ESSAYS ON
DEMOCRACY, REDISTRIBUTION,
AND INEQUALITY

Sigrid Alexandra Koob

Ph.D. Dissertation

Copenhagen Business School
Department of International Economics,
Government, and Business

Submitted: March 31, 2023

Supervisors: Mogens Kamp Justesen (Copenhagen Business School), Hans-Otto Sano (The Danish Institute for Human Rights)
ACKNOWLEDGEMENT

Writing a PhD has been an incredibly rewarding learning experience, in which I have had the great pleasure of working with numerous brilliant people.

First of all, I would like to express my deep gratitude to Mogens Kamp Justesen, my primary supervisor, for indispensable guidance, enthusiastic encouragement, invaluable feedback, and for generously providing knowledge and expertise throughout this project. I’m grateful for a great collaboration from which I have learned a lot. I am also thankful to the Inequality Platform for financial support.

I would also like to express my deep gratitude to Hans-Otto Sano, my secondary supervisor, for giving me the opportunity and for the valuable feedback and constant support throughout the process. I am also grateful to the Danish Institute for Human Rights (DIHR) for the financial support. Thanks should also go to all my colleagues at the Research Department at DIHR, whose company I have highly appreciated during the project.

I am also thankful for the generous support from the Department of International Government, Economic and Business (EGB). I have highly appreciated the company of my colleagues at EGB. I’m extremely grateful to my fellow PhD and great friend, Sina Smid, for great chats and collaboration, inspiration, encouragement, valuable feedback, and moral support - my PhD journey would have been the same without. I am also thankful to my colleagues from the Business and Democracy Group for providing valuable suggestions and feedback that helped guide this entire project. Special thanks to Benjamin Carl Krag Egerod, Zoltan Fazekas, Anne Jamison, Florian Hollenbach, Mads Dagnis, Jens Olav Dalgaard, Jan Stuckatz, who have all taken the time to read parts of my dissertation and provided me with extremely useful and constructive feedback. This has without doubt improved the quality of the project. Also a special thanks to Eddie Ashbee for doing an excellent job as PhD coordinator at the Department. I would also like to express my gratitude to my colleagues at the secretariat of EGB - a special thanks to Anne Suhr and Pia Kjær Lyndgaard for invaluable support in nonacademic matters, of which there has been plenty throughout the process.

I would like to thank Peter Sandholt Jensen, Manuele Citi, Kristine Eck, and Anne Jamison for taking time out of their busy schedules to read parts of my dissertation and provide me with valuable comments at my opening and closing seminars. I would also like to thank my committee chair and members, Mads Dagnis, Kristine Eck and Marcia Grimes, for accepting to review my dissertation and for their comprehensive and invaluable feedback.
Last but not least, I would like to thank my family. I am forever grateful to Hans, my husband, for the continuous support, devotion and great inspiration. I am also forever grateful to my kids, Niels and Buster, for their curiosity, brilliant questions, and for invaluable distractions from the project. Also a special thanks to Lisbeth, my mother, for the unwavering support and help, especially during busy time. I could not have undertaken this journey without all of you.
ABSTRACT

Economic inequality continues to thrive in democracies across the world. This is puzzling because theory predicts that the ideals of democracy should induce more equal societies. At the same time, high levels of inequality tend to undermine democratic institutions. It may be that many democracies are trapped in a vicious cycle of persistent economic inequality and democratic backsliding, which may be difficult to alter. The purpose of this dissertation is to examine the general question of why inequality persists in democracies with a focus on the means by which the poor can exert political influence to remedy persistent inequality and why they may fail to do so.

The dissertation consists of three independent chapters. Each addresses the links between democracy, redistribution and inequality from different angles. In Chapter 1, I examine the general link between democracy and economic inequality by analysing the distributional dynamics of economic growth in democracies relative to autocracies. The chapter shows that democracies are, on average, no better than autocracies when it comes to inclusive economic growth (growth that is associated with a reduction in economic inequality). However, when countries are classified according to their de facto implementation of democratic institutions, liberal democracies do foster inclusive growth in both relative and absolute terms. Chapter 2 and Chapter 3 focus on the political power of the poor to influence redistributive policies in electoral democracies. Each chapter examines different forms of political action that are available to the poor. Chapter 2 focuses on voting and on the impact of clientelism, which may shape how elections serve to channel demand for programmatic redistribution into the political system. The chapter shows that clientelism adversely affects voter support for political candidates regardless of efforts to provide programmatic redistribution. Chapter 3 focuses on protest as an alternative (or complementary) form of political action to influence redistribution when the electoral process is curtailed. The chapter shows that the poor may hold some de facto political power by virtue of protests. However, the magnitude of that power depends on the choice of protest tactics.

The dissertation arrives at these novel insights by employing both observational and experimental quantitative research designs with an emphasis on causal inference. The research questions are analysed both across countries and among individual voters in two unequal electoral democracies; Brazil and South Africa. The dissertation adds to the understanding on the causes of equilibria of persistent inequality, low programmatic redistribution, and democratic backsliding, which are liable to emerge when poor citizens are deprived of political power - at the ballot box or in the streets.
DANSK RESUMÉ

Økonomisk ulighed stortrives i demokratier verden over. Det er overraskende, da de demokratiske idealer teoretisk set burde føre til mere lige samfund. Samtidig viser den historiske og aktuelle udvikling i mange lande, at økonomisk ulighed har en tendens til at undergrave demokratiske institutioner. Lande kan derfor blive fanget i en ond cirkel, der er karakteriseret af vedholdende økonomisk ulighed og demokratiske tilbageskridt, som kan være svær at slippe fri af. Formålet med denne PhD-afhandling er at undersøge, hvorfor økonomisk ulighed består i demokratier. Dette overordnede spørgsmål undersøges med fokus på lavindkomstgruppers muligheder for at udøve politisk indflydelse til at nedbringe den vedvarende økonomisk ulighed, samt hvorfor de ofte mislykkes med det.


Afhandlingen når frem til disse nye indsigter ved at anvende både observationsbaserede og eksperimentelle kvantitative forskningsdesigns med vægt på kausal inferens, og forskningsspørgsmålene undersøges både på tværs af lande og blandt individuelle vælgere i to udvalgte lande, Brasilien og Sydafrika. Afhandlingen bidrager til vores
forståelse af de bagvedliggende årsager til, at en ond cirkel med vedholdende økonomisk ulighed, begrænset programmatisk omfordeling og demokratisk tilbageskridt kan opstå. Det kan i særdeleshed gøre sig gældende, når den fattigere del af befolkningen er frarøvet politisk magt - enten ved stemmeboksen eller i gaderne.
## CONTENTS

List of Figures ix  
List of Tables xiii  

<table>
<thead>
<tr>
<th>Frame</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Theoretical Framework</td>
<td>6</td>
</tr>
<tr>
<td>Research Design</td>
<td>10</td>
</tr>
<tr>
<td>Summary of Findings</td>
<td>15</td>
</tr>
<tr>
<td>Contribution</td>
<td>16</td>
</tr>
<tr>
<td>Concluding Remarks</td>
<td>18</td>
</tr>
<tr>
<td>References</td>
<td>21</td>
</tr>
</tbody>
</table>

1 | Democracy and Inclusive Economic Growth: A Weak Link | 31 |
| 1.1 | Introduction | 31 |
| 1.2 | Insights From the Literature | 35 |
| 1.3 | Democracy and Inclusive Economic Growth | 37 |
| 1.4 | Data and Descriptives | 40 |
| 1.5 | Econometric Specification | 49 |
| 1.6 | Results | 50 |
| 1.7 | Conclusion | 60 |
| References                                                            | 63  |

2 | Programmatic Redistribution and Clientelism: Evidence from Brazil | 69 |
| 2.1 | Introduction | 69 |
| 2.2 | Voter Responses to Distributive Politics | 73 |
| 2.3 | The Brazilian Case | 76 |
| 2.4 | Data and Design | 79 |
| 2.5 | Results | 84 |
| 2.6 | Conclusion | 95 |
| References                                                            | 97  |

3 | Fighting For a Better Life: Protest and Public Opinion in South Africa | 103 |
| 3.1 | Introduction | 103 |
| 3.2 | Protest and Public Opinion | 108 |
| 3.3 | The Case of South Africa | 111 |
| 3.4 | Observational Study: Evidence from a Difference-in-Differences Analysis | 115 |
| 3.5 | Experimental Study: Evidence from Two Survey Experiments | 125 |
| 3.6 | Conclusion | 137 |
| References                                                            | 139 |

Supplementary Material to Chapter 1 145
<table>
<thead>
<tr>
<th>Supplementary Material to Chapter 2</th>
<th>167</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplementary Material to Chapter 3</td>
<td>207</td>
</tr>
</tbody>
</table>
# List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Income Inequality and Democracy Level, Brazil and South Africa</td>
<td>13</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Redistribution, Union Denisty, Human Capital, and Political Corruption, across Political Regimes</td>
<td>48</td>
</tr>
<tr>
<td>Figure 3</td>
<td>The Long-Term Distributional Impact of Growth in Democracies and Autocracies</td>
<td>53</td>
</tr>
<tr>
<td>Figure 4</td>
<td>The Distributional Impact of Economic Growth across Regime Types</td>
<td>57</td>
</tr>
<tr>
<td>Figure 5</td>
<td>Simulations of the Distributional Impact of Growth in Liberal Democracies, Poorest 10% (left) and Richest 10% (right)</td>
<td>58</td>
</tr>
<tr>
<td>Figure 6</td>
<td>Effects on Candidate Support and the Likelihood of Winning</td>
<td>86</td>
</tr>
<tr>
<td>Figure 7</td>
<td>Interaction Effects on Candidate Support, Programmatic Redistribution x Clientelism</td>
<td>89</td>
</tr>
<tr>
<td>Figure 8</td>
<td>Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs</td>
<td>91</td>
</tr>
<tr>
<td>Figure 9</td>
<td>Poor vs. non-poor Voters</td>
<td>94</td>
</tr>
<tr>
<td>Figure 10</td>
<td>Service Delivery Protests in South Africa, 2012-2022</td>
<td>113</td>
</tr>
<tr>
<td>Figure 11</td>
<td>Average protest sympathy in the Days Between an Interview and Protest</td>
<td>118</td>
</tr>
<tr>
<td>Figure 12</td>
<td>Illustration of the Difference-in-Difference Setup, 30 Days Time Window</td>
<td>119</td>
</tr>
<tr>
<td>Figure 13</td>
<td>The Effect of Protest Images on Protest Sympathy and Policy Support</td>
<td>128</td>
</tr>
<tr>
<td>Figure 14</td>
<td>Effects of Protest Information on Protest Sympathy and Policy Support, AMCEs</td>
<td>132</td>
</tr>
<tr>
<td>Figure 15</td>
<td>Interaction Effects for Policy Support, MMs</td>
<td>135</td>
</tr>
<tr>
<td>Figure 16</td>
<td>Effects on Policy Support, Racial Group Identification, MMs</td>
<td>137</td>
</tr>
<tr>
<td>Figure A.2.1</td>
<td>Income share of Q1 (% of total income) over time across regime types</td>
<td>147</td>
</tr>
<tr>
<td>Figure A.2.2</td>
<td>Income share of Q2 (% of total income) over time across regime types</td>
<td>147</td>
</tr>
<tr>
<td>Figure A.2.3</td>
<td>Income share of Q3 (% of total income) over time across regime types</td>
<td>148</td>
</tr>
<tr>
<td>Figure A.2.4</td>
<td>Income share of Q4 (% of total income) over time across regime types</td>
<td>148</td>
</tr>
<tr>
<td>Figure A.2.5</td>
<td>Income share of Q5 (% of total income) over time across regime types</td>
<td>149</td>
</tr>
<tr>
<td>Figure A.2.6</td>
<td>GNI per capita growth over time across regime types</td>
<td>149</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

| Figure C.1.1 | The Long-Term Distributional Impact of Growth across Income Deciles in Democracies and Autocracies, GMM estimates | 152 |
| Figure C.2.1 | The Long-Term Impact of Growth on the Income Distribution in Democracies (Cheibub et al. 2010) | 154 |
| Figure C.3.1 | The Long-Term Distributional Impact of Growth across Deciles, Conditioned on Regime Type, GMM Estimates | 156 |
| Figure C.4.1 | The long-term distributional impact of growth across deciles conditioned on regime type, adding controls (all of the above controls included) | 161 |
| Figure C.5.1 | The distributional impact of economic growth in liberal democracy (excluding lower bound countries) | 162 |
| Figure A.3.1 | Diagnostics | 170 |
| Figure A.4.1 | Duration of Survey | 171 |
| Figure A.4.2 | Main Effects on Candidate Support, by Attention Check | 172 |
| Figure A.4.3 | Interaction Effects, by Attention Check | 173 |
| Figure A.5.1 | Characteristics of 2020 City councillor Candidates | 174 |
| Figure C.1.1 | Effects on Candidate Support and the Likelihood of Winning, MMs | 189 |
| Figure C.1.2 | Effects on Voter Beliefs, AMCEs | 190 |
| Figure C.1.3 | Effects on Voter Beliefs, MMs | 191 |
| Figure C.2.1 | Interaction Effects on Likelihood of Winning, Programmatic Redistribution x Clientelism, MMs | 192 |
| Figure C.2.2 | Interactions Effects on Voter Beliefs, Clientelism x Income Taxes, MMs | 193 |
| Figure C.2.3 | Interaction Effects on Candidate Support, Clientelism x Income Taxes, MMs | 194 |
| Figure C.3.1 | Poor vs. Non-poor Voters | 195 |
| Figure C.3.2 | Interaction Effects on Likelihood of Winning, Programmatic Redistribution x Clientelism, Non-poor vs. Poor, MMs | 196 |
| Figure C.3.3 | Interaction Effects on Voter Beliefs I, Programmatic Distribution x Clientelism, Non-poor vs. poor, MMs | 197 |
| Figure C.3.4 | Interaction Effects on Voter Beliefs II, Programmatic Distribution x Clientelism, Non-poor vs. poor, MMs | 198 |
| Figure C.3.5 | Interaction Effects on Voter Beliefs III, Programmatic Distribution x Clientelism, Non-poor vs. poor, MMs | 199 |
| Figure C.3.6 | Correlation Matrix Poverty Indicators | 200 |
| Figure C.3.7 | Main Effects on Candidate Support, by Poverty | 201 |
| Figure C.3.8 | Interaction Effects, by Gender, MMs | 202 |
| Figure C.3.9 | Interaction Effects, by Education, MMs | 203 |
| Figure C.3.10 | Interaction Effects, by Partisanship, MMs | 204 |
| Figure A.3.1 | Average protest sympathy across days between interview and protest | 208 |
| Figure B.0.1 | Power Analysis, Vignette and Conjoint Experiments | 221 |
| Figure D.3.1 | Check of Simple Randomization | 225 |
| Figure D.3.2 | Placebo check, where outcome variable is “The national govt should do more to improve trade relations with China” | 228 |
| Figure D.4.1 | Alternative baseline: Peaceful protest without blame attribution | 230 |
| Figure D.4.2 | Outcome variables: Public Disorder (”People who protest against lack of service delivery are causing unnecessary public disorder”) and Deservingness (“People who protest against lack of service delivery deserve help from the municipal government”) | 231 |
| Figure E.3.1 | Diagnostics | 233 |
| Figure E.3.2 | Vignette Treatment Effects Check | 234 |
| Figure E.4.1 | Effects on Public Disorder and Derservingness, AMCEs | 239 |
| Figure E.4.2 | Interaction Effects on Protest Sympathy, MMs | 240 |
| Figure E.4.3 | Riots, Interaction Effects on Policy Support, Blame Attribution x Grievance x Participants, MMs | 241 |
| Figure E.4.4 | Effects on Policy Support, Racial Group Identification, MMs | 242 |
| Figure E.4.5 | Effects on Protest Sympathy, Racial Group Identification, MMs | 243 |
| Figure E.4.6 | Effects on Public Disorder and Deservingness, Racial Identification, MMs | 244 |
LIST OF FIGURES
LIST OF TABLES

Table 1  Descriptive Statistics ........................................ 47
Table 2  The Distributional Impact of Economic Growth, Conditioned on Democracy ........................................ 52
Table 3  The Impact of Economic Growth on Income Shares across Quintiles, Conditioned on Regime Types (V-Dem) ........................................ 54
Table 4  The Impact of Economic Growth on the Average Income of the Poorest 10%, Conditioned on Regime Types (V-Dem) ........................................ 59
Table 5  Conjoint Survey Experiment: Attributes and Levels ........................................ 81
Table 6  The Effect of Service Delivery Protest on protest sympathy (20-, 30-, 45- and 60-days Windows) ........................................ 123
Table 7  Conjoint Experiment ........................................ 129
Table A.1.1  RoW by Country for 2016, Autocracies ........................................ 145
Table A.1.2  RoW by Country for 2016, Democracies ........................................ 146
Table C.1.1  The impact of economic growth on income shares across quintiles conditioned on democracy/autocracy (V-dem), GMM estimates ........................................ 151
Table C.2.1  The Impact of Economic Growth on Income Shares across Quintiles, Conditioned on Democracy and Dictatorship (Cheibub et al. 2010) ........................................ 153
Table C.3.1  The Impact of Economic Growth on Income Shares across Quintiles, Conditioned on Regime Types (V-Dem), GMM Estimates ........................................ 155
Table C.4.1  The distributional impact of economic growth across regime types, adding controls (oil rents) ........................................ 157
Table C.4.2  The distributional impact of economic growth across regime types, adding controls (population growth, urbanization and structural transformation) ........................................ 158
Table C.4.3  The distributional impact of economic growth across regime types, adding controls (regime durability, party orientation and state fiscal capacity) ........................................ 159
Table C.4.4  The distributional impact of economic growth across regime types, adding controls (regime durability, party orientation and quality of government) ........................................ 160
Table C.6.1  The distributional impact of economic growth in liberal democracies, varying the reference group ........................................ 162
Table C.7.1  The impact of economic growth on the average income of the poorest 10% conditioned on regime types (V-dem) ........................................ 163
Table A.1.1  Experiment Introduction ........................................ 167
<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.1.2</td>
<td>Outcome questions</td>
<td>167</td>
</tr>
<tr>
<td>A.1.3</td>
<td>Follow-up questions to experiment</td>
<td>168</td>
</tr>
<tr>
<td>A.2.1</td>
<td>Descriptive Statistics of Variables</td>
<td>168</td>
</tr>
<tr>
<td>B.0.1</td>
<td>Main Effects on Candidate Support and the Likelihood of Winning</td>
<td>176</td>
</tr>
<tr>
<td>B.0.3</td>
<td>Interaction Effects on Candidate Support, Programmatic Redistribution x Clientelism</td>
<td>177</td>
</tr>
<tr>
<td>B.0.5</td>
<td>Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs: Improve Fiscal Capacity</td>
<td>178</td>
</tr>
<tr>
<td>B.0.7</td>
<td>Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs: Engage in Corruption</td>
<td>179</td>
</tr>
<tr>
<td>B.0.9</td>
<td>Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs: Help in Economic Distress</td>
<td>180</td>
</tr>
<tr>
<td>B.11</td>
<td>Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs: Help poor people</td>
<td>181</td>
</tr>
<tr>
<td>B.13</td>
<td>Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs: Reduce Inequality</td>
<td>182</td>
</tr>
<tr>
<td>B.15</td>
<td>Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs: Deliver Public Services</td>
<td>183</td>
</tr>
<tr>
<td>B.17</td>
<td>Poor vs. non-poor voters</td>
<td>184</td>
</tr>
<tr>
<td>B.19</td>
<td>Main effects on Candidate support, Non-poor vs. Poor Voters</td>
<td>185</td>
</tr>
<tr>
<td>B.21</td>
<td>Main effects on Candidate support, Non-poor vs. Poor Voters</td>
<td>186</td>
</tr>
<tr>
<td>A.3.1</td>
<td>The effect of the occurrence of protest events on the occurrence of survey interviews</td>
<td>209</td>
</tr>
<tr>
<td>A.3.2</td>
<td>Excludability check</td>
<td>210</td>
</tr>
<tr>
<td>A.3.3</td>
<td>SUTVA check</td>
<td>211</td>
</tr>
<tr>
<td>A.3.4</td>
<td>Correlation between treatment status and item-non response</td>
<td>212</td>
</tr>
<tr>
<td>A.3.5</td>
<td>The effect of future service delivery protest on protest sympathy (20, 30, 45 and 60 days window), OLS</td>
<td>214</td>
</tr>
<tr>
<td>A.3.6</td>
<td>The effect of future service delivery protest on protest sympathy (20, 30, 45 and 60 days window), Logit</td>
<td>216</td>
</tr>
<tr>
<td>A.4.1</td>
<td>The effect of service delivery protest on protest sympathy, 20, 30, 45 and 60 days window (Logit model)</td>
<td>219</td>
</tr>
<tr>
<td>A.4.2</td>
<td>The effect of service delivery protest on protest sympathy, 20, 30, 45 and 60 days window (OLS) - Alternative definition of violent protest</td>
<td>220</td>
</tr>
<tr>
<td>C.0.1</td>
<td>Descriptive Statistics</td>
<td>222</td>
</tr>
<tr>
<td>D.1.1</td>
<td>Vignette Experiment</td>
<td>223</td>
</tr>
<tr>
<td>D.1.2</td>
<td>Outcome questions</td>
<td>224</td>
</tr>
<tr>
<td>D.3.1</td>
<td>Descriptive Statistics across Treatment Groups</td>
<td>227</td>
</tr>
</tbody>
</table>
Table D.4.1  Outcome variable: Policy Support ("The municipal govt. should increase spending to improve service delivery in poor settlements") 228
Table D.4.2  Outcome variable: Protest Sympathy ("I support people who protest against lack of service delivery") 229
Table E.1.1  Outcome questions 232
Table E.4.1  Protest Sympathy, AMCEs 235
Table E.4.2  Protest Sympathy, MMs 236
Table E.4.3  Policy Support, AMCEs 237
Table E.4.4  Policy Support, MMs 238
INTRODUCTION

Economic inequality remains rampant in democracies across the world - seven out of the 10 most unequal countries in the world are classified as democratic. This tendency is puzzling because theory predicts that the ideals of democracy should induce more equal societies. As Robert Dahl wrote: “a key characteristic of democracy is the continuing responsiveness of the government to the preferences of its citizens, considered as political equals” (Dahl, 1971, p. 1). Ideally, the poor should have as much political power as the rich in shaping the (re)distribution of resources in society. However, the evidence shows that legislators in democracies consistently act on the preferences of the most affluent rather than on those of the poor (Gilens, 2012; Bernauer et al., 2015; Bartels, 2016; Lupu and Warner, 2022a,b). Consequently, the poor are left with few means of reversing economic inequality, such as redistributive policies.

At the same time, persistent and rising economic inequality tend to undermine democratic institutions. A higher concentration of wealth lead to a higher concentration of political power, which can also discourage political participation among poorer segments of society (Lijphart, 1997; Dahl, 1998; Bonica et al., 2013; Ansell and Samuels, 2010; Theodossiou and Zangelidis, 2020). In general, democracies have deteriorated across the globe. According to a report from V-Democracy from 2023, only 30% of the global population now live in democracies, a decline from around 50% in 2012. In addition, approximately 40% live in autocratising countries, a substantial rise from the 5% that were observed in 2012 (Papada et al., 2023). It may be that many democracies are trapped in an equilibrium of persistent economic inequality and democratic backsliding, which may be difficult to escape. The purpose of this dissertation is to examine the general question of why inequality persists in democracies with a focus on the means by which the poor can remedy persistent economic inequality in a democratic context and why they may fail to do so.

The dissertation addresses these questions by examining the links between democracy, programmatic redistribution, and economic inequality by focusing on the political power of the poor. A rich body of literature has addressed the puzzle of the persistence of high inequality in democracies. Three sets of (complementary) explanations have become prominent in the field and in the public discourse. The first set of explanations highlights

---

1 According to Chancel et al. (2022), the 10 most unequal countries of the world in 2021, as measured by the income gap between the top 10% and the bottom 50%, were: South Africa (D), Peru (D), Mexico (D), Namibia (D), Chile (D), Costa Rica (D), Zambia (A), the Central African Republic (A), Colombia (D), and Mozambique (A). They were classified as either democracies (D) or autocracies (A) by Boese et al. (2022). The Gini data follow the same pattern.
the proposition that persistent inequality is a consequence of the free market capitalism
that flourishes in democratic contexts, which tends to contribute to higher concentrations
of income and wealth (Piketty, 2014; Bahamonde and Trasberg, 2021). The second set of
explanations is premised on the notion of elite capture. According to these explanations,
a democracy may be captured by political and economic elites, often through corruption,
lobbying and political donations. These elites are interested primarily in promoting
their own economic interests rather than effectuating the political preferences of the
poor (Acemoglu and Robinson, 2008; Gilens, 2012; Albertus, 2013; Ansell and Samuels,
2014; Bartels, 2016; Lupu and Warner, 2022b,a) The third set of explanations revolves
around populism and the preferences of the poor. These explanations highlight the fact
that the poor increasingly prioritise other policies (in domains such as immigration and
antiglobalisation) over redistributive ones, even though it may run counter with their
own economic interests (Shayo, 2009; Lupu and Pontusson, 2011; Gilens, 2012; Cavaillé
and Trump, 2015; Rueda and Stegmueller, 2019; Shayo, 2020; Pastor and Veronesi, 2021;
Yakter, 2023; Strobl et al., 2023).2 All three sets of explanations are important pieces of
the whole puzzle,3 but this dissertation mainly relates to the literature on elite capture.
Furthermore, rather than focusing on the specific strategies that the elites employ to
capture the political system, I focus on the countermeasures that the poor may adopt to
push back and on the potential causes of their failure.

The dissertation consists of three independent chapters (papers). Each addresses
these links that were outlined in the preceding paragraphs from different angles in order
to arrive at novel explanations of the compatibility between democracy, low redistribution,
and high economic inequality, which falsifies numerous standard theoretical predictions.
In Chapter 1, I examine the general link between democracy and economic inequality
by analysing the distributional dynamics of economic growth in democracies relative
to autocracies. Chapter 2 and Chapter 3 focus on the political power of the poor to
influence redistributive policies. Each chapter examines different courses of political
action that are available to the poor. Chapter 2 concerns elections and clientelism,
which may be a potential barrier that prevent the poor from influencing programmatic redistribution. Chapter 3 focuses on protests as an alternative form of political action.
The poor may use protest to influence programmatic redistribution when their electoral
options are somehow constrained. All three chapters employ both observational and
experimental quantitative research designs with an emphasis on causal inference. The
research questions are analysed both at the macro-level, that is, across countries, and at
the micro-level, that is, among individual voters.

---

2 Indeed, political polarisation and populist movements have also been highlighted as consequences of high
economic inequality (e.g. Stoetzer et al. 2023)

3 Other important explanations include low turnout among poor voters (e.g., Lijphart 1997; Lupu and Warner
2022a,b, redistribution that are biased so as to mainly benefit the middle-classes (e.g., Stigler 1970; Acemoglu
et al. 2015) and a decreasing influence of trade unions and other related interest groups (e.g., Western and
Rosenfeld 2011)
The purpose of Chapter 1 is to determine whether democracies are more likely to foster inclusive economic growth (growth that is associated with a reduction in income inequality), relative to other regime types. The chapter aims to answer the following research question: Are democracies better than autocracies at translating economic growth into income gains for the poor relative to the rich? The analysis shows that democracies are, on average, no better than autocracies when it comes to inclusive economic growth. However, when countries are classified according to their de facto adoption of democratic institutions, liberal democracies do appear to embark on inclusive growth paths in the long run; however, the effect is small in absolute terms. The chapter thus contributes to the puzzle of democracy and persistent inequality by highlighting the importance of de facto implementation of democratic institutions.

Chapter 2 and Chapter 3 focus on two different perspectives on the political power of the poor in two unequal electoral democracies, namely Brazil and South Africa. The purpose of Chapter 2 is to examine the manner in which clientelism shapes demand for programmatic redistribution by focusing on voter support for political candidates who mix different modes of distributive politics. The chapter addresses the following research question: How do voters reward or punish political candidates who vary in their policy mix of programmatic redistribution and clientelism? The analysis shows that clientelism has a negative effect on voter support for political candidates who have also advocated programmatic redistribution. The analysis further shows that when clientelism is part of a candidate’s policy mix, voters perceive that candidate as less capable of providing public services regardless of their track record of programmatic redistribution. The chapter highlights that the presence of clientelist strategies matters for how elections serve to channel demand for programmatic redistribution into the political system, and the chapter thus contributes to the academic understanding of the persistence of low levels of programmatic redistribution in democracies that are plagued by political corruption.

Chapter 2 thus focuses on elections as a platform from which citizens can demand programmatic redistribution. Chapter 3, conversely, analyses the role of protest as an alternative (or complementary) form of political action that the poor may engage in to pressure policy makers into improving programmatic redistribution. Protests can affect policymakers directly through public disorder but also indirectly through shifts in public opinion. The purpose of the chapter is therefore to answer the following research question: How does protest affect support for public services? The analysis shows that poor voters may exercise some de facto political power through protests when the electoral arena is curtailed, but the extent of that power depend on the manner in which the protesters communicate their grievances. In particular, large-scale peaceful protest has the strongest potential for attracting public support. Violent tactics, in contrast, run the risk of causing a backlash on public support. The chapter thus sheds light on why inequality may persist despite efforts of the poor to reverse it.

The dissertation, altogether, sheds light on the conditions that precipitate equilibria of persistent inequality and democratic backsliding. The three chapters confirm that
high levels of inequality and democracy are compatible, especially when the de facto implementation of democratic institutions is somehow captured by the political elite. When poor citizens are deprived of the political power, at the ballot box or in the streets, to reverse economic inequality through redistribution, there is a risk that the loop of persistent inequality and democratic decline may become self-reinforcing.

THEORETICAL FRAMEWORK

Democracy, Redistribution, and Inequality

According to the classical theories of rational choice, democracy ought to deliver higher levels of economic equality through programmatic redistribution (Lipset, 1959; Meltzer and Richard, 1981; Roberts, 1977; Romer, 1975; Boix, 2003; Acemoglu and Robinson, 2000, 2001, 2006; Przeworski et al., 2006; Przeworski, 2009). Democracies grant poor citizens the right to vote and, therefore, the opportunity to influence the distribution of resources in society. The canonical model of Meltzer and Richard (1981) predicts that low-income voters should become decisive, in democracies, and that they should demand progressive taxation and pro-poor policies, which should narrow the gap between rich and poor. Democratic rule also incentivises the supply of public services because policymakers in democracies are accountable to larger groups in society (a "winning coalition") and thus rely on the provision of public services as an efficient means of rewarding coalition members and thereby sustaining political support (Bueno de Mesquita et al., 2005; Lake and Baum, 2001; Baum and Lake, 2003; Stasavage, 2005; Gerring et al., 2005). Democratic rights, such as those of freedom of assembly and association, provide a solid basis for the influence of trade unions and related interest groups, which may strengthen the bargaining power of low-income groups and result in higher wages for these groups (Rodrik, 1999).

All of these mechanisms serve to channel the preferences of the poor into the political system, mainly through elections. Although elections are important for holding policymakers accountable, they are not always adequate because they may be compromised by elite capture (Persson et al., 1997; Albertus and Menaldo, 2014; Haggard and Kaufman, 2016; McMann et al., 2020). Additional checks and balances are therefore crucial for ensuring accountability and, consequently, for protecting the mechanisms that ensure that the poor can exercise an influence on politics (Persson et al., 1997). Proper checks and balances, such as legislative and judicial constraints on the executive, ensure that official bodies can discipline each other and prevent corrupt practices (Persson et al., 1997).

4 In this dissertation, I refer to economic inequality in broad terms - I take it to entail an unequal distribution of wealth and/or income
5 I use Stokes et al. (2013) definition of programmatic redistribution, that is, programmatic redistribution is assumed to occur when governments collect taxes and spend them on transfers and services that are structured around formalised, transparent, and publicly known rules.
6 I use Acemoglu and Robinson (2008) definition of elite capture, which refers to richer members of society taking action to increase their de facto political power at the expense of the poor.
7 I define corruption as the abuse of public office for private gain (Bardhan, 2022)
These constraints, furthermore, protect minorities from the “tyranny of the majority” (Lührmann et al., 2018). It is therefore imperative to distinguish between the *de facto* implementation of democratic institutions that enforce these additional constraints on the executive (hereafter “liberal democracies”) and the *de jure* adoption of such institutions, which does not usually involve the enforcement of such constraints (hereafter “electoral democracies”) (Lührmann et al., 2018). Chapter 1 relies on these theories and hypotheses that liberal democracies are more likely to translate economic growth into larger gains for lower income groups relative to higher income groups. In other words, a liberal democracy is more likely to foster an inclusive economic growth path (relative to other regime types). However, one may also expect this positive link to be limited in size, in absolute terms, for the two reasons that are outlined below.

Although effective checks and balances reduce the likelihood of elite capture, they do not prevent elites from acquiring critical political influence (e.g., through lobbyism and political donations). According to the elite-competition approach, democracy allows for a competing elite (or middle-class) to emerge. That elite demands political influence in order to promote and protect its economic interests (Ansell and Samuels, 2014). Although the winning coalitions in democracies are much broader than in autocracies, and usually account for median preferences, they can also accommodate the preferences of elites (Dorsch and Maarek, 2019). The overweighting of elite preferences may result in the unequal representation of the poor, akin to “affluence bias” (Gilens, 2012; Bartels, 2016; Lupu and Warner, 2022b,a). While a positive link between democracy and economic equality is more likely to obtain in liberal democracies, the affluence bias may weaken the effect in absolute terms.

Furthermore, the postulation of the link rests on the assumption that the poor prefer more redistribution (i.e., that they have uni-dimensional preferences), which need not be the case (Scheve and Stasavage, 2017). Although income remains an important determinant of redistributive preferences (Rueda and Stegmueller, 2019), other influential determinants also exist. These include prospects of upward mobility, which may lower support for redistribution (Piketty, 1995; Benabou and Ok, 2001; Alesina and La Ferrara, 2005; Rueda and Stegmueller, 2019). Alternatively, poor voters may vote according to their religious convictions rather than in line with their material interests (Roemer, 1998; Scheve and Stasavage, 2006; De La O and Rodden, 2008; Acemoglu et al., 2015). Poor voters may also vote along ethnic rather than class lines, especially in societies with high ethnic heterogeneity (Alesina et al., 1999; Glaeser and Alesina, 2004; Houle, 2017; Dahlberg et al., 2012). Likewise, poor voters’ support for redistribution may also depend on their social affinity with the groups that stand to benefit - the higher the perceived distance between the two, the less likely it is that redistribution will attract

---

8 This, of course, also applies to high-income voters. Although income remains an important determinant in this context as well, the redistributive preferences of high-income voters may also depend on their preferences of inequality (Rueda and Stegmueller, 2019). Some high-income voters may prefer lower levels of inequality to remedy the potential negative externalities (associated with high inequality) or because of their ideological convictions.
support (Shayo, 2009; Lupu and Pontusson, 2011; Gilens, 2012; Cavaillé and Trump, 2015). Finally, redistribution preferences are multidimensional, and some voters may be ambivalent about particular dimensions. For example, some voters may prefer lower income inequality, but may also be averse to government interventions. These attitudes, furthermore, depend on the political sophistication of voters (Yakter, 2023).

Altogether, democratic rule provides a range of mechanisms by which the poor can influence redistribution. Beyond multiparty elections, checks and balances are necessary to prevent the elite from blocking these mechanisms. In consequence, democratic institutions must be implemented de facto. Chapter 1 is premised on the expectation that liberal democracies foster more inclusive growth path than other regimes. This positive link may be limited in size, in absolute terms, either because of a bias in representation or because of a bias in redistributive preferences. At the same time, Chapter 1 proceeds from the expectation that democracies, on average, are no more likely to produce economic equality than other regime types. Chapter 2 focuses on one potential explanation, namely that forms of political corruption such as clientelism can undermine the ability of the poor to influence programmatic redistribution, a tendency that is especially pronounced in electoral democracies.9

Clientelism and Demand for Redistribution

The absence of appropriate checks and balances paves the way for elite capture, which can leave the poor with limited political influence (Acemoglu and Robinson, 2008; Albertus and Menaldo, 2014; Scheve and Stasavage, 2017). One way for the political elite to fractionalise the de facto political power of the poor is to engage in clientelism, in which they exchange money or material benefits in return for votes and political support often from the poor part of the electorate (Acemoglu and Robinson, 2008; Grzymala-Busse, 2008; Stokes et al., 2013; Albertus and Menaldo, 2014; Nichter, 2018).10 Accordingly, Chapter 2 focuses on the manner in which clientelist strategies influence the mechanisms by which elections channel demand for programmatic redistribution and public goods into the political system.

Clientelism thrives in both democracies and autocracies, but the incentives to pursue these strategies vary across regime types. In autocracies, political leaders use such strategies to preserve regime dependence, while leaders in democracies use them to

9 Political corruption is a broad concept that differs from bureaucratic corruption. The concept comprises both “extractive political corruption”, in which elected officials abuse their positions to extract resources from the state and from private citizens (e.g. bribery, embezzlement and fraud), and “power-preserving political corruption”, in which elected officials abuse their positions in order to secure political support and protection (e.g. clientelism) (Amundsen, 2019).

10 I define clientelism as a type of non-programmatic distribution, in which parties or political candidates distribute benefits to voters (or communities) on the condition that the voters reciprocate with votes or political support (Hicken, 2011; Stokes et al., 2013; Woller et al., 2022). Non-programmatic distribution generally lacks formalized, clear and publicly known rules, and it is subject to political manipulation and partisanship, which determine who gains access to transfers and benefits (Stokes et al., 2013). Clientelism can be subdivided further into “electoral clientelism”, which only operates during elections (in forms such as vote-buying), and “relational clientelism”, in which the benefits are extended beyond the duration of election campaigns (such as patronage, that is, jobs for political support) (Niehder, 2018)
expand their electoral support base (Hicken, 2011). In particular, electoral competition in democracies provides incentives for politicians to engage in clientelism in order secure the support of swing voters, to consolidate core support, or to increase turnout (Stokes et al., 2013). However, electoral competition can also undermine clientelism if politicians compete on programmatic platforms, at least if they can make credible promises about the corresponding policies (Keefer and Vlaicu, 2008). Generally, clientelism is more likely to thrive in democracies with high levels of economic inequality and poverty (Stokes et al., 2013; Nichter, 2018) and low trust in state capacity, tendencies that are particularly pronounced in young democracies (Keefer and Vlaicu, 2008; Bustikova and Corduneanu-Huci, 2017).

Clientelism in democracies constrains the de facto political power of the poor because it undermines elections as a vehicle for representation and as a mechanism for holding policymakers accountable and, furthermore, it impedes the quality of governance (Stokes et al., 2013; Bardhan, 2022; Lindberg et al., 2022). Accordingly, clientelism shapes both the extent to which politicians supply and voters demand programmatic redistribution (Acemoglu et al., 2011; Robinson and Verdier, 2013; Larreguy et al., 2016; Nichter, 2018; Ferguson et al., 2020). On the supply-side, clientelism may be a more efficient means of mobilising voters than making credible promises of programmatic redistribution (Lizzeri and Persico, 2001; Keefer, 2007; Keefer and Vlaicu, 2008; Khemani, 2015). Theories of retrospective voting predict that voters reward or punish the incumbent government depending on its performance in office, including the delivery of public service (de Kadt and Lieberman, 2020; De Vries and Solaz, 2017). On the demand-side, clientelist offers can therefore undermine demand for programmatic redistribution because the electorate may associates this with weak fiscal capacity and poor public service delivery (Weitz-Shapiro, 2012; Bustikova and Corduneanu-Huci, 2017; Boas et al., 2019). Chapter 2 takes this theoretical approach as its point of departure and hypothesises a negative association between clientelism and voter support for politicians who has also delivered redistributive programmatic policies.

Protest as an Alternative Way to Demand Redistribution

Yet elections are not the only way in which the poor can influence policymakers. Although voting is an important political action, political influence can also be exercised through other actions. Political participation has traditionally been subdivided into conventional forms, such as voting, supporting a political campaign, and running for office, and unconventional forms, such as boycotts, demonstrations, and protests (Barnes and Kaase, 1979). Indeed, protest is an alternative (or complementary) way for poor voters

---

11 In order to overcome information asymmetries, that is, to identify prospects, political parties make use of intermediaries or brokers (Stokes et al., 2013).

12 Ballot secrecy and legal enforcement should undermine clientelist practice, even in young democracies (Stokes et al., 2013; Nichter, 2018). However, certain forms of clientelism, such as relational clientelism, are more resilient to these institutions. In other words, when voters are in an ongoing relationship with politicians (or party brokers), they use alternative mechanisms to overcome the dual credibility problem, such as requesting benefits and declaring support (Nichter, 2018).
to exert de facto political power, when the electoral process is deemed insufficient (Harris and Hern, 2019; Booysen, 2007; Lipsky, 1968). The theoretical starting point of Chapter 3 is that voters can use protest as an alternative or complementary strategy to influence the distribution of resources in society.

In formal models of contentious politics, a group of citizens and the incumbent government have conflicting preferences over a policy space - the government seeks to maintain the status quo, while the citizens would like to see alternatives enacted (Shadmehr, 2014). The citizens can challenge the status quo by engaging in collective action,\(^\text{13}\) in forms such as protest, in order to demand the implementation of an alternative policy; the government can respond with concessions or repression. Although protest is a high-cost form of political action because it requires much more energy and time than its alternatives, such as voting (Tarrow, 2011; Harris and Hern, 2019), citizens often engage in protest to signal their political preferences (Lohmann, 1993; Booysen, 2007; Harris and Hern, 2019). According to the grievance-based theory, citizens engage in protest when a grievance is serious, such as high levels of inequality and poverty (Weede, 1987; Boix, 2003; Acemoglu and Robinson, 2006). According to the opportunity-based theory, citizens decide to protest when the expected benefits (e.g., policy improvements) exceed the expected costs (e.g., the time and effort spend on protesting) (Tilly, 1978).

