda, Kiełczewska, & Brandt, 2018). The benefit value remained the same (Reuters, 2013), and was readjusted to 800 PLN in January 2024. .

[6]See timeline in Figure A4.2, Supplementary Material.

[7]The subsequent pension reform and other policy changes are discussed in the robustness analysis. The robustness checks indicate that the main results are not driven by other policy changes.

the introduction of Family 500+. In 2017, 52% of the surveyed population considered the family policy as 'Good' (compared to 13% in 2013), and only 10% considered it 'Inadequate' (versus 32% in 2013). The outcomes and consequences of the Family 500+ program have been the subject of policy and academic research. On the one hand, research indicates that the transfers substantially reduced extreme material poverty (Jkedrzejczak & Pekasiewicz, 2020), for both observed and perceived poverty (Paradowski & Wolszczak-Derlacz, 2025), and micro simulations predicted the near end of child poverty (Brzeziński & Najsztub, 2017). On the other hand, the program failed to have lasting effects on birth rates (Hrytsai, 2021), and its overall costs have been heavily criticized. Experts point out that richer households have more children and thus tend to benefit more than poorer households (Myck et al., 2021). Additionally, empirical evidence suggests that the program increased support for the incumbent populist party PIS in later elections (Gromadzki, Sałach, & Brzeziński, 2024) and decreased female labor force participation, with especially detrimental effects among lower-educated women (Magda et al., 2018).

## 4.3 Methodology

### 4.3.1 Data: The Polish panel survey

The Polish Panel Survey (POLPAN) is a program of panel surveys carried out in 5-year intervals since 1988 that focuses on describing the social structure and its change during the last 30 years in Poland[8]. Initially, the survey covered a national sample of 5,817 individuals representing Poland's adult population (aged 21-65). In 1993, the sample was reduced to 2,500 individuals. To ensure a representative age balance, subsequent waves have been replenished with newly sampled young cohorts. The most recent wave carried out in 2018 included 2,161 respondents[9].

For our analysis, we use the survey waves from 2008, 2013, and 2018. This limits attrition and ensures that the observations include sufficient respondents potentially eligible for the Family 500+ program in 2018. Given that the means-tested family allowances were introduced at the end of 2003, including that wave could affect the outcome variables in that wave. Thus, our preferred specification considers a balanced panel from 2008 to 2018. We exclude individuals with children in the household born after the implementation of Family 500+ (children born in 2017 or 2018). It is plausible that some individuals decided to expand their families following the announcement of Family 500+ and that this decision

[8]The data from the POLPAN panel survey are publicly available at GESIS, Leibniz Institut fur Sozialwissenschaften, and Harvard Dataverse.

[9]See Tomescu-Dubrow et al. (2021) for more information on the POLPAN dataset and data collection methodology

is correlated with their priors on the role of the government in society. As the program was launched in April 2016, and payments ramped up in June-July 2016, it is unlikely that children born in 2016 were a reaction to the new transfer in place[10].

Table 4.1 lists the basic demographics for the balanced 2008 - 2018 panel. It is important to note that, since we restrict the observations, the sample is no longer representative of the Polish population . The average age of respondents in the last three waves is 51 years, and women comprise a slight majority of the sample. One-third of the sample is married, 30% of the sample report having at least one child in the household, and the average household consists of three individuals. Nearly half of the sample resides in rural areas. The mean educational level attained is general secondary, 32% of the observations report pursuing or having a higher educational degree, and 59% of the sample is working at the time of the interview.

Table 4.1: Summary statistics: Demographics. Balanced Sample

| Variable | Mean | SD | Min | Max | Count |
|---|---|---|---|---|---|
| 1+ child in HH | 0.30 | 0.46 | 0.00 | 1.00 | 2628 |
| Age | 51.22 | 17.82 | 21.00 | 95.00 | 2628 |
| Woman | 0.52 | 0.50 | 0.00 | 1.00 | 2628 |
| HH size | 3.12 | 1.58 | 1.00 | 12.00 | 2627 |
| Married | 0.67 | 0.47 | 0.00 | 1.00 | 2628 |
| Working | 0.59 | 0.49 | 0.00 | 1.00 | 2628 |
| Education | 4.41 | 2.52 | 1.00 | 8.00 | 2628 |
| Primary education or less | 0.14 | 0.35 | 0.00 | 1.00 | 2628 |
| Secondary education | 0.54 | 0.50 | 0.00 | 1.00 | 2628 |
| Higher education | 0.32 | 0.47 | 0.00 | 1.00 | 2628 |
| Rural household | 0.48 | 0.50 | 0.00 | 1.00 | 2628 |

Note: The variables 1+ child in the household, Woman, Married, Working, Primary education or less, Secondary education, Higher education, and Rural household are dummy variables which take a value of 1 when the respondent('s household) fits the category. Age is a continuous variable, and Education a 8-point categorical variable for the highest educational level achieved by the respondent. Source: POLPAN (2021).

[10]Considering a 9 months pregnancy, the first "Family 500+ cohort" would have be born in January 2017.

### 4.3.2 Empirical strategy

The Family 500+ program was introduced in 2016 at the national level in one single phase. While the political economy of targeting suggests that new beneficiaries are more likely to change their preferences, conceptually, non-recipients could also respond to the new policy by resenting not being considered by the change or by anticipating to benefit in the future. In other words, the impact of Family 500+ on preferences would differ across different categories of individuals according to how exposed they were to the national change in transfers. Therefore, we refrain from estimating the effect of benefiting from the welfare transfer vis-à-vis a clear counterfactual, as we cannot ensure that the control group – the non-beneficiaries – would not be affected by the treatment. Instead, we examine the differential impact of the policy expansion at the individual level and across groups defined by their likelihood to benefit from the transfer immediately or possibly in the future. The relevance of exposure to the policy change has been explored in the context of welfare retrenchments and government support (Larsen, 2018). More recently, this approach has also been adopted by research on the unequal effects of the Covid-19 pandemic, a common shock, across different types of workers compared to a baseline category (see Bussolo, Kotia, & Sharma, 2021, for an example). Formally, this chapter follows the approach in Bussolo et al. (2021) and uses a difference-in-difference event study panel regression, according to the specification below.

$$Pref_{i,t} = \alpha + \sum_{c} \alpha_c Category_c + \sum_{t} \beta_t WAVE_t + \sum_{c,t} \gamma_{c,t} Category_c \times WAVE_t \quad (4.1)$$
$$+ \sum_{t} \eta_{i,t} X_{i,t} + \sum \lambda_{j,t} (NUTS2_j \times WAVE_t) + \mu_i + \varepsilon_{i,t}$$

where the dependent variable, $Pref_{i,t}$, reflects redistributive, tax, and political preferences for individual $i$ in year $t$; $Category_c$ is a vector of binary variables identifying the child- and income-related category the individual belongs to (see below); $WAVE_t$ indicates the survey wave, which controls for time-specific factors; $X_{i,t}$ are time-varying individual controls[11]. We control for educational attainment, per capita income, employment status, and whether the individual performs a high-skilled profession. $\sum_{j,t} NUTS2_j \times WAVE_t$ are region-time fixed effects[12], which control for region-wave-specific shocks like the sub-

[11] Following the conventional approach, we replace the 2018 values by the 2013 values of each time-varying variables. Thus, $X_{i,t}$ varies between 2008 and 2013, but not between 2013 and 2018. Time-specific controls are not required to ensure parallel trends. Table A4.24, in Supplementary Material, displays results without time-varying covariates.

[12] We test the robustness of the results with no region × wave fixed effects and NUTS1 × wave fixed effects. The results remain qualitatively stable, albeit with occasional changes in the significance level

national governmental administration and social trends. Lastly, we control for individual-level fixed effects, which account for time-invariant traits impacting a person's preferences, such as gender, upbringing, and cultural components.

**Redistributive preferences**

In our analysis, we first focus on redistributive preferences. The choice of the dependent variable follows the hypotheses derived from the theories of the political economy of targeting. According to that literature, individuals will be more supportive of allocating budget to welfare policies when their (perceived) odds of benefiting from such policies are high enough. We construct an index using survey questions that capture attitudes towards redistribution, gauging support for government provision to vulnerable groups, including that of services and the reduction of income differences. POLPAN has various questions related to redistributive preferences. The first question asks the respondents to what extent they agree with the statement that the government is responsible for reducing differences in people's incomes. This question is conventionally used in the literature to measure preferences for redistribution (Alesina & Giuliano, 2011) and is widely included in international values and social surveys[13]. Other questions do not directly address opinions on redistribution but the underlying dimensions that shape support for redistribution. They gauge the individual's support for government-funded social policies (Cavaillé & Trump, 2015), specifically in the labor market and education realms. The first question asks whether the government should assist children from poor families by facilitating their access to higher education. The second elicits support for the government providing jobs for all individuals who want to work. All three variables are measured by POLPAN using a 5-point Likert scale ranging from 'strongly disagree' (1) to 'strongly agree' (5) (See Table A4.1 in annex)[14]. Based on the three questions, we compute a composite index of support for redistribution, converting direct opinions and proxies measuring support for government-funded social policies. The index is constructed with factor analysis using a polychoric correlation matrix [15] and normalized to consist of values between 0 (lowest) and 1 (highest support).

(Tables A4.25 and A4.26 in the Supplementary material)

[13]Renowned examples include the *World Values Survey*, *European Social Survey*, and the *General Social Survey*. Those surveys usually use either the question stated in the text or a close alternative asking whether it is the government's or individual responsibility to provide for each citizen.

[14]Summary statistics by variable available on Table A4.15, Supplementary Material.

[15]We use the unbalanced dataset covering waves 1998 to 2018 to perform the analysis. The factor loadings for all variables are above the minimum conventional values of 0.4 (minimum loading 0.54). Only one factor with Eigenvalue above 1 is used for computing the index. Tables A4.16, A4.17 and A4.18, Supplementary Material, display the Correlation Matrix, Factor Analysis output and Factor Loadings, respectively.

### Tax preferences

Secondly, we focus on tax preferences as an outcome variable. While direct transfers and income taxes have a reasonably progressive profile in Poland, the burden of indirect taxes rendered the system progressive only at the bottom deciles; households starting from the second decile were net payers to the treasury (Goraus-Tanska & Inchauste, 2016).

According to the literature on the political economy of targeting, individuals react to the degree of targeting of social protection systems when choosing their preferred tax rates. Potential recipients accept higher tax rates as they have the prospect of benefiting from the transfers. As posed by the canonical models in Moene and Wallerstein (2001) and Gelbach and Pritchett (2002), a change in the coverage rate of welfare policies influences the preferred tax rate and schedule of those who become (in)eligible to receive the benefit. Thus, based on the predictions of the models, we expect the (potential) beneficiaries to change their tax preferences toward higher tax rates vis-à-vis the reference category. The POLPAN survey asks the respondents about their preferred tax rate for individuals in different reference income levels. Table A4.2 in the Annex lists the income values used in each wave for the different reference groups[16].

The original question is recorded in POLPAN with 4 distinct variables, corresponding to the tax rates for each income group; namely, the rows in Table A4.2. Using these four original tax variables, we build different measures that capture preferences for the level and distribution of tax rates. The two variables are combined to generate, per respondent, (i) the preferred average tax rate, and (ii) a concentration coefficient that measures how unequal the distribution of the tax burden would be across income groups. The preferred average tax rate is measured by Equation 4.2 for each individual $i$ and wave $t$, as the mean of the tax rates assigned for the different income groups 1 through 4.

$$AvgTax_{i,t} = \frac{tax_{1,i,t} + tax_{2,i,t} + tax_{3,i,t} + tax_{4,i,t}}{4} \tag{4.2}$$

Tax progressivity is measured by the concentration index, calculated for each $i$ and wave $t$ based on the tax rates assigned for every income group $g$:

$$ConcTax_{i,t} = 2 * \frac{cov(tax_{g,i,t}, R_{g,i,t})}{(tax_{1,i,t} + tax_{2,i,t} + tax_{3,i,t} + tax_{4,i,t})/4} \tag{4.3}$$

$tax_{g,i,t}$ is the tax rate that individual $i$ assigned to income group $g$, in year-wave $t$. The

[16]The respondent could answer a tax percentage or a tax value in PLN. In cases where the answer was in values, we calculated the corresponding percentage based on the questions' reference income. For instance, if in 2018 the respondent assigned a tax value of 200 PLN to people earning 2,000 PLN, the corresponding tax rate is 10%.

income groups (subscript $g$) are groups 1, 2, 3, and 4, in Table A4.2. $R_{g,i,t}$ is the group $g$'s rank in income distribution, and cov(...) the covariance between the tax rate assigned to group $g$, and $g$'s income rank. The concentration index measures the nature of the tax allocation across the different income groups and takes values between -1 and +1. A negative coefficient indicates that lower-income groups mostly bear the tax burden (regressive tax), while positive values occur when taxes are concentrated on higher-income groups (progressive tax), and zero corresponds to perfect equality across groups (neutral tax). When two negative indices are compared, the lower the index, the higher the burden is placed on lower-income groups, even though both cases represent a regressive tax system. Similarly, for positive values, the greater the index, the higher the tax burden is placed on higher-income groups.

**Voting intentions**

Lastly, we assess the impact of Family 500+ on political preferences of (in)eligible households. According to the literature on the political economy of targeting, a more inclusive welfare system would imply greater support of redistributive policies, a larger tax schedule, and, ultimately, a vote for political platforms that advocate for this structure of social protection (Gelbach & Pritchett, 2002; Moene & Wallerstein, 2001). The literature on economic voting makes similar predictions, where voters are driven by their material self-interest and reward or punish the incumbent for their personal financial situation (Lewis-Beck & Paldam, 2000). In the Polish case, research has linked the widening of the child benefit to increased support for the Law and Justice party in municipalities with greater shares of Family 500+ transfers.

Given the individual-level nature of the POLPAN data, we are able to build upon previous work (e.g. Gromadzki et al., 2024), reduce concerns of ecological fallacy, and distinguish between different categories of (non-)recipients to assess whether they react differently to the 2016 policy implementation. To operationalize this analysis, we use the respondents' stated voting intentions in favor of the incumbent party, PiS, who implemented the Family 500+ programme.

Since Family 500+ was introduced after the 2015 elections, using the reported vote in the 2015 elections would not accurately capture this change of support given the child benefit expansion. Therefore, we opt for using expected future vote, instead of reported past vote[17]. POLPAN inquires the respondents about their party/candidate preferences[18]

[17]One could be concerned that the question reflects the expansion of Family 500+ to a full universal transfer in 2019. However, the expansion was only announced in February 2019, and the data collection of POLPAN's last wave took place in 2018, with over 90% of the sample interviewed by July. Therefore, the stated voting intentions are unlikely to reflect expectations of the future broadening.

[18]The stated answer is the spontaneous political preference.

should the elections be held in the upcoming Sunday. From this question, we compute a dummy variable, taking the value of 1 if the respondent indicates an intention to vote for PiS and 0 otherwise.

Table 4.2 provides the summary statistics for the outcome variables per wave. Overall, individuals in the sample are less supportive of redistribution in 2018 compared to 2013, measured with the composite redistributive index. The tax-related variables suggest a preference for lower tax levels in 2018 relative to 2013, with stable preferences on tax progressivity. Lastly, PiS enjoyed a growing support throughout the waves within our sample.

Table 4.2: Summary statistics: outcome variables per wave

| Variable | Wave 2008 | | Wave 2013 | | Wave 2018 | |
|---|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | Mean | SD |
| | *Outcome variables* | | | | | |
| Redistributive Index | 0.78 | 0.18 | 0.80 | 0.19 | 0.73 | 0.19 |
| Tax: Average value | 15.54 | 7.19 | 16.23 | 7.23 | 15.55 | 7.17 |
| Tax: Progressivity | 0.30 | 0.18 | 0.27 | 0.18 | 0.28 | 0.16 |
| PiS vote | 0.12 | 0.33 | 0.18 | 0.39 | 0.33 | 0.47 |

Note: Summary statistics per wave for the balanced panel sample 2008-2018 (N=876). Source: POLPAN (2021)

### Beneficiary groups

In an event study approach, the groups and waves constitute the explanatory variables, for which the differential treatment effects will be assessed. We define the different groups according to their likelihood of benefiting from the Family 500+, and whether we expect the group to change their preferences as a reaction. For the definition of the categories, the likelihood of benefiting is defined by whether the individual satisfies the eligibility criteria, which comprise two dimensions: the number of children below 18 years in the household and per capita household income.

As the policy excluded households without underage children, the likelihood of benefiting depended firstly on the number of children in the household. Households are assigned to categories (see Table 4.3) according to the number of children born between 2000 and 2016 living in the household in 2018: zero, two, or two or more. Moreover, we differentiate households according to their income, as the policy design included a quasi-universal and means-tested arm. We create a binary variable identifying those respondents whose household belongs to the bottom quintile of the sample's per capita income distribution in

2013 (pre-policy)[19]. With this approach, we can explore the reactions of respondents with children who were (not) likely to benefit in 2018 from Family 500+ for the firstborn child, depending on their income[20] More specifically, low-income individuals with one child are more likely to benefit from the policy change compared to individuals with one child who do not belong to the bottom quintile. The evolution of their preferences (relative to respondents without children) would reflect this different exposure.

The categories identified in Table 4.3 are entered into equation (1) as $Category_c$ and they are time-invariant: the main coefficients of interest, $\gamma_{c,t}$, capture the differential impact of Family 500+ on individual's preferences based on the categories they belong to in 2013, the period before the policy change. The 2013 period, and the respective interaction terms, are the omitted time variables in all regressions, so all regression coefficients are scaled with reference to this base period. Low-income households with children, who are in principle eligible for the child benefits, constitute our categories of interest and, if the theoretical predictions hold, should show a distinct impact of the policy change relative to individuals with no children, the baseline category, and the coefficient $\gamma_{c,2018}$, the category-specific effects of Family 500+, would be significant. If (any of the) 2018 coefficients ($\gamma_{c,2018}$) are statistically different from zero, the respondents belonging to that category have a different response to the Family 500+ compared to respondents without children. Alternatively, statistically zero coefficients suggest that preferences evolve similarly to childless respondents, and there would be no empirical evidence for the theoretical predictions that (likely) beneficiaries would support a larger welfare state.

Besides measuring how people differ in their responses to the policy change, the event study approach allows us to examine the trends before the policy change ($\gamma_{c,2008}$), which should be statistically zero for the parallel trends assumption to hold. $\beta_{2018}$ captures the preferences changes among childless respondents (the reference category), the common

[19]We group individuals with children and missing income into a separate group, whose results we omit from the main text due to space considerations.

[20]The category assignment is based on the eligibility criteria and additional assumptions about the corresponding data regarding both the number of children and income. The first assumption concerns respondents providing correct information about the birth years of household residents, used to identify children under 18, and about household income. For income, the most common sources of misreporting are underreporting of very high incomes and overreporting of low incomes (Angel, Disslbacher, Humer, & Schnetzer, 2019). The former would not introduce distortions, as the respondents are divided into those in the bottom income quintile and those in the other quintiles. Should the overreporting of low income take place, it would most likely either introduce noise in the group of 'ineligible but with children' or bias their results towards more strongly positive results. The second assumption is that the measures used to define the categories should appropriately capture the underlying eligibility rules, and that income measures for 2013 convey the relevant information about eligibility in 2016/2018. Income reported in 2018 is plausibly endogenous to the treatment; thus, we utilize the 2013 income. Based on that, the treatment assignment assumes that being in the bottom income quintile in 2013 serves as a proxy for income eligibility in 2018. This latter assumption does not apply to eligibility based on the number of children, as that information was retrieved from the 2018 survey, and birth year does not vary over time.

social effect of Family 500+, as well as other events that impacted society as a whole between 2013 and 2018. Examples of the latter could include, for instance, the impact of the 2015 European refugee crisis or the Euro-recession on economic and political preferences (Algan et al., 2016; Matakos, Savolainen, & Tukiainen, 2020).

Table 4.3: Categories of households

| | Group | *Coefficient of interest:* Overall effect | Additional effect | Number of children | Bottom quintile | Share of the Total sample |
|---|---|---|---|---|---|---|
| Categories | *Baseline* | $\beta_{2018}$ | - | *0* | - | 70,7% |
| | 1Q1 | $\beta_{2018}$ | $\gamma_{1q1,2018}$ | 1 | Yes | 2,7% |
| | 1Q2+ | $\beta_{2018}$ | $\gamma_{1q2,2018}$ | 1 | No | 8,6% |
| | 2Q1 | $\beta_{2018}$ | $\gamma_{2q1,2018}$ | 2+ | Yes | 4,8% |
| | 2Q2+ | $\beta_{2018}$ | $\gamma_{2q2,2018}$ | 2+ | No | 8,2% |
| | 1+Qmissing (omitted) | $\beta_{2018}$ | $\gamma_{1qm,2018}$ | 1+ | N/A (Missing income) | 5,0% |

## 4.4 Results

### 4.4.1 Main results

The main findings of our analysis are presented in Table 4.4. The table is divided into three panels. The upper panel presents the estimated coefficients for the waves' fixed effects (the 2013 wave is the baseline value), which capture common societal trends in preferences for that wave. The middle panel shows the coefficients $\gamma_{c,2008}$, which are used to inspect whether the parallel trend assumption holds. Finally, the bottom panel displays the coefficients for the category-specific effects of Family 500+ ($\gamma_{c,2018}$). We estimate the model for each of the four outcome variables with the corresponding results in columns 1 to 4. The identifying assumption of the event study is that the preferences of respondents in each category, defined by the number of children in the household and income quintile, developed in parallel to childless respondents before the introduction of Family 500+ and that these households did not experience systematically different idiosyncratic shocks after it. None of the coefficients for the pre-trend variables is statistically significant, which confirms that the parallel trend assumption is reasonable.

The $\beta_{2018}$ coefficients, in the top panel, capture the shared impact of events taking place between 2013 and 2018, as well as the effect of Family500+ on childless individuals since they constitute the baseline category for which the group-specific coefficient $\gamma_{0,2018}$ is omitted. Compared to 2013, redistributive preferences were lower among the Polish society, who preferred a more regressive tax scheme and was more likely to support PiS in 2018, measured by $\beta_{2018}$ in columns 1, 3, and 4, respectively. The preferred average tax rate,

on the other hand, remained stable in 2018 compared to 2013. The table's bottom panel, which displays the category-specific effects in 2018, shows that the coefficients $\gamma_{c,2018}$ are statistically not different from zero when the redistributive index or the preferred average tax are the outcome variables. In other words, the redistributive preferences of households with children do not evolve statistically differently from respondents without children after the introduction of Family 500+, regardless of income level (Column 1). The respondents are in general less supportive of governmental assistance in 2018 compared to 2013, given the significant negative $\beta_{2018}$ and statistically insignificant $\gamma_{c,2018}$ in Column 1. Likewise, the main coefficient for the preferred average tax rate is insignificant (Column 2). Interestingly, while all categories of Polish society preferred tax levels in 2018 that are similar to those of 2013, it changed its opinion on distribution and supported more regressive tax systems in 2018 compared to 2013 (Column 3). This change; however, was not uniform across all categories. Respondents who, despite having children at home, are likely ineligible for the transfers differ in how the tax should be distributed across income groups and are more likely to prefer a more progressive system than their childless counterparts, as indicated by the positive $\gamma_{1q2+,2018}$ point estimate, significant at the 5% level.

While the overall population was more likely to report support for PiS in 2018 compared to 2013, as indicated by the positive and significant $\beta_{2018}$, support for PiS in 2018 was significantly lower among higher-income respondents, who in the absence of an income criterion would be eligible for the benefit, effect significant at a 1% significance level[21]. The lack of effects across other categories, interpreted together with $\beta_{2018}$, suggests that the incumbent is not only rewarded by the transfer beneficiaries for concerns regarding their individual finances but also by non-recipients. However, the negative coefficient for higher-income households with 1 child indicates resentment by those who are excluded from the policy's beneficiaries pool, despite fulfilling a main requirement, namely, the presence of children in the household, which is tightly connected to the policy's primary scope. Yet, the negative effect is not sufficiently strong to reverse the effect of Family 500+ for that category, i.e. respondents in all categories express higher support for PiS in 2018 vis-à-vis their political views in 2013. Our results align with Gromadzki et al. (2024) in that childless voters were not likely to punish the incumbent party for being excluded. However, while it is not possible to make claims regarding the 2019 voting behavior with the currently available POLPAN data (collected in 2018), our results suggest that there was a relative punishment by a specific share of non-recipients, a group that is not identifiable in previous research using aggregate-level data.

[21] The inclusion of past PiS vote, as a time-varying covariate, does not drive the results.

Table 4.4: Effects of the Family 500+ introduction

| | | (1) Redistributive Index | (2) Tax: Average | (3) Tax: Progressivity | (4) PiS Vote |
|---|---|---|---|---|---|
| $\beta_{2008}$ | 2008 | -0.014 | -1.082 | -0.076*** | -0.023 |
| | | (0.023) | (1.155) | (0.026) | (0.040) |
| $\beta_{2018}$ | 2018 | -0.061*** | -1.126 | -0.084*** | 0.197*** |
| | | (0.023) | (0.925) | (0.027) | (0.053) |
| | | *Parallel trends* | | | |
| $\gamma_{1q1,2008}$ | 2008 × 1 Child, Q1 | -0.042 | -0.846 | 0.000 | -0.055 |
| | | (0.040) | (2.228) | (0.041) | (0.110) |
| $\gamma_{1q2+,2008}$ | 2008 × 1 Child, Q2+ | -0.017 | 0.941 | -0.007 | 0.008 |
| | | (0.022) | (1.161) | (0.030) | (0.052) |
| $\gamma_{2q1,2008}$ | 2008 × 2+ Children, Q1 | -0.020 | -1.386 | 0.023 | -0.030 |
| | | (0.031) | (1.589) | (0.040) | (0.076) |
| $\gamma_{2q2+,2008}$ | 2008 × 2+ Children, Q2+ | -0.008 | 0.362 | 0.031 | 0.054 |
| | | (0.025) | (0.956) | (0.029) | (0.045) |
| | | *Main coefficients of interest* | | | |
| $\gamma_{1q1,2018}$ | 2018 × 1 Child, Q1 | 0.014 | 1.208 | -0.005 | -0.132 |
| | | (0.034) | (3.658) | (0.036) | (0.125) |
| $\gamma_{1q2+,2018}$ | 2018 × 1 Child, Q2+ | 0.008 | 1.191 | 0.049** | -0.110*** |
| | | (0.026) | (0.939) | (0.024) | (0.039) |
| $\gamma_{2q1,2018}$ | 2018 × 2+ Children, Q1 | -0.019 | -0.618 | 0.025 | 0.053 |
| | | (0.043) | (1.241) | (0.040) | (0.073) |
| $\gamma_{2q2+,2018}$ | 2018 × 2+ Children, Q2+ | 0.025 | 0.901 | 0.047 | 0.057 |
| | | (0.023) | (1.061) | (0.030) | (0.061) |
| | Observations | 2565 | 2295 | 2272 | 2628 |
| | $R^2$ | 0.091 | 0.045 | 0.072 | 0.137 |

Note: All difference-in-difference event study estimations include individual time-varying controls, individual and $NUTS2 \times wave$ fixes effects, with robust standard errors in parentheses. Time-varying controls are fixed for the 2013 values in 2018, and include education, income (including missing income dummy), unemployment, and high-skill employment status. Number of children below 18 years old as reported in 2018, but excluding individuals with children in the household born in 2017 and 2018. Income quintiles are computed with 2013 per capita income, and individuals with children and non missing income are regarded as a separate respondent category, with interaction terms not displayed due to space constraints. The redistributive index is continuous between 0 and 1. The average tax rates and tax progressivity are continuous variables, ranging from 0 to 100 and between -1 and +1, respectively. PiS vote is a dummy variable for voting intention, taking the value 1 if the individual states they would vote for PiS in elections next Sunday. The regression is estimated using the 2008 to 2018 balanced panel sample. N=876 individuals. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$ Source: POLPAN (2021).

### 4.4.2 Heterogeneous effects

The analysis above has only shown very limited effects of the Family 500+ program on redistributive preferences. Yet, the overall effects might underestimate the program's impact on different population groups. In this section, we explore whether the effects differ for each category based on gender, area of residence, level of education, and attitudes such as fairness concerns[22]. For ease of interpretation, we split the samples according to the different characteristics to conduct the analysis. To maintain a sufficient number of observations per category for each subsample, we redefine the categories according only to the number of children in the household, so that individuals with at least two children who are eligible for the transfers for at least one child are grouped together. Moreover, we focus on the 2013 and 2018 waves. A drawback of this approach is that we are not able to test whether the parallel trend assumption holds for the different categories in each subsample. Nonetheless, apart from occasional changes in significance levels, the results of the post-change coefficients for the 2013-2018 panel mirror those of the 2008-2018 panel, as shown in Tables A4.19 and A4.20[23] in the Supplementary Material. Importantly, the bundling into one group of high and low-income respondents with two or more children does not reveal any effects of the Family 500+ on the preferences of beneficiaries. In other words, the program had effects on neither the extensive (receiving vs. not receiving the transfer, Table A4.19) nor the intensive (value of transfers received, Table 4.4) margins. Moreover, the effects among nonbeneficiaries drive the evolution of respondents with one child. All Tables with the outcomes of the heterogeneity analysis exercises are included in the Annex.

#### Demographic characteristics

First, we explore whether individuals react to the Family 500+ differently based on demographic characteristics. Research consistently indicates that women are more socially oriented than men (Alesina & Giuliano, 2011; Ranehill & Weber, 2022), especially in higher-income countries (Bozzano, Profeta, Puglisi, & Scabrosetti, 2024; Falk & Hermle, 2018), and that their social preferences are more malleable than those of men (Croson & Gneezy, 2009). The results in Table A4.3 indicate that the Family 500+ program more likely affected women's preferences for redistribution depending on their (likely) eligibility, albeit the gender differences are less pronounced than in previous research. Women living

[22]Previous research highlights the moderating effect that ideology may have on redistributive preference (Alesina & Fuchs-Schündeln, 2007; Esarey, Salmon, & Barrilleaux, 2012). However, POLPAN does not elicit the respondents' left-right placement, hindering a heterogeneity analysis according to political ideology.

[23]The main results survive different sample specifications: balanced 2008-2018, unbalanced 2008-2018, and balanced 2013-2018 panel samples. See the description of the samples in each Table's footnotes.

in a household with one child prefer higher tax rates and favor a more progressive tax profile in comparison to childless women. Men's preferences, on the other hand, are not influenced by higher exposure to the program. Women also respond more starkly than men to being excluded from transfers: women with one child were less likely to support PiS than other women in 2018, although they were more supportive of PiS compared to 2013. The penalization among women is stronger and more precisely estimated than the corresponding effect for the same group among men.

Treatment effects might also differ by geographical location[24]. Research suggests that residents of urban and rural areas differ in their values and pro-social attitudes (Aydinli, Bender, & Chasiotis, 2013; Luca, Terrero-Davila, Stein, & Lee, 2023). According to the estimated coefficients in Table A4.4, urban residents with one child responded to widening child benefits with support for higher preferred average tax rates and a more progressive tax structure. In both subsamples, respondents with two children did not differ from childless individuals in their preferences after 2016. On the other hand, the political backlash after the policy change was rather visible among the rural population. More specifically, rural residents with one child were less likely to support PiS in 2018 than those with no or more than one child. This contrasts with the findings for redistributive and tax preferences, where the policy effects were observed among the urban population but were absent in rural areas.

Educational attainment has also been associated with preferences for redistribution (Alesina & Giuliano, 2011) and tax progressivity, including in Eastern European countries (Domonkos, 2016). We find a weak positive effect on tax progressivity among higher-educated respondents with children (Table A4.5). Effects are stronger concerning tax rate preferences for lower-educated respondents with two or more children. They prefer a higher average tax rate relative to others with the same educational attainment and no children. Assuming that the level of education is closely correlated with income, these results could indicate that poorer households drive the changed preferences. Similarly, individuals with lower educational attainment became more supportive of PiS in 2018 compared to 2013, whereas there was no systematic difference between 2018 and 2013 for the educated. Moreover, the PiS punishment effect was driven by lower-educated respondents with one child, while the category-specific preferences of the higher-educated remained stable.

**Attitudes and beliefs**

Lastly, we explore whether individuals (likely) benefiting from the Family 500+ program react differently based on their prior related to inequality aversion and the role of luck and

[24]The sample split was made using pre-defined labels provided by POLPAN. We defined the location as rural if specified as such in POLPAN, and urban otherwise.

own efforts in explaining success. Poverty attitudes shape preferences for redistribution (Alesina & Angeletos, 2005; Durante, Putterman, & Van der Weele, 2014; Gassmann & Timár, 2024). People who believe everybody can succeed in society if they work hard enough are less inclined towards redistributive policies (Alesina & Angeletos, 2005; Alesina & Giuliano, 2011; Karadja, Mollerstrom, & Seim, 2017). Among people who do not agree that hard work is important to achieving success (Table A4.6), the policy expansion strongly affected tax preferences according to the respondent's eligibility for the new transfers. Both respondents with only one or with more children favor higher tax rates and were less supportive of PiS than those without children but hold similar beliefs that success is not determined by hard work. Likely, Table A4.7 suggests that attitudes related to fairness concerns and attribution of responsibility moderate the effect of Family 500+. Among individuals who believe that one is to blame for unfavorable outcomes in life, the evolution of preferences was stable between groups with no heterogeneous responses according to the degree of exposure to the extension of benefits coverage. But those who have one child and believe the person is not the sole responsible for life mishappenings favored higher and more progressive tax rates and would hold PiS accountable in the next elections.

## 4.5 Robustness analysis

Given our choices to estimate our main models, testing how robust our findings are to changes in the underlying sample or the model design is essential. First, we replace the redistribution index with the underlying variables used for its construction as outcome variables. Next, we redefine respondent categories using more disaggregated income specifications. Additionally, we investigate whether the lack of effect among beneficiaries results from anticipation effects. Finally, address possible threats to the identification of our model stemming from confounding changes. All tests include the estimation of the preferred tax rate of the median income group as an alternative dependent variable[25]. The estimations of the underlying variables used to construct the index do not reveal patterns that would corroborate the theoretical predictions.

We are not able to ensure parallel trends for the individual input variables (Table A4.8 in Annex), apart from when the outcome variable measures support for the government providing education assistance to poor children, which would more closely relate to the

[25]The Median Group Tax Rate is calculated as $MedianGroupTax_{i,t} = \frac{tax_{2,i,t}+tax_{3,i,t}}{2}$. It corresponds to the mean value between the tax rates of income groups 2 and 3, defined according to the income groups in Table A4.2, for each individual $i$ and wave $t$. The Median Group Tax does not report the median tax value chosen by each individual, instead, the tax rate that the respondent chose for the "median group". Since the survey asks about the rates for an even number of groups, the value of the median group corresponds to the mean between the two bordering observations.

family function that Family 500+ serves. In that case, individuals with one child became more supportive of the measure after Family 500+ compared to other categories.

To test the robustness of our beneficiary groups, we explore the effects of Family 500+ across different category specifications. In Specification 2, we distinguish childless individuals who belonged to the bottom quintile from those who did not to test whether a pure income force was driving the main results[26]. Moreover, we construct Specification 3 using the number of children in the household and a more granular income breakdown: bottom quintile, middle-income (quintiles 2 and 3), and higher-income (quintiles 4 and 5).

The parallel trends for all outcome variables continue to hold under Specifications 2 and 3 (Tables A4.9 and A4.10, respectively, in the Annex). Specification 2, which splits the childless category, suggests that the main results are not due to bundling low and high(er)-income respondents in the baseline category, as the results remain stable (Table A4.9). The income disaggregation of Specification 3 (Table A4.10) reveals that the backlash against PiS occurred among both middle-income and higher-income respondents, thus, the effect was not driven by individuals located closer to, but above, the transfer eligibility threshold. The tax preferences, however, show patterns suggesting a tax burden shift away from the income group to which the individual was likely to belong. Non-beneficiaries with one child did not systematically change their preferred average rate, but higher-income individuals favored higher tax rates to median groups, whereas middle-income respondents reported a more progressive tax scheme compared to other categories. In other words, not being included in the policy expansion did not affect the overall level of taxes the individual understands society should direct to the government. Instead, wealthier respondents attributed a higher burden to the middle class, possibly due to understanding that this group started benefiting from public transfers. Middle-income respondents, on the other hand, shifted the tax to higher classes by preferring a more progressive scheme. A possible explanation is that the policy change and the new income threshold might have served as a signal for middle-income individuals of their placement in the income distribution. Our findings corroborate existing research suggesting that middle-income individuals align preferences to other income classes they are close to (Lupu & Pontusson, 2011) and support more progressive taxes when learning that they rank lower in the income distribution than previously thought (Fernández-Albertos & Kuo, 2018).

A lack of effect among recipients may be explained by expectations of future benefits by childless young respondents, who expect to be able to benefit from the program in the future. However, it is important to note that, due to the balanced panel structure of

[26]Table A4.22 presents the characteristics of each specification.

the sample, the youngest respondents were 31 years old when interviewed in 2018, which reduces concerns about the strong influence of young adults with no children to bias the results[27]. Nonetheless, we test for this possibility by excluding childless individuals below the age of 40 from the sample, whose preferences are more likely to change due to expectations of future benefits. The main results survive the sample restriction and remain qualitatively stable to the new specification (Table A4.11).