Poor voters can therefore use protests as an alternative (or complementary) means of influencing policymakers. Protest can shape both the supply of and demand for programmatic redistribution. Protest can pressure policymakers directly to improve the supply of public services by raising the cost of repression through public disorder. But pressure can also be exerted indirectly through public opinion (Madestam et al., 2013; Wouters and Walgrave, 2017; Gillion and Soule, 2018). Moreover, protest can operate as a signalling game, in which a subset of the citizenry decides to protest in order to signal policy preferences and another subset observes the signal and update their preferences based on protest behaviour (Lohmann, 1994b,a). Specifically, protests can make policy issues, such as insufficient public services, more salient to the public, who may align their policy preferences to those of the protesters and support their demands (Lohmann, 1994b,a; Madestam et al., 2013; Gillion and Soule, 2018; Enos et al., 2019; Wasow, 2020; Reny and Newman, 2021). Information aggregation of this kind, that is, the use of protests to transmit information that affects the voting decisions of others, requires clear communication on the part of the protesters (Battaglini, 2017). Chapter 3 draws on this theoretical approach and hypothesises that protest causes shifts in public opinion that are contingent on the choice of protest tactics.

**RESEARCH DESIGN**

The dissertation employs quantitative methods in both observational and experimental research designs with a focus on causal inference, and the objective is to analyse the

\(^{13}\text{When they can overcome the collective action problem (Olson, 1965)}\)
links between democracy, programmatic redistribution, and economic inequality. The
dissertation, furthermore, examines these links both at the macro-level, that is, across
countries, and at the micro-level, that is, among individual voters in two selected electoral
democracies, namely Brazil and South Africa.

Case Selection

Brazil and South Africa are both interesting cases for a study of the mechanisms
behind persistent economic inequality in democracies. Brazil democratized in the 1980s,
and South Africa democratized in the 1990s. In both cases, there was an immediate
increase in the level of democracy that subsequently stalled or was even reversed (Figure
1a). Today, the two are classified as electoral democracies by V-Democracy (Boese et al.,
2022; Papada et al., 2023). This means that both countries have free and fair multiparty
elections. However, unlike liberal democracies, they both lack appropriate checks and
and/or fail to protect “an additional set of individual and minority rights beyond the
electoral sphere” (Lührmann et al., 2018, p. 4). Recent large-scale corruption scandals in
both countries, such the “Operation Car Wash” in Brazil and the “Zondo Commission” in
South Africa have supplied vivid examples of the inadequacy of the checks and balances
that are applied to elected officials.14 15 Widespread corruption have undoubtedly also
undermined the capacity of the two countries to implement fiscal (redistributive) policies
(Timmons and Garfias, 2015; Plagerson et al., 2019).

Brazil and South Africa have experienced rising or persistent economic inequality
since democratization (Figure 1b). Although income inequality in Brazil has decreased
slightly since the 2000s as a consequence of government programmes such as Bolsa
Família, inequality remains high, in part because of the limited progressivity of the tax
system (Chancel et al., 2022; Higgins and Pereira, 2014). Around a third of Brazilians
are estimated to live in poverty.16 Likewise, South Africa has failed to reverse the high
levels of inequality that it inherited from the apartheid regime. Despite efforts to expand
social welfare (Kroth et al., 2016; Plagerson et al., 2019), South Africa remains the most
unequal country in the world. In South Africa, the average income of the richest 10% is
60 times higher than that of the poorest 50% (Chancel et al., 2022). Consecutive
ANC governments have achieved real progress in various domains of social welfare and
succeeded in providing access to education, health, and basic public services to millions
of previously disenfranchised citizens (Plagerson et al., 2019; Lieberman et al., 2021), but
almost half of the population continues to live in poverty.17

14 Freedom House, Brazil 2023
15 Freedom House, South Africa 2023
16 According to a study that is based on a household survey which was conducted by the national statistics
agency “Instituto Brasileiro de Geografia e Estatística”, 29.6% of the Brazilian population was living in
poverty in 2021 with a monthly per capita income that is equivalent to R$497 or less; FGV Social Centro de
Políticas Sociais)
17 According to the national statistics agency “Statistics South Africa”, 49.2% of adult South Africans live in
poverty, defined by the upper-bound poverty line (equivalent to an income of 1,183 Rand per month or less;
Statistics South Africa)
In Brazil, the failure of social policies to remedy poverty partly explains the obdurate persistence of clientelist practices (Stokes et al., 2013; Nichter, 2018). Indeed political parties in Brazil often provide voters with benefits (through brokers) that are contingent on political support; 41% of the Brazilian population knew someone who had voted in exchange for political support, according to a survey from 2010 (Nichter, 2018, p. 16). Relational clientelism, in which benefits are extended beyond election campaigns, has been particularly resilient to economic development and improvements to electoral institutions (Nichter, 2018). In general, programmatic redistributive policies co-exist with widespread clientelist distribution, and Brazil provides an interesting case for studying voters’ responses to political candidates who use both clientelist practices and programmatic redistributive policies to mobilise electoral support.

In South Africa, the failure of social policies has sparked a “rebellion of the poor” (Alexander, 2010). Poor citizens protest regularly and, often, violently in order to voice their dissatisfaction with the inadequate provision of basic public service (Booysen, 2007; De Juan and Wegner, 2019; Paret, 2018; Lieberman et al., 2021). Indeed the disappointment with the postapartheid economic and political transformation of the country has fuelled these frustrations among the poor (Alexander, 2010; De Juan and Wegner, 2019; Burchardt, 2022). Moreover, widespread corruption has contributed to mistrust in the political system as well as to disbelief in elections as an effective means of holding politicians accountable (Harris and Hern, 2019; Bottkjaer and Justesen, 2021). On the whole, the combination of inadequate basic public services and the perceived deficiencies of electoral contests has prompted South Africans to turn to the streets to air their political demands. This makes South Africa an interesting case for a study of the effect of protest on public opinion.

---

18 E.g., in 2000, Brazil introduced electronic voting, which improved ballot secrecy, but it did not eradicate clientelism (Nichter, 2018)
**Figure 1**: Income Inequality and Democracy Level, Brazil and South Africa

(a) Liberal Democracy Index  
(b) Top 10% / Bottom 50% income gap ratio

**Note**: Figure 1b is based on data from the World Inequality Database (WID.world) who provide annual estimates of the distribution of income and wealth using concepts of income and wealth that are consistent with the macroeconomic national accounts (Chancel et al., 2022). The top 10% / bottom 50% ratio is the average income of the richest 10% in relation to the average income of the poorest 50%. Figure 1a is based on data from V-democracy who annually provide an index of the state of liberal democracy that captures both electoral and liberal aspects of democracy and goes from the lowest (0) to the highest (1) levels of democracy (Boese et al., 2022).

**Data**

The dissertation relies primarily on four datasets, which are derived from a wide range of sources. In **Chapter 1**, I construct a dataset that combines national income distribution data from more than 1,500 household surveys, collected by the World Bank, with regime information about 110 countries over the period between 1980 and 2016 from V-Democracy. **Chapter 2** relies on an original online survey in Brazil in 2021 (n = 1,600) that was conducted specifically for the purposes of the study. The analysis employs experimental designs to study the links between clientelism and programmatic redistribution. Similarly, **Chapter 3** is based on an original online survey. It was conducted in South Africa in 2022 (n = 3,200), and the data were collected for this specific analysis, which also employs experimental designs to study the effect of protest on public opinion. **In Chapter 3**, I also use spatial analysis to combine data on protest events in South Africa from the Armed Conflict Location and Event Data Project (ACLED) with face-to-face survey data from the South Africa Citizens Survey from 2018 (n = 13,000) that are based on geolocation. The purpose of using these data is to test the impact of actual protest events on support among citizens who reside in their vicinity.

**Methods**

Given the nature of the data and the cases, I apply quantitative methods, with a focus on causal inference in order to study the links between democracy, programmatic redistribution, and economic inequality at both the macro-level (across countries) and the micro-level (within countries). In **Chapter 1**, I use a dynamic panel-data model with interactions in order to determine whether the dynamics of the distributional impact of
economic growth within countries are conditioned by regime type. Although this method controls for several potential biases, such as country fixed effects and the dynamics of income distribution, it cannot be claimed to yield strong causal inferences; instead, it tests hypothesised relationships.

**Chapter 2** and **Chapter 3** are premised on methods that do produce strong causal inferences as well as on the examination of specific countries. These approaches generate further insights into the mechanisms that underlie the general relationships that are tested in **Chapter 1**. **Chapter 2** presents a conjoint experiment that involves two hypothetical political candidates whose policy mixes of clientelist and programmatic policies differ. The experiment makes it possible to estimate the causal effect of the conjoint feature, separately and in combination, on support (relative to a baseline), and it is especially suitable for studies of sensitive topics, such as clientelism (Bansak et al., 2021). In addition, the experiment includes a number of outcome questions that produce detailed insights into the mechanisms behind voter support, such as beliefs about fiscal capacity, corruption, and public-service delivery.

**Chapter 3** combines observational and experimental research designs. Spatial analysis is employed as part of a difference-in-difference approach in order to study the causal effect of protest events on support. Specifically, the analysis identifies the effect of protest events by interacting a spatial treatment with a time treatment. The spatial treatment is assigned to respondents who were living in the ward district in which a protest had occurred in a specific time window, and the time treatment is assigned to respondents who were interviewed over a set period after a protest had taken place. Moreover, the chapter draws on two survey experiments, a vignette and a conjoint. The vignette experiment tests the causal effect of protest images – respondents were randomly exposed to images from service-delivery protests. This procedure mimics the important channels by which citizens are exposed to actual protests, such as social media or news websites. However, in their essence, both protest events and images are compound treatments in which different pieces of information appear simultaneously. The conjoint experiment, therefore, is intended to untangle the causal effects of the different dimensions of protests, such as size, the nature of the grievance, blame, tactics, duration, and police involvement.

Overall, the cross-country (macro-level) approach in **Chapter 1** and the within-country (micro-level) approaches in **Chapter 2** and **Chapter 3** are complementary in a number of ways. First, the cross-country study is conducive to the testing of universal (macro-level) theoretical relationships (Coppedge, 1999; Gerring et al., 2022), such as the relationship between democracy and inclusive economic growth that is only observable at the country-level. However, this approach does not provide any insights into the specific components of democracy that drive the general relationship or into the mechanisms that underlie it. The within-country analyses in **Chapter 2** and **Chapter 3** thus dovetail into this approach by focusing on specific components and by investigating the underlying mechanisms in greater depth (Lieberman, 2005; Gerring, 2004). In particular, **Chapter 2** focuses on elections, and **Chapter 3** focus on protests. Both chapters also provide
explanations of the general relationship between democracy and inequality, in particular, by suggesting mechanisms for the general finding that democracies, on average, do not induce more equal societies. Second, one of the advantages of the within-country studies is that their higher internal validity enables causal inference, a deficiency of the cross-country study in Chapter 1. The cross-country study, on the other hand, has higher external validity, that is, its results are more generalisable (Coppedge, 1999; Gerring, 2004; Gerring et al., 2022).

**SUMMARY OF FINDINGS**

**Chapter 1** enquires whether democracies are better than autocracies at translating economic growth into income gains for the poorest, relative to the richest. In other words, the question is whether democracies embark on more inclusive growth paths than autocracies (growth that is associated with a decline in economic inequality). The analysis shows that democracies are no better than autocracies on the whole. However, when democracies are classified according to their de facto adoption of democratic institutions (Lührmann et al., 2018), it emerges that liberal ones do foster more inclusive growth than other regimes in the long run; however, the effect is small. Electoral democracies, conversely, perform no better than autocracies. These findings highlight the importance of the de facto adoption of democratic institutions. Although democratic rule is far from perfect, it is better than its alternatives, at least as far as inclusive economic growth is concerned. These findings partly reconcile the two strands of the literature that argue for (e.g., Meltzer and Richard 1981) and against (e.g., Ansell and Samuels 2014) the existence of a positive link between democracy and economic equality. The findings cohere with the redistributive approach because they show that liberal democracy is linked positively to inclusive growth. At the same time, they also cohere with the elite-competition approach, both by showing that the link in question is weak and by demonstrating that it is not observed in electoral democracies, in which elite capture is more likely.

In **Chapter 2**, I focus on an electoral democracy, Brazil, and test the impact of a prominent form of political corruption that flourishes when the de-facto adoption of democratic institutions lacks, namely clientelism. The analysis shows that clientelism adversely affects voter support for a political candidate who has also delivered programmatic redistribution. In fact, if a political candidate engages in both clientelist and programmatic redistribution, voters associate them with weak fiscal capacity, more widespread involvement in corruption, a lower likelihood of helping the poor, and a lower likelihood of delivering adequate public services, regardless of the candidates’ track record of providing programmatic policies. The analysis also shows that voters are more lenient towards clientelist distribution involving job offers (relative to cash handouts), especially pronounced among the poor voters. The findings, on the whole, chime with the literature that casts clientelism as a potential barrier to demand for programmatic redistribution (Berens and Gelepithis, 2019; Guerra and Justesen, 2022; Kyriacou, 2022). The findings suggest that clientelism can undermine the social contract between the
state and its citizens, and that low levels of programmatic redistribution may persist in an equilibrium that is difficult to upend, particularly in societies with high levels of inequality.

In Chapter 3, I examine another electoral democracy, South Africa, and test the impact of protest as an alternative way to influence policymakers to improve public services, when the de facto adoption of democratic institutions is hindered by an inadequate electoral arena. The analysis shows that poor voters may hold some de facto political power by virtue of protests when electoral competition lacks. However, the magnitude of that power depends on the manner in which the protesters communicate their grievances. Peaceful protest has the strongest potential to attract sympathy and support; violent protest appears to run the risk of a backlash. However, some factors may moderate these negative effects. The factors in question include blame attribution, a shared group identity, the nature of the grievance, and the size of the protest. The findings show that large-scale peaceful protests with blame attribution may, in particular, serve as an effective political tool that enables the poor to pile pressure on incumbents through public opinion. These findings pertain to the literature on the heterogeneous effects of protest on public opinion (e.g. Enos et al. 2019; Wasow 2020). The findings also point to the risk of a negative spiral of ineffective protest and persistent inequality.

CONTRIBUTION

This dissertation overall contributes to the literature on the relationship between democracy, programmatic redistribution and economic inequality, which has puzzled researchers for decades.\(^{19}\) Theoretically, the dissertation adds to the literature by characterising the de facto political power of the poor to demand programmatic redistribution as an important element of the relationship between democracy and economic inequality. In particular, the dissertation contains theoretical arguments about the manner in which the poor can engage in different political actions to influence (re)distribution as well as explanations of the failure of those efforts in the context of elite capture. Methodologically, the dissertation employs a wide range of quantitative methods, with a focus on causal inference, and it combines observational and experimental research designs as well as a macro-level and micro-level perspectives on the overarching research question. Empirically, the dissertation arrives at novel insights that are based on two original surveys that were conducted for these purposes of the research. Those studies include several experiments that were designed specifically to account for a new perspective on the literature. Substantially, the dissertation provides important insights on the causes of equilibria of persistent inequality and democratic backsliding. To be precise, I show that such equilibria are liable to emerge when the poor have limited access to channels by

\(^{19}\) E.g., Lipset (1959); Meltzer and Richard (1981); Roberts (1977); Romer (1975); Boix (2003); Acemoglu and Robinson (2000, 2001, 2006); Przeworski et al. (2006); Przeworski (2009); Scheve and Stasavage (2017); Albertus and Menaldo (2014); Acemoglu and Robinson (2008); Ansell and Samuels (2010, 2014); Acemoglu et al. (2015)
which they may influence policymakers. Furthermore, each of the chapters contributes to the important streams of the literature that are outlined below.

Chapter 1 contributes to the rich empirical literature on the effect of democracy on economic growth \cite{Barro1996, Weede1996, TavaresAndWacziarg2001, RodrikAndWacziarg2005, Rodrik2005, GerringAndPrzeworski2005, PerssonAndTabellini2006, PapaioannouAndSiourounis2008, Knutsen2013, Sen2013, MurtinAndWacziarg2014, Justesen2014, AcemogluAndWinston2019, Knutsen2021, GerringAndPrzeworski2022}, but moves beyond average growth rates and examines the distributional impact of growth. In other words, the chapter shows how democracy conduces, at least to some extent, to more inclusive growth than other regimes. To the best of my knowledge, this matter has not been subjected to empirical investigation in the literature.\footnote{BlaydesAndKayser\citeyear{BlaydesAndKayser2011} took an important first step by showing that democracies are better than autocracies at translating economic growth into calorie consumption, which they used as an alternative measure of transfers to the poor. But they did not study the effects of democracy on the income distribution directly.} Furthermore, the chapter contributes to the literature on the link between democracy and economic inequality. Despite the convincing theoretical arguments, there is no compelling empirical evidence for the proposition that democracy produces less economic inequality - at least, only when certain conditions are met \cite{BahamondeAndTrasberg2021, Wong2021, DorschAndMaarek2019, ScheveAndStasavage2017, AcemogluEtAl2015, AlbertusAndMenaldo2014, BlaydesAndKayser2011}. I add to this literature by showing that the positive link between democracy and equality is conditional on the de facto adoption of democratic institutions. Moreover, the analysis provides new insights by moving beyond broad measures of economic inequality (such as the Gini coefficient) by examining effects across the entire distribution of incomes.

Chapter 2 contributes to the literature on the relationship between clientelism and programmatic redistribution \cite{GuerraAndJustesen2022, CruzEtAl2021, FergussonEtAl2020, PellicerEtAl2020, MaresAndVisconti2019, Frey2019, Nichter2018, Kramon2017, Khemani2015, StokesEtAl2013, SugiyamaAndHunter2013, Zucco2013, AcemogluEtAl2011}. Part of the literature has focused on the effect of programmatic distribution on clientelism. The empirical evidence shows that programmatic redistribution may reduce the incidence of clientelist relationships \cite{Frey2019, SugiyamaAndHunter2013, Zucco2013}. Another strand of the literature focused on the impact of clientelism on the supply of and on demand for programmatic redistribution. Most of this literature concerns the supply-side, that is, the effect of clientelism on the supply of programmatic redistribution by politicians. The literature finds that clientelism tends to reduce incentives to provide programmatic redistribution \cite{Kyriacou2022, FergussonEtAl2020, Khemani2015, AcemogluEtAl2011}. Chapter 2 offers a different perspective on the issue by studying the demand-side and, in particular, by inquiring how clientelism shapes demand for political candidates who has delivered programmatic redistribution. This question has received less attention in the literature \cite{GuerraAndJustesen2022}. The chapter shows that clientelist strategies reduce voter support for politicians who also offer
programmatic redistribution. Moreover, the extant literature focuses almost exclusively on redistributive expenditures. Chapter 2 accounts for the problem of funding, that is, the tax schemes that are devised to fund public services, which also shape voters’ evaluations of candidates and their distributive policies.

Chapter 3 contributes to the literature on the effect of protest on public opinion (Madestam et al., 2013; Beber et al., 2014; Sangnier and Zylberberg, 2017; Gillion and Soule, 2018; Enos et al., 2019; El-Mallakh, 2020; Feinberg et al., 2020; Wasow, 2020; Reny and Newman, 2021; Hager et al., 2022; Dahlum et al., 2023). Scholars agree that the impact of protest on public opinion is conditional on the choice of protest tactics (Wasow, 2020; Enos et al., 2019; Feinberg et al., 2020). However, there is no consensus on the impact of violent protest - some have found a negative effect on public support (Muñoz and Anduiza, 2019; El-Mallakh, 2020; Feinberg et al., 2020; Wasow, 2020; Reny and Newman, 2021), while others have found a positive effect (Enos et al., 2019). The findings in Chapter 3 are in line some of the extant literature on the mixed effects of peaceful and violent protests. The chapter also adopts a fresh perspective on the findings on violent protest, which are also mixed. While violent protest can, on average, provoke a backlash, this effect is contingent on other attributes of protests, such as blame attribution, the nature of the grievance, and the size of the demonstration. The chapter, furthermore, develops a novel methodological approach by combining a difference-in-differences analysis that is based on geo-coded observational data with two original survey experiments. This approach makes it possible to test the general causal effects of exposure to actual protest events and images, which corresponds to the real mechanisms by which citizens observe protests in the streets and in the media. The design also makes it possible to untangle the causal effects of the different features of protests in these compound treatments (events and images). The analysis confirms that protests are indeed multidimensional.

CONCLUDING REMARKS

This dissertation addresses the puzzle of persistent economic inequality in democracies across the world. Its focus is on elite capture and the political counter-strategies of the poor. In theory, democracy should induce greater equality because poor citizens may be expected to enjoy unconstrained access to means of influencing the (re)distribution of resources in society. There are several ways, both conventional and unconventional, in which poor citizens can exert political influence in a democracy. First of all, conventional political action at the ballot box enables citizens to reward political candidates whose policies are aligned with their preferences for programmatic redistribution. However, this channel may be obstructed by the political elite through political corruption. When voting lacks efficacy for this reason, citizens can engage in more unconventional actions by taking to the streets and signalling their policy preferences through protest. Protests can pressure policymakers into improving programmatic redistribution, especially if they attract public sympathy and support through information aggregation. For this information-aggregation strategy to succeed, the protest signal must be sufficiently pre-
cise. If poor citizens lack the requisite political power, be it at the ballot box or in the streets, a democracy may descend into a negative spiral in which an unequal distribution of political power nurtures an unequal distribution of economic wealth and vice versa.

The three chapters confirm that democracy is compatible with high levels of inequality, especially when the de facto implementation of democratic institutions is somehow captured by the political elite. Clientelism is a common type of elite capture, and it thrives in unequal societies. The dissertation shows how clientelism can affect voter support for programmatic redistribution adversely – voters associate the prevalence of clientelism with weak fiscal capacity and poor public-service delivery. The dissertation also shows how protest is an alternative or complementary tool for influencing policymakers. These analyses show that clear communication and large-scale movements are indispensable for the effectiveness of protests in inducing long-term improvements to policies.

At a higher level of generality, it is possible for countries to become locked in an equilibrium of persistent economic inequality, low programmatic redistribution, and democratic backsliding. That equilibrium, once in place, can become rigid, especially when inclusive economic growth is not attained. Abundant explanations have emerged from the voluminous literature on these phenomena. Increasing economic inequality may polarise political opinion and cause poor citizens to vote against their own economic interests. At the same time, elite capture and rent-seeking behaviour flourish when inequality is high. This dissertation adds to these explanations by showing how the counter-strategies of the poor may fail, be it due to the inadequacy of electoral action or in consequence of the ineffectiveness of particular forms of protest. However, several questions remain to be answered, of which the most important by far is what alternative or complementary forms of political actions may prove effective in reversing persistent inequality across different democratic (as well as autocratic) settings.
REFERENCES


URL: https://doi.org/10.1080/02589001.2022.2035701


URL: http://www.jstor.org/stable/422240

URL: https://doi.org/10.1093/ej/ueaa112


URL: http://www.nber.org/papers/w26848


URL: https://doi.org/10.1016/j.jpubeco.2019.05.002


URL: https://doi.org/10.1146/annurev-polisci-060820-060910


URL: http://www.jstor.org/stable/j.ctt1q1xs6z


URL: http://dx.doi.org/10.1016/j.jdeveco.2015.07.002


URL: https://doi.org/10.1086/685451


URL: https://doi.org/10.4159/9780674982918

URL: https://www.sciencedirect.com/science/article/pii/S0305750X1830319X


**URL:** https://doi.org/10.1146/annurev-polisci-061014-101840


**URL:** https://www.sciencedirect.com/science/article/pii/S0167268123000100


**URL:** http://www.jstor.org/stable/43664332


REFERENCES


DEMOCRACY AND INCLUSIVE ECONOMIC GROWTH: A WEAK LINK

Abstract

Are democracies better than autocracies at translating economic growth into higher income gains for the poorest, relative to the richest? Theoretically, one would expect democracies to produce more inclusive growth patterns because democratic rule allows poorer citizens to exert a stronger influence on the distribution of resources in society. However, this paper shows that the empirical link between democracy and inclusive growth is weak. To test the link, I use a measure from V-Democracy that classifies countries into liberal democracies, electoral democracies, electoral autocracies and closed autocracies. This classification yields a more nuanced analysis than the use of dichotomous measures. Using a sample of 110 countries that covers the period from 1980 to 2016, I estimate the effect of economic growth on the income shares of different income groups, ranging from the poorest 10% to the richest 10%. I show that liberal democracies foster inclusive growth in the long term; the other regime types do not.

1.1 INTRODUCTION

In 2020, Oxfam Ibis published a report that carried a highly persuasive message: the 2,153 billionaires of the world own more wealth than the poorest 60%, which is equivalent to 4.6 billion individuals. Since 1995, the richest 1% have captured 40% of global wealth growth, while the poorest 50% have only captured 2% (Chancel et al., 2022). These figures show clearly that economic growth has not benefited everyone equally. The growing disparities within many countries have been associated with political polarisation, populist movements, and the erosion of social cohesion. The most abundantly covered events of the last decade include Brexit in the UK, the “Gilets Jaunes” movement in France, and the election of Donald Trump to the U.S. presidency in 2016,¹ all of which have been linked to rising inequality. At the same time, economists point to the mounting evidence that economic growth may be more fragile and less resilient when its benefits accrue primarily to the richest in society (e.g. Rajan 2011; Stiglitz 2015;

¹ Other widely covered events include the Capitol Hill riots of January 6, 2021, the election of Jair Bolsonaro in Brazil in 2018, and the Congress riots that took place in Brazil on January 8, 2023.
Ostry et al. 2019). Accordingly, international organisations and national politicians across the world have highlighted the need for inclusive economic growth in the future.2

Inclusive growth is usually referred to as a broad-based sharing of economic growth.3 But there is no unified approach to its measurement. Some scholars assign importance to poverty reduction in absolute terms, while others focus on poverty reduction in relative terms. I follow the latter approach because the recent emphasis on inclusive growth has coincided with rising inequality within many countries.4 Specifically, I follow the relative definition of pro-poor growth, which suggests that economic growth has to be associated with a reduction in inequality (Klasen, 2008). This said, I also use the absolute definition of pro-poor growth as a robustness check, in which I define inclusive growth in absolute terms as economic growth that is associated with an increase in the income of the poorest part of the population (Klasen, 2008). Despite the burgeoning literature on the link between growth and poverty reduction (Ravallion and Chen, 2003; Dollar and Kraay, 2002; Adams, 2004; Donaldson, 2008), little empirical research has been conducted on the factors that foster inclusive growth in relative terms.

In this paper, I focus on the impact of political regime types. Political regimes provide a fundamental structure for the distribution of political power and the aggregation of political preferences in society (Acemoglu et al., 2015). A rich body of literature has analysed the impact of democracy on average growth rates, but without reaching a consensus on the relationship (Barro 1996; Przeworski et al. 2006; Tavares and Wacziarg 2001; Gerring et al. 2005; Rodrik and Wacziarg 2005; Persson and Tabellini 2006; Papaioannou and Siourounis 2008; Knutsen 2013; Murtin and Wacziarg 2014; Justesen 2014; Acemoglu et al. 2019; Gerring et al. 2022). However, there is some evidence for the proposition that democracies and autocracies produce different types of growth. Democracies seem to foster growth that is more stable and more likely to be sustained in the long term (Weede 1996; Rodrik 2005; Rodrik and Wacziarg 2005; Sen 2013; Knutsen 2021). The present paper, therefore, intends to answer the following question: Is economic growth in democracies also more inclusive than in other regime types? To the best of my knowledge, this is the first paper to address this matter.

The theoretical literature refers to several potential reasons for which economic growth in democracies may be more inclusive than growth under other regimes. Democracies grant the poor the right to vote and thus the political power to influence the distribution of resources in society (Meltzer and Richard, 1981). Democracies may also invest more resources in human capital, broadly defined, because incumbents are accountable to larger constituencies than in autocracies (Bueno de Mesquita et al., 2005).

---

2 The examples include the UN Sustainable Development Goals, the World Bank, the OECD, the IMF, and the World Economic Forum.

3 According to the World Bank “Inclusive growth is growth that is broad-based across sectors and inclusive of a large part of the country’s workforce” (Ianchovichina and Lundstrom, 2009). According to the IMF “Inclusive growth is a broad-sharing of the benefits of, and the opportunities for, economic growth” (IMF, 2017). Finally, according to the World Economic Forum “Inclusive growth is a broad-based expansion of economic opportunity and prosperity.” (WEF, 2017).

4 E.g., Ostry et al. (2019).
Furthermore, democratic rule provides freedom of association, which enhances the bargaining power of low-income groups and may result in higher wages of these groups (Rodrik, 1999). Finally, checks and balances, including legislative and judicial constraints on the executive, may prevent the diversion of national wealth into corrupt practices (Barro, 1996; Persson et al., 1997; McMann et al., 2020).

However, these mechanisms are most likely to apply when democratic institutions are implemented de facto. Many regimes hold multiparty elections. However, in some countries, these elections are mere exercises in window dressing that only benefit authoritarian politicians (Lührmann et al., 2018). Even in democracies, multiparty elections may be compromised by fraud or vote buying (Acemoglu et al., 2015). Many democracies also suffer from weak constraints on the executive (Lührmann et al., 2018), which causes rent-seeking behaviours to become widespread. Such tendencies may altogether prevent the poor from influencing the political process. It is therefore important to distinguish between the de facto and the de jure implementation of democratic institutions. The distinction has important implication for the de facto political power of the poor. Altogether, one may expect that democracies that have implemented democratic institutions de facto are more likely to foster inclusive economic growth than other regimes.

I test this hypothesis by estimating how much different income groups gain from the growth of national income and by determining whether these gains differ across political regimes. This approach allows me to determine whether the growth of national income in democracies is more inclusive. Specifically, I estimate the effect of national income growth on the income shares of different groups, ranging from the poorest 10% to the richest 10%. Unlike other empirical studies, this paper examines impacts on the entire income distribution rather than on the Gini coefficient, which makes it possible to distinguish the income gains of the poorest from the income gains of other groups. Furthermore, I use a newly developed measure of regime types from V-Democracy (V-Dem), which discriminates between liberal and electoral democracies as well as between electoral and closed autocracies. According to that classification, multiparty elections are held in both liberal and electoral democracies. Liberal democracies provide additional civil and political rights as well as constraints on the executive. Other empirical studies on the link between democracy and inequality are based on simple dichotomous measures, which do not necessarily distinguish between high- and low-quality democracies. The empirical analysis is conducted by using within-country variation in a dynamic setup that is based on a panel of 110 countries that covers the period between 1980 and 2016.

The empirical analysis yields several interesting results. When countries are classified as democratic or autocratic, it emerges that, on average, democracies are no more successful than autocracies in fostering inclusive economic growth in relative terms. However, when democracies are subdivided into liberal and electoral regimes, it transpires that
liberal democracies foster inclusive growth, in relative terms, over the long run; electoral democracies do not. Universal suffrage and multiparty elections are insufficient – countries also need to ensure access to justice, transparent law enforcement, respect for personal liberties and the rule of law, and judicial as well as legislative constraints on the executive. In other words, civil and political human rights, coupled with constraints on the executive, mean that liberal democracies exhibit more inclusive distributional tendencies.

This said, the distributional impact of national income growth is small in absolute terms. Although liberal democracies perform significantly better at translating growth into income gains for lower-income groups, the long-term improvements are small. For example, a permanent increase in national income will increase the income share of the poorest 10% by 2.8% over a 30-year period, and decrease the income share of the richest 10% by 1%. The resultant changes in the income distribution are not critical, which indicates that, even though a liberal democracy is more inclusive than other regimes, the mere fact of a state operating as a liberal democracy does not guarantee fundamental long-term changes in the income distribution. This finding may be attributed to the tendency that, even in liberal democracies, political preferences are unequally represented (Gilens, 2012; Bartels, 2016; Lupu and Warner, 2022b,a). Consequently, democratic rule is far from perfect when it comes to inclusive growth; this said, it is better than the alternatives.

The paper contributes to two strands of the literature. First, the paper contributes to the literature on the impact of democracy on economic growth (Barro, 1996; Weede, 1996; Tavares and Wacziarg, 2001; Rodrik and Wacziarg, 2005; Rodrik, 2005; Gerring et al., 2005; Przeworski et al., 2006; Persson and Tabellini, 2006; Papaioannou and Siourounis, 2008; Knutsen, 2013; Sen, 2013; Murtin and Wacziarg, 2014; Justesen, 2014; Acemoglu et al., 2019). It goes beyond average growth rates and addresses the distributional impact of growth. While there is extensive research on the drivers of average growth rate, there is limited empirical research on inclusive economic growth. Second, the paper contributes to the literature on the impact of democracy on economic inequality (Acemoglu et al., 2015; Dorsch and Maarek, 2019; Bahamonde and Trasberg, 2021). It provides new insights to the research question by moving beyond broad measures of income inequality, such as the Gini coefficient, and the simple dichotomous measures of democracy that are used widely in the literature. Specifically, the empirical part of the paper focuses on the impact of growth the entire income distribution in democracies, with a regime measure that subdivides democracies into two groups depending on the de facto adoption of democratic institutions.

The rest of the paper is structured as follows: The next section summarises the main findings from the extant empirical literature. Section 1.3 considers the theoretical arguments about the association between democracy and inclusive economic growth. Section 1.4 and 1.5 discuss the data and the methodology that are used in the empirical
analyses. Section 1.6 presents the results, and the final section discusses the main findings and concludes.

1.2 INSIGHTS FROM THE LITERATURE

Scholars have debated the question of whether democracy improves economic growth rates for decades without reaching a consensus. A number of studies indicate that democracy fosters growth (Rodrik and Wacziarg 2005; Persson and Tabellini 2006; Papaioannou and Siourounis 2008; Knutsen 2013; Acemoglu et al. 2019), while others report no relationship or even an inverse association (e.g. Barro 1996; Przeworski et al. 2006; Tavares and Wacziarg 2001; Gerring et al. 2005; Murtin and Wacziarg 2014). Although the literature has failed to establish robustly that democracy has an impact on average growth rates, there is some evidence that democracies produce different patterns of growth. There are differences in the volatility of growth, with autocracies exhibiting larger variation than democracies (Weede 1996; Rodrik and Wacziarg 2005; Knutsen 2021). The literature has also identified differences in the ability to sustain economic growth (Rodrik, 2005; Sen, 2013). Moreover, Przeworski et al. (2006) showed that growth in dictatorships is more labour intensive, with lower output per worker, than in democracies. In an influential work, Acemoglu and Robinson (2012) argued that inclusive institutions are essential for sustaining economic growth in the long run. However, it remains unclear whether democracies are also more successful in ensuring inclusive economic growth, that is, growth that benefits low-income groups relative to high-income groups.

Although the focus has increasingly shifted to inclusive economic growth,\(^8\) few studies have examined the role of democracy. The most closely related study is Blaydes and Kayser (2011). The authors showed that democracies are better than autocracies at translating economic growth into calorie consumption, an alternative measure of transfers to the poor. In the paper, they argued that: "In sharp contrast to the consumption of material goods or accumulation of wealth, for which humans have no upper bound on their ability to achieve, biological limits make it impossible for a small number of individuals to consume most of a nation’s calories" (Blaydes and Kayser, 2011, p. 889). They claimed that there is a strong correlation between average calorie consumption and income inequality, but they did not back this claim with empirical evidence. This measure is, moreover, most closely related to the absolute definition of pro-poor growth.

Although the empirical literature on the link between democracy and inclusive economic growth is limited, the impact of democracy on economic inequality has been studied extensively. However, no compelling evidence of a relationship has emerged from those analyses. Acemoglu et al. (2015) reviewed the empirical literature and concluded that it had produced ambiguous results.\(^9\) Moreover, they argued that much of that literature is plagued by econometric issues because many studies neither include confounding country-specific factors in their panel settings nor point to identification

---

\(^8\) E.g., Anand et al. (2013); Sen (2014); Aoyagi and Ganelli (2015); Jalles and de Mello (2019)

\(^9\) So much is also confirmed by the meta-analysis by Gerring et al. (2022)
strategies that account for the possibility that democracy is endogenous. Acemoglu et al. (2015) addressed these issues by using dynamic panel models with country- and time-fixed effects, but found no reduced-form evidence of an effect of democracy on the Gini coefficient.

Yet recent research has highlighted the importance of conditional factors in the relationship between democracy and inequality. Those factors also supply potential explanations for the null findings that emerge from the empirical literature (Dorsch and Maarek, 2019; Bahamonde and Trasberg, 2021). Dorsch and Maarek (2019) showed that a positive link between democracy and economic equality only applies to initially unequal autocracies when they leverage redistributive mechanisms (higher fiscal capacity to provide pro-poor public goods). The link is negative in initially equal autocracies by virtue of the operation of market-opportunity mechanisms (more free-market policies). They referred to this finding as a “middle-ground” result. Bahamonde and Trasberg (2021) found further support for the market-opportunity theory. They showed that democracies with high state capacity may be associated with higher levels of income inequality because they provide ideal settings for the protection of property rights and the security of contracts, which attract foreign direct investments and precipitate financial development. Such developments, in turn, result in higher inequality. Their findings, however, are at odds with the findings of Dorsch and Maarek (2019) who identified a positive link and pointed to redistribution mechanisms in initially unequal countries. These various authors agree on the importance of conditional factors for the impact of democracy on inequality, but they do not arrive at a consensus on all of the applicable mechanisms.

Many studies in this strand of the literature examine the redistribution mechanisms in question by testing the impact of democracy on redistribution, education, and health outcomes. Acemoglu et al. (2015) found that democracy is associated with higher levels of redistribution. Albertus and Menaldo (2014) argued that the link between democracy and redistribution only obtains when elites are politically weak during democratisation processes. Furthermore, Ansell and Samuels (2014) showed that the effect of democracy on fiscal redistribution is conditional on economic inequality - higher levels of economic inequality weaken the redistributive effects of democracy.10 Turning to education, a number of studies show that democracy exerts a positive influence on education spending as well as on primary- and secondary-school enrolment (Lake and Baum 2001; Baum and Lake 2003; Stasavage 2005; Harding and Stasavage 2014; Acemoglu et al. 2015; Dahlum and Knutsen 2017). For health outcomes, the evidence shows a positive correlation between democracy and life expectancy (Wigley and Akkoyunlu-Wigley, 2011) as well as democracy and reductions in infant mortality (Gerring et al., 2012, 2022).

Altogether, the empirical literature indicates that democracies may be associated with higher levels of fiscal redistribution and improvements in education and health outcomes,

10 Scholars have also argued that electoral systems, proportional ones in particular, matter for the impact of democracy on redistribution (e.g., Iversen and Soskice 2006)
but democracy has no general impact on economic inequality. In recent research, these null findings have been attributed to conditional factors such as the heterogeneity of regimes, in terms of initial inequality and state capacity (Dorsch and Maarek, 2019; Bahamonde and Trasberg, 2021). I also proceed from the premise that regimes are heterogeneous; in particular, I emphasise that democracies are heterogeneous. Dorsch and Maarek (2019) argued that the impact of democracy on inequality is conditional on the initial inequality levels that obtain in autocracies (prior to democratisation). I add that this impact is also conditional on the de facto implementation of democratic institutions (after democratisation). Although most studies rely primarily on crude dichotomous conceptualisations and measures, I distinguish between the de jure and de facto implementation of democratic institutions. Furthermore, I argue that a more granular approach is needed if the impacts of democracy on income inequality are to be identified. Past studies have relied solely on broad measures such as the Gini coefficient, which does not necessarily reveal exact changes in income distribution. For example, a shift in the Gini coefficient can result from income gains among the poorest or from gains that accrue to the middle classes, or movements in opposite directions may net out. I contribute to the literature by proposing an alternative approach which goes beyond broad measures of income inequality and crude dichotomous measures of democracy. Specifically, I examine the impact of growth in democracies across the entire income distribution. I use a regime measure that subdivides democracies into two groups, depending on the de facto implementation of democratic institutions.

1.3 DEMOCRACY AND INCLUSIVE ECONOMIC GROWTH

Why Democracy May Foster Inclusive Growth

Several theoretical arguments suggest that democracy should foster more inclusive growth than autocracy. At least three mechanisms find support in the theoretical literature. The first mechanism links democracies to higher levels of redistribution. In Meltzer and Richard (1981)’s theoretical framework, elections and universal suffrage extend political power to the poorer segments of society, which may increase demand for redistribution. Extending the franchise increases the number of voters with relatively low incomes, thus shifting the position of the median voter downward in the income distribution. More poor voters increase demand for pro-poor policies, which are typically associated with progressive taxation and social spending, which can narrow the gap between rich and poor (Meltzer and Richard, 1981; Albertus and Menaldo, 2014; Acemoglu et al., 2015). In theory, this mechanism will be enforced under economic expansion. Economic expansion generates a higher tax base for redistribution, and the political cost of raising taxes or increasing spending may also be lower during expansionary periods (Stevenson, 2001; Kayser, 2009; Blaydes and Kayser, 2011).

11 E.g., Acemoglu et al. (2015); Dorsch and Maarek (2019); Bahamonde and Trasberg (2021)
The second mechanism associates democracies with larger investments in broad-based public goods. Since incumbents in democracies are accountable to larger groups in society, they are forced to invest in broad-based human capital through the provision of public services such as education and healthcare (Lake and Baum 2001; Baum and Lake 2003; Stasavage 2005; Gerring et al. 2005). As noted by Bueno de Mesquita et al. (2005), the incumbent must rely on some political coalition, that is, on a group of citizens whose support is essential for the incumbent to stay in office. In their theory, the provision of public goods depends on the size of this winning coalition. As the size of the coalition increases, the incumbent becomes accountable to a larger group in society, and will rely more heavily on public goods, which provide a relatively cheap means of rewarding coalition members when compared to private goods. Democracies are based on large winning coalitions, while autocratic regimes rely on small coalitions. Democratic governments are thus more likely to invest in human capital through the provision of public services. This mechanism is also more likely to be enforced under economic expansion as this increases the pool of available resources to invest.\(^\text{13}\)

The third mechanism is premised on the connection between democracy and higher wages for middle- and low-income groups (Rodrik, 1999; Blaydes and Kayser, 2011). Democracies provide a range of civil and political rights, such as those of freedom of assembly and association, which enhance the bargaining power of employees and thus provide a solid basis for trade unions and collective bargaining, which may result in legislation that is favourable to workers (Rodrik, 1999). In addition, democracies are more likely to observe the rule of law to protect workers’ rights, which also strengthens the bargaining power of labour (Rodrik, 1999). The operation of this mechanism is also more pronounced during expansionary periods. There are two reasons for this tendency. First, more resources are available for wage increases. Second, economic expansion may strengthen the bargaining power of workers as a consequence of the expansion of employment opportunities. Holding all else equal, lower-income groups should therefore gain more from economic growth in democracies than in autocracies, which do not guarantee these rights.