Lastly, our identification strategy assumes that no other contemporary shocks systematically and differentially affected respondents across the different categories between 2013 and 2019. However, other reforms introduced by the PiS administration could potentially confound our results. First, the Civic Platform's earlier increase in the retirement age was a key political issue for PiS, leading to the Polish Parliament's passage of legislation reversing the reform in November 2016. The law was enacted in October 2017 and restored the previous scheme: 60 years for women and 65 for men (versus 67 for both). To address this issue, our main model already controls for the respondents' age via the individual and wave-fixed effects. Moreover, we re-run our estimations adding an interaction between a dummy indicating individuals impacted by the pension reforms[28] and the wave dummies. If the pension reforms differentially impacted the Family 500+ categories we constructed, the addition of this interaction term would absorb the effect. Results in Table A4.12 suggest that individuals impacted by the pension reform did, in fact, become more supportive of PiS in 2018 compared to those who were not. Nonetheless, our results survive the inclusion of the pension effect, suggesting the pension reform beneficiaries were not systematically correlated with the different categories of Family 500+ (non-)beneficiaries.

Second, the PiS government reformed the educational system in 2016, eliminating lower-secondary schools and, more significantly, raising the compulsory school attendance age from six to seven years. Research has linked this change to increased enrollments in private preschools, largely due to overcrowding in public institutions (Ciepielewska-Kowalik, 2020). Although our strategy distinguishes between households with children (who would, *a priori*, be equally affected by the educational reform), this reform may have mitigated any positive effects among Family 500+ recipients, potentially biasing the results toward zero in comparison to childless households. To account for this, we include in our model an interaction between a dummy variable indicating households with preschool-age children[29] and the wave dummy. If the reform influences our results, this interaction term should capture the confounding effect. However, the results in Table A4.13 show that the

[27]The average women's age at birth of first child in 2018 Poland was 27.4 years (UNECE, n.d.).

[28]This dummy takes the value of 1 for women between 61 and 67 years old in 2018 (between 60 and 66 in 2017) and 66- and 67-year-old men in 2018 (65 and 66 in 2017)

[29]Preschool-age children are defined as those aged 3 to 6 in 2018, and children who were of preschool age in 2016 and 2017, thus aged 7 and 8 in 2018.

experiences of households with preschool-age children did not drive our main findings[30].

Thirdly, in line with the experiences of other countries, in 2015, Poland's government went from a liberal democracy to an illiberal one, characterized by social conservatism and criticism of libertarian values (Guriev & Papaioannou, 2022). To address concerns that the implementation of Family 500+ reflects changes in preferences that led to the victory of PiS in 2015, we restrict our sample to individuals who maintained a consistent pattern of voting in the 2013 and 2018 elections. Using the classification provided by the Chapel Hill Expert Survey (CHES), we identify individuals who voted for comparable parties in both elections. More specifically, we classify the parties into libertarians or traditionalists according to the CHES GAL-TAN measure, which expresses the parties' social and cultural values in a quantifiable measure[31]. Thus, we exclude from the sample respondents who changed from libertarian to authoritarian preferences (or reversely) and respondents who did not inform of their party preferences in either wave. The main results[32] are reproduced with this new sample (Table A4.14), with the caveat that parallel trends cannot be ensured for average tax rates.

## 4.6 Discussion and conclusion

Despite the positive trends in (extreme) poverty reduction over the past decades, challenging domestic circumstances and the aftermath of international shocks heightened international concerns about ensuring livelihoods and social inclusion for those in need, exemplified by the 2030 Agenda for Sustainable Development. Research has shown that (non-contributory) social transfers to families have the potential to protect and improve a range of outcomes for the beneficiaries, including relieving financial distress and improving children's education and health markers, among others (Bastagli et al., 2016; Millán, Barham, Macours, Maluccio, & Stampini, 2019). However, even programs that are effective in achieving the desired outcomes with their target population must be fiscally sustainable and enjoy social endorsement to ensure their continuity through the years. A core idea put forward to explain policy support is that individuals are materially self-interested and will advocate for policies from which they can benefit. This rationale is introduced in the seminal Meltzer and Richard (1981) model to explain redistributive

[30] We perform the same exercise, with the underlying index variable on education provision as the dependent variable. The results, available upon request, replicate those in Table A4.8.

[31] Table A4.23, Supplementary Material, lists the parties' scores in the GAL-TAN measure in the CHES editions closest to the election years.

[32] As the only source of votes for PiS are respondents in the 'authoritarian' category and the small sample size for that group limits variation, our analysis is limited to the redistributive index and tax-related measures as outcome variables. Due to the number of observations, we estimate the model using the unbalanced 2008-2018 panel.

government spending given inequality levels. Moreover, research has shown that when lower-income individuals are aware of their income position, they are more supportive of redistribution as they are prospective beneficiaries of transfers financed by the taxes of their richer counterparts (Cruces, Perez-Truglia, & Tetaz, 2013).

The literature on the political economy of targeting proposes at its core that for a transfer to find and sustain political support, it should cover a broader beneficiary group (Gelbach & Pritchett, 2002; Moene & Wallerstein, 2001). A voter coalition will be formed by people who have a high likelihood of benefiting from the policy and deem the policy fair (Rothstein, 2012). Thus, a program that benefits only a small share of society is predicted by the theory to shape the tax and redistributive preferences of non (potential) beneficiaries accordingly, leading them to oppose a political agenda that advocates for greater levels of social provision by the government. Similarly, a more inclusive transfer will reach more individuals, who, guided by self-interest, will support the maintenance of the system that benefits them. We exploited a widening of the Polish family benefit coverage, which went from means-tested to quasi-universal in 2016, to test the pro-universalism argument that self-interested individuals will support a greater welfare state if they benefit from it.

We find that individuals who became beneficiaries after 2016 - higher income households with more than one child - do not become more supportive of governmental redistribution than households not eligible for transfers due to being childless. In other words, actually benefiting from a child transfer does not shape preferences for redistribution or tax structure substantially different from childless households, as the theory would have predicted. However, our findings suggest that among those who did not benefit from the expansion, individuals with children who were excluded due to income considerations reacted to the policy changes; they preferred more progressive taxes and were more likely to punish the government in the next elections. These effects were particularly strong among lower-educated women.

With a series of robustness checks, we attempt to alleviate concerns about the limitations of our study design. Our results survive further breakdowns of the households according to their per capita income. This suggests that the changes observed in our data are not a result of pure income concerns but rather a combination of income and the presence of children in the house, the program's defining eligibility criteria. Furthermore, the results remain stable after restricting our analysis to a reduced sample of voters with consistent voting preferences. Although this approach cannot entirely eliminate the possibility of confounding factors given the data and the policy context, it suggests that changing liberal-traditional social values are not the primary driver behind the observed results. Similarly, our main findings survive the inclusion of the possible effects of PiS' educational and pension reforms, suggesting that those impacted by these changes did not system-

atically correlate with our (non-)beneficiaries categories. Lastly, We derive our measure for redistributive preference from questions that can be understood as stemming from a general ideological dimension, instead of concrete support for a program and elicitation, connected to individual perceptions of gains/losses from it. While opinions on the specific policy would allow the examination of the social sustainability of that programme, that information is unfortunately not available with other data necessary for a rigorous scholarly investigation. Nonetheless, one of the items used for our index computation specifically addresses children, which relates more directly to the family function of Family 500+. A disaggregated analysis of that subcomponent indicates that households more likely to have benefited more from Family 500+ do not become more supportive of the educational measure vis-a-vis childless households.

Beyond possible research limitations, the lack of a stronger response among beneficiaries might stem from two complementary explanations. First, family and children's benefits are examples of welfare policies that enjoy considerable levels of broad social support, even by non-direct beneficiaries (Bremer & Bürgisser, 2023; Goerres & Tepe, 2010; Neustadt & Zweifel, 2023). It is plausible that childless respondents have (close) ties to other individuals with children and would be willing to pay for a system benefiting these individuals (Goerres & Tepe, 2010). Additionally, families with children are also commonly thought to be a vulnerable group of society to whom little group-specific insurance is available (Neustadt & Zweifel, 2023). The specific Polish socio-political context of increasing conservative values would likely reinforce this protective view of families as worthy beneficiaries (Meardi & Guardiancich, 2022; Orenstein & Bugarič, 2022). Thus, instead of a primary self-motivated reaction, the reaction of the childless to the Family 500 would be a display of altruism to a group that is not seen as undeserving by society and that exemplifies the desired features of Polish society. A second explanation for the lack of difference between those two groups relates to the policy feedback literature, which poses that personal experiences with public policies matter for the attitudes of the public (Larsen, 2018; Rothstein, 2012). Individuals would adapt their political attitudes from their (personal) exposure to the policy and the institutions involved with it. However, the literature acknowledges that the dynamics of welfare expansion and retrenchment operate in different dimensions (Larsen, 2019), and it is possible that the immediate and stark reaction observed in the context of a policy curtail is not a mirrored image of the positive acceptance of a policy widening. To the extent that attitudes towards redistribution are a deep-rooted cultural element (E. F. Luttmer, 2001), it is possible that it would require more than two years of living under a more inclusive system for its structure to exert any changes to one's preferences. The current political mistrust and polarization observed in Poland (Applebaum, 2020; Sadura & Sierakowski, 2021) plausibly pose additional challenges to changes in welfare attitudes and increase support for a larger welfare state (Daniele & Geys, 2015;

Gubello, 2024), especially within a relatively short period of time. Support of a social protection system depends on personal views about the welfare bureaucracy, (Rothstein, 2012), and among Poles, those more likely to benefit highly from the welfare policies have lower levels of faith in the government's ability to provide a holistic range of public goods and services (Sadura & Sierakowski, 2021).

The concentration of the effect on non-beneficiaries with children suggests that the design of policy features is relevant for the transfers' acceptance by non-beneficiaries. As Family 500+ prompted different preferences from non-beneficiaries with one child than from non-beneficiaries with no or more than one child, the economic eligibility criteria seem to carry weight, particularly for individuals likely to see themselves close to the policy's primary goal. Our findings resonate with research that considers proximity to the policy as a crucial factor when exploring reactions to its change. Differently from much of the work that explores reactions to those adversely affected by a policy retrenchment (De Vries & Hobolt, 2012; Elinder, Jordahl, & Poutvaara, 2015; Larsen, 2018), we suggest that similar punishment might be observed in the case of a policy expansion that fails to include the whole group that could, in theory, benefit from the transfer. While we are not able to inspect it directly, it is plausible that respondents with one child understood the income criteria to be discretionary since it referred to household conditions not related to the program's main function for which they qualified and was only applicable to a subgroup of potential beneficiaries.

This chapter sheds light on how a coverage widening of transfers might change the political and tax attitudes - both levels and shape - among non-beneficiaries, which the political economy of targeting does not expressively disentangle. The response of non-beneficiaries over tax levels is different from that of tax distribution, corroborating previous evidence that there is a decoupling of these two tax attitudes on people's minds (Barnes, 2015). In comparison to other households, one-child households excluded from the benefits transferred the tax burden to other income groups; however, did not change their preferred average tax rate. This provides additional indications that those respondents do not support a system where they finance but do not benefit from transfers. While we do not find evidence that the policy beneficiaries would have a greater willingness to pay for a welfare system that benefits them (which research such as Neustadt & Zweifel, 2023, predicts), non-beneficiaries do not necessarily become less willing to finance such a system. Instead, they expect other groups also to contribute: high-income non-beneficiaries prefer higher middle-income taxes after the change, and middle-income non-beneficiaries favor more progressive tax schemes. The null effect of Family 500+ on beneficiaries' tax preferences, on the other hand, echos previous evidence suggesting a lack of clear understanding among many Poles of the connection between taxes paid and the provision of welfare transfers,

goods, and services (Sadura & Sierakowski, 2021). As it had already been argued for mature social protection systems (Busemeyer & Neimanns, 2017), the case of the welfare policies in transitioning economies also seems to involve complex distribution considerations.

Importantly, our findings do not refute the argument that a more universal system enjoys greater overall support than a targeted one. Even though the estimated 2018 wave effect suggests a society that favors less redistribution and a more regressive tax system, we are not able to make inferences about whether and how the widening of social transfers influences broad preferences for redistribution or tax, only about the differential effects across different categories of (non-)beneficiaries. As the policy was announced and implemented nationally at the same time, it is not possible to use any spatial variation to explore a non-treated region as a control group and examine broad changes in support for redistribution. Even in that case, one could argue that a staggered policy implementation would affect the preferences of individuals in treated and untreated areas alike, either by an expectation of the policy roll-out or resentment of exclusion. While this bears little or no consequences when studying outcomes such as economic activities, it is plausible that the study of preferences and perceptions is highly vulnerable to such effects. Additionally, even though experimental settings ensure a high degree of control and non-spillovers, there are challenges in replicating the effects of living under a policy structure and adapting your attitudes accordingly. Therefore, it is crucial to combine experimental work with research grounded on observational data to explore how preferences react to different designs of (welfare) policies.

# Appendices

## 4.A Annex

Table A4.1: Redistributive attitudes: description

| Variable | Type | Scale |
|---|---|---|
| Index: preferences for redistribution | Continuous: Normalized index | 0 - 1 |
| Index: input variables | | |
| The government should reduce differences in income | Ordinal: Agree/Disagree | 5 points |
| The government should assist poor children in higher education | Ordinal: Agree/Disagree | 5 points |
| The government should provide jobs for everyone who wants to work | Ordinal: Agree/Disagree | 5 points |
| Variables for heterogeneity analyses | | |
| The role of hard work to achieve success in life | Ordinal: Agree/Disagree | 5 points |
| Establishment of upper-income limit | Ordinal: Agree/Disagree | 5 points |
| Whose responsibility is it when something goes wrong in one's life | Nominal: Own/Others/Depends | 3 points |

Source: POLPAN, 2008, 2013, 2018.

Table A4.2: Tax schedule preferences

| Income group | Wave | | |
|---|---|---|---|
| | **2008** | **2013** | **2018** |
| 1 | 1,200 | 1,500 | 2,000 |
| 2 | 3,000 | 4,000 | 5,000 |
| 3 | 9,000 | 9,000 | 12,000 |
| 4 | 45,000 | 50,000 | 60,000 |

Question: "How much tax should be paid – on a monthly basis – by people who earn the following amounts per month (gross):". Each cell displays the value of monthly earnings for the question.
In each year, POLPAN asks the respondents about their preferred tax rates for four groups with different incomes. In Table A4.2 above, the columns 2008, 2013, and 2018 refer to the income values used in each wave. Within the same survey wave, the values for each group are listed in different rows in the same column. Source: POLPAN (2021).

Table A4.3: Heterogeneous effects: Gender

| | Index | | Avg tax | | Tax progressivity | | PiS vote | |
|---|---|---|---|---|---|---|---|---|
| Gender | Man | Woman | Man | Woman | Man | Woman | Man | Woman |
| 2018 × 1 Child | 0.01 | 0.02 | 0.10 | 2.17* | 0.01 | 0.05* | -0.06 | -0.10** |
| | (0.02) | (0.02) | (0.86) | (1.19) | (0.02) | (0.03) | (0.04) | (0.05) |
| 2018 × 2+ Children | -0.00 | 0.03* | 1.12 | 0.56 | 0.03 | 0.01 | 0.04 | -0.00 |
| | (0.03) | (0.02) | (0.99) | (0.93) | (0.03) | (0.02) | (0.06) | (0.05) |
| Observations | 1526 | 1866 | 1278 | 1469 | 1268 | 1459 | 1556 | 1950 |
| $R^2$ | 0.111 | 0.109 | 0.052 | 0.036 | 0.073 | 0.049 | 0.092 | 0.101 |

Note: All difference-in-difference event study estimations include individual, wave and $NUTS2 \times wave$ fixed effects, with robust standard errors in parentheses. Number of children below 18 years old reported in 2018, but excluding individuals with children in the household born in 2017 and 2018. The redistributive index is continuous between 0 and 1. The average tax rates and the median group tax rates are continuous variables ranging from 0 to 100. Lastly, tax progressivity is continuous, between -1 and 1. The regression is run on a sample of the 2013 to 2018 balanced panel. The sample is split according to the respondent's gender for each outcome variable's estimation, identified in the table's header. Source: POLPAN (2021).
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4.4: Heterogeneous effects: Rural - Urban

| | Index | | Avg tax | | Tax progressivity | | PiS vote | |
|---|---|---|---|---|---|---|---|---|
| Location | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban |
| 2018 × 1 Child | 0.03 | -0.00 | 2.19** | 0.26 | 0.06** | 0.01 | -0.04 | -0.14*** |
| | (0.02) | (0.02) | (0.93) | (1.24) | (0.03) | (0.02) | (0.05) | (0.05) |
| 2018 × 2+ Children | 0.01 | 0.03 | 0.79 | 0.61 | 0.03 | 0.00 | -0.05 | 0.01 |
| | (0.03) | (0.02) | (1.14) | (0.87) | (0.03) | (0.02) | (0.04) | (0.05) |
| Observations | 1869 | 1523 | 1471 | 1276 | 1464 | 1263 | 1930 | 1576 |
| $R^2$ | 0.096 | 0.151 | 0.069 | 0.038 | 0.054 | 0.082 | 0.068 | 0.141 |

Note: See Table A4.3 for a decription of the estimation methods and variables specifications. The sample is split according to the respondent's dwelling location, identified in the table's header. Source: POLPAN (2021). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4.5: Heterogeneous effects: Education

| | Index | | Avg tax | | Tax progressivity | | PiS vote | |
|---|---|---|---|---|---|---|---|---|
| Education | Lower | High | Lower | High | Lower | High | Lower | High |
| 2018 × 1 Child | 0.03 | -0.01 | 1.26 | 1.27 | 0.03 | 0.05* | -0.12*** | -0.00 |
| | (0.02) | (0.03) | (1.05) | (1.19) | (0.02) | (0.03) | (0.04) | (0.05) |
| 2018 × 2 Children | 0.02 | 0.02 | 1.62* | -0.57 | 0.02 | 0.02 | -0.01 | 0.05 |
| | (0.02) | (0.03) | (0.83) | (1.17) | (0.03) | (0.03) | (0.05) | (0.06) |
| Observations | 2451 | 941 | 1957 | 790 | 1941 | 786 | 2544 | 962 |
| $R^2$ | 0.110 | 0.104 | 0.046 | 0.064 | 0.046 | 0.111 | 0.106 | 0.075 |

Note: See Table A4.3 for a description of the estimation methods and variables specifications. The sample is split according to the respondent's educational attainment. Lower education: up to, and including, secondary level; High education: post-secondary and above. Source: POLPAN (2021).
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4.6: Heterogeneous effects: Determinant of success: Hardwork

| | Index | | Avg tax | | Tax progressivity | | PiS vote | |
|---|---|---|---|---|---|---|---|---|
| Hardwork is important | No | Yes | No | Yes | No | Yes | No | Yes |
| 2018 × 1 Child | -0.02 | 0.02 | 3.59** | 0.47 | -0.01 | 0.05** | -0.10* | -0.07 |
| | (0.03) | (0.02) | (1.55) | (0.89) | (0.03) | (0.02) | (0.05) | (0.04) |
| 2018 × 2 Children | 0.04 | 0.02 | 3.96*** | -0.12 | 0.05 | 0.02 | -0.09 | 0.04 |
| | (0.03) | (0.02) | (1.51) | (0.76) | (0.05) | (0.02) | (0.08) | (0.04) |
| Observations | 1455 | 1937 | 861 | 1886 | 859 | 1868 | 1522 | 1984 |
| $R^2$ | 0.127 | 0.104 | 0.085 | 0.038 | 0.073 | 0.062 | 0.117 | 0.085 |

Note: A4.3 for a description of the estimation methods and variables specifications. The sample is split according to the respondent's belief whether hard work is important to achieve success in life (elicited in the 2013 wave), identified in the table's header. Source: POLPAN (2021).
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4.7: Heterogeneous effects: If something goes wrong with life, whose fault is it?

| | Index | | Avg tax | | Tax progressivity | | PiS vote | |
|---|---|---|---|---|---|---|---|---|
| Fault for wrong things | Others | Own | Others | Own | Others | Own | Others | Own |
| 2018 × 1 Child | 0.01 | 0.00 | 1.88** | -0.73 | 0.04* | 0.02 | -0.08* | -0.04 |
| | (0.02) | (0.03) | (0.83) | (1.75) | (0.02) | (0.03) | (0.04) | (0.06) |
| 2018 × 2 Children | 0.01 | 0.04 | 0.49 | 1.42 | 0.03 | 0.00 | 0.06 | 0.00 |
| | (0.02) | (0.03) | (0.81) | (1.19) | (0.02) | (0.03) | (0.04) | (0.06) |
| Observations | 1931 | 807 | 1882 | 774 | 1871 | 765 | 1988 | 822 |
| $R^2$ | 0.129 | 0.121 | 0.049 | 0.061 | 0.043 | 0.075 | 0.102 | 0.081 |

Note: See Table A4.3 for a description of the estimation methods and variables specifications. The sample is split according to the respondent's belief about whose fault it is if something goes wrong in their life (attitude elicited in the 2013 wave), identified in the table's header. Source: POLPAN (2021).
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4.8: Index breakdown: Input variables

| Dependent variable: | Government responsibility | | Education assistance | | Job provision | |
|---|---|---|---|---|---|---|
| | Highly Agrees | Agrees | Highly Agrees | Agrees | Highly Agrees | Agrees |
| 2008 | 0.007 | 0.064 | 0.015 | 0.086** | -0.217*** | -0.165*** |
| | (0.075) | (0.071) | (0.072) | (0.041) | (0.074) | (0.056) |
| 2018 | -0.166*** | -0.163** | -0.176** | 0.001 | -0.122* | -0.094** |
| | (0.057) | (0.075) | (0.073) | (0.051) | (0.072) | (0.046) |
| *Parallel trends* | | | | | | |
| 2008 × 1 Child, Q1 | -0.149 | -0.047 | 0.104 | 0.022 | -0.103 | -0.209** |
| | (0.157) | (0.142) | (0.126) | (0.048) | (0.139) | (0.085) |
| 2008 × 1 Child, Q2+ | -0.045 | -0.061 | -0.072 | 0.035 | -0.014 | 0.026 |
| | (0.059) | (0.071) | (0.079) | (0.036) | (0.068) | (0.059) |
| 2008 × 2+ Children, Q1 | 0.001 | -0.168* | 0.131 | -0.048 | -0.025 | -0.004 |
| | (0.092) | (0.088) | (0.094) | (0.059) | (0.111) | (0.056) |
| 2008 × 2+ Children, Q2+ | 0.084 | -0.021 | 0.041 | 0.036 | -0.041 | -0.077 |
| | (0.074) | (0.074) | (0.082) | (0.044) | (0.079) | (0.064) |
| *Main coefficients of interest* | | | | | | |
| 2018 × 1 Child, Q1 | -0.034 | 0.124 | 0.087 | 0.080* | -0.072 | 0.036 |
| | (0.135) | (0.112) | (0.144) | (0.044) | (0.120) | (0.046) |
| 2018 × 1 Child, Q2+ | -0.003 | 0.009 | -0.082 | 0.091* | 0.015 | -0.001 |
| | (0.065) | (0.075) | (0.074) | (0.047) | (0.079) | (0.062) |
| 2018 × 2+ Children, Q1 | 0.064 | -0.127 | 0.057 | -0.061 | 0.024 | -0.014 |
| | (0.095) | (0.088) | (0.107) | (0.073) | (0.116) | (0.077) |
| 2018 × 2+ Children, Q2+ | 0.037 | 0.023 | 0.031 | 0.003 | 0.064 | -0.017 |
| | (0.068) | (0.081) | (0.076) | (0.049) | (0.068) | (0.048) |
| Observations | 2628 | 2628 | 2628 | 2628 | 2628 | 2628 |
| $R^2$ | 0.056 | 0.041 | 0.085 | 0.061 | 0.079 | 0.060 |

Notes: See notes in Table 4.4 for a description of the estimation methods and explanatory variables specifications. The outcome variables, described in the table's header, are dummies for weather the individual highly agrees or agrees with the statements used as input variables to construct the redistributive index. See Table A4.1 for a description of the input variables. Source: POLPAN (2021).
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4.9: Specification 2: Breakdown 0 children and low-income categories

| | Redistributive Index | Tax: Average | Tax: Median Group | Tax: Progressivity | PiS Vote |
|---|---|---|---|---|---|
| 2008 × 1 Child, Q1 | -0.041 | -1.041 | -2.105 | 0.002 | -0.051 |
| | (0.040) | (2.239) | (2.358) | (0.042) | (0.110) |
| 2008 × 1 Child, Q2+ | -0.016 | 0.768 | 0.050 | -0.005 | 0.011 |
| | (0.022) | (1.168) | (1.204) | (0.031) | (0.052) |
| 2008 × 2+ Children, Q1 | -0.020 | -1.595 | -1.059 | 0.025 | -0.026 |
| | (0.031) | (1.604) | (1.433) | (0.040) | (0.076) |
| 2008 × 2+ Children, Q2+ | -0.007 | 0.178 | 0.019 | 0.033 | 0.056 |
| | (0.026) | (0.973) | (1.091) | (0.029) | (0.045) |
| 2008 × 0 Child, Q1 | -0.028 | -1.807 | -2.090 | 0.011 | 0.007 |
| | (0.023) | (1.469) | (1.473) | (0.028) | (0.044) |
| 2018 × 1 Child, Q1 | 0.020 | 1.131 | 1.069 | -0.002 | -0.125 |
| | (0.034) | (3.674) | (3.853) | (0.037) | (0.125) |
| 2018 × 1 Child, Q2+ | 0.014 | 1.116 | 1.553 | 0.053** | -0.103*** |
| | (0.026) | (0.968) | (1.019) | (0.025) | (0.040) |
| 2018 × 2+ Children, Q1 | -0.013 | -0.709 | 0.040 | 0.029 | 0.061 |
| | (0.043) | (1.277) | (1.395) | (0.041) | (0.074) |
| 2018 × 2+ Children, Q2+ | 0.030 | 0.813 | 0.974 | 0.051* | 0.064 |
| | (0.024) | (1.095) | (1.076) | (0.030) | (0.062) |
| 2018 × 0 Child, Q1 | -0.035 | -1.910 | -1.770 | -0.003 | 0.052 |
| | (0.026) | (1.369) | (1.511) | (0.028) | (0.070) |
| Observations | 2565 | 2295 | 2290 | 2272 | 2628 |
| $R^2$ | 0.098 | 0.048 | 0.038 | 0.073 | 0.138 |

Notes: See notes in Table 4.4 for a description of the estimation methods and explanatory variables specifications. See the main text for a description of the Specification 3 categories. The categories of missing income ("0 children, missing income" and "1+ children missing income" categories have been omitted from the table. Source: POLPAN (2021).
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4.10: Specification 3: Further income breakdown

| | Redistributive Index | Tax: Average | Tax: Median Group | Tax: Progressivity | PiS Vote |
|---|---|---|---|---|---|
| 2008 × 1 child, Q1 | -0.041 | -0.850 | -1.926 | 0.001 | -0.055 |
| | (0.040) | (2.230) | (2.347) | (0.041) | (0.110) |
| 2008 × 1 child, Q2 AND Q3 | -0.015 | 0.921 | -0.210 | 0.018 | -0.001 |
| | (0.028) | (1.659) | (1.623) | (0.040) | (0.080) |
| 2008 × 2+ children, Q1 | -0.020 | -1.387 | -0.847 | 0.023 | -0.030 |
| | (0.031) | (1.590) | (1.417) | (0.040) | (0.076) |
| 2008 × 2+ children, Q2 AND Q3 | 0.024 | 0.233 | -0.402 | 0.049 | 0.073 |
| | (0.028) | (1.069) | (1.266) | (0.039) | (0.058) |
| 2008 × 1 child, Q4 AND Q5 | -0.019 | 0.938 | 0.657 | -0.033 | 0.018 |
| | (0.030) | (1.444) | (1.538) | (0.043) | (0.060) |
| 2008 × 2+ children, Q4 AND Q5 | -0.059 | 0.573 | 1.228 | 0.002 | 0.022 |
| | (0.045) | (1.647) | (1.721) | (0.037) | (0.059) |
| 2018 × 1 child, Q1 | 0.014 | 1.225 | 1.117 | -0.005 | -0.131 |
| | (0.034) | (3.661) | (3.840) | (0.037) | (0.125) |
| 2018 × 1 child, Q2 AND Q3 | 0.017 | 0.404 | 0.631 | 0.072** | -0.102* |
| | (0.036) | (1.214) | (1.316) | (0.035) | (0.060) |
| 2018 × 2+ children, Q1 | -0.019 | -0.618 | 0.080 | 0.025 | 0.053 |
| | (0.043) | (1.241) | (1.369) | (0.040) | (0.073) |
| 2018 × 2+ children, Q2 AND Q3 | 0.036 | 1.126 | 1.155 | 0.049 | 0.084 |
| | (0.026) | (1.237) | (1.205) | (0.040) | (0.080) |
| 2018 × 1 child, Q4 AND Q5 | -0.000 | 1.962 | 2.491** | 0.028 | -0.117*** |
| | (0.034) | (1.250) | (1.262) | (0.031) | (0.042) |
| 2018 × 2+ children, Q4 AND Q5 | 0.008 | 0.549 | 0.809 | 0.044 | 0.011 |
| | (0.042) | (1.806) | (1.743) | (0.040) | (0.087) |
| Observations | 2565 | 2295 | 2290 | 2272 | 2628 |
| $R^2$ | 0.093 | 0.046 | 0.036 | 0.074 | 0.137 |

Notes: See notes in Table 4.4 for a description of the estimation methods and explanatory variables specifications. See the main text for a description of the Specification 3 categories. Source: POLPAN (2021).
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4.11: Robustness: Expectation effects

| | Redistributive Index | Tax: Average | Tax: Median Group | Tax: Progressivity | PiS Vote |
|---|---|---|---|---|---|
| 2008 | -0.02 | -1.08 | 0.69 | -0.07*** | -0.03 |
| | (0.02) | (1.30) | (1.43) | (0.03) | (0.05) |
| 2018 | -0.06** | -1.10 | -0.70 | -0.10*** | 0.21*** |
| | (0.03) | (0.97) | (1.04) | (0.03) | (0.06) |
| | | | *Parallel trends* | | |
| 2008 × 1 Child, Q1 | -0.04 | -0.51 | -1.62 | -0.01 | -0.05 |
| | (0.04) | (2.20) | (2.29) | (0.04) | (0.11) |
| 2008 × 1 Child, Q2+ | -0.02 | 1.27 | 0.56 | -0.01 | 0.03 |
| | (0.02) | (1.18) | (1.24) | (0.03) | (0.05) |
| 2008 × 2+ Children, Q1 | -0.02 | -0.97 | -0.37 | 0.02 | -0.02 |
| | (0.03) | (1.60) | (1.43) | (0.04) | (0.08) |
| 2008 × 2+ Children, Q2+ | -0.00 | 0.72 | 0.60 | 0.03 | 0.07 |
| | (0.03) | (0.97) | (1.09) | (0.03) | (0.05) |
| | | | *Main coefficients of interest* | | |
| 2018 × 1 Child, Q1 | 0.02 | 1.52 | 1.35 | 0.01 | -0.15 |
| | (0.03) | (3.69) | (3.86) | (0.04) | (0.12) |
| 2018 × 1 Child, Q2+ | 0.01 | 1.56 | 1.91* | 0.06** | -0.13*** |
| | (0.03) | (0.95) | (1.01) | (0.02) | (0.04) |
| 2018 × 2+ Children, Q1 | -0.02 | -0.17 | 0.43 | 0.04 | 0.03 |
| | (0.04) | (1.27) | (1.38) | (0.04) | (0.07) |
| 2018 × 2+ Children, Q2+ | 0.02 | 1.23 | 1.25 | 0.06** | 0.04 |
| | (0.02) | (1.08) | (1.06) | (0.03) | (0.06) |
| Observations | 2290 | 2016 | 2012 | 1997 | 2346 |
| $R^2$ | 0.090 | 0.049 | 0.042 | 0.079 | 0.149 |

Notes: See notes in Table 4.4 for a description of the estimation methods and specification of the outcome and explanatory variables. The sample excludes 40-year-old and younger, childless respondents. See the main text for a description of the Specification 2 categories. Source: POLPAN (2021).
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4.12: Robustness: Pension Reform

| | Redistributive Index | Tax: Average | Tax: Median Group | Tax: Progressivity | PiS Vote |
|---|---|---|---|---|---|
| 2008 | -0.01 | -1.22 | 0.31 | -0.08*** | -0.03 |
| | (0.02) | (1.16) | (1.28) | (0.03) | (0.04) |
| 2018 | -0.06*** | -1.10 | -0.83 | -0.08*** | 0.18*** |
| | (0.02) | (0.93) | (1.00) | (0.03) | (0.05) |
| | | | *Parallel trends* | | |
| 2008 × 1 Child, Q1 | -0.04 | -0.71 | -1.83 | 0.00 | -0.05 |
| | (0.04) | (2.22) | (2.34) | (0.04) | (0.11) |
| 2008 × 1 Child, Q2+ | -0.02 | 1.12 | 0.32 | -0.00 | 0.01 |
| | (0.02) | (1.17) | (1.21) | (0.03) | (0.05) |
| 2008 × 2+ Children, Q1 | -0.02 | -1.21 | -0.75 | 0.03 | -0.03 |
| | (0.03) | (1.60) | (1.43) | (0.04) | (0.08) |
| 2008 × 2+ Children, Q2+ | -0.01 | 0.54 | 0.30 | 0.04 | 0.06 |
| | (0.03) | (0.97) | (1.09) | (0.03) | (0.04) |
| | | | *Main coefficients of interest* | | |
| 2018 × 1 Child, Q1 | 0.01 | 1.19 | 1.05 | -0.01 | -0.12 |
| | (0.03) | (3.65) | (3.83) | (0.04) | (0.13) |
| 2018 × 1 Child, Q2+ | 0.01 | 1.16 | 1.50 | 0.05* | -0.09** |
| | (0.03) | (0.97) | (1.02) | (0.02) | (0.04) |
| 2018 × 2+ Children, Q1 | -0.02 | -0.64 | 0.00 | 0.02 | 0.07 |
| | (0.04) | (1.25) | (1.38) | (0.04) | (0.07) |
| 2018 × 2+ Children, Q2+ | 0.03 | 0.88 | 0.94 | 0.04 | 0.07 |
| | (0.02) | (1.07) | (1.05) | (0.03) | (0.06) |
| | | | *Robustness check coefficient* | | |
| 2008 × Affected pension reform | -0.01 | 1.08 | 0.57 | 0.03 | 0.02 |
| | (0.02) | (0.93) | (0.96) | (0.02) | (0.04) |
| 2018 × Affected pension reform | 0.00 | -0.03 | -0.31 | -0.01 | 0.11** |
| | (0.02) | (0.98) | (1.04) | (0.02) | (0.05) |
| Observations | 2565 | 2295 | 2290 | 2272 | 2628 |
| $R^2$ | 0.092 | 0.046 | 0.035 | 0.074 | 0.140 |

Notes: See notes in Table 4.4 for a description of the estimation methods and specification of the outcome and explanatory variables. See the main text for a description of the Specification 2 categories. Source: POLPAN (2021). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4.13: Robustness: Educational Reform

| | Redistributive Index | Tax: Average | Tax: Median Group | Tax: Progressivity | PiS Vote |
|---|---|---|---|---|---|
| 2008 | -0.01 | -1.10 | 0.38 | -0.08*** | -0.02 |
| | (0.02) | (1.15) | (1.27) | (0.03) | (0.04) |
| 2018 | -0.06*** | -1.18 | -0.94 | -0.08*** | 0.20*** |
| | (0.02) | (0.92) | (0.99) | (0.03) | (0.05) |
| | | | *Parallel trends* | | |
| 2008 × 1 Child, Q1 | -0.04 | -0.91 | -1.87 | 0.01 | -0.05 |
| | (0.04) | (2.25) | (2.38) | (0.04) | (0.11) |
| 2008 × 1 Child, Q2+ | -0.01 | 0.83 | 0.27 | 0.00 | 0.01 |
| | (0.02) | (1.31) | (1.35) | (0.03) | (0.06) |
| 2008 × 2+ Children, Q1 | -0.01 | -1.59 | -0.80 | 0.04 | -0.02 |
| | (0.03) | (1.68) | (1.55) | (0.04) | (0.08) |
| 2008 × 2+ Children, Q2+ | 0.00 | 0.18 | 0.27 | 0.05 | 0.06 |
| | (0.03) | (1.22) | (1.38) | (0.04) | (0.06) |
| | | | *Main coefficients of interest* | | |
| 2018 × 1 Child, Q1 | 0.01 | 0.70 | 0.66 | -0.00 | -0.14 |
| | (0.03) | (3.40) | (3.58) | (0.04) | (0.13) |
| 2018 × 1 Child, Q2+ | 0.00 | 0.28 | 0.79 | 0.05* | -0.13*** |
| | (0.03) | (1.05) | (1.12) | (0.03) | (0.05) |
| 2018 × 2+ Children, Q1 | -0.03 | -2.11 | -1.21 | 0.03 | 0.02 |
| | (0.05) | (1.58) | (1.76) | (0.05) | (0.08) |
| 2018 × 2+ Children, Q2+ | 0.01 | -0.62 | -0.30 | 0.06 | 0.03 |
| | (0.03) | (1.46) | (1.47) | (0.03) | (0.07) |
| | | | *Robustness check coefficients* | | |
| 2008 ×Post-2016 pre-school Child | -0.02 | 0.25 | -0.10 | -0.02 | -0.01 |
| | (0.02) | (1.15) | (1.20) | (0.03) | (0.05) |
| 2018 ×Post-2016 pre-school Child | 0.02 | 2.14 | 1.84 | -0.01 | 0.05 |
| | (0.03) | (1.43) | (1.50) | (0.03) | (0.06) |
| Observations | 2565 | 2295 | 2290 | 2272 | 2628 |
| $R^2$ | 0.092 | 0.047 | 0.037 | 0.073 | 0.137 |