**Why Democracy May Not Foster Inclusive Growth**

Although all of these mechanisms serve to channel the political preferences of the poor into the political system, there are mechanisms that can hinder their operation. The political and economic elite may invest in *de facto* political power to limit the political influence of the poor. Even a democracy may be captured by elites in this fashion (Acemoglu and Robinson, 2008; Albertus and Menaldo, 2014). According to the elite-competition approach, which was developed by Ansell and Samuels (2014), democracy

\(^{13}\) Furthermore, the specific bundle of goods depends on the personal tastes and needs of the coalition members (Bueno de Mesquita et al., 2005). If the winning coalition mostly includes low-income groups, they will prefer public services that benefit the poorer segments of society. If the winning coalition is comprised primarily of members of the middle classes, on the other hand, they may favour public services that mainly serve them. This proposition was formalized in the "Director’s Law" by Stigler (1970), which says that democracies are more likely to redistribute from rich and poor to middle-income groups.
allows a new competing elite to emerge. That elite seeks political influence in order to promote and protect its economic interests, and it typically has little appetite for fiscal redistribution from the rich to the poor. Along the same lines, market-opportunity theorists argue that democracies provide an environment that is more conducive to financial investment and development, which augment the ability of a competitive elite to accumulate wealth (Piketty, 2014; Bahamonde and Trasberg, 2021), say through rent-seeking behaviour.

Corruption and rent-seeking behaviour may flourish when the level of democracy is low. The mere presence of elections shortens the time horizons of incumbents and increases the political benefits of engaging in different forms of corruption (McMann et al., 2020). Forms of political corruption such as clientelism supply a salient example. Clientelism may be more effective in attracting political support for policymakers than credible promises of programmatic redistribution (Keefer, 2007; Hicken, 2011; Bustikova and Corduneanu-Húc, 2017). Although multiparty elections are a key means of controlling policymakers, they are far from adequate. Additional checks and balances are crucial for the prevention of elite capture and rent-seeking behaviour in democracies (Persson et al., 1997). Therefore, they are also critical for the theoretical link between democracy and inclusive economic growth.

De facto vs. De Jure Implementation of Democratic Institutions

The de facto implementation of democratic institutions, which goes beyond multiparty elections and subjects the executive to judicial and legislative constraints, makes it more difficult for the political and economic elite to pursue rent-seeking strategies. Consequently, the efforts of the poor to exert political influence on the redistribution of resources in society through the mechanisms that were described in Section 1.3 rest on a firmer footing. Accordingly, it is important to distinguish the de facto implementation of democratic institutions (hereafter, “liberal democracy”) from their de jure implementation (hereafter, “electoral democracy”; Lührmann et al. 2018). The previous paragraphs, altogether, generates several expectations. On the one hand, democracies, on average, can be expected to be no more likely to foster inclusive growth than autocracies. On the other hand, liberal democracies may be expected to be more likely to foster inclusive growth than regimes of other types. I summarise these expectations in the hypotheses that follow.

H₄: Democracies are, on average, no more likely to translate economic growth into gains for lower-income groups, relative to higher-income groups, than autocracies.

H₅: Liberal democracies are more likely to translate economic growth into gains for lower-income groups, relative to higher-income groups, than regimes of other types.
It is important to note that, while de facto democratic institutions are more likely to foster inclusive growth than other regimes, the size of the effect may be modest in absolute terms. There are at least two justifications for this expectation. First, although de facto democratic institutions are more likely to prevent elite capture, they do not prevent the elite from acquiring critical political influence, say through lobbying or political donations (Gilens, 2012; Bartels, 2016; Lupu and Warner, 2022b,a). Second, poor voters need not favour redistribution. Although income remains an important determinant of redistributive preferences among poor voters (Rueda and Stegmueller, 2019), the preferences in question may also depend on religion, ethnic heterogeneity, social identity, and political sophistication (Alesina and Giuliano, 2009; Acemoglu et al., 2015; Houle, 2017; Shayo, 2009; Yakter, 2023).

1.4 DATA AND DESCRIPTIVES

Defining Inclusive Economic Growth

Inclusive growth is usually referred to as the sharing of economic growth on a broad basis, and most international organisations and scholars agree about this general conceptualisation. However, there is no unified approach to the measurement of inclusive growth, and different suggestions have been made in the literature. Some scholars subscribe to an absolute definition of pro-poor growth (e.g. Anand et al. 2013; Aoyagi and Ganelli 2015), while others adopt the relative definition of pro-poor growth (e.g. Balakrishnan et al. 2013; Sen 2014; Kireyev and Chen 2017). The absolute definition of pro-poor growth implies that the poor benefit from economic growth in absolute terms (Klasen, 2008), while the relative definition implies that the incomes of the poor should grow more rapidly than average incomes. In other words, according to the relative definition, growth must be associated with a reduction in economic inequality (Klasen, 2008). Inclusive economic growth has been highlighted as a response to the challenge of rising economic inequality in many countries. Accordingly, I rely mainly on the relative definition. Specifically, I define inclusive growth as economic growth that is associated with a reduction in income inequality, and I measure it by estimating the link between economic growth and the income distribution. I use the absolute definition of pro-poor growth as a robustness check. To that end, I define inclusive growth in absolute terms, that is, as

---

14 Electoral systems may also matter. Proportional systems may induce more equal representation than majoritarian ones because a larger fraction of the electorate is represented in the legislature (Lupu and Warner, 2022b,a)

15 According to the World Bank “Inclusive growth is growth that is broad-based across sectors and inclusive of a large part of the country’s workforce” (Ianchovichina and Lundstrom, 2006). According to the IMF “Inclusive growth is a broad-sharing of the benefits of, and the opportunities for, economic growth” (IMF, 2017). According to the World Economic Forum “Inclusive growth is a broad-based expansion of economic opportunity and prosperity.” (WEF, 2017).

16 For example, the IMF published their “IMF Annual Report 2018”, which focused on making growth inclusive in order to address inequality (IMF, 2018). The OECD has published a report “Opportunities for All: A Framework for Policy Action on Inclusive Growth” from 2018, where they also highlight inclusive growth as a response to rising inequality in many countries. OECD 2018. Likewise, the World Economic Forum published a report “The Inclusive Growth and Development Report 2017” that highlighted rising inequality in countries as a challenge that inclusive growth should overcome WEF 2017.
economic growth that is associated with an increase in the average income of the poorest segment of the population. I measure this by reference to the link between growth and increases in the average incomes of the poorest. The main difference between the relative and the absolute approach is that the latter does not impose any restrictions on income inequality – growth can be inclusive even when the income gap is widening. The data are described in more detail in the subsections that follow.

Dependent Variables

For my dependent variables, I use data on income shares across deciles from the World Bank. Those data capture the share of the total income of a country that is held by individuals in each income decile. The data are from PovcalNet, a World Bank database of nationally representative household surveys that are used to estimate poverty and income inequality. PovcalNet covers per capita household disposable income (or consumption expenditure) and distributional data (converted into 2011 international PPP dollars) from more than 1,500 household surveys that were conducted in 167 countries over the period between 1979 and 2017. In order to ensure the sufficiency of the time series for each country, I include only countries for which a minimum of three surveys are available. Moreover, no more than five years must have lapsed between each such survey for a country to be included in the study sample. I thus arrive at a sample of 110 countries that covers the period between 1980 and 2016. For the robustness checks, I rely on the absolute definition of pro-poor growth. In that context, I use the average income of the poorest 10% as an additional dependent variable.

The main advantage of the use of income shares is that it enables me to assess impacts across the entire income distribution. For instance, I can distinguish between the income gains of low- and middle-income groups. No such distinction can be drawn if broader measures of inequality, such as the Gini coefficient, are used because shifts can result from gains that accrue to the poor or to the middle classes (Blaydes and Kayser, 2011). Nevertheless, data of this kind are not without limitations. First, survey designs and methodologies can differ between countries, which reduces cross-country comparability. However, according to the World Bank, these problems diminish as survey methods improve and become more standardised. Furthermore, in order to maximize comparability between and within countries, I only use data from PovcalNet and do not add data from other sources. Second, the under-reporting of income and selective compliance may cause measurement errors and is unlikely to be distribution neutral. Generally, survey data may underestimate income inequality (Piketty et al., 2018). Third, there are discrepancies between the micro survey data and the macro national accounts. There is no reason for these sources to be closely matched because they are premised on

---

17 PovcalNet
18 E.g., UNU-WIDER collect household survey data from a number of different sources including the OECD, the Luxembourg Income Study, national statistical offices, the World Bank, and such like. These surveys differ in, among others, the concept of income and the statistical units that they adopt, which makes it difficult to use different sources within and across countries.
different concepts and draw on different methods, but large discrepancies may reflect measurement errors. Fourth, surveys are not available on a yearly basis for all countries. I thus only use five-year averages.

**Independent variables**

My main independent variable is a measure of the level of democracy from Varieties of Democracy (V-Dem), which classifies countries into different regime types. More specifically, I use the V-Dem measure “Regimes of the World” (RoW) that classifies countries into liberal democracies, electoral democracies, electoral autocracies, or closed autocracies (Lühmånn et al., 2018; Coppedge et al., 2019). V-Dem defines a democracy as a state that conducts de facto multiparty, free, and fair elections and which meets a minimum threshold that is based on Dahl’s institutional prerequisites for polyarchy (Lühmånn et al., 2018, p. 3).

Democracies can be liberal or electoral. Liberal democracies guarantee access to justice, transparent law enforcement, observance of the principles of respect for personal liberties and the rule of law, and the enforcement of judicial and legislative constraints on the executive. Electoral democracies do not exhibit at least one of these features. Furthermore, V-Dem defines an autocracy as a state that does not hold de facto multiparty, free, or fair elections or does not meet Dahl’s institutional prerequisites for polyarchy. Autocracies can be electoral or closed. An electoral autocracy holds de jure multiparty elections for the chief executive and the legislature. There are no multiparty elections in closed autocracies. In the analysis, I use both the dichotomous measure of democracy and the classification of regime types.

The measurement of democracy is the subject of a long-running discussion. The most appropriate measure depends on the research question. The main advantage of using RoW in my setting is that the classification of regimes is based on the de facto implementation of democratic institutions and processes rather than their de jure implementation (Lühmånn et al., 2018, pp. 3-4). As outlined in the theoretical sections of this chapter, this distinction is important because the de facto adoption of democratic rule is more likely to prevent elite capture. The RoW measure agrees on around 90% of the country-years regime classification (democracy/autocracy) with other important dichotomous measures such as Cheibub et al. (2010), Boix (2003), or Polity IV (Lühmånn et al., 2018, p. 9). Yet there are differences concerning a number of cases, primarily where de facto practice deviate from de jure standards (Lühmånn et al., 2018, p. 12).

---

19 PovcalNet
20 Dahl’s theory of polyarchy posit that a democracy is based on six institutional guarantees: elected officials, free and fair elections, freedom of expression, alternative sources of information, associational autonomy, and inclusive citizenship (Dahl, 1998)
21 Additionally, V-Dem also classify lower- and upper-bound countries in each category, which makes it possible to work with a more nuanced notion of the level of democracy (Lühmånn et al., 2018, p. 6).
22 RoW agrees with Cheibub et al. (2010) on 89% of the cases. Most of the disagreements are over country-years that Cheibub et al. (2010) coded as democratic and which RoW codes as autocratic. The discrepancy may be due to Cheibub et al. (2010)’s use of a lower threshold for democracy (Lühmånn et al., 2018, p. 10). RoW agrees with Polity IV on 94% (Lühmånn et al., 2018, p. 11). Once more, most of the disagreements have to do with RoW autocracies being coded as democracies in Polity IV.
RoW is, to the best of my knowledge, the most comprehensive classification of *de facto* regime types.

The second key variable is *per capita growth in Gross National Income (GNI growth)*, which is derived from the World Development Indicators. GNI is equal to Gross Domestic Product (GDP) plus net foreign income. It reflects the income of a country more accurately than GDP and is thus a superior measure for analysing the distribution of income (Piketty et al., 2018). A country with large income outflows can have a large GDP without being able to distribute much to its citizens (Piketty et al., 2018). In the analysis, I interact GNI growth with regime type and estimate the impact on the income distribution.23

**Control variables**

Several time-varying control variables are also included in the analysis. In all baseline specifications, I include *GDP per capita* in constant 2010 US dollars (in logarithm) from the World Development Indicators (WDI) in order to account for the development levels of countries, which may affect the emergence and the survival of democracy (Przeworski et al., 2006) as well as the income distribution (Kuznets, 1955). In addition, I test the robustness of the baseline specifications by adding multiple controls. These include *oil rents* as a percentage of GDP, as reported by the WDI. Oil rents are associated with rent seeking, which may affect both regime stability and the income distribution. Furthermore, I include measures of *population growth*, *urbanisation* (the share of the population that lives in urban areas), and *structural transformation* (manufacturing value added as a percentage of GDP), which may all affect both democratisation and the income distribution. Declines in population growth, increased urbanisation, and industrialisation may all be associated with democratisation (Przeworski et al., 2006) as well as with income gains for the poor and the middle classes.

Finally, I add a number of regime-related factors. These include *regime durability* from Polity IV, which counts the number of years since the last regime change; *party orientation* from the Database of Political Institutions, which is a dummy that indicates whether the incumbent political party is left wing; *state fiscal capacity* from V-Dem, which is an expert-based rating of the fiscal capacity of a state; and *quality of government*, which is an International Country Risk Guide indicator of government quality that accounts for corruption, law and order, and bureaucracy. I include these measures in order to rule out the possibility that it is either regime stability, political orientation, state capacity, or quality of government that affects the income distribution (rather than regime type).24

However, all of these controls are only included as robustness checks in order to avoid the issue of over-controlling (cf. Knutsen 2021).

---

23 All of the results are robust to using GDP per capita growth instead of GNI per capita growth.

24 Moreover, I would liked to control for ethnic and religious heterogeneity, which make political regimes less stable (Przeworski et al., 2006) and may reduce demand for redistribution as discussed in the theoretical part. However, the data at hand (e.g. the measure of ethnic fractionalisation) has no variation over time, and are thus already captured by the country-fixed effects.
Descriptive Statistics

Table 1 summarises the descriptive statistics for the income shares (only the top and the bottom 10% are displayed to save space), for per capita GNI growth, and for GDP per capita across regime types. The average income shares do not differ substantially between regimes – on average, the poorest 10% hold around 2% of total income, and the richest 10% hold approximately 30%. The income distribution is slightly more unequal in electoral democracies and electoral autocracies, while liberal democracies and closed autocracies are around the same levels and are slightly more equal. However, there is between-country variation for all regime types. Electoral autocracies exhibit the highest between-countries variation in the income shares of the poorest 10%, with a range of 0.02% to 5%, and electoral democracies have the highest between-countries variation for the richest 10%, with a minimum of 20% and a maximum of nearly 60%. Variation within countries is generally lower, in line with the tendency of income distributions to change slowly.

All regimes exhibit average GNI per capita growth of between 1% and 2%, but there is considerable variance between and within countries. Within countries, liberal democracies have the lowest volatility. They are followed by electoral democracies, closed autocracies, and electoral autocracies, which have the highest volatility. Liberal democracies exhibit the lowest between-countries variation, followed by electoral autocracies, electoral democracies, and closed autocracies. Turning to per capita GNI growth, liberal democracies seem to be the most homogeneous group and have the least volatile growth. The per capita GNI growth of electoral autocracies is the most volatile, and closed autocracies are the most heterogeneous group.

Liberal democracies have the highest average GDP per capita. They are followed by closed autocracies. There is between-countries variation in both groups. Electoral democracies and electoral autocracies have the lowest average GDP per capita, and both seem to be relatively homogeneous as groups. Overall, there are equal and unequal countries in all regime-type groups. The same is true of developed and developing countries. Section A.1 in the Supplementary Material contains a full list of countries that have adopted each type of regime.

I also examine the differences between regime types by reference to four additional measures, all of which are related to the theoretical framework (Section 1.3). The four are redistribution, broad-based human capital, workers’ rights, and corruption. Figure 2 shows the average values (with confidence intervals) across regime types for selected measures of each of the mechanisms. Redistribution is captured by the difference between gross and net income inequality as reported by Swiid (Solt, 2020). Broad-based human capital is captured by an index of educational equality that is compiled by V-Dem. Workers’ rights are captured by union density as reported by the ILO. The political corruption index originates from V-Dem. Liberal democracy clearly differs from the other regime types on most dimensions, with higher levels of redistribution, equal access to education, and lower corruption. However, liberal democracies do not seem to be associated with
exceptional union density. Interestingly, the descriptive statistics also show that electoral democracies do not, as a general matter, differ substantially from autocracies. This finding once more highlights the importance of distinguishing between the de jure and the de facto implementation of democratic institutions.
Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (overall)</th>
<th>Std. dev. (between)</th>
<th>Std. dev. (within)</th>
<th>Min</th>
<th>Max</th>
<th>Obs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal democracies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income share (%) of the poorest 10%</td>
<td>2.75</td>
<td>0.86</td>
<td>0.84</td>
<td>0.21</td>
<td>0.86</td>
<td>4.59</td>
</tr>
<tr>
<td>Income share (%) of the richest 10%</td>
<td>27.53</td>
<td>6.74</td>
<td>7.15</td>
<td>1.48</td>
<td>20.40</td>
<td>52.66</td>
</tr>
<tr>
<td>Avg. income of poorest 10% (2011 PPP US$)</td>
<td>3,691</td>
<td>2,287</td>
<td>2,384</td>
<td>420</td>
<td>249</td>
<td>8,999</td>
</tr>
<tr>
<td>GNI per capita growth (%)</td>
<td>2.02</td>
<td>2.03</td>
<td>1.32</td>
<td>1.73</td>
<td>-5.73</td>
<td>15.40</td>
</tr>
<tr>
<td>GDP per capita (constant 2010 US$)</td>
<td>32,444</td>
<td>20,415</td>
<td>19,240</td>
<td>7,724</td>
<td>1,007</td>
<td>108,125</td>
</tr>
<tr>
<td>Electoral democracies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income share (%) of the poorest 10%</td>
<td>2.19</td>
<td>1.00</td>
<td>0.94</td>
<td>0.36</td>
<td>0.11</td>
<td>4.50</td>
</tr>
<tr>
<td>Income share (%) of the richest 10%</td>
<td>33.32</td>
<td>7.38</td>
<td>7.36</td>
<td>2.87</td>
<td>20.19</td>
<td>57.40</td>
</tr>
<tr>
<td>Avg. income of poorest 10% (2011 PPP US$)</td>
<td>7.82</td>
<td>7.59</td>
<td>8.12</td>
<td>258</td>
<td>46</td>
<td>5,368</td>
</tr>
<tr>
<td>GNI per capita growth (%)</td>
<td>2.02</td>
<td>3.30</td>
<td>3.05</td>
<td>2.49</td>
<td>-16.50</td>
<td>10.19</td>
</tr>
<tr>
<td>GDP per capita (constant 2010 US$)</td>
<td>5,131</td>
<td>4,958</td>
<td>5,038</td>
<td>1,043</td>
<td>321</td>
<td>25,703</td>
</tr>
<tr>
<td>Electoral autocracies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income share (%) of the poorest 10%</td>
<td>2.59</td>
<td>0.91</td>
<td>0.99</td>
<td>0.31</td>
<td>0.02</td>
<td>4.80</td>
</tr>
<tr>
<td>Income share (%) of the richest 10%</td>
<td>31.71</td>
<td>5.94</td>
<td>6.56</td>
<td>2.17</td>
<td>20.32</td>
<td>46.80</td>
</tr>
<tr>
<td>Avg. income of poorest 10% (2011 PPP US$)</td>
<td>6.56</td>
<td>6.31</td>
<td>6.73</td>
<td>262</td>
<td>7</td>
<td>3,673</td>
</tr>
<tr>
<td>GNI per capita growth (%)</td>
<td>2.32</td>
<td>5.42</td>
<td>2.87</td>
<td>4.54</td>
<td>-24.02</td>
<td>51.97</td>
</tr>
<tr>
<td>GDP per capita (constant 2010 US$)</td>
<td>3,599</td>
<td>6,392</td>
<td>4,785</td>
<td>2,467</td>
<td>171</td>
<td>53,069</td>
</tr>
<tr>
<td>Closed autocracies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income share (%) of the poorest 10%</td>
<td>2.94</td>
<td>0.73</td>
<td>0.94</td>
<td>0.33</td>
<td>0.82</td>
<td>4.56</td>
</tr>
<tr>
<td>Income share (%) of the richest 10%</td>
<td>29.57</td>
<td>4.21</td>
<td>5.59</td>
<td>2.16</td>
<td>19.21</td>
<td>46.36</td>
</tr>
<tr>
<td>Avg. income of poorest 10% (2011 PPP US$)</td>
<td>614</td>
<td>627</td>
<td>891</td>
<td>151</td>
<td>104</td>
<td>3,908</td>
</tr>
<tr>
<td>GNI per capita growth (%)</td>
<td>1.22</td>
<td>4.60</td>
<td>4.68</td>
<td>2.60</td>
<td>-17.15</td>
<td>10.91</td>
</tr>
<tr>
<td>GDP per capita (constant 2010 US dollars)</td>
<td>9,525</td>
<td>19,413</td>
<td>13,729</td>
<td>4,767</td>
<td>208</td>
<td>99,292</td>
</tr>
</tbody>
</table>
Figure 2: Redistribution, Union Density, Human Capital, and Political Corruption across Political Regimes

Note: a) Redistribution is measured as the relative difference between gross and net income inequality as reported by Svid (Solt, 2020); b) broad-based human capital is measured by reference to the V-Dem indicator of education equality which is based on an expert rating of the availability of high-quality basic education to all citizens; c) union density is the share of employees who are union members as reported by the ILO; d) political corruption is captured by the V-Dem political corruption index, which is an average of four sub-indicators: public-sector corruption, executive corruption, legislative corruption, and judicial corruption. The scores increase with corruption.
1.5 ECONOMETRIC SPECIFICATION

The empirical strategy is to test the distributional impact of growth across different regime types. The main model is an autoregressive panel model with distributed lags that is applied to data that are averaged over a five year period.

\[ y_{it}^s = \beta_0 + \beta_1 y_{i,t-1}^s + \beta_2 x_{i,t-1} + \beta_3 k D_{i,t-1} + \beta_4 k x_{i,t-1} D_{i,t-1} + \gamma p z_{i,t-1} + \lambda_t + \alpha_i + \epsilon_{it} \]  

(1)

where \( t = 1, \ldots, T \) are years and \( i = 1, \ldots, N \) are countries. \( y_{it}^s \) is the dependent variable, that is, the (log of) income share of the \( s \)th quartiles, where \( s = 1, \ldots, 5 \) when using quintiles and \( s = 1, \ldots, 10 \) when using deciles.\(^{25}\) \( x_{i,t-1} \) is the independent variable, i.e. per capita GNI growth and \( D_{i,t-1} \) is a vector of \( k \) dummies that indicates regime type. Moreover, \( z_{i,t-1} \) is a vector of control variables. The lagged dependent variable on the right-hand side is included to control for the dynamics of the income shares. The \( \alpha_i \) denotes country fixed effects, which account for time-invariant country characteristics, and \( \lambda_t \) denote year effects. The error term \( \epsilon_{it} \) captures all other omitted factors with \( E[\epsilon_{it}|y_{i,t-1}^s, x_{i,t-1}, D_{i,t-1}, z_{i,t-k}, \lambda_t, \alpha_i] = 0 \) for all \( i \) and \( t \). This is the standard assumption that is employed for dynamic panel-data models, and it implies that regime type and economic growth in the past are orthogonal to contemporaneous and future shocks to income shares. The standard errors are clustered at the country level. I employ both within-transformation estimators and GMM estimators (see the discussion in Section B in the Supplementary Material). Moreover, I estimate the long-run effects of the distributional impact of economic growth \( x \), conditioned on regime type \( D \), on the income distribution \( y^s \). The long-run effects are estimated by model (1) above as follows.

\[ \mu^s = \frac{\beta_2 + \beta_4 k D}{1 - \beta_0} \]  

(2)

I estimate the point estimates of the nonlinear combination of the parameter estimates \( \mu^s \) and the corresponding inferences by following Cameron and Trivedi (2010).

In line with, Acemoglu et al. (2015), Dorsch and Maarek (2019), and Bahamonde and Trasberg (2021) the adoption of this approach enables me to control for two potential biases. First, I control for country fixed effects, which account for structural differences that pertain to matters other than regime type and may also affect the income distribution or the manner in which growth conditions the income distribution. These factors might include colonial legacy, cultural traits, religion, original land distribution and geography. Second, the estimation approach allows the persistent dynamics of the dependent variable, which may influence regime type, that is, that the lagged income distribution may influence lagged regime changes.\(^{26}\)

\(^{25}\) As a robustness check, I rely on inclusive growth in absolute terms, where the (log of) average income of the first income decile (the poorest 10%) is my dependent variable.

\(^{26}\) For example, changes in the income distribution may trigger social unrest and, ultimately, regime change (Boix, 2003; Acemoglu and Robinson, 2006).
Importantly, even though within-country estimates account for country and time fixed effects, this approach has several limitations. First, there may be omitted time-varying variables that are correlated with both the independent and the dependent variables. This problem is mitigated, albeit only to some degree, by the inclusion of relevant controls. Second, the method relies on the assumption of exogenous regressors, and it is important to consider the possibility of feedback from the income distribution on the evolution of regimes. Even though the analysis only examines lagged impact on the assumption that the income distribution of today cannot have influenced the type of regime that prevailed in the past, not all sources of endogeneity (e.g., expectations about the future) can be eliminated. Altogether, I do not make any causal claims, but rather tests of the hypothesised relationships.

In summary, I focus on within-country variation, and I enquire whether the long-term distributional impact of economic growth is conditioned by the regime type of a country. All specifications are robust to the use of the GMM estimation technique (the results are provided in the Supplementary Material). I start with a simple framework in which countries are classified as either democracies or as autocracies. I then repeat the analysis but subdivide the former category into liberal and electoral democracies and the latter category into electoral and closed autocracies. The objective is to determine whether the subdivision of regime types produces results that are different from those that emerge from the use of the simple dichotomous measure. Finally, I use both income quintiles and deciles as dependent variables; quintiles are less sensitive to uncertainty around the tails of the income distribution, while the use of deciles yields detailed insights into the income distribution.

1.6 RESULTS

Democracy vs. Autocracy

I start with the simple framework, through which I seek to ascertain whether the distributional impact of national income growth is different in democracies and autocracies. Thus, I use the dichotomous measure from V-Dem. The next subsection presents the results from the use of the more detailed classification of regimes. Table 2 summarises results. I use income shares across quintiles as dependent variables (each quintile is in a separate column in the table). The results are from within-country estimations, but they are all robust to the use of GMM estimations, which is presented in Section C.1 in the Supplementary Material in order to conserve space. Moreover, I estimate both the short-run and the long-term distributional impact of growth across regime types. The short-term effect shows how average growth over the preceding five years affects the income distribution in the following five years on average. The long-term effect shows how a permanent increase in growth affects the income distribution in the long term; this is the focus of the analysis.
In democracies, an increase in national income is associated with a decline in the income share of the poorest 20% (the first quintile), an increase in the income share of the middle 40% (the second and the third quintile), and a decline in the income share of the richest 40% (the fourth and fifth quintile) in the long term. However, all of the estimates are insignificant. In autocracies, growth decreases the income share of the bottom 80% (the first four quintiles) and increases the share of the top 20% (the fifth quintile), but the results are only significant for the third and the fourth quintile. Therefore, on the whole, there are no significant differences between democracies and autocracies in terms of inclusive growth. I repeat the estimations with income shares across deciles as the dependent variable. The long-term effects and confidence intervals are summarised in Figure 3. On the whole, the estimates confirm the findings. Neither democracies nor autocracies seem to translate national income growth into income gains for lower-income groups, relative to higher-income groups. These findings are all in line with the theoretical expectations ($H_a$) as well as with the empirical literature (e.g., Acemoglu et al. 2015, Dorsch and Maarek 2019).

---

27 This finding is also robust to the use of alternative dichotomous measures of democracy. I repeat the analysis with the democracy-dictatorship indicator from Cheibub et al. (2010) that was updated by Bjørnskov and Rode (2018). See Section C.2 in the Supplementary Material for results.
Table 2: The Distributional Impact of Economic Growth, Conditioned on Democracy

<table>
<thead>
<tr>
<th>Dependent variable: Income share of</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within estimations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income share$_{t-1}$</td>
<td>0.569***</td>
<td>0.527***</td>
<td>0.516***</td>
<td>0.437***</td>
<td>0.506***</td>
</tr>
<tr>
<td></td>
<td>(0.066)</td>
<td>(0.065)</td>
<td>(0.057)</td>
<td>(0.055)</td>
<td>(0.056)</td>
</tr>
<tr>
<td>Democracy$_{t-1}$</td>
<td>0.019</td>
<td>0.000</td>
<td>-0.006</td>
<td>-0.009</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>(0.029)</td>
<td>(0.015)</td>
<td>(0.010)</td>
<td>(0.008)</td>
<td>(0.010)</td>
</tr>
<tr>
<td>GNI growth$_{t-1}$</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.002*</td>
<td>-0.002***</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Democracy$<em>{t-1}$ × GNI growth$</em>{t-1}$</td>
<td>-0.001</td>
<td>0.002</td>
<td>0.002</td>
<td>0.002**</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>GDP per capita$_{t-1}$</td>
<td>0.037</td>
<td>0.015</td>
<td>0.007</td>
<td>0.001</td>
<td>-0.019</td>
</tr>
<tr>
<td></td>
<td>(0.053)</td>
<td>(0.030)</td>
<td>(0.021)</td>
<td>(0.015)</td>
<td>(0.021)</td>
</tr>
</tbody>
</table>

GNI growth$_{t-1}$ (Democracy = 1) -0.001 0.000 0.000 0.000 -0.001
(0.004) (0.002) (0.001) (0.001) (0.001)

GNI growth$_{t-1}$ (Democracy = 0) -0.003 -0.001 -0.002* -0.002*** 0.001
(0.003) (0.002) (0.001) (0.001) (0.001)

Long-run effect of growth (Democracy = 1) -0.003 0.001 0.000 -0.001 -0.001
(0.008) (0.004) (0.002) (0.001) (0.001)

Long-run effect of growth (Democracy = 0) -0.001 -0.003 -0.004* -0.004*** 0.002
(0.007) (0.004) (0.002) (0.001) (0.003)

Observations 433 433 433 433 433

R² (within) 0.470 0.428 0.407 0.308 0.423

No. of countries 107 107 107 107 107

**Note**: Within-country estimations with country and time effects based on five-year averages. The dependent variables are (the logs of) income shares across quintiles. All estimations include a constant term and time effects, which are not reported to conserve space. The robust standard errors, which are adjusted for clustering at the country level, are given in parentheses. Asterisks indicate significance as follows: *** 0.01, ** 0.05, * 0.1.
Figure 3: The Long-Term Distributional Impact of Growth in Democracies and Autocracies

![Graph showing the long-term effect of growth in democracies and autocracies across different deciles.]

**Note:** Long-term estimates and confidence intervals from within-country estimations with country and time effects based on five-year averages. The dependent variables are (the logs of) income shares across deciles.

*De Jure vs. De Facto Implementation of Democratic Institutions*

I estimate the distributional impact of growth across different regime types next. I use the V-Dem indicator that discriminates between liberal and electoral democracies and between electoral and closed autocracies. The results from the within-country estimations are summarised in Table 3. Income shares across quintiles serve as the dependent variables. The GMM estimations produce the same results (Section C.3 in the Supplementary Material). The estimates reveal very different patterns across the four regime types.
Table 3: The Impact of Economic Growth on Income Shares across Quintiles, Conditioned on Regime Types (V-Dem)

<table>
<thead>
<tr>
<th>Dependent variable: Income share of</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income share_{t-1}</td>
<td>0.570***</td>
<td>0.532***</td>
<td>0.530***</td>
<td>0.462***</td>
<td>0.518***</td>
</tr>
<tr>
<td></td>
<td>(0.069)</td>
<td>(0.068)</td>
<td>(0.060)</td>
<td>(0.057)</td>
<td>(0.061)</td>
</tr>
<tr>
<td>Liberal democracy_{t-1}</td>
<td>-0.002</td>
<td>-0.008</td>
<td>0.005</td>
<td>0.010</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>(0.061)</td>
<td>(0.043)</td>
<td>(0.034)</td>
<td>(0.024)</td>
<td>(0.030)</td>
</tr>
<tr>
<td>Electoral democracy_{t-1}</td>
<td>0.050</td>
<td>0.034</td>
<td>0.024</td>
<td>0.010</td>
<td>-0.022</td>
</tr>
<tr>
<td></td>
<td>(0.051)</td>
<td>(0.031)</td>
<td>(0.022)</td>
<td>(0.015)</td>
<td>(0.022)</td>
</tr>
<tr>
<td>Electoral autocracy_{t-1}</td>
<td>0.033</td>
<td>0.037</td>
<td>0.034</td>
<td>0.022</td>
<td>-0.029</td>
</tr>
<tr>
<td></td>
<td>(0.047)</td>
<td>(0.030)</td>
<td>(0.022)</td>
<td>(0.014)</td>
<td>(0.022)</td>
</tr>
<tr>
<td>GNI growth_{t-1}</td>
<td>0.003</td>
<td>0.001</td>
<td>-0.000</td>
<td>-0.002</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Liberal democracy_{t-1} × GNI growth_{t-1}</td>
<td>0.008</td>
<td>0.007*</td>
<td>0.005*</td>
<td>0.003*</td>
<td>-0.003</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.004)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Electoral democracy_{t-1} × GNI growth_{t-1}</td>
<td>-0.007</td>
<td>-0.003</td>
<td>-0.001</td>
<td>0.001</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td>(0.004)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Electoral autocracy_{t-1} × GNI growth_{t-1}</td>
<td>-0.006</td>
<td>-0.005</td>
<td>-0.003</td>
<td>-0.001</td>
<td>0.004*</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.004)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>GDP per capita_{t-1}</td>
<td>0.021</td>
<td>0.008</td>
<td>0.004</td>
<td>-0.000</td>
<td>-0.017</td>
</tr>
<tr>
<td></td>
<td>(0.057)</td>
<td>(0.032)</td>
<td>(0.022)</td>
<td>(0.015)</td>
<td>(0.022)</td>
</tr>
</tbody>
</table>

GNI growth_{t-1} (Liberal democracy = 1) 0.011*** 0.008*** 0.005** 0.002 -0.004**
|                                     | (0.003)  | (0.002)  | (0.002)  | (0.001)  | (0.002)  |
| GNI growth_{t-1} (Electoral democracy = 1) | -0.004 | -0.001 | -0.001 | -0.001 | 0.000 |
|                                     | (0.004)  | (0.002)  | (0.001)  | (0.001)  | (0.002)  |
| GNI growth_{t-1} (Electoral autocracy = 1) | -0.003 | -0.003* | -0.004*** | -0.002*** | 0.003* |
|                                     | (0.003)  | (0.002)  | (0.001)  | (0.001)  | (0.001)  |
| GNI growth_{t-1} (closed autocracy) | 0.003 | 0.001 | -0.000 | -0.002 | -0.002 |
|                                     | (0.006)  | (0.003)  | (0.002)  | (0.001)  | (0.002)  |
| Long-run effect of growth (Liberal democracy = 1) | 0.026*** | 0.017*** | 0.010*** | 0.003 | -0.009** |
|                                     | (0.007)  | (0.004)  | (0.003)  | (0.003)  | (0.004)  |
| Long-run effect of growth (Electoral democracy = 1) | -0.010 | -0.003 | -0.002 | -0.002 | 0.000 |
|                                     | (0.011)  | (0.005)  | (0.003)  | (0.002)  | (0.004)  |
| Long-run effect of growth (Electoral autocracy = 1) | -0.007 | -0.007* | -0.008** | -0.005*** | 0.006* |
|                                     | (0.007)  | (0.004)  | (0.003)  | (0.002)  | (0.003)  |
| Long-run effect of growth (closed autocracy) | 0.007 | 0.002 | -0.000 | -0.003* | -0.004 |
|                                     | (0.014)  | (0.007)  | (0.004)  | (0.002)  | (0.005)  |

Observations 433 433 433 433 433
R² (within) 0.481 0.448 0.427 0.323 0.442
No. of countries 107 107 107 107 107

Note: Within-country estimations with country and time effects based on five-year averages. Dependent variables are (the logs of) income shares across quintiles. Standard errors are clustered at the country level. Significance levels: *** 0.01, ** 0.05, * 0.1.
In liberal democracies, economic growth significantly increases the income share of the poorest 60%. It also decreases the income share of the richest 20% in both the short and the long run. In the long run, a permanent one-percentage-point increase in economic growth boosts the income share of the first quintile by approximately 2.6% (or 0.026 log points). The corresponding increases for the second, the third, and the fourth quintile are 1.7%, 1%, and 0.3%, respectively, while the income share of the fifth quintile decreases by 0.9%. The magnitude of the effect decreases with income, and the effect is positive for the poorest and negative for the richest. Thus, liberal democracies seem to translate national income growth into gains for lower-income groups, relative to higher-income groups. I return to the magnitude of the estimates below. On the whole, the performance of liberal democracies is superior to that of regimes of other types by a significant margin. Liberal democracies outperform electoral democracies as well as electoral and closed autocracies (see Section C.6 in the Supplementary Material).

Altogether, the findings accord with the expectations from the theoretical framework ($H_b$).

Turning to long-term impacts in electoral democracies, Table 3 reveals a pattern that is in stark contrast with the one that I observe for liberal democracies. National income growth decreases the income shares of the bottom 80% and slightly increases the share of the richest 20%, but the estimates are insignificant. Moreover, there is no significant difference between electoral democracies on the one hand and electoral and closed autocracies on the other hand. This finding highlights a crucial distinction between liberal and electoral democracies. Beyond free and fair multiparty elections, liberal democracies provide constraints on the executive and protect an additional set of individual and minority rights which safeguard citizens from the "tyranny of the majority" (Lührmann et al., 2018). Those constraints and rights may prevent elite capture, as discussed in Section 1.3. As expected, this additional protection seems to make an important difference when it comes to long-term inclusive growth.

The results for autocratic regimes reveal several interesting patterns. In electoral autocracies, national income growth seems to mainly benefit the richest 20% while reducing the income shares of the bottom 80% in both the short and the long run. In the long run, a permanent one-percentage-point increase in growth decreases the income share of the first and the second quintile by 0.7%, that of the 3rd quintile by 0.8%, and that of 4th quintile by 0.5%. The share of the fifth quintile increases by 0.6%. In closed autocracies, the pattern is almost reversed – national income growth increases the income share of the bottom 40% but decreases the share of the top 60%. However, most of the estimates are insignificant. Nonetheless, electoral autocracies are significantly better than closed autocracies at translating national income growth into gains for the richest 20%. Electoral autocracies hold de jure multiparty elections; closed autocracies do not. This

---

28 Relative to closed autocracies, in liberal democracies, growth increases the income share of the second, the third, and the fourth quintile significantly. The difference is insignificant for the first and the fifth quintile. As pointed out in the descriptive analysis, closed autocracies are a heterogeneous group, which may explain the insignificance of the differences.
distinction seems to make an important difference to the distributional impact of growth. In general, this finding emphasises the peculiarities of autocracies (Dorsch and Maarek, 2019), and the differences may have important implications for the distribution of gains in national income.

I repeat the analysis once more with income shares across deciles in order to obtain further insights into the distributional impact of growth. The long-term effects across different regime types and the confidence intervals are displayed in Figure 4. The GMM estimations produce the same results. The results, as a whole, corroborate the findings that were presented above and yield additional insights. The upper-left pane of Figure 4 shows the long-term distributional impact of national income growth in liberal democracies. A permanent increase in growth is associated with an increase in the income share of the bottom 60% and a decline in the income share of the richest 20% in the long term. For example, a permanent increase in growth sees the income share of the poorest 10% grow by 2.8% and the share of the richest 10% decrease by 1%, with the confidence intervals indicating that the exact magnitude of the effect is uncertain. Nevertheless, the figure illustrates that lower-income groups benefit from growth while the highest-income groups do not. The upper-right pane of Figure 4 summarises the results for electoral democracies, which follow the opposite pattern. However, all of the estimates are insignificant. Nevertheless, the difference between liberal and electoral democracies is significant, and liberal democracies are more successful than electoral democracies at ensuring inclusive growth.

---

29 Section C.3 in the Supplementary Material.
30 I repeat the analysis of the distributional impact of growth in liberal democracies with countries that V-Dem classifies as “lower bound”, which only just meet the criteria for liberal democracy, excluded. The results remain the same (see Section C.5 in the Supplementary Material)
Figure 4: The Distributional Impact of Economic Growth across Regime Types

<table>
<thead>
<tr>
<th>Liberal democracy</th>
<th>Electoral democracy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Electoral autocracy

<table>
<thead>
<tr>
<th>Closed autocracy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Note: Long-term estimates and confidence intervals from within-country estimations with country and time effects based on five-year averages. The dependent variables are (the logs of) income shares across deciles.

Although the significant effect for liberal democracies is noteworthy, so is its low magnitude. Suppose that, in a liberal democracy, the poorest 10% initially hold approximately 3% of total income, while the richest 10% hold around 30% (in line with the
averages for liberal democracies, cf. Table 1). Figure 5 shows how a permanent increase in national income would affect the income share of the poorest 10% (left pane) and the richest 10% (right pane) over time. The income share of the poorest 10% increases from 3% to 3.08% over a 30-year period; for the richest 10%, it decreases from 30% to 29.73%. Such developments would not result in any fundamental changes in the income distribution for at least two reasons. First, even though liberal democracies are more inclusive than other regimes, the adoption of liberal democracy per se does not suffice to ensure that national income will be shared relatively equally in the long term. As discussed in the theoretical framework, equality also depends on the extent to which the political preferences of the poor are represented in politics. Second, it is important to note the discrepancies between micro survey data and macro national accounts. Those differences may be reflected partly in the finding of a weak link.