Notes: See notes in Table 4.4 for a description of the estimation methods and specification of the outcome and explanatory variables. See the main text for a description of the Specification 2 categories. Source: POLPAN (2021). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4.14: Robustness: GALTAN Restricted sample

| | Unbbalanced 2008-2018 panel sample | | | | Balanced 2013-2018 panel sample | | | |
|---|---|---|---|---|---|---|---|---|
| | Redistributive Index | Tax: Avg | Tax: Median | Tax: Progressivity | Redistributive Index | Tax: Avg | Tax: Median | Tax: Progressivity |
| 2008 | 0.021 | -2.763 | -1.107 | -0.050 | | | | |
| | (0.052) | (2.178) | (2.545) | (0.037) | | | | |
| 2018 | -0.021 | -1.110 | -1.773 | -0.057 | -0.021 | -0.682 | -1.222 | -0.056 |
| | (0.030) | (0.987) | (1.137) | (0.038) | (0.030) | (0.994) | (1.100) | (0.039) |
| 2008 × 1 Child, Q1 | -0.002 | -2.048 | -2.526 | 0.013 | | | | |
| | (0.061) | (2.968) | (2.390) | (0.086) | | | | |
| 2008 × 1 Child, Q2+ | -0.033 | 5.209** | 4.179 | 0.033 | | | | |
| | (0.037) | (2.577) | (2.829) | (0.048) | | | | |
| 2008 × 2+ Children, Q1 | 0.044 | -0.613 | -1.492 | 0.042 | | | | |
| | (0.059) | (2.744) | (3.095) | (0.100) | | | | |
| 2008 × 2+ Children, Q2+ | 0.023 | 2.897* | 3.714 | -0.053 | | | | |
| | (0.044) | (1.694) | (2.293) | (0.054) | | | | |
| 2018 × 1 Child, Q1 | -0.010 | -1.461 | -1.809 | -0.056 | -0.009 | -1.055 | -1.340 | -0.071 |
| | (0.045) | (1.445) | (1.479) | (0.051) | (0.044) | (1.420) | (1.462) | (0.050) |
| 2018 × 1 Child, Q2+ | -0.009 | 1.374 | 1.390 | 0.071** | -0.007 | 1.206 | 1.305 | 0.072** |
| | (0.042) | (1.504) | (1.482) | (0.034) | (0.042) | (1.506) | (1.488) | (0.034) |
| 2018 × 2+ Children, Q1 | -0.001 | 0.861 | 1.685 | -0.086 | -0.001 | 0.704 | 1.425 | -0.093 |
| | (0.060) | (1.875) | (2.372) | (0.072) | (0.059) | (1.890) | (2.390) | (0.073) |
| 2018 × 2+ Children, Q2+ | 0.035 | -1.623 | -1.272 | -0.026 | 0.033 | -1.800 | -1.403 | -0.026 |
| | (0.040) | (1.949) | (1.896) | (0.059) | (0.040) | (1.932) | (1.877) | (0.060) |
| Observations | 1234 | 1019 | 1016 | 1015 | 978 | 761 | 760 | 760 |
| $R^2$ | 0.090 | 0.124 | 0.098 | 0.113 | 0.085 | 0.092 | 0.079 | 0.071 |

Notes: See notes in Table 4.4 for a description of the estimation methods and explanatory variables specifications and main text for a description of the Specification 3 categories. The sample includes only individuals who voted in a party belonging to the GALTAN 'Authoritarian' category in 2013 and 2018 or individuals who voted in a party belonging to the GALTAN 'Libertarian' category in 2013 and 2018. See Table A4.23 for an overview of the parties' classification. Unbalanced 2008-2018 includes individuals who participated the 2008, 2013, and 2018 waves and respondents who only participated in the 2013 and 2018 waves. Balanced 2013-2018 covers only the latter. Source: POLPAN (2021). Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

## 4.B Supplementary material

| | | 2003 | 2008 | 2013 | 2015 | 2016 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|
| *Means-tested* | | | | | | | | |
| Family Allowance *(Zasiłek rodzinny)* | Pc income Eligibility | 1+ child & PLN 504 | 1+ child & PLN 504 | 1+ child & PLN 539 | 1+ child & PLN 574 | 1+ child & <674 PLN | 1+ child & < 674PLN | 1+ child & < 674PLN |
| | Benefit | < 5yo: 43<br>5-18yo: 53<br>18-24 yo: 66 | < 5yo: 48<br>5-18yo: 64<br>18-24 yo: 68 | < 5yo: 77<br>5-18yo: 106<br>18-24 yo: 115 | < 5yo: 77<br>5-18yo: 106<br>18-24 yo: 115 | < 5yo: 89<br>5-18yo: 118<br>18-24 yo: 129 | < 5yo: 95<br>5-18yo: 124<br>18-24 yo: 135 | < 5yo: 95<br>5-18yo: 124<br>18-24 yo: 135 |
| Zloty for zloty | | - | - | - | - | Allows families with income a little above the income threshold receive some allowance. The benefits payable is reduced by the amount by which family income exceeds the income threshold, when the adjustment is at least PLN20 | | |
| Family 500+ (Świadczenie wychowawcze, 500 Plus) | Pc income Eligibility | - | - | - | - | 1 child & <800 PLN | 1 child & <800 PNL | - |
| | Benefit | - | - | - | - | 500 | 500 | - |
| *Not income-tested* | | | | | | | | |
| Family 500+ (Świadczenie wychowawcze, 500 Plus) | Eligibility | - | - | - | - | 2+ children | 2+ children | 1+ children |
| | Benefit | - | - | - | - | 500 | 500 | 500 |

Source: Mutual Information System on Social Protection (MISSOC)

Figure A4.1: Eligibility criteria throughout the years.

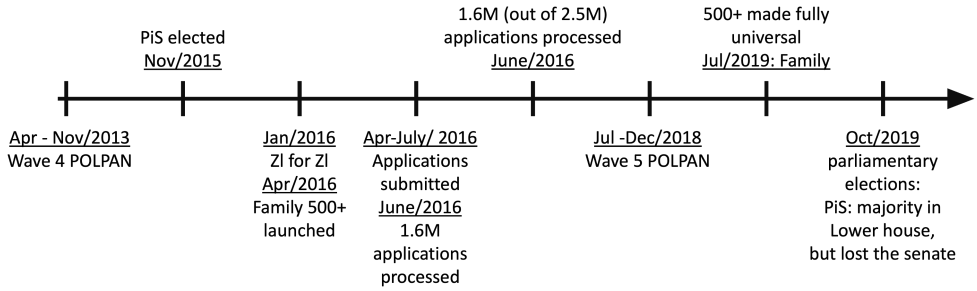


Figure A4.2: Timeline

Source: Authors' owm elaboration

Table A4.15: Summary statistics: index input variables, per wave

| Variable | Wave 2008 | | Wave 2013 | | Wave 2018 | |
|---|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | Mean | SD |
| *Outcome variables* | | | | | | |
| Goverment: reduce inequalities | 3.82 | 1.11 | 3.79 | 1.16 | 3.60 | 1.10 |
| Goverment: provide education | 4.53 | 0.66 | 4.52 | 0.76 | 4.27 | 0.81 |
| Goverment: provide jobs | 4.09 | 1.04 | 4.23 | 1.10 | 3.93 | 1.14 |

Note: Summary statistics per wave.Respondents included in the balanced panel sample 2008-2018. See Table A4.1 for a description of the variables. Source: POLPAN (2021)

Table A4.16: Redistributive index: Polychoric correlation matrix

| | Reduce differences in income | Education assistance | Job provision |
|---|---|---|---|
| Reduce differences in income | 1 | | |
| Education assistance | 0.30355568 | 1 | |
| Job provision | 0.44378081 | 0.42047418 | 1 |

Table A4.17: Redistributive index: Factor analysis using input components

| Factor | Eigenvalue | Difference | Proportion | Cumulative |
|---|---|---|---|---|
| Factor 1 | 1.01834 | 1.11817 | 1.4668 | 1.4668 |
| Factor 2 | -0.09983 | 0.12439 | -0.1438 | 1.3230 |
| Factor 3 | -0.22423 | . | -0.3230 | 1.0000 |

Note: LR test: independent vs. saturated: chi2(3) = 4433.20 Prob>chi2 = 0.0000. Number of observations = 10,198. Method: principal factors. Factor analysis performed using a polychoric correlation matrix. Source: POLPAN 1998, 2003, 2008, 2013, 2018

Table A4.18: Redistributive index: Factor loadings (pattern matrix) and unique variances of input variables

| Variable | Factor1 | Uniqueness |
|---|---|---|
| The government should reduce income differences | 0.5590 | 0.6876 |
| The government should assist poor children in higher education | 0.5358 | 0.7129 |
| The government should provide jobs for those who want | 0.6471 | 0.5812 |

Table A4.19: Results comparison of 2008-2018 and 2013-2018 panels. Combined categories.

| | Index | | | Avg tax | | | Tax progressivity | | | PiS Vote | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Balanced 3 | Unbalanced 3 | Balanced 4 | Balanced 3 | Unbalanced 3 | Balanced 4 | Balanced 3 | Unbalanced 3 | Balanced 4 | Balanced 3 | Unbalanced 3 | Balanced 4 |
| 2008 | -0.02 | -0.01 | | -1.29 | -1.55 | | -0.07*** | -0.06** | | -0.02 | -0.04 | |
| | (0.02) | (0.02) | | (1.14) | (1.10) | | (0.03) | (0.02) | | (0.04) | (0.04) | |
| 2018 | -0.06** | -0.05*** | -0.05*** | -1.04 | -1.63** | -1.54** | -0.09*** | -0.06*** | -0.05*** | 0.20*** | 0.17*** | 0.17*** |
| | (0.02) | (0.02) | (0.02) | (0.89) | (0.64) | (0.64) | (0.03) | (0.02) | (0.02) | (0.05) | (0.04) | (0.04) |
| 2008 × 1 Child | -0.02 | -0.01 | | 0.99 | 1.12 | | -0.00 | -0.01 | | -0.02 | 0.00 | |
| | (0.02) | (0.02) | | (1.04) | (0.99) | | (0.02) | (0.02) | | (0.04) | (0.04) | |
| 2008 × 2 Children | -0.01 | -0.00 | | 0.02 | 0.27 | | 0.03 | 0.02 | | 0.01 | -0.02 | |
| | (0.02) | (0.02) | | (0.85) | (0.81) | | (0.02) | (0.02) | | (0.04) | (0.04) | |
| 2018 × 1 Child | -0.00 | 0.01 | 0.01 | 0.89 | 1.22 | 1.27 | 0.04* | 0.03** | 0.04** | -0.13*** | -0.09** | -0.09** |
| | (0.02) | (0.01) | (0.01) | (1.10) | (0.78) | (0.78) | (0.02) | (0.02) | (0.02) | (0.04) | (0.03) | (0.03) |
| 2018 × 2 Children | 0.01 | 0.02 | 0.02 | 0.33 | 0.87 | 0.91 | 0.04* | 0.02 | 0.02 | 0.06 | 0.01 | 0.01 |
| | (0.02) | (0.02) | (0.02) | (0.82) | (0.67) | (0.67) | (0.02) | (0.02) | (0.02) | (0.05) | (0.04) | (0.04) |
| Observations | 2565 | 4280 | 3392 | 2295 | 3652 | 2747 | 2272 | 3623 | 2727 | 2628 | 4414 | 3506 |
| $R^2$ | 0.089 | 0.090 | 0.104 | 0.041 | 0.038 | 0.035 | 0.067 | 0.055 | 0.047 | 0.138 | 0.109 | 0.087 |

Each column represents a different estimation of the model in Equation 4.1. The first line ('Index', 'Avg tax', 'Tax progressivity', 'PiS Vote' ) indicates that column's regression outcome variable. The second line indicates the sample used for that estimation. Balanced 3 represents a balanced panel sample of individuals who participated in the 2008, 2013, and 2018 wave. Unbalanced 3 refers to the unbalanced panel sample of individuals who participated in at least two of those three waves. Balanced 4 denotes the balanced panel sample of individuals who participated in the 2013 and 2018 waves. Refer to the main text for an explanation of the categories used as explanatory variables.
Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4.20: Results comparison of 2008-2018 and 2013-2018 panels.

| | Index | | | Avg tax | | | Tax progressivity | | | PiS Vote | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Balanced 3 | Unbalanced 3 | Balanced 4 | Balanced 3 | Unbalanced 3 | Balanced 4 | Balanced 3 | Unbalanced 3 | Balanced 4 | Balanced 3 | Unbalanced 3 | Balanced 4 |
| 2008 | -0.01 | -0.01 | | -1.18 | -1.41 | | -0.07*** | -0.06** | | -0.03 | -0.04 | |
| | (0.02) | (0.02) | | (1.14) | (1.11) | | (0.03) | (0.02) | | (0.04) | (0.04) | |
| 2018 | -0.06*** | -0.05*** | -0.05*** | -1.12 | -1.64** | -1.54** | -0.08*** | -0.05*** | -0.05*** | 0.20*** | 0.17*** | 0.17*** |
| | (0.02) | (0.02) | (0.02) | (0.92) | (0.65) | (0.65) | (0.03) | (0.02) | (0.02) | (0.05) | (0.04) | (0.04) |
| 2008 × 1 Child, Q1 | -0.04 | -0.04 | | -0.85 | -0.67 | | 0.00 | -0.01 | | -0.05 | -0.01 | |
| | (0.04) | (0.04) | | (2.23) | (2.25) | | (0.04) | (0.04) | | (0.11) | (0.09) | |
| 2008 × 1 Child, Q2+ | -0.02 | -0.01 | | 0.93 | 0.75 | | -0.01 | -0.00 | | 0.01 | 0.03 | |
| | (0.02) | (0.02) | | (1.16) | (1.12) | | (0.03) | (0.03) | | (0.05) | (0.05) | |
| 2008 × 2+ Children, Q1 | -0.02 | -0.01 | | -1.36 | -0.65 | | 0.02 | 0.01 | | -0.03 | -0.07 | |
| | (0.03) | (0.03) | | (1.60) | (1.53) | | (0.04) | (0.04) | | (0.08) | (0.08) | |
| 2008 × 2+ Children, Q2+ | -0.01 | -0.01 | | 0.38 | 0.39 | | 0.03 | 0.03 | | 0.05 | 0.03 | |
| | (0.03) | (0.02) | | (0.97) | (0.93) | | (0.03) | (0.03) | | (0.04) | (0.04) | |
| 2018 × 1 Child, Q1 | 0.01 | 0.03 | 0.03 | 1.21 | 1.63 | 1.66 | -0.01 | -0.03 | -0.04 | -0.13 | -0.04 | -0.04 |
| | (0.03) | (0.03) | (0.03) | (3.66) | (2.25) | (2.22) | (0.04) | (0.03) | (0.03) | (0.12) | (0.09) | (0.09) |
| 2018 × 1 Child, Q2+ | 0.01 | 0.02 | 0.02 | 1.19 | 0.85 | 0.91 | 0.05** | 0.06*** | 0.06*** | -0.11*** | -0.06* | -0.06* |
| | (0.03) | (0.02) | (0.02) | (0.94) | (0.74) | (0.73) | (0.02) | (0.02) | (0.02) | (0.04) | (0.04) | (0.04) |
| 2018 × 2+ Children, Q1 | -0.02 | 0.00 | 0.01 | -0.66 | 0.79 | 0.91 | 0.03 | 0.01 | 0.00 | 0.05 | -0.04 | -0.04 |
| | (0.04) | (0.03) | (0.03) | (1.25) | (1.07) | (1.07) | (0.04) | (0.03) | (0.03) | (0.07) | (0.06) | (0.06) |
| 2018 × 2+ Children, Q2+ | 0.03 | 0.01 | 0.01 | 0.90 | 0.97 | 0.98 | 0.05 | 0.04 | 0.04 | 0.06 | 0.01 | 0.01 |
| | (0.02) | (0.02) | (0.02) | (1.06) | (0.91) | (0.91) | (0.03) | (0.03) | (0.03) | (0.06) | (0.05) | (0.05) |
| Observations | 2565 | 4280 | 3392 | 2295 | 3652 | 2747 | 2272 | 3623 | 2727 | 2628 | 4414 | 3506 |
| $R^2$ | 0.091 | 0.091 | 0.104 | 0.044 | 0.040 | 0.035 | 0.068 | 0.058 | 0.053 | 0.136 | 0.108 | 0.086 |

Note: Each column represents a different estimation of the model in Equation 4.1. The first line ('Index', 'Avg tax', 'Tax progressivity', and 'PiS Vote') indicates that column's regression outcome variable. The second line indicates the sample used for that estimation. Balanced 3 represents a balanced panel sample of individuals who participated in the 2008, 2013, and 2018 wave. Unbalanced 3 refers to the unbalanced panel sample of individuals who participated in at least two of those three waves. Balanced 4 denotes the balanced panel sample of individuals who participated in the 2013 and 2018 waves. Refer to the main text for an explanation of the categories used as explanatory variables.
Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4.21: Number of observations per income quintile and children in the household. Balanced sample 2008 - 2018

| Quintile (2013) | Number of children (2018) 0 Children | 1 Child | 2+ Children |
|---|---|---|---|
| 1 | 72 | 24 | 42 |
| 2 | 103 | 21 | 27 |
| 3 | 83 | 15 | 18 |
| 4 | 153 | 24 | 13 |
| 5 | 116 | 15 | 14 |
| Missing income | 92 | 20 | 24 |
| *Total* | *619* | *119* | *138* |

Source: POLPAN (2021).

Table A4.22: Categories of households: Specification 2 and Specification 3

| | Group | *Coefficient of interest:* Overall effect | Additional effect | Number of children | Quintile |
|---|---|---|---|---|---|
| Specification 2 | *Baseline* | $\beta_{2018}$ | - | *0* | 2013 quintile 2+ |
| | 1Q1 | $\beta_{2018}$ | $\gamma_{1q1,2018}$ | 1 | 2013 quintile 1 |
| | 1Q2+ | $\beta_{2018}$ | $\gamma_{1q2,2018}$ | 1 | 2013 quintile 2+ |
| | 2Q1 | $\beta_{2018}$ | $\gamma_{2q1,2018}$ | 2+ | 2013 quintile 1 |
| | 2Q2+ | $\beta_{2018}$ | $\gamma_{2q2,2018}$ | 2+ | 2013 quintile 2+ |
| | 0Q1 | $\beta_{2018}$ | $\gamma_{0q1,2018}$ | 0 | 2013 quintile 1 |
| Specification 3 | *Baseline* | $\beta_{2018}$ | - | *0* | - |
| | 1Q1 | $\beta_{2018}$ | $\gamma_{1q1,2018}$ | 1 | 2013 quintile 1 |
| | 1Q2-3 | $\beta_{2018}$ | $\gamma_{1q2-3,2018}$ | 1 | 2013 quintiles 2 and 3 |
| | 1Q4-5 | $\beta_{2018}$ | $\gamma_{1q4-5,2018}$ | 1 | 2013 quintiles 4 and 5 |
| | 2Q1 | $\beta_{2018}$ | $\gamma_{2q1,2018}$ | 2+ | 2013 quintile 1 |
| | 2Q2-3 | $\beta_{2018}$ | $\gamma_{2q2-3,2018}$ | 2+ | 2013 quintiles 2 and 3 |
| | 2Q4-5 | $\beta_{2018}$ | $\gamma_{2q4-5,2018}$ | 2+ | 2013 quintiles 4 and 5 |

Table A4.23: Parties classification according to CHES - GAL-TAN

| **Party** | **CHES 2014** | **CHES 2019** | **Other CHES** | **Binary classification** | **Notes** |
|---|---|---|---|---|---|
| PiS | 8.47 | 9.14 | | Traditional | |
| PSL | 6.94 | 7.10 | | Traditional | |
| Korwin | N/A | N/A | | Traditional | Single politician, described as a right-wing populist (Jacuński et al., 2021) |
| PJN | N/A | N/A | | Traditional | A spinoff group from the Law and Justice founded in 2010. Dissolved in 2013 (Jacuński et al., 2021). |
| SP | 8.65 | N/A | | Traditional | A spinoff group from the Law and Justice party founded in 2012 (Jacuński et al., 2021). |
| Kukiz | N/A | 7.61 | | Traditional | Founded in 2015 |
| PO | 4.59 | 4.67 | | Libertarian | |
| RP | 1.18 | N/A | | Libertarian | |
| SLD | 2.76 | 3.57 | | Libertarian | |
| Nowo | N/A | 2.61 | | Libertarian | Founded in 2015 |
| Lewica Razem | N/A | 1.22 | | Libertarian | Founded in 2015 |
| UW/PD | N/A | N/A | 2.38 (2002) | Libertarian | Dissolved in 2005. |

Note: The GAL-TAN measure runs from 0 (Libertarian/Postmaterialist) to 10 (Traditional/Authoritarian). The binary classification considers the threshold median of 5 for allocating into the categories. When a party's classification is unavailable for a given edition, another survey edition is considered. In cases where no GAL-TAN measure is available, qualitative (described in 'Notes') information is used for the allocation. Only parties mentioned by respondents who informed their voting preferences in both the 2013 and 2018 POLPAN waves are considered. 'Missing', 'Would not vote', 'Difficult to say' and 'Others' are not considered. Sources: Jacuński et al. (2021) and Jolly et al. (2022).

Table A4.24: Main results: no time-varying controls

| | (1) Redistributive Index | (2) Tax: Average | (3) Tax: Progressivity | (4) PiS Vote |
|---|---|---|---|---|
| 2008 | -0.01 | -1.15 | -0.07*** | -0.03 |
| | (0.02) | (1.14) | (0.02) | (0.04) |
| 2018 | -0.06*** | -1.13 | -0.08*** | 0.20*** |
| | (0.02) | (0.92) | (0.03) | (0.05) |
| *Parallel trends* | | | | |
| 2008 × 1 Child, Q1 | -0.05 | -0.96 | 0.01 | -0.06 |
| | (0.04) | (2.24) | (0.04) | (0.11) |
| 2008 × 1 Child, Q2+ | -0.01 | 1.39 | -0.01 | 0.02 |
| | (0.02) | (1.12) | (0.03) | (0.05) |
| 2008 × 2+ Children, Q1 | -0.02 | -1.20 | 0.02 | -0.03 |
| | (0.03) | (1.58) | (0.04) | (0.08) |
| 2008 × 2+ Children, Q2+ | -0.01 | 0.59 | 0.03 | 0.06 |
| | (0.02) | (0.95) | (0.03) | (0.04) |
| *Main coefficients of interest* | | | | |
| 2018 × 1 Child, Q1 | 0.01 | 1.21 | -0.00 | -0.13 |
| | (0.03) | (3.65) | (0.04) | (0.12) |
| 2018 × 1 Child, Q2+ | 0.01 | 1.19 | 0.05** | -0.11*** |
| | (0.03) | (0.94) | (0.02) | (0.04) |
| 2018 × 2+ Children, Q1 | -0.02 | -0.65 | 0.03 | 0.05 |
| | (0.04) | (1.25) | (0.04) | (0.07) |
| 2018 × 2+ Children, Q2+ | 0.03 | 0.91 | 0.05 | 0.06 |
| | (0.02) | (1.06) | (0.03) | (0.06) |
| Observations | 2565 | 2295 | 2272 | 2628 |
| $R^2$ | 0.089 | 0.041 | 0.065 | 0.135 |

Note: See notes in Table 4.4 for a description of the estimation methods and variable specifications. The estimations include individual, time fixed effect, and NUTS2 × Wave fixed effects. The estimations in this table do not include time-variant controls. Source: POLPAN (2021). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4.25: Main results: No NUTS2 X Wave FE

| | Index Index | Tax: Average | Tax: Median group | Tax: Progressivity | PiS Vote |
|---|---|---|---|---|---|
| 2008 | -0.012 | -0.970** | -0.794** | 0.013 | -0.064*** |
| | (0.008) | (0.400) | (0.403) | (0.009) | (0.017) |
| 2018 | -0.066*** | -0.735* | -0.558 | 0.002 | 0.147*** |
| | (0.008) | (0.410) | (0.437) | (0.009) | (0.018) |
| | | *Parallel trend* | | | |
| 2008 × 1 Child, Q1 | -0.041 | -1.240 | -2.024 | -0.017 | -0.052 |
| | (0.041) | (2.301) | (2.479) | (0.039) | (0.110) |
| 2008 × 1 Child, Q2+ | -0.009 | 0.477 | -0.111 | -0.000 | 0.009 |
| | (0.022) | (1.126) | (1.156) | (0.032) | (0.051) |
| 2008 × 2+ Children, Q1 | -0.020 | -0.934 | -0.285 | 0.035 | -0.035 |
| | (0.031) | (1.520) | (1.374) | (0.040) | (0.076) |
| 2008 × 2+ Children, Q2+ | -0.005 | 0.480 | 0.294 | 0.043 | 0.057 |
| | (0.025) | (0.921) | (1.017) | (0.029) | (0.044) |
| 2008 × 1+ Child, Missing inc | 0.021 | 1.869 | 1.579 | 0.035 | -0.072 |
| | (0.026) | (1.676) | (1.825) | (0.047) | (0.066) |
| | | *Main coefficients of interest* | | | |
| 2018 × 1 Child, Q1 | 0.018 | 1.213 | 1.046 | -0.026 | -0.105 |
| | (0.034) | (3.627) | (3.811) | (0.040) | (0.127) |
| 2018 × 1 Child, Q2+ | 0.012 | 1.008 | 1.243 | 0.055** | -0.094** |
| | (0.025) | (0.902) | (0.962) | (0.025) | (0.037) |
| 2018 × 2+ Children, Q1 | -0.024 | -0.150 | 0.559 | 0.022 | 0.043 |
| | (0.042) | (1.230) | (1.362) | (0.040) | (0.072) |
| 2018 × 2+ Children, Q2+ | 0.031 | 1.019 | 1.125 | 0.052* | 0.061 |
| | (0.023) | (1.076) | (1.051) | (0.030) | (0.062) |
| 2018 × 1+ Child, Missing inc | -0.018 | 0.561 | 0.948 | 0.053 | -0.011 |
| | (0.028) | (1.633) | (1.631) | (0.044) | (0.085) |
| Observations | 2565 | 2295 | 2290 | 2272 | 2628 |
| $R^2$ | 0.068 | 0.012 | 0.010 | 0.022 | 0.109 |

Note: See notes in Table 4.4 for a description of the estimation methods and variables specifications. The estimations include individual and time fixed effect, but do not include NUTS2 × Wave fixed effect.
Source: POLPAN (2021).
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4.26: Main results: NUTS1 X Wave FE

| | Index Index | Tax: Average | Tax: Median group | Tax: Progressivity | PiS Vote |
|---|---|---|---|---|---|
| 2008 | -0.009 | -0.071 | 0.508 | 0.015 | -0.043 |
| | (0.014) | (0.711) | (0.708) | (0.018) | (0.029) |
| 2018 | -0.055*** | 0.169 | 0.157 | -0.013 | 0.154*** |
| | (0.016) | (0.654) | (0.703) | (0.018) | (0.032) |
| *Parallel trend* | | | | | |
| 2008 × 1 Child, Q1 | -0.042 | -1.289 | -2.178 | -0.019 | -0.052 |
| | (0.041) | (2.244) | (2.415) | (0.041) | (0.111) |
| 2008 × 1 Child, Q2+ | -0.016 | 0.741 | 0.082 | -0.014 | 0.004 |
| | (0.022) | (1.149) | (1.176) | (0.031) | (0.053) |
| 2008 × 2+ Children, Q1 | -0.019 | -0.982 | -0.504 | 0.038 | -0.032 |
| | (0.032) | (1.559) | (1.406) | (0.040) | (0.077) |
| 2008 × 2+ Children, Q2+ | -0.006 | 0.437 | 0.174 | 0.038 | 0.053 |
| | (0.025) | (0.935) | (1.044) | (0.030) | (0.044) |
| *Main coefficients of interest* | | | | | |
| 2018 × 1 Child, Q1 | 0.019 | 1.121 | 0.996 | -0.020 | -0.101 |
| | (0.033) | (3.613) | (3.802) | (0.039) | (0.125) |
| 2018 × 1 Child, Q2+ | 0.012 | 1.251 | 1.560 | 0.050** | -0.098** |
| | (0.026) | (0.936) | (0.997) | (0.025) | (0.038) |
| 2018 × 2+ Children, Q1 | -0.019 | -0.086 | 0.575 | 0.035 | 0.056 |
| | (0.043) | (1.252) | (1.375) | (0.040) | (0.073) |
| 2018 × 2+ Children, Q2+ | 0.028 | 0.999 | 1.090 | 0.054* | 0.062 |
| | (0.024) | (1.074) | (1.044) | (0.031) | (0.062) |
| Observations | 2565 | 2295 | 2290 | 2272 | 2628 |
| $R^2$ | 0.079 | 0.023 | 0.021 | 0.043 | 0.117 |

Note: See notes in Tables 4.4 for a description of the estimation methods and variables specifications. The estimations include individual, time, and NUTS1 × Wave fixed effect. Source: POLPAN (2021).
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4.27: Main results controlled for PiS vote in last elections

| | (1) Redistributive Index | (2) Tax: Average | (3) Tax: Progressivity | (4) PiS Vote |
|---|---|---|---|---|
| 2008 | -0.015 | -1.260 | -0.071*** | -0.043 |
| | (0.023) | (1.154) | (0.025) | (0.038) |
| 2018 | -0.061*** | -1.117 | -0.084*** | 0.197*** |
| | (0.023) | (0.924) | (0.027) | (0.053) |
| *Parallel trends* | | | | |
| 2008 × 1 Child, Q1 | -0.042 | -0.948 | -0.000 | -0.067 |
| | (0.040) | (2.206) | (0.041) | (0.108) |
| 2008 × 1 Child, Q2+ | -0.017 | 0.979 | -0.006 | 0.015 |
| | (0.022) | (1.162) | (0.031) | (0.050) |
| 2008 × 2+ Children, Q1 | -0.020 | -1.237 | 0.022 | -0.010 |
| | (0.031) | (1.595) | (0.041) | (0.073) |
| 2008 × 2+ Children, Q2+ | -0.007 | 0.417 | 0.030 | 0.060 |
| | (0.025) | (0.967) | (0.028) | (0.042) |
| *Main coefficients of interest* | | | | |
| 2018 × 1 Child, Q1 | 0.014 | 1.197 | -0.005 | -0.132 |
| | (0.034) | (3.655) | (0.036) | (0.125) |
| 2018 × 1 Child, Q2+ | 0.008 | 1.194 | 0.049** | -0.110*** |
| | (0.026) | (0.938) | (0.024) | (0.039) |
| 2018 × 2+ Children, Q1 | -0.019 | -0.644 | 0.028 | 0.053 |
| | (0.043) | (1.246) | (0.041) | (0.073) |
| 2018 × 2+ Children, Q2+ | 0.025 | 0.904 | 0.047 | 0.057 |
| | (0.023) | (1.062) | (0.030) | (0.061) |
| Voted PiS last elections | 0.006 | 0.793 | 0.002 | 0.123*** |
| | (0.013) | (0.645) | (0.016) | (0.039) |
| Observations | 2565 | 2295 | 2272 | 2628 |
| $R^2$ | 0.091 | 0.045 | 0.068 | 0.145 |

Note: See notes in Tables 4.4 for a description of the estimation methods and variables specifications. The estimations include individual, time, and NUTS1 × Wave fixed effect. Voted PiS last elections is a time-varying dummy, with a value of 1 if the respondent reports that wave having voted for PiS in the last elections (see footnote 11 for details on values). Source: POLPAN (2021).
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

# Chapter 5

# Conclusion

What happens when a society no longer believes in itself? When people distrust their fellow citizens, resent their leaders, and feel that the system does not include them? These are not abstract questions; they instead define many of the world's current policy challenges, from managing pandemics to sustaining democracy. The Covid-19 pandemic brought to the forefront trust-based vaccination hesitancy, despite vaccines being cost-effective measures responsible for saving more than 150 million lives over the past century (Organization et al., 2024). Influenced by distrust and misinformation, we see the re-emergence of previously controlled dangerous diseases like measles, a highly transmissible infection whose control hinges on a sense of collective action to achieve the required 95% herd immunity (Pandey & Galvani, 2023). In 2024 alone, more than 123 million people were forcibly displaced worldwide due to persecution, conflict, violence, human-rights violations, or public-order breakdown, a figure more than double that of 2014. Out of those, more than 40% are displaced outside their homelands (UNHCR, 2025). This problem is further compounded by decreasing absorptive capacities in host countries, as internal social ruptures gain momentum worldwide, and political forces in many countries hold a strong agenda opposing immigration. As of 2025, the looming threat of climate change remains high, and societies experience more severe and frequent climate hazards: between 2000 and 2019, climate-related disasters nearly doubled compared to the previous decades (UNDRR, 2020), with around 3.5 billion poeple being highly vulnerable to the effects of climate change (H. Lee et al., 2023). This already grim outlook is predicted to worsen if action is not taken. However, efforts of the global community to come together to address this collective and intertemporal challenge are hampered by a combination of skepticism in research, growing geopolitical tensions on the international stage, and ruptures of societies domestically.

Effective policy-making in the 21$^{st}$ century requires more than technical expertise or economic resources. Social cohesion, once treated as a soft concern, is now emerging as a condition for policy success. Against a backdrop of global mistrust and mounting policy complexity, this dissertation examined the role of social cohesion for public policy.

## 5.1 Main findings and policy implications

This thesis explored the political economy of social cohesion, defined by its multidimensional concept of inclusive identity, orientation towards the common good, social relations, and trust; and to what extent it is relevant for public policy. Based on a collection of empirical studies, this thesis finds that policy preferences are not merely expressions of material interests or ideological priors. Instead, they are shaped by relational considerations: whether citizens feel they belong, whether they trust others to reciprocate, and

whether they believe the state will act fairly and competently.

The second chapter investigates the question of whether trust can act as a foundational condition for reform capacity in contexts marked by economic crisis and uncertainty. While existing literature emphasizes the importance of formal institutions in shaping government responses, less is known about the informal drivers, particularly the role of political and social trust, in shaping citizen support for policy implementation. Chapter 2 provides original cross-national survey and experimental evidence from Latin America to examine how trust relates to support for crisis-response reforms that vary in timing, regulatory formalism, and vulnerability to opportunistic behavior. The chapter shows that both political and social trust are relevant, but they operate through different mechanisms. Individuals with high political mistrust are more likely to be indifferent to both flexible and regulated policy alternatives, suggesting a form of deeper political disengagement rather than clear-cut opposition to one specific approach. In contrast, social mistrust alone does not reduce support for more flexible policy designs unless citizens are explicitly reminded that the success of the policy depends on others' behavior, indicating that social trust becomes politically salient to explain policy preferences under conditions of heightened uncertainty and perceived collective risk.

Complementing these findings, the chapter also explores the role of perceptions about others, showing that individuals' expectations about what others in society are likely to support strongly correlate with their own stated preferences, particularly when policy success is framed as dependent on social collaboration. These findings suggest that (part) of the effect of trust and uncertainty runs through expectations about the actions of others. Importantly, the findings also highlight the conditional nature of policy support: individuals who had prior positive experiences with the public bureaucracy were more supportive of reform options, particularly the more agile and less bureaucratic ones. Finally, the study shows that the effectiveness of trust as a mobilizing force for reform is not uniform across political contexts. More specifically, in areas with lower perceived governance quality, trust appears to act more as an obstacle hampering engagement than a mechanism to promote cooperation. These results suggest that reform capacity is not only a question of institutional design or policy content, but also of underlying social conditions, such as trust, experience, and perceptions, that shape citizens' willingness to cooperate under uncertainty.