Figure 5: Simulations of the Distributional Impact of Growth in Liberal Democracies, Poorest 10% (left) and Richest 10% (right)

Note: Simulations based on within-country estimations with country and time effects based on five year averages.

The lower part of Figure 4 summarises the long-term estimates for autocracies. In electoral autocracies (the lower-left pane of Figure 4), national income growth tends to decrease the income share of the bottom 90% while increasing that of the richest 10% in the long run. The pattern is reversed, to some extent, in closed autocracies (the lower-right pane of figure 4), but it is mostly insignificant. Nonetheless, electoral autocracies are significantly better than closed autocracies at ensuring that income gains accrue to the richest 10%. The difference between the two types of autocracies may be an interesting avenue for future research.

Finally, I add different sets of controls to test the robustness of the results. The controls include oil rents, population growth, urbanisation, manufacturing value added, regime durability, party orientation, state fiscal capacity, and quality of government. The results from the within-country estimations are provided in Section C.4 in the Supplementary Material. The main findings do not change when controls are included – liberal democracies still translate economic growth into income gains for the poorest, relative to the richest. The same is not true of regimes of other types.
Alternative Measure: Inclusive Growth in Absolute Terms

I use an alternative measure of inclusive growth which relies on the absolute definition of pro-poor growth as a robustness check. Instead of examining impacts on the entire income distribution, I focus on the average income of the poorest 10%. I use the (log of the) average income of the poorest 10% as a dependent variable, and I test the effect of national income growth on their incomes in absolute terms. This approach is less strict than the relative one because it only requires the income of the poor to increase; there are no income-equality restrictions. The results are summarised in Table 4 (only the long-run effects are displayed to save space).

Table 4: The Impact of Economic Growth on the Average Income of the Poorest 10%, Conditioned on Regime Types (V-Dem)

<table>
<thead>
<tr>
<th>Dependent variable: Average income of the poorest 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-run effect of growth (Liberal democracy = 1)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Long-run effect of growth (Electoral democracy = 1)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Long-run effect of growth (Electoral autocracy = 1)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Long-run effect of growth (closed autocracy)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Observations</td>
</tr>
<tr>
<td>$R^2$ (within)</td>
</tr>
<tr>
<td>No. of countries</td>
</tr>
</tbody>
</table>

**Note:** Within-country estimations with country and time effects based on five-year averages. The dependent variable is (the log of) the average income of the first income decile. All estimations include a constant term, a lagged dependent variable, binary measures of the type of political regime (with closed autocracy as a reference), GNI growth, the interactions between GNI growth and types of political regimes, GDP per capita, and time effects; however, these are not reported in order to conserve space. The robust standard errors, which are adjusted for clustering at the country level, are given in parentheses. Asterisks indicate significance as follows: *** 0.01, ** 0.05, * 0.1.

For all of the four regime types, national income growth has a positive impact on the average income of the poorest 10% in the long run. However, this impact is only significant in liberal democracies, electoral democracies, and electoral autocracies. This finding is also robust to the use of GMM estimation (see Section C.7 in the Supplementary Material). The effect is at its most pronounced in liberal democracies, where a permanent one-percentage-point increase in national income growth increases the average income of the poorest decile by approximately 7.4%. The effects for electoral democracies and autocracies are approximately 3.7% and 3%, respectively. Inclusive growth, in
absolute terms, occurs not only in liberal democracies but also in the other regimes under observation, with the exception of closed autocracies. This finding may be contrasted to its counterpart from the analysis that is based on the relative framework, in which reductions in income inequality are required. Still, liberal democracies are associated with the most inclusive growth paths in absolute terms – the size of the effect is twice as large as for the other regimes.

1.7 CONCLUSION

In spite of the increasing importance of inclusive economic growth, little is known about the steps that countries must take to embark on such a path. This paper focused on the role of one fundamental aspect of the political system, namely the difference between democracy and autocracy. The link between democracy and average economic growth rates has been studied extensively. Although scholars have failed to identify any robust impact of democracy on average growth rates, there is some evidence that democratic and autocratic rule produce different patterns of growth. While a number of empirical studies have concluded that economic growth in democracies is less volatile and more likely to be sustained, the inclusivity of growth has not been analysed. This paper thus contributes to the literature by showing that growth is more inclusive in liberal democracies than under other regimes.

At a higher level of abstraction, the empirical analysis that was developed on the preceding pages shows that the link between democracy and inclusive growth is weak. When countries are classified as either democratic or autocratic, democracies emerge to be no more successful than autocracies in fostering inclusive economic growth. However, when the analysis is refined so as to discriminate between liberal and electoral democracies, it transpires that, in relative terms, liberal democracies foster inclusive growth in the long term, while electoral democracies do not. However, the distributional impact of growth is small. Although liberal democracies are significantly better at translating growth into income gains for lower-income groups, the mere adoption of liberal democratic institutions does not fundamentally alter the income distribution in the long term. Democratic rule is far from perfect when it comes to inclusive growth, but it is better than its alternatives.

Several theoretical arguments suggest that liberal democracies should perform better, in terms of inclusive growth, than other regimes. In addition to multiparty elections, liberal democracies entail the imposition of judicial and legislative constraints on the executive. These constrains should, holding all else equal, prevent elites from fractionalising the political power of the poor. However, there are also theoretical reasons to expect this effect to be limited in size. Even in a liberal democracy, the poor do not necessarily benefit from higher levels of redistribution. Outcomes also depend on the redistributive preferences of the poor and on the political influence of elites. Recent research has shown that, in many advanced democracies, representation is unequal, in that elected officials are more likely to effectuate the preferences of affluent citizens.
than those of the poor (Gilens, 2012; Bartels, 2016; Lupu and Warner, 2022a,b). Unequal representation in advanced democracies may be associated with the weaker influence of interest groups that advocate for lower-income groups and the stronger influence of political donations from high-income groups (Lupu and Warner, 2022b). Moreover, low voter turnout among the poorest segments of society may cause elected officials to discount the preferences of these groups, thus reinforcing the affluence bias (Bonica et al., 2013; Lupu and Warner, 2022b). The preferences of the lower-income segments of society may be poorly represented in liberal democracies, which may explain the weakness of the link between the adoption of such regimes and inclusive growth.

The empirical analysis also showed mixed results for autocracies. While electoral autocracies did not seem to foster an inclusive growth path in relative terms, only in absolute terms, closed autocracies showed no clear pattern of inclusive growth. Interestingly, when comparing liberal democracies to the other regime types in terms of relative inclusive growth, the difference to closed autocracies is the weakest (see Section C.6 in the Supplementary Material). Closed autocracies consist of a small and very heterogeneous group of countries, which is likely to explain the weak difference. But it may also be the case that some types of autocracies foster inclusive growth. Theory in this area suggests that redistribution may be the optimal strategy for authoritarian rulers in some cases. If the opposition in an authoritarian regime is strong, the incumbent authoritarian ruler may choose to make concessions by redistributing to this group to avoid broad-based resistance movements (Gandhi, 2008). The link between autocracy and inclusive growth may be an interesting avenue for future research.

Nonetheless, democracies across the world may benefit from a stronger focus on the pursuit of inclusive growth strategies, because, “Apart from the considerable economic benefit they promise, inclusive growth strategies increase the odds that when democracy gets foothold, it will survive” (Dahl, 2015, p. 199).
62 DEMOCRACY AND INCLUSIVE ECONOMIC GROWTH: A WEAK LINK
REFERENCES


URL: https://doi.org/10.1086/700936


REFERENCES


URL: https://doi.org/10.1146/annurev-polisci-060820-060910


URL: https://doi.org/10.4159/9780674982918


PROGRAMMATIC REDISTRIBUTION AND CLIENTELISM: EVIDENCE FROM A CONJOINT EXPERIMENT IN BRAZIL

with Sina Smid and Mogens Kamp Justesen

Abstract
In real-world elections, voters mostly do not face a choice between ‘good’ or ‘bad’ candidates but rather between candidates who attempt to mobilise electoral support by mixing normatively desirable policies on issues like health with normatively undesirable practices like vote buying. In this paper, we study how voters reward or punish candidates who differ in their mix of programmatic and clientelistic distribution. We marshal evidence from a conjoint experiment of voter preferences for city councillors in Brazil. Our findings show that clientelism negatively affects voter support, even when programmatic redistribution is part of candidates’ policy platform. However, clientelism involving work or jobs is punished less harshly and may even make candidates more electorally viable. Particularly poor voters are more lenient towards clientelistic distribution involving work when it is combined with pro-poor programmatic distribution. Our findings help explain why politicians continue to use certain types of clientelism and how these are paired with programmatic redistribution to mobilise voter support.

2.1 INTRODUCTION

In real-world elections, voters mostly do not face a choice between ‘good’ or ‘bad’ candidates (Mares and Visconti, 2019), but rather between candidates whose performance in office varies and who attempt to mobilise electoral support by mixing different modes of distributive politics. Indeed, across a variety of democracies around the world, parties and candidates often campaign on a mix of programmatic and clientelist distribution (Mares and Young, 2019; Nichter, 2018; Stokes et al., 2013; Yıldırım and Kitschelt, 2020). Candidates may, for instance, propose to allocate funds for building new schools or increase access to cash transfer programs and simultaneously engage in vote buying during election campaigns. This presents voters with a trade-off between the potential rewards obtained from different forms of redistribution and the normative undesirability of supporting a candidate using clientelist strategies (Breitenstein, 2019; Hidalgo and Nichter, 2016; Mares and Visconti, 2019; Mares and Young, 2019).
In this paper, we study the demand-side of redistributive politics by analysing voter support for political candidates who vary in their mix of programmatic and clientelist redistribution. We focus on how voter support for political candidates running on platforms with programmatic redistributive policies changes when clientelist distribution is part of the candidates’ policy mix. We examine how differences in the mix of programmatic policies, spending and taxation, and clientelist distribution affect voter support. We analyse how voter support and beliefs about candidates are shaped by differences in the type of programmatic good (cash transfer programs versus health clinics) and clientelist transfers (jobs versus cash handouts) that candidates distribute.

We depart from the argument that voters punish candidates who engage in clientelist distribution, because they may associate such candidates with corruption and weak capacity to deliver public policies (Boas et al., 2019; Incerti, 2020; Weitz-Shapiro, 2012). However, we modify this argument in two ways. First, for candidates who engage in clientelist distribution, voters may discriminate between different types of goods, jobs, or cash that are part of the clientelist exchange. Second, poor voters may be more lenient towards and supportive of clientelist distribution if it goes hand-in-hand with access to programmatic welfare benefits. Therefore, while voters may, in general terms, dislike candidates’ using clientelist distribution, voter support also hinges on the specific mix of programmatic and clientelist distribution and the type of clientelism candidates use. These types of clientelism involve cash-for-votes on the electoral spot-market or more enduring opportunities for jobs or work that are characteristic of patronage networks.

Empirically, our paper relies on evidence from Brazil, a case of a democracy with high levels of income inequality and political corruption, and where redistributive social welfare programs co-exist alongside widespread clientelist distribution. While tax-funded programmatic redistribution is still limited, Brazil harbours one of the most celebrated conditional cash transfer (CCT) programs, Bolsa Família (now Auxílio Brasil) (Fried, 2012), in the developing world, and CCT programs have recently been expanded to the municipal level. At the same time, clientelist practices are common in local politics and thrive both during and between elections (Nichter, 2018; Sugiyama and Hunter, 2013). This makes Brazil a useful case for studying how voters respond to candidates using different modes of clientelist and programmatic redistribution to mobilise support during elections.

We marshal evidence from a conjoint survey experiment (n = 1,900) implemented in April 2021 and tailored around voter support for local city councillors in Brazil’s municipal elections. The candidate profiles randomly differ in their pro-poor programmatic spending, positions on income taxation, and clientelist distribution. The conjoint experiment allows us to test the causal effects of candidates’ programmatic redistributive policies and clientelist offers on voter support, as well as the intersection between the two.

Our empirical analyses reveal several interesting findings. First, we find that voter support, in absolute terms, for a candidate who works for programmatic redistribution
is lower when clientelist distribution is also part of the candidate’s policy mix. While voters support candidates’ campaigning on programmatic redistribution and associate programmatic appeals with a higher likelihood of helping the poor and delivering sufficient public services, the results change if candidates simultaneously engage in clientelist distribution. In fact, if a candidate engages in both clientelist and programmatic redistribution, voter beliefs change to associate such a profile with weak fiscal capacity, more widespread involvement in corruption, and a lower likelihood of both helping the poor and delivering sufficient public services.

Why, then, would candidates even want to employ clientelist distribution during elections campaigns? Our results shed light on this question, too. Second, we find that while voters generally dislike candidates’ using clientelist strategies, they are more lenient towards clientelist distribution involving job offers (relative to cash handouts) in line with e.g. Klašnja et al. (2021). This suggests that the nature of the clientelist relation matters for voter evaluations and that candidates offering work or jobs in exchange for political support have greater appeal - or are punished less harshly - than candidates engaging in crude cash-for-votes transactions.

Third, while the literature has emphasised that clientelism is more effective among poor voters (Kramon, 2017), our findings suggest that poor and economically deprived voters do not uniformly support candidates who offer a mix of programmatic and clientelist distribution. Rather, poor voters discriminate between the types of goods being distributed as part of a clientelist exchange, and are more prone to support candidates who combine clientelist distribution of jobs (rather than cash) with certain types of programmatic distribution, such as conditional cash transfers.

Finally, we find stark differences between voters’ own responses to clientelist distribution and their beliefs about how other people respond in similar situations. Voters tend to state that they will punish candidates using clientelist strategies but not believe their fellow citizens will do the same. Even if the individual voter finds clientelism normatively undesirable, this suggests a collective action problem where norms and expectations about links between voters and candidates guide people to engage in clientelism because they believe others will do so too (Fisman and Golden, 2017).

Our findings contribute to three strands of literature. First, we contribute to the literature on the relationship between political clientelism and programmatic redistributive politics in young democracies (Berens and Ruth-Lovell, 2021; Bustikova and Corduneanu-Huci, 2017; Cruz et al., 2021; Gherghina et al., 2022; Guerra and Justesen, 2022; Keefer, 2007; Kramon, 2017; Kyriacou, 2023; Mares and Young, 2019; Nichter, 2018; Rains and Wibbels, 2023; Stokes et al., 2013). Several scholars have shown how programmatic social policies contribute to break clientelist ties between voters and politicians by reducing voters’ dependence on clientelism (Frey, 2019; Sugiyama and Hunter, 2013; Zucco, 2013). But the recent literature has also addressed the reverse relationship, i.e the impact of clientelism on programmatic redistribution, which has shown how the use of clientelism
adversely affects incumbent incentives to provide broad-based and pro-poor public services (Acemoglu et al., 2011; Fergusson et al., 2022; Khemani, 2015; Kyriacou, 2023).

However, while most of the literature on the linkages between clientelism and programmatic redistributive policies focused on the supply-side, we contribute by examining the demand-side of redistributive politics (Berens and Ruth-Lovell, 2021; Guerra and Justesen, 2022; Pellicer et al., 2020). In particular, we show how the presence of clientelist strategies matters regarding how elections serve to channel demand for programmatic redistribution and public goods into the political system. We also provide further insight into why clientelism may lower voter support for programmatic redistributive policies. We show that, when clientelism is part of a candidate’s policy platform, voters perceive such candidates as less capable of providing public services, regardless of their track record of programmatic policies. Moreover, the existing literature almost exclusively focuses on the spending of redistribution, and we add to this body of work by including the funding-side (taxation), which may matter for how voters evaluate candidates and for the trade-offs between different types of programmatic and non-programmatic redistribution. Our experiment includes treatments on different tax schemes to fund government spending, allowing us to show how clientelism also shapes attitudes towards tax schemes. In the bigger picture, our findings contribute to our understanding of why clientelism tends to undermine the social contract between citizens and states. Consequently, we shed light on why high levels of inequality, low levels of redistribution, and widespread political clientelism often co-exist in equilibrium (Fergusson et al., 2022).

Third, we contribute to the experimental literature on voter support for political candidates who engage in clientelist practice, e.g. Carnes and Lupu (2016); Kirkland and Coppock (2018); Mares and Visconti (2019). Our paper is closely related to Mares and Visconti (2019), who analyse voter support or punishment of candidates engaging in different types of illicit clientelist behavior. Rather than portraying candidates as ‘good’ or ‘bad’ types, our paper departs from the assumption that in the real world of electoral politics, political candidates often come in ‘shades of grey’, combining features that may be deemed normatively desirable with other features that may be deemed normatively undesirable (Mares and Visconti, 2019; Mares and Young, 2019). Our paper adds to Mares and Visconti (2019) by zooming in on the role of candidates who engage in both licit and illicit forms of distributive politics, and by examining how voters trade off different types of (licit) programmatic redistribution against (illicit) clientelist benefits. In such scenarios, we show that voters are more willing to support candidates using particular types of clientelism.

Finally, we contribute to the literature on corruption voting (Bøttkjaer and Justesen, 2021; Breitenstein, 2019; De Vries and Solaz, 2017; Klašnja et al., 2021), which addresses the puzzle of why voters sometimes support crooked candidates in democratic elections. This literature too speaks to the trade-offs voters face between candidates who engage in corrupt activities but deliver policy benefits, and candidates who are honest but fail to deliver public policies (Breitenstein, 2019; Hidalgo and Nichter, 2016). We add
to this literature by analyzing voter support for candidates who run on platforms of pro-poor programmatic redistribution and simultaneously engage in illicit clientelist distribution often viewed as a type of electoral corruption. By examining how the mix of clientelist and programmatic distributive politics drives candidate evaluations, we add to the understanding of the causes and mechanisms behind voter support for corrupt candidates. In addition, we show a discrepancy between voters self-reported willingness to support clientelist candidates and their perceptions of the willingness of fellow citizens to support similar types of candidates. While voters’ own response to clientelist candidates is relatively negative, they are much less confident that other voters will respond in a similar way. This hints at a large-scale electoral collective action problem, where voters’ involvement in clientelism is guided by beliefs and expectations that clientelism is widespread due to other voters’ willingness to engage in clientelist relations.

The paper proceeds as follows. The following section develops the theory and hypotheses that guide our analysis. Next, we motivate the selection of Brazil as an ideal case for our analyses, followed by an outline of our research design and introduction to the conjoint experiment. We then analyse and discuss the findings from our conjoint experiment. The final section concludes.

2.2 VOLER RESPONSES TO DISTRIBUTIVE POLITICS

Theories of retrospective voting assume that voters reward or punish governments based on their past performance (de Kadt and Lieberman, 2020; De Vries and Solaz, 2017). In models of distributive electoral politics, government performance is often tied to programmatic redistribution, where governments collect taxes and spend them on transfers and services structured around formalised, transparent, and publicly known rules (Acemoglu and Robinson, 2006; Dixit and Londregan, 1996; Meltzer and Richard, 1981). Low-income voters are supposed to be stronger supporters of candidates working for targeted and progressive redistributive programs such as pro-poor conditional cash transfers (Dixit and Londregan, 1996), whereas policies that improve public schools and health care are likely to attract support from both poor and middle-class voters (Elkjær and Iversen, 2020).

In many new democracies, however, politicians rely on both programmatic and non-programmatic modes of redistributing collective or individual benefits (Stokes et al., 2013). Non-programmatic distribution lacks formalised, clear and publicly known rules, and is subject to political manipulation and partisan conditions influencing who gains access to transfers and benefits and who does not (Stokes et al., 2013). Clientelism is a prominent case of non-programmatic distribution and entails that parties or political candidates distribute benefits to voters (or communities) contingent on voters’ reciprocating with votes or political support (Hicken, 2011; Stokes et al., 2013; Woller et al., 2022). Clientelist distribution can take on many forms, such as vote buying and patronage, and involves a
variety of goods such as money, work, and access to public services’ all being exchanged in return for political support (Albertus, 2013; Gans-Morse et al., 2014).

Clientelist distribution is mostly targeted at poor and low-income groups (Jensen and Justesen, 2014; Kramon, 2017; Mares and Young, 2016; Stokes et al., 2013) who may also be more favorable towards candidates distributing material handouts or cash (associated with vote buying), work or jobs (associated with patronage) in return for political support. In contrast, evidence suggests that middle-class voters are more strongly opposed to clientelist distribution, either because they do not benefit from such distribution or because they find it normatively undesirable (Weitz-Shapiro, 2012). Indeed, from a normative democratic perspective, programmatic redistribution is often seen as desirable, whereas clientelist distribution is viewed as illicit and undesirable (Mares and Young, 2019; Stokes et al., 2013).

Mixing Programmatic and Clientelist Distribution

Yet the question of how voters evaluate candidates who simultaneously engage in programmatic and clientelist distribution is not straightforward. Although the criteria for gaining access to goods differ, both programmatic and clientelist distribution entail that some groups benefit more than others even when the receipt of goods and benefits is conditional on partisan support. Moreover, candidates who campaign on providing programmatic redistribution, e.g. improving schools and health facilities, combined with the distribution of clientelist transfers mix ‘good’ and ‘bad’ modes of redistribution. This presents voters with a trade-off between the potential rewards obtained from different forms of redistribution and the normative undesirability of supporting a candidate engaging in clientelist distribution (cf. Breitenstein 2019; Hidalgo and Nichter 2016; Mares and Visconti 2019; Mares and Young 2019; Pellicer et al. 2021).

On the one hand, voters may associate candidates who employ clientelist strategies with corruption, weak electoral accountability, and violations of basic principles of democratic fairness (Boas et al., 2019), even if candidates have a track record of delivering public services. Voters may also view clientelist distribution as spending that detracts from the resources available for government welfare and services. In this way, voters might associate candidates using clientelism with weak fiscal capacity and poor public service delivery (Weitz-Shapiro, 2012). While clientelist distribution often fills a gap in public service provision, particularly when state capacity is weak, using clientelist transfers to compensate for a lack in public services may in itself cause voters to lower their demand for programmatic redistribution (Bustikova and Corduneanu-Huci, 2017; Sanchez and Goda, 2018). Even if programmatic redistribution is part of a candidate’s policy platform, this suggests that the mere use of clientelist distribution contributes to lower voter support. For the electorate in general, we therefore expect lower voter support for candidates who simultaneously engage in clientelist and programmatic redistribution.
2.2 Voter Responses to Distributive Politics

\textbf{H}_1: Voters’ support for a candidate who has worked for redistributive programmatic policies decreases if the candidate also offers cash or work in return for votes.

On the other hand, different forms of clientelism may be evaluated differently by voters, and not all forms of clientelism are perceived as illegitimate or normatively undesirable (Mares and Visconti, 2019). Clientelist transactions may also arise at the request of voters and serve as mechanisms for politicians to accommodate voter demands (Nichter and Peress, 2017; Nichter, 2018). Evidence from the Brazilian context shows that voters perceive cash offers as immoral, whereas other forms of clientelism are often not associated with illegal behavior (Ansell, 2018; Hidalgo and Nichter, 2016). Indeed, the ties that clientelist practices form between voters and politicians differ depending on the nature of the exchange and the goods that are distributed. At one end of the scale, clientelism may materialise as short-term transactions of cash-for-votes on electoral spot markets (Yıldırım and Kitschelt, 2020). This type of transaction typically occurs around election time, involves small handouts like food or cash, and does not require structured and repeated interactions between voters and party agents over time. At the other end, clientelistic relations may entail more enduring forms of relational clientelism, where a steady access to networks of work, jobs, or public services requires that voters reciprocate with continual displays of loyalty and political support (Frye et al., 2014; Gans-Morse et al., 2014; Nichter, 2018). Robinson and Verdier (2013) argued that patronage relationships is a more credible way for clientelist politicians to commit to redistributing resources, because the allocation of work or jobs creates a repeated flow of rent to voters. For political parties, jobs are also reversible and can be withdrawn if voters fail to comply with their commitments to support the distributing party. For voters too, access to jobs and work is more valuable than handouts because it creates a repeated flow of income, even if it is conditional on political support. This makes it easier to use patronage to buy voter support and creates ongoing dependence between voters and politicians that keeps voters embedded in patronage networks (Bøttkjaer and Justesen, 2021). This leads us to expect that voters, on average, will react more negatively to clientelistic transactions that resemble simple vote buying where cash is traded for political support, whereas patronage, the exchange of work or jobs in return for political support, is viewed more favorably.

\textbf{H}_2: Voters are more likely to punish candidates offering cash in return for their vote than candidates offering jobs or work in return for their vote.

While we expect voter support for clientelist candidates to be contingent on the type of exchange and the nature of the good that is being distributed, voters’ position in the income distribution may be a source of heterogeneity in evaluations of clientelist transactions. Candidates sometimes deliberately try to obfuscate the undesirable features of clientelism by using clientelist strategies to signal their competence and ability to provide benefits to voters (Kramon, 2017; Mares and Young, 2019). Obfuscation strategies may be
particularly effective in context of widespread poverty, which provides fertile grounds for candidates to emphasise how clientelist distribution showcases their commitment to future pro-poor redistribution and signals their ability to bring benefits to the local community (Kramon, 2017; Mares and Young, 2019). From the perspective of poor voters, there can be substantial benefits to supporting a candidate who delivers broad-based public services while employing clientelist strategies to distribute targeted goods during (and between) elections, allowing voters to “have their cake and eat it too” (Lindberg, 2013).

Therefore, the use of clientelism by political candidates and their brokers during and in between election campaigns does not immediately imply weaker electoral support - or lower demand for programmatic redistribution. Voter support might be particularly strong if politicians use clientelism to signal that they are a “redistributive type” who looks after the interests of the poor and has capacity and resources to provide material benefits and public services. This mechanism is especially salient among low-income voters who may be more inclined to perceive clientelist transfers as a signal of a candidate’s electoral viability and intent to redistribute in the future (Kramon, 2017). By implication, low-income voters may be more favorable towards candidates who mix programmatic and clientelist modes of distribution. We therefore expect that candidates who simultaneously engage in programmatic and clientelist redistribution receive higher levels of voter support from poor and low-income voters.

\[ H_3: \text{Low-income voters’ support for a candidate who has worked for redistributive programmatic policies increases if the candidate also offers cash or work in return for their votes.} \]

Following the argument that a clientelist distribution of jobs or work is more valuable to voters than smaller, one-shot cash transfers and provides a more enduring mechanism for politicians to keep voters embedded in patronage networks - we also examine whether low-income voters’ electoral support differs depending on whether candidates distribute jobs or cash as part of clientelist transactions, as we would expect based on \( H_2 \).

2.3 THE BRAZILIAN CASE

The development of social policies over the last 30 years and continuing challenges with public sector integrity make Brazil an excellent case for studying how voters respond to candidates running on platforms where programmatic redistributive policies are mixed with strategies of clientelist distribution (Sugiyama and Hunter, 2013). For our purposes, Brazil is an ideal case because it is a democracy where tax-funded redistributive programs like Bolsa Família (now replaced by Auxílio Brasil\(^1\)) co-exist with widespread clientelist distribution, and both are mainly targeted at poor and vulnerable groups (Nichter, 2018). The decentralised nature of Brazil’s public sector has created a significant role for elected

\(^1\) Brazilian Government
municipal councils and directly elected mayors in providing public services. Indeed, conditional cash transfer (CCT) programs have recently been expanded to the municipal level in Brazil. At the same time, local politics are important for politicians’ use of clientelist distribution, which - in a candidate-centered electoral system - serves to link citizens and politicians both during and in between municipal elections (Nichter, 2018).

The election of Luis Inácio Lula da Silvas from the Worker’s Party Partido dos Trabalhadores (PT) in 2003 was a defining moment in Brazil and coincided with a general turn towards left-leaning governments in Latin America. Until its replacement and at the time of our survey experiment, Bolsa Família was the CCT with the largest number of beneficiaries in the World. In May 2020, 14,281,761 families benefited from the program, receiving an average benefit of 169R$ per month, depending on the number of children and pregnant women. The program financially supported poor families below a monthly per capita family income of R$85 (extreme poverty) and from R$85.01 to R$170 (poverty) (MDS, 2022).

Around eight percent of Brazil’s 5,570 municipalities have expanded the Bolsa Família program by introducing municipal CCTs to benefit citizens in their local area. Most of these are in bigger cities where income inequality and segregation has been on the rise in recent years (Bergman, 2019). For instance, in 2010, the mayor of Rio de Janeiro introduced the ‘Cartão Família Carioca’ program, which served as a supplement to Bolsa Família, using the same thresholds and conditions. The amount received by poor families varies according to their income and results in an additional minimum of R$20 per person in the household.2

CCT programs in Brazil are tax funded as an important element of programmatic redistribution. However, similar to other Latin American countries, the Brazilian tax system’s progressivity is limited. While Lula successfully introduced and expanded targeted cash transfers, the tax system has largely remained unchanged since 2003. Today, the highest income tax rate is 27.5 percent starting from a monthly income of R$4,655, (ca. 900 US$) on the lower end compared to for example the average of OECD countries. As a result, Brazil’s wealth and income distributions are highly skewed with a strong concentration among top income and wealth groups. This means that while the spending side of Brazil’s CCT programs tends to be progressive in nature, the taxation side is much less progressive. The tax system even has strong regressive elements and constitutes a challenge for the most vulnerable, especially Black women, who pay a large share of indirect consumption taxes (Higgins and Pereira, 2014). The design of our experiment, which we discuss below, therefore takes both the spending and revenue sides of programmatic redistribution into account.

Despite the successes in reducing poverty and inequality in the 2000s in Brazil, cash transfers have not eradicated (extreme) poverty. The continued existence of poverty in many parts of the country are parts of the narrative for continued clientelist relations between voters and politicians (Nichter, 2018; Scott, 1969). Indeed, various forms of

---

2 Local government of Rio de Janeiro
political clientelism are relatively widespread in Brazil. Party brokers are a crucial part of many communities and the electoral process, especially in the low-income, north-eastern part of the country and in rural areas (Nichter, 2018; Sugiyama and Hunter, 2013). Brokers often have well-established networks, occupy informal leadership positions, know their community’s needs and take on advocacy roles on behalf of their local community. Most of these communities cultivate long-term relationships with brokers and candidates, and it is common practice in rural families to vote for the same candidate as the head of family (Ansell, 2018; Hidalgo and Nichter, 2016). Despite these embedded clientelistic relationships, public debate in Brazil has shifted towards punishing political corruption openly as a response to recent large-scale political scandals and anti-corruption campaigns, which may also affect voters’ perceptions of clientelistic practices (Boas et al., 2019; Gonzalez-Ocantos et al., 2023).

Indeed, comparable survey data highlight high perceived corruption in Brazil and recent corruption scandals, especially the ‘Lava Jato’ (Car Wash) scandal, continue to permeate the political system and influence people’s perceptions of public institutions, politicians and engagement in politics (Gonzalez-Ocantos et al., 2023; Samuels and Zucco, 2018). These challenges have become even more relevant over the last years in Brazil, while rule of law practices seem to have decreased. 6 out of 10 civil servants reported in a 2021 survey having witnessed some form of unethical behaviour and cited most often the use of civil servants’ position to help family and friends (WorldBank, 2021). Brazil therefore generally serves as an excellent case to shed light on voter reactions to allegedly corrupt candidates (Anduiza et al., 2013; Zucco, 2013).

Finally, the nature of Brazil’s municipal electoral system makes it well-suited for studying voters’ choice between candidates campaigning on different and often highly personal platforms mixing programmatic and clientelistic distribution. In Brazil’s municipal electoral system, voters directly elect mayors, vice-mayors and city councillors by absolute majority. All are elected for 4-year terms on an open-list ballot. In cities with more than 200,000 voters when no mayoral candidate reaches an absolute majority, there is a run-off between the top-two candidates (this happened in 95 cities in the 2020 election). City councillors are elected on a multi-member, open-list proportional system. By implication, candidates within the same party compete for seats on the municipal council. The open-list system reinforces candidate-centered elections and campaigns with a focus on individual candidates’ qualities, rather than party labels (Blumenau et al., 2017). In fact, open-list proportional systems are particularly prone to the use of clientelist voter mobilisation strategies because (in addition to competition between political parties) they increase intra-party competition among candidates running on the same party label, and who need to distinguish themselves from rivals among party competitors to obtain office. The institutionalised intra-party competition of open-list

---

3 Similarly, in our survey sample, a large majority of respondents, almost 60% believe that the president and mayors are likely involved in corruption. And 20% mention that over the past year, someone from a political party has reached out to help with a job or offer cash in return for respondents’ vote.
ballots in Brazil therefore provides candidates with a strong incentive to use vote buying and clientelist distribution to cultivate personal votes (Hicken, 2007).

2.4 DATA AND DESIGN

Our empirical analysis relies on data from a conjoint survey experiment placing two hypothetical political candidates against each other in a contest for becoming city councillor during municipal elections in Brazil. The conjoint survey experiment was pre-registered at OSF on October 16, 2020. All three hypotheses were pre-registered in the document titled “Programmatic Redistribution and Clientelism in Brazil: Evidence from a Conjoint Survey Experiment” to avoid false positive results from multiple hypotheses testing in conjoint experiments (Liu and Shiraito, 2023). The survey design and data collection were approved by the Ethics Council of the University before the data collection on March 9, 2021. The experimental design is set in the context of the municipal elections held in Brazil on November 15, 2020 (first round) and December 20, 2020 (second round). The survey complies with standard principles of research ethics. All respondents were asked for voluntary consent to participate; the survey did not involve deception or harm to respondents; and all respondents were ensured full anonymity. Data collection was postponed from March 2020 to March-April 2021 due to the Covid-19 pandemic, and the data collection mode was changed from a face-to-face survey to an online survey, which ensured that data collection was feasible while protecting respondents from unnecessary health-related risks.

Data collection

The survey was administered in collaboration with the two survey-research companies IBPS and Qualibest4 in an online survey during March-April 2021. Respondents were recruited from a sample universe of Qualibest’s Brazilian online panel. The sample consists of around 1,900 respondents (piloted in March with 100 respondents). Qualibest provided access to their online panel of voting-age respondents (above 16 years) and IBPS conducted the sampling.5 The survey was programmed in Qualtrics and Qualibest sent out individual questionnaire links via their internal survey platform. Qualibest compensated respondents who completed questionnaire using a point-based system.

The online survey was based on a non-probability quota sampling, similar to using strata in a stratified random sample. Subgroup quotas were calculated as the sample target of each subgroup, disaggregated by region, gender, and age, and proportionate to the population in that group, based on data made available by the Brazilian Superior Electoral Court. The use of quotas addresses one of the common problems with online panels - that survey respondents are disproportionally younger and more educated.

4 IBPS Consultoria e Pesquisa: http://www.ibpsnet.com.br/. IBPS is specialised in election surveys in Brazil and is affiliated with the University of Rio de Janeiro. QualiBest is specialised in online panels in Brazil (https://www.institutoqualibest.com/).

5 Men, older respondents and the remote part of Brazil in North and Northeast were challenging to reach, so these groups were targeted at a higher rate to achieve the quota target by region, age and gender.
programmatic redistribution and clientelism: evidence from brazil

(Mercer et al., 2017). Yet vulnerable and remote survey respondents are underrepresented in the final sample.6

Party identification and political ideology are important factors for perceptions of redistributive policies. In our survey sample, only 24% of respondents answered yes to the question of whether they identify with any party. Of these respondents, 26% identified with the Worker’s Party PT, and 5% identified with the Brazilian Social Democracy Party. The remaining respondents feel close to a various number of Brazilian parties. Yet, 39% of respondents stated that they voted for Jair Bolsonoro (PSL) at the latest presidential election and 30% for Fernando Haddad (PT). To ensure that there is no partisan bias, we check our main results by people who voted for Jair Bolsonaro in 2018 (president at the time of the survey) vs. those who did not. Figure C.3.10 in the Supplementary Material overall confirms no such bias. Finally, we conduct the analyses on a sample of respondents with complete answers, who conducted the survey in a reasonable time frame,7 while also verifying each observation as a unique respondent in the data (see Section A.4 in the Supplementary Material).

The Conjoint Experiment

The conjoint experiment is designed to study voter support for candidates varying along multiple dimensions, including the use of programmatic and clientelist distribution. The conjoint experiment allows us to examine how candidates’ use of different modes of programmatic and clientelist distribution causally affects voters’ candidate choice as well as voter perceptions of candidate qualities and competences. Conjoint are also useful for studying potentially sensitive issues like clientelism because sensitive attributes are embedded in an entire candidate profile with several other attributes (Bansak et al., 2021; Hainmueller et al., 2014; Horiuchi et al., 2022). In our design, clientelist distribution is one of six candidate attributes which should reduce social desirability bias in respondents’ answers. All attribute values were randomly assigned, and the experiment had a total of 324 unique candidate profiles. The experiment was repeated three times per respondent to increase statistical power, meaning that the total sample size consists of 5,700 candidate choices. The introductory text of the experiment, outcome questions, and descriptive statistics are available in Section A.1 in the Supplementary Material.

---

6 This may imply that our estimates on clientelism are somewhat conservative because we have collected more responses from the segments of the population, who might have a higher aversion towards clientelism.

7 For the analysis we exclude all responses that were completed longer than three days.
Treatment Effects: Attributes and Levels

The conjoint experiment shows profiles of two competing, hypothetical political candidate profiles who differ on six attributes that serve as treatments. We design the survey experiment with two political candidates that are running for re-election as city councillor because the programmatic distribution and the clientelistic distribution treatment are designed based on retrospective voting models, presenting respondents choices from past performances. We chose the election for city councillor to measure voter preferences for local politicians, who are more likely to engage in clientelist relationships. In addition, because mayors are often a well-known figures in local politics and to avoid biased perceptions about the current mayor, we chose to model two city councillor candidates. Table 5 summarises candidates’ attributes and levels. The first three are the generic characteristics of age, gender and occupation. Age is varied in 10-year intervals from 35-55, corresponding to the average age interval for most city councillors in Brazil (see Section A.5 in the Supplementary Material for an overview of the characteristics of city councillor candidates in the 2020 election). To reflect differences
Programmatic redistribution and clientelism: evidence from Brazil

In candidates’ socioeconomic backgrounds, their occupations comprise lawyer, manager of a big company, and factory worker in a big company. All attribute levels were carefully selected and we acknowledge that they are not all representative of the distribution of city councillor candidates. Candidate’s occupation is not modelled after the distribution of characteristics of councillor candidates to be able to compare and measure the effect of candidate’s social class. It only serves as a background characteristic and not as one of the main attributes of interest, as specified in the pre-analysis plan. This design choice has consequences for the external validity of the survey experiment. Specifically, it is less likely that results will tell us which candidate characteristics are more likely to gain the majority of votes, but rather tells us an important indication about voter preferences (Abramson et al., 2022; de la Cuesta et al., 2022; Hainmueller et al., 2015). The remaining three attributes represent a different mix of programmatic redistribution (spending and revenue side) and clientelist distribution. The attributes cover municipality-level policies because the conjoint survey experiment mimics a voting decision between two hypothetical city council candidates. It is important for our purposes, to note that Brazilian citizens reach out to members of the city council about public services that are provided by the municipality and city councillors are also often involved in clientelistic exchanges with citizens (Bobonis et al., 2017; Nichter, 2018; Sugiyama and Hunter, 2013).

In terms of programmatic redistribution, we draw on models of retrospective voting and assign an attribute on the candidates’ previous performance as a politician on delivering programmatic distribution in the municipality. The attribute has three levels: a status quo (baseline), a quasi-public good, and a targeted social transfer category. We implement the quasi-public good as a public health care clinic, because health care spending is within the domain of Brazilian municipalities and is a highly salient issue citizens often raise with city councillors (Bobonis et al., 2017; Nichter, 2018). Targeted social transfers are implemented as the provision of a local CCT with a monthly supplement of R$100 for Bolsa Família recipients - which mimics Rio de Janeiro’s ‘Cartão Família Carioca’ program (a municipal level supplement to Bolsa Família). Similar local CCT programs are currently implemented in around 8% of Brazilian municipalities and widely discussed on the local level and increases the external validity of our survey experiment. National and local level CCTs are good examples of targeted social policies that have lifted many Brazilians out of poverty over the last decade and which are administered according to formalised rules with little ground for systematic manipulation (Fried, 2012; Nichter, 2018).

We also assign an attribute with candidates’ position on income tax policy to account for the revenue side of programmatic redistribution. Because income taxes are outside of the decision-making authority of municipalities in Brazil and are determined at the state level, we focus on candidates’ preferences (or policy positions) rather than actual performance in local government. Nonetheless, we focus on income taxation rather than local level taxation (e.g. property taxes), because it is the most salient component of Brazil’s tax system and forms an important part of the revenue to finance Bolsa
Família. The tax attribute has three levels, starting with maintaining the status quo of income taxation. Second, it is a policy position supporting progressive income taxation as higher taxes on the richest 15% (income above R$ 4700)\(^8\), which corresponds to the highest income bracket of the current Brazilian tax system. Third, it is a policy position supporting a flat-rate 1% tax increase for all income groups. While the third level maintains the moderately progressive nature of Brazil’s current tax system, it implies that all income groups would pay higher taxes, meaning that in this scenario even low-income voters would face a tax increase.

Finally, we assign an attribute with candidates’ involvement in clientelist distribution. This attribute reflects differences in the nature of the goods being distributed, while also being tailored to the operation of clientelism in the Brazilian context (Nichter, 2018; Sugiyama and Hunter, 2013). First, the baseline is a scenario of a candidate not using clientelist strategies to mobilise voters. The second level reflects a situation where the candidate engages in vote buying. This comes in the form of a simple cash-for-votes scheme where the candidates offer voters R$100 in return for their vote at the municipal election. This corresponds to the amount distributed as part of the local CCT treatment and is close to the amounts typically offered in vote-buying practices in Brazil (Nichter and Peress, 2017). The third level is also a clientelist transaction, but one portraying a patronage scheme in which candidates offer voters work for the local municipality in return for their vote. In contrast to vote buying, which typically involves small-scale handouts of money or food (Yıldırım and Kitschelt, 2020), patronage involves the distribution of work or jobs conditional on political support.

**Outcomes and Voter Beliefs**

For each pair of candidates, we ask respondents two questions to serve as the main outcomes. First, to measure respondents’ candidate support, we ask which candidate the respondent “would vote for in the next municipal election?”. Second, to measure the electoral viability of candidates, we ask which candidate respondents believe “is more likely to win the next municipal election?”. This question informs us of respondents’ assessments of candidates’ likelihood of winning and their expectations about the behavior of the electorate in general. This outcome matters for support for candidates using clientelist distribution because voter support for clientelist candidates may be contingent on the expectations of the candidate choices of other voters (cf. Corbacho et al. 2016; Fisman and Golden 2017).

We ask six follow-up questions to get a better understanding of voter beliefs and mechanisms driving voter support of candidates using programmatic and clientelist distribution (for an overview, see Table A.1.3 in the Supplementary Material). These questions also serve as a validation intended to check whether respondents understood the experiment and responded to the information we intended to provide in the experiment. First, because voters may perceive clientelist distribution as a signal of weak fiscal

---

\(^8\) According to the World Inequality Database (https://wid.world/simulator/, around 13% in Brazil have a higher income than R$ 4700 (the top tax bracket).
capacity, we ask respondents about their perceptions of the candidates’ ability to (a) improve the collection of local taxes and raise revenues and (b) deliver sufficient public services. Second, voters may perceive clientelist offers as a signal of corruption, and so we ask about perceptions of the candidate’s involvement in (c) corruption. Third, to examine whether candidates can successfully obfuscate the normatively undesirable features of clientelism (Kramon, 2017; Mares and Young, 2019) and instead use clientelist distribution to sway voter beliefs by signalling that candidates are “redistributive types”, we ask respondents which candidate they think is more likely to (d) help people like themselves when they face economic challenges, (e) help poor people, and (f) reduce inequality.

2.5 RESULTS

Figure 6 shows the main results from the conjoint experiment testing how programmatic and clientelist distribution affects candidates’ voter support and electoral viability. The coefficients reported in Figure 6 are average marginal component effects (AMCEs) that show the effect of an attribute level, taking the effect of other attributes into account by averaging over effect variations caused by them (Bansak et al., 2018; Hainmueller et al., 2014). Recent research has clarified the interpretability of the AMCEs by demonstrating that the AMCEs average over both the direction and intensity of individual preferences (Abramson et al., 2022; Bansak et al., 2022). In line with Bansak et al. (2022), we interpret AMCEs as the effect on the probability of choosing a political candidate when an attribute changes values for that candidate. And as pointed out by Abramson et al. (2022), we are aware that the AMCEs cannot be interpreted as majoritarian preferences.9 10 Figure C.1.1 in the Supplementary Material shows corresponding marginal means (MMs), which denote the probability that respondents select a specific attribute level, averaged over the other attributes (Leeper et al., 2020). AMCEs provide a relative measure of preferences, whereas MMs provide an absolute measure of preferences (Leeper et al., 2020).11 We cluster standard errors at the respondent level, since each respondent performs the conjoint tasks multiple times.

We also carry out diagnostics checks to test three key assumptions for causal inference in conjoint experiments (Hainmueller et al., 2014). First, we perform balance checks to test that attributes values are properly randomised. Second, we address potential carryover effects by checking whether responses depend on prior candidate profiles that respondents have been exposed to in the experiments. Third, we check for potential

9 Furthermore, the recent literature has also proposed alternative estimates (e.g., Ganter 2023; Zhirkov 2022), but the AMCEs still remain the most applied in the empirical literature. This may be because some of these estimators (e.g., Zhirkov 2022) put additional restrictions on the survey design and data collection.

10 Additionally, recent research from Clayton et al. (2023) showed that conjoint experiments may generate measurement error due to intra-respondent reliability. Fortunately, they find extensive empirical evidence that the error does not vary systematically with different combinations of attributes. They propose a bias correction, which will often make effects larger.

11 AMCEs in fully randomised designs are the differences between the MMs of a given attribute level and its baseline.
profile-order effects. In the Supplementary Material (Section A.3) we show that all three assumptions hold. The Supplementary Material (Section A.4) also reports results from attention checks designed to validate that respondents remained attentive throughout the experiment. The distribution shows that 97\% of the respondents in the final sample passed the first attention checks (after the first conjoint task) and 98.5\% passed the second attention check (after the second conjoint task).

All attribute values are fully randomised, there are no profile order effects for almost all attribute values (the only exception is small differences for "No clientelism" and "Same tax", but we do not see this as a major violation of the assumption) and there are no carryover effects across all attribute values.
Figure 6: Effects on Candidate Support and the Likelihood of Winning

(a) Candidate support

(b) Likelihood of winning

Note: The coefficients (dots) show the average marginal component effects (AMCEs), i.e. the effect of an attribute level relative to its baseline, averaged over the other attributes. The dots without horizontal bars denote the baseline of an attribute. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. \( n = 8,520 \). See Table B.0.1 in the Supplementary Material for details.
Voter Responses to Programmatic Distribution

Figure 6a shows that a track record of using elected office to strengthen programmatic redistribution significantly increases voter support (relative to the baseline). Working for the introduction of local CCT programmes increases candidate support by 5 percentage points, whereas efforts to expand health clinics increase support by 7 percentage points. Theoretically, we would expect a difference between the effect of the two forms of programmatic distribution (universal vs. targeted distribution) as health clinics benefit a larger part of the electorate than local CCTs. However, the effect of the two types of programmatic redistribution is not significantly different, suggesting that both health and CCT programs are viewed favorably among large parts of the electorate (Bergman, 2019).

Voters likewise perceive candidates as more electorally viable if they run on platforms signaling strong prior performance on issues of programmatic redistribution: Local CCTs increase voter beliefs that the candidate is likely to win the election by 10 percentage points, whereas local health clinics lead to a 7 percentage point increase. Consistent with models of retrospective voting, voters reward candidates who perform well on programmatic distribution, and they believe other voters will do so too.

Results from the analyses of voter beliefs corroborate that the programmatic distribution treatments make voter perceptions of candidates more favorable (see Figure C.1.2 in the Supplementary Material). Voters believe that candidates who have worked for more programmatic distribution (local CCTs or health clinics) are more likely to help the poor, reduce inequality, help people in economic distress, and deliver good public services. However, voters do not systematically associate candidates running on programmatic platforms with stronger fiscal capacity or less involvement in corruption.

Candidate support is also affected by positions on taxation. Advocating a flat-rate 1% tax increase decreases the probability of voter support by significant 9 percentage points (Figure 6a) and lowers voter beliefs in candidates’ electoral viability (Figure 6b). While candidate support for increased income taxes on the richest 15% of the population has no effect on voter support, Brazilian voters tend to believe that policy positions of higher taxes on the rich make candidates less likely to win the election (Figure 6b).

Voter Responses to Clientelism

Figure 6a shows that voters have a strong aversion to candidates’ relying on clientelist distribution. Voters are 38 percentage points less likely to support a candidate who offers cash in return for votes. Voter support for candidates who use patronage also drops by a substantial 27 percentage point. While the large negative effects of vote buying and patronage are relative to a candidate who does not use clientelist strategies, this suggests strong electoral punishment effects for candidates using clientelist distribution to mobilise support. Voters’ aversion to clientelist distribution also holds in absolute terms (see Figure C.1.1 in the Supplementary Material). Moreover, both the relative and absolute effects of vote buying and patronage differ significantly. This shows that vote
buying is perceived as a greater vice than patronage, which resonates with the findings of Ansell (2018) who shows that cash offers are perceived as more immoral than other types of clientelism in Brazil.

Regarding the effects of clientelist distribution on electoral viability (figure 6b), voters’ beliefs about candidates’ likelihood of winning are strikingly different from the effects on candidate support. Voters tend to believe that clientelist distribution makes little or no difference to candidates’ likelihood of winning the election (3 percentage points effect of vote buying and no effect of patronage). Even though voters themselves state that they would punish clientelist candidates, they do not believe other voters will do the same. This suggests that clientelism gives rise to a collective action problem: If voters’ own behavior is contingent on their beliefs about the actions of their fellow citizens (Fisman and Golden, 2017), clientelism may endure, in part, because it is considered a common link between voters and politicians, even though it is widely seen as involving normatively undesirable practices. Indeed, voters’ strong aversion to clientelist distribution is also apparent in their beliefs about the qualities of clientelist candidates. Candidates that are using clientelistic distribution are associated with weak fiscal capacity, corruption, and a lower likelihood of reducing inequality. Also, vote buying candidates are perceived as worse than candidates using patronage (cf. Figures C.1.2 and C.1.3 in the Supplementary Material).

The Grey Zone: Mixing Programmatic and Clientelist Distribution

The results so far show that voters in Brazil are favorable towards candidates who campaign on platforms of programmatic redistribution and tend to punish candidates who employ clientelist strategies during election campaigns although this does not detract from candidates’ electoral viability. The results match findings in the literature showing that voters generally disapprove of candidates involved in clientelism and corruption more broadly (Bøttkjaer and Justesen, 2021; Incerti, 2020). What we are interested in, however, is what happens to voter support in a scenario where candidates are not simply portrayed as “good” or “bad”, but operate in a grey zone where programmatic and clientelist distribution form part of the same candidate’s election campaign.

To do so, we examine the interaction effects between the two modes of distribution: That is, how does clientelist distribution affect voter support conditional on candidates’ having a track record of working for increased programmatic redistribution (hypothesis $H_1$)? Figure 7 shows predicted probabilities of voting for candidates with differing platforms of distributive politics.\(^{13}\) We only show results for the interaction terms. Figure 7a shows interactions between programmatic and clientelist distribution and Figure 7b the interaction between clientelist distribution and programmatic income taxation. We display coefficients as marginal means, that is, the probability of voting for candidates with different platforms of distributive politics. All predicted probabilities are bench-

\(^{13}\) We also validate our results by gender comparing results for male and female respondents (Figure C.3.8) and find no significant differences.
marked against 0.5, which is the overall probability in forced-choice experiments (Leeper et al., 2020).

Figure 7: Interaction Effects on Candidate Support, Programmatic Redistribution x Clientelism

Note: The coefficients (dots) show marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes. All predicted probabilities are bench-marked against 0.5. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. \( n = 8,520 \). See Table B.0.3 in the supplementary material for details.

Figure 7 shows the wide variation in candidate support across different combinations of distributional politics. Voters clearly prefer candidates who campaign on programmatic spending (both increasing and keeping the current level) provided that
clientelist distribution does not enter the policy mix. However, while programmatically redistributive candidates are generally punished for adding any form of clientelism to their election campaign, voters do discriminate between different types of clientelist distribution. Specifically, voters are much more lenient towards a mix of programmatic redistribution and patronage than to a mix of programmatic redistribution and vote buying, which is sanctioned significantly harder. Interestingly, voters only evaluate patronage as poorly as vote buying when it is combined with a programmatic 1% flat-rate tax, a feature of the revenue-side of programmatic redistribution.

In terms of electoral viability, mixing programmatic and clientelist redistribution does not make the voters think that candidates are less capable of winning elections (see Figure C.2.1 in the Supplementary Material). While voters are not supportive of clientelist candidates, even if they also deliver sound programmatic policies, they do not believe this makes candidates less likely of winning elections. This is especially the case for local CCTs. Voters believe that a candidate offering a mix of local CCTs and patronage is as likely to win as a candidate who offers local CCTs but does not engage in clientelist distribution. Thus, voters’ seem to believe that their fellow citizens are relatively forgiving of patronage distribution, if it is combined with targeted programmatic goods, and that a mix of patronage and CCT programs makes candidates electorally viable.

Voter beliefs about candidate qualities and competences also change when clientelist distribution is mixed with a programmatic policy platform, as shown in Figure 8.14 While voters on average associate a candidate with a track record of programmatic redistribution with improved fiscal capacity, helping the poor and people in economic distress, and no corruption, the picture completely reverses when candidates also employ clientelist distribution. In fact, a candidate whose policy platform mixes clientelist and programmatic distribution is associated with low fiscal capacity, a lower likelihood of delivering public services, and higher likelihood of engaging in corruption.

14 The interactions of clientelism and income tax policies are available in Figure C.2.2 in the Supplementary Material.
Figure 8: Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs

(a) Improve fiscal capacity  
(b) Engage in corruption

(c) Help in economic distress  
(d) Help poor people

(e) Reduce inequality  
(f) Deliver public service

Note: The coefficients (dots) show marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes. All predicted probabilities are benchmarked against 0.5. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. \( n = 8,520 \). See Table B.0.5 to Table B.0.15 for details.

However, consistent with our findings above, when we decompose clientelist distribution and distinguish between patronage and vote buying, voter beliefs are more positive towards candidates who campaign on a mix of patronage and local CCTs (or increasing taxes on the rich), which is viewed more favorably than those who campaign on a mix of
programmatic redistribution and vote buying. For instance, candidates using patronage while working for local CCTs are not perceived as being less (or more) likely of helping the poor and reducing inequality. And candidates who combine patronage distribution with a policy position of taxing the rich are even perceived as being slightly more likely to improve fiscal capacity. These results add important information to the puzzle of why clientelist candidates often get elected, despite voters’ apparent dislike of clientelism: Voters are more lenient towards some forms of clientelist distribution, particularly if they involve work or jobs and if they are mixed with pro-poor programmatic policies. Regardless of their own (negative) views, voters also seem to believe that clientelism does not make candidates less likely of receiving support from other voters, which might suggest that there is little inter-personal confidence that clientelist distribution will be electorally sanctioned.

Overall, these findings are line with our expectation ($H_1$) that voter support is heavily contingent on whether candidates use clientelist strategies, even if programmatic redistribution is an integral part of their policy platform. Our findings also support the idea ($H_2$) that voters differentiate between different modes of clientelism and are more lenient toward candidates employing a mix of programmatic redistribution and patronage than those who offer a mix that includes vote buying. This suggests that different types of clientelism are subject to different levels of electoral punishment, and that voters consider trade-offs in choosing between candidates mixing different types of programmatic and clientelist distribution.

**Programmatic Redistribution, Clientelism, and Poverty**

Poverty is often considered a root cause of clientelism and poor people are more likely targets of clientelist parties (Jensen and Justesen, 2014; Scott, 1969; Stokes et al., 2013). It is also plausible that poverty contributes to heterogeneity in how voters evaluate politicians who use clientelist strategies during elections. We therefore examine how the interaction of programmatic and clientelistic distribution affect voters’ support for and beliefs about clientelist candidates for subgroups of poor and non-poor voters in Brazil. We expect that candidates campaigning on a mix of programmatic and clientelist distribution receive greater support among poor voters ($H_3$), who may perceive clientelism as a signal of candidates’ ability and commitment to engage in pro-poor redistribution.

For the subgroup analyses, we rely only on differences in marginal means (MMs) because differences in AMCEs are sensitive to the choice of baseline values and can give misleading results, especially when preferences for baseline values differ across subgroups (Leeper et al., 2020). We construct a poverty measure by combining two survey items and we validate the approach with different approaches of measuring poverty. A correlation matrix of the different poverty indicators that we used in the survey and for validation of the the poverty indicator used in the analysis can be found in Figure C.3.6 in the Supplementary Material. We also include the main effects on candidate support, by
poverty in Figure C.3.7 in the Supplementary Material. In order to measure poverty, we first create an indicator for people who receive support from Bolsa Família. The program is designed for families with low incomes, that is, a monthly per capita income of R154 or lower. We categorise Bolsa Família recipients based on a survey question asking whether the respondent or anyone in the respondent’s household receive support from Bolsa Família. A limitation of this indicator is that it might only capture a subgroup of poor respondents who are “Bolsa Família-compliant”. Second, to include non-compliant poor respondents who do not qualify for Bolsa Família, we rely on a survey question that measures whether respondents have gone without a meal a day in the past year (“Over the past year, how often, if ever, have you or anyone in your family: gone without a meal a day”). We classify respondents as poor if they or household members were either Bolsa Família recipients or have gone without a meal a day. As such, our poverty indicator includes Bolsa Família household beneficiaries and respondents, who have experienced food insecurity over the last year.

Figure 9 shows how the effects of combinations of different modes of distributive politics differ across poor and non-poor voters (the interaction effects of income taxes and clientelism are in the Supplementary Material, Figure C.2.3). For non-poor voters, mixing clientelist distribution with programmatic distribution lowers candidate support (Figure C.3.1). While the picture is less clear for poor voters, the results do not generally match the expectation (H3) that adding clientelist distribution to the policy mix has a positive effect on candidate support among poor voters. That is, poor voters in Brazil do not uniformly support candidates using clientelist strategies to mobilise support. However, they do not reward candidates refraining from the use of clientelist distribution to the same extent as non-poor people. In other words, the positive effect of not engaging in clientelist distribution on candidate support is smaller for poor people. Indeed, poor voters are more prone to support candidates mixing the distribution of work or jobs (patronage) with increased access to a local CCT, a form of targeted pro-poor redistribution. The probability of supporting such a candidate is 12 percentage point larger for the poor than for the non-poor. Among the poor, the use of patronage (rather than vote buying) seems to be a more effective strategy for mobilising political support.16

---

15 The proportion of Brazilians who receive Bolsa Família in our sample is 6.4%, whereas it is about 1/4 of the Brazilian population (MDS, 2022). Our sample therefore underestimates the proportion of Bolsa Família beneficiaries, possibly because these are harder to reach with online surveys.

16 As a robustness check, we checked differences by education, Figure C.3.9 in the Supplementary Material, which also showed that voters with lower educational levels are more lenient towards patronage than are more educated voters.
When we turn to voter assessments of candidates’ electoral viability, it is striking that neither poor or non-poor voters believe clientelist distribution makes candidates less likely of winning elections (see Figure C.3.2 in the Supplementary Material). This supports our prior findings that people in Brazil generally disapprove of clientelism in electoral politics, but do not expect that other voters will punish clientelist candidates.

Finally, poor and non-poor voters hold different beliefs about the qualities and competences of candidates using clientelism as part of their policy mix (Supplementary Material, Figure C.3.3, C.3.4, and C.3.5). Non-poor voters clearly associate candidates’ mixing programmatic and clientelist distribution with weak fiscal capacity, corruption, and a low likelihood of helping the poor (see Figure C.3.3). In some respects, poor voters’ beliefs about the qualities and competences of the candidate do not change much when clientelism is part of a candidate’s distributional politics. Particularly noteworthy is that the poor do not see clientelist distribution as a signal of candidates’ intent to redistribute (see Figure C.3.4). These findings stand in contrast to our general expectation as well as findings in the literature (Mares and Visconti, 2019; Kramon, 2017) suggesting
that clientelist distribution may signal pro-poor concerns and obfuscate the normatively undesirable features of clientelism.

2.6 CONCLUSION

Widespread clientelism potentially contributes to undermine the supply of and demand for public goods and programmatic redistribution. Underprovision of programmatic redistribution may simultaneously keep voters dependent on clientelist networks and the goods they can obtain through connections to political parties. Clientelism and low levels of programmatic redistribution may therefore persist in an equilibrium that is difficult to escape, particularly in societies with high levels of inequality (Acemoglu et al., 2011; Fergusson et al., 2022). To understand how this relationship operates in the context of democratic politics, it is important to understand how clientelism shape voter support for programmatic redistribution.

We address one part of this puzzle by focusing on the demand-side of distributive politics, focusing in particular on voter support for candidates running for elected office on platforms mixing programmatic and clientelist modes of redistribution. To do so, we marshal evidence from a conjoint experiment of voter preferences for city councillor candidates in Brazil. The results support some of our preregistered hypotheses, whereas others find weak or no support. We find that voter support, on average, decreases whenever clientelist distribution enters a candidate’s policy mix, regardless of the candidate’s efforts to implement programmatic redistribution. Our findings also suggest that voters in Brazil discriminate between different types of clientelism, and that patronage in particular is subject to much lower electoral punishment than simple vote buying. This applies particularly to poorer groups in society. In contrast to our expectations, poor people are not more supportive of clientelist candidates, particularly not when they engage in crude vote buying.

However, poor voters are more prone to positively evaluate and support candidates who mix popular modes of pro-poor programmatic redistribution like conditional cash transfers with patronage where access to work or jobs is exchanged in return for political support. Voters, including the poor, clearly disapprove of candidates who rely on clientelist distribution that is short-term and involves small cash-handouts (like vote buying). This applies even when such candidates also have a track record of working for increased access to public health facilities or conditional cash transfer programs.

Finally, our results shed light on an interesting voter coordination problem in Brazilian elections. There is a stark difference between how voters themselves respond to clientelism and how they believe others will respond. While voters state that they are prepared to punish candidates engaging in clientelist distribution, they do not believe their fellow citizens will do the same. This may be indicative of a context where clientelism and political corruption are systemic and embedded in a wide range of relations between voters and politicians. Such belief systems may also give rise to a large-scale electoral
collective action problem, where individuals’ beliefs about how others behave lead them to engage in clientelist relations, even if they find such relations normative undesirable.
REFERENCES


URL: [http://www.nber.org/papers/w23589](http://www.nber.org/papers/w23589)


REFERENCES


**URL:** http://dx.doi.org/10.1016/j.jdeveco.2015.07.002


**URL:** https://doi.org/10.1177/1354068811436030


**URL:** https://doi.org/10.1093/poq/nfw060

**URL:** https://doi.org/10.1177/0010410116666838


**URL:** https://doi.org/10.1177/09516298211003661


**URL:** http://www.jstor.org/stable/43664332


**URL:** https://doi.org/10.1080/13510347.2019.1641798

FIGHTING FOR A BETTER LIFE: PROTEST AND PUBLIC OPINION IN SOUTH AFRICA

with Mogens Kamp Justesen

Abstract

How do civic protests cause shifts in public opinion? Protest enables citizens to express their dissatisfaction with governments and policies when other political actions, such as voting, seem insufficient. Protests may directly lead governments to address certain policy issues, but they can also exert indirect pressure on officials by precipitating shifts in public opinion. In this paper, we examine the effects of peaceful and violent protest on public opinion, using evidence from the case of South Africa, where citizens regularly engage in community protest to express dissatisfaction with poor public service delivery on issues such as water, electricity and sanitation. We marshal evidence from both observational and experimental research designs. First, we test the effects of protest events on public opinion as part of a difference-in-differences design that is based on multiple waves of a nationwide survey, which we match to geo-coded protest data. Second, drawing on a nationwide online survey, we randomly expose respondents to images of violent or peaceful protest. Third, we run a conjoint experiment to disentangle the effects of the different dimensions of protest. We find that peaceful protest in which protesters attribute blame for their grievances to specific actors attract the most sympathy and support from the wider public. Violent tactics and the absence of blame attribution, on the other hand, cause a backlash effect on public opinion. That said, we also show that specific types of violent protest can attract sympathy and support from the wider electorate.

3.1 INTRODUCTION

The number of protests in Sub-Saharan Africa has peaked in recent years (Branch and Mampilly, 2015; Mueller, 2018; Harris and Hern, 2019). In what has been dubbed the third wave of African protests (Mueller, 2018), citizens in several African countries are increasingly taking to the streets because they believe that the electoral arena is not an adequate platform for their opinions (Harris and Hern, 2019). These protests have been linked to frustrations with the failure of economic growth to remedy inequality and poverty in the region, especially prevalent among poorer citizens (Mueller, 2018; Harris and Hern, 2019; De Juan and Wegner, 2019). Furthermore, observers have emphasised
that these protests differ from previous waves of demonstrations in their nature. They are more frequent, they are usually smaller in scale, and they are mostly about basic material needs, such as food prices and the provision of basic public services, rather than about ideology and regime change (Mueller, 2018; Harris and Hern, 2019). At the same time, little is known about the public perception of those protests and their effect on the opinion of the wider electorate. Protests can put direct pressure on incumbent governments to address failures of public policy, but they can also affect government action indirectly through shifts in public opinion (Madesam et al., 2013; Wouters and Walgrave, 2017; Gillion and Soule, 2018). Indeed, while public protests may result in short-term concessions, a shift in public opinion can produce durable policy changes (Soroka and Wlezien, 2009).

In this paper, we address this issue by examining the effects of protest on public opinion. To that end, we marshal evidence from the wave of service delivery protests in South Africa. These protests, which have been escalating for almost two decades, involve poor citizens who protest regularly, and sometime daily, to voice their dissatisfaction with the inadequate provision of services, such as water, electricity, and sanitation in their communities (Booysen, 2007; De Juan and Wegner, 2019; Paret, 2018; Lieberman, 2022). We examine the influence of these protests on public support for the policy concerns that the protesters raise as well as on public sympathy for the protesting groups. Accordingly, we focus on policy support and sympathy for protesters among citizens who are exposed to recent nearby protest events or to different types of information about protests, and we use observational and experimental research designs to test the impact of protest events or information on public opinion.

Theoretically, we argue that protest behaviour can be viewed as a signalling game, in which a subset of citizens use protests to publicly signal private information about salient issues that concern them. Citizens who are exposed to these signals update their beliefs in ways that make them sympathetic or unsympathetic to protesters and their demands (Enos et al., 2019). In the case of service delivery protests, citizens may, for instance, perceive the demonstrations as a signal of the poor living conditions in underprivileged settlements and strengthen their support for improvements to service delivery in those areas. Often protesters use disruptive or violent tactics, such as the burning of tyres, road-blocks, or riots, in order to express their concerns, as one South African protester put it, “violence is the only language the state understands” (Paret, 2018). Unlike peaceful protests, violent ones may be perceived as a signal of unlawful public disorder, which could result in a backlash effect in public opinion. However, violent protest may also signal that the grievances are severe. In this way, they can increase public awareness of demands for basic public services (Beber et al., 2014; Enos et al., 2019). We also emphasise two factors that may amplify the effect of (peaceful and violent) protest, namely blame attribution and shared group identity. Both may increase the perceived legitimacy of the

---

1 The first wave occurred prior to decolonisation in the 1960s, and the second wave was connected to the democratic transitions of the 1990s.
protest and the perceived deservingness of the protesters (van Oorschot, 2000; Javeline, 2003; Beber et al., 2014; Enos et al., 2019; Battaglini et al., 2020; Pellicer et al., 2021).

Empirically, we test the effects of protest events and information on policy support and sympathy for protesters by using observational and experimental data. First, we use a difference-in-differences design, in which we match geo-location data for protest events to several waves of a nationwide face-to-face survey that was conducted in 2018. We construct a spatial and temporal treatment variable that a) locates exposure to actual protest events in the wards (constituencies) where individuals vote while also b) focusing on the periods prior to interviews with the respondents. In the difference-in-differences analysis, we use this treatment indicator to compare changes in support among citizens who are exposed to actual protest events in their wards to citizens who are not exposed. We also distinguish between peaceful and violent protest events.

Second, we test the effect of exposure to protest information by using two survey experiments from a national online survey that we fielded in the early autumn of 2022 in South Africa. The survey experiments, a vignette and a conjoint, entailed assigning respondents to different types of informational environments at random. In the vignette experiment, the treatment groups were at random shown images of either a peaceful or a violent service delivery protest along with a short description that referred to blame attribution or its lack. We use this vignette experiment to determine how exposure to information in the form of images (accompanied by text) affect support and sympathy among respondents. In an experimental design, an image, in essence, is a compound treatment in which many different pieces of information are aggregated into a single package (the picture treatment). This say little about the specific features of protests that cause more (or less) sympathy or support for protesters and the policies that they advocate. In order to address these concerns, we also ran a conjoint experiment that enquires into how information about the different dimensions of protests affects support and sympathy for protesters. To that end, we randomly assigned respondents to different protest profiles that capture the relative effects of six salient dimensions of protest: the number of protesters, the source of their grievance, their tactics, the levels of blame attribution, the duration of the event, and police involvement. This approach enables us to examine the characteristics of protest that generate more (or less) support for protesters and their demands.

The empirical analysis reveals several interesting findings. The evidence from our difference-in-differences analysis shows that South African citizens respond to protest events in ways that are consistent with our expectations. Peaceful protest events increase sympathy, while violent protests decrease it. The effect is more pronounced for more recent protest events and fades out over longer time horizons. The results from the vignette experiment suggest that South African citizens are not noticeably affected by exposure to information about protests that is packed as images, except for a small negative effect of violent protests. The conjoint experiment, however, shows that some specific dimensions of protest information do induce shifts in public opinion. We find
evidence that violent tactics have strong negative effects on both sympathy and policy support, relative to peaceful protests.

On average, violent protest has a negative impact on public opinion. But certain factors attenuate this negative effect. First, citizens are much more likely to forgive the use of violent tactics when the protesters attribute blame for their grievances to a specific actor. Second, citizens who share a racial-group identity with the protesters have a higher tolerance for the use of violent tactics. Third, the nature of a grievance matters for perceptions of the legitimacy of using violence, especially when it comes to access to clean drinking water. Fourth, violent protests that involve larger crowds attracts more sympathy and support than smaller crowds, arguably because they signal more widespread grievances. In fact, a large violent protest that involves riots and specific blame attribution and which is directed against the lack of clean water increases, in absolute terms, both the likelihood of protester sympathy and policy support among the public. Importantly, these findings shed light on the conditions that may make the wider public receptive and sympathetic to violent protest as a means of expressing wants and voicing grievances.

Overall, our findings suggest that peaceful protests that involve blame attribution have the strongest potential for attracting sympathy and support from the electorate. Peaceful protest thus appears to be the most effective means of protesters to signalling dissatisfaction with particular policies. Violent protests that do not involve blame attribution, in contrast, risk creating a backlash and seem to shift the focus away from the substance of the grievances and towards the mode of conveying those grievances. However, this does not hold universally for all violent protests. In some circumstance, violent protests do, in fact, attract both sympathy and support.

Our findings contribute to several strands of the literature on protest and (civil) conflict. First, we add to the literature on the impact of peaceful or violent protest on public opinion (Madestam et al., 2013; Beber et al., 2014; Sangnier and Zylberberg, 2017; Gillion and Soule, 2018; Enos et al., 2019; El-Mallakh, 2020; Feinberg et al., 2020; Wasow, 2020; Reny and Newman, 2021; Hager et al., 2022; Dahlum et al., 2023). The literature suggests that protest can increase support for policies by highlighting salient issues to other voters (Madestam et al., 2013; Gillion and Soule, 2018; Wasow, 2020). The effects of violent protest, however, are much less clear. The evidence suggests that violent protest may decrease (Muñoz and Anduiza, 2019; El-Mallakh, 2020; Feinberg et al., 2020; Wasow, 2020; Reny and Newman, 2021) or increase public support for the protesters and their grievances (Enos et al., 2019). We contribute to this work both theoretically and empirically by comparing the effects of peaceful and violent protests on public opinion and by reconciling the apparently contradictory effects of violent protest, a lacuna in the extant literature. We argue and show empirically that, as far as public opinion is concerned, violent protest induces a backlash on average, but some specific features, such as blame attribution, a shared group identity, the nature of the grievance, and the size of the protest, may attenuate this negative effect. Indeed, some forms of violent protest are,
ultimately, capable of positively affecting both public sympathy and policy support. The evidence that we marshal in support of these claims is both novel and comprehensive. It is grounded in both observational and experimental data, and it captures reactions to both protests events and information about hypothetical scenarios.

Second, although the literature, for most part, treats protest events as “bundled treatments”, we explain how different dimensions of protests affect public opinion both separately and in concert. We identify the features of violent protests that are likely to induce support and sympathy among the public. Third, as far as the specificities of the African and the South African contexts are concerned, we contribute to the literature on voter responses to (the lack of) public service delivery (de Kadt and Lieberman, 2020; Lieberman, 2018) and on the service delivery protests that have occurred in the course of the African democratisation process since the 1990s (Booysen, 2007; Alexander, 2010; De Juan and Wegner, 2019; Pellicer et al., 2021). In the case of South Africa, this literature often focuses on the causes of the protests (e.g. De Juan and Wegner 2019) rather than on their consequences. We expand on this literature by examining the effects of the service delivery protests on support policies and on sympathy for the protesters. To the best of our knowledge, these effects have not yet been tested extensively.

Finally, in the bigger picture, our paper contributes to the literature on the use of violence as a political weapon and its implications for public opinion. Scholars have examined the influence of terrorist attacks on institutional trust (Wollebaek et al., 2012; Dinesen and Jæger, 2013), government approval (Schubert et al., 2002; Holman et al., 2022), and electoral outcomes (Montalvo, 2011), focusing mostly on consolidated democracies (Godefroidt, 2023). A less developed body of literature suggests that political violence (Arce, 2003), rebel attacks (Gates and Justesen, 2020), and terrorism (Harding and Nwokolo, 2023) also affect public opinion in fragile democracies. We contribute to this work in two ways. First, this literature largely focuses on Western countries (Godefroidt, 2023). Drawing on the case of South Africa, we adduce new evidence on the manner in which protests, including violent ones, shape public opinion in non-Western contexts. Second, while much of the existing literature focuses on rare but highly intensive events such as terrorist attacks, we focus on conflicts that are low-intensity and high-frequency events, not unlike small insurgencies (Alexander, 2010). In other words, we add to the literature by focusing on the mechanisms by which collective action, in the form of micro protests, shapes public opinion. Taken in isolation, such occurrences are less intensive than attacks by terrorists or rebel groups, but they occur so frequently that they exert a significant and oftentimes disruptive influence on society.

The paper is structured as follows: the next section describes the theory and the hypotheses that guide our analysis. We then justify the selection of South Africa as an ideal case for our study. The following sections outline the research designs as well as presenting the findings and elaborating on their implications. The observational study

---

2 E.g., Madestam et al. (2013); Beber et al. (2014); Sangnier and Zylberberg (2017); Enos et al. (2019); Wasow (2020); Reny and Newman (2021)
is described first, and the experimental study is described second. The final section concludes.

### 3.2 PROTEST AND PUBLIC OPINION

Protest is a form of collective action that has citizens, who often have limited access to policy-making arenas, draw attention or object to policies or adverse social conditions by expressing anger, frustration, or moral indignation about particular issues (Javeline, 2003). Or, alternative, they may seek to obtain transfers or services from the political system (Lipsky, 1968). Protest is a form of political action that goes beyond the type of political behaviour that the standard models of voting usually incorporate (de Kadt and Lieberman, 2020). Common to retrospective voting models is that voters are presumed to evaluate governments on the basis of their performance in office and to reward (or punish) incumbents, contingent on whether they deliver a mix of taxes and public policies that are aligned to the interests and preferences of the citizenry. In simple models of retrospective voting, therefore, voters use elections to oust incumbents from office if they fail to deliver satisfactory public services. Yet, as Booysem (2007) noted, in some democratic systems, mostly ones that are dominated by a single party, voters sometimes support the incumbent (dominant) party on election day while also protesting against it between elections in order to demonstrate their dissatisfaction with issues such as public service provision. Voting for a party in government and protesting against it, can therefore serve as complimentary strategies for shaping government policy and improving public services (Booysem, 2007).

**Protest as Signalling**

We theorise that protests that are directed at an incumbent government (or the political system) as signalling games (Lohmann, 1994b,a), in which a subset of citizens engages in protest behaviour in order to signal their private information about perceptions of or experiences with (the failure of) public services or public policies in general. In this framework, protests are connected to potential policy changes in four steps (Lohmann, 1994b,a). First, citizens observe an issue in private, and they use theses observations to form beliefs about germane public policies. In our case, for example, many South Africans experience a lack of clean water and functioning sanitation as well as frequent and widespread power outages. These experiences inform their beliefs and opinions about desirable government and public-policy responses to these issues.

Second, a subset of citizens decides to engage in protest as a means of sending a signal to the government that reveals their private information about the state of the world, such as the perceived or experienced lack of basic services. The signal may be noisy, depending on the mode of communication that the senders employ (e.g., the use of peaceful or violent protest tactics), and the extent to which the protesters assign blame to a specific actor, or more diffusely, to the system (or to no actor in particular). Third, non-protesting citizens, a different subset of the public, observe the signal and update
their beliefs about the state of the world, on the basis of their perceptions of the protest and the behaviour of the protesters. Finally, all citizens condition their political support for the protesters and the issues that they raise on these updated beliefs.\(^3\)

**Expectations**

Proceeding from the framework that we described in the preceding paragraphs, we focus on the effect of protest on public opinion. Exposure to protest may occur in consequence of accessing information in various forms or through the observation of actual events. We distinguish between support for *protesters* (protest sympathy) and support for their *policy demands* (policy support). We argue that protest has heterogeneous effects on policy support and that information aggregation through protest is more likely to result in public support if the signal that the protests convey is less noisy (Battaglini, 2017). We emphasise three sources of signal noise that can affect public perceptions of protests and protesters: Peaceful vs. violent protests, the specificity of blame attribution, and group affiliations.

A **peaceful** protest can create awareness of policy issues, such as the inadequate provision of basic services, and make them more salient in the eyes of the public, which paves the way for popular support for both protesters and their demands (Madestam et al., 2013; Gillion and Soule, 2018; Enos et al., 2019; Wasow, 2020; Dahlum et al., 2023). Protests can serve the same function as political campaigns. In political campaigns, policy preferences are transmitted through social networks and media, which may have a mobilising effect (Enos et al., 2019). The use of **violence** in protests may, likewise, serve as a strong signal of a grievance that the protesters can transmit to the public. This transmission is likely to expand the non-protesting citizens’ awareness of the specific **policy issues** that the protesters raise. While the public may be unsympathetic to the use of violence, under some circumstances, violent protests can increase public support for the policy demand in question.\(^4\)

To be clear, we are not arguing that all forms of violent protest always generate support for the policy concerns of the protesters. Instead, the non-protesting public may express support for the raising of a given policy **issue** (but not necessarily for the **protesters**) by means of violent protest under specific circumstances. For example, when the public perceive violent protests as signals of real and severe (material) grievances and needs on the part of the protesters, and when the protests are perceived to concern constitutional rights, such as access to clean drinking water and adequate housing in the South African case. While these propositions may hold generally, the service delivery protests in South Africa are a case in which significant segments of the population are likely to believe that these conditions are met.

---

\(^3\) While this question is beyond the scope of this paper, policy change may be a downstream consequence of protest, if a sufficiently large proportion of the public align their policy preferences during elections or if they manage to impel the government to respond to grievances between elections.

\(^4\) We adopt a broad definition of violent protest, according to which such protests involve a) either damage to property and/or injury to persons, and/or b) disruptive tactics such as road blocks (Alexander et al., 2018). Our analysis also distinguishes between a) and b).
The signal that violent protests generate may become noisy if the mode of protest (violence or disruption) diverts attention from its ultimate objective (policy demand). In other words, violent protest may cause the public to shift their focus away from the substance of the grievances and towards the use of violence as a mode of expressing these grievances (Wasow, 2020). In such instances, non-protesting citizens may be less sympathetic to the protesters and less likely to perceive them as worthy of help (van Oorschot, 2000).

The foregoing suggests that citizens form relatively sophisticated opinions. They distinguish between grievances and policy demands as well as between support for protesters and for their tactics per se. Protests against climate change supply an apposite analogy: the public may be sympathetic to the cause of combatting climate change while being unsympathetic to the mode of protest (e.g., roadblocks and property destruction). In evaluating public opinion about protests, one needs to distinguish between support for the protesters (protest sympathy) and support for their policy demands (policy support). In line with this distinction, we expect peaceful or violent protests to have different effects, depending on whether the outcome of interest is sympathy for the protesters or support for the policy issues that they raise. In the context of the public-service delivery protests, therefore, we arrive at the following hypotheses:

\[ H_{1a}: \text{Peaceful protest causes an increase in support for the protesters and their demands for basic public services.} \]

\[ H_{1b}: \text{Violent protest causes a decrease in support for the protesters and an increase in support for their demands for basic public services.} \]

Protest signals may also become less noisy if the aggrieved protesters clearly hold certain political actors accountable for the lack of basic services (Javeline, 2003; Tilley and Hobolt, 2011; De Juan and Wegner, 2019; Gates and Justesen, 2020). While protesters usually object to an injustice or point to a grievance, they may also identify the institutions or the political actors to whom they attribute responsibility (Javeline, 2003). For instance, protesters may object to shortages of clean drinking water but may also allege that their municipal council has failed to resolve the issue. Such developments generally require citizens to possess relatively abundant of information, in that they must know which actors and institutions are in charge of the provision of particular services.

A service delivery protest that involves specific blame attribution may signal a graver injustice, because the signals that the observers receive about the legitimacy of the protest are less noisy and, because the protesters know who can redress their grievances. Specific blame attribution also signals that the grievance is out of the protesters’ control, which may make them more deserving of help in the eyes of others (van Oorschot, 2000). In contrast, a service delivery protest that does not involve blame attribution is likely to

---

5 Climate activism through disruptive protests has been pursued by, among others, the Extinction Rebellion movement; see, e.g., this article in Time magazine.
signal more diffuse sentiments of anger and frustration (Javeline, 2003). We therefore argue that public support for protesters and their policy demands is contingent on the specificity of blame attribution, that is, on the extent to which protesters attribute blame to the particular political actors with responsibilities in the policy domain of their grievances, such as the local municipality who is responsible for the provision of basic public services. Accordingly, we therefore expect that the specificity of blame attribution moderates the impact of protests on policy support and protester sympathy:

\[ H_2: \text{The effect of protests on support for protesters and their demands for basic public services increases when the protesters attribute blame to specific actors or institutions that are responsible for the provision of basic services.} \]

Finally, it is widely accepted that in-group and out-group identities matter for political behaviour and public opinion (Beber et al., 2014; Enos et al., 2019; Battaglini et al., 2020; Pellicer et al., 2021). Individuals who share a social, cultural, or ethnic identity with the protesters may be more likely to perceive the protests as credible. Therefore, those individuals are also more likely to perceive these signals that the grievance is real and well-founded as less noisy. In this way, shared identities may lead to stronger expressions of support for the policy demands of the protesters, among in-group members, and to stronger perceptions that protesters deserve help (van Oorschot, 2000). In the South African context, citizens who share a racial-group identity with the protesters may be more likely to sympathise with them than individuals with dissimilar racial-group affiliations. Indeed, even the use of violence to express grievances may be more socially acceptable among in-group members. Likewise, violent protests may be sanctioned more strictly by out-group citizens who do not share the identity of protesters (cf. Enos et al. (2019)). We therefore expect shared group identities to increase the effect of protests on support for protesters and their policy demands. The most salient marker of group identity in South Africa is racial group affiliation (rather than ethnic identity) (Ferree, 2010; Lieberman, 2022). We therefore expect racial identity to moderate the effect of protests on public support for protesters and their policy demands:

\[ H_3: \text{The effect of protest on support for the protesters and their demands for basic public services increases when citizens share a racial group identity with the protesters.} \]

3.3 THE CASE OF SOUTH AFRICA

The history of South Africa is rife with conflict and violence, which are strongly connected to and perpetrated by the apartheid regime and its brutal structural oppression of people of colour and Black South Africans. During the political transition that preceded the end of apartheid in 1994, the country experienced “unprecedented violence and teetered on the brink of civil war” (Thompson, 2014, p. 241). In the postapartheid era,
however, South Africa has seen little violent conflict between the state and organised non-state actors (Palik et al., 2020). Against this background, it would be tempting to classify South Africa as a society that is relatively free of (violent) conflict at present. However, while the nature of conflict has changed in the postapartheid era, violent and nonviolent local-level protests, riots, and clashes do occur. However, they are not related to control over territory or borders or to conflicts between states (like the apartheid regime) and organised non-state actors (like the African National Congress (ANC) liberation movement during apartheid).