The relevance of (mis)trust for the support of reforms has important implications. First, as political mistrust poses damaging threats to the social legitimacy of policies, when feasible, national governments should engage other political actors that might enjoy greater credibility with the broader society. In federal structures, local governments tend to enjoy higher and more stable support than national authorities (Arends et al., 2023). Thus,

(new) policies should harness multilevel implementation structures not only for logistical purposes but also to curb mistrust-driven opposition. While experimental research suggests provision of information about the government's positive performance might lift citizens' political trust (Alessandro et al., 2021), in the real world, cognitive biases in information acquisition might limit this channel (Andersen & Hjortskov, 2016). Yet, the results in Chapter 2 indicate that investing in increasing the efficiency of local bureaucracies and building a simple interaction for citizens can assist the governments with the process of reforms in a way that does not depend on trust. Besides these direct effects, repeated positive experiences with the bureaucracy have the potential to induce in citizens a positive view about the government's performance and improve their attitudes towards the government apparatus in the longer run.

The next study in Chapter 3 delves into the populist vote in 2018 Brazil and shows how the new populist trajectory observed in the Global North echoes in the recent Brazilian experience. Chapter 3 finds that, when pitting the two predominant theoretical frameworks on populism against each other, motivations informed by the cultural backlash hypothesis were the most consistent and significant predictors of voting for Bolsonaro. A cultural conservative vote, which was limited in previous elections (Borges & Vidigal, 2018), was the most consistent factor associated with a Bolsonaro vote in 2018, both in the first and the runoff rounds, in the direction predicted by the theory. Those grievances were consistently found across a range of groups, such as voters who radicalized their right-leaning vote or shifted from a left- to a right-wing support in the previous elections. While other accounts remain relevant to explain the Bolsonaro vote, including ideology, concerns with corruption, and antagonism against the 'establishment' Brazilian Labour Party *PT*, they operate orthogonally to cultural concerns. Yet, these results are not to claim that economic issues do not matter, although they might not operate through the lenses of personal economic deprivation or insecurity as found in the context of higher-income countries. Moreover, Brazil is emblematic regarding the role of political trust on the populist vote, as political dissatisfaction was widespread across deeply different political and ideological social groups. In that setting, the Eastonian concept of diffuse political dissatisfaction and widespread institutional skepticism, in the form of lack of support for (liberal) democracy, emerges as a critical factor to explain the populist vote, rather than more specific forms of political support or trust (Devine, 2024a). The relevance of this chapter extends beyond Brazil into Latin America, and possibly to other regions, since the focus of research on the rise of populists in the region was strongly centered around economic forces. At the time of the study, the role of cultural motivations to explain the populist vote in these areas remained limited.

The primary implication of the findings is that in Brazil, even more clearly than in other

richer settings, addressing economic inequalities will not by itself deter the weakening of inclusive democratic institutions. Instead, politicians in the establishment spectrum must acknowledge the power of cultural grievances around which a diversity of social groups congregate, all in support of populist platforms. This does not imply, however, that inclusive platforms addressing historical patterns of exclusion of cultural minorities should be avoided. It suggests that democratic political actors should be aware of the power of the narrative in the cultural domain. How the progress of the inclusive agenda is perceived by different groups hinges not only on the realized effects of the policies but also on its communication by the government, the traditional media, and decentralized narratives on social media. In the short-run, opposition to populists should acknowledge the centrality of cultural grievances and aim to minimize narratives that might carry an understanding of progressing the rights of given groups at the detriment of others. Instead, address cultural topics with caution and, when doing so, highlight the benefits for traditional groups if possible. In the long run, investments and restructuring civic education may help to educate children on the economic and social importance of addressing cultural exclusions.

Turning to the last chapter, the question moves beyond understanding the consequences of (feelings of) alienation and low trust, and seeks to explore whether by manipulating the design of public policies, governments can influence their citizens to support (or not oppose) systems that seek the common good. For that, the chapter investigates the changes in the family benefits implemented in 2016 in Poland. The turn away from a narrowly targeted policy to a quasi-universal system changed the coverage of the non-contributory family benefits from a narrow focus on the poor to a much wider encompassing pool of beneficiaries, including middle and high-income households. Scholars who argue in favour of universal systems as the politically feasible alternative for a resilient welfare argue that those groups would become more supportive of the welfare and willing to fund it, once they are also able to benefit from the transfers. Yet, using an event study design, the findings in Chapter 4 indicate that, in the Polish setting, pure self-interested economic motivations highlighted in the literature, based on material gains from larger welfare schemes, do not drive individual support for redistribution or influence the preferred tax scheme. Individuals who benefited from the introduction of Family 500 did not differ from households with no children in how they supported redistribution, their tax preferences, or even how willing they were to support the party that was responsible for the policy expansion, regardless of how much they were able to benefit from the programme. 'Excluded-but-deserving' families, namely those with one child but income above the cutoff threshold to claim the benefit, not only were willing to penalize the responsible political party, but also changed their preferred income tax allocation, likely in a move to shift the burden to other groups. Heterogeneity analysis indicates that the effect among this group is

partially moderated by views on fairness and meritocracy. These real-world results echo the core argument of previous experimental research in lab and survey settings (Muñoz & Pardos-Prado, 2019; Schüring & Gassmann, 2016): support of universal vs targeted schemes is not based solely on self-interested economic motivations. Elements that concern altruism (Schüring & Gassmann, 2016), and its interplay with the identity-bounded notions of deservingness (Muñoz & Pardos-Prado, 2019) play important roles.

Two sets of policy recommendations emerge from the findings above. First, when designing social transfers with an income or means-tested eligibility criterion, policy-makers and development agencies should avoid sharp exclusion thresholds to prevent political and social backlash. When feasible, eligibility rules should implement smoothed cutoffs with phase-out designs to avoid resentment among 'near-in' households. Although not directly inferable from Chapter 4, it is also possible that geographic targeting carried out by national authorities triggers similar reactions from neighboring communities. Thus, it is important for policy-makers to include a clear communication strategy informing non-recipients about the decisions regarding the eligibility design to ensure procedural justice, particularly when decreasing but continuous benefits are not feasible. Second, as inclusion in a social transfer does not automatically increase broad support for redistribution, governments should be prudent about deploying such a strategy as a foundation for their welfare system, especially when they have fiscal sustainability in mind. There are not necessarily immediate spillovers to other policy areas, and recipients are not automatically more willing to pay higher taxes to finance the system they benefit from. However, in the long run, the inclusion may lead to interaction with the bureaucracy and publicly provided services, which, if efficient, can have positive trickle-down effects as highlighted in Chapter 2.

### 5.1.1 More than a sum of the parts

While the findings of each study are important in their own capacity, when taken together, the evidence contributes to an understanding of the role of social cohesion for public policy in a manner that is not possible to infer from each individual chapter in isolation. First, the combination of the studies highlights how social cohesion is a crucial element present in the process of preference formation for different constituting levels of public policies. At the broader macro-level, a sense of recognition, inclusive identity, and trust are tightly related to preferences over the deepest definitional element of public policies: namely, preferences over the institutional design that constitutes the backbone of the liberal democratic policies. At the meso-level, recognition as deserving citizens influences preferences over the range of policy instruments within a policy area, such as which tax policy to implement. At the micro-level, trust is foundational to shape the preferences

regarding specific procedural design features in otherwise comparable policies. In sum, the findings of this dissertation reveal that cohesion matters for the institutional environment people prefer (the regime level), which policy content people support (optimal policy choice level), and for a given policy, the regulatory elements it contains (procedural detail level); levels explored in chapters 3, 4, and, 2, respectively.

Second, the findings of the three chapters can be viewed as cohesion entering different stages of the policy feedback cycle, featuring as a precondition as well as an outcome of policy and political processes. During the pre-implementation moment, cohesion influences the set of socially feasible policies at the disposal of policy-makers by influencing which policies society views as legitimate, as explored in Chapter 2. The immediate post-implementation effects of policies are evidenced by their impact on attitudes that are more readily malleable in the short run, such as political support and allocation of tax obligations in Chapter 4. Over time, the collection of policies provokes cumulative and profound changes in societal norms, which might result from actual reshaping of socio-economic structures, or of citizens interpreting policies as signals around what the government envisions 'their place in the polity' to be (Béland et al., 2022). The updated (perceptions of) social, economic, and/or cultural exclusion have the potential of causing deep impacts in the polity, with a social choice for a reorientation of the polity regime, which redefines the paradigm of future policies.

The dynamic nexus policy-cohesion is thus based on people updating their sense of inclusion and recognition based on what policies do and signal, and in turn, updating their political and ideological agendas. Pragmatically, this has important implications for policy making, as (i) present policy decisions have important trickle-down effects on future policy development, (ii) with a potential impact ranging from broad institutional stability to policy design and details. Given the policy-cohesion nexus, careful considerations must be made not only when adopting policies from other geographic contexts, but also in decisions to maintain or reinstall successful past policies. Material interests and economic deprivation alone do not drive preferences or backlash; rather, the experience or anticipation of being left out of perceived entitlements. For that reason, the decision around policy design and implementation strategies must account for the current and local social contexts and adapt to the ongoing policy improvements. In cases where specific instruments need to be adopted, it is important those are implemented in tandem with supportive measures that address (feelings of) relative exclusion and dignity. Examples of such measures include conscientization campaigns and compensatory packages, although the latter should not rely solely on material transfers due to their limited role in building an inclusive identity. Most importantly, policy-making should expand its understanding of policy scope so that it redefines the policy radius in a manner that includes both the

policy/programme clientele, as well as those who are not the primary addressees of the measures. Thus, social policies, in particular social protection systems, should be designed not only to reduce economic distress, but to signal inclusive belonging. When designing policies and pillars that promote development, acknowledging that not all social groups will directly benefit, actors ought to understand that economic considerations interplay with a broader sense of belonging. Once those are deeply set, it is hard to reverse the trend with only economic considerations.

## 5.2 Open questions and Future Directions in Research

This dissertation provided an encompassing analysis of the role of social cohesion for different aspects of public policies, using a combination of different econometric approaches, including correlational, quasi-experimental, and experimental methods. As with any empirical study, each methodological choice implies a set of limitations, outlined in this section. This section also provides insights into potential venues for future research that can contribute to advancing the understanding of the political economy of social cohesion.

In Chapter 2, the micro-level evidence on the influence of trust on support for reform-oriented policies is robust across different specifications, but two limitations deserve mention. The first limitation refers to the effect of trust on preferences. Concerns regarding endogeneity are reduced due to the survey design choice of implementing hypothetical policy scenarios and requesting respondents to choose between the two hypothetical policy alternatives. Yet, while this approach limits the risks of reverse causality, it does not induce a strictly externally exogenous variation in trust. Second, while the results are based on patterns from nine different countries, the extrapolation of the results to other regions must ensure that key constructs, such as trust, indeed carry equivalent meaning across different cultural and political contexts. There is a lively debate on how the standard survey measurement of trust compares to behavioral approaches (Banerjee, 2018; Johnson & Mislin, 2012; Tannenbaum, Cohn, Zünd, & Maréchal, 2025) and whether the underlying attitude captured by these survey measurements differs across countries (Jin et al., 2025; Schneider, 2017). Overall, the existing work tends to agree that survey measures capture trusting behavior, while the evidence on a cross-national consensus on the meaning of trust is more contested. In other words, what constitutes "trust in government" or "community trust" may be shaped by historical experiences or recent political events, potentially undermining cross-national comparability. Even though the results are not driven by a particular country, any extrapolation of the findings in Chapter 2 to socio-cultural contexts differing significantly from those in Latin America should be done with caution.

The latter point serves as a door for future work. As the overwhelming majority of work on (political) trust uses data from high-income country citizens (Devine, 2024a), more work exploring the dynamics in other settings is paramount, including the effect of trust on preferences over policy features. Another venue where more work is welcome involves understanding how to induce persistent improvements in political trust (when such change is beneficial for society). To date, research has explored the role of direct participatory programs (Ardanaz et al., 2023) and the provision of general government performance information (Alessandro et al., 2021). In connection with the context of Chapter 2, it would be interesting to understand whether, and in which conditions, policy reforms and governmental response to adversities influence citizens' institutional trust. Exploring the economic effect of crises and reforms would complement work as Algan et al. (2017). In addition, research could further advance this literature and explore to what extent the governmental response, the way it was communicated, and whether it corresponds to the individual's preferences, moderate the effects of crises and reforms on trust.

The findings of Chapter 3 indicate that cultural motivations are important factors to be investigated in connection with the Brazilian populist vote. However, as indicated in the chapter, the results do not aim to provide a causal claim. Instead, the analysis investigates the competing nature of the currently dominant frameworks around populism. This approach aimed at providing an exploratory insight into the relative importance of different accounts in the Brazilian context. To this end, it employed a correlational analysis to assess which variables, reflecting different theoretical frameworks, were more strongly associated with support for Bolsonaro. The results supporting the relevance of explanations anchored on social traditionalism remain stable over a battery of different specifications, samples, and conservative estimations accounting for a wide range of plausible confounders. Nonetheless, this study acknowledges that the patterns, while robust, can only be argued to reveal strong and consistent correlations.

Given the findings in Chapter 3, as well as the continuous high social support for Jair Bolsonaro[1], despite criticisms regarding the poor handling of the COVID-19 pandemic, modest economic performance, and worsening of social indicators during his administration (Delivorias, 2022), more research is needed to provide causal support for the role of cultural motivations for populist preferences. The existing evidence is so far limited in terms of contribution and depth of focus on culture. In the context of Brazil, the only work that, to the best of the author's knowledge, (indirectly) addresses the role of culture is Barros and Silva (2025), who explore the role of cultural motivations via the lenses of gender specific voting patterns in regions affected by labor shocks. More experimental

[1]In the 2022 elections, Jair Bolsonaro obtained 49,17% of the valid votes, the narrowest electoral margin in the Brazilian democratic history (TSE, 2022).

and quasi-experimental evidence is welcome, both expanding the breadth of cultural attitudes addressed and using a combination of individual-level and aggregate-level settings. Besides exploring the Brazilian context, further research should investigate the populist social forces in low and middle-income countries. Clearly, the phenomenon, with deep roots in Latin America, is still relevant to countries in the region in current times, including with its right-wing nature. There is a continuous presence of right-wing candidates, such as José Antonio Kast in Chile, who had a positive performance in Chile's 2021 elections, despite not winning the runoff, and democratically elected right-wing populists, like Javier Milei in 2023 Argentina (Kestler, 2022). However, Latin America is not an isolated case beyond the Global North: the success of leaders like Narendra Modi and his BJP party in India (Ammassari, Fossati, & McDonnell, 2023), and Rodrigo Duterte in the Philippines (Curato, 2017) evidences how populism is a strong worldwide threat. Given the particularities of each social context, which often leads to the political agendas of those populists to deviate rather substantially from their European and US counterparts (Díaz, Rovira Kaltwasser, & Zanotti, 2023), further research to understand the social demands behind the populist vote will contribute to the advancement and refinement of the field.

Chapter 4 explored whether an expansion in the coverage of public transfers with Family 500+ in Poland influences attitudes by (non-)recipients, using secondary data representative, at each wave, of the Polish adult population. However, the event study methodology employed in the study was based on a panel structure, which allowed for controlling for individual fixed effects, but implied selecting a subgroup of respondents for each wave sample. For that reason, the sample used is no longer representative of the Polish population. As the heterogeneity responses indicate that reactions may depend on socio-demographics and other behavioral considerations, there are limitations to the external validity that one is able to infer from the results in reference to variables possibly no longer covered by the sample with the panel structure. For that reason, more studies are welcome that examine either the effect on a nationally representative Polish society, or on different experiences with policy expansions in other contexts.

Moreover, we were able to understand the effects of a common 'shock' that impacted the preferences of different groups vis-à-vis a reference group category. This reference category, although not impacted by the change in a direct material sense, might also have been subject to shaping their welfare and political attitudes due to their own policy assessment or by being immersed in a context where political decisions are broadcast and (critically) debated. As a consequence, the findings in Chapter 4 refer to a relative effect of the policy, instead of its full effect; i.e., compared to what would occur in a setting with no benefits expansion. An important extension would thus involve exploring the absolute effects of a

policy change. Due to the attitudinal nature of the outcomes in focus (perceptions and preferences), a simple staggered implementation of a national program would not ensure the exogeneity of non-beneficiaries to the policy change. Therefore, future research could explore federal systems and combine differences in state-led social programmes to understand the absolute effects of a policy expansion, since federal structures are likely to limit 'spill-overs' to individuals in non-treated states. A related venue for future research refers to the family of research investigating the electoral consequences of social transfers. As our research indicates, backlashes from individuals close to eligibility may arise compared to other non-beneficiary groups, a distinction which is underexplored in the existing work (e.g. Zucco Jr, 2013, 2015). Likewise, welfare retrenchment can have effects on groups beyond the individuals directly harmed by policy shrinkage, for instance, former already non-beneficiary groups approving the changes. While existing work explores the relative effects of retrenchments mainly on affected individuals (e.g. Larsen, 2018), further studies seeking to understand these indirect dynamics are welcome.

# References


Aassve, A., Daniele, G., & Le Moglie, M. (2018). Never forget the first time: The persistent effects of corruption and the rise of populism in Italy. *BAFFI CAREFIN Centre Research Paper*(2018-96).

Abadie, A., Athey, S., Imbens, G. W., & Wooldridge, J. M. (2023). When should you adjust standard errors for clustering? *The Quarterly Journal of Economics*, *138*(1), 1–35.

Abou-Chadi, T., & Kurer, T. (2021). Economic risk within the household and voting for the radical right. *World Politics*, *73*(3), 482–511.

Absher, S., Grier, K., & Grier, R. (2020). The economic consequences of durable left-populist regimes in latin america. *Journal of Economic Behavior & Organization*, *177*, 787–817.

Acemoglu, D., Egorov, G., & Sonin, K. (2013). A political theory of populism. *The Quarterly Journal of Economics*, *128*(2), 771–805.

Acemoglu, D., & Restrepo, P. (2020). Robots and jobs: Evidence from us labor markets. *Journal of political economy*, *128*(6), 2188–2244.

Aghion, P., Algan, Y., Cahuc, P., & Shleifer, A. (2010). Regulation and distrust. *The Quarterly journal of economics*, *125*(3), 1015–1049.

Ahlerup, P., Olsson, O., & Yanagizawa, D. (2009). Social capital vs institutions in the growth process. *European Journal of Political Economy*, *25*(1), 1–14.

Akerlof, G. A., & Kranton, R. E. (2000). Economics and identity. *The quarterly journal of economics*, *115*(3), 715–753.

Akerlof, G. A., & Kranton, R. E. (2005). Identity and the economics of organizations. *Journal of Economic perspectives*, *19*(1), 9–32.

Akkerman, A., Mudde, C., & Zaslove, A. (2014). How populist are the people? Measuring populist attitudes in voters. *Comparative political studies*, *47*(9), 1324–1353.

Alan, S., Baysan, C., Gumren, M., & Kubilay, E. (2021). Building social cohesion in ethnically mixed schools: An intervention on perspective taking. *The Quarterly Journal of Economics*, *136*(4), 2147–2194.

Aldrich, D. P. (2011). The power of people: social capital's role in recovery from the 1995 kobe earthquake. *Natural hazards*, *56*, 595–611.

Alesina, A., & Angeletos, G.-M. (2005). Fairness and redistribution. *American economic review*, *95*(4), 960–980.

Alesina, A., Ardagna, S., & Trebbi, F. (2006). Who adjusts and when? the political economy of reforms. *IMF Staff Papers*, *53*(1), 1–29.

Alesina, A., Baqir, R., & Easterly, W. (1999). Public goods and ethnic divisions. *The Quarterly journal of economics*, *114*(4), 1243–1284.

Alesina, A., Devleeschauwer, A., Easterly, W., Kurlat, S., & Wacziarg, R. (2003). Fractionalization. *Journal of Economic growth*, *8*(2), 155–194.

Alesina, A., & Fuchs-Schündeln, N. (2007). Good-bye lenin (or not?): The effect of communism on people's preferences. *American Economic Review*, *97*(4), 1507–1528.

Alesina, A., Gennaioli, C., & Lovo, S. (2019). Public goods and ethnic diversity: Evidence from deforestation in indonesia. *Economica*, *86*(341), 32–66.

Alesina, A., & Giuliano, P. (2011). Preferences for redistribution. In *Handbook of social economics* (Vol. 1, pp. 93–131). Elsevier.

Alesina, A., Glaeser, E., & Sacerdote, B. (2001). *Why doesn't the us have a european-style welfare system?* (Tech. Rep.). National bureau of economic research.

Alesina, A., & La Ferrara, E. (2000). *The determinants of trust.* National bureau of economic research Cambridge, Mass., USA.

Alesina, A., Miano, A., & Stantcheva, S. (2023). Immigration and redistribution. *The Review of Economic Studies*, *90*(1), 1–39.

Alessandro, M., Lagomarsino, B. C., Scartascini, C., Streb, J., & Torrealday, J. (2021). Transparency and trust in government. evidence from a survey experiment. *World Development*, *138*, 105223.

Alexandropoulou, S., & Gotzner, N. (2024). The interpretation of relative and absolute adjectives under negation. *Journal of Semantics*, *41*(3-4), 373–399. doi: https://doi.org/10.1093/jos/ffae012

Algan, Y. (2018). Trust and social capital. *For good measure: Advancing research on well-being metrics beyond GDP*, 285–322.

Algan, Y., & Cahuc, P. (2010a). Inherited trust and growth. *American Economic Review*, *100*(5), 2060–92.

Algan, Y., & Cahuc, P. (2010b, 12). Inherited Trust and Growth. *American Economic Review*, *100*(5), 2060–92. Retrieved from `http://www.aeaweb.org/articles.php?doi=10.1257/aer.100.5.2060` doi: 10.1257/AER.100.5.2060

Algan, Y., & Cahuc, P. (2014). Trust, growth, and well-being: New evidence and policy implications. In *Handbook of economic growth* (Vol. 2, pp. 49–120). Elsevier.

Algan, Y., Cahuc, P., Algan1, Y., & Cahuc2, P. (2013). Trust and Growth. *Source: Annual Review of Economics*, *5*, 521–549. doi: 10.11

Algan, Y., Cahuc, P., & Sangnier, M. (2016). Trust and the welfare state: The twin peaks curve. *The Economic Journal*, *126*(593), 861–883.

Algan, Y., Guriev, S., Papaioannou, E., & Passari, E. (2017). The European trust crisis and the rise of populism. *Brookings Papers on Economic Activity*, *2017*(2), 309–400.

Alm, J. (2019). What motivates tax compliance? *Journal of economic surveys*, *33*(2), 353–388.

Almeida, R., Leite Corseuil, C. H., & Poole, J. (2017). The impact of digital technologies on routine tasks: do labor policies matter? *World Bank Policy Research Working Paper*(8187).

Alsan, M., & Wanamaker, M. (2018). Tuskegee and the health of black men. *The quarterly journal of economics*, *133*(1), 407–455.

Amaral, O. E. d. (2020). The victory of jair bolsonaro according to the brazilian electoral study of 2018. *Brazilian Political Science Review*, *14*.

Ammassari, S., Fossati, D., & McDonnell, D. (2023). Supporters of india's bjp: Distinctly populist and nativist. *Government and Opposition*, *58*(4), 807–823. doi: https://doi.org/10.1007/s12116-021-09335-8

Ananyev, M., & Guriev, S. (2019). Effect of income on trust: Evidence from the 2009 economic crisis in russia. *The Economic Journal*, *129*(619), 1082–1118.

Andersen, S. C., & Hjortskov, M. (2016). Cognitive biases in performance evaluations. *Journal of Public Administration Research and Theory*, *26*(4), 647–662.

Andrabi, T., & Das, J. (2017). In aid we trust: Hearts and minds and the pakistan earthquake of 2005. *Review of Economics and Statistics*, *99*(3), 371–386.

Anelli, M., Colantone, I., & Stanig, P. (2019). We were the robots: Automation and voting behavior in western europe. *BAFFI CAREFIN Centre Research Paper*(2019-115).

Angel, S., Disslbacher, F., Humer, S., & Schnetzer, M. (2019). What did you really earn last year?: explaining measurement error in survey income data. *Journal of the Royal Statistical Society Series A: Statistics in Society*, *182*(4), 1411–1437.

Angelos, D. (2022). Brazil's economy: Challenges for the new president.

Angelova, M., Bäck, H., Müller, W. C., & Strobl, D. (2018). Veto player theory and reform making in western europe. *European Journal of Political Research*, *57*(2), 282–307.

Antonietti, R., & Boschma, R. (2021). Social capital, resilience, and regional diversification in italy. *Industrial and Corporate Change*, *30*(3), 762–777.

Applebaum, A. (2020). *Twilight of democracy: The seductive lure of authoritarianism.* Anchor.

Archenti, N., & Tula, M. I. (2017). Critical challenges of quotas and parity in latin america. *Women, politics, and democracy in Latin America*, 29–44.

Ardanaz, M., Hübscher, E., Keefer, P., & Sattler, T. (2024). Voter responses to fiscal crisis: Experimental evidence on preferences for fiscal adjustment in emerging markets. doi: https://doi.org/10.18235/0012884

Ardanaz, M., Otálvaro-Ramírez, S., & Scartascini, C. (2023). Does information about citizen participation initiatives increase political trust? *World Development*, *162*, 106132.

Arends, H., Brik, T., Herrmann, B., & Roesel, F. (2023). Decentralization and trust in government: Quasi-experimental evidence from ukraine. *Journal of Comparative Economics*, *51*(4), 1356–1365.

Ares, M., & Hernández, E. (2017). The corrosive effect of corruption on trust in politicians: Evidence from a natural experiment. *Research & Politics*, *4*(2), 2053168017714185.

Arrow, K. J. (1972). Gifts and exchanges. *Philosophy & Public Affairs*, 343–362.

Attanasio, O., Pellerano, L., & Reyes, S. P. (2009). Building trust? conditional cash transfer programmes and social capital. *Fiscal Studies*, *30*(2), 139–177.

Autor, D., Dorn, D., Hanson, G., & Majlesi, K. (2020). Importing political polarization? the electoral consequences of rising trade exposure. *American Economic Review*, *110*(10), 3139–3183.

Aydinli, A., Bender, M., & Chasiotis, A. (2013). Helping and volunteering across cultures: Determinants of prosocial behavior. *Online Readings in Psychology and Culture*, *5*(3), 1–27.

Baekgaard, M., Herd, P., & Moynihan, D. P. (2023). Of 'welfare queens' and 'poor carinas': Social constructions, deservingness messaging and the mental health of welfare clients. *British Journal of Political Science*, *53*(2), 594–612.

Báez Ramírez, J. E., Camacho, A., Conover, E., & Zárate, R. A. (2012). *Conditional cash transfers, political participation, and voting behavior* (Tech. Rep.). IZA Discussion Papers.

Bai, Y., & Li, Y. (2021). More suffering, more involvement? the causal effects of seismic disasters on social capital. *World Development*, *138*, 105221.

Balboni, C., Bandiera, O., Burgess, R., Ghatak, M., & Heil, A. (2022). Why do people stay poor? *The Quarterly Journal of Economics*, *137*(2), 785–844.

Ballard-Rosa, C., Jensen, A., & Scheve, K. (2022). Economic decline, social identity, and authoritarian values in the united states. *International Studies Quarterly*, *66*(1), sqab027.

Ballard-Rosa, C., Malik, M. A., Rickard, S. J., & Scheve, K. (2021). The economic origins of authoritarian values: evidence from local trade shocks in the united kingdom. *Comparative political studies*, *54*(13), 2321–2353.

Balloussier, A. V. (2020, 13 01). Cara típica do evangélico brasileiro é feminina e negra, aponta datafolha [Newspaper Article]. *Reuters*. (Avail-

able at: https://www1.folha.uol.com.br/poder/2020/01/cara-tipica-do-evangelico-brasileiro-e-feminina-e-negra-aponta-datafolha.shtml (Accessed: July 3rd, 2023))

Banerjee, R. (2018). On the interpretation of world values survey trust question-global expectations vs. local beliefs. *European Journal of Political Economy*, *55*, 491–510.

Bargain, O., & Aminjonov, U. (2020). Trust and compliance to public health policies in times of covid-19. *Journal of Public Economics*, *192*, 104316.

Barnes, L. (2015). The size and shape of government: preferences over redistributive tax policy. *Socio-economic review*, *13*(1), 55–78.

Barr, N. A. (2020). *The economics of the welfare state*. Oxford university press.

Barr, R. R. (2018). Populism as a political strategy. In *Routledge handbook of global populism* (pp. 44–56). Routledge.

Barrientos, A., & Hulme, D. (2016). *Social protection for the poor and poorest: Concepts, policies and politics*. Springer.

Barrios, J. M., Benmelech, E., Hochberg, Y. V., Sapienza, P., & Zingales, L. (2021). Civic capital and social distancing during the covid-19 pandemic. *Journal of Public Economics*, *193*, 104310.

Barros, L., & Silva, M. S. (2025). Economic shocks, gender, and populism: Evidence from Brazil. *Journal of Development Economics*, *174*, 103412.

Bartscher, A. K., Seitz, S., Siegloch, S., Slotwinski, M., & Wehrhöfer, N. (2021). Social capital and the spread of covid-19: Insights from european countries. *Journal of health economics*, *80*, 102531.

Bastagli, F., Hagen-Zanker, J., Harman, L., Barca, V., Sturge, G., Schmidt, T., & Pellerano, L. (2016). Cash transfers: what does the evidence say. *A rigorous review of programme impact and the role of design and implementation features. London: ODI*, *1*(7).

Bauer, M., Blattman, C., Chytilová, J., Henrich, J., Miguel, E., & Mitts, T. (2016). Can war foster cooperation? *Journal of Economic Perspectives*, *30*(3), 249–274.

Bavel, J. J. V., Baicker, K., Boggio, P. S., Capraro, V., Cichocka, A., Cikara, M., ... others (2020). Using social and behavioural science to support covid-19 pandemic response. *Nature human behaviour*, *4*(5), 460–471.

Bayerlein, M., Boese, V. A., Gates, S., Kamin, K., & Murshed, S. M. (2021). Populism and covid-19: How populist governments (mis) handle the pandemic. *Journal of Political Institutions and Political Economy,*, *2*(3), 389–428.

Becchetti, L., Castriota, S., & Conzo, P. (2017). Disaster, aid, and preferences: The long-run impact of the tsunami on giving in sri lanka. *World Development*, *94*, 157–173.

Beesley, C., & Hawkins, D. (2022). Corruption, institutional trust and political engage-

ment in peru. *World Development*, *151*, 105743.

Béland, D., Campbell, A. L., & Weaver, R. K. (2022). *Policy feedback: How policies shape politics*. Cambridge University Press.

Belanger, E., & Aarts, K. (2006). Explaining the rise of the LPF: issues, discontent, and the 2002 Dutch election. *Acta politica*, *41*(1), 4–20.

Bellani, L., & Scervini, F. (2020). Heterogeneity in preferences for redistribution and public spending: A cross-country analysis. *European Journal of Political Economy*, *63*, 101890. doi: https://doi.org/10.1016/j.ejpoleco.2020.101890

Bellodi, L., Morelli, M., & Vannoni, M. (2024). A costly commitment: Populism, economic performance, and the quality of bureaucracy. *American Journal of Political Science*, *68*(1), 193–209.

Benabou, R., & Ok, E. A. (2001). Social mobility and the demand for redistribution: the poum hypothesis. *The Quarterly Journal of Economics*, *116*(2), 447–487.

Berg, A., Ostry, J. D., Tsangarides, C. G., & Yakhshilikov, Y. (2018). Redistribution, inequality, and growth: new evidence. *Journal of Economic Growth*, *23*(3), 259–305.

Berggren, N., Daunfeldt, S.-O., & Hellström, J. (2016). Does social trust speed up reforms? the case of central-bank independence. *Journal of Institutional Economics*, *12*(2), 395–415.

Bergh, A., & Bjørnskov, C. (2014). Trust, welfare states and income equality: Sorting out the causality. *European Journal of Political Economy*, *35*, 183–199.

Besley, T. (2020). State capacity, reciprocity, and the social contract. *Econometrica*, *88*(4), 1307–1335.

Besley, T., Dann, C., & Dray, S. (2025). *Growth experiences and trust in government* (Tech. Rep.). LSE Working Paper (forthcoming).

Besley, T., & Dray, S. (2024). Trust and state effectiveness: the political economy of compliance. *The Economic Journal*, *134*(662), 2225–2251.

Bethônico, T. (2022a, 14 07). Brazil to turn on spending taps in run-up to presidential vote [Newspaper Article]. *Finantial times*. (Available at: https://www.ft.com/content/e9574855-39b6-49ce-977e-058b87ace2d2?accessToken=zwAF_-aOq9C4kdPpV0hVObZJztOXfgWLh6zi0g.MEQCIDNpdV7TRtKr-1FcNhGTNQrHbzyF0Ae4GcjPLZbzE5hoAiBzAVvqAA82dHuLSSKUFGI20WiqZ9b8WqODEKtqg6aNpg&sh gift&token=5c1dc7c0-5b27-4519-9e68-4b04d40fb111 (Accessed: July 3rd, 2023))

Bethônico, T. (2022b, 08 10). Datafolha: Avaliação de bolsonaro melhora entre quem recebe auxílio brasil, mas lula tem 56% das intenções de voto [Newspaper Article]. *Folha de São Paulo*. (Available at: https://www1.folha.uol.com.br/mercado/2022/10/datafolha-avaliacao-de-bolsonaro-melhora-entre-quem-recebe

-auxilio-brasil-mas-lula-tem-56-das-intencoes-de-voto.shtml (Accessed: July 3rd, 2023))

Bjørnskov, C. (2008a). Social capital and happiness in the united states. *Applied Research in Quality of Life*, *3*, 43–62.

Bjørnskov, C. (2008b). Social trust and fractionalization: A possible reinterpretation. *European Sociological Review*, *24*(3), 271–283.

Bjørnskov, C. (2009). Social trust and the growth of schooling. *Economics of education review*, *28*(2), 249–257. doi: https://doi.org/10.1016/j.econedurev.2006.09.013

Bjørnskov, C. (2012). How does social trust affect economic growth? *Southern Economic Journal*, *78*(4), 1346–1368.

Bjørnskov, C., Borrella-Mas, M. Á., & Rode, M. (2022). The economics of change and stability in social trust: Evidence from (and for) catalan secession. *Economics & Politics*, *34*(2), 275–297.

Bjørnskov, C., & Méon, P.-G. (2015). The productivity of trust. *World development*, *70*, 317–331.

Bjørnskov, C., & Svendsen, G. T. (2013). Does social trust determine the size of the welfare state? evidence using historical identification. *Public Choice*, *157*, 269–286. doi: https://doi.org/10.1007/s11127-012-9944-x

Bluhm, R., de Crombrugghe, D., & Szirmai, A. (2020). *Do weak institutions prolong crises? on the identification, characteristics, and duration of declines during economic slumps*. The World Bank.

Bluhm, R., & Thomsson, K. (2020). Holding on? ethnic divisions, political institutions and the duration of economic declines. *Journal of Development Economics*, *144*, 102457.

Boeri, T., Mishra, P., Papageorgiou, C., & Spilimbergo, A. (2021). Populism and civil society. *Economica*, *88*(352), 863–895.

Bolet, D. (2021). Drinking alone: local socio-cultural degradation and radical right support—the case of british pub closures. *Comparative Political Studies*, *54*(9), 1653–1692.

Bonomi, G., Gennaioli, N., & Tabellini, G. (2021). Identity, beliefs, and political conflict. *The Quarterly Journal of Economics*, *136*(4), 2371–2411.

Borges, A., & Vidigal, R. (2018). Do lulismo ao antipetismo? Polarização, partidarismo e voto nas eleições presidenciais brasileiras. *Opinião Pública*, *24*(1), 53–89.

Born, B., Müller, G. J., Schularick, M., & Sedláček, P. (2019). The costs of economic nationalism: evidence from the brexit experiment. *The Economic Journal*, *129*(623), 2722–2744.

Bozzano, M., Profeta, P., Puglisi, R., & Scabrosetti, S. (2024). Women's voice on redistribution: From gender equality to equalizing taxation. *European Journal of Political*

*Economy*, 102497.

Bremer, B., & Bürgisser, R. (2023). Public opinion on welfare state recalibration in times of austerity: Evidence from survey experiments. *Political Science Research and Methods*, *11*(1), 34–52.

Brück, T., Ferguson, N. T., Justino, P., & Stojetz, W. (2020). *Trust in the time of corona* (No. 2020/82). WIDER Working Paper.

Brzeziński, M., & Najsztub, M. (2017). The impact of. *Polityka Społeczna*, *13*(1 (ang)), 16–25.

Bueno, N. S., & Dunning, T. (2017). Race, resources, and representation: evidence from brazilian politicians. *World Politics*, *69*(2), 327–365.

Buggle, J. C., & Durante, R. (2021). Climate risk, cooperation and the co-evolution of culture and institutions. *The Economic Journal*, *131*(637), 1947–1987.

Buonanno, P., Ferrari, I., & Saia, A. (2024). All is not lost: Organized crime and social capital formation. *Journal of Public Economics*, *240*, 105257.

Buonanno, P., Montolio, D., & Vanin, P. (2009). Does social capital reduce crime? *The journal of law and economics*, *52*(1), 145–170.