The numerous local service delivery protests and the clashes between protesters and the police that have unfolded in democratic South Africa supply a prominent example of this development. In fact, despite its status as an upper-middle-income country with a high level of development, relative to other countries in the African region, South Africa has witnessed an increase in the incidence of protests, both peaceful and violent, over the past two decades (De Juan and Wegner, 2019; Alexander, 2010). Often, these protests are linked to resentment and a lack of belief in local and national governments along with dissatisfaction with the provision of public services such as water, electricity, and sanitation (Burchardt, 2022; Booysen, 2007). In the wake of the first postapartheid elections in 1994, consecutive governments that were led by the dominant party, the ANC, vowed to create “a better life for all” South Africans (Kroth et al., 2016). This process entailed developing and improving state welfare and progress in education, health and social grants, and access to basic public services, including housing, electricity, water, and sanitation (Kroth et al., 2016; Plagerson et al., 2019).

Despite the challenging structural conditions in the aftermath of apartheid, the ANC governments indeed achieved significant and real progress in various domains of social welfare and succeeded in providing access to education, health, and basic public services to millions of previously disenfranchised and disempowered citizens (Plagerson et al., 2019; Lieberman, 2022). In spite of these achievements, South Africa remains one of most unequal countries in the world (Bank, 2016) - large segments of the population still live in poverty and lack access to basic services.

Against this backdrop, the expansion of nominal access to public services has been accompanied by an increase in service delivery protests. These protests are directed, in part, against insufficient or inequitable access to public services as well as against poor levels of service (De Juan and Wegner, 2019, p. 39). They also have to do with the lack of representation for poor citizens, who have specific demands and needs, in the (local) political system (Booysen, 2007; Alexander, 2010). In fact, while the service delivery protests are sometimes labelled "popcorn protests” (Bond and Mottiar, 2013) because of their tendency to flare up and disappear rapidly, they have become a stable feature of South African society and occur so regularly that they have reached “insurrectionary proportions” in some parts of the country (Alexander, 2010, p. 25).

Service delivery protests, both peaceful and violent, are particularly frequent in poor and underprivileged areas, including townships, where poverty remains rife and where
3.3 The Case of South Africa

It remains difficult to address the structural and persistent inequality that decades of apartheid entrenched. Indeed, the South African service delivery protests have been described as a “rebellion of the poor” (Alexander, 2010; Alexander and Pfaffe, 2014; Burchardt, 2022). This description signifies the experiences of exclusion from public services that are common among those who live in poor communities and refers to the associated perceptions of widespread corruption (Bøttkjær and Justesen, 2021), as well as to the collective mistrust of and disappointment with the economic and political transformation of South Africa in the postapartheid era (Alexander, 2010; Burchardt, 2022).

The map below illustrates the magnitude and the geographical spread of the service delivery protests in South Africa. Figure 10a shows the total number of service delivery protests across South African municipalities and Figure 10b shows the proportion of violent service delivery protests from 2012 to 2022.6

Figure 10: Service Delivery Protests in South Africa, 2012-2022

(a) Number of service delivery protests  
(b) Proportion of violent service delivery protests

Note: The geo-coded data are from ACLED and are based on simple textual analyses that yield a list of service delivery protests, 2012-2022.

Figure 10 alludes to three important points. First, while South Africa spans a huge territory, service delivery protests occur across the entire country, including rural and smaller urban areas. Second, Figure 10a shows that protests tend to be concentrated in large metropolitan areas (“metros”) such as Johannesburg, Tshwane (Pretoria), eThekwini (Durban), and Cape Town, all of which are important economic hubs and contain large, urban, and densely populated informal settlements. It is precisely in these areas that public-service failure is particularly salient and visible to large groups of citizens who respond by engaging in collective action in the form of protest. Third, it is also clear that the protests are not only forms of peaceful collective action; they often involve violent or disruptive tactics (Figure 10b), such as burning tyres, the destruction of property and buildings, roadblocks, and clashes with police (De Juan and Wegner, 2019; Alexander,

6 While the rise of service delivery protests have been dated back to 2004 (Booysen, 2007; Alexander, 2010), our data only allows us to trace protests from 2012 onwards.
violent protests are relatively common in many areas, particularly those that surround the large metros.

Service delivery protests are mostly local and often, but not always, directed against municipal councils, local councillors, and mayors. South African municipal councils are elected on the basis of a mixed-member electoral system: roughly half of all members (ward councillors) are elected from single-member constituencies, while the other half are elected from party lists by using a proportional electoral system (PR councillors) that was designed to increase the proportionality between votes and council seats (Lieberman et al., 2021; Justesen and Schulz-Herzenberg, 2018). As far as electoral districts are concerned, all municipalities are comprised of wards. This is important to the present ends because our difference-in-differences analysis locates protests at the ward level. Mayors are not elected directly but as candidates for councils from party lists; then, they are appointed to municipal councils by majority vote (Porten et al., 2022; Berliner and Wehner, 2022).

Municipal councils, which are headed by mayors, have a constitutional mandate to deliver basic public services, including piped water, sewage and sanitation, refuse collection, and electricity (Porten et al., 2022; Berliner and Wehner, 2022). Since the deficient provision of these services is one of the key causes of the protests (Porten et al., 2022; Booyse, 2007; Burchardt, 2022), we focus on three salient public services, namely water, sanitation, and electricity. More than 25 years after the democratic transition, large segments of the South African population still lack access to these services or experience frequent disruptions. For instance, around 18% of households, most of which are black South African, are not connected to public sewage systems. An estimated 10% do not have access to piped water and the country has been suffering from shortages of energy and electricity, with frequent power outages, for years.

Our experiments entail variations on the provision of service delivery – water, sanitation, and electricity – along with information about the actors whom the protesters hold accountable. However, the political responsibility for delivering public services rests with different individuals and institutions. Water and sanitation are in the purview of municipalities. Therefore, citizens, if sufficiently informed, should find it easier to attribute blame for such failures to municipal councils, mayors, and ward councillors (Porten et al., 2022). The supply of electricity is less straightforward and involves more actors, of which the most important is Eskom, the national electricity company of South Africa, which accounts for approximately 90% of production and is also heavily involved in distribution (Porten et al., 2022; Bowman, 2020; Kroth et al., 2016). Eskom is subject to the authority of the Department of Public Enterprises, which is part of the national government, but the company and the municipalities share the responsibility for distributing electricity to consumers. Moreover, some municipalities acquire electricity from sources other than Eskom (Porten et al., 2022, p. 7). Most municipalities rely heavily

---

7 News24 2019
8 Daily Maverick 2020
9 Bloomberg 2022
on Eskom for the production and distribution of electricity; in others, councils play a more important role in distribution (Porten et al., 2022). This arrangement makes it difficult for citizens to attribute responsibility for failures directly to municipal councils or to the national government. Our experiments therefore involve not only variations in the service that is being delivered but also variation in the specific actors that the protesters hold accountable.

Here, we provide evidence on the effects of protest on public opinion in two stages. We proceed from the difference-in-differences analysis of the observational survey data. We examine the effect of peaceful and violent protests on sympathy for protesters among the public. Since the data that we use for that analysis do not allow us to examine effects on public support for the polices that the protesters raise, the second stage of our analysis draws on evidence from two online survey experiments in the influence of violent and peaceful protests and their characteristics on both policy support and protester sympathy.

3.4 OBSERVATIONAL STUDY: EVIDENCE FROM A DIFFERENCE-IN-DIFFERENCES ANALYSIS

We first test the effect of actual protest events in a difference-in-differences setup. We use several waves of a nationwide face-to-face survey that was conducted by Citizen Survey in 2018, which we match to data on protest events from The Armed Conflict Location and Event Data Project (ACLED). The latter data are based on geolocations.10

Data

Our dependent variable, protest sympathy, is from the South African Citizens Survey (SACS), a nationally representative monthly face-to-face survey that ran from 2015 to 2019 in South Africa. The monthly national sample consists of 1,300 respondents, and the data include the geolocations of the respondents’ enumeration areas.11 The survey covers a wide range of questions, including political preferences, living conditions, and demographics; however, not all questions feature in all of the waves. The dependent variable that we use is a question about the respondents’ attitudes towards individuals who participate in protests. Based on this question, we code a binary indicator that takes a value of 1 if a respondent sympathises, at least to some extent, with those who participate in protests and a value of 0 if the respondent does not sympathise with them at all.12 The question was included in 10 of the monthly waves that ran from February 2018 to November 2018, which yields a subsample of 13,000 respondents. The survey

10 Citizen Survey is a South African research and survey consultancy that is based in Cape Town (Citizen Survey). The data are from the 2018 version of their South African Citizen Survey.
11 There are typically four respondents in each enumeration area; in a few areas, there are up to 12 respondents
12 The formulation of the question is “Right or wrong actions: People who take part in protests?” with the following response categories a) “There is nothing wrong with them at all”, b) “They are wrong but you sympathize with them” and c) “They are wrong and should be punished under the law”. We code a) and b) as 1 and c) as 0.
does not include questions about support for policies on the delivery of basic public services (our second main outcome variable).

The causal variable, *service delivery protests*, is from the ACLED project,\textsuperscript{13} which collects information on the dates, actors, locations, fatalities, and types of reported political violence and protest events around the world from 1997 to the present day. ACLED is an expert-coded database that uses information from four sources: the traditional media, reports (e.g. from international organizations), local partner, and social media. ACLED records “Demonstration Events”, which are divided into a range of subcategories.\textsuperscript{14} An advantage with the ACLED data (compared to other conflict datasets) is that it comprise both non-violent and violent events. We define *protest events* as either “Peaceful protest”, “Protest with intervention”, “Excessive force against protesters”, or “Violent demonstration”. We further define *peaceful protest* as “Peaceful protest” in ACLED and *violent protest* as either “Protest with intervention”, “Excessive force against protesters”, or “Violent demonstration”. We opt for this split between peaceful and violent protest because it may be hard for observers to judge the origin of violence in a protest. We also use an alternative split as a robustness check. To that end, we define *peaceful protest* as “Protest” (sub-divided into “Peaceful protest”, “Protest with intervention”, and “Excessive force against protesters”) and *violent protest* as “Riots” (sub-divided into “Violent demonstration” and “Mob violence”) in the ACLED data, which does not change our findings (see Table A.4.2 in the Supplementary Material). Generally, ACLED uses a broad definition of violent protest (“violent demonstration”) that includes both riots and other disruptive actions such as the blocking of roads and the burning tyres or other materials. A general limitation with the data (as with other media-based conflict datasets) is the potential underreporting of, especially, non-fatal events (Croicu and Eck, 2022).

The data also include a short description of each protest event, which makes it possible to identify service delivery protests by conducting a simple textual analysis. Using a predefined set of words that are related to the provision of basic services (e.g., “service delivery”, “water shortage”, “power outage”, “sewerage”), we define a gross list of *service delivery protests*, which includes events whose descriptions contain one of these words. We then review the gross list in detail and manually remove protests that are not related to service delivery. Section A.1 in the Supplementary Material provides further details. We limit our sample to events that occurred between November 2017 and April 2019 in order to match the SACS survey subsample. This leaves a total of 315 service delivery protests that occurred over this period, corresponding to an average of 18 protests per month, of which around 40% were peaceful and 60% were violent. This may be a conservative estimate of the magnitude of the service delivery protests because, as already noted, not all protests receive media attention (in news or social media), which is a prerequisite for inclusion in the ACLED database.

\textsuperscript{13} ACLED

\textsuperscript{14} “Demonstration events” are divided into “Protests” and “Riots”, where “Protests” are further sub-divided into “Peaceful protest”, “Protest with intervention” and “Excessive force against protesters”, and “Riots” are subdivided into “Violent demonstration” and “Mob violence”.
Inspired by the approach of Sangnier and Zylberberg (2017), we match the SACS data to the ACLED data by selecting the protest events that occurred within the same ward as the location of an interview in a 60-day window that is centred on the protest date (we use 40-, 90-, and 120-day windows as robustness checks). The procedure yields approximately 100 unique service delivery protests (where one service delivery protest affects more than one individual). We further restrict our sample to municipalities in which at least one interview was conducted within a ward that saw a protest event over the applicable 60-day window, generating a sample of around 6,000 respondents.

Figure 11 displays average protest sympathy in the days between an interview and a protest event. The dots on the left side of the figure show the average level of protest sympathy among respondents who were interviewed before a protest (conditional on no protest occurring within the ward of the respondent for a long period [200 days] prior to the interview). The dots on the right show the average level of protest sympathy among respondents who were interviewed after a peaceful or violent protest. Although the data are noisy, they suggest that protest sympathy changes after exposure to a protest event. Even more interestingly, the paths differ depending on whether the protest event was peaceful or violent, and the sympathy gap is at its largest in the immediate aftermath of protests. Figure A.3.1 in the Supplementary Material average protest sympathy before a protest event for peaceful and violent protests, which confirms the evidence of diverging paths.
Figure 11: Average protest sympathy in the Days Between an Interview and Protest

![Figure 11: Average protest sympathy in the Days Between an Interview and Protest](image)

**Note:** The dots on the left side of the figure show the average level of protest sympathy among the respondents who were interviewed $t = 1, \ldots, 200$ days before a protest (conditional on no protest happening within the ward of the respondent 200 days preceding the interview). The dots on the right side show the average level of protest sympathy among the respondents who were interviewed $t = 1, \ldots, 200$ days after a peaceful or violent protest, respectively. The lines and the grey shaded areas reflect the results from the local polynomial regression fitting and the associated 95% confidence intervals.

**Estimation**

We follow the approach of Sangnier and Zylberberg (2017) and construct a spatial and a temporal treatment as a measure of our main causal variable, protest events. In an ideal experiment, we would observe the same respondents in treated and untreated wards immediately before and after a protest event, which would allow us to identify the impact of protests from the variation in the interview dates. However, we cannot make such observations. Accordingly, we use spatial and temporal variation to identify the impact of protests in different wards.

We define a spatial treatment group by assigning a service delivery protest to respondents who live within a ward in which a protest has occurred and who were interviewed in the 60-day window that is centred on the protest date (we use 40, 90, and 120 days as robustness checks). The spatial control group consists of respondents within the same municipality who were interviewed over the same time period but were living outside the treated ward. The time treatment is defined by reference to respondents who

---

15 Wards differ considerably in size, depending on the size of the municipality. The median size of wards is 36 km$^2$, while the median size of the treated wards is around 10 km$^2$. Since we only have the geolocations of the enumeration areas of the respondents, some enumeration areas exhibit an overlap of two or three wards. In such cases, we assign the spatial treatment if a protest has occurred in any of those wards.
were interviewed in the 30 days after the protest (we use 20-, 45-, and 60-day windows as robustness checks).

Figure 12 illustrates the difference-in-differences design. Figure 12a shows all of the municipalities of South Africa, including their wards. The municipalities that are marked in red include treated respondents, that is, respondents who were exposed to a service delivery protest in their ward within 30 days of being interviewed. By way of further example, Figure 12b zooms in on the wards of the City of Cape Town. It shows the spatial distribution of the service delivery protests (the blue triangles) that occurred in the 30 days before a survey interview. We use these protest events, which are matched to the individual-level survey data, to geolocate the respondents who were interviewed in the vicinity of protest events (within wards) and within the time window in question. In this way, we derive our spatial and temporal treatment indicators for the purposes of the difference-in-differences design.

Figure 12: Illustration of the Difference-in-Difference Setup, 30 Days Time Window

(a) South Africa

(b) City of Cape Town

Note: The figure on the left shows a map of South Africa, in which municipalities with treated respondents are marked with red. The figure on the right zooms in on the City of Cape Town (a metropolitan municipality in the Western Cape province of South Africa). Wards with treated respondents are marked in red and service delivery protest events are denoted by blue triangles.

The identification comes from the interaction between the spatial treatment and the temporal treatment. In other words, the treatment group consists of respondents who were interviewed in the ward in which a protest event occurred within 30 days of the protest. We distinguish between peaceful and violent protests. On the assumption that the date of an interview does not depend on the occurrence of a service delivery protest, the difference in protest sympathy between respondents who are interviewed before and after a protest in a ward within a municipality can be interpreted as the causal (local) effect of a service delivery protest (Sangnier and Zylberberg, 2017). We estimate a simple difference-in-differences set up with interactions in the following model:

\[
y_{ijt} = \alpha + \beta_s D_{spatial}^{jt \pm \tau} + \beta_p D_{time \times spatial}^{jt \pm \tau} + \beta_v D_{v,p,t \times \tau} + \sum_{k=1}^{K} \gamma_k X_k^i + \pi_m + \phi_w + \epsilon_{ijt}, \tag{3}
\]
where $y_{ijt}$ is the outcome for an individual $i$ living in ward $j$ who is interviewed at date $t$. $\alpha$ is the average level of the outcome variable in the baseline specification; $D^\text{spatial}_{jt+\tau}$ is a binary variable that indicates whether a service delivery protest occurred in ward $j$ during $t \pm \tau \in \{20, 30, 45, 60\}$ days centred on the interview date $t$; $D^{\text{time}\times\text{spatial}}_{p,j,t-\tau}$ and $D^{\text{time}\times\text{spatial}}_{v,j,t-\tau}$ are binary variables that indicates whether a peaceful or a violent service delivery protest, respectively, occurred in ward $j$ during the $\tau$ days that immediately preceded the interview at date $t$. The vector $X$ is a set of observable characteristics of individual $i$; $\pi_m$ denotes municipal fixed effects and $\phi_w$ denotes fixed effects for the survey waves; $\epsilon$ is the error term. We estimate the model by using both OLS and logit regression because our outcome is binary, and we correct standard errors for spatial correlation by following Conley (1999) and using a diffusion parameter of 50 km. $\beta_s$ captures the effect of the spatial treatment, that is, proximity to protest. $\beta_p$ and $\beta_v$ capture the causal effect of a peaceful and violent protest event, respectively, during $\tau$ days prior to the interview.\footnote{In subsection A.2, we discuss recent research on potential biases in two-way-fixed-effects (TWFE) models in relation to our design. Yet we do not use TWFE models, because our data are a repeated cross-section and not a panel.}

## Results

Table 6 summarises the results from the difference-in-differences analysis by using the OLS regressions with and without covariates and across the different time windows (the results from the logit regressions are displayed in Table A.4.1 in the Supplementary Material). All specifications include municipal and survey-wave fixed effects, and the standard errors are corrected for spatial correlation (cf. Conley 1999). The dependent variable is protest sympathy. Since most of the respondents were interviewed in wards that did not see any protests within the assigned time window, the treated respondents comprise a relatively low proportion of the whole sample (2-3%).

The results in Table 6 show that, in the 30-day window, a peaceful service delivery protest increases the probability of sympathising with protesters by approximately 16.5 percentage points, while a violent protest decreases it by approximately 12.6 percentage points. These are substantial effects, relative to the baseline of around 68% respondents who sympathise with the protesters to some extent.\footnote{To calculate the full effect of protest, we add the coefficient for protest proximity and the coefficient for either peaceful protest or violent protest.} In other words, the respondents who had been exposed to a peaceful service delivery protest in the 30 days prior to the interview were much more likely to sympathise with the protesters than the respondents who had not been exposed to a service delivery protest. Furthermore, the respondents who had been exposed to a violent service delivery protest in the 30 days prior to the interview were much less likely to sympathise with the protesters, relative to the respondents who had not been exposed thus. Generally, the effects are larger for the shorter time windows (20 and 30 days) and fade out over the longer time windows (45 and 60 days). The coefficient of protest proximity (the spatial treatment) is negative in
most of the specifications, but it is only significant for the narrowest time horizon. This finding suggests that respondents who live in the vicinity of protests sympathise less with protests on average, compared to respondents in the same municipality who are located further away from protests. Overall, these findings lend support to hypotheses $H_{1a}$ and $H_{1b}$.

\[18\] The covariates suggest that females, older individuals, and the residents of urban areas sympathise less with protesters, while respondents who identify as Black or coloured sympathise with them more (relative to Whites).
### Table 6: The Effect of Service Delivery Protest on Protest Sympathy (20-, 30-, 45- and 60-days Windows)

<table>
<thead>
<tr>
<th>Dependent Variable:</th>
<th>20 days</th>
<th>30 days</th>
<th>45 days</th>
<th>60 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protests proximity</td>
<td>-0.0560***</td>
<td>-0.0519***</td>
<td>-0.0138</td>
<td>-0.0121</td>
</tr>
<tr>
<td></td>
<td>(0.0195)</td>
<td>(0.0248)</td>
<td>(0.0089)</td>
<td>(0.0155)</td>
</tr>
<tr>
<td>Peaceful protest</td>
<td>0.1788***</td>
<td>0.1940***</td>
<td>0.1689***</td>
<td>0.1357***</td>
</tr>
<tr>
<td></td>
<td>(0.0448)</td>
<td>(0.0488)</td>
<td>(0.0379)</td>
<td>(0.0251)</td>
</tr>
<tr>
<td>Violent protest</td>
<td>-0.1187**</td>
<td>-0.1157***</td>
<td>-0.1072**</td>
<td>-0.1121***</td>
</tr>
<tr>
<td></td>
<td>(0.0471)</td>
<td>(0.0409)</td>
<td>(0.0466)</td>
<td>(0.0497)</td>
</tr>
<tr>
<td>Female</td>
<td>-0.0328***</td>
<td>-0.0339***</td>
<td>-0.0310***</td>
<td>-0.0309***</td>
</tr>
<tr>
<td></td>
<td>(0.0096)</td>
<td>(0.0094)</td>
<td>(0.0100)</td>
<td>(0.0097)</td>
</tr>
<tr>
<td>Black/coloured</td>
<td>0.0406</td>
<td>0.0404*</td>
<td>0.0406*</td>
<td>0.0416*</td>
</tr>
<tr>
<td></td>
<td>(0.0249)</td>
<td>(0.0244)</td>
<td>(0.0246)</td>
<td>(0.0233)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.0008**</td>
<td>-0.0008**</td>
<td>-0.0009**</td>
<td>-0.0009**</td>
</tr>
<tr>
<td></td>
<td>(0.0004)</td>
<td>(0.0003)</td>
<td>(0.0003)</td>
<td>(0.0004)</td>
</tr>
<tr>
<td>Low income</td>
<td>-0.0235</td>
<td>-0.0346</td>
<td>-0.0229</td>
<td>-0.0223</td>
</tr>
<tr>
<td></td>
<td>(0.0296)</td>
<td>(0.0327)</td>
<td>(0.0314)</td>
<td>(0.0307)</td>
</tr>
<tr>
<td>Metropolitan area</td>
<td>0.0151</td>
<td>0.0104</td>
<td>0.0112</td>
<td>0.0112</td>
</tr>
<tr>
<td></td>
<td>(0.0425)</td>
<td>(0.0421)</td>
<td>(0.0412)</td>
<td>(0.0401)</td>
</tr>
<tr>
<td>Urban area</td>
<td>-0.0367***</td>
<td>-0.0541**</td>
<td>-0.1123**</td>
<td>-0.1006**</td>
</tr>
<tr>
<td></td>
<td>(0.0120)</td>
<td>(0.0229)</td>
<td>(0.0487)</td>
<td>(0.0392)</td>
</tr>
<tr>
<td>ANC supporter</td>
<td>-0.0138</td>
<td>-0.0136</td>
<td>-0.0104</td>
<td>-0.0102</td>
</tr>
<tr>
<td></td>
<td>(0.0099)</td>
<td>(0.0101)</td>
<td>(0.0108)</td>
<td>(0.0093)</td>
</tr>
</tbody>
</table>

Observations: 5,879 5,879 5,950 5,950 6,083 6,083 6,329 6,329
No. of treated: 95 95 131 131 190 190 227 227

**Note:** Significance codes: ***: 0.01, **: 0.05, *: 0.1. All specifications include municipal and survey wave fixed effects; std.err are corrected for spatial correlation using a diffusion parameter of 50 km, cf. Conley (1999, 2008); all regressions are estimated using OLS.
Threats to Identification

While the results above provide support for our hypotheses, the credibility of the difference-in-differences estimates can be challenged on several grounds. First, our identification strategy relies on the assumption that the occurrence of protest events and the dates of the survey interviews are independent of each other. This assumption may be violated if, for instance, protests lead to the cancellation or postponement of interviews in the affected locality. To address this issue, we construct a panel with data for all wards in South Africa and for all dates in 2018. We then construct a binary variable that indicates whether a protest occurred in a specific ward and on a specific date and a similar variable for survey interviews. We use a dynamic panel model with ward fixed effects to determine whether protest events in the preceding week predict survey interviews. The results show that protest events do not have a significant effect on the timing of survey interviews (see Table A.3.1 in the Supplementary Material).

The other potential challenges to our identification strategy have to do with violations of the excludability assumption and the stable unit treatment value assumption (SUTVA) (Gerber and Green, 2012). The excludability assumption implies that the effect on the outcome should be mediated only through the service delivery protest treatment and through nothing else. This assumption may be falsified if other significant events occur at the same time. We examine this matter by running a robustness analysis in which we remove treated respondents if other protest events that are not related to service delivery occurred in their wards over the relevant periods (see Table A.3.2 in the Supplementary Material). Although this exercise halves the number of treated respondents, it does little to change the robustness of the results. SUTVA implies that the potential outcome for a given respondent does not vary with the treatments that are assigned to other respondents (Gerber and Green, 2012). This assumption may be violated if there are spillover effects, say if a protest in one ward affects the outcome in neighbouring wards. To address this issue, we run a robustness check in which we remove the respondents who were living in wards that are adjacent to the treated wards. Table A.3.3 in the Supplementary Material shows that the results are robust to this exercise.

The estimates may also be biased because of attrition and non-compliance (Gerber and Green, 2012; Harding and Nwokolo, 2023). We check for attrition bias (systematic drop-out by respondents) by estimating the correlation between treatment status and item non-response for our outcome variable. Table A.3.4 in the Supplementary Material shows that there is no correlation across the different treatment groups (“any protest”, “peaceful protest”, or “violent protest”) or different time windows (20-, 30-, 45-, and 60-days). Non-compliance could be an issue if, for instance, some members of the treatment group are not exposed to a treatment because they are unaware of its occurrence (Harding and Nwokolo, 2023). While we cannot directly test for or rule out non-compliance, we think that it is unlikely to be a significant concern for three reasons. First, service delivery protests are highly salient and oftentimes disruptive public events that attract much attention, which makes their occurrence common knowledge in the local area.
Second, in our design, these events occurred within wards that are relatively small and confined geographical areas – learning about protests was relatively easy. Third, wards are politically salient, in terms of public-service delivery, because citizens in a specific ward elect ward councillors directly to the municipal councils that are responsible for local public services.

Finally, we test the parallel trends assumption (Cunningham, 2021), that is, we inquire whether protest sympathy differs between the treatment and the control group prior to exposure to protest. We first identify groups of respondents who were interviewed in the 30 days before they were exposed to a peaceful or a violent protest (with 20-, 45-, and 60-day windows as robustness checks). We then re-estimate our model by comparing these prior-to-treatment groups with the control group of never-treated respondents. The results, which are summarised in Table A.3.5 and A.3.6 in the Supplementary Material, show no significant difference in protest sympathy across the groups prior to treatment. In other words, the assumption of parallel trends seems to hold.

Overall, the difference-in-differences models suggest that the South African public respond to protest events that involve peaceful or violent tactics as expected. Nonetheless, the difference-in-differences analysis leaves several issues unresolved. First, the data do not allow us to distinguish between sympathy for the protesters and support for the policy issues that they raise. Second, the analysis does not show which particular characteristics of protests generate support or induce resentment. Third, the analysis does not pinpoint the factors that amplify or attenuate the effects of protest on public opinion. In order to address these shortcomings, we leverage evidence from two survey experiments that we designed in order to address these issues.

3.5 EXPERIMENTAL STUDY: EVIDENCE FROM TWO SURVEY EXPERIMENTS

The survey experiments are part of an online survey that we fielded in South Africa in the early autumn of 2022 (23 August to 14 October 2022). The experiments and hypotheses were pre-registered with the OSF on 15 August 2022. The sample includes 3,200 respondents (South African citizens above the age of 18). The online survey is based on nonprobability quota sampling, which is similar to using strata in a stratified random sample. The subgroup quotas were calculated as sample targets for each subgroup, and disaggregated by gender, age and province. They are proportionate to the populations in each group, in line with data from Statistics South Africa. The respondents are likely to be wealthier and more educated than the general South African population, which is a common issue with online panels (Mercer et al., 2017). Poor

---

19 In collaboration with moweb
20 https://osf.io/f8pz
21 A power analysis shows that a sample size of 3,000 makes it possible to detect small effect sizes in the vignette experiment (using Cohen’s d) as well as effect sizes down to 0.04 (AMCE) for the conjoint experiment; see Section B.0.1 in the Supplementary Material.
citizens, who are more likely to participate in protests and to call for improvements to the delivery of basic services, are under-represented in the sample as a result. This under-representation is not necessarily a problem for our analysis. First, we are interested in the influence of protests on support among the larger non-protesting segment of the electorate, including those who are outside of the mostly poor and underprivileged areas that are likely to see protests. Second, under-representation may imply that our estimates are somewhat conservative because we may have collected more responses from the more affluent segments of the non-protesting population, who might have less sympathy for the protesters and their grievances from the outset. For these reasons, the characteristics of our sample may serve as a hard test of our argument. Section C in the Supplementary Material contains further details about the sampling strategy and the descriptive statistics.

The survey respondents were first presented with a vignette experiment; later, they completed a conjoint one. Attention checks were conducted between the two. We are aware that this procedure, in principle, makes the conjoint a post-treatment experiment relative to the vignette. However, the point of the experimental sequencing is precisely to expose respondents to aggregate information through the vignette first. That information is subsequently decomposed into more granular dimensions in the conjoint. Since the latter experiment is fully randomised, this sequence should not, on average, affect responses. We corroborate this proposition by checking the responses from the conjoint experiments against the different treatment groups in the vignette (Figure E.3.2 in the Supplementary Material).

Vignette Experiment Design

All experimental groups in the vignette were provided with a general description of public-service delivery in South Africa (the baseline text), which reflects knowledge that is relatively common in the country. The respondents in the treatment groups were randomly assigned to different images of service delivery protests (with the general text as the baseline) to determine how these images affect sympathy and support. Images constitute a relatively aggregate and compound experimental treatment – much information is compiled into a single picture, including, among others, information about the size of the protest, the composition of the body of protesters, the tactics that are used (violent or peaceful), police presence, and such like. These images mimic important channels through which the public often access information about protests, such as (social) media, newspapers, and television.

The treatments are based on a $2 \times 2$ treatment scheme: respondents are exposed to an image of a peaceful or a violent service delivery protest, and each image is combined with either a short text that indicates that the protesters attributed blame to the municipal government or a short text that indicates that they did not attribute blame to any particular actor or institution. The four treatment scenarios are therefore as follows: 1) a peaceful service delivery protest without blame attribution, 2) a peaceful protest with
Results from the Vignette Experiment

Figure 13 shows that images of peaceful protest (with or without blame attribution) have no effect on either protest sympathy or policy support. This finding runs contrary in $H_{1a}$, which hypothesises a positive effect. The results in Figure 13 do show that images of violent protest (with and without blame attribution) have a negative effect on both protest sympathy and on policy support, but only the effects on protest sympathy are statistically significant, relative to the baseline, which is partly in line with $H_{1b}$. The respondents also seem to perceive violent protest, especially without blame attribution, as less legitimate and protesters as less deserving of help, cf. Figure D.4.2a and Figure D.4.2b in the Supplementary Material. It may be inferred that South Africans, when exposed to aggregate images that contain information about service delivery protests, disapprove of the use of violent tactics, but there are no significant negative implications for popular support for the protesters’ grievances.

Generally, however, the effects are small, and the respondents’ support for the protesters and their policy demands does not seem to be particularly affected by exposure to images of protest.\(^{22}\) Relative to the baseline value of 5.38 (on a seven-point scale) for the protest sympathy measure, exposure to a violent protest without blame attribution only reduces sympathy by 0.32 points. The relative effects are overall the same. Relative to peaceful protest (with or without blame attribution), violent protest (with or without blame attribution) decreases sympathy significantly but has no effect on policy support (Figure D.4.1 in the Supplementary Material).

The findings on protest sympathy from the vignette experiment seem to be somewhat at odds with the results from the difference-in-differences analysis. The effects of peaceful protests, in particular, differ. The null or small effects in Figure 13 may be attributable to the high salience of service delivery protests in the South African public agenda and to the media attention that they receive across the country – South African citizens may generally be pre-treated with public-service protests to such an extent that (new) information or images of protests do not sway their perceptions of protests to any notable

\(^{22}\) There may be heterogeneous treatment effects, say across racial groups, but we lack the statistical power to analyse them further in the vignette experiment. We address this matter in the conjoint experiment.
Figure 13: The Effect of Protest Images on Protest Sympathy and Policy Support

(a) Protest Sympathy

(b) Policy Support

Note: The coefficients (dots) show the marginal effects of the treatments (relative to the baseline). The standard errors are clustered at the municipal level. All regressions include municipal fixed effects. The bars represent 95\% confidence intervals. \( n = 3,204 \).

extent, at least not in comparison to local exposure to actual protest events. However, it is also plausible that people’s perceptions of protest are more sophisticated and that relatively crude compound treatments, such as images, cannot tease out the particular features of protests that make the public more (or less) supportive of and sympathetic towards the protesters and their cause. In order to understand public opinion about public-service protests in South Africa more comprehensively, therefore, we conducted a follow-up conjoint experiment that is designed to identify the features of protests that are likely to change public opinion.

Conjoint Experiment Design

Images of protests and aggregate messages about protest events in general are compound treatments in which many different pieces of information are contained in a single picture. It is difficult to know what features of the protest treatments induce more or less sympathy or support. In order to untangle this problem, we conduct a conjoint experiment that yields insights into the relative effect of six salient attributes of protests, namely the number of protesters, the nature of the grievance, the level of blame attribution, tactics (peaceful or violent), the duration of the protest, and police involvement, as well as into their interactions. It should be noted that we distinguish between two different levels of violent tactics, namely roadblocks and riots, which makes it possible to disentangle the effects of more severe violence (riots) and those of less violent, but still disruptive, tactics (roadblocks). The conjoint experiment allows us to test the relative effect of many treatments without losing too much statistical power, an advantage over the vignette experiment, and it is also appropriate for the subgroup analyses (Leeper et al., 2020).

In the conjoint experiment, respondents are presented with an introductory text that runs as follows: “Imagine you see two different service delivery protests in your
neighborhood...”. It is followed by descriptions of two hypothetical protests. Table 7 summarises the features of the conjoint experiment, that is, the attributes of the protests and their levels. The experiment was repeated three times with each respondent. After each repetition, we asked questions about policy support and protest sympathy, the main outcomes, and about perceptions of the legitimacy of the protest and the deservingness of the protesters. The outcomes are summarised in Table E.1.1 in the Supplementary Material. We included attention checks between each task.

Table 7: Conjoint Experiment

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Levels</th>
<th>Example Protest A</th>
<th>Example Protest B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number (There are...):</strong></td>
<td>1) 10 protesters</td>
<td>10 protesters</td>
<td>500 protesters</td>
</tr>
<tr>
<td></td>
<td>2) 100 protesters</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) 500 protesters</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Source of grievance ...protesting against...:</strong></td>
<td>1) A week’s lack of clean water</td>
<td>A week’s lack of clean water</td>
<td>A week’s lack of electricity</td>
</tr>
<tr>
<td></td>
<td>2) A week’s lack of electricity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) A week’s lack of functioning sewerage systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blame attribution (They blame...):</strong></td>
<td>1) nobody</td>
<td>nobody</td>
<td>the ward councillor</td>
</tr>
<tr>
<td></td>
<td>2) the ward councillor</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) the municipal government</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4) the national government</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5) the president of South Africa</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tactics (The protest involves...):</strong></td>
<td>1) a peaceful march</td>
<td>a peaceful march</td>
<td>riots</td>
</tr>
<tr>
<td></td>
<td>2) road blocks</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) riots</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Duration (The protest had lasted for...):</strong></td>
<td>1) 1 day</td>
<td>1 day</td>
<td>7 days</td>
</tr>
<tr>
<td></td>
<td>2) 3 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) 7 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Police involvement (... and the police...):</strong></td>
<td>1) are not present</td>
<td>dissolve the protest by force</td>
<td>are not present</td>
</tr>
<tr>
<td></td>
<td>2) observe the protest</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) dissolve the protest by force</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Results from the Conjoint Experiment

Figure 14 reports the results in terms of average marginal component effects (AMCEs). The results show the effect of an attribute level, taking the effect of other attributes into account by averaging over effect variations caused by them (Bansak et al., 2018; Hainmueller et al., 2014).\(^{23}\) In line with Bansak et al. (2022), we interpret AMCEs as the effect of a change in a protest feature on the probability of supporting a service delivery protest.\(^{24}\)

The standard errors are clustered at the respondent level because each respondent performed the task three times. We restrict our sample in two ways. First, we exclude respondents who failed the attention checks. Second, we exclude respondents who spent less than 60 seconds on the first task.\(^{25}\) We perform several diagnostics checks for the assumptions that are key for conjoint experiments (randomisation, carry-over effects, and profile-order effects). The results are presented in Section E.3 of the Supplementary Material. The diagnostic tests show that there are no significant issues with the three assumptions. We also test the impact of the vignette (pre)treatment on the conjoint analysis, and we confirm that there is none.

Figure 14 reveals several interesting findings. First of all, violent protest tactics lower the probability of both protest sympathy and policy support, relative to peaceful tactics, and these negative effects are larger for more severe forms of violence, such as rioting. Riots lower the probability of sympathy by 30 percentage points, which is substantial, and that of policy support by 21 percentage points, while protests that involve roadblocks lower sympathy by 19 percentage points and support by 14 percentage points (relative to peaceful protest marches). We therefore observe significantly larger negative effects for protest sympathy than for policy support. Violent tactics decrease protest sympathy but do not necessarily translate into lower policy support. South Africans also perceive protests that involve roadblocks or riots as more likely to cause unnecessary public disorder, and they perceive protesters who use such tactics as less deserving of help (Figure E.4.1a and Figure E.4.1b in the Supplementary Material). The latter results also serve as manipulation checks and corroborate the proposition that the experiment worked as intended.

Overall, these findings are in line with our hypotheses \(H_{1a}\) and \(H_{1b}\), although some findings do not conform to our initial expectations. Peaceful protest increases protest sympathy and policy support in both relative and absolute terms,\(^{26}\) which is consistent with \(H_{1a}\). Violent protest decreases protest sympathy, once more in both relative and

---

\(^{23}\) The regression output is displayed in Table E.4.3 and Table E.4.1 in the Supplementary Material. Marginal means are shown in Table E.4.4 and Table E.4.2.

\(^{24}\) Recent work has shown that AMCEs can be interpreted as averages over both the direction and the intensity of individual preferences (Abramson et al., 2022; Bansak et al., 2022).

\(^{25}\) The first attention check is phrased as follows: “which day is it today?”. The second asks about the respondent’s year of birth, which we compare to their self-reported age. We drop those respondents for whom there is a mismatch (approximately 100 respondents). We included a timer in the survey, which measures the number of seconds that lapse between the start of the conjoint experiment to the last click. Around 350 respondents spent less than 60 seconds on the first task and are therefore excluded.

\(^{26}\) Cf. Table E.4.2 and Table E.4.4 in the Supplementary Material.
absolute terms, which is in line with $H_{1b}$, but it also decreases policy support, which runs counter to $H_{1b}$ (that hypothesises a positive effect). However, the negative effects are smaller for policy support than for protest sympathy. These findings suggest that peaceful protest has the strongest potential to attract public support, while violent protest, especially rioting, may induce a backlash.
Figure 14: Effects of Protest Information on Protest Sympathy and Policy Support, AMCEs

(a) Protest Sympathy

(b) Policy Support

Note: The coefficients (dots) show the average marginal component effects (AMCEs), that is, the effect of an attribute level relative to its baseline, averaged over the other attributes. The dots without horizontal bars denote the baseline of an attribute. Standard errors are clustered at the respondent level. The bars represent 95% confidence intervals. $n = 9,546$. 
Second, blame attribution increases the probability of both protest sympathy and policy support. The results show that effects differ somewhat depending on the specific actors or institutions to which the protesters attribute blame and on whether the grievance lies within the domains of these actors or institutions (Gates and Justesen, 2020). Blaming the municipal government, which is responsible for the delivery of most basic public services, attracts significantly more sympathy and support than blaming the president of South Africa. Blaming the municipal government increases the probability of protest sympathy by 16 percentage points and that of policy support by 14 percentage points (relative to the absence of blame attribution). Respondents perceive protesters who blame the municipal government as more deserving of help and do not associate such protests with unnecessary public disorder. Blame attribution thus increases the perceived legitimacy of a protest.