Burchi, F., Loewe, M., Malerba, D., & Leininger, J. (2022). Disentangling the relationship between social protection and social cohesion: Introduction to the special issue. *The European Journal of Development Research*, *34*(3), 1195.

Burchi, F., & Roscioli, F. (2021). *Can integrated social protection programmes affect social cohesion? mixed-methods evidence from malawi* (Tech. Rep.). Discussion Paper.

Burchi, F., & Roscioli, F. (2022). Can integrated social protection programmes affect social cohesion? mixed-methods evidence from malawi. *The European Journal of Development Research*, *34*(3), 1240–1263.

Burni, A., & Tamaki, E. (2021). Populist communication during the covid-19 pandemic: The case of brazil's president bolsonaro. *Partecipazione e conflitto*, *14*(1), 113–131.

Busby, E. C., Doyle, D., Hawkins, K. A., & Wiesehomeier, N. (2018). Activating populist attitudes: the role of corruption. In *The ideational approach to populism* (pp. 374–395). Routledge.

Busemeyer, M. R., & Neimanns, E. (2017). Conflictive preferences towards social investments and transfers in mature welfare states: The cases of unemployment benefits and childcare provision. *Journal of European Social Policy*, *27*(3), 229–246.

Bussolo, M., Kotia, A., & Sharma, S. (2021). *Workers at risk: Panel data evidence on the covid-19 labor market crisis in india*. World Bank.

Bustikova, L. (2014). Revenge of the radical right. *Comparative Political Studies*, *47*(12), 1738–1765.

Calo-Blanco, A., Kovářík, J., Mengel, F., & Romero, J. G. (2017). Natural disasters and indicators of social cohesion. *PloS one*, *12*(6), e0176885.

Camacho, L. A. (2014). The effects of conditional cash transfers on social engagement and trust in institutions: evidence from peru's juntos programme.

Cameron, L., & Shah, M. (2014). Can mistargeting destroy social capital and stimulate crime? evidence from a cash transfer program in indonesia. *Economic Development and Cultural Change*, *62*(2), 381–415.

Campante, F., Durante, R., & Tesei, A. (2022). Media and social capital. *Annual review of economics*, *14*(1), 69–91.

Campello, D., Schiffrin, A., Belarmino, K., & Thome, D. (2020). Captured media?: Examining brazilian coverage of lava jato 1. In *Corruption and the lava jato scandal in latin america* (pp. 68–81). Routledge.

Cappelen, A. W., Enke, B., & Tungodden, B. (2025). Universalism: global evidence. *American Economic Review*, *115*(1), 43–76.

Casoria, F., Galeotti, F., & Villeval, M. C. (2024). Trust and social preferences in times of acute health crisis. *Annals of Economics and Statistics*(154), 5–50.

Cassar, A., Healy, A., & Von Kessler, C. (2017). Trust, risk, and time preferences after a natural disaster: experimental evidence from thailand. *World Development*, *94*, 90–105.

Cavaillé, C., & Trump, K.-S. (2015). The two facets of social policy preferences. *The Journal of Politics*, *77*(1), 146–160.

CBOS, Public Opinion Research Center. (2017, 03). *Polish public opinion.* `https://www.cbos.pl/PL/publikacje/public_opinion/2017/03_2017.pdf`. CBOS EXPERTISE.

Chan, H. F., Supriyadi, M. W., & Torgler, B. (2018). Trust and tax morale. *The Oxford handbook of social and political trust*, 1–71.

Chan, J., To, H.-P., & Chan, E. (2006). Reconsidering social cohesion: Developing a definition and analytical framework for empirical research. *Social indicators research*, *75*(2), 273–302.

Charron, N., Harring, N., & Lapuente, V. (2021). Trust, regulation, and redistribution why some governments overregulate and under-redistribute. *Regulation & Governance*, *15*(1), 3–16.

Charron, N., Lapuente, V., & Bauhr, M. (2024). The geography of quality of government in europe. subnational variations in the 2024 european quality of government index and comparisons with previous rounds.

Chattopadhyay, R., & Duflo, E. (2004). Women as policy makers: Evidence from a randomized policy experiment in india. *Econometrica*, *72*(5), 1409–1443.

Ciepielewska-Kowalik, A. (2020). (un) intended consequences of the 2016 educational reform on early childhood education and care in poland. the story of a few applications that led to significant disorder. *Policy Futures in Education*, *18*(6), 806–823.

Coady, D., Grosh, M., & Hoddinott, J. (2004). Targeting outcomes redux. *The World Bank Research Observer*, *19*(1), 61–85.

Colantone, I., & Stanig, P. (2018). The trade origins of economic nationalism: Import competition and voting behavior in western europe. *American Journal of Political Science*, *62*(4), 936–953.

Cole, S., Giné, X., Tobacman, J., Topalova, P., Townsend, R., & Vickery, J. (2013). Barriers to household risk management: Evidence from india. *American Economic Journal: Applied Economics*, *5*(1), 104–135.

Coleman, J. S. (1994). *Foundations of social theory*. Harvard university press.

Corno, L., La Ferrara, E., & Burns, J. (2022). Interaction, stereotypes, and performance: Evidence from south africa. *American Economic Review*, *112*(12), 3848–3875. doi: https://doi.org/10.1257/aer.20181805

Costa, F., Garred, J., & Pessoa, J. P. (2016). Winners and losers from a commodities-for-manufactures trade boom. *Journal of International Economics*, *102*, 50–69.

Costa, F., Marcantonio, A., & Rocha, R. (2023). Stop suffering! economic downturns and pentecostal upsurge. *Journal of the European Economic Association*, *21*(1), 215–250.

Costa-Font, J., & Cowell, F. (2015). Social identity and redistributive preferences: a survey. *Journal of Economic Surveys*, *29*(2), 357–374. doi: https://doi.org/10.1111/joes.12061

Croson, R., & Gneezy, U. (2009). Gender differences in preferences. *Journal of Economic literature*, *47*(2), 448–474.

Cruces, G., Perez-Truglia, R., & Tetaz, M. (2013). Biased perceptions of income distribution and preferences for redistribution: Evidence from a survey experiment. *Journal of Public Economics*, *98*, 100–112.

Curato, N. (2017). Flirting with authoritarian fantasies? rodrigo duterte and the new terms of philippine populism. *Journal of Contemporary Asia*, *47*(1), 142–153.

Dahlberg, M., Edmark, K., & Lundqvist, H. (2012). Ethnic diversity and preferences for redistribution. *Journal of Political Economy*, *120*(1), 41–76.

Dal Bó, E., Dal Bó, P., & Eyster, E. (2018). The demand for bad policy when voters underappreciate equilibrium effects. *The Review of Economic Studies*, *85*(2), 964–998.

Dal Bó, E., Finan, F., Folke, O., Persson, T., & Rickne, J. (2018). Economic losers and political winners: Sweden's radical right. *Unpublished manuscript, Department of Political Science, UC Berkeley*.

Daniele, G., & Geys, B. (2015). Interpersonal trust and welfare state support. *European Journal of Political Economy*, *39*, 1–12.

Dannenberg, A., Haita-Falah, C., & Zitzelsberger, S. (2020). Voting on the threat of

exclusion in a public goods experiment. *Experimental Economics*, *23*, 84–109.

Da Silva, A. J. B., & Larkins, E. R. (2019). The bolsonaro election, antiblackness, and changing race relations in brazil. *The Journal of Latin American and Caribbean Anthropology*, *24*(4), 893–913.

Dassonneville, R., Feitosa, F., Hooghe, M., & Oser, J. (2021). Policy responsiveness to all citizens or only to voters? a longitudinal analysis of policy responsiveness in oecd countries. *European Journal of Political Research*, *60*(3), 583–602.

Däubler, T. (2008). Veto players and welfare state change: What delays social entitlement bills? *Journal of Social Policy*, *37*(4), 683–706.

David, H., & Dorn, D. (2013). The growth of low-skill service jobs and the polarization of the us labor market. *American economic review*, *103*(5), 1553–97.

Davidovic, D., & Harring, N. (2020). Exploring the cross-national variation in public support for climate policies in europe: The role of quality of government and trust. *Energy Research & Social Science*, *70*, 101785.

Dearmon, J., & Grier, R. (2011). Trust and the accumulation of physical and human capital. *European Journal of Political Economy*, *27*(3), 507–519. doi: https://doi.org/10.1016/j.ejpoleco.2011.03.001

De Donder, P., & Hindriks, J. (1998). The political economy of targeting. *Public choice*, *95*(1-2), 177–200.

De Ferranti, D. M. (2004). *Inequality in latin america: breaking with history?* world bank publications.

Dehdari, S. H. (2022). Economic distress and support for radical right parties—evidence from Sweden. *Comparative Political Studies*, *55*(2), 191–221.

Delhey, J., Newton, K., & Welzel, C. (2011). How general is trust in "most people"? solving the radius of trust problem. *American sociological review*, *76*(5), 786–807.

Delivorias, A. (2022). Brazil's economy: Challenges for the new president. *European Parliamentary Research Service, available at: www. europarl. europa. eu/thinktank/en/-document/EPRS_BRI (2022)*, *738196*.

Dell, M. (2010). The persistent effects of peru's mining mita. *Econometrica*, *78*(6), 1863–1903.

Deloy, C. (2015). The law and justice party win the parliamentary elections and the absolute majority. *Foundation Robert Schuman*.

De Micheli, D. (2021). Racial reclassification and political identity formation. *World Politics*, *73*(1), 1–51.

Desmet, K., Gomes, J. F., & Ortuño-Ortín, I. (2020). The geography of linguistic diversity and the provision of public goods. *Journal of Development Economics*, *143*, 102384.

Desmet, K., Ortuño-Ortín, I., & Wacziarg, R. (2017). Culture, ethnicity, and diversity. *American Economic Review*, *107*(9), 2479–2513.

Desmet, K., Ortuño-Ortín, I., & Weber, S. (2017). Peripheral diversity: transfers versus public goods. *Social Choice and Welfare*, *49*(3), 787–823.

Devereux, S., Masset, E., Sabates-Wheeler, R., Samson, M., Rivas, A.-M., & Te Lintelo, D. (2017). The targeting effectiveness of social transfers. *Journal of Development Effectiveness*, *9*(2), 162–211.

Devereux, S., McGregor, J. A., & Sabates-Wheeler, R. (2011). Introduction: social protection for social justice. *IDS Bulletin*, *42*(6), 1–9.

Devine, D. (2024a). Does political trust matter? a meta-analysis on the consequences of trust. *Political Behavior*, 1–22.

Devine, D. (2024b). Political trust and redistribution preferences. *Journal of European Public Policy*, 1–24.

Devine, D., Gaskell, J., Jennings, W., & Stoker, G. (2021). Trust and the coronavirus pandemic: What are the consequences of and for trust? an early review of the literature. *Political Studies Review*, *19*(2), 274–285.

Devine, D., Valgardhsson, V., Smith, J., Jennings, W., Scotto di Vettimo, M., Bunting, H., & McKay, L. (2024). Political trust in the first year of the covid-19 pandemic: A meta-analysis of 67 studies. *Journal of European Public Policy*, *31*(3), 657–679.

Devine, D., & Valgardsson, V. O. (2024). Stability and change in political trust: Evidence and implications from six panel studies. *European Journal of Political Research*, *63*(2), 478–497.

De Vries, C. E., & Hobolt, S. B. (2012). Do voters blame governments for social spending cuts? evidence from a natural experiment. In *presentation at the epop conference in oxford* (pp. 7–9).

Díaz, C., Rovira Kaltwasser, C., & Zanotti, L. (2023). The arrival of the populist radical right in chile: José antonio kast and the "partido republicano". *Journal of Language and Politics*, *22*(3), 342–359.

Dimant, E. (2024). Hate trumps love: The impact of political polarization on social preferences. *Management Science*, *70*(1), 1–31.

Dincer, O. C., & Uslaner, E. M. (2010). Trust and growth. *Public Choice*, *142*(1-2), 59.

Dippel, C., Gold, R., & Heblich, S. (2015). *Globalization and its (dis-) content: Trade shocks and voting behavior* (Tech. Rep.). National Bureau of Economic Research.

Dominguez, P., Frisancho, V., Hoffmann, B., et al. (2022). Trust and the effectiveness of public policy. *IDB Publications (Book Chapters)*, 109–142.

Domonkos, S. (2016). Who wants a progressive income tax? determinants of tax policy preferences in post-socialist eastern europe. *East European Politics and Societies*, *30*(02), 423–448.

Dorn, D., Hanson, G., Majlesi, K., et al. (2020). Importing political polarization? the electoral consequences of rising trade exposure. *American Economic Review*, *110*(10),

3139–83.

Dornbusch, R., & Edwards, S. (1990). Macroeconomic populism. *Journal of development economics*, *32*(2), 247–277.

Dornbusch, R., & Edwards, S. (1991). The macroeconomics of populism. *The macroeconomics of populism in Latin America*, 7–13.

Dos Santos, S. A. (2002). Historical roots of the "whitening" of brazil. *Latin American Perspectives*, *29*(1), 61–82.

D.O.U. - Diário Oficial da União. (2012, 08). *Lei nº 12.711 de cotas de ingresso nas universidades.* (Available at https://www2.camara.leg.br/legin/fed/lei/2012/lei-12711-29-agosto-2012-774113-publicacaooriginal-137498-pl.html)

D.O.U. - Diário Oficial da União. (2015, 12). *Decreto nº 8.593/2015.* (Available at www.in.gov.br/web/dou/-/decreto-n-8-593-de-17-de-dezembro-de-2015-30176400)

Doyle, D. (2011). The legitimacy of political institutions: Explaining contemporary populism in Latin America. *Comparative Political Studies*, *44*(11), 1447–1473.

Drobetz, W., Mönkemeyer, M., Requejo, I., & Schröder, H. (2023). Foreign bias in institutional portfolio allocation: The role of social trust. *Journal of Economic Behavior & Organization*, *214*, 233–269.

Durante, R., Mastrorocco, N., Minale, L., & Snyder, J. M. (2025). Unpacking social capital. *The Economic Journal*, *135*(667), 773–807.

Durante, R., Putterman, L., & Van der Weele, J. (2014). Preferences for redistribution and perception of fairness: An experimental study. *Journal of the European Economic Association*, *12*(4), 1059–1086.

Dussaillant, F., & Guzmán, E. (2014). Trust via disasters: the case of chile's 2010 earthquake. *Disasters*, *38*(4), 808–832.

Dustmann, C., Schönberg, U., & Stuhler, J. (2017). Labor supply shocks, native wages, and the adjustment of local employment. *The Quarterly Journal of Economics*, *132*(1), 435–483.

Easterly, W., Ritzen, J., & Woolcock, M. (2006). Social cohesion, institutions, and growth. *Institutions, and Growth (August 2006)*.

Edo, A., Giesing, Y., Öztunc, J., & Poutvaara, P. (2019). Immigration and electoral support for the far-left and the far-right. *European Economic Review*, *115*, 99–143.

Edwards, S. (2019). On Latin American populism, and its echoes around the world. *Journal of Economic Perspectives*, *33*(4), 76–99.

Eguino, H., & Radics, A. (2018). Next steps for decentralization and subnational governments in latin america and the caribbean. *Washington, DC: Inter-American Development Bank*, *11*.

El-Attar, M., & Poschke, M. (2011). Trust and the choice between housing and financial assets: Evidence from spanish households. *Review of Finance*, *15*(4), 727–756.

Elinder, M., Jordahl, H., & Poutvaara, P. (2015). Promises, policies and pocketbook voting. *European Economic Review*, *75*, 177–194.

Encarnación, O. G. (2017). The patriarchy's revenge: How retro-macho politics doomed dilma rousseff. *World Policy Journal*, *34*(1), 82–91.

Ervasti, H., Kouvo, A., & Venetoklis, T. (2019). Social and institutional trust in times of crisis: Greece, 2002–2011. *Social Indicators Research*, *141*, 1207–1231.

Esaiasson, P., Sohlberg, J., Ghersetti, M., & Johansson, B. (2021). How the coronavirus crisis affects citizen trust in institutions and in unknown others: Evidence from 'the swedish experiment'. *European journal of political research*, *60*(3), 748–760.

Esarey, J., Salmon, T., & Barrilleaux, C. (2012). Social insurance and income redistribution in a laboratory experiment. *Political Research Quarterly*, *65*(3), 685–698.

Evans, D. K., Holtemeyer, B., Kosec, K., et al. (2019). Cash transfers increase trust in local government. *World Development*, *114*(C), 138–155.

Evans, D. K., & Kosec, K. (2023). Cash transfers, trust, and inter-household transfers: Experimental evidence from tanzania. *The World Bank Economic Review*, *37*(2), 221–234.

Fairbrother, M. (2017). Environmental attitudes and the politics of distrust. *Sociology Compass*, *11*(5), e12482.

Fairbrother, M., Sevä, I. J., & Kulin, J. (2019). Political trust and the relationship between climate change beliefs and support for fossil fuel taxes: Evidence from a survey of 23 european countries. *Global Environmental Change*, *59*, 102003.

Falk, A., & Hermle, J. (2018). Relationship of gender differences in preferences to economic development and gender equality. *Science*, *362*(6412), eaas9899.

Farjam, M., & Loxbo, K. (2024). Social conformity or attitude persistence? the bandwagon effect and the spiral of silence in a polarized context. *Journal of Elections, Public Opinion and Parties*, *34*(3), 531–551.

Fehr, E. (2009). On the economics and biology of trust. *Journal of the european economic association*, *7*(2-3), 235–266.

Fehr, E., & Leibbrandt, A. (2011). A field study on cooperativeness and impatience in the tragedy of the commons. *Journal of public economics*, *95*(9-10), 1144–1155.

Fernandez, R., & Rodrik, D. (1991). Resistance to reform: Status quo bias in the presence of individual-specific uncertainty. *The American economic review*, 1146–1155.

Fernández-Albertos, J., & Kuo, A. (2018). Income perception, information, and progressive taxation: Evidence from a survey experiment. *Political Science Research and Methods*, *6*(1), 83–110.

Fetzer, T. (2019). Did austerity cause brexit? *American Economic Review*, *109*(11), 3849–86.

Fischbacher, U., Grammling, D., Hausfeld, J., & Zíka, V. (2023). Identity breeds inequal-

ity: Evidence from a laboratory experiment on redistribution. *Journal of Public Economics*, *222*, 104866. doi: https://doi.org/10.1016/j.jpubeco.2023.104866

Fleming, D. A., Chong, A., & Bejarano, H. D. (2014). Trust and reciprocity in the aftermath of natural disasters. *The Journal of Development Studies*, *50*(11), 1482–1493.

Fong, C. (2001, 11). Social preferences, self-interest, and the demand for redistribution. *Journal of Public Economics*, *82*(2), 225–246. doi: 10.1016/S0047-2727(00)00141-9

Forte, A., Peiró-Palomino, J., & Tortosa-Ausina, E. (2015). Does social capital matter for european regional growth? *European Economic Review*, *77*, 47–64.

Frey, C. B., Berger, T., & Chen, C. (2018). Political machinery: did robots swing the 2016 US presidential election? *Oxford Review of Economic Policy*, *34*(3), 418–442.

Frost, M. H., Kim, S., Scartascini, C., Zamora, P., & Zechmeister, E. J. (2025). Disaster and political trust: Evidence from the 2017 mexico city earthquake. *World Development*, *189*, 106927.

Fukuyama, F. (1995). Social capital and the global economy. *Foreign Aff.*, *74*, 89.

Funke, M., Schularick, M., & Trebesch, C. (2023). Populist leaders and the economy. *American Economic Review*, *113*(12), 3249–3288.

Furth-Matzkin, M., & Sunstein, C. R. (2017). Social influences on policy preferences: Conformity and reactance. *Minn. L. Rev.*, *102*, 1339.

G1. (2022, 07 04). 'sou contra o aborto', diz lula após reações a declaração sobre o tema [Newspaper Article]. *G1*. (Available at: `https://g1.globo.com/ce/ceara/eleicoes/2022/noticia/2022/04/07/sou-contra-o-aborto-diz-lula-apos-reacoes-a-declaracao-sobre-o-tema.ghtml` (Accessed: July 3rd, 2023))

Gallagher, S., Howard, S., Muldoon, O. T., & Whittaker, A. C. (2022). Social cohesion and loneliness are associated with the antibody response to covid-19 vaccination. *Brain, behavior, and immunity*, *103*, 179–185.

Gambetta, D. (2000). Can we trust trust. *Trust: Making and Breaking Cooperative Relation, Electronic edition*.

Garritzmann, J. L., Neimanns, E., & Busemeyer, M. R. (2023). Public opinion towards welfare state reform: The role of political trust and government satisfaction. *European Journal of Political Research*, *62*(1), 197–220.

Gassmann, F., & Timár, E. (2024). Perceived position on the social ladder and redistributive preferences–a survey experiment from the kyrgyz republic. *European Journal of Political Economy*, 102496.

Gatto, M. A., & Power, T. J. (2016). Postmaterialism and political elites: the value priorities of Brazilian federal legislators. *Journal of Politics in Latin America*, *8*(1), 33–68.

Gavin, M., & Manger, M. (2023). Populism and de facto central bank independence.

*Comparative Political Studies*, *56*(8), 1189–1223.

Gelbach, J., & Pritchett, L. (2002). Is more for the poor less for the poor? the politics of means-tested targeting. *Topics in Economic Analysis & Policy*, *2*(1), 1027.

Georgarakos, D., & Pasini, G. (2011). Trust, sociability, and stock market participation. *Review of Finance*, *15*(4), 693–725.

Gidron, N., & Hall, P. A. (2017). The politics of social status: economic and cultural roots of the populist right. *The British journal of sociology*, *68*, S57–S84.

Gidron, N., & Mijs, J. J. (2019). Do changes in material circumstances drive support for populist radical parties? panel data evidence from the netherlands during the great recession, 2007–2015. *European Sociological Review*, *35*(5), 637–650.

Gilioli, R. d. S. P. (2017). Um balanço do FIES: desafios, perspectivas e metas do PNE. *Plano Nacional de Educação: olhares sobre o andamento das metas. Brasília: Câmara dos Deputados*, 195–226.

Gingrich, J. (2019). Did state responses to automation matter for voters? *Research & Politics*, *6*(1), 2053168019832745.

Giuliano, P., & Spilimbergo, A. (2024). *Aggregate shocks and the formation of preferences and beliefs* (Tech. Rep.). National Bureau of Economic Research.

Giuliano, P., & Wacziarg, R. (2020). *Who voted for trump? populism and social capital* (Tech. Rep.). National Bureau of Economic Research.

Goerres, A., & Tepe, M. (2010). Age-based self-interest, intergenerational solidarity and the welfare state: A comparative analysis of older people's attitudes towards public childcare in 12 oecd countries. *European Journal of Political Research*, *49*(6), 818–851.

Golman, R., Loewenstein, G., Moene, K. O., & Zarri, L. (2016). The preference for belief consonance. *Journal of Economic Perspectives*, *30*(3), 165–188.

González-Bailón, S., & Lelkes, Y. (2023). Do social media undermine social cohesion? a critical review. *Social Issues and Policy Review*, *17*(1), 155–180.

Gonçalves, C., & Srinivasan, K. (2019). Corruption in emerging market economies: How does brazil fare? *Brazil: Boom, Bust, and the Road to Recovery*, 295.

Goraus-Tanska, K., & Inchauste, G. (2016). The distributional impact of taxes and transfers in poland. *World Bank Policy Research Working Paper*(7787).

Gradstein, M., & Justman, M. (2002). Education, social cohesion, and economic growth. *American Economic Review*, *92*(4), 1192–1204.

Gromadzki, J., Sałach, K., & Brzeziński, M. (2024). When populists deliver on their promises: the electoral effects of a large cash transfer programme in poland. *Economica*, *91*(361), 320–345.

Grossman, G. M., & Helpman, E. (2021). Identity politics and trade policy. *The Review of Economic Studies*, *88*(3), 1101–1126.

Gründler, K., & Köllner, S. (2020). Culture, diversity, and the welfare state. *Journal of Comparative Economics*, *48*(4), 913–932.

Gubello, M. (2024). Social trust and the support for universal basic income. *European Journal of Political Economy*, *81*, 102495.

Gubello, M. (2025). Inherited social trust and depression among second-generation immigrants. *Kyklos*.

Gugushvili, D., & Hirsch, D. (2014). Means-tested and universal approaches to poverty: international evidence and how the uk compares. *Centre for Research in Social Policy. Working paper*, *640*.

Guiso, L., Herrera, H., Morelli, M., & Sonno, T. (2019). Global crises and populism: the role of Eurozone institutions. *Economic Policy*, *34*(97), 95–139.

Guiso, L., Herrera, H., Morelli, M., & Sonno, T. (2024). Economic insecurity and the demand for populism in europe. *Economica*, *91*(362), 588–620.

Guiso, L., Herrera, H., Morelli, M., Sonno, T., et al. (2017). *Demand and supply of populism*. Centre for Economic Policy Research London, UK.

Guiso, L., Sapienza, P., & Zingales, L. (2004). The role of social capital in financial development. *American economic review*, *94*(3), 526–556.

Guiso, L., Sapienza, P., & Zingales, L. (2008). Trusting the stock market. *the Journal of Finance*, *63*(6), 2557–2600.

Guiso, L., Sapienza, P., & Zingales, L. (2009). Cultural biases in economic exchange? *The quarterly journal of economics*, *124*(3), 1095–1131.

Guiso, L., Sapienza, P., & Zingales, L. (2011). Civic capital as the missing link. *Handbook of social economics*, *1*, 417–480.

Guriev, S. (2018). Economic drivers of populism. In *Aea papers and proceedings* (Vol. 108, pp. 200–203).

Guriev, S., & Melnikov, N. (2016). War, inflation, and social capital. *American Economic Review*, *106*(5), 230–235.

Guriev, S., Melnikov, N., & Zhuravskaya, E. (2021). 3g internet and confidence in government. *The Quarterly Journal of Economics*, *136*(4), 2533–2613.

Guriev, S., & Papaioannou, E. (2022). The political economy of populism. *Journal of Economic Literature*, *60*(3), 753–832.

GUS, Główny Urzad Statystyczny. (2017). *Social assistance and child and family care in 2016*. Central Statistical office.

GUS, Główny UrzAd Statystyczny. (2018). *Social assistance and child and family care in 2017*. Central Statistical office.

GUS, Główny Urzad Statystyczny. (2019). *Social assistance and child and family care in 2018*. Central Statistical office.

GUS, Główny Urzad Statystyczny. (2020). *Social assistance and child and family care in*

*2019*. Central Statistical office.

Habibov, N., Cheung, A., & Auchynnikava, A. (2017). Does trust increase willingness to pay higher taxes to help the needy? *International Social Security Review*, *70*(3), 3–30. doi: https://doi.org/10.1111/issr.12141

Hamad, B. A., Jones, N., Abuhamad, S., Baird, S., & Oakley, E. (2025). Can social protection contribute to social connectedness in contexts of forced displacement and crisis? lessons from jordan's labelled cash transfer for education. *World Development*, *188*, 106886.

Harring, N., Jagers, S. C., & Löfgren, Å. (2021). Covid-19: Large-scale collective action, government intervention, and the importance of trust. *World development*, *138*, 105236.

Hasan, I., Hoi, C.-K., Wu, Q., & Zhang, H. (2017). Does social capital matter in corporate decisions? evidence from corporate tax avoidance. *Journal of Accounting Research*, *55*(3), 629–668.

Hauk, E., Oviedo, M., & Ramos, X. (2022). Perception of corruption and public support for redistribution in latin america. *European Journal of Political Economy*, *74*, 102174.

Hauser, O. P., & Norton, M. I. (2017). (mis) perceptions of inequality. *Current opinion in psychology*, *18*, 21–25.

Hawkins, K. A. (2009). Is Chávez populist? Measuring populist discourse in comparative perspective. *Comparative Political Studies*, *42*(8), 1040–1067.

Hawkins, K. A. (2018). The ideational approach. In *Routledge handbook of global populism* (pp. 57–72). Routledge.

Hetherington, M. J., & Husser, J. A. (2012). How trust matters: The changing political relevance of political trust. *American Journal of Political Science*, *56*(2), 312–325.

Hilo-Merkovich, R., Peer, E., & Feldman, Y. (2024). Affidavit aversion: Public preferences for trust-based policy instruments. *Regulation & Governance*, *18*(3), 970–986.

Hogg, M. A., & Turner, J. C. (1987). Intergroup behaviour, self-stereotyping and the salience of social categories. *British journal of social psychology*, *26*(4), 325–340.

Holleman, B., Kamoen, N., Krouwel, A., Pol, J. v. d., & Vreese, C. d. (2016). Positive vs. negative: The impact of question polarity in voting advice applications. *PloS one*, *11*(10), e0164184. doi: 10.1371/journal.pone.0164184

Houle, C., & Kenny, P. D. (2018). The political and economic consequences of populist rule in latin america. *Government and Opposition*, *53*(2), 256–287.

Hrytsai, L. (2021). Evaluation of the family 500+ programme: National and international perspectives. *Annales Universitatis Mariae Curie-Skłodowska, sectio K–Politologia*, *28*(2), 101–118.

Hunter, W., & Power, T. J. (2019). Bolsonaro and Brazil's illiberal backlash. *Journal of*

*Democracy*, *30*(1), 68–82.

Hunter, W., & Power, T. J. (2023). Lula's second act. *Journal of Democracy*, *34*(1), 126–140.

Iacoella, F., Justino, P., & Martorano, B. (2020). *Roots of dissent: Trade liberalization and the rise of populism in brazil* (No. 2020/118). WIDER Working Paper.

Iglesias, S. P. (2022, 20 10). Lula seeks crucial votes amid supporters of ex-rival tebet [Newspaper Article]. *Bloomberg*. (Available at: `https://www.bloomberg.com/news/articles/2022-10-20/lula-seeks-crucial-votes-amid-supporters-of-former-rival-tebet` (Accessed: July 3rd, 2023))

ILO. (2021). *World social protection report 2020–22: Social protection at the crossroads–in pursuit of a better future.* International Labour Office Geneva.

Inglehart, R., Haerpfer, C., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano, J., ... others (2020). *The wvs cultural map of the world: World values survey, all rounds – country-pooled datafile.* (Madrid, Spain & Vienna, Austria: JD Systems Institute & WVSA Secretariat [Version: `http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp`])

Inglehart, R., & Norris, P. (2016). Trump, Brexit, and the rise of populism: Economic have-nots and cultural backlash.

Inglehart, R., & Norris, P. (2017). Trump and the populist authoritarian parties: the silent revolution in reverse. *Perspectives on Politics*, *15*(2), 443–454.

Jacuński, M., Brodzińska-Mirowska, B., Pacześniak, A., Wincławska, M., Jacuński, M., Brodzińska-Mirowska, B., ... Wincławska, M. (2021). The emergence of the party system in poland—from instability to permanent rivalry patterns. *Party Organization and Communication in Poland*, 61–95.

Jennings, W., Stoker, G., Valgardhsson, V., Devine, D., & Gaskell, J. (2021). How trust, mistrust and distrust shape the governance of the covid-19 crisis. *Journal of European Public Policy*, *28*(8), 1174–1196.

Ji, C., Jiang, J., & Zhang, Y. (2024). Political trust and government performance in the time of covid-19. *World Development*, *176*, 106499.

Jin, S., Yan, S., & Zhang, X. (2025). Measuring trust across countries: Inconsistencies between experiments and surveys. *Economics Letters*, 112213.

Jkedrzejczak, A., & Pekasiewicz, D. (2020). Changes in income distribution for different family types in poland. *International Advances in Economic Research*, *26*(2), 135–146.

Johnson, N. D., & Mislin, A. (2012). How much should we trust the world values survey trust question? *Economics Letters*, *116*(2), 210–212.

Jolly, S., Bakker, R., Hooghe, L., Marks, G., Polk, J., Rovny, J., ... Vachudova, M. A.

(2022). Chapel hill expert survey trend file, 1999–2019. *Electoral studies*, *75*, 102420.

Jordahl, H. (2009). Inequality and trust. *Published as" Economic Inequality" in Svendsen, GT and Svendsen, GLH (Eds.), Handbook of Social Capital, Edward Elgar*.

Kaasa, A., & Andriani, L. (2022). Determinants of institutional trust: the role of cultural context. *Journal of Institutional Economics*, *18*(1), 45–65. doi: https://doi.org/10.1017/S1744137421000199

Kaczan, D. J., & Orgill-Meyer, J. (2020). The impact of climate change on migration: a synthesis of recent empirical insights. *Climatic Change*, *158*(3), 281–300. doi: https://doi.org/10.1007/s10584-019-02560-0

Kaltwasser, C. R., & Van Hauwaert, S. M. (2020). The populist citizen: Empirical evidence from europe and latin america. *European Political Science Review*, *12*(1), 1–18.

Kamoen, N., Holleman, B., Mak, P., Sanders, T., & Van Den Bergh, H. (2017). Why are negative questions difficult to answer? on the processing of linguistic contrasts in surveys. *Public Opinion Quarterly*, *81*(3), 613–635. doi: https://doi.org/10.1093/poq/nfx010

Kang, J. (2022, 03 07). Lula challenges bolsonaro's grip on brazil evangelical vote [Newspaper Article]. *Reuters*. (Available at: `https://www.reuters.com/world/americas/lula-challenges-bolsonaros-grip-brazil-evangelical-vote-2022-09-27/` (Accessed: July 3rd, 2023))

Karadja, M., Mollerstrom, J., & Seim, D. (2017). Richer (and holier) than thou? the effect of relative income improvements on demand for redistribution. *Review of Economics and Statistics*, *99*(2), 201–212.

Keefer, P. (2025). Trust and the new institutional economics. *Handbook of New Institutional Economics*, 975–1000.

Keefer, P., Scartascini, C., & Vlaicu, R. (2022). Demand-side determinants of public spending allocations: Voter trust, risk and time preferences. *Journal of Public Economics*, *206*, 104579.

Keefer, P., & Scartascini, C. G. (2022). Trust: The key to social cohesion and growth in latin america and the caribbean. In *Trust: the key to social cohesion and growth in latin america and the caribbean.* [Washington, DC]: Inter-American Development Bank.

Kennedy, C. (2007). Vagueness and grammar: The semantics of relative and absolute gradable adjectives. *Linguistics and philosophy*, *30*(1), 1–45. doi: https://doi.org/10.1007/s10988-006-9008-0

Kennedy, C., & McNally, L. (2005). Scale structure, degree modification, and the semantics of gradable predicates. *Language*, *81*(2), 345–381.

Kenny, P. D. (2020). "the enemy of the people": Populists and press freedom. *Political Research Quarterly*, *73*(2), 261–275.

Kestler, T. (2022). Radical, nativist, authoritarian—or all of these? assessing recent cases of right-wing populism in latin america. *Journal of Politics in Latin America*, *14*(3), 289–310.

Kitt, S., Axsen, J., Long, Z., & Rhodes, E. (2021). The role of trust in citizen acceptance of climate policy: Comparing perceptions of government competence, integrity and value similarity. *Ecological Economics*, *183*, 106958.

Klein, C. (2013). Social capital or social cohesion: What matters for subjective well-being? *Social Indicators Research*, *110*, 891–911.

Klein, C. H., Mitchell, S. T., & Junge, B. (2018). Naming Brazil's previously poor:"New middle class" as an economic, political, and experiential category. *Economic Anthropology*, *5*(1), 83–95.

Klor, E. F., & Shayo, M. (2010). Social identity and preferences over redistribution. *Journal of Public Economics*, *94*(3-4), 269–278.

Knack, S., & Keefer, P. (1997). Does social capital have an economic payoff? a cross-country investigation. *The Quarterly journal of economics*, *112*(4), 1251–1288.

Korpi, W., & Palme, J. (1998). The paradox of redistribution and strategies of equality: Welfare state institutions, inequality, and poverty in the western countries. *American sociological review*, 661–687.

Kritzinger, S., Foucault, M., Lachat, R., Partheymüller, J., Plescia, C., & Brouard, S. (2021). 'rally round the flag': the covid-19 crisis and trust in the national government. *West European Politics*, *44*(5-6), 1205–1231.

Krook, M. L., & Sanín, J. R. (2020). The cost of doing politics? analyzing violence and harassment against female politicians. *Perspectives on Politics*, *18*(3), 740–755.

Kulin, J., & Johansson Sevä, I. (2021). Who do you trust? how trust in partial and impartial government institutions influences climate policy attitudes. *Climate Policy*, *21*(1), 33–46.

Kuziemko, I., Norton, M. I., Saez, E., & Stantcheva, S. (2015). How elastic are preferences for redistribution? evidence from randomized survey experiments. *American Economic Review*, *105*(4), 1478–1508.

Laban, R., & Sturzenegger, F. (1994). Distributional conflict, financial adaptation and delayed stabilizations. *Economics & Politics*, *6*(3), 257–276.

Laenen, T., Van Hootegem, A., & Rossetti, F. (2023). The multidimensionality of public support for basic income: a vignette experiment in belgium. *Journal of European Public Policy*, *30*(5), 849–872.