Assigning blame to the national (ANC) government has almost the same effect as assigning blame to the municipal council. This similarity is probably due to the strong national orientation of the South African party (and political) system. Interestingly, however, blaming a ward councillor has a slightly smaller effect. This finding is likely related to the fact most respondents believed that the municipal government bears the primary responsibility for providing basic public services; few believed that ward councillors or the state has the main responsibility. These results provide conditional support for $H_2$. On the one hand, blame attribution generally increases policy support and sympathy for protesters. On the other hand, the specificity of blame attribution (e.g., to the municipal or the national government) is less consequential than anticipated in $H_2$, possibly because of the importance of national party politics in South Africa.

We also find that respondents are more forgiving of violent tactics when protesters attribute blame for their grievances. The likelihoods of protest sympathy and policy support are significantly higher for protests that involve both roadblocks and riots if the protesters blame the municipal government. The effects are especially pronounced for policy support (cf. Figure 15a below). While a protest that involves roadblocks and no blame attribution is associated with a lower likelihood of policy support, roadblocks and blaming the municipal government are associated with a higher likelihood of policy support (a significant difference of 18 percentage points). Similarly, riots that do not involve blame attribution are associated with a very low probability of policy support, but that probability increases significantly, by 13 percentage points, when the protesters attribute blame to the municipal government, which is in line with $H_2$. This finding suggests that citizens have higher tolerance thresholds for some violent and disruptive tactics when protesters attribute blame for their grievances to specific actors.

---

27 Cf. Figure E.4.1a and Figure E.4.1b in the Supplementary Material

28 In the survey, we asked the respondents who they believed to be responsible for the provision of water, electricity, and sanitation (three separate questions). Around 80% believed that the municipal government is responsible for the provision of water and sanitation, and 50% believed that the municipal government is responsible for electricity. Finally, 50% believed Eskom to be responsible

29 The interaction effects for protest sympathy are presented in Figure E.4.2 in the Supplementary Material
Third, the source of grievance matters for both protest sympathy and policy support. The lack of clean water is the only grievance that attracts both sympathy and support, while lack of sanitation and lack of electricity, somewhat surprisingly, have no effect or even exercise a negative influence. Those who protest against the lack of clean water are also perceived as much more deserving of help than those who protest against the lack of electricity and sanitation (Figure E.4.1b in the Supplementary Material). While clean water, sanitation, and electricity are all important basic public services, access to clean water is the issue that generates the most support and sympathy by far. Indeed, the South African public are more tolerant of violent and disruptive tactics when the protesters voice discontent with the lack of clean water (cf. Figure 15b below). A protest that involves roadblocks is significantly more likely to result in an increase in policy support (a significant increase of 13 percentage points) when the underlying grievance is the lack of clean water rather than the lack of electricity. Likewise, riots are associated with a higher likelihood of policy support (a significant increase of 15 percentage points), when the grievance has to do with clean water rather than electricity. These results suggest that, in the eyes of the South African public, the nature of a grievance may, in some cases, justify the use of violent and disruptive tactics by protesters.

Fourth, the size of the protest, as reflected in the number of protest participants, increases both sympathy and policy support. In our case, larger crowds translate into perceptions of greater deservingness relative to smaller crowds (Figure E.4.1b in the Supplementary Material). Interestingly, even violent protests, and riots in particular, that involve larger crowds (500 protesters) are more likely to attract support than riots that only involve small groups of 10 protesters (a significant difference of 14 percentage points; cf. Figure 15c below). While this finding may appear counterintuitive since larger riots might lead to more violence, the size of a crowd evidently signals to the public that the protesters have appropriate justifications for their grievances (Mueller, 2018).

Finally, protest duration does not affect protest sympathy or policy support; police involvement may matter, depending on the interaction between the police and the protesters. Protests that the police merely observe attract more sympathy and support than protests without a police presence. The dispersal of protests by police lowers sympathy but does not affect support.32

Overall, the results of the conjoint experiment show that violent protest may induce a backlash, but certain features can attenuate this negative effect. In particular, attributing blame to specific actors, the grievance, and the size of the crowd can all contribute to the perceived legitimacy of the protest. In fact, when these features occur together,
violent protests are associated with more sympathy and stronger support: a riot staged by 500 protesters against the lack of clean water in which blame is directed at the municipal government is more likely, in absolute terms, to attract sympathy and support (a significant 65% probability; cf. Figure E.4.3 in the Supplementary Material). This finding indicates that citizens, at least in South Africa, are not indifferent to the causes and attributes of public protests. They form sophisticated opinions that are based on the specificities of an event. While some protests clearly foment resentment, others can garner support for both the policy issues that are in dispute and for those who do the protesting.

Figure 15: Interaction Effects for Policy Support, MMs

(a) Tactics x Blame

(b) Tactics x Grievance

(c) Tactics x No. of Protesters

*Note:* The coefficients (dots) show marginal means (MMs), that is, the probability that respondents would select a specific combination of attributes, averaged over the other attributes. MMs are ordered by size and colour-coded by protest tactics. All of the predicted probabilities are benchmarked against 0.5. The standard errors are clustered at the respondent level. The bars represent 95% confidence intervals. n = 9,546

**Moderating Effects of Racial Group Identification**

Public-service protests in South Africa occur disproportionately in poor and underprivileged areas. Their residents, in turn, are disproportionately individuals of colour and Black South Africans. Racial-group identification is the most salient source of group identity in South Africa (Ferree, 2010). Black South Africans are also the key constituency of the ANC (Justesen and Schulz-Herzenberg, 2018) and constitute a significant propor-
tion of the public. They are likely to use both “bricks and ballots” (Booyisen, 2007) to voice their dissatisfaction with the provision of public services.

Our survey data confirm that service delivery protests are most common in the communities where poor Black South Africans reside; 90% of the respondents who had attended a service delivery protest identified as Black South Africans. Therefore, it is logical to treat respondents who identify as Black South Africans as the in-group, relative to all of the individuals who are involved in service delivery protests.

We enquire whether these findings differ across subgroups of respondents who identify as Black South Africans and with other racial groups (coloured, White, and Indian or Asian). For the subgroup analyses, we rely on differences in marginal means (MMs) because differences in AMCEs are sensitive to the choice of baseline levels and can yield misleading results, especially when preferences for baseline levels differ across subgroups (Leeper et al., 2020).

Figure 16 shows the effects of the attributes of the protest, with a particular focus on protest tactics, on policy support across subgroups of respondents who identify as Black (the left panel) and among respondents who identify with other racial groups (the middle panel), and on the difference between the two (the right panel). The main differences between the two groups revolve around the effects of tactics (violent or peaceful). Two differences are particularly pronounced. First, the probability of supporting a peaceful protest is significantly lower (6 percentage points) among Black South Africans than among other groups. Second, the probability of supporting a violent protest (a riot) is higher by 7 percentage points among Black South Africans. A similar pattern emerges for protest sympathy (Figure E.4.5 in the Supplementary Material). The difference that we observe in the context of peaceful protest contradicts our expectations (H₃), while the difference that pertains to violent protest accords with them. Peaceful protests seem to attract more support and sympathy from out-group members, while violent protests are tolerated to a larger extent by in-group members, who arguably have a stronger sense of commonality and empathy with the protesters. This finding suggests that shared identity does matter for the popular support and legitimacy of protests.

---

33 Marginal means denote the probability that a respondent would select a specific attribute level, averaged over the other attributes (Leeper et al., 2020). While AMCEs provide a relative measure of preferences, MMs provide an absolute measure of preferences (Leeper et al., 2020). AMCEs in fully randomized designs are the differences between the MMs of a given attribute level and its baseline, ignoring other attributes.

34 Individuals who identifies as Black South Africans associate violent protests to a lower extent with unnecessary public disorder compared to other racial groups, and perceive violent protesters as more deserving of help compared the other racial groups (cf. Figure E.4.6a and Figure E.4.6b in the Supplementary Material).
3.6 CONCLUSION

Protests serve as a means of expressing opinions that is supplementary to the standard modes of political behaviour, such as voting. They raise awareness and express dissatisfaction with and concern about salient policy issues. Understanding the effects of protests on public opinion is important for understanding the effectiveness of protest as a political weapon for poor and underprivileged citizens. This applies irrespective of whether the protests concern climate change, poor living conditions, or, as in our case, deficient public services.

In this paper, we showed that peaceful and violent protest causes shifts in public opinion by using evidence from the recent wave of public-service delivery protests in South Africa. Our observational difference-in-differences analysis and the survey experimental evidence show that, on average, the effect of protests depends on tactics, which can be peaceful or violent. Peaceful protest has the strongest potential to garner sympathy and support, while violent protests are liable to cause a backlash in public support. Citizens perceive peaceful protest as more legitimate than violent protest and treat peaceful protesters as more worthy of help than those who protest violently.

**Figure 16: Effects on Policy Support, Racial Group Identification, MMs**

*Note:* The coefficients (dots) show marginal means (MMs), that is, the probability that a respondent would select a specific combination of attributes, averaged over the other attributes (as well as the differences across the two subgroups). All predicted probabilities are benchmarked against 0.5 and differences are benchmarked against 0. The standard errors are clustered at the respondent level. The bars represent 95% confidence intervals. \( n = 9,546 \) (\( n_{\text{black}} = 6,330 \)). See Figure E.4.4 for MMs across all protest features.
Our experimental evidence also suggests that South African citizens form relatively sophisticated opinions about protests. Those opinions are contingent on the specific features of protest events. The efficacy of protest as a political weapon for the poor is somewhat ambiguous and depends on the particularities of specific events. Peaceful protest can attract sympathy and support, but much turns on other factors, such as the specificity of blame attribution, the nature of the grievance, and the size of the protest. Similarly, violent protest seems to be a double-edged sword. While violent protests are generally assessed in unfavourable terms, in some circumstances, the public are inclined to forgive. Indeed, we found that at least four factors attenuate the negative effects of violent protests. Citizens exhibit a higher tolerance for violent tactics when the protesters attribute blame for their grievances to relevant political actors and institutions (e.g., a municipal council), when they share a racial-group identity with the protesters, when the grievance is perceived as sufficiently serious to justify disruption (e.g., failure to meet basic human needs like access to clean drinking water), and when violent protests involve large crowds. In fact, the co-occurrence of these four factors can generate both popular sympathy and support for the protesters and the policy issues that they raise. Overall, the results suggest that, although violent protests entail a significant risk of adverse effects on public opinion, specific types of violent protests may serve the ends of protesters.

In the bigger picture, our findings help us understand the third wave of protest in Africa and the legitimacy of protests in the eyes of the public. Our findings suggest that the combination of violence and small-size protests is not very effective in attracting public support. Furthermore, such protests may also be less costly, in electoral terms, for the state to repress. Many countries may therefore find themselves in a vicious cycle in which high levels of economic inequality and inadequate public services foster violent micro-protests that fail to attract sympathy or support from the wider public. Large-scale collective action seems to be a more effective means of placing grievances on the public agenda and accumulating mass electoral support, but mainly when protesters pin the blame for their grievances on the institutions and political actors who are responsible for them. Concerted collective action that identifies culprits who can be held accountable is more likely to incent governments to redress the grievances that blight the everyday lives of the poor.
REFERENCES


URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/1468-2508.t01-1-00016


URL: https://doi.org/10.1086/716951


URL: https://doi.org/10.1080/02589001.2013.789727

REFERENCES

**URL:** https://doi.org/10.1086/710146

**URL:** https://doi.org/10.1093/afr/adaa013


**URL:** https://doi.org/10.1080/02589001.2022.2035701


**URL:** http://www.jstor.org/stable/j.ctv1c29t27


**URL:** https://onlinelibrary.wiley.com/doi/abs/10.1111/pops.12025


URL: https://books.google.dk/books?id=yxEGywAACAAJ


URL: https://doi.org/10.1080/03057070.2018.1539376


URL: https://doi.org/10.1086/685451


### Descriptives

#### List of Countries

Table A.1.1: RoW by Country for 2016, Autocracies

<table>
<thead>
<tr>
<th>Closed autocracies</th>
<th>Electoral autocracies</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Arab Emirates</td>
<td>Afghanistan</td>
</tr>
<tr>
<td>China</td>
<td>Armenia</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>Burundi</td>
</tr>
<tr>
<td>Jordan</td>
<td>Bangladesh</td>
</tr>
<tr>
<td>Laos</td>
<td>Belarus</td>
</tr>
<tr>
<td>Libya</td>
<td>Central African Republic</td>
</tr>
<tr>
<td>Morocco</td>
<td>Cameroon</td>
</tr>
<tr>
<td>State of Palestine</td>
<td>Comoros</td>
</tr>
<tr>
<td>Qatar</td>
<td>Algeria</td>
</tr>
<tr>
<td>Somalia</td>
<td>Egypt</td>
</tr>
<tr>
<td>Thailand</td>
<td>Ethiopia</td>
</tr>
<tr>
<td><strong>Kuwait</strong></td>
<td>Gambia</td>
</tr>
<tr>
<td><strong>Viet Nam</strong></td>
<td>Equatorial Guinea</td>
</tr>
<tr>
<td><strong>Closed autocracies</strong></td>
<td><strong>Electoral autocracies</strong></td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>Afghanistan</td>
</tr>
<tr>
<td>China</td>
<td>Armenia</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>Burundi</td>
</tr>
<tr>
<td>Jordan</td>
<td>Bangladesh</td>
</tr>
<tr>
<td>Laos</td>
<td>Belarus</td>
</tr>
<tr>
<td>Libya</td>
<td>Central African Republic</td>
</tr>
<tr>
<td>Morocco</td>
<td>Cameroon</td>
</tr>
<tr>
<td>State of Palestine</td>
<td>Comoros</td>
</tr>
<tr>
<td>Qatar</td>
<td>Algeria</td>
</tr>
<tr>
<td>Somalia</td>
<td>Egypt</td>
</tr>
<tr>
<td>Thailand</td>
<td>Ethiopia</td>
</tr>
<tr>
<td><strong>Kuwait</strong></td>
<td>Gambia</td>
</tr>
<tr>
<td><strong>Viet Nam</strong></td>
<td>Equatorial Guinea</td>
</tr>
</tbody>
</table>

*Note: RoW by Country for 2016, Autocracies* 

- Afghanistan
- Armenia
- Burundi
- Bangladesh
- Belarus
- Central African Republic
- Cameroon
- Comoros
- Algeria
- Egypt
- Ethiopia
- Gambia
- Equatorial Guinea
- Haiti
- Kazakhstan
- Cambodia
- Montenegro
- Mozambique
- Mauritania
- Malaysia
- Nicaragua
- Pakistan
- Papua New Guinea
- Russian Federation
- Rwanda
- Iran
- Singapore
- Serbia
- Tajikistan
- Turkey
- Uganda
- Ukraine
- Venezuela
- Zambian
- Gabon
- Guinea
- Kyrgyzstan
- Madagascar
- Macedonia
- Tanzania
Table A.1.2: RoW by Country for 2016, Democracies

<table>
<thead>
<tr>
<th>Electoral democracies</th>
<th>Liberal democracies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cote d'Ivoire</td>
<td>Niger</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>Panama</td>
</tr>
<tr>
<td>Guinea-Bissau</td>
<td>Poland</td>
</tr>
<tr>
<td>Kenya</td>
<td>Senegal</td>
</tr>
<tr>
<td>Moldova</td>
<td>Sao Tome and Principe</td>
</tr>
<tr>
<td>Mali</td>
<td>Suriname</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>Slovakia</td>
</tr>
<tr>
<td>Argentina</td>
<td>South Africa</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td></td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td></td>
</tr>
<tr>
<td>Bolivia</td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td></td>
</tr>
<tr>
<td>Ecuador</td>
<td></td>
</tr>
<tr>
<td>Georgia</td>
<td></td>
</tr>
<tr>
<td>Croatia</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td></td>
</tr>
<tr>
<td>Jamaica</td>
<td></td>
</tr>
<tr>
<td>Sri Lanka</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td></td>
</tr>
<tr>
<td>Mongolia</td>
<td></td>
</tr>
<tr>
<td>Malawi</td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td></td>
</tr>
<tr>
<td>Peru</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td></td>
</tr>
<tr>
<td>Paraguay</td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td></td>
</tr>
<tr>
<td>El Salvador</td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td></td>
</tr>
<tr>
<td>Lithuania</td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td></td>
</tr>
<tr>
<td>Malta</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Electoral democracies</th>
<th>Liberal democracies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Albania</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Barbados</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Botswana</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chile</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Costa Rica</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Czechia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Greece</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Italy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Republic of Korea</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Namibia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Uruguay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Australia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Austria</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Belgium</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Switzerland</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cyprus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Germany</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Denmark</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spain</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Estonia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Finland</td>
</tr>
<tr>
<td></td>
<td></td>
<td>France</td>
</tr>
<tr>
<td></td>
<td></td>
<td>United Kingdom</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ireland</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Iceland</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Luxembourg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Netherlands</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Norway</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New Zealand</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Portugal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Slovenia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sweden</td>
</tr>
<tr>
<td></td>
<td></td>
<td>United States</td>
</tr>
</tbody>
</table>

**Note:** Countries in italic are upper/lower bound, where gray indicates lower bound and green upper bound.
### Descriptives

Figure A.2.1: Income share of $Q_1$ (% of total income) over time across regime types

![Graph showing income share of $Q_1$ over time across regime types](image)

Figure A.2.2: Income share of $Q_2$ (% of total income) over time across regime types

![Graph showing income share of $Q_2$ over time across regime types](image)
Figure A.2.3: Income share of Q3 (% of total income) over time across regime types

Figure A.2.4: Income share of Q4 (% of total income) over time across regime types
Figure A.2.5: Income share of Q5 (% of total income) over time across regime types

Figure A.2.6: GNI per capita growth over time across regime types
The choice of estimation method depends on the behavior of unobserved country-specific effects $\alpha_i$. In this analysis, fixed effects are likely to be present; country-specific effects such as colonial legacy or original land distribution are very likely to be correlated with both regime type and the income distribution. Hence, pooled OLS estimation will be inconsistent. One option is to eliminate $\alpha_i$ by modeling variables in deviation from their time-averaged values, the so-called “within transformation” (Cameron and Trivedi, 2005). However, due to endogeneity of the lagged dependent variable, the within estimates may have an asymptotic bias of order $1/T$, known as the Nickell bias (Nickell, 1981). The generalized method of moments (GMM) estimator developed by Arellano and Bond (1991) deals with this by differencing the model and using lagged levels as instruments. However, some of the models of this analysis include a large number of right-hand side variables that thus increases the instrument count. As pointed out by Roodman (2009), GMM estimation can generate invalid estimates when the instrument collection is large. I thus employ both estimation techniques to ensure robust results.\(^{35}\)

### C ADDITIONAL RESULTS

#### c.1 GMM Estimations of the Distributional Impact of Growth, Conditioned on Democracy

Table C.1.1 summarises results from GMM estimations with income shares across quintiles as the dependent variables, using a dichotomous measure of democracy from V-dem. Figure C.1.1 summarises the long-term effects from GMM estimations with income shares across deciles as the dependent variables.

---

\(^{35}\) For the GMM estimates, I also report a test of second-order serial correlation and a Hansen test of overidentifying restrictions. For absence of serial correlation, one should reject the null of second-order serial correlation. For the Hansen test of overidentifying restrictions, one should reject the null of overidentifying restrictions.
Table C.1.1: The impact of economic growth on income shares across quintiles conditioned on democracy/autocracy (V-dem), GMM estimates

<table>
<thead>
<tr>
<th>Dependent variable: Income share of</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income share_{t-1}</td>
<td>0.639***</td>
<td>0.518***</td>
<td>0.524***</td>
<td>0.371***</td>
<td>0.446***</td>
</tr>
<tr>
<td></td>
<td>(0.098)</td>
<td>(0.114)</td>
<td>(0.145)</td>
<td>(0.129)</td>
<td>(0.141)</td>
</tr>
<tr>
<td>Democracy_{t-1}</td>
<td>0.014</td>
<td>0.007</td>
<td>-0.004</td>
<td>-0.011</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>(0.046)</td>
<td>(0.025)</td>
<td>(0.018)</td>
<td>(0.012)</td>
<td>(0.016)</td>
</tr>
<tr>
<td>GNI per cap. growth_{t-1}</td>
<td>-0.007</td>
<td>-0.004</td>
<td>-0.003**</td>
<td>-0.003***</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Democracy_{t-1} \times GNI growth_{t-1}</td>
<td>0.003</td>
<td>0.004</td>
<td>0.003*</td>
<td>0.002**</td>
<td>-0.003</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>GDP per capita_{t-1}</td>
<td>-0.090</td>
<td>-0.049</td>
<td>-0.037</td>
<td>-0.015</td>
<td>0.015</td>
</tr>
<tr>
<td></td>
<td>(0.088)</td>
<td>(0.049)</td>
<td>(0.033)</td>
<td>(0.019)</td>
<td>(0.033)</td>
</tr>
<tr>
<td>Long-run effect of growth (Democracy= 1)</td>
<td>-0.011</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(0.016)</td>
<td>(0.005)</td>
<td>(0.003)</td>
<td>(0.001)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Long-run effect of growth (Democracy= 0)</td>
<td>-0.019</td>
<td>-0.008</td>
<td>-0.007</td>
<td>-0.004**</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>(0.015)</td>
<td>(0.006)</td>
<td>(0.005)</td>
<td>(0.002)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Observations</td>
<td>324</td>
<td>324</td>
<td>324</td>
<td>324</td>
<td>324</td>
</tr>
<tr>
<td>No. of countries</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>AR2 p-value</td>
<td>0.262</td>
<td>0.623</td>
<td>0.455</td>
<td>0.292</td>
<td>0.870</td>
</tr>
<tr>
<td>Hansen p-value</td>
<td>0.122</td>
<td>0.152</td>
<td>0.419</td>
<td>0.209</td>
<td>0.212</td>
</tr>
<tr>
<td>No. of instruments</td>
<td>55</td>
<td>55</td>
<td>55</td>
<td>55</td>
<td>55</td>
</tr>
</tbody>
</table>

Note: Results from Arellano and Bond’s (1991) GMM estimator based on five year averages. The AR2 row reports the p-value for a test of serial correlation in the residuals, the Hansen row the p-value of the Hansen test of overidentifying restrictions and the final row reports the number of instruments. All estimations include a constant term and time effects (not reported to save space). Robust standard errors in parentheses, stars indicate significance at *** 0.01, ** 0.05, * 0.1.
Figure C.1.1: The Long-Term Distributional Impact of Growth across Income Deciles in Democracies and Autocracies, GMM estimates

![Graph showing the long-term distributional impact of growth across income deciles in democracies and autocracies.](image)

**Notes:** Long-term estimates and confidence intervals from GMM estimations with country and time effects based on five year averages. The dependent variables are (log of) income shares across deciles.

**c.2 Alternative Dichotomous Measure of Democracy**

Table C.2.1 and figure C.2.1 report the estimations results with the democracy and dictatorship dummy from Cheibub et al. (2010) (updated by Bjørnskov and Rodes 2018).
Table C.2.1: The Impact of Economic Growth on Income Shares across Quintiles, Conditioned on Democracy and Dictatorship (Cheibub et al. 2010)

<table>
<thead>
<tr>
<th>Dependent variable: Income share of</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income share_{t−1}</td>
<td>0.568***</td>
<td>0.519***</td>
<td>0.508***</td>
<td>0.433***</td>
<td>0.500***</td>
</tr>
<tr>
<td></td>
<td>(0.070)</td>
<td>(0.066)</td>
<td>(0.057)</td>
<td>(0.053)</td>
<td>(0.059)</td>
</tr>
<tr>
<td>Democracy_{t−1}</td>
<td>0.033</td>
<td>0.025</td>
<td>0.015</td>
<td>0.004</td>
<td>-0.015</td>
</tr>
<tr>
<td></td>
<td>(0.035)</td>
<td>(0.020)</td>
<td>(0.013)</td>
<td>(0.007)</td>
<td>(0.012)</td>
</tr>
<tr>
<td>GDP per cap. growth_{t−1}</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.002</td>
<td>-0.002***</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Democracy_{t−1} × GDP growth_{t−1}</td>
<td>-0.001</td>
<td>0.001</td>
<td>0.002</td>
<td>0.002**</td>
<td>-0.000</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>GDP per capita_{t−1}</td>
<td>0.044</td>
<td>0.021</td>
<td>0.012</td>
<td>0.004</td>
<td>-0.023</td>
</tr>
<tr>
<td></td>
<td>(0.053)</td>
<td>(0.030)</td>
<td>(0.021)</td>
<td>(0.015)</td>
<td>(0.022)</td>
</tr>
<tr>
<td>Long-run effect of growth (Democracy= 1)</td>
<td>-0.002</td>
<td>0.000</td>
<td>-0.000</td>
<td>-0.001</td>
<td>-0.000</td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Long-run effect of growth (Democracy= 0)</td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.004</td>
<td>-0.004***</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td>(0.004)</td>
<td>(0.003)</td>
<td>(0.001)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Observations</td>
<td>433</td>
<td>433</td>
<td>433</td>
<td>433</td>
<td>433</td>
</tr>
<tr>
<td>R²</td>
<td>0.471</td>
<td>0.433</td>
<td>0.411</td>
<td>0.310</td>
<td>0.426</td>
</tr>
<tr>
<td>No. of countries</td>
<td>107</td>
<td>107</td>
<td>107</td>
<td>107</td>
<td>107</td>
</tr>
</tbody>
</table>

Note: Within estimations with country and time effects based on five year averages. The dependent variables are (log of) income shares across quintiles. All estimations include a constant term and time effects that are not reported to save space. Robust standard errors in parentheses, stars indicate significance at *** 0.01, ** 0.05, * 0.1.
Figure C.2.1: The Long-Term Impact of Growth on the Income Distribution in Democracies (Cheibub et al. 2010)

Note: Long-term estimates and confidence intervals from within estimations with country and time effects based on five year averages. The dependent variables are (log of) income shares across deciles.

c.3 GMM Estimations of the Distributional Impact of Growth across Regime Types

Table C.3.1 summarises results from GMM estimations with income shares across quintiles as the dependent variables, and figure C.3.1 shows long-term GMM estimates with income shares across deciles as dependent variables.
Table C.3.1: The Impact of Economic Growth on Income Shares across Quintiles, Conditioned on Regime Types (V-Dem), GMM Estimates

<table>
<thead>
<tr>
<th>Dependent variable: Income share of</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income share(_{t-1})</td>
<td>0.483***</td>
<td>0.306***</td>
<td>0.280***</td>
<td>0.242***</td>
<td>0.277***</td>
</tr>
<tr>
<td>(0.096)</td>
<td>(0.095)</td>
<td>(0.103)</td>
<td>(0.098)</td>
<td>(0.104)</td>
<td></td>
</tr>
<tr>
<td>Liberal democracy(_{t-1})</td>
<td>0.090</td>
<td>0.052</td>
<td>0.020</td>
<td>-0.003</td>
<td>-0.034</td>
</tr>
<tr>
<td>(0.070)</td>
<td>(0.048)</td>
<td>(0.038)</td>
<td>(0.026)</td>
<td>(0.033)</td>
<td></td>
</tr>
<tr>
<td>Electoral democracy(_{t-1})</td>
<td>0.070</td>
<td>0.046</td>
<td>0.022</td>
<td>0.002</td>
<td>-0.025</td>
</tr>
<tr>
<td>(0.064)</td>
<td>(0.038)</td>
<td>(0.020)</td>
<td>(0.019)</td>
<td>(0.027)</td>
<td></td>
</tr>
<tr>
<td>Electoral autocracy(_{t-1})</td>
<td>0.066</td>
<td>0.047</td>
<td>0.032</td>
<td>0.014</td>
<td>-0.029</td>
</tr>
<tr>
<td>(0.056)</td>
<td>(0.033)</td>
<td>(0.025)</td>
<td>(0.016)</td>
<td>(0.024)</td>
<td></td>
</tr>
<tr>
<td>GNI per cap. growth(_{t-1})</td>
<td>-0.005</td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.003***</td>
<td>0.001</td>
</tr>
<tr>
<td>(0.006)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td>Liberal democracy(<em>{t-1}) × GNI growth(</em>{t-1})</td>
<td>0.017***</td>
<td>0.012***</td>
<td>0.007**</td>
<td>0.004***</td>
<td>-0.007**</td>
</tr>
<tr>
<td>(0.008)</td>
<td>(0.004)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.003)</td>
<td></td>
</tr>
<tr>
<td>Electoral democracy(<em>{t-1}) × GNI growth(</em>{t-1})</td>
<td>0.001</td>
<td>0.003</td>
<td>0.002</td>
<td>0.002**</td>
<td>-0.002</td>
</tr>
<tr>
<td>(0.007)</td>
<td>(0.004)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.003)</td>
<td></td>
</tr>
<tr>
<td>Electoral autocracy(<em>{t-1}) × GNI growth(</em>{t-1})</td>
<td>0.000</td>
<td>-0.001</td>
<td>-0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>(0.006)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td>GDP per capita(_{t-1})</td>
<td>-0.083</td>
<td>-0.035</td>
<td>-0.021</td>
<td>-0.012</td>
<td>0.005</td>
</tr>
<tr>
<td>(0.083)</td>
<td>(0.044)</td>
<td>(0.031)</td>
<td>(0.020)</td>
<td>(0.028)</td>
<td></td>
</tr>
<tr>
<td>Long-run effect of growth (Liberal democracy = 1)</td>
<td>0.024***</td>
<td>0.014***</td>
<td>0.007**</td>
<td>0.002</td>
<td>-0.008***</td>
</tr>
<tr>
<td>(0.009)</td>
<td>(0.004)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.003)</td>
<td></td>
</tr>
<tr>
<td>Long-run effect of growth (Electoral democracy = 1)</td>
<td>-0.007</td>
<td>0.001</td>
<td>0.001</td>
<td>-0.000</td>
<td>-0.002</td>
</tr>
<tr>
<td>(0.011)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td>Long-run effect of growth (Electoral autocracy = 1)</td>
<td>-0.009</td>
<td>-0.004</td>
<td>-0.004*</td>
<td>-0.003**</td>
<td>0.003</td>
</tr>
<tr>
<td>(0.007)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td>Long-run effect of growth (Closed autocracy)</td>
<td>-0.010</td>
<td>-0.003</td>
<td>-0.003</td>
<td>-0.004***</td>
<td>0.001</td>
</tr>
<tr>
<td>(0.012)</td>
<td>(0.005)</td>
<td>(0.003)</td>
<td>(0.001)</td>
<td>(0.003)</td>
<td></td>
</tr>
</tbody>
</table>

Observations 324 324 324 324 324
No. of countries 98 98 98 98 98
AR2 p-value 0.418 0.852 0.392 0.275 0.894
Hansen p-value 0.687 0.717 0.751 0.644 0.806
No. of instruments 107 107 107 107 107

Note: Results from Arellano and Bond’s (1991) GMM estimator based on five year averages. The AR2 row reports the p-value for a test of serial correlation in the residuals, the Hansen row the p-value of the Hansen test of overidentifying restrictions and the final row reports the number of instruments. All estimations include a constant term and time effects (not reported to save space). Robust standard errors in parentheses, stars indicate significance at *** 0.01, ** 0.05, * 0.1.
Figure C.3.1: The Long-Term Distributional Impact of Growth across Deciles, Conditioned on Regime Type, GMM Estimates

Notes: Long-term estimates and confidence intervals from GMM estimations with country and time effects based on five year averages. The dependent variables are (log of) income shares across deciles.
c.4 Estimations of The Distributional Impact of Growth across Regime Types, Adding Controls

Table C.4.1-C.4.3 summarise results from within estimations, where different sets of controls are included. Table C.4.1 includes oil rents, table C.4.2 population growth, urbanization and manufacturing value added, and table C.4.3-C.4.4 includes regime durability, party orientation and state capacity/quality of government. Figure C.4.1 summarizes long-term estimates from within estimations, where all of the controls are included.

Table C.4.1: The distributional impact of economic growth across regime types, adding controls (oil rents)

<table>
<thead>
<tr>
<th>Dependent variable: Income share of</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal democracy (t_{-1} \times ) GNI growth (t_{-1})</td>
<td>0.009</td>
<td>0.007*</td>
<td>0.005*</td>
<td>0.003*</td>
<td>-0.003</td>
</tr>
<tr>
<td>(0.007)</td>
<td>(0.004)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.003)</td>
<td></td>
</tr>
<tr>
<td>Electoral democracy (t_{-1} \times ) GNI growth (t_{-1})</td>
<td>-0.006</td>
<td>-0.002</td>
<td>-0.001</td>
<td>0.001</td>
<td>0.002</td>
</tr>
<tr>
<td>(0.008)</td>
<td>(0.004)</td>
<td>(0.003)</td>
<td>(0.001)</td>
<td>(0.003)</td>
<td></td>
</tr>
<tr>
<td>Electoral autocracy (t_{-1} \times ) GNI growth (t_{-1})</td>
<td>-0.006</td>
<td>-0.005</td>
<td>-0.003</td>
<td>-0.001</td>
<td>0.004*</td>
</tr>
<tr>
<td>(0.006)</td>
<td>(0.004)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.003)</td>
<td></td>
</tr>
<tr>
<td>GDP per capita (t_{-1})</td>
<td>0.021</td>
<td>0.008</td>
<td>0.004</td>
<td>-0.000</td>
<td>-0.017</td>
</tr>
<tr>
<td>(0.057)</td>
<td>(0.032)</td>
<td>(0.022)</td>
<td>(0.015)</td>
<td>(0.022)</td>
<td></td>
</tr>
<tr>
<td>Oil rents (t_{-1})</td>
<td>0.004</td>
<td>0.001</td>
<td>-0.000</td>
<td>-0.001</td>
<td>-0.000</td>
</tr>
<tr>
<td>(0.004)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td>Long-run effect of growth (Liberal democracy = 1)</td>
<td>0.026***</td>
<td>0.017***</td>
<td>0.010***</td>
<td>0.003</td>
<td>-0.009**</td>
</tr>
<tr>
<td>(0.007)</td>
<td>(0.005)</td>
<td>(0.004)</td>
<td>(0.003)</td>
<td>(0.004)</td>
<td></td>
</tr>
<tr>
<td>Long-run effect of growth (Electoral democracy = 1)</td>
<td>-0.010</td>
<td>-0.003</td>
<td>-0.002</td>
<td>-0.002</td>
<td>0.000</td>
</tr>
<tr>
<td>(0.011)</td>
<td>(0.005)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.004)</td>
<td></td>
</tr>
<tr>
<td>Long-run effect of growth (Electoral autocracy = 1)</td>
<td>-0.009</td>
<td>-0.008*</td>
<td>-0.008**</td>
<td>-0.005***</td>
<td>0.006*</td>
</tr>
<tr>
<td>(0.007)</td>
<td>(0.004)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.003)</td>
<td></td>
</tr>
<tr>
<td>Long-run effect of growth (closed autocracy)</td>
<td>0.005</td>
<td>0.002</td>
<td>-0.000</td>
<td>-0.003</td>
<td>-0.003</td>
</tr>
<tr>
<td>(0.014)</td>
<td>(0.007)</td>
<td>(0.004)</td>
<td>(0.002)</td>
<td>(0.005)</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>433</td>
<td>433</td>
<td>433</td>
<td>433</td>
<td>433</td>
</tr>
<tr>
<td>(R^2) (within)</td>
<td>0.483</td>
<td>0.448</td>
<td>0.427</td>
<td>0.324</td>
<td>0.442</td>
</tr>
<tr>
<td>No. of countries</td>
<td>107</td>
<td>107</td>
<td>107</td>
<td>107</td>
<td>107</td>
</tr>
</tbody>
</table>

Note: Within estimations with country and time effects based on five year averages. The dependent variables are (log of) income shares across quintiles. All estimations include a constant term, time effects, a lagged dependent variable, regime dummies and GNI per capita growth, but these are not reported to save space. Robust standard errors in parentheses, stars indicate significance at *** 0.01, ** 0.05, * 0.1.
Table C.4.2: The distributional impact of economic growth across regime types, adding controls (population growth, urbanization and structural transformation)

<table>
<thead>
<tr>
<th>Dependent variable: Income share of Q</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal democracy$<em>{t-1} \times$ GNI growth$</em>{t-1}$</td>
<td>0.015</td>
<td>0.009</td>
<td>0.006</td>
<td>0.004</td>
<td>-0.004</td>
</tr>
<tr>
<td></td>
<td>(0.011)</td>
<td>(0.006)</td>
<td>(0.004)</td>
<td>(0.003)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Electoral democracy$<em>{t-1} \times$ GNI growth$</em>{t-1}$</td>
<td>-0.003</td>
<td>-0.001</td>
<td>0.000</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>(0.011)</td>
<td>(0.006)</td>
<td>(0.004)</td>
<td>(0.002)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Electoral autocracy$<em>{t-1} \times$ GNI growth$</em>{t-1}$</td>
<td>-0.003</td>
<td>-0.004</td>
<td>-0.003</td>
<td>-0.001</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>(0.011)</td>
<td>(0.006)</td>
<td>(0.004)</td>
<td>(0.003)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>GDP per capita$_{t-1}$</td>
<td>0.021</td>
<td>0.008</td>
<td>-0.001</td>
<td>-0.007</td>
<td>-0.017</td>
</tr>
<tr>
<td></td>
<td>(0.059)</td>
<td>(0.032)</td>
<td>(0.025)</td>
<td>(0.018)</td>
<td>(0.023)</td>
</tr>
<tr>
<td>Population growth$_{t-1}$</td>
<td>0.002</td>
<td>0.001</td>
<td>0.002</td>
<td>0.003</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.008)</td>
<td>(0.006)</td>
<td>(0.005)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Urbanization$_{t-1}$</td>
<td>0.007***</td>
<td>0.003*</td>
<td>0.002</td>
<td>0.001</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Manufacturing value added$_{t-1}$</td>
<td>-0.007***</td>
<td>-0.003*</td>
<td>-0.001</td>
<td>-0.000</td>
<td>0.002**</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
</tbody>
</table>

| Long-run effect of growth (Liberal democracy = 1)      | 0.028***| 0.019***| 0.011**| 0.003| -0.011**|
|                                                       | (0.008)| (0.006)| (0.005)| (0.003)| (0.004)|
| Long-run effect of growth (Electoral democracy = 1)    | -0.012| -0.004| -0.003| -0.001| 0.001|
|                                                       | (0.010)| (0.005)| (0.003)| (0.002)| (0.004)|
| Long-run effect of growth (Electoral autocracy = 1)    | -0.013| -0.010**| -0.009**| -0.005**| 0.008***|
|                                                       | (0.008)| (0.005)| (0.004)| (0.002)| (0.004)|
| Long-run effect of growth (closed autocracy)           | -0.006| -0.002| -0.003| -0.004| -0.001|
|                                                       | (0.023)| (0.013)| (0.008)| (0.004)| (0.009)|

| Observations                                          | 401   | 401   | 401   | 401   | 401   |
| R² (within)                                           | 0.527 | 0.478 | 0.440 | 0.333 | 0.465 |
| No. of countries                                      | 106   | 106   | 106   | 106   | 106   |

**Note:** Within estimations with country and time effects based on five year averages. The dependent variables are (log of) income shares across quintiles. All estimations include a constant term, time effects, a lagged dependent variable, regime dummies and GNI per capita growth, but these are not reported to save space. Robust standard errors in parentheses, stars indicate significance at *** 0.01, ** 0.05, * 0.1.
Table C.4.3: The distributional impact of economic growth across regime types, adding controls (regime durability, party orientation and state fiscal capacity)

<table>
<thead>
<tr>
<th>Dependent variable: Income share of</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal democracy$<em>{t-1} \times$ GNI growth$</em>{t-1}$</td>
<td>0.007</td>
<td>0.006</td>
<td>0.004</td>
<td>0.003</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.004)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Electoral democracy$<em>{t-1} \times$ GNI growth$</em>{t-1}$</td>
<td>-0.008</td>
<td>-0.004</td>
<td>-0.002</td>
<td>-0.000</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td>(0.004)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Electoral autocracy$<em>{t-1} \times$ GNI growth$</em>{t-1}$</td>
<td>-0.008</td>
<td>-0.006</td>
<td>-0.004*</td>
<td>-0.002</td>
<td>0.005*</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.004)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>GDP per capita$_{t-1}$</td>
<td>0.011</td>
<td>0.001</td>
<td>-0.001</td>
<td>-0.004</td>
<td>-0.012</td>
</tr>
<tr>
<td></td>
<td>(0.060)</td>
<td>(0.033)</td>
<td>(0.021)</td>
<td>(0.015)</td>
<td>(0.022)</td>
</tr>
<tr>
<td>Regime durability$_{t-1}$</td>
<td>0.000</td>
<td>-0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Left wing$_{t-1}$</td>
<td>0.009</td>
<td>0.004</td>
<td>0.003</td>
<td>-0.000</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>(0.021)</td>
<td>(0.010)</td>
<td>(0.006)</td>
<td>(0.004)</td>
<td>(0.007)</td>
</tr>
<tr>
<td>State capacity$_{t-1}$</td>
<td>-0.017</td>
<td>-0.005</td>
<td>0.003</td>
<td>0.007</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>(0.015)</td>
<td>(0.008)</td>
<td>(0.006)</td>
<td>(0.004)</td>
<td>(0.007)</td>
</tr>
<tr>
<td>Long-run effect of growth (Liberal democracy = 1)</td>
<td>0.029***</td>
<td>0.019***</td>
<td>0.011***</td>
<td>0.003</td>
<td>-0.011***</td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td>(0.005)</td>
<td>(0.004)</td>
<td>(0.003)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Long-run effect of growth (Electoral democracy = 1)</td>
<td>-0.009</td>
<td>-0.004</td>
<td>-0.003</td>
<td>-0.003</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.006)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Long-run effect of growth (Electoral autocracy = 1)</td>
<td>-0.008</td>
<td>-0.008*</td>
<td>-0.008**</td>
<td>-0.005***</td>
<td>0.006*</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.005)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Long-run effect of growth (closed autocracy)</td>
<td>0.011</td>
<td>0.005</td>
<td>0.002</td>
<td>-0.002</td>
<td>-0.005</td>
</tr>
<tr>
<td></td>
<td>(0.014)</td>
<td>(0.007)</td>
<td>(0.004)</td>
<td>(0.002)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Observations</td>
<td>397</td>
<td>397</td>
<td>397</td>
<td>397</td>
<td>397</td>
</tr>
<tr>
<td>$R^2$ (within)</td>
<td>0.501</td>
<td>0.471</td>
<td>0.445</td>
<td>0.331</td>
<td>0.463</td>
</tr>
<tr>
<td>No. of countries</td>
<td>103</td>
<td>103</td>
<td>103</td>
<td>103</td>
<td>103</td>
</tr>
</tbody>
</table>

**Note:** Within estimations with country and time effects based on five year averages. The dependent variables are (log of) income shares across quintiles. All estimations include a constant term, time effects, a lagged dependent variable, regime dummies and GNI per capita growth, but these are not reported to save space. Robust standard errors in parentheses, stars indicate significance at *** 0.01, ** 0.05, * 0.1.
Table C.4.4: The distributional impact of economic growth across regime types, adding controls (regime durability, party orientation and quality of government)

<table>
<thead>
<tr>
<th>Dependent variable: Income share of</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal democracy$<em>{t-1} \times$ GNI growth$</em>{t-1}$</td>
<td>0.001</td>
<td>0.004</td>
<td>0.003</td>
<td>0.002</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(0.014)</td>
<td>(0.008)</td>
<td>(0.005)</td>
<td>(0.003)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Electoral democracy$<em>{t-1} \times$ GNI growth$</em>{t-1}$</td>
<td>-0.024*</td>
<td>-0.010</td>
<td>-0.005</td>
<td>-0.001</td>
<td>0.009*</td>
</tr>
<tr>
<td></td>
<td>(0.014)</td>
<td>(0.008)</td>
<td>(0.005)</td>
<td>(0.003)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Electoral autocracy$<em>{t-1} \times$ GNI growth$</em>{t-1}$</td>
<td>-0.014</td>
<td>-0.008</td>
<td>-0.005</td>
<td>-0.002</td>
<td>0.008</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.008)</td>
<td>(0.005)</td>
<td>(0.003)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>GDP per capita$_{t-1}$</td>
<td>-0.012</td>
<td>-0.008</td>
<td>-0.004</td>
<td>-0.002</td>
<td>-0.010</td>
</tr>
<tr>
<td></td>
<td>(0.057)</td>
<td>(0.032)</td>
<td>(0.021)</td>
<td>(0.014)</td>
<td>(0.020)</td>
</tr>
<tr>
<td>Regime durability$_{t-1}$</td>
<td>-0.000</td>
<td>-0.000</td>
<td>-0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Left wing$_{t-1}$</td>
<td>0.022</td>
<td>0.012</td>
<td>0.005</td>
<td>-0.001</td>
<td>-0.004</td>
</tr>
<tr>
<td></td>
<td>(0.018)</td>
<td>(0.009)</td>
<td>(0.006)</td>
<td>(0.004)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Quality of government$_{t-1}$</td>
<td>0.267*</td>
<td>0.120*</td>
<td>0.055</td>
<td>-0.002</td>
<td>-0.041</td>
</tr>
<tr>
<td></td>
<td>(0.152)</td>
<td>(0.067)</td>
<td>(0.043)</td>
<td>(0.025)</td>
<td>(0.037)</td>
</tr>
</tbody>
</table>

| Long-run effect of growth (Liberal democracy = 1) | 0.028*** | 0.018*** | 0.011*** | 0.003 | -0.011*** |
|                                                   | (0.008) | (0.004) | (0.003) | (0.003) | (0.003) |
| Long-run effect of growth (Electoral democracy = 1) | -0.031*** | -0.013** | -0.008* | -0.002 | 0.009*** |
|                                                   | (0.012) | (0.006) | (0.004) | (0.003) | (0.003) |
| Long-run effect of growth (Electoral autocracy = 1) | -0.009 | -0.009** | -0.008*** | -0.005*** | 0.006* |
|                                                   | (0.007) | (0.004) | (0.003) | (0.002) | (0.003) |
| Long-run effect of growth (closed autocracy)      | 0.025  | 0.009  | 0.003  | -0.001 | -0.011 |
|                                                   | (0.031) | (0.017) | (0.011) | (0.005) | (0.011) |

<table>
<thead>
<tr>
<th>Observations</th>
<th>390</th>
<th>390</th>
<th>390</th>
<th>390</th>
<th>390</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2$ (within)</td>
<td>0.518</td>
<td>0.474</td>
<td>0.439</td>
<td>0.329</td>
<td>0.468</td>
</tr>
<tr>
<td>No. of countries</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
</tr>
</tbody>
</table>

Note: Within estimations with country and time effects based on five year averages. The dependent variables are (log of) income shares across quintiles. All estimations include a constant term, time effects, a lagged dependent variable, regime dummies and GNI per capita growth, but these are not reported to save space. Robust standard errors in parentheses, stars indicate significance at *** 0.01, ** 0.05, * 0.1.
Figure C.4.1: The long-term distributional impact of growth across deciles conditioned on regime type, adding controls (all of the above controls included)

Note: Long-term estimates and confidence intervals from within estimations with country and time effects based on five year averages. The dependent variables are (log of) income shares across deciles.
c.5  **Estimations of the Distributional Impact of Growth in Liberal Democracies, Excluding "Lower Bound Countries"**

Figure C.5.1: The distributional impact of economic growth in liberal democracy (excluding lower bound countries)

Note: Long-term estimates and confidence intervals from within estimations with country and time effects based on five year averages. The dependent variables are (log of) income shares across deciles.