Langenkamp, A., & Bienstman, S. (2022). Populism and layers of social belonging: Support of populist parties in europe. *Political Psychology*, *43*(5), 931–949.

La Porta, R., Lopez-de Silanes, F., Shleifer, A., & Vishny, R. W. (1996). *Trust in large organizations.* National Bureau of Economic Research Cambridge, Mass., USA.

Larsen, E. G. (2018). Welfare retrenchments and government support: evidence from a natural experiment. *European Sociological Review*, *34*(1), 40–51.

Larsen, E. G. (2019). Policy feedback effects on mass publics: A quantitative review. *Policy studies journal*, *47*(2), 372–394.

Laurence, J. (2011). The effect of ethnic diversity and community disadvantage on social cohesion: A multi-level analysis of social capital and interethnic relations in uk communities. *European sociological review*, *27*(1), 70–89.

Layton, M. L., Smith, A. E., Moseley, M. W., & Cohen, M. J. (2021). Demographic polarization and the rise of the far right: Brazil's 2018 presidential election. *Research & Politics*, *8*(1), 2053168021990204.

Lee, A. H.-Y. (2022). Social trust in polarized times: How perceptions of political polarization affect americans' trust in each other. *Political behavior*, *44*(3), 1533–1554.

Lee, H., Calvin, K., Dasgupta, D., Krinner, G., Mukherji, A., Thorne, P., ... others (2023). *Climate change 2023: synthesis report. contribution of working groups i, ii and iii to the sixth assessment report of the intergovernmental panel on climate change.* The Australian National University.

Leivas, P. H. S., & dos Santos, A. M. A. (2018). Horizontal inequality and ethnic diversity in brazil: patterns, trends, and their impacts on institutions. *Oxford development studies*, *46*(3), 348–362.

Levi, M., & Stoker, L. (2000). Political trust and trustworthiness. *Annual review of political science*, *3*(1), 475–507.

Lewandowski, P., Park, A., & Schotte, S. (2020). *The global distribution of routine and non-routine work* (Working Paper No. 06/2020). Instytut Badan Strukturalnych.

Lewis-Beck, M. S., & Paldam, M. (2000). Economic voting: an introduction. *Electoral studies*, *19*(2-3), 113–121.

Lindert, P. H. (2004). *Growing public: Volume 1, the story: Social spending and economic growth since the eighteenth century* (Vol. 1). Cambridge University Press.

Lins, K. V., Servaes, H., & Tamayo, A. (2017). Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis. *the Journal of Finance*, *72*(4), 1785–1824.

Liu, W., Gerber, E., Jung, S., & Agrawal, A. (2022). The role of human and social capital in earthquake recovery in nepal. *Nature Sustainability*, *5*(2), 167–173.

Luca, D., Terrero-Davila, J., Stein, J., & Lee, N. (2023). Progressive cities: Urban–rural polarisation of social values and economic development around the world. *Urban Studies*, *60*(12), 2329–2350.

Luna, B., Andrea, F., & Francesco, S. (2023). Collective negative shocks and preferences for redistribution: Evidence from the covid-19 crisis in germany. *The Journal of Economic Inequality*, *21*(2), 381–403.

Lupu, N., & Pontusson, J. (2011). The structure of inequality and the politics of redistribution. *American Political Science Review*, 316–336.

Luttmer, E. F. (2001). Group loyalty and the taste for redistribution. *Journal of political Economy*, *109*(3), 500–528.

Luttmer, E. F. P., & Singhal, M. (2011). Culture, context, and the taste for redistribution. *American Economic Journal: Economic Policy*, *3*(1), 157–179.

Macdonald, D. (2021). Political trust and support for immigration in the american mass public. *British Journal of Political Science*, *51*(4), 1402–1420.

Mackay, R., Mavisakalyan, A., & Tarverdi, Y. (2024). Trust a few: Natural disasters and the disruption of trust in africa. *Journal of Behavioral and Experimental Economics*, *113*, 102288.

Magda, I., Kiełczewska, A., & Brandt, N. (2018). *The "family 500+" child allowance and female labour supply in poland* (No. 1481). OECD. doi: https://doi.org/https://doi.org/10.1787/1a30745e-en

Magro, M. (2018). STF fixa mínimo de 30% do fundo partidário para campanhas de mulheres. *Valor Econômico*. Retrieved 2018-03-15, from `https://valor.globo.com/politica/noticia/2018/03/15/stf-fixa-minimo-de-30-do-fundo-partidario-para-campanhas-de-mulheres.ghtml` (Available at `https://valor.globo.com/politica/noticia/2018/03/15/stf-fixa-minimo-de-30-do-fundo-partidario-para-campanhas-de-mulheres.ghtml`)

Major, B., Blodorn, A., & Major Blascovich, G. (2018). The threat of increasing diversity: Why many White Americans support Trump in the 2016 presidential election. *Group Processes & Intergroup Relations*, *21*(6), 931–940.

Maloney, W. F., & Molina, C. (2019). *Is automation labor-displacing in the developing countries, too? robots, polarization, and jobs* (Working Paper). Washington, D.C.: World Bank.

Margalit, Y. (2019). Economic insecurity and the causes of populism, reconsidered. *Journal of Economic Perspectives*, *33*(4), 152–70.

Marien, S., & Hooghe, M. (2011). Does political trust matter? an empirical investigation into the relation between political trust and support for law compliance. *European journal of political research*, *50*(2), 267–291.

Marino, M., Iacono, R., & Mollerstrom, J. (2024). (mis-) perceptions, information, and political polarization: a survey and a systematic literature review. *European Journal of Political Economy*, 102578.

Martinangeli, A. F., Povitkina, M., Jagers, S., & Rothstein, B. (2024). Institutional qual-

ity causes generalized trust: experimental evidence on trusting under the shadow of doubt. *American Journal of Political Science*, *68*(3), 972–987.

Martins-Neto, A., Mathew, N., Mohnen, P., & Treibich, T. (2024). Is there job polarization in developing economies? a review and outlook. *The World Bank Research Observer*, *39*(2), 259–288.

Matakos, K., Savolainen, R., & Tukiainen, J. (2020). Refugee migration and the politics of redistribution: Do supply and demand meet? *Aboa Center for Economics, Discussion Paper*(132).

McKnight, A. (2015). *A fresh look at an old question: is pro-poor targeting of cash transfers more effective than universal systems at reducing inequality and poverty?* (No. 640). LIS Working Paper Series.

Meardi, G., & Guardiancich, I. (2022). Back to the familialist future: the rise of social policy for ruling populist radical right parties in italy and poland. *West European Politics*, *45*(1), 129–153.

Meer, T. v. d., & Tolsma, J. (2014). Ethnic diversity and its effects on social cohesion. *Annual Review of Sociology*, *40*(1), 459–478.

Meltzer, A. H., & Richard, S. F. (1981). A rational theory of the size of government. *Journal of political Economy*, *89*(5), 914–927.

Millán, T. M., Barham, T., Macours, K., Maluccio, J. A., & Stampini, M. (2019). Long-term impacts of conditional cash transfers: review of the evidence. *The World Bank Research Observer*, *34*(1), 119–159.

Mimica, N., & Navia, P. (2024). Where did hyper-presidentialism go? the origin of bills and laws passed in chile, 1990–2022. *Journal of Politics in Latin America*, *16*(1), 27–49.

Mishra, S. (2020). Social networks, social capital, social support and academic success in higher education: A systematic review with a special focus on 'underrepresented'students. *Educational Research Review*, *29*, 100307. doi: https://doi.org/10.1016/j.edurev.2019.100307

Moene, K. O., & Wallerstein, M. (2001). Inequality, social insurance, and redistribution. *American Political Science Review*, 859–874.

Montresor, G., & Schiavon, L. (2025). Social capital and vaccination compliance: Evidence from italy. *Economics & Human Biology*, *56*, 101462.

Mudde, C., & Kaltwasser, C. R. (2013). Exclusionary vs. inclusionary populism: Comparing contemporary Europe and Latin America. *Government and opposition*, *48*(2), 147–174.

Mudde, C., & Kaltwasser, C. R. (2017). *Populism: A very short introduction*. Oxford University Press.

Mudde, C., & Rovira Kaltwasser, C. (2018). Studying populism in comparative perspec-

tive: Reflections on the contemporary and future research agenda. *Comparative Political Studies*, *51*(13), 1667–1693.

Müller, J.-W. (2016). *What is populism?* University of Pennsylvania press.

Muñoz, J., & Pardos-Prado, S. (2019). Immigration and support for social policy: an experimental comparison of universal and means-tested programs. *Political Science Research and Methods*, *7*(4), 717–735.

Mutz, D. C. (2018). Status threat, not economic hardship, explains the 2016 presidential vote. *Proceedings of the National Academy of Sciences*, *115*(19), E4330–E4339.

Myck, M., Król, A., Trzciński, K., & Oczkowska, M. (2021). *The childcare benefit after five years: 500 plus how much?* CenEA: Centre for Economic Analysis.

Neustadt, I., & Zweifel, P. (2023). *Redistribution in whose favor? preferences with regard to nationality and type of beneficiaries.* Available at SSRN. doi: http://dx.doi.org/10.2139/ssrn.4712930

Ñopo, H. (2012). *New century, old disparities: Gender and ethnic earnings gaps in latin america and the caribbean*. World Bank Publications.

North, D. C., Wallis, J. J., Weingast, B. R., et al. (2009). *Violence and social orders: A conceptual framework for interpreting recorded human history*. Cambridge University Press.

Nunn, N., Qian, N., & Wen, J. (2018). *Distrust and political turnover during economic crises* (Working Paper No. 24187). National Bureau of Economic Research. Retrieved from `http://www.nber.org/papers/w24187` doi: 10.3386/w24187

Nunn, N., & Wantchekon, L. (2011). The slave trade and the origins of mistrust in africa. *American economic review*, *101*(7), 3221–3252.

OECD. (2011). *Perspectives on global development 2012: Social cohesion in a shifting world*. OECD Publishing.

OECD. (2022). *Building trust and reinforcing democracy: Preparing the ground for government action* (OECD Public Governance Reviews). Paris: OECD Publishing. doi: https://doi.org/10.1787/76972a4a-en

OECD. (2024). *OECD Survey on Drivers of Trust in Public Institutions – 2024 Results Building Trust in a Complex Policy Environment.* Paris: OECD Publishing. doi: https://doi.org/10.1787/9a20554b-en

OECD. (2024). *Society at a glance 2024: Oecd social indicators*. OECD Publishing.

Oh, H., & Hong, J. H. (2012). Citizens' trust in government and their willingness-to-pay. *Economics Letters*, *115*(3), 345–347.

Orenstein, M. A., & Bugarič, B. (2022). Work, family, fatherland: the political economy of populism in central and eastern europe. *Journal of European Public Policy*, *29*(2), 176–195.

Organization, W. H., et al. (2024). Global immunization efforts have saved at least 154

million lives over the past 50 years. *World Health Organization News. April*, *24*.

Pagliarini, A. (2023). Tongues of fire: Silas malafaia and the historical roots of neo-pentecostal power in bolsonaro's brazil. *Latin American Perspectives*, *50*(1), 179–196.

Pandey, A., & Galvani, A. P. (2023). Exacerbation of measles mortality by vaccine hesitancy worldwide. *The Lancet Global Health*, *11*(4), e478–e479.

Papaioannou, E. (2020). A comment on:"state capacity, reciprocity, and the social contract" by timothy besley. *Econometrica*, *88*(4), 1351–1358.

Paradowski, P. R., & Wolszczak-Derlacz, J. (2025). Inequality, poverty, and child benefits: evidence from a natural experiment. *Post-Soviet Affairs*, *41*(3), 242–262.

Pavanello, S., Watson, C., Onyango-Ouma, W., & Bukuluki, P. (2018). Effects of cash transfers on community interactions: Emerging evidence. In *The social and political potential of cash transfers* (pp. 61–75). Routledge.

Peiró-Palomino, J., Gianmoena, L., Picazo-Tadeo, A. J., & Rios, V. (2024). Social trust and the advanced aspects of social progress. evidence for the european regions. *European Journal of Political Economy*, *83*, 102547.

Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of personality and social psychology*, *90*(5), 751.

Peyton, K. (2020). Does trust in government increase support for redistribution? evidence from randomized survey experiments. *American Political Science Review*, *114*(2), 596–602.

Pinotti, P. (2012). Trust, regulation and market failures. *Review of Economics and Statistics*, *94*(3), 650–658.

Pitlik, H., & Kouba, L. (2015). Does social distrust always lead to a stronger support for government intervention? *Public Choice*, *163*(3-4), 355–377.

POLPAN, Słomczyński, Kazimierz M. and Tomescu-Dubrow, Irina and Institute of Philosophy and Sociology, Polish Academy of Sciences. (2021). *Polish Panel Survey POLPAN.* Harvard Dataverse. Retrieved from `https://doi.org/10.7910/DVN/DAPH0P` (Dataset) doi: 10.7910/DVN/DAPH0P

Porcella, I., & Rodrigues, E. (2022, 03 10). Bolsonaro aposta em mais 'bondades' no auxílio brasil para vencer 2º turno [Newspaper Article]. *Estadão*. (Available at: `https://www.estadao.com.br/economia/bolsonaro-mais-bondades-auxilio-brasil-aposta-2-turno/` (Accessed: July 3rd, 2023))

Power, T. J., & Zucco Jr, C. (2009). Estimating ideology of brazilian legislative parties, 1990-2005: a research communication. *Latin American Research Review*, 218–246.

Power, T. J., & Zucco Jr, C. (2012). Elite preferences in a consolidating democracy: the brazilian legislative surveys, 1990–2009. *Latin American Politics and Society*, *54*(4), 1–27.

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of american community.* Simon and schuster.

Rahman, M. H., Lee, G. H., Shabnam, N., & Jayasinghe, S. (2020). Weathering trust. *Journal of Economic Behavior & Organization*, *178*, 449–473.

Ranehill, E., & Weber, R. A. (2022). Gender preference gaps and voting for redistribution. *Experimental Economics*, *25*(3), 845–875.

Rennó, L. R. (2020). The bolsonaro voter: issue positions and vote choice in the 2018 brazilian presidential elections. *Latin American Politics and Society*, *62*(4), 1–23.

Reuters. (2013). *Poland approves child benefit hike as election looms.* Reuters.

Riera, P., & Madariaga, A. G. (2023). Overlapping polarization: On the contextual determinants of the interplay between ideological and affective polarization. *Electoral studies*, *84*, 102628.

Rincon, L. (2023). A robin hood for all: a conjoint experiment on support for basic income. *Journal of European Public Policy*, *30*(2), 375–399.

Rincón, L., Vlandas, T., & Hiilamo, H. (2022). What's not to like? benefit design, funding structure and support for universal basic income. *Journal of European Social Policy*, *32*(4), 467–483.

Roberts, K. M. (1995). Neoliberalism and the transformation of populism in latin america: The peruvian case. *World politics*, *48*(1), 82–116.

Roberts, K. M. (2019). Bipolar disorders: Varieties of capitalism and populist out-flanking on the left and right. *Polity*, *51*(4), 641–653.

Rodrik, D. (1999). Where did all the growth go? external shocks, social conflict, and growth collapses. *Journal of economic growth*, *4*(4), 385–412.

Rodrik, D. (2018). Populism and the Economics of Globalization. *Journal of international business policy*, *1*(1-2), 12–33.

Rodrik, D. (2020). Why does globalization fuel populism?

Roelen, K. (2017). Shame, poverty and social protection.

Roelen, K., Leon-Himmelstine, C., & Kim, S. K. (2022). Chicken or egg? a bi-directional analysis of social protection and social cohesion in burundi and haiti. *The European Journal of Development Research*, *34*(3), 1216–1239.

Rönnerstrand, B. (2016). Contextual generalized trust and immunization against the 2009 a (h1n1) pandemic in the american states: A multilevel approach. *SSM-population health*, *2*, 632–639.

Rooduijn, M. (2019). State of the field: How to study populism and adjacent topics? A plea for both more and less focus. *European Journal of Political Research*, *58*(1), 362–372.

Rooduijn, M., Van Der Brug, W., & De Lange, S. L. (2016). Expressing or fuelling discontent? The relationship between populist voting and political discontent. *Electoral*

*Studies*, *43*, 32–40.

Rosati, A. (2022, 22 Apr). Lula risks losing support over remarks on abortion, middle class [Newspaper Article]. *Bloomberg*. (Available at: https://www.bloomberg.com/news/articles/2022-04-25/lula-risks-losing-votes-among-brazil-s-faithful-and-middle-class (Accessed: July 3rd, 2023))

Rothstein, B. (2001). The universal welfare state as a social dilemma. *Rationality and society*, *13*(2), 213–233.

Rothstein, B. (2008). Is the universal welfare state a cause or an effect of social capital? *QoG Working Paper Series*, *2008*(16), 16.

Rothstein, B. (2012). The universal welfare state as a social dilemma. In *Cooperation in modern society* (pp. 226–244). Routledge.

Rothstein, B., & Stolle, D. (2008). The state and social capital: An institutional theory of generalized trust. *Comparative politics*, *40*(4), 441–459.

Rothstein, B., & Uslaner, E. M. (2005). All for all: Equality, corruption, and social trust. *World politics*, *58*(1), 41–72.

Rudolph, T. J. (2017). Political trust as a heuristic. In *Handbook on political trust* (pp. 197–211). Edward Elgar Publishing.

Rudolph, T. J., & Evans, J. (2005). Political trust, ideology, and public support for government spending. *American Journal of Political Science*, *49*(3), 660–671.

Saaranen, A. (2024). Social trust during the pandemic: Longitudinal evidence from three waves of the swiss household panel study. *Journal of Trust Research*, *14*(2), 188–212.

Sadi, A. (2022, 07 04). Qg de bolsonaro comemora fala de lula sobre aborto e prepara material de campanha; pt vê 'erro' e cobra estratégia [Newspaper Article]. *G1*. (Available at: https://g1.globo.com/politica/blog/andreia-sadi/post/2022/04/07/qg-de-bolsonaro-comemora-fala-de-lula-sobre-aborto-e-prepara-material-de-campanha-pt-ve-erro-e-cobra-estrategia.ghtml (Accessed: July 3rd, 2023))

Sadura, P., & Sierakowski, S. (2021). Koniec hegemonii 500 plus. *Raport z badań, Warszawa*.

Salata, A. R. (2015). Quem é classe média no brasil? um estudo sobre identidades de classe. *Dados*, *58*(1), 111–149.

Samuels, D. J., & Zucco, C. (2018). *Partisans, antipartisans, and nonpartisans: voting behavior in brazil*. Cambridge University Press.

Sangnier, M. (2013). Does trust favor macroeconomic stability? *Journal of Comparative Economics*, *41*(3), 653–668.

Santos, M. L., Pérez-Liñán, A., & García Montero, M. (2014). El control presidencial

de la agenda legislativa en américa latina. *Revista de ciencia política (Santiago)*, *34*(3), 511–536.

Sasso, G., & Morelli, M. (2021). Bureaucrats under populism. *Journal of Public Economics*, *202*, 104497.

Satyanath, S., Voigtlaender, N., & Voth, H.-J. (2013). *Bowling for fascism: social capital and the rise of the nazi party* (Tech. Rep.). National Bureau of Economic Research.

Scheve, K. F., & Slaughter, M. J. (2001). What determines individual trade-policy preferences? *Journal of International Economics*, *54*(2), 267–292.

Schiefer, D., & Van der Noll, J. (2017). The essentials of social cohesion: A literature review. *Social Indicators Research*, *132*, 579–603.

Schneider, I. (2017). Can we trust measures of political trust? assessing measurement equivalence in diverse regime types. *Social indicators research*, *133*(3), 963–984.

Schüring, E., & Gassmann, F. (2016). The political economy of targeting–a critical review. *Development Policy Review*, *34*(6), 809–829.

Shayo, M. (2009). A model of social identity with an application to political economy: Nation, class, and redistribution. *American Political science review*, 147–174.

Shayo, M. (2020). Social identity and economic policy. *Annual Review of Economics*.

Shimada, G. (2015). The role of social capital after disasters: An empirical study of japan based on time-series-cross-section (tscs) data from 1981 to 2012. *International Journal of Disaster Risk Reduction*, *14*, 388–394.

Sides, J., Tesler, M., & Vavreck, L. (2018). Hunting where the ducks are: Activating support for Donald Trump in the 2016 Republican primary. *Journal of Elections, Public Opinion and Parties*, *28*(2), 135–156.

Siegrist, M. (2021). Trust and risk perception: A critical review of the literature. *Risk analysis*, *41*(3), 480–490.

Silva, J., Morgandi, M., & Levin, V. (2016). Trust in government and support for redistribution. *World Bank Policy Research Working Paper*(7675).

Singer, M. M., & Carlin, R. E. (2013). Context counts: The election cycle, development, and the nature of economic voting. *The Journal of Politics*, *75*(3), 730–742.

Sisk, T. (2020). *Strengthening social cohesion. conceptual framing and programming implications* (Guidance Notes). New York, NY, USA: United Nations Development Programme.

Skirbekk, V., Stonawski, M., & Goujon, A. (2011). *Global christianity: A report on the size and distribution of the world's christian population* (Tech. Rep.). Washington, D.C.: Pew Research Center's Forum on Religion & Public Life.

Smith, A. E. (2019). *Religion and brazilian democracy: mobilizing the people of god*. Cambridge University Press.

Sobhaninia, S. (2024). The social cohesion measures contributing to resilient disaster

recovery: a systematic literature review. *Journal of Planning Literature*, *39*(4), 519–534.

Sobhaninia, S., Buckman, S., & Ortiz-Garcia, C. (2024). Stronger together? redefining social cohesion role in building disaster-resilient communities. *Journal of Risk Research*, *27*(11), 1424–1441.

Sønderskov, K. M., & Dinesen, P. T. (2014). Danish exceptionalism: Explaining the unique increase in social trust over the past 30 years. *European Sociological Review*, *30*(6), 782–795.

Sønderskov, K. M., & Dinesen, P. T. (2016). Trusting the state, trusting each other? the effect of institutional trust on social trust. *Political Behavior*, *38*, 179–202.

Sowa, A. (2016). Family 500+: A new family income-supporting benefit in poland. *ESPN Flash Report*, *45*.

Spilimbergo, A., & Srinivasan, K. (2019). The subnational fiscal crisis. In *Brazil: Boom, bust, and the road to recovery.* INTERNATIONAL MONETARY FUND.

Spilimbergo, A., Srinivasan, K., & Walutowy, M. F. (2018). *Brazil: Boom, bust, and the road to recovery.* International Monetary Fund.

Spilker, G., Schaffer, L. M., & Bernauer, T. (2012). Does social capital increase public support for economic globalisation? *European Journal of Political Research*, *51*(6), 756–784. doi: https://doi.org/10.1111/j.1475-6765.2012.02058.x

Stantcheva, S. (2021). Understanding tax policy: How do people reason? *The Quarterly Journal of Economics*, *136*(4), 2309–2369.

Stephane, V. (2021). Hiding behind the veil of ashes: Social capital in the wake of natural disasters. *World Development*, *145*, 105518.

STF - Supremo Tribunal Federal. (2011). *Ação direta de inconstitucionalidade 4277/df.* Retrieved from `https://www.jusbrasil.com.br/jurisprudencia/stf/20627236`

Suhay, E., Soni, A., Persico, C., & Marcotte, D. E. (2022). Americans' trust in government and health behaviors during the covid-19 pandemic. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, *8*(8), 221–244.

Suzuki, S. (2022, 30 06). Pec que amplia auxílio brasil em ano eleitoral é 'passar a perna na lei', diz especialista [Newspaper Article]. *BBC News Brasil*. (Available at: `https://www.bbc.com/portuguese/brasil-61992544` (Accessed: July 3rd, 2023))

Szeidl, A., & Szucs, F. (2021). Media capture through favor exchange. *Econometrica*, *89*(1), 281–310.

Tabellini, G. (2010). Culture and institutions: economic development in the regions of europe. *Journal of the European Economic association*, *8*(4), 677–716.

Tajfel, H. (1974). Social identity and intergroup behaviour. *Social science information*, *13*(2), 65–93.

Tannenbaum, D., Cohn, A., Zünd, C. L., & Maréchal, M. A. (2025). What do cross-country surveys tell us about social capital? *Review of Economics and Statistics*, *107*(1), 142–151.

ten Kate, F., Klasing, M. J., & Milionis, P. (2023). Societal diversity, group identities and their implications for tax morale. *Journal of Comparative Economics*, *51*(3), 1048–1067. doi: https://doi.org/10.1016/j.jce.2023.04.005

Tomescu-Dubrow, I., Slomczynski, K. M., Sawiński, Z., Kiersztyn, A., Janicka, K., Życzyńska-Ciołek, D., ... Kotnarowski, M. (2021). The polish panel survey, polpan. *European Sociological Review*, *37*(5), 849–864.

Trejo, G., & Bizzarro, F. (2015). Religious competition and the rise of leftist parties: Why the catholic church provided the mass base for the workers' party in brazil. *Available at SSRN 3148471*.

TSE. (2022). Lula é eleito novamente presidente da República do Brasil. *Folha On Line*.

Tribunal Superior Eleitoral. (2018). *Tse-divulgação de resultados de eleições.*

TSE. (2023, July). *Resultado eleição geral ordinária 2022.* (`https://www.tse.jus.br/eleicoes/eleicoes-2022/divulgacao-dos-resultados-das-eleicoes-2022`)

Tu, Q., & Bulte, E. (2010). Trust, market participation and economic outcomes: evidence from rural china. *World Development*, *38*(8), 1179–1190. doi: https://doi.org/10.1016/j.worlddev.2009.12.014

UNDRR. (2020). *The human cost of disasters 2000-2019* (Tech. Rep.). United Nations Office for Disaster Risk Reduction.

UNECE. (n.d.). *Mean age of women at birth of first child.* Retrieved 2024-06-30, from `https://w3.unece.org/PXWeb/en/Table?IndicatorCode=34`

UNHCR. (2025). *Global trends: Forced displacement in 2024* (Tech. Rep.). Copenhagen, Denmark: United Nations High Commissioner for Refugees.

United Nations Economic Commission for Europe. (2023). *Social cohesion: Concept and measurement* (United Nations publication No. ECE/CES/STAT/2023/8).

Uslaner, E. M. (2002). The moral foundations of trust. *Available at SSRN 824504*.

Uslaner, E. M. (2010). Segregation, mistrust and minorities. *Ethnicities*, *10*(4), 415–434.

Uslaner, E. M., & Brown, M. (2005). Inequality, trust, and civic engagement. *American politics research*, *33*(6), 868–894.

Valli, E., Peterman, A., & Hidrobo, M. (2019). Economic transfers and social cohesion in a refugee-hosting setting. *The Journal of Development Studies*, *55*(sup1), 128–146.

Van der Cruijsen, C., De Haan, J., & Roerink, R. (2023). Trust in financial institutions: A survey. *Journal of economic surveys*, *37*(4), 1214–1254.

Van der Meer, T. W. (2017). Economic performance and political trust. In *The oxford handbook of social and political trust.* Oxford University Press.

Van der Meer, T. W., Hakhverdian, A., & Aaldering, L. (2016). Off the fence, onto

the bandwagon? a large-scale survey experiment on effect of real-life poll outcomes on subsequent vote intentions. *International Journal of Public Opinion Research*, *28*(1), 46–72.

Van der Meer, T. W., & Zmerli, S. (2017). The deeply rooted concern with political trust. In *Handbook on political trust* (pp. 1–16). Edward Elgar Publishing.

Van Oorschot, W., & Roosma, F. (2015). The social legitimacy of differently targeted benefits. *Im-PRovE Working Paper No. 15*, *11*.

Veszteg, R. F., Funaki, Y., & Tanaka, A. (2015). The impact of the tohoku earthquake and tsunami on social capital in japan: Trust before and after the disaster. *International Political Science Review*, *36*(2), 119–138.

Wachs, J., Yasseri, T., Lengyel, B., & Kertész, J. (2019). Social capital predicts corruption risk in towns. *Royal Society open science*, *6*(4), 182103.

Werner, A. (2019). An eventful two decades of reforms, economic boom, and a historic crisis. *Brazil: Boom, Bust, and the Road to Recovery*, 15.

Williams, R. (2016). Understanding and interpreting generalized ordered logit models. *The Journal of Mathematical Sociology*, *40*(1), 7–20.

Wilson, R. K. (2018). Trust experiments, trust games, and surveys. *The oxford handbook of social and political trust*, 279–304.

Winters, M. S., & Weitz-Shapiro, R. (2013). Lacking information or condoning corruption: When do voters support corrupt politicians? *Comparative Politics*, *45*(4), 418–436.

World Bank. (2024). *Worldwide governance indicators, 2024 update.* (accessed on February 28, 2024, `www.govindicators.org`)

World Bank. (2025). *Social Cohesion and Resilience.* Retrieved May 02, 2025, from `https://www.worldbank.org/en/topic/social-cohesion-and-resilience`

World Bank Group. (2023, April). *Poverty & equity brief, latin america & the caribbean, brazil.* (`https://databankfiles.worldbank.org/public/ddpext_download/poverty/987B9C90-CB9F-4D93-AE8C-750588BF00QA/current/Global_POVEQ_BRA.pdf`)

Xue, X., Reed, W. R., & van Aert, R. C. (2024). Social capital and economic growth: A meta-analysis. *Journal of Economic Surveys*. doi: https://doi.org/10.1111/joes.12660

Zak, P. J., Kurzban, R., & Matzner, W. T. (2004). The neurobiology of trust. *Annals of the New York Academy of Sciences*, *1032*(1), 224–227.

Zakharov, A., & Chapkovski, P. (2025). The effect of war on redistribution preferences. *Journal of Public Economics*, *241*, 105284.

Zanotti, L., & Roberts, K. M. (2021). Still the exception and not the rule: The populist radical right in latin america. *Revista Uruguaya de Ciencia Política*, *30*(1), 23.

Zucco, C. (2011). Conditional cash transfers and voting behavior: Redistribution and

clientelism in developing democracies. *Documento inédito*.

Zucco, C., Luna, J. P., & Baykal, O. G. (2020). Do conditionalities increase support for government transfers? *The Journal of Development Studies*, *56*(3), 527–544.

Zucco Jr, C. (2013). When payouts pay off: Conditional cash transfers and voting behavior in brazil 2002–10. *American journal of political science*, *57*(4), 810–822.

Zucco Jr, C. (2015). The impacts of conditional cash transfers in four presidential elections (2002–2014). *Brazilian Political Science Review*, *9*, 135–149.

# Summary

## English

Social cohesion, the informal institution binding communities together through trust, solidarity, shared identity, and orientation toward the common good, has been increasingly recognized as a foundation for sustainable development and democratic stability. Governments, international organizations, and researchers acknowledge that cohesive societies are better equipped to coordinate collective action, ensure effective governance, and support policies that promote shared prosperity. Yet, the specific mechanisms through which social cohesion shapes political behavior and policy preferences remain insufficiently understood. In light of that, this dissertation integrates theoretical and empirical insights to explore when, why, and how social cohesion matters for citizens' attitudes toward institutional change and state intervention. More specifically, it examines the role of social cohesion across three distinct domains of political economy: citizens' support for policy reform under uncertainty, the cultural roots of populist electoral support, and the political consequences of welfare program design. The dissertation is composed of an introductory chapter, three main empirical chapters, and a concluding chapter

The introduction in Chapter 1 situates the dissertation within the broad literature on social cohesion and public policy. It positions the work at the intersection of development economics and political behavior, highlighting the limitations of conventional economic explanations for policy support, and documenting the macro-level evidence on the economic and institutional returns to cohesion. The chapter defines social cohesion as it is used throughout the dissertation, emphasizing its multidimensional nature, encompassing trust, a sense of belonging, social relations, and an orientation toward the common good. Chapter 1 concludes by positioning the three empirical studies at the intersection of development economics and political behavior, and illustrating how each speaks to a different level of the policy process. The three empirical chapters are summarized as follows:

**Chapter 2: In trust we reform?**
The second chapter investigates to what extent social and political trust shape individual

preferences for crisis-response policies that differ in their speed, flexibility, and level of regulatory oversight. The study is motivated by the observation that governments' capacity to respond effectively to severe economic shocks depends on citizens' willingness to support and cooperate with government action under uncertainty, so understanding the determinants of policy preferences is key. The chapter investigates this empirically through an original large-scale survey vignette experiment, fielded in December 2023 and January 2024 across nine Latin American countries and covering over 9,000 individuals. The results show that political and social trust are both relevant, but operate through fundamentally different mechanisms. Political mistrust is consistently damaging: individuals with low trust in political institutions are more likely to be indifferent to both rigid and regulated, as well as flexible and uncertain policies, reflecting a form of political disengagement rather than clear-cut opposition to any specific approach. This pattern exists unconditionally of whether the risk of government failure is made explicit. Social mistrust, by contrast, does not reduce support for the more flexible option unless respondents are explicitly reminded that its success depends on others' behavior.

Importantly, the findings also show that past experience with public bureaucracy operates independently of political trust, and that local governance moderates the effect of trust and uncertainty. In localities with lower perceived governance quality, political mistrust functions as an obstacle to engagement, effectively narrowing the range of politically feasible reform options. Where service satisfaction is higher, citizens retain some willingness to accept government action, particularly when uncertainty is high(er). Together, these results suggest that reform capacity is not only a question of formal institutional design, but of the underlying social conditions, namely trust, experience, and perceptions, that shape what citizens are willing to accept under uncertainty.

**Chapter 3: Brazil above everything**

The third chapter focuses on the political economy of the populist vote in Brazil's 2018 presidential election, in which the right-wing populist Jair Bolsonaro came to power. While the rise of populism has been extensively studied in high-income countries, the literature on Latin America has been heavily focused on economic explanations, with the role of cultural motivations comparatively underexplored. This chapter pits the two predominant theoretical frameworks against each other in the Brazilian setting: the economic insecurity hypothesis, which attributes populist support to material deprivation and labor-market vulnerability, and the cultural backlash hypothesis, which emphasizes feelings of cultural threat among socially conservative citizens in response to progressive change. Using individual-level data from the 2018 Brazilian Electoral Study, this chapter shows that dissatisfaction with modern cultural and social structures was the most consistent and significant predictor of a Bolsonaro vote across a range of voter profiles,

as predicted by the cultural backlash theory. Economic factors, while not irrelevant, do not operate through the lens of personal economic deprivation or insecurity as found in high-income country settings. These findings extend the cultural backlash argument to a novel context, suggesting that feelings of cultural exclusion are harmful to democratic stability, even in settings where progressive cultural transformation has not reached levels observed in Western Europe or North America.

**Chapter 4: Who gets what and who gets resentful**

Chapter 4 moves beyond understanding the consequences of exclusion and low trust, and explores whether governments can promote solidarity and policy support via the design of social protection schemes. A core argument put forward by defenders of universal welfare systems is that broadening the coverage of a social transfer, from a narrowly targeted program to a more inclusive one with wider coverage, will generate greater support for redistribution, as materially self-interested individuals endorse policies from which they benefit. To test this empirically, the chapter exploits the 2016 expansion of Poland's Family 500+ program, which expanded a means-tested family allowance to a quasi-universal child benefit covering middle- and high-income households. Using three waves of the Polish Panel Survey (POLPAN) and an event-study design, the chapter investigates how changes in targeting influenced individuals' redistributive and political preferences and their attitudes toward the tax burden.

The findings challenge accounts grounded on pure material self-interest. Households that became beneficiaries after the expansion did not evolve differently from childless households in how they supported redistribution or preferred the tax structure, contrary to what the theory predicts. In other words, material gain, on its own, does not translate into greater support for the welfare state. Yet, among those who did not benefit from the expansion, the picture is more nuanced. Families with one child who were excluded from the program due to income considerations, despite fulfilling the primary eligibility criterion, preferred more progressive tax systems and were more likely to punish the responsible political party, with effects partially moderated by fairness concerns and views on meritocracy. Two implications follow. First, the political case for universal transfers cannot rest on the assumption that new beneficiaries will reciprocate with greater support for redistribution. Second, effective policy design requires careful consideration of inclusion and exclusion criteria so that ineligibility is not perceived as unfair.

Taken together, the three studies highlight how cohesion shapes policy preferences at multiple levels: at the micro level, trust influences preferences over the procedural design of otherwise comparable policies; at the meso level, recognition as deserving citizens shapes preferences over the range of policy instruments within a given area; and at the macro level, a sense of cultural inclusion or exclusion shapes preferences over the foundational

institutional design of the polity itself. In addition, the chapters suggest how cohesion enters different stages of the policy feedback cycle, by shaping the set of socially feasible policies before implementation, influencing immediate political and fiscal reactions in the short run, and driving shifts in political identity and regime preferences over time. Social cohesion and public policy are thus codefined, as cohesion shapes what policies citizens will accept, and the policies governments adopt continuously reshape the social fabric that makes (future) governance possible.