### c.6 The Distributional Impact of Growth in Lib. Dem., Across Reference Groups

Table C.6.1: The distributional impact of economic growth in liberal democracies, varying the reference group

<table>
<thead>
<tr>
<th>Dependent variable: Income share of</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference group: Closed autocracies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberal democracy_{t-1} \times GNI growth_{t-1}</td>
<td>0.008</td>
<td>0.007*</td>
<td>0.005*</td>
<td>0.003*</td>
<td>-0.003</td>
</tr>
<tr>
<td>(0.007)</td>
<td>(0.004)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.003)</td>
<td></td>
</tr>
<tr>
<td>Reference group: Electoral autocracies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberal democracy_{t-1} \times GNI growth_{t-1}</td>
<td>0.014***</td>
<td>0.011***</td>
<td>0.008***</td>
<td>0.005**</td>
<td>-0.007***</td>
</tr>
<tr>
<td>(0.005)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td>Reference group: Electoral democracies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberal democracy_{t-1} \times GNI growth_{t-1}</td>
<td>0.016**</td>
<td>0.009***</td>
<td>0.006**</td>
<td>0.002</td>
<td>-0.005*</td>
</tr>
<tr>
<td>(0.006)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.003)</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>433</td>
<td>433</td>
<td>433</td>
<td>433</td>
<td>433</td>
</tr>
<tr>
<td>$R^2$ (within)</td>
<td>0.481</td>
<td>0.448</td>
<td>0.427</td>
<td>0.323</td>
<td>0.442</td>
</tr>
<tr>
<td>No. of countries</td>
<td>107</td>
<td>107</td>
<td>107</td>
<td>107</td>
<td>107</td>
</tr>
</tbody>
</table>

Note: Within estimations with country and time effects based on five year averages. The dependent variables are (log of) income shares across quintiles. All estimations include a constant term, time effects, a lagged dependent variable, regime dummies and GNI per capita growth, but these are not reported to save space. Robust standard errors in parentheses, stars indicate significance at *** 0.01, ** 0.05, * 0.1.
c.7  **GMM Estimation of the Impact of Economic Growth on the Average Income of the Poorest 10%, Conditioned on Regime Types (V-Dem)**

Table C.7.1: The impact of economic growth on the average income of the poorest 10% conditioned on regime types (V-dem)

<table>
<thead>
<tr>
<th>Dependent variable: Average income of the poorest 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-run effect of growth (Liberal democracy = 1)</td>
</tr>
<tr>
<td>(0.016)</td>
</tr>
<tr>
<td>Long-run effect of growth (Electoral democracy = 1)</td>
</tr>
<tr>
<td>(0.010)</td>
</tr>
<tr>
<td>Long-run effect of growth (Electoral autocracy = 1)</td>
</tr>
<tr>
<td>(0.007)</td>
</tr>
<tr>
<td>Long-run effect of growth (closed autocracy)</td>
</tr>
<tr>
<td>(0.013)</td>
</tr>
<tr>
<td>Observations</td>
</tr>
<tr>
<td>No. of countries</td>
</tr>
<tr>
<td>AR2 p-value</td>
</tr>
<tr>
<td>Hansen p-value</td>
</tr>
<tr>
<td>No. of instruments</td>
</tr>
</tbody>
</table>

**Note:** Results from Arellano and Bond’s (1991) GMM estimator based on five year averages. The dependent variables are (log of) average income of the first income decile. All estimations include a constant term, a lagged dependent variable, binary measures of the political regime types (closed autocracy as reference), GNI growth, the interactions between GNI growth and political regime types, GDP per capita and time effects, but these are not reported to save space. Robust standard errors, adjusted for clustering at the country level, are in parentheses, stars indicate significance at *** 0.01, ** 0.05, * 0.1. The AR2 row reports the p-value for a test of serial correlation in the residuals, the Hansen row the p-value of the Hansen test of overidentifying restrictions and the final row reports the number of instruments.
REFERENCES


A. SURVEY EXPERIMENT AND ROBUSTNESS CHECKS

3.1 Experimental Set-Up

Experimental Set-Up

The following section shows the experiment in English and in Portuguese (it was only conducted in Portuguese) and the outcome questions we implemented after the experiment.

Table A.1.1: Experiment Introduction

<table>
<thead>
<tr>
<th>English</th>
<th>Portuguese</th>
</tr>
</thead>
<tbody>
<tr>
<td>The last municipal elections in Brazil took place in November and December 2020.</td>
<td>As últimas eleições municipais no Brasil ocorreram em novembro e dezembro de 2020.</td>
</tr>
<tr>
<td>In the next section we will present you, three times in a row, pairs of hypothetical</td>
<td>Na seção seguinte da pesquisa, apresentaremos, por três vezes seguidas, pares de candidatos hipotéticos</td>
</tr>
<tr>
<td>candidates for city councillor who are running for re-election in their municipality.</td>
<td>a vereador que estão concorrendo à reeleição em seu município.</td>
</tr>
<tr>
<td>If you don’t find either candidate very good, please choose the candidate that you</td>
<td>Se você não achar nenhum dos dois candidatos muito bons, por favor, escolha o candidato que você</td>
</tr>
<tr>
<td>consider “less bad”. Please read the information about the two candidates carefully and</td>
<td>considera “menos pior”.</td>
</tr>
<tr>
<td>afterwards choose the political candidate that you would most likely support in elections</td>
<td>Leia atentamente as informações sobre os dois candidatos e, em seguida, escolha o candidato que você</td>
</tr>
<tr>
<td>for the city councillor in your municipality.</td>
<td>mais provavelmente apoiaria nas próximas eleições municipais.</td>
</tr>
</tbody>
</table>

Note: The survey and the survey experiment were only conducted in Portuguese.

Table A.1.2: Outcome questions

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Candidate A</th>
<th>Candidate B</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 … would you vote for in the next municipal election?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 … is more likely to win the next municipal election?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table A.1.3: Follow-up questions to experiment

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Candidate A</th>
<th>Candidate B</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. . . is more likely to improve the capacity to collect local taxes and raise revenues in your municipality?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. . . is more likely to engage in corruption?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. . . is more likely to help people like you when they face economic challenges?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. . . is more likely to help poor people?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. . . is more likely to reduce the gap between the rich and the poor?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. . . is more likely to deliver sufficient public services in your municipality?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a.2 Descriptive Statistics

Table A.2.1: Descriptive Statistics of Variables

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>27.07</td>
<td>12.59</td>
<td>1,424</td>
</tr>
<tr>
<td>Gender</td>
<td>0.50</td>
<td>0.50</td>
<td>1,424</td>
</tr>
<tr>
<td>Upper sec. education or lower</td>
<td>0.37</td>
<td>0.48</td>
<td>1,424</td>
</tr>
<tr>
<td>Higher education</td>
<td>0.63</td>
<td>0.48</td>
<td>1,424</td>
</tr>
<tr>
<td>Gone without a meal</td>
<td>0.10</td>
<td>0.30</td>
<td>1,424</td>
</tr>
<tr>
<td>Bolsa Família recipients</td>
<td>0.06</td>
<td>0.24</td>
<td>1,424</td>
</tr>
<tr>
<td>Asked for clientelism, cash</td>
<td>0.09</td>
<td>0.28</td>
<td>1,419</td>
</tr>
<tr>
<td>Asked for clientelism, work</td>
<td>0.09</td>
<td>0.29</td>
<td>1,417</td>
</tr>
<tr>
<td>Offer of clientelism, work</td>
<td>0.07</td>
<td>0.26</td>
<td>1,407</td>
</tr>
<tr>
<td>Offer of clientelism, cash</td>
<td>0.11</td>
<td>0.31</td>
<td>1,405</td>
</tr>
<tr>
<td>Pref. increase tax of rich</td>
<td>0.36</td>
<td>0.48</td>
<td>1,389</td>
</tr>
<tr>
<td>Pref. lower tax of poor</td>
<td>0.63</td>
<td>0.48</td>
<td>1,396</td>
</tr>
<tr>
<td>Tax system unfair</td>
<td>0.78</td>
<td>0.41</td>
<td>778</td>
</tr>
<tr>
<td>Pref. increase Bolsa amount</td>
<td>0.70</td>
<td>0.46</td>
<td>1,390</td>
</tr>
<tr>
<td>Pref. increase Bolsa no. families</td>
<td>0.49</td>
<td>0.50</td>
<td>1,375</td>
</tr>
<tr>
<td>No trust in tax collection</td>
<td>0.44</td>
<td>0.50</td>
<td>1,316</td>
</tr>
<tr>
<td>No trust in public service delivery</td>
<td>0.55</td>
<td>0.50</td>
<td>1,375</td>
</tr>
</tbody>
</table>
3.3 Diagnostic Tests

The diagnostic tests in Figure A.3.1 show no major issues with the three key assumptions for inference in conjoint experiments (Hainmueller et al., 2014): 1) Randomization of profiles, 2) No profile-order effects, and 3) No carry-over Effects. First, Figure A.3.1a confirms that all attribute values are fully randomized. We did not implement any constraints in the experiment with regards to restricting specific attributes and values and we use an uniform distribution with equal weights of each profile. Second, Figure A.3.1c shows that the assumption of no profile order hold for almost all attribute values. The only exception is “No clientelism” and “Same tax”, which respondents are slightly more likely to select, when they are part of the first candidate profile. However, the likelihood of selecting “No clientelism” has large positive values regardless of the profile order, so we do not see this as a main violation of the assumptions that need to hold for a conjoint experiment. For “Same tax”, the likelihood is slightly positive (i.e. above 0.5) for the first profile and insignificant for the second, but the two values are close, and this is not the main focus of our analysis. Third, Figure A.3.1b shows no carryover effects across all attribute values.
a.4 Attention Checks and Final Sample

We place the conjoint experiment in the beginning of our survey - after asking for respondents’ consent to participate in the survey and a few socio-demographic questions - to have respondents’ highest attention. Additionally, we use two attention checks before the second task of the conjoint experiment (‘What day is it today?’) and again before the third task (‘What year were you born?’) to test respondents’ attention before answering the conjoint tasks. We calculate whether respondents passed the attention check as 1- if the weekday overlaps with the day the survey was conducted and 2- if the birth-year overlaps with the birth-date respondents are asked about later in the survey. For validation,
we run our main interaction effects for clientelism and taxation (figure A.4.3a) as well as distributive politics (figure A.4.3a) for the subgroup of respondents that passed the attention check and that did not pass the attention check and we find similar estimates.

In the final sample that the analysis is based on (1- completion of the survey no more than three days (4 responses removed); 2- no duplicates (54 responses removed); 3- quota was met and screened out respondents were deleted (59 and 15 responses removed)), 3 percent of respondents did not pass the first attention check and 1.55 percent of respondents did not pass the second attention check.

Figure A.4.1: Duration of Survey
Figure A.4.2: Main Effects on Candidate Support, by Attention Check

Note: These plots show the marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes. All predicted probabilities are benchmarked against 0.5. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. \( N = 8,520 \) \( (N_{\text{poor}} = 1,206) \). The poverty indicator is defined as gone without a meal OR being a Bolsa Família recipients ("Poor") vs. ("Non-poor").
Figure A.4.3: Interaction Effects, by Attention Check

(a) Programmatic Distribution x Clientelism, by Attention Check

(b) Programmatic Distribution x Income Tax, by Attention Check

Note: These plots show the marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes. All predicted probabilities are benchmarked against 0.5.

2.5 Municipal Election 2020: City councillor Candidates

We analyse the profiles of all city councillor candidates from the 2020 election in Brazil to understand what types of political candidates voters have in mind and refer to when they answer the conjoint experiment. We see that among all city councillor candidates across Brazil, the profiles and backgrounds are very different. Similarly, the occupation and professional background of city councillor candidates varies across various fields. The most common occupation is Farmer, Municipal Council Servant, 36 The data is provided by the Superior Electoral Court (TSE) to increase the transparency of the Brazilian elections. The data can be accessed here: https://dadosabertos.tse.jus.br/
Merchant, Businessperson and Housewife. Only 6 percent of all political candidates are former city councillors. In relation to the attribute values we use in our experiment, 2 percent identify as lawyer, 0.5 percent as managers (‘Gerente’), though we use ‘manager of a big company’ and an additional 7 percent each are a Businessperson and a Merchant. 3 percent as workers (‘Trabalhador’), we implement this as a ‘factory worker in a big company’ to compare it with the other attribute level. Most candidates are male (66 percent) and have only completed High School, followed by Higher education.

(a) Candidates’ Age
(b) Candidates’ Education and Gender

Figure A.5.1: Characteristics of 2020 City councillor Candidates

Note: The plots show the distribution of candidates’ age, education and gender of all city councillor candidates that were running in the 2020 election.
## B MAIN RESULTS

Table B.0.1: Main Effects on Candidate Support and the Likelihood of Winning

<table>
<thead>
<tr>
<th>Conjoint Features</th>
<th>Candidate Support, AMCE</th>
<th>Likelihood of Winning, AMCEs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>level</td>
<td>estimate</td>
</tr>
<tr>
<td>Age</td>
<td>35 years</td>
<td>0.0000000</td>
</tr>
<tr>
<td>Age</td>
<td>45 years</td>
<td>-0.0021565</td>
</tr>
<tr>
<td>Age</td>
<td>55 years</td>
<td>-0.0179038</td>
</tr>
<tr>
<td>Clientelist distribution</td>
<td>No clientelism</td>
<td>0.0000000</td>
</tr>
<tr>
<td>Clientelist distribution</td>
<td>Patronage</td>
<td>-0.2724095</td>
</tr>
<tr>
<td>Clientelist distribution</td>
<td>Vote buying</td>
<td>-0.3789150</td>
</tr>
<tr>
<td>Gender</td>
<td>Female</td>
<td>0.0000000</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>-0.0213755</td>
</tr>
<tr>
<td>Occupation</td>
<td>Factory Worker</td>
<td>0.0257902</td>
</tr>
<tr>
<td>Occupation</td>
<td>Lawyer</td>
<td>0.0000000</td>
</tr>
<tr>
<td>Occupation</td>
<td>Manager</td>
<td>0.0144673</td>
</tr>
<tr>
<td>Programmatic distribution</td>
<td>Health clinics</td>
<td>0.0703679</td>
</tr>
<tr>
<td>Programmatic distribution</td>
<td>Local CCT</td>
<td>0.0490739</td>
</tr>
<tr>
<td>Programmatic distribution</td>
<td>No change</td>
<td>0.0000000</td>
</tr>
<tr>
<td>Tax preferences</td>
<td>1% tax increase for all</td>
<td>-0.0885547</td>
</tr>
<tr>
<td>Tax preferences</td>
<td>Same tax</td>
<td>0.0000000</td>
</tr>
<tr>
<td>Tax preferences</td>
<td>Taxing the rich</td>
<td>-0.0076372</td>
</tr>
</tbody>
</table>

*Note: The estimates are average marginal component effects (AMCEs), which show the effect of a feature level, taking the effect of other features into account by averaging over effect variations caused by them (Bansak et al., 2018; Hainmueller et al., 2014). The dependent variables are candidate support and the candidate’s likelihood of winning.*
Table B.0.3: Interaction Effects on Candidate Support, Programmatic Redistribution x Clientelism

<table>
<thead>
<tr>
<th>Conjoint Features</th>
<th>Interaction Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>estimate</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td></td>
</tr>
<tr>
<td>No change and No clientelism</td>
<td>0.6748718</td>
</tr>
<tr>
<td>Health clinics and No clientelism</td>
<td>0.7412731</td>
</tr>
<tr>
<td>Local CCT and No clientelism</td>
<td>0.7290323</td>
</tr>
<tr>
<td>No change and Patronage</td>
<td>0.4139037</td>
</tr>
<tr>
<td>Health clinics and Patronage</td>
<td>0.4645161</td>
</tr>
<tr>
<td>Local CCT and Patronage</td>
<td>0.4501542</td>
</tr>
<tr>
<td>No change and Vote buying</td>
<td>0.2863248</td>
</tr>
<tr>
<td>Health clinics and Vote buying</td>
<td>0.3790239</td>
</tr>
<tr>
<td>Local CCT and Vote buying</td>
<td>0.3451327</td>
</tr>
<tr>
<td>Same tax and No clientelism</td>
<td>0.7418335</td>
</tr>
<tr>
<td>Taxing the rich and No clientelism</td>
<td>0.7276507</td>
</tr>
<tr>
<td>1% tax increase for all and No clientelism</td>
<td>0.6756198</td>
</tr>
<tr>
<td>Same tax and Patronage</td>
<td>0.4786325</td>
</tr>
<tr>
<td>Taxing the rich and Patronage</td>
<td>0.4799567</td>
</tr>
<tr>
<td>1% tax increase for all and Patronage</td>
<td>0.3738509</td>
</tr>
<tr>
<td>Same tax and Vote buying</td>
<td>0.3732318</td>
</tr>
<tr>
<td>Taxing the rich and Vote buying</td>
<td>0.3609100</td>
</tr>
<tr>
<td>1% tax increase for all and Vote buying</td>
<td>0.2758997</td>
</tr>
</tbody>
</table>

*Note:* The estimates are the interactions of the marginal means (MMs), which denote the probability that respondents select a specific combination of feature values, averaged over the other features (Leeper et al., 2020). The dependent variable is candidate support.
Table B.0.5: Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs: **Improve Fiscal Capacity**

<table>
<thead>
<tr>
<th>feature</th>
<th>level</th>
<th>Improve fiscal capacity</th>
<th>estimate</th>
<th>std.error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>No change and No clientelism</td>
<td></td>
<td>0.6553846</td>
<td>0.0145852</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Health clinics and No clientelism</td>
<td></td>
<td>0.6878850</td>
<td>0.0145988</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Local CCT and No clientelism</td>
<td></td>
<td>0.6688172</td>
<td>0.0149502</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>No change and Patronage</td>
<td></td>
<td>0.4556150</td>
<td>0.0156209</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Health clinics and Patronage</td>
<td></td>
<td>0.4548387</td>
<td>0.0157750</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Local CCT and Patronage</td>
<td></td>
<td>0.4295992</td>
<td>0.0155036</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>No change and Vote buying</td>
<td></td>
<td>0.3504274</td>
<td>0.0146322</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Health clinics and Vote buying</td>
<td></td>
<td>0.4112150</td>
<td>0.0149138</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Local CCT and Vote buying</td>
<td></td>
<td>0.3738938</td>
<td>0.0155227</td>
</tr>
</tbody>
</table>

**Note:** The estimates are the interactions of the marginal means (MMs), which denote the probability that respondents select a specific combination of feature values, averaged over the other features (*Leeper et al.,* 2020). The dependent variable is “Improve fiscal capacity”. See table A.1.3 for survey question.
Table B.0.7: Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs: **Engage in Corruption**

<table>
<thead>
<tr>
<th>Conjoint Features</th>
<th>Engage in corruption</th>
</tr>
</thead>
<tbody>
<tr>
<td>feature</td>
<td>level</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>No change and No clientelism</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Health clinics and No clientelism</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Local CCT and No clientelism</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>No change and Patronage</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Health clinics and Patronage</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Local CCT and Patronage</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>No change and Vote buying</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Health clinics and Vote buying</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Local CCT and Vote buying</td>
</tr>
</tbody>
</table>

*Note:* The estimates are the interactions of the marginal means (MMs), which denote the probability that respondents select a specific combination of feature values, averaged over the other features (*Leeper et al.*, 2020). The dependent variable is “Engage in corruption”. See table A.1.3 for survey question.
<table>
<thead>
<tr>
<th>feature</th>
<th>level</th>
<th>Help in economic distress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>No change and No clientelism</td>
<td>0.5897436 0.0150128</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Health clinics and No clientelism</td>
<td>0.6704312 0.0153411</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Local CCT and No clientelism</td>
<td>0.7172043 0.0141630</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>No change and Patronage</td>
<td>0.4256684 0.0156800</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Health clinics and Patronage</td>
<td>0.4569892 0.0156463</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Local CCT and Patronage</td>
<td>0.5179856 0.0155666</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>No change and Vote buying</td>
<td>0.3301282 0.0145872</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Health clinics and Vote buying</td>
<td>0.3821391 0.0147390</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Local CCT and Vote buying</td>
<td>0.3993363 0.0154219</td>
</tr>
</tbody>
</table>

*Note:* The estimates are the interactions of the marginal means (MMs), which denote the probability that respondents select a specific combination of feature values, averaged over the other features (*Leeper et al., 2020*). The dependent variable is “Help in economic distress”. See table A.1.3 for survey question.
Table B.0.11: Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs: Help poor people

<table>
<thead>
<tr>
<th>Conjoint Features</th>
<th>Help poor people</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>feature</td>
<td>level</td>
<td>estimate</td>
<td>std.error</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>No change and No clientelism</td>
<td>0.6020513</td>
<td>0.0145677</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Health clinics and No clientelism</td>
<td>0.6906651</td>
<td>0.0149900</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Local CCT and No clientelism</td>
<td>0.7483871</td>
<td>0.0138780</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>No change and Patronage</td>
<td>0.3818182</td>
<td>0.0153255</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Health clinics and Patronage</td>
<td>0.4516129</td>
<td>0.0156876</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Local CCT and Patronage</td>
<td>0.4964029</td>
<td>0.0158016</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>No change and Vote buying</td>
<td>0.3215812</td>
<td>0.0145754</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Health clinics and Vote buying</td>
<td>0.3821391</td>
<td>0.0145852</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Local CCT and Vote buying</td>
<td>0.4148230</td>
<td>0.0158700</td>
</tr>
</tbody>
</table>

Note: The estimates are the interactions of the marginal means (MMs), which denote the probability that respondents select a specific combination of feature values, averaged over the other features (Leeper et al., 2020). The dependent variable is “Help poor people”. See table A.1.3 for survey question.
<table>
<thead>
<tr>
<th>feature</th>
<th>level</th>
<th>Conjoint Features</th>
<th>Reduce inequality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>estimate</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>No change and No clientelism</td>
<td>0.6317949</td>
<td>0.0143003</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Health clinics and No clientelism</td>
<td>0.7012320</td>
<td>0.0145297</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Local CCT and No clientelism</td>
<td>0.7150538</td>
<td>0.0144388</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>No change and Patronage</td>
<td>0.4128342</td>
<td>0.0156598</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Health clinics and Patronage</td>
<td>0.4290323</td>
<td>0.0157449</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Local CCT and Patronage</td>
<td>0.4737924</td>
<td>0.0157801</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>No change and Vote buying</td>
<td>0.3215812</td>
<td>0.0145221</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Health clinics and Vote buying</td>
<td>0.4039460</td>
<td>0.0151456</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Local CCT and Vote buying</td>
<td>0.3982301</td>
<td>0.0153047</td>
</tr>
</tbody>
</table>

*Note:* The estimates are the interactions of the marginal means (MMs), which denote the probability that respondents select a specific combination of feature values, averaged over the other features (Leeper et al., 2020). The dependent variable is “Reduce inequality”. See table A.1.3 for survey question.
Table B.0.15: Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs: **Deliver Public Services**

<table>
<thead>
<tr>
<th>Conjoint Features</th>
<th>Deliver public services</th>
</tr>
</thead>
<tbody>
<tr>
<td>feature</td>
<td>level</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>No change and No clientelism</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Health clinics and No clientelism</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Local CCT and No clientelism</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>No change and Patronage</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Health clinics and Patronage</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Local CCT and Patronage</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>No change and Vote buying</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Health clinics and Vote buying</td>
</tr>
<tr>
<td>Programmatic Distribution X Clientelism</td>
<td>Local CCT and Vote buying</td>
</tr>
</tbody>
</table>

**Note:** The estimates are the interactions of the marginal means (MMs), which denote the probability that respondents select a specific combination of feature values, averaged over the other features (Leeper et al., 2020). The dependent variable is “Deliver public services”. See table A.1.3 for survey question.
### Table B.0.17: Poor vs. non-poor voters

<table>
<thead>
<tr>
<th>Conjoint Features</th>
<th>MM Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>feature</td>
<td>level</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>No change and No clientelism (Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Health clinics and No clientelism (Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Local CCT and No clientelism (Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>No change and Patronage (Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Health clinics and Patronage (Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Local CCT and Patronage (Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>No change and Vote buying (Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Health clinics and Vote buying (Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Local CCT and Vote buying (Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>No change and No clientelism (Non-Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Health clinics and No clientelism (Non-Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Local CCT and No clientelism (Non-Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>No change and Patronage (Non-Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Health clinics and Patronage (Non-Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Local CCT and Patronage (Non-Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>No change and Vote buying (Non-Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Health clinics and Vote buying (Non-Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Local CCT and Vote buying (Non-Poor)</td>
</tr>
<tr>
<td>Conjoint Features</td>
<td>MM Effects</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>-0.1470010</td>
</tr>
<tr>
<td>Health clinics and No clientelism</td>
<td>-0.0582269</td>
</tr>
<tr>
<td>Local CCT and No clientelism</td>
<td>-0.0726817</td>
</tr>
<tr>
<td>No change and Patronage</td>
<td>-0.0011995</td>
</tr>
<tr>
<td>Health clinics and Patronage</td>
<td>0.0409429</td>
</tr>
<tr>
<td>Local CCT and Patronage</td>
<td>0.1204992</td>
</tr>
<tr>
<td>No change and Vote buying</td>
<td>0.0132379</td>
</tr>
<tr>
<td>Health clinics and Vote buying</td>
<td>0.0442613</td>
</tr>
<tr>
<td>Local CCT and Vote buying</td>
<td>0.0564697</td>
</tr>
</tbody>
</table>
Table B.0.21: Main effects on Candidate support, Non-poor vs. Poor Voters

<table>
<thead>
<tr>
<th>Conjoint Features</th>
<th>MM Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>feature level</td>
<td>estimate</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>No change and No clientelism (Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Health clinics and No clientelism (Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Local CCT and No clientelism (Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>No change and Patronage (Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Health clinics and Patronage (Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Local CCT and Patronage (Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>No change and Vote buying (Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Health clinics and Vote buying (Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Local CCT and Vote buying (Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>No change and No clientelism (Non-Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Health clinics and No clientelism (Non-Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Local CCT and No clientelism (Non-Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>No change and Patronage (Non-Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Health clinics and Patronage (Non-Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Local CCT and Patronage (Non-Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>No change and Vote buying (Non-Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Health clinics and Vote buying (Non-Poor)</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>Local CCT and Vote buying (Non-Poor)</td>
</tr>
</tbody>
</table>

Note: The estimates are the interactions of the marginal means (MMs) for subgroups of poor vs. non-poor, which denote the probability that respondents of a subgroup select a specific combination of feature values, averaged over the other features (Leeper et al., 2020). The dependent variable is candidate support.
Table B.0.23: Main effects on Candidate support, Non-poor vs. Poor Voters

<table>
<thead>
<tr>
<th>Conjoint Features</th>
<th>MM Effects</th>
<th>Difference Poor-Non-Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>estimate</td>
<td>std.error</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>-0.1470010</td>
<td>0.0458716</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>-0.0582269</td>
<td>0.0429760</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>-0.0726817</td>
<td>0.0449618</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>-0.0011995</td>
<td>0.0489079</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>0.0409429</td>
<td>0.0474784</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>0.1204992</td>
<td>0.0483608</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>0.0132379</td>
<td>0.0415039</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>0.0442613</td>
<td>0.0445260</td>
</tr>
<tr>
<td>Programmatic Distribution x Clientelism</td>
<td>0.0564697</td>
<td>0.0420575</td>
</tr>
</tbody>
</table>
C ADDITIONAL RESULTS

C.1 Main Effects: Programmatic Redistribution and Clientelism

Figure C.1.1 presents the marginal means (MMs) of the main effects on candidate support (C.1.1a) and electoral viability (C.1.1b). Figure C.1.2 presents the average marginal component effects (AMCEs) for the main effects on voters beliefs about the candidates (cf. A.1.3). Figure (C.1.3) presents the marginal means of voter beliefs.
Figure C.1.1: Effects on Candidate Support and the Likelihood of Winning, MMs

Note: These plots show the marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes. All predicted probabilities are bench-marked against 0.5. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. N = 8,520.
Figure C.1.2: Effects on Voter Beliefs, AMCEs

Note: These plots show the average marginal component effects (AMCEs), i.e. the effect of an attribute level relative to its baseline, averaged over the other attributes. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. The points without horizontal bars denote the baseline of an attribute. $N = 8,520$. 

(a) Improve fiscal capacity  
(b) Engage in corruption  
(c) Help in economic distress  
(d) Help poor people  
(e) Reduce inequality  
(f) Deliver public service
Figure C.1.3: Effects on Voter Beliefs, MMs

(a) Improve fiscal capacity  
(b) Engage in corruption  
(c) Help in economic distress  
(d) Help poor people  
(e) Reduce inequality  
(f) Deliver public service

Note: These plots show the marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes. All predicted probabilities are bench-marked against 0.5. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 8,520$. 

c.2 Interaction Effects: Programmatic Redistribution and Clientelism

Figure C.2.1 presents the interactions effects of clientelism and programmatic redistribution on voters beliefs about a candidate’s likelihood of winning.

Figure C.2.1: Interaction Effects on Likelihood of Winning, Programmatic Redistribution x Clientelism, MMs

(a) Programmatic distribution x Clientelism

(b) Income taxes x Clientelism

Note: These plots show the marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes. All predicted probabilities are benchmarked against 0.5. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. N = 8,520.
Figure C.2.2: Interactions Effects on Voter Beliefs, Clientelism x Income Taxes, MMs

(a) Improve fiscal capacity
(b) Engage in corruption
(c) Help in economic distress
(d) Help poor people
(e) Reduce inequality
(f) Deliver public service

Note: These plots show the marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes. All predicted probabilities are benchmarked against 0.5. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. \( N = 8,520 \).
Figure C.2.3: Interaction Effects on Candidate Support, Clientelism x Income Taxes, MMs

<table>
<thead>
<tr>
<th>Non-poor</th>
<th>Poor</th>
<th>Poor − Non-poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Income Taxes x Clientelism)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1% tax increase for all and Vote buying</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxing the rich and Vote buying</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same tax and Vote buying</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1% tax increase for all and Patronage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxing the rich and Patronage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same tax and Patronage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1% tax increase for all and No clientelism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxing the rich and No clientelism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same tax and No clientelism</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: These plots show the marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes (as well as the differences across the two subgroups). All predicted probabilities are bench-marked against 0.5 and differences are bench-marked against 0. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 8,520$ ($N_{poor} = 1,206$).

c.3 Subgroup Analysis

The subgroup analysis shows the correlation matrix of the different poverty indicators that we used in the survey (figure C.3.6) and the main effects on candidate support, by poverty (figure C.3.7). We also find no significant differences between male and female respondents (figure C.3.8).
Figure C.3.1: Poor vs. Non-poor Voters

Note: The coefficients (dots) show the difference across the subgroups in marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $n = 8,520$ ($n_{\text{poor}} = 1,206$). See Table B.0.21 in the supplementary material for details.
Figure C.3.2: Interaction Effects on Likelihood of Winning, Programmatic Redistribution x Clientelism, Non-poor vs. Poor, MMs

(a) Programmatic Distribution x Clientelism

(b) Income Taxes x Clientelism

Note: These plots show the marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes (as well as the differences across the two subgroups). All predicted probabilities are benchmarked against 0.5 and differences are benchmarked against 0. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. N = 8,520 (N_{poor} = 1,206.)
Figure C.3.3: Interaction Effects on Voter Beliefs I, Programmatic Distribution x Clientelism, Non-poor vs. poor, MMs

(a) Improve fiscal capacity

(b) Engage in corruption

Note: These plots show the marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes (as well as the differences across the two subgroups). All predicted probabilities are bench-marked against 0.5 and differences are bench-marked against 0. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. N = 8,520 (N_{poor} = 1,206.)
**Figure C.3.4: Interaction Effects on Voter Beliefs II, Programmatic Distribution x Clientelism, Non-poor vs. poor, MMs**

<table>
<thead>
<tr>
<th>Non-poor</th>
<th>Poor</th>
<th>Poor − Non-poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Programmatic Distribution x Clientelism)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local CCT and Vote buying</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health clinics and Vote buying</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No change and Vote buying</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local CCT and Patronage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health clinics and Patronage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No change and Patronage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local CCT and No clientelism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health clinics and No clientelism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No change and No clientelism</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: These plots show the marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes (as well as the differences across the two subgroups). All predicted probabilities are bench-marked against 0.5 and differences are bench-marked against 0. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. \( N = 8,520 \) (\( N_{\text{poor}} = 1,206 \).)

(a) Help the poor

(b) Deliver public services
Figure C.3.5: Interaction Effects on Voter Beliefs III, Programmatic Distribution x Clientelism, Non-poor vs. poor, MMs

<table>
<thead>
<tr>
<th>Non-poor</th>
<th>Poor</th>
<th>Poor − Non-poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local CCT and No clientelism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health clinics and No clientelism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No change and No clientelism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health clinics and Patronage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No change and Patronage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local CCT and No clientelism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health clinics and No clientelism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No change and No clientelism</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) Help in economic distress

(b) Reduce inequality

Note: These plots show the marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes (as well as the differences across the two subgroups). All predicted probabilities are bench-marked against 0.5 and differences are bench-marked against 0. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 8,520$ ($N_{\text{poor}} = 1,206$.)
Figure C.3.6: Correlation Matrix Poverty Indicators

Note: The correlation matrix shows the Spearman correlations of all survey indicators measuring poverty in different ways, i.e. monetary poverty and food insecurity. The question about income corresponds to income bins based on multiples of Brazil’s minimum wage. Meal and Medicine are measured by asking respondents whether they had to go without food or medicine (“Over the past year, how often, if ever, have you or anyone in your family... gone without a meal a day?/... gone without medicine or medical treatment that you needed?”) and Bolsa Família includes all survey respondents that answered that they or someone in their household is currently a beneficiary of the Bolsa Família program. The poverty indicator used in this analysis is defined as gone without a meal OR being a Bolsa Família recipients (“Poor”) vs. (“Non-poor”). Stars * 0.10 ** 0.05 *** 0.01.
Figure C.3.7: Main Effects on Candidate Support, by Poverty

<table>
<thead>
<tr>
<th>Feature</th>
<th>Non-poor</th>
<th>Poor</th>
<th>Poor – Non-poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factory Worker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lawyer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clientelism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vote buying</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patronage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No clientelism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local politics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local CCT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health clinics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No change</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxing the rich</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1% tax increase for all</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same tax</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: These plots show the marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes. All predicted probabilities are benchmarked against 0.5. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 8,520$ ($N_{\text{poor}} = 1,206$). The poverty indicator is defined as gone without a meal OR being a Bolsa Família recipients ("Poor") vs. ("Non-poor").
Figure C.3.8: Interaction Effects, by Gender, MMs

(a) Programmatic Distribution x Clientelism

(b) Income Taxes x Clientelism

Note: These plots show the marginal means (MMs) of the main interaction effects by respondents’ gender, i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes. All predicted probabilities are bench-marked against 0.5. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 8,520$ ($N_{female} = 4,272$).
Figure C.3.9: Interaction Effects, by Education, MMs

(a) Programmatic Distribution x Clientelism

(b) Income Taxes x Clientelism

Note: These plots show the marginal means (MMs) of the main interaction effects by respondents’ education, i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes. All predicted probabilities are bench-marked against 0.5. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 8,520$ (Higher = 5,400, Lowersec = 258 and Uppersec = 2,862). Respondents’ levels of education are grouped in three groups: 1- Primary and Lower Secondary education; 2- Upper secondary education and 3- Higher education. Results are shown for each of the groups and the difference.
Figure C.3.10: Interaction Effects, by Partisanship, MMs

(a) Programmatic Distribution x Clientelism

(b) Income Taxes x Clientelism

Note: These plots show the marginal means (MMs) of the main interaction effects by respondents’ partisanship, i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes. All predicted probabilities are bench-marked against 0.5. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 8,520$. Only 24% of respondents answered that they identify with a party, hence this figures shows answers to the question: “At the first round in the presidential elections in October 2018, did you vote for... Jair Bolsonaro vs. all other answers”, as a proxy for partisanship and as a way to show alignment with the current government.
REFERENCES


A DIFFERENCE-IN-DIFFERENCES ANALYSIS

a.1 Service Delivery Protests in ACLED

Identifying Service Delivery Protests

We identify service delivery protests using the notes in the ACLED data. For each protest event, there is a short description which usually explain the source of grievance, the protest scope and elaborates on the protest tactics. To identify service delivery protests, we first define a gross list of service delivery protests as protest events, where a predefined range of words related to basic service delivery occur in the protest description. The words include: service, delivery, service delivery, services, basic service, basic public service, water, electricity, electric, outage, power outage, power, sanitation, sewage, sewerage, pipes, toilet, housing, informal settlements, eviction, shacks, informal dwelling, community