## Nederlands

Sociale cohesie is de informele institutie die gemeenschappen met elkaar verbindt door middel van vertrouwen, solidariteit, een gedeelde identiteit en een gerichtheid op het algemeen belang. Ze wordt steeds meer erkend als een fundament voor duurzame ontwikkeling en democratische stabiliteit. Overheden, internationale organisaties en onderzoekers erkennen dat hechte samenlevingen beter in staat zijn om collectieve actie te coördineren, effectief bestuur te waarborgen en beleid te ondersteunen dat gedeelde welvaart bevordert. Toch is er nog onvoldoende inzicht in de specifieke mechanismen waarmee sociale cohesie politiek gedrag en beleidsvoorkeuren beïnvloedt. Daarom integreert dit proefschrift theoretische en empirische inzichten om te onderzoeken wanneer, waarom en hoe sociale cohesie van belang is voor de houding van burgers ten opzichte van institutionele verandering en staatsinterventie. Concreet onderzoekt het de rol van sociale cohesie in drie verschillende domeinen van de politieke economie: de steun van burgers voor beleidshervormingen in onzekere tijden, de culturele wortels van populistische electorale steun en de politieke gevolgen van de opzet van welzijnsprogramma's. Het proefschrift bestaat uit een inleidend hoofdstuk, drie empirische hoofdstukken en een afsluitend hoofdstuk.

De inleiding in hoofdstuk 1 plaatst het proefschrift in de bredere literatuur over sociale cohesie en overheidsbeleid. Het werk situeert zich op het snijvlak van ontwikkelingseconomie en politiek gedrag. Het benadrukt de beperkingen van conventionele economische verklaringen voor beleidssteun en documenteert het bewijs op macroniveau met betrekking tot de economische en institutionele voordelen van cohesie. Dit hoofdstuk definieert sociale cohesie zoals deze in het hele proefschrift wordt gebruikt, waarbij de nadruk ligt op het multidimensionale karakter ervan: vertrouwen, een gevoel van verbondenheid, sociale relaties en een gerichtheid op het algemeen belang. Hoofdstuk 1 sluit af met het plaatsen van de drie empirische studies op het snijvlak van ontwikkelingseconomie en politiek gedrag, en illustreert hoe elk daarvan betrekking heeft op een ander niveau van het beleidsproces. De drie empirische hoofdstukken worden als volgt samengevat:

### Hoofdstuk 2: Hervormen op basis van vertrouwen?

Het tweede hoofdstuk onderzoekt in hoeverre sociaal en politiek vertrouwen van invloed zijn op individuele voorkeuren voor crisismaatregelen die verschillen in snelheid, flexibiliteit en mate van regelgevend toezicht. De studie is ingegeven door de constatering dat het vermogen van overheden om effectief te reageren op ernstige economische schokken afhangt van de bereidheid van burgers om overheidsmaatregelen in onzekere tijden te steunen en eraan mee te werken; inzicht in de determinanten van beleidsvoorkeuren is dus van cruciaal belang. Dit hoofdstuk onderzoekt dit empirisch met een origineel,

grootschalig enquête-vignette-experiment, uitgevoerd in december 2023 en januari 2024 in negen Latijns-Amerikaanse landen onder meer dan 9.000 personen. De resultaten tonen aan dat zowel politiek als sociaal vertrouwen relevant zijn, maar via fundamenteel verschillende mechanismen werken. Politiek wantrouwen is consequent schadelijk: personen met weinig vertrouwen in politieke instellingen staan vaker onverschillig tegenover zowel rigide en gereguleerd als flexibel en onzeker beleid. Dit weerspiegelt een vorm van politieke afhaking in plaats van duidelijke oppositie tegen een specifieke aanpak. Dit patroon bestaat ongeacht of het risico van falen van de overheid expliciet wordt gemaakt. Sociaal wantrouwen daarentegen vermindert de steun voor de flexibelere optie niet, tenzij respondenten er expliciet aan worden herinnerd dat het succes ervan afhangt van het gedrag van anderen.

De bevindingen tonen daarnaast aan dat ervaringen uit het verleden met de overheidsbureaucratie onafhankelijk van politiek vertrouwen werken, en dat lokaal bestuur het effect van vertrouwen en onzekerheid tempert. In plekken waar de kwaliteit van het bestuur als lager wordt ervaren, fungeert politiek wantrouwen als een belemmering voor betrokkenheid, waardoor de reeks politiek haalbare hervormingsopties in feite wordt beperkt. Waar de tevredenheid over de dienstverlening hoger is, blijven burgers bereid om overheidsmaatregelen te accepteren, met name wanneer de onzekerheid groot(er) is. Al met al suggereren deze resultaten dat hervormingscapaciteit niet alleen een kwestie is van formele institutionele opzet, maar ook van de onderliggende sociale omstandigheden, namelijk vertrouwen, ervaring en percepties, die bepalen wat burgers bereid zijn te accepteren in tijden van onzekerheid.

**Hoofdstuk 3: Brazilië boven alles**

Het derde hoofdstuk richt zich op de politieke economie van de populistische stem bij de Braziliaanse presidentsverkiezingen van 2018, waarbij de rechts-populist Jair Bolsonaro aan de macht kwam. Hoewel de opkomst van het populisme uitgebreid is bestudeerd in landen met een hoog inkomen, is de literatuur over Latijns-Amerika sterk gericht op economische verklaringen. De rol van culturele motivaties heeft relatief weinig aandacht gekregen. Dit hoofdstuk zet de twee dominante theoretische kaders tegenover elkaar in de Braziliaanse context: de hypothese van economische onzekerheid, die de steun voor populisme toeschrijft aan materiële achterstand en kwetsbaarheid op de arbeidsmarkt, en de hypothese van culturele terugslag, die de nadruk legt op gevoelens van culturele bedreiging onder sociaal conservatieve burgers als reactie op progressieve verandering. Op basis van gegevens op individueel niveau uit de Brazilian Electoral Study van 2018 laat dit hoofdstuk zien dat ontevredenheid over moderne culturele en sociale structuren de meest consistente en significante voorspeller was van een stem op Bolsonaro bij een breed scala

aan kiezersprofielen, zoals voorspeld door de culturele-backlash-theorie. Economische factoren zijn weliswaar niet irrelevant, maar werken niet via de lens van persoonlijke economische deprivatie of onzekerheid, zoals in landen met een hoog inkomen. Deze bevindingen breiden het argument van de culturele terugslag uit naar een nieuwe context en suggereren dat gevoelens van culturele uitsluiting schadelijk zijn voor de democratische stabiliteit, zelfs in situaties waar progressieve culturele transformatie nog niet het niveau heeft bereikt dat in West-Europa of Noord-Amerika wordt waargenomen.

**Hoofdstuk 4: Wie krijgt wat en wie koestert wrok**

Hoofdstuk 4 gaat verder dan het begrijpen van de gevolgen van uitsluiting en laag vertrouwen, en onderzoekt of overheden solidariteit en beleidssteun kunnen bevorderen via het ontwerp van socialezekerheidsstelsels. Een kernargument van voorstanders van universele socialezekerheidsstelsels is dat het verbreden van de dekking van een sociale uitkering, van een nauw gericht programma naar een meer inclusief programma met een bredere dekking, meer steun voor herverdeling zal genereren, aangezien individuen met materiële eigenbelangen beleid steunen waarvan zij zelf profiteren. Om dit empirisch te toetsen maakt het hoofdstuk gebruik van de uitbreiding in 2016 van het Poolse Family 500+-programma, waarbij een inkomensafhankelijke kinderbijslag werd uitgebreid tot een quasi-universele kinderbijslag voor huishoudens met een midden- en hoog inkomen. Met behulp van drie golven van de Poolse Panel Survey (POLPAN) en een event-study-ontwerp onderzoekt het hoofdstuk hoe veranderingen in de doelgerichtheid de herverdelings- en politieke voorkeuren van individuen en hun houding ten opzichte van de belastingdruk beïnvloedden.

De bevindingen spreken verklaringen tegen die gebaseerd zijn op puur materieel eigenbelang. Huishoudens die na de uitbreiding begunstigden werden, ontwikkelden zich niet anders dan kinderloze huishoudens wat betreft hun steun voor herverdeling of hun voorkeur voor de belastingstructuur. Dit is in tegenstelling tot wat de theorie voorspelt. Met andere woorden: materieel gewin op zich vertaalt zich niet in grotere steun voor de verzorgingsstaat. Onder degenen die niet van de uitbreiding profiteerden, is het beeld echter genuanceerder. Gezinnen met één kind die vanwege inkomensoverwegingen van het programma werden uitgesloten, ondanks dat ze aan het primaire toelatingscriterium voldeden, gaven de voorkeur aan meer progressieve belastingstelsels en waren eerder geneigd de verantwoordelijke politieke partij af te straffen. De effecten werden gedeeltelijk getemperd door bezorgdheid over rechtvaardigheid en opvattingen over meritocratie. Hieruit volgen twee implicaties. Ten eerste kan het politieke pleidooi voor universele uitkeringen niet berusten op de veronderstelling dat nieuwe begunstigden dit zullen beantwoorden met grotere steun voor herverdeling. Ten tweede vereist een effectief beleidsontwerp een

zorgvuldige afweging van inclusie- en exclusiecriteria, zodat het niet in aanmerking komen niet als oneerlijk wordt ervaren.

Al met al benadrukken de drie studies hoe cohesie beleidsvoorkeuren op meerdere niveaus vormgeeft: op microniveau beïnvloedt vertrouwen de voorkeuren voor de procedurele opzet van verder vergelijkbare beleidsmaatregelen; op mesoniveau bepaalt de erkenning als verdienstelijke burgers de voorkeuren voor het bereik van beleidsinstrumenten binnen een bepaald gebied; en op macroniveau bepaalt een gevoel van culturele inclusie of uitsluiting de voorkeuren voor de fundamentele institutionele opzet van het politieke bestel zelf. Bovendien suggereren de hoofdstukken hoe cohesie in verschillende stadia van de beleidsfeedbackcyclus een rol speelt: door vóór de implementatie de reeks sociaal haalbare beleidsmaatregelen te bepalen, op korte termijn onmiddellijke politieke en fiscale reacties te beïnvloeden, en in de loop van de tijd verschuivingen in politieke identiteit en regimevoorkeuren te stimuleren. Sociale cohesie en overheidsbeleid zijn dus onderling afhankelijk: cohesie bepaalt welk beleid burgers zullen accepteren, en het beleid dat regeringen aannemen hervormt voortdurend het sociale weefsel dat (toekomstig) bestuur mogelijk maakt.

# Impact paragraph

*The impact paragraph of this doctoral dissertation is added in compliance with article 22.5 of the "Regulations for obtaining the doctoral degree at Maastricht University" decreed by resolution of the board of deans, dated 1 October 2020.*

This dissertation explores the relevance of the multifaceted aspects of social cohesion to public policies, covering its different composing elements, such as sense of belonging, trust, solidarity, and orientation towards a common good. As societies worldwide become increasingly polarized, so does the importance of understanding the repercussions for policies of the interactions between economic considerations and one's sense of belonging and inclusion. This dissertation demonstrates how social cohesion is an informal institution that enters different stages of the policy process and interacts with preference formation relative to different policy levels. More specifically, this dissertation sheds light on how social cohesion influences preferences over policies' procedural elements (Chapter 2), on how cumulative feelings of exclusion from cultural developments pose a threat to democratic stability (Chapter 3), and how there is little potential to counteract such an erosion of shared solidarity simply by relying on economic self-interest, while policy exclusion damages the basis for solidarity (Chapter 4).

Hence, this dissertation highlights the dynamic policy-cohesion nexus, which requires a broad approach in the complex policy-making process to promote shared prosperity, and stresses the potential of unintended policy spillovers across policy realms and social groups. In Chapter 2, I investigate the direct relevance of social cohesion to preferences over policies' procedural elements. Using a large-scale survey experiment, covering over nine thousand individuals across nine Latin American countries with different institutional and economic characteristics, I investigate the connection between social and political trust and the social demand for strict procedural elements in policy reforms. Through the combination of a vignette experiment stressing uncertainty and a series of empirical specifications, the findings indicate that the influence of trust on preferences is not trivial: while political mistrust is detrimental to the process of policy making under any scenario,

social trust harms flexible processes and must be activated by the salience of others. That chapter provides evidence that the importance of trust goes beyond the influence over preferences for policies of different natures, content, or private/public mandates. Rather, trust has an influence on pragmatic elements related to the implementation of the policy, which are relatively uncomplicated, in a political sense, for the implementing agent (oftentimes, governments) to define. Having in consideration political and social landscapes where policy contents are often subject to stark opposition, governments are likely to face less resistance over implementation processes, which should be leveraged to counter resistance whenever possible.

Chapter 3 provides evidence that the cumulative feelings of mismatch between traditional values and the progressive cultural advancements are important to understand the populist vote in Brazil. These findings show that the current support for populist platforms is not a result of more recent economic processes that culminated in economic insecurity, nor that progressive policies must reach levels comparable to those found in Europe to trigger a backlash. Rather, the cultural core of the populist vote in Chapter 2 indicates that feelings of cultural threat and exclusion are harmful also in other settings, such as in Brazil. As support for populists in Brazil (and other countries) remains high despite tepid economic performance, bad management of the Covid-19 crisis, and slanders against the democratic institutions, the results of that chapter reveal that a broad approach to promote a sense of cultural recognition is needed to safeguard liberal democracy in the Global South.

Lastly, Chapter 4 examines the potential that the design of social protection schemes has to promote inclusion and solidarity. As cultural changes are commonly a byproduct of other arguably desired economic and social processes (for instance, globalization) and impact solidarity across social groups, it is in the interest of governments to understand whether it is feasible to promote shared prosperity via other venues. Chapter 4 explores the argument, often used by defenders of universal welfare schemes, that widening the coverage of a country's social protection will increase its support due to the self-interest of its citizens. Yet, using an event study design to assess the expansion of Poland's family benefit in 2016, I find that monetary gains alone do not influence one's preferences related to redistribution. Yet, exclusion from the programme leads people to change their tax and political preferences, likely due to beliefs that the eligibility requirements were unfairly designed. Social protection policies and any income-related requirement should thus be carefully conceived, particularly when it comes to programmes that aim at specific functions, as family or sickness benefits. Social policies should ideally avoid stark discontinuities in eligibility conditions. When those are required, well-tailored communication strategies should be planned to mitigate the adverse consequences to social cohesion.

In conclusion, from the influence of social cohesion on policy support to the impact of policy design on the foundations of social cohesion, the learnings from this dissertation provide valuable insights for policy-makers about the need to account for the interaction between cultural and economic considerations to deliver prudent policies. As cohesion is multifaceted in its nature, it continuously evolves to reflect its context and time specific conditions. It is thus plausible, if not likely, that political identities currently shape cohesion in low and middle income countries, adding to the widely explored traditional cleavages along ethnic or class lines. Yet, the use of that more recent framework to understand economic and political outcomes is still rather incipient in those settings. It is the hope that this thesis contributes to the growth of research integrating cultural narratives grounded on political identities into settings beyond high income societies.

# About the Author

I hold a BA in International Relations from the University of São Paulo (USP) in Brazil, and a Research MSc in Economics from Maastricht University in the Netherlands. Before moving to the Netherlands for my Master's and PhD, I worked for several years in Brazil with growth and market analysis, and product and project management across different settings, including the banking industry, start-ups, and market consultancies. I am currently a development economics researcher in the Department of Transformation of Economic and Social Systems at the German Institute for Development and Sustainability (IDOS) in Bonn, Germany. In my position, I explore, among other things, how social protection promotes dignity and resilience in the face of crises.

# UNU-MERIT, Maastricht University Dissertation Series

**2026**

**Stefanie Roost**
*The Cost of Division: Essays on Political Economy, Social Cohesion, and Public Policies*
UNU-MERIT, Maastricht University Dissertation Series № 341

**Tobias Hillenbrand**
*Walking the tightrope of humanitarian concerns and perceived threats: Essays on attitudes toward refugee immigration in Germany*
UNU-MERIT, Maastricht University Dissertation Series № 340

**Rodrigo Ito**
*Essays on the extended effects of international scientific mobility*
UNU-MERIT, Maastricht University Dissertation Series № 339

**Bruhan Mohan Konda**
*Exploring the Dynamics of Social Identity and Social Networks in Shaping Developmental Outcomes: A Case of Rural India*
UNU-MERIT, Maastricht University Dissertation Series № 338

**Karol Mayerly Rodriguez Cabrera**
*Economics of children's outcomes: the role of policy interventions and household dynamics*
UNU-MERIT, Maastricht University Dissertation Series № 337

**Renata Mayer Gukovas**
*Skills for resilience: Human capital and occupational mobility across dynamic labor markets*
UNU-MERIT, Maastricht University Dissertation Series № 336

**Gbenoukpo Robert Djidonou**
*Essays on Labor Dynamics and Industrial Growth: Supply Chains, Innovation and Informality*
UNU-MERIT, Maastricht University Dissertation Series № 335

**2025**

**Maximilian Bruder**
*Bridging Profitability and Sustainability: Essays on Private Sector Innovation for Sustainable Development in Low-Income Contexts*
UNU-MERIT, Maastricht University
Dissertation Series № 334

**Negash Haile Dedho**
*The Good, the Bad, and the Ugly? Host country corruption, Multinational firms' Foreign Direct Investment, and Innovation*
UNU-MERIT, Maastricht University
Dissertation Series № 333

**Amira Gamal El-Din**
*Resilience of Public Organizations: The Case of the Education Sector in Egypt*
UNU-MERIT, Maastricht University
Dissertation Series № 332

**María de las Mercedes Luisa Menéndez de Medina**
*Technological Change and Production Specialisation in the Green and Digital Transition*
UNU-MERIT, Maastricht University
Dissertation Series № 331

**Ulkar Sattarova**
*The implementation and evaluation of Problem-Based Learning in Azerbaijani Higher Education*
UNU-MERIT, Maastricht University
Dissertation Series № 330

**Márcia da Mota Darós**
*Innovative capacity in low-tech service firms: An analysis of the Brazilian boutique hotels and pest control sectors*
UNU-MERIT, Maastricht University
Dissertation Series № 329

**Davide Bonaglia**
*Essays on the creation and diffusion of novel technologies*
UNU-MERIT, Maastricht University
Dissertation Series № 328

**Pham Thi Trang**
*Mobile internet diffusion and development impacts: evidence and heterogeneity effects*
UNU-MERIT, Maastricht University
Dissertation Series № 327

**Jorge Valverde Carbonell**
*Essays on Economic Complexity, International Trade and Minerals Economics*
UNU-MERIT, Maastricht University
Dissertation Series № 326

**Teresa Janz**
*Trapped in Poverty: Persistent Poverty in the Context of Global Crises*
UNU-MERIT, Maastricht University
Dissertation Series № 325

**Walter Mauricio Hernán Céspedes Quiroga**
*The Challenges of South America's Lithium Triangle: Industrial Policies for an Emerging Global Value Chain*
UNU-MERIT, Maastricht University
Dissertation Series № 324

**Olga Rataj**
*The Role of Entrepreneurs and Financiers in the Circular Economy Transitions in Differing Geographical Contexts*
UNU-MERIT, Maastricht University
Dissertation Series № 323

**Lalaine Hermoso Siruno**
*Agents of human development? The strategies of (irregular) Filipino migrant domestic workers in the Netherlands and the United Kingdpom*
UNU-MERIT, Maastricht University
Dissertation Series № 322

**Maria Tomai**
*Sociotechnical Transitions Towards Circular & Sustainable Economies: The case of Solid Waste Management in Ghana*
UNU-MERIT, Maastricht University
Dissertation Series № 321

**Soazic Elise Wang Sonne**
*Essays on the Economics of Conflict and Human Capital in Central Africa*
UNU-MERIT, Maastricht University
Dissertation Series № 320

**Lotte Geunis**
*Political elites in democratic innovations: Why political actors engage young people in public policy*
UNU-MERIT, Maastricht University
Dissertation Series № 319

**2024**

**Raquel Tebaldi**
*The politics and impacts of social assistance and early childhood education and care policies in Latin America*
UNU-MERIT, Maastricht University
Dissertation Series № 318

**Martin Kügemann**
*Sustainability Assessment and Decision Making on Road Transportation Fuels and Vehicles. Selecting alternative road transportation fuels and vehicles under consideration of stakeholder assessment and the inclusion of sustainability aspects*
UNU-MERIT, Maastricht University
Dissertation Series № 317

**Michelle Gonzalez Amador**
*Learning in Low and Middle-Income Countries, Essays on Education and Development Economics*
UNU-MERIT, Maastricht University
Dissertation Series № 316

**Florencia Jaccoud**
*Essays on Automation and Labour Markets*
UNU-MERIT, Maastricht University
Dissertation Series № 315

**Guangyao Zhang**
*Essays on Science Evaluation*
UNU-MERIT, Maastricht University
Dissertation Series № 314

**Chen Gong**
*Understanding the Drivers of Income Inequality in China: A Multilevel Distributional Microsimulation Analysis*
UNU-MERIT, Maastricht University
Dissertation Series № 313

**Alejandro Álvarez-Vanegas**
*Moving universities towards Education for Sustainable Development*
UNU-MERIT, Maastricht University
Dissertation Series № 312

**Philipp König**
*Towards Collaborative Accountability: Changing Patterns of Accountability in International Development Finance*
UNU-MERIT, Maastricht University
Dissertation Series № 311

**Hubert Nii-Aponsah**
*The Future Quantity and Structural Effects of Contemporary Automation*
UNU-MERIT, Maastricht University
Dissertation Series № 310

**Claudia Roethlisberger**
*Essays on the contribution of personality traits and social norms and the effectiveness of a policy intervention*
UNU-MERIT, Maastricht University
Dissertation Series № 309

**Mathilde Catharina Tubbergen**
*Procedural legitimacy in the asylum process*
UNU-MERIT, Maastricht University
Dissertation Series № 308

**Oriol Gisbert Marti**
*Essays on the Structure of Supply and Demand*
UNU-MERIT, Maastricht University
Dissertation Series № 307

**Ferdi Widiputera**
*Diversity in Higher Education: Insights and Implications*
UNU-MERIT, Maastricht University
Dissertation Series № 306

**Ricardo Morel Berendson**
*Beyond money metrics: Essays on Multidimensional Poverty*
UNU-MERIT, Maastricht University
Dissertation Series № 305

**Michele Delera**
*Essays on Global Value Chains, Economics Development, and the Environment*
UNU-MERIT, Maastricht University
Dissertation Series № 304

**Jacqueline Rose Mary Salguero Huaman**
*Making Trade Work for Gender Equality: Essays on The Trade and Gender Nexus in Developing Countries*
UNU-MERIT, Maastricht University
Dissertation Series № 303

**Mariajose Silva Vargas**
*Beyond Boundaries: Integrating Refugees and Consolidating Farmland. Essays in Experimental and Development Economics*
UNU-MERIT, Maastricht University
Dissertation Series № 302

**Antonio Soares Martins Neto**
*Essays on Technology Adoption and the Labour Market*
UNU-MERIT, Maastricht University
Dissertation Series № 301

**Maria Antonieta Collazos Ortiz**
*On the Political Economy of Resource*

*Rents Distribution: Insights from a Developing and Decentralized Country*
UNU-MERIT, Maastricht University
Dissertation Series № 300

**2023**

**Carmine Paolo de Salvo**
*Agricultural policies and agricultural performance in Latin America and the Caribbean*
UNU-MERIT, Maastricht University
Dissertation Series № 299

**Casty Njoroge**
*The Impact of Land Registration on Agricultural Productivity in Kenya*
UNU-MERIT, Maastricht University
Dissertation Series № 298

**Julia Reinold**
*Essays on Attracting and Retaining Highly Educated Migrants*
UNU-MERIT, Maastricht University
Dissertation Series № 297

**Cintia Denise Granja**
*International Student Mobility and Attitudes Towards Inequality*
UNU-MERIT, Maastricht University
Dissertation Series № 296

**Nordine Es-Sadki**
*Technology Transfer in Europe*
UNU-MERIT/Maastricht University
Dissertation Series № 295

**Charlotte Mueller**
*Diaspora Return Visits for Knowledge Transfer and Capacity Development: A Case Study of IOM's Connecting Diaspora for Development Project in Ethiopia, Sierra Leone and Somaliland*
UNU-MERIT/Maastricht University
Dissertation Series № 294

**Madeleine Sumption**
*An Analysis of Success and Failure in the Immigrant Investor Programmes of the United States and the United Kingdom*
UNU-MERIT/Maastricht University
Dissertation Series № 293

**Musa Hasen Ahmed**
*Essays on Development Economics: Climate Change, Education and Development*
UNU-MERIT/Maastricht University
Dissertation Series № 292

**Rumbidzai Ndoro**
*Exploring Unintended Responses to Social Cash Transfers through Intra-Household Decision-Making Dynamics and Women's Empowerment in Africa*
UNU-MERIT/Maastricht University
Dissertation Series № 291

**Chuks Otioma**
*Information and Communications Technology Capabilities. Innovation and Economic Performance in Africa: The role of Framework Conditions, Entrepreneurial Activity and Firm Learning*
UNU-MERIT/Maastricht University
Dissertation Series № 290

**Sophie Gysan**
*Strategy Implementation and Decision Making in the Broader MNC Network*
UNU-MERIT/Maastricht University
Dissertation Series №289

**Talitha Dubow**
*Essays on the decision-making processes of irregularised migrants over the course of their migration trajectories*
UNU-MERIT/Maastricht University
Dissertation Series № 288

**Muhammad Fauzan Ansyari**
*Teacher professional development interventions to promote data use in education*
UNU-MERIT/Maastricht University
Dissertation Series № 287

**2022**

**Guido Pialli**
*Essays on Technological Change and Income Distribution*
UNU-MERIT/Maastricht University
Dissertation Series № 286

**Francesca Rubiconto**
*Technical change, competitiveness, and employment: A sustainable perspective*
UNU-MERIT/Maastricht University
Dissertation Series № 285

**Radhika Mia Bhuyan**
*Firm Innovation Strategies in Alternative Energy Systems: Exploring the Dynamics of Firm Innovation Strategies over the Technology Life Cycle*
UNU-MERIT/Maastricht University
Dissertation Series № 284

**George Christopoulos**
*Regional Patterns of Innovation Clustering and Economic Performance*
UNU-MERIT/Maastricht University
Dissertation Series № 283

**Silas Uwabasigaye Nsanzumuhire**
*Strategic Mechanisms for Stimulating Academia-Industry Interactions in Developing Countries*
UNU-MERIT/Maastricht University
Dissertation Series № 282

**Lorena Giuberti Coutinho**
*Essays on Technology and Society, The Impacts of Algorithms and Online Media on Labor Market Outcomes and Political Dynamics*
UNU-MERIT/Maastricht University
Dissertation Series № 281

**Emanuela Sirtori**
*LED there be light: The evolution in LED technology and dynamics of entry into the LED lighting market*
UNU-MERIT/Maastricht University
Dissertation Series № 280

**Godsway Korku Tetteh**
*The Economic Outcomes of Financial Innovation and Digital Infrastructure in Sub-Saharan Africa*
UNU-MERIT/Maastricht University
Dissertation Series № 279

**Erich de la Fuente**
*Limiting Media Freedom in Democratic States: How Governments Use Instruments to Curtail News Media Freedom*
UNU-MERIT/Maastricht University Dissertation Series № 278

**Francesco Iacoella**
*Essays from Sub-Saharan Africa*
UNU-MERIT/Maastricht University Dissertation Series № 277

**Victor Osei Kwadwo**
*Inter-municipal Cooperation and Environmental Outcomes: Impact, Drivers, and Incentives*
UNU-MERIT/Maastricht University Dissertation Series № 276

**Hiwot Mekonnen Mesfin**
*Essays on Human and Social Capital Formation*
UNU-MERIT/Maastricht University Dissertation Series № 275

**Beatriz Calzada Olvera**
*Extractive Industries and Structural Transformation*
UNU-MERIT/Maastricht University Dissertation Series № 274

**Ngoc Pham Quang**
*Essays on Technical Change and Efficiency in a Transition Economy the Case of Vietnam*
UNU-MERIT/Maastricht University Dissertation Series № 273

**Tamara A. Kool**
*Beyond the Right to Work: Labour Market Engagement of Protracted Refugees Through a Social Exclusion Lens*
UNU-MERIT/Maastricht University Dissertation Series № 272

**2021**

**Yip Ching Yu**
*Immigrant Welfare Dynamics in the Netherlands*
UNU-MERIT/MGSoG Dissertation Series № 271

**Tatenda P. Zinyemba**
*Effects of HIV on children and youth's educational Attainment*
UNU-MERIT/MGSoG Dissertation Series № 270

**Atsuko Okuda**
*Towards E-Compliance: Exploring the Role of Compliance and E Governance Initiatives in the Case of Bhutan*
UNU-MERIT/MGSoG Dissertation Series № 269

**Rafael Lemaitre Carabias**
*Public Sector Innovation in the United Arab Emirates. How innovation occurs and the outcomes it delivers*
UNU-MERIT/MGSoG Dissertation Series № 268

**Maria Klara Kuss**
*The Negotiations of Zambia's Welfare Regime. The Transformative Potential of Social Cash Transfers*

UNU-MERIT/MGSoG Dissertation Series
№ 267

**Michelle S. M. Momo**
*A Multidimensional Perspective on Education in Developing Countries*
UNU MERIT/MGSoG Dissertation Series
№ 266

**Gideon Onyewuchi Ndubuisi**
*Essays on International Trade: The Role of Institutions and Imported Intermediate Inputs*
UNU-MERIT/MGSoG Dissertation Series
№ 265

**Solomon Owusu**
*Powering Structural Transformation and Economic Development in Africa: The Role of Services, Manufacturing and Global Value Chains*
UNU-MERIT/MGSoG Dissertation Series
№ 264

**Halefom Yigzaw Nigus**
*Markets and Human Behavior: Evidence from Artefactual Field Experiments*
UNU-MERIT/MGSoG Dissertation Series
№ 263

**Iulia Falcan**
*Transition towards a renewable European electricity system. What are the implications for the power technology mix, pan-European power trade and the electricity market?*
UNU MERIT/MGSoG Dissertation Series
№ 262

**Gloria L. Bernal N.**
*On Improving Education Opportunities: Preferences and Performance of High School Students in Response to Scholarships, Information, and Coeducation*
UNU-MERIT/MGSoG Dissertation Series
№ 262

**Anne-Lore Fraikin**
*The effect of financial retirement incentives originating from the social security system on the retirement behavior of older Belgian workers*
UNU-MERIT/MGSoG Dissertation Series
№ 261

**Philip Drauz**
*Who calls the shots and why? The role of actors and instructions in the response to the sovereign debt crises in the euro area*
UNU-MERIT/MGSoG Dissertation Series
№ 261

**Bart Kleine Deters**
*A Quantitative approach to the right to education: Concept, Measurement, and Effects*
UNU-MERIT/MGSoG Dissertation Series
№ 260

**Eliana Rubiano-Matulevich**
*Essays on Conflict-Induced Displacement and Gender in Colombia*
UNU-MERIT/MGSoG Dissertation Series
№ 259

**Njagi Purity Muthoni**
*Financial Risk, Vulnerability and Equity of*

*Access to Healthcare Services in Kenya*
UNU-MERIT/MGSoG Dissertation Series
№ 258

**María José Espinosa-Romero**
*The Shadow of Hierarchy in Marine Fisheries Governance*
UNU-MERIT/MGSoG Dissertation Series
№ 257

**Lorena Rivera León**
*Unveiling the Determinants of Scientific Productivity in Middle-Income Countries: An Economics of Science Perspective*
UNU-MERIT/MGSoG Dissertation Series
№ 256

**Racky Balde**
*Essays on Informal versus formal Economy Choices*
UNU-MERIT/MGSoG Dissertation Series
№ 255

**Caio Torres Mazzi**
*Learning, Capabilities and Governance in Global Value Chains*
UNU-MERIT/MGSoG Dissertation Series
№ 254

**Giulia Rossello**
*Social Transformations and Labour Market Entry: An Investigation into University Systems in Emerging Economies*
UNU-MERIT/MGSoG Dissertation Series
№ 253

**2020**

**Rose Camille Vincent**
*Essays in Public Economics: Multi-Layer Tax Structure and Implications*
UNU-MERIT/MGSoG Dissertation Series
№ 252

**Emmanuel Mensah**
*Structural change in developing countries: patterns, causes, and consequences*
UNU-MERIT/MGSoG Dissertation Series
№ 251

**Ornsaran Manuamorn**
*Governance of International Adaptation Finance for local Climate Change Adaptation: An Analysis of Adaptation Fund Projects*
UNU-MERIT/MGSoG Dissertation Series
№ 250

**Gillian McFarland**
*Doing policy in Further Education: An exploration of the enactment of the GCSE resits policy in Further Education colleges in England*
UNU-MERIT/MGSoG Dissertation Series
№ 249

**Omar Rodriguez Torres**
*Essays on Entrepreneurship in Colombia*
UNU-MERIT/MGSoG Dissertation Series
№ 248

**Elaine Lebon-McGregor**
*International Organizations and Global Migration Governance*
UNU-MERIT/MGSoG Dissertation Series
№ 247

**Janyl Moldalieva**

*Playing the 'Game'of Transparency and Accountability in Kyrgyzstan's Resource Governance*
UNU-MERIT/MGSoG Dissertation Series
№ 246

**Kaleab Kebede Haile**
*Essays on Rural Household Decision-Making under Climate Risk*
UNU-MERIT/MGSoG Dissertation Series
№ 245

**Nora Jasmin Ragab**
*Diaspora Mobilisation in a Conflict Setting*
UNU-MERIT/MGSoG Dissertation Series
№ 244

**Mary Kaltenberg**
*From Micro to Macro: Essays on Technological Change and Income Divergence*
UNU-MERIT/MGSoG Dissertation Series
№ 243

**Ayla E. Bonfiglio**
*Student migrant, refugee or both? Exploring Refugee Agency and Mobility through Tertiary Education in Kenya, South Africa and Uganda*
UNU-MERIT/MGSoG Dissertation Series
№ 242

**Danilo Sartorello Spinola**
*Cycles, Economic Structures and External Constraints. A Structuralist study on the causes of economic volatility in Latin America*
UNU-MERIT/MGSoG Dissertation Series
№ 241

**2019**

**Jemal Adem**
*Livelihood Vulnerability to Shocks, Behaviour and Investment in Education: Essays in Behavioural Development Economics*
UNU-MERIT/MGSoG Dissertation Series
№ 240

**Davina Osei**
*Corrupt or corrupted networks? An empirical enquiry*
UNU-MERIT/MGSoG Dissertation Series
№ 239

**Patima Chongcharoentanawat**
*Beyond Static Inequality: Public policies and economic mobility in Thailand*
UNU-MERIT/MGSoG Dissertation Series
№ 238

**Charlotte Guillard**
*Rethinking economic growth and structural change. The role of boundaries and linkages between industries*
UNU-MERIT/MGSoG Dissertation Series
№ 237

**Nicolas Echarti**
*Employment Effects or Vocational Rehabilitation in Germany: A quantitative analysis*
UNU-MERIT/MGSoG Dissertation Series
№ 236

**Shellie E. Solomon**
*Neighbourhoods Matter: Crime, collective*

*efficacy and foreclosures in Miami*
UNU-MERIT/MGSoG Dissertation Series
№ 235

**Michał Kazimierczak**
*Regional Innovation and Entrepreneurship: Patents, trade marks, entry and entrants' growth in European manufacturing industries*
UNU-MERIT/MGSoG Dissertation Series
№ 234

**Fernanda Soares**
*The Influence of Within School and Across Schools' Collaborative Practices on Student Learning and Teaching Outcomes in West Africa*
UNU-MERIT/MGSoG Dissertation Series
№ 233

**Mira Bierbaum**
*New Mindsets to Innovate Activation*
UNU-MERIT/MGSoG Dissertation Series
№ 232

**Norman Dytianquin**
*Technology in the Asian Miracle and Crisis Debates: Applications of and Insights from the Field of Influence Approach to Input-Output Analysis*
UNU-MERIT/MGSoG Dissertation Series
№ 231

**Nga Le**
*The implications of health insurance for the labour market and patient satisfaction with medical care in Vietnam*
UNU-MERIT/MGSoG Dissertation Series
№ 230

**Jinhyuck Park**
*Intellectual Property right protection and cross-border R&D investments by multinational enterprises*
UNU-MERIT/MGSoG Dissertation Series
№ 229

**Richard de Groot**
*Show me the Money: Essays on the Impact of Cash Transfers on Child Nutrition and the Role of Intra-Household Dynamics*
UNU-MERIT/MGSoG Dissertation Series
№ 228

**Catie Lott**
*Diamonds are a Women's Best Friend: Broadening Measures of Women's Access to Formal Political Decision-Making*
UNU-MERIT/MGSoG Dissertation Series
№ 227

**Ana Cristina Calderon Ramirez**
*Public Management Reforms: Three stories about public procurement agencification in Latin America*
UNU-MERIT/MGSoG Dissertation Series
№ 226

**Camilo Nicanor Carrillo Purin**
*Teachers' in-service training and student achievement: The effect of in-service training of Peruvian teachers on student achievement*
UNU-MERIT/MGSoG Dissertation Series
№ 225

**Hugo Confraria**
*Developing scientific capacity in the Global South*

UNU-MERIT/MGSoG Dissertation Series № 224

**Alison Cathles**
*Educational Pathways and Skills: Past, Present, and Future*
UNU-MERIT/MGSoG Dissertation Series № 223

**Ibrahima Sory Kaba**
*Aggregate Fluctuations and Development: Essays on Macroeconomic Volatility and Economic Growth*
UNU-MERIT/MGSoG Dissertation Series № 222

**Charlotte Keijser**
*Firm Participation, Learning and Innovation in Heterogenous Value Chains of IT-enabled Services*
UNU-MERIT/MGSoG Dissertation Series № 221

**Salih Çevikarslan**
*Innovation Strategies and Their Implications for Technological Change and Market Outcomes: An Evolutionary Multi-Agent Based Modelling Approach*
UNU-MERIT/MGSoG Dissertation Series № 220

**Wondimagegn Mesfin Tesfaye**
*Essays on the Impacts of Climate-Smart Agricultural Innovations on Household Welfare*
UNU-MERIT/MGSoG Dissertation Series № 219

**Tatevik Poghosyan**
*How Board Networks Affect Firm Performance and Innovation Incentives in Transition Economies: The Case of Armenia*
UNU-MERIT/MGSoG Dissertation Series № 218

**Arip Muttaqien**
*Essays on Inequality and Polarization: Empirical Studies in Developing Asia*
UNU-MERIT/MGSoG Dissertation Series № 217

**2018**

**Katrin Marchand**
*Essays on Forced Migration and Labour Market Participation in Developing Countries*
UNU-MERIT/MGSoG Dissertation Series № 216

**Ortrun Merkle**
*The Myth of Gender Neutral Power: Corruption and Gender Norms*
UNU-MERIT/MGSoG Dissertation Series № 215

**Biljana Meshkovska**
*Life after Trafficking: (re)integration processes of women that have been trafficked for the purpose of sexual exploitation in Europe*
UNU-MERIT/MGSoG Dissertation Series № 214

**Vincenzo Vinci**
*The Relevance of Institutions and People's*

*Preferences for Social Protection*
UNU-MERIT/MGSoG Dissertation Series
№ 213

**Silke Heuser**
*The Effectiveness of Environmental Policies on Reducing Deforestation in the Brazilian Amazon*
UNU-MERIT/MGSoG Dissertation Series
№ 212

**Jennifer Waidler**
*Social Assistance and Remittances and Their Role in the Fight Against Poverty*
UNU-MERIT/MGSoG Dissertation Series
№ 211

**Choolwe Muzyamba**
*The role of community mobilization in the promotion of maternal health of women living with HIV in Zambia*
UNU-MERIT/MGSoG Dissertation Series
№ 210

**Juan Carlos A. Castillo Sánchez**
*Assessing the Role of the Export Sector in Mexican Economic Development, 1965-2014*
UNU-MERIT/MGSoG Dissertation Series
№ 209

**Tareq Abuelhaj**
*Food Security Policy Impact Analysis: The Econometrics of Cash and Food Assistance Cost Effectiveness*
UNU-MERIT/MGSoG Dissertation Series
№ 208

**Marta Férnandez de Arroyabe Arranz**
*Essays on M&AS and Innovation*
UNU-MERIT/MGSoG Dissertation Series
№ 207

**Clotilde Mahé**
*Essays on Migration and Occupational Choice*
UNU-MERIT/MGSoG DissertationSeries
№ 206

**Simone Sasso**
*Talent on the move. Essays on Human Capital, Graduate Mobility and Economic Development*
UNU-MERIT/MGSoG Dissertation Series
№ 205

**Khaled Walid Rajab**
*Strategic Planning under Fragility*
UNU-MERIT/MGSoG Dissertation Series
№ 204

**Mutinta Hambayi Nseluke**
*A Tall Order: Improving Child Linear Growth*
UNU-MERIT/MGSoG Dissertation Series
№ 203

**Elvis Korku Avenyo**
*Innovations and Firm Performance in Sub-Saharan Africa: Empirical Analyses*
UNU-MERIT/MGSoG Dissertation Series
№ 202

**Ni Zhen**
*Employment Dynamics, Firm Performance and Innovation Persistence in the Context*

*of Differentiated Innovation Types: Evidence from Luxembourg*
UNU-MERIT/MGSoG Dissertation Series № 201

**Caroline Wehner**
*Too Scared to Achieve: The Relation Between Neuroticism, Conscientiousness and Socioeconomic Outcomes*
UNU-MERIT/MGSoG Dissertation Series № 200

**Stefania Innocenti**
*On Institutional Persistence*
UNU-MERIT/MGSoG Dissertation Series № 199

**Hassen Abda Wako**
*Economic Globalization, Institutions and Development: Essays on Aid, Foreign Direct Investment and Trade*
UNU-MERIT/MGSoG Dissertation Series № 198

**2017**

**Hans-Erik Edsand**
*Winds of Change*
UNU-MERIT/MGSoG Dissertation Series № 197

**Ana Patricia Silva Vara**
*Redressing the Gender Gap*
UNU-MERIT/MGSoG Dissertation Series № 196

**Andrés Iván Mideros Mora**
*Essays on the Economic Effects of Non-contributory Social Protection*
UNU-MERIT/MGSoG Dissertation Series № 195

**Tobias Broich**
*New Actors in the Global Economy*
UNU-MERIT/MGSoG Dissertation Series № 194

**Bernard Nikaj**
*From No-government to E-government*
UNU-MERIT/MGSoG Dissertation Series № 193

**Ali Safarnejad**
*Prioritizing the HIV Response*
UNU-MERIT/MGSoG Dissertation Series № 192

**Clovis Freire**
*Diversification and Structural Economic Dynamics*
UNU-MERIT/MGSoG Dissertation Series № 191

**Michael Verba**
*Innovation and Knowledge Dynamics: Essays on the Knowledge Economy*
UNU-MERIT/MGSoG Dissertation Series № 190

**Pui Hang Wong**
*The Hearts and Minds in Conflict and Peace: The Economics of Counterinsurgency and the Psychology of Reconstruction*
UNU-MERIT/MGSoG Dissertation Series № 189

**Brenda Yamba**
*Schooling Despite All Odds: Evidence from*

*Lesotho on Female Child Carers who Stayed in School*
UNU-MERIT/MGSoG Dissertation Series № 188

**Sheng Zhong**
*Moving towards An Energy Efficient Future: Essays on Energy Efficiency, Technology and Development*
UNU-MERIT/MGSoG Dissertation Series № 187

**Julieta Marotta**
*Access to Justice and Legal Empowerment of Victims of Domestic Violence through Legal Organizations in the City of Buenos Aires: A Qualitative Empirical Legal Study*
UNU-MERIT/MGSoG Dissertation Series, № 186

**Andrea Franco-Correa**
*On the Measurement of Multidimensional Poverty as a Policy Tool: Empirical Applications to Chile, Colombia, Ecuador and Peru*
UNU-MERIT/MGSoG Dissertation Series, № 185

**2016**

**Yesuf Awel**
*Insurance for Growth:Empirical Essays on Insurance Demand and Impacts in Africa*
UNU-MERIT Dissertation Series, № 108

**Tigist Mekonnen Melesse**
*Grow More Food using Fewer Resources: Agricultural Technology Adoption and Innovation Practices for Inclusive and Sustainable Development*
UNU-MERIT Dissertation Series, № 107

**Eleni Yitbarek**
*Getting Ahead or left Behind? Essays on Poverty Dynamics and Social Mobility in Africa*
UNU-MERIT Dissertation Series, № 106

**Thuy Dieu Nguyen**
*Firm-Level Theory and Evidence of Corruption*
UNU-MERIT Dissertation Series, № 105

**Raquel Tsukada Lehman**
*Essays on Household Production with Labor-Saving Technology*
UNU-MERIT Dissertation Series, № 104

**Eva Barteková**
*Multi-Problem Challenges for a Renewable Future: Empirical Studies on Competitive Disadvantages from Electricity Price Differentials and Mineral Supply Risk in an Open Economy*
UNU-MERIT Dissertation Series, № 103

**Jocelyn Olivari**
*Entrepreneurial Traits and Innovation: Evidence from Chile*
UNU-MERIT Dissertation Series, № 102

**Muhammad Shafique**
*Essays on the role of knowledge, R&D, and Technology-based Firms in the Evolution of Socio-techno-economic System*
UNU-MERIT Dissertation Series, № 101

**Serdar Türkeli**
*Governance of Innovation Policy: Empirical Studies on Applied Political Economy by Multi-Methods Analysis*
UNU-MERIT Dissertation Series, № 100

**Ayokunu Adedokun**
*Pathways to Sustainable Peace building in Divided Societies: Lessons and Experiences from Mozambique*
MGSoG Dissertation Series, № 75

**Luiz Rothier Bautzer**
*Organizing Concurrent Engineering through ICT Platforms: Blueprinting Product Lifecycle Management Platforms across Disciplinary Agencies*
MGSoG Dissertation Series, № 74

**Natalia Popova**
*Migration in the Periphery of the European Union: Determinants of Successful and Sustainable Labour Market Integration of Return Migrants in Albania, Egypt, Moldova and Tunisia*
MGSoG Dissertations Series, № 73

**Richard A. Martina**
*Uncertainty and Resource Constraint in the Small Island Developing States: Essays in Entrepreneurial Cognition*
MGSoG Dissertations Series, № 72

**Cécile Cherrier**
*The Expansion of Basic Social Protection in Low-income Countries: An Analysis of Foreign Aid Actors' Role in the Emergence of Social Transfers in Sub-Saharan Africa*
MGSoG Dissertations series, № 71

**Paul Caldron**
*The Tacit Bargain in Short-Term Medical Missions: Why U.S. physicians go and what it costs*
MGSoG Dissertation Series,№ 70

**Mahmut Kobal**
*Customs & Excellence: A Comparative Approach on Administrative and Regulatory Compliance Perspectives of the EU-Turkey Customs Union*
MGSoG Dissertation Series, № 69

**Craig Loschmann**
*Essays on Conflict-related Migration and Development in the Case of Afghanistan*
MGSoG Dissertations Series, № 68

**Andrea Milan**
*Rural Livelihoods, Location and Vulnerable Environments: Approaches to Migration in Mountain areas of Latin America*
MGSoG Dissertation Series, № 67

**Farida Lada**
*On Guarding the Welfare of Clinical Trial Subjects While Promoting Novel Drug Innovation: A Game Theoretical Approach*
MGSoG Dissertation Series, № 66

**2015**

**Hibret Belete Maemir**
*Dissecting Aggregate Productivity: International Integration and Growth with Heterogeneous Firms*
UNU-MERIT Dissertation Series, № 96

**Giorgio Triulzi**

*Looking for the Right Path: Technology Dynamics, Inventive Strategies and Catching-up in the Semiconductor Industry*
UNU-MERIT Dissertation Series, № 95

**Abdul Baseer Qazi**
*Knowledge flows and networks in the ICT sector: The case of Pakistan*
UNU-MERIT Dissertation Series, № 94

**Ajay Thutupalli**
*Technology Paradigm Shifts in Agriculture: Drivers of Sustainability and Catch up*
UNU-MERIT Dissertation Series, № 93

**Eduardo Urias**
*Improving access to HIV/AIDS treatment in Brazil: When are Compulsory Licenses effective in Price Negotiations?*
UNU-MERIT Dissertation Series, № 92

**Francesca Guadagno**
*Why have so few Countries Industrialised?*
UNU-MERIT Dissertation Series, № 91

**Daniel Opolot**
*The Evolution of Beliefs and Strategic Behaviour*
UNU-MERIT Dissertation Series, № 90

**Alejandro Lavopa**
*Structural Transformation and Economic Development: Can Development Traps be Avoided*
UNU-MERIT Dissertation Series, № 89

**Jinjin Zhao**
*Urban water management reform: The Case of China*
UNU-MERIT Dissertation Series, № 88

**Simona Vezzoli**
*Borders, Independence and Post-colonial Ties: the Role of the State in Caribbean Migration*
MGSoG Dissertation Series, № 65

**Silvia Consuelo Gómez Soler**
*Civil Conflict and Education: How Does Exposure to Civil Conflict Affect Human Capital Accumulation? Evidence from Standardized Exit Exams in Colombia*
MGSoG Dissertation Series, № 64

**Paula Nagler**
*Occupational Choice in the Developing World*
MGSoG Dissertation Series, № 63

**Jasmin Kientzel**
*Determinants of Professional Commitment to Environmental Sustainability*
MGSoG Dissertation Series, № 62

**Mehmet Güney Celbiş**
*Regional Policies: Convergence, Trade, and the Allocation of Public Capital*
MGSoG Dissertation Series, № 61

**Florian Henning**
*Living Up to Standard: Interoperability Governance and Standards Adoption in Government Information Networks*
MGSoG Dissertation Series, № 60

**Niels P. Groen**
*The Never-Ending Project: Understanding E-Government Project Escalation*

MGSoG Dissertation Series, № 59

**Derek Copp**
*Teacher-Based Reactivity to Provincial Large-scale Assessment in Canada*
MGSoG Dissertation Series, № 58

**Michaella Vanore**
*Family-Member Migration and the Psychosocial Health Outcomes of Children in Moldova and Georgia*
MGSoG Dissertation Series, № 57

**Sonja Fransen**
*The Economic and Social Effects of Remittances and Return Migration in Conflict-Affected Areas: The Case of Burundi*
MGSoG Dissertation Series, № 56

**Ibrahim Khalil Conteh**
*The Impact of Floods on Primary School Education in Zambia*
MGSoG Dissertation Series, № 55

**Richard Bluhm**
*Growth Dynamics and Development: Essays in Applied Econometrics and Political Economy*
MGSoG Dissertation Series, № 54

**Nevena P. Zhelyazkova**
*Work-Family Reconciliation and Use of Parental Leave in Luxembourg: Empirical Analysis of Administrative Records*
MGSoG Dissertation Series, № 53

**2014**

**Dirk Crass**
*The Impact of Brands on Innovation and Firm Performance: Empirical Evidence from Germany*
UNU-MERIT Dissertation Series, № 87

**Samyukta Bhupatiraju**
*The Geographic Dimensions of Growth and Development*
UNU-MERIT Dissertation Series, № 86

**François Lafond**
*The Evolution of Knowledge Systems*
UNU-MERIT Dissertation Series, № 85

**Annalisa Primi**
*Promoting Innovation in Latin America: What Countries Have Learned (and What They Have Not) in Designing and Implementing Innovation and Intellectual Property Policies*
UNU-MERIT Dissertation Series, № 84

**Fatoumata Lamarana Diallo**
*Evaluation of Meal and Deworming Programs for Primary Schools in Rural Senegal*
UNU-MERIT Dissertation Series, № 83

**Sachin Kumar Badkas**
*Metachoice and Metadata: Innovating with Environmental Policy Analysis in Europe*
MGSoG Dissertation Series, № 52

**Irina S. Burlacu**
*An Evaluation of Tax-Benefit Systems Impact on the Welfare of Frontier Worker: The Case of Luxembourg and Belgium*
MGSoG Dissertation Series, № 51

**Özge Bilgili**
*Simultaneity in Transnational Migration Research: Links Between Migrants' Host and Home Country Orientation*
MGSoG Dissertation Series, № 50

**Yulia Privalova Krieger**
*Reshaping the Big Agenda: Transnational Politics and Domestic Resistance Financial crisis and social protection reform in Bosnia and Herzegovina*
MGSoG Dissertation Series, № 49

**Marieke van Houte**
*Moving Back or Moving Forward? Return migration after Conflict*
MGSoG Dissertation Series, № 48

**Oxana Slobozhan** *Global Governance in the Management of Natural Resources: The Case of the Extractive Industries Transparency Initiative (EITI)* MGSoG Dissertation Series, № 47

**Luis Bernardo Mejia Guinand**
*The Changing Role of the Central Planning Offices in Latin America: A Comparative Historical Analysis Perspective (1950-2013)*
MGSoG Dissertation Series, № 46

**Cheng Boon Ong**
*Ethnic Segregation in Housing, Schools and Neighbourhoods in the Netherlands*
MGSoG Dissertation Series, № 45

**Luciana V. Cingolani**
*Bureaucracies for Development: Oxymoron or Reality? Studies on State Capacity in Challenging Governance Contexts*
MGSoG Dissertation Series, № 44

**Carlos Cadena Gaitán**
*Green Politics in Latin American Cities - Sustainable Transport Agendas*
MGSoG Dissertation Series, № 43

**Katie Kuschminder**
*Female Return Migration and Reintegration Strategies in Ethiopia*
MGSoG Dissertation Series, № 42

**Metka Hercog**
*Highly-Skilled Migration and New Destination Countries*
MGSoG Dissertation Series, № 41

**Margaret Agaba Rugadya**
*Can Remittances Influence the Tenure and Quality of Housing in Uganda?*
MGSoG Dissertation Series, № 40

**Ilire Agimi**
*New Governance Under Limited Statehood: The Case of Local Government Reform in Kosovo*
MGSoG Dissertation Series, № 39

**2013**

**Anant Kamath**
*Information Sharing through Informal Interaction in Low-Tech Clusters*
UNU-MERIT Dissertation Series, № 82

**Flavia Pereira de Carvalho**
*What we talk about when we talk about Brazilian Multinationals: An Investigation*

*on Brazilian FDI, Economic Structure, Innovation and the Relationship between them*
UNU-MERIT Dissertation Series, № 81

**Jun Hou**
*Complementarity in Innovation and Development: A Cross-country Comparison*
UNU-MERIT Dissertation Series, № 80

**Rufin Baghana**
*Impacts of Government Incentives to R&D, Innovation and Productivity: A Microeconometric Analysis of the Québec Case*
UNU-MERIT Dissertation Series, № 79

**Lilia I. Stubrin**
*High-Tech Activities in Emerging Countries: A Network perspective on the Argentinean Biotech Activity*
UNU-MERIT/MGSoG Dissertation Series, № 78

**Kristine Farla**
*Empirical Studies on Institutions, Policies and Economic Development*
MGSoG Dissertation Series, № 38

***Marina Petrovic***
*Social Assistance and Activation in the Pursuit of Happiness: Shedding New Light on Old Policy Solutions to Social Exclusion*
MGSoG Dissertation Series, № 37

**Laura Torvinen**
*Assessing Governance Assessments: The Case of Mozambique: Governance Assessments in the Context of Aid Effectiveness Discourse*
MGSoG Dissertation Series, № 36

**Biniam Egu Bedasso**
*Institutional Change in the Long Shadow of Elite: Essays on Institutions, Human Capital and Ethnicity in Developing Countries*
MGSoG Dissertation Series, № 35

**Sepideh Yousefzadeh Faal Deghati**
*Childhoods Embargoed: Constructing and Reconstructing Multidimensional Child Poverty in Iran 1984-2009*
MGSoG Dissertation Series, № 34

**Robert Bauchmüller**
*Investing in Early Childhood Care and Education: The Impact of Quality on Inequality*
MGSoG Dissertation Series, № 33

**Martin Rehm**
*Unified Yet Separated: Empirical Study on the Impact of Hierarchical Positions within Communities of Learning*
MGSoG Dissertation Series, № 32

**2012**

**Abdul Waheed**
*Innovation Determinants and Innovation as a Determinant: Evidence from Developing Countries*
UNU-MERIT Dissertation Series, № 77

**Bilal Mirza**
*Energy Poverty and Rural Energy Markets*

*in Pakistan*
UNU-MERIT Dissertation Series, № 76

**Benjamin Engelstätter**
*Enterprise Software and Video Games: An Empirical Analysis*
UNU-MERIT Dissertation Series, № 75

**Fulvia Farinelli**
*Natural Resources, Innovation and Export Growth:The Wine Industry in Chile and Argentina*
UNU-MERIT Dissertation Series

**Rodolfo Lauterbach**
*Innovation in Manufacturing: From Product Variety and Labor Productivity Growth to Economic Development in Chile*
UNU-MERIT Dissertation Series

**Kirsten Wiebe**
*Quantitative Assessment of Sustainable Development and Growth in Sub-Saharan Africa*
UNU-MERIT Dissertation Series, № 74

**Julio Miguel Rosa**
*Organizational Strategies, Firms' Performance and Spatial Spillovers: The Canadian Case in Research and Development.*
UNU-MERIT Dissertation Series, № 73

**Johannes Wilhelmus Marie Boels**
*Joseph Schumpeter, Honderd Jaar Economische Ontwikkeling: Een Historisch-theoretische Beschouwing*
UNU-MERIT Dissertation Series

**Dorcas Mbuvi**
*Utility Reforms and Performance of the Urban Water Sector in Africa*
MGSoG Dissertation Series, № 31

**Lina Salanauskaite**
*Distributional Impacts of Public Policies: Essays in Ex-Ante and Ex-Post Evaluation*
MGSoG Dissertation Series, № 30

**Esther Schüring**
*To Condition or not – is that the Question? An Analysis of the Effectiveness of Ex-Ante and Ex-Post Conditionality in Social Cash Transfer Programs*
MGSoG Dissertation Series, № 29

**Joe Abah**
*Strong Organisations in Weak States: Atypical Public Sector Performance in Dysfunctional Environments*
MGSoG Dissertation Series, № 28

**Zina Samih Nimeh**
*Social Citizenship Rights: Inequality and Exclusion*
MGSoG Dissertation Series, № 27

**2011**

**Daniel Vertesy**
*Interrupted Innovation: Emerging Economies in the Structure of the Global Aerospace Industry*
UNU-MERIT Dissertation Series, № 72

**Tina Saebi**
*Successfully Managing Alliance Portfolios: An Alliance Capability View*

UNU-MERIT Dissertation Series, № 71

**Nora Engel**
*Tuberculosis in India: A Case of Innovation and Control*
UNU-MERIT/MGSoG Dissertation Series, № 70

**Evans Mupela**
*Connectivity and growth in Sub-Saharan Africa: The Role of Communication Satellites*
UNU-MERIT Dissertation Series, № 69

**Nantawan Kwanjai**
*Cross Cultural Intelligence amid Intricate Cultural Webs: A Tale of the UnDutchables in the Land of 1002 Smiles*
UNU-MERIT Dissertation Series, № 68

**Lina Sonne**
*Innovation in Finance to Finance Innovation: Supporting Pro-poor Entrepreneur-based Innovation*
UNU-MERIT Dissertation Series, № 67

**Lenka Eisenhamerová**
*Legitimacy of 'Humanitarian Military Intervention'*
MGSoG Dissertation Series, № 26

**Sonila Tomini**
*Informal Payments for Health Care Services in Albania*
MGSoG Dissertation Series, № 25

**Jinjing Li**
*Dynamic Microsimulation in Public Policy Evaluation*
MGSoG Dissertation Series, № 24

**Aziz Atamanov**
*Rural Nonfarm Employment and International Migration as Alternatives to Agricultural Employment: The Case of Kyrgyzstan*
MGSoG Dissertation Series, № 23

**Frieda Vandeninden**
*Poverty Alleviation: Aid and Social Pensions*
MGSoG Dissertation Series, № 22

**Juliana Nyasha Tirivayi**
*The Welfare Effects of Integrating AIDS Treatment with Food Transfers: Evidence from Zambia*
MGSoG Dissertation Series, № 21

**Agnieska Ewa Sowa**
*Who's Left Behind? Social Dimensions of Health Transition and Utilization of Medical Care in Poland*
MGSoG Dissertation Series, № 20

**Emmanaouil Sfakianakis**
*The Role of Private Actors in the Provision of Public Goods with Applications to Infrastructure and Financial Stability*
MGSoG Dissertation Series, № 19

**Siu Hing Lo**
*White Collars Green Sleeves: An Inter-organizational Comparison of Determinants of Energy-Related Behaviors among Office Workers*
MGSoG Dissertation Series, № 18

**Treena Wu**
*Constraints to Human Capital Investment in Developing Countries: Using the Asian Financial Crisis in Indonesia as a Natural Experiment*
MGSoG Dissertation Series, № 17

**Henry Espinoza Peña**
*Impact Evaluation of a Job-Training Programme for Disadvantaged Youths: The Case of Projoven*
MGSoG Dissertation Series, № 16

**2010**

**Fernando Santiago**
*Human Resources Management Practices and Learning for Innovation in Developing Countries: Pharmaceutical Firms in Mexico*
UNU-MERIT Dissertation Series, № 66

**Zakaria Babutsidze**
*Essays on Economies with Heterogeneous Interacting Consumers*
UNU-MERIT Dissertation Series, № 65

**Bertha Vallejo**
*Learning and Innovation Under Changing Market Conditions: The Auto Parts Industry in Mexico*
UNU-MERIT Dissertation Series, № 64

**Donatus Ayitey**
*Technical Change, Competitiveness and Poverty Reduction: A Study of the Ghanaian Apparel Industry*
UNU-MERIT Dissertation Series, № 63

**Sergey Filippov**
*Multinational Subsidiary Evolution: Corporate Change in New EU Member States*
UNU-MERIT Dissertation Series, № 62

**Asel Doranova**
*Technology Transfer and Learning under the Kyoto Regime: Exploring the Technological Impact of CDM Projects in Developing Countries*
UNU-MERIT Dissertation Series, № 61

**Florian Tomini**
*Between Family and Friend: Understanding the Interdependency of Private Transfers*
MGSoG Dissertation Series, № 15

**Michał Polalowski**
*The Institutional Transformation of Social Policy in East Central Europe: Poland and Hungary in Comparative and Historical Perspective*
MGSoG Dissertation Series, № 14

**Maha Ahmed**
*Defining, Measuring and Addressing Vulnerability: The Case of Post Conflict Environments*
MGSoG Dissertation Series, № 13

**Pascal Beckers**
*Local Space and Economic Success: The Role of Spatial Segregation of Migrants in the Netherlands*
MGSoG Dissertation Series, № 12

**Victor Cebotari**

*Conflicting Demands in Ethnically Diverse Societies: Ethno political Contention and Identity Values in Europe*
MGSoG Dissertation Series, № 11

**Dennis Gyllensporre**
*Competing and Complementary Perspectives on the EU as a Crisis Management Actor: An Examination of the Common Security and Defence Policy through the Lenses of Idealism and Realism*
MGSoG Dissertation Series, № 10

**Judit Vall Castello**
*Business Cycle and Policy Effects on Labour Market Transitions of Older and Disabled Workers in Spain*
MGSoG Dissertation Series, № 9

**Keetie Roelen**
*False Positives or Hidden Dimensions: The Definition and Measurement of Child Poverty*
MGSoG Dissertation Series, № 8

**Denisa Maria Sologon**
*Earning Dynamics in Europe*
MGSoG Dissertation Series, № 7

**Melissa Siegel**
*Money and Mobility: Migration and Remittances*
MGSoG Dissertation Series, № 6

**Jessica S. Hagen-Zanker**
*Modest Expectations: Causes and Effects of Migration on Migrant Households in Source Countries*
MGSoG Dissertation Series, № 5

**2009**

**Alexis Habiyaremye**
*From Primary Commodity Dependence to Diversification and Growth: Absorptive Capacity and Technological Catch Up in Botswana and Mauritius*
UNU-MERIT Dissertation Series, № 60

**Yoseph Getachew**
*The Role of Public Capital in Economic Development*
UNU-MERIT Dissertation Series, № 59

**Sandra Leitner**
*Embodied Technological Change and Patterns of Investment in Austrian Manufacturing*
UNU-MERIT Dissertation Series, № 58

**Semih Akçomak**
*The Impact of Social Capital on Economic and Social Outcomes*
UNU-MERIT Dissertation Series, № 57

**Abraham Garcia**
*The Role of Demand in Technical Change*
UNU-MERIT Dissertation Series, № 56

**Saurabh Arora**
*Coherence in Socio-technical Systems: A Network Perspective on the Innovation Process*
UNU-MERIT Dissertation Series, № 55

**Mirtha R. Muniz Castillo**
*Human Development and Autonomy in Project Aid: Experiences from four bilateral projects in Nicaragua and El*

*Salvador*
MGSoG Dissertation Series, № 4

**Christiane Arndt**
*Governance Indicators*
MGSoG Dissertation Series, № 3

**Britta Augsburg**
*Microfinance: Greater Good or Lesser Evil?*
MGSoG Dissertation Series, № 2

**2008**

**Rutger Daems**
*Medicines for the Developing World*
UNU-MERIT Dissertation Series, № 54

**Johannes Hanel**
*Assessing Induced Technology: Sombart's Understanding of Technical Change in the History of Economics*
UNU-MERIT Dissertation Series, № 53

**Rifka Weehuizen**
*Mental Capital: the Economic Significance of Mental Health*
UNU-MERIT Dissertation Series, № 52

**Danielle Cloodt**
*The Relationship between R&D Partnership Formation, Social Embeddedness and Innovative Performance*
UNU-MERIT Dissertation Series, № 51

**Sabine Fuss**
*Sustainable Energy Development under Uncertainty*
UNU-MERIT Dissertation Series, № 50

**Geranda Notten**
*Measuring and Managing Poverty Risks*
MGSoG Dissertation Series, № 1

**2007**

**Tobias Kronenberg**
*Reconciling Environmental Conservation with Economic Prosperity: The Feasibility of Double Dividends in the Short and Long Run*
UNU-MERIT Dissertation Series, № 49

**Viktoria Kravtsova**
*Assessing the Impact of Foreign Direct Investment in Transition Economies*
UNU-MERIT Dissertation Series, № 48

**Suhail Sultan**
*The Competitive Advantage of Small and Medium Sized Enterprises: The Case of Jordan's Natural Stone Industry*
UNU-MERIT Dissertation Series, № 47

**2006**

**Bulat Sanditov**
*Essays on Social Learning and Imitation*
UNU-MERIT Dissertation Series, № 46

**Mamata Parhi**
*Dynamics of New Technology Diffusion: A Study of the Indian Automotive Industry*
UNU-MERIT Dissertation Series, № 45

**Andreas Reinstaller**
*Social Structures and the Innovation Process: Their Role in the Demand of*

*Firms and Consumers*
UNU-MERIT Dissertation Series, № 44

**Rose Kiggundu**
*Innovation systems and Development: The Journey of a Beleaguered Nile Perch Fishery in Uganda*
UNU-MERIT Dissertation Series, № 43

**Thomas Pogue**
*The Evolution of Research Collaboration in South African Gold Mining: 1886-1933*
UNU-MERIT Dissertation Series, № 42

**Geoffrey Gachino**
*Foreign Direct Investment, Spillovers and Innovation: The Case of Kenyan Manufacturing Industry*
UNU-MERIT Dissertation Series, № 41

**Önder Nomaler**
*Technological Change, International Trade and Growth: An Evolutionary, Multi-Agents-Based Modelling Approach*
UNU-MERIT Dissertation Series, № 40

**2005**

**Samia Satti Osman Mohamed-Nour**
*Change and Skill Development in the Arab Gulf Countries*
UNU-MERIT Dissertation Series, № 39

**Elad Harison**
*Intellectual Property Rights: Economics and Policy Analysis*
UNU-MERIT Dissertation Series, № 38

**Daniel Dalohoun**
*Learning to innovate agricultural innovation and entrepreneurship: the case of Songhaï farmers in Benin*
UNU-MERIT Dissertation Series, № 37

**Müge Ozman**
*Networks, Organizations and Knowledge*
UNU-MERIT Dissertation Series, № 36

**Bas Straathof**
*Product Variety and Economic Growth: The Counteracting Effects of Scale and Idiosyncrasy*
UNU-MERIT Dissertation Series, № 35

**Wilfred Schoenmakers**
*Knowledge Flows between Multinational Companies: A Patent Data Analysis*
UNU-MERIT Dissertation Series, № 34

**Myriam Cloodt**
*Mergers and Acquisitions (M and As) in High-Tech Industries: Measuring the Post-M and A Innovative Performance of Companies*
UNU-MERIT Dissertation Series, № 33

**2004**

**Paola Criscuolo**
*R&D Internationalisation and Knowledge Transfer: Impact on MNEs and their Home Countries*
UNU-MERIT Dissertation Series, № 32

**Maarten Verkerk**
*Trust and Power on the Shop Floor*
UNU-MERIT Dissertation Series, № 31

**Gottfried Leibbrandt**
*Adoption, Harmonization and Succession of Network Technologies across Countries*
UNU-MERIT Dissertation Series, № 30

**Mark Sanders**
*Skill Biased Technical change: Its Origins, the Interaction with the Labour Market and Policy Implications*
UNU-MERIT Dissertation Series, № 29

**2003**

**Nadine Roijakkers**
*Inter-firm Cooperation in High-tech Industries: a Study of R&D Partnerships in Pharmaceutical Biotechnology*
UNU-MERIT Dissertation Series, № 28

**Viki Sonntag**
*Speed, Scale and Sustainability*
UNU-MERIT Dissertation Series, № 27

**Masaru Yarime**
*From End-of-Pipe Technology to Clean Technology*
UNU-MERIT Dissertation Series, № 26

**Stéphane Malo**
*The Combinatorial Chemistry Revolution: Sustaining a Superior Performance Position through Technological Learning*
UNU-MERIT Dissertation Series, № 25

**2002**

**Annelies Hogenbirk**
*Determinants of Inward Foreign Direct Investment: the Case of the Netherlands*
UNU-MERIT Dissertation Series, № 24

**Bastiaan Johan ter Weel**
*The Computerization of the Labour Market*
UNU-MERIT Dissertation Series

**2001**

**John Adeoti**
*Technology Investment in Pollution Control in Sub-Saharan Africa: The Case of the Nigerian Manufacturing Industry*
UNU-MERIT Dissertation Series, № 23

**Edward Huizenga**
*Innovation Management: How Frontrunners Stay Ahead: An Empirical Study on Key Success Factors in the ICT sector*
UNU-MERIT Dissertation Series, № 22

**2000**

**Machiel van Dijk**
*Technological Change and the Dynamics of Industries: Theoretical Issues and Empirical evidence from Dutch Manufacturing*
UNU-MERIT Dissertation Series, № 21

**1999**

**Jan Cobbenhagen**
*Managing Innovation at the Company Level: A Study on Non-Sector-Specific Success Factors*
UNU-MERIT Dissertation Series, № 20

**Marjolein Caniëls**
*Regional Growth Differentials: The Impact of Locally Bounded Knowledge Spillovers*
UNU-MERIT Dissertation Series, № 19

**1998**

**Aldo Geuna**
*Resource Allocation and Knowledge production: Studies in the Economics of University Research*
UNU-MERIT Dissertation Series, № 18

**1996**

**Reinoud Joosten**
*Dynamics, Equilibria, and Values*
UNU-MERIT Dissertation Series, № 17

**Hugo Kruiniger**
*Investment, R&D, and the Financing Decisions of the Firm* UNU-MERIT Dissertation Series, № 16

**1995**

**Hans van Meijl**
*Endogenous Technological Change: The Case of Information Technology, Theoretical Considerations and Empirical Results*
UNU-MERIT Dissertation Series, № 15

**René Kemp**
*Environmental Policy and Technical Change: A Comparison of the Technological Impact of Policy Instruments*
UNU-MERIT Dissertation Series, № 14

**Rohini Acharya**
*The Impact of New Technologies on Economic Growth and Trade: A Case Study of Biotechnology*
UNU-MERIT Dissertation Series, № 13

**Geert Duysters** *The Evolution of Complex Industrial Systems: The Dynamics of Major IT Sectors*
UNU-MERIT Dissertation Series, № 12

**Marjan Groen**
*Technology, Work and Organisation: A Study of the Nursing Process in Intensive Care Units*
UNU-MERIT Dissertation Series, № 11

**1994**

**Huub Meijers**
*On the Diffusion of Technologies in a Vintage Framework: Theoretical Considerations and Empirical Results*
UNU-MERIT Dissertation Series, № 10

**Theon van Dijk**
*The Limits of Patent Protection: Essays on the Economics of Intellectual Property Rights*
UNU-MERIT Dissertation Series, № 9

**Hans Voordijk**
*Naar Integrale Logistiek in Bedrijfsketens: Ontwikkelingen in de Bouw*
UNU-MERIT Dissertation Series, № 8

**1993**

**Paul Diederen**
*Technological Progress in Enterprises and Diffusion of Innovation: Theoretical Reflections and Empirical Evidence*
UNU-MERIT Dissertation Series, № 7

**Ben Dankbaar**
*Economic Crisis and Institutional Change: The Crisis of Fordism from the Perspective of the Automobile Industry*
UNU-MERIT Dissertation Series, № 6

**Hanno Roberts**
*Accountability and Responsibility: The Influence of Organisation Design on Management Accounting*
UNU-MERIT Dissertation Series, № 5

**1992**

**Bart Verspagen**
*Uneven Growth between Interdependent Economies: An Evolutionary View on Technology Gaps, Trade and Growth*
UNU-MERIT Dissertation Series, № 4

**Sjoerd Romme**
*A Self-organization Perspective on Strategy Formation*
UNU-MERIT Dissertation Series, № 3

**1989**

**John Spangenberg**
*Economies of Scale, and Atmosphere in Research Organisations*
UNU-MERIT Dissertation Series, № 2

**1988**

**John Hagedoorn**
*Evolutionary and Heterodox Innovation Analysis: A Study of Industrial and Technological Development in Process Control and Information Technology*
UNU-MERIT Dissertation Series, № 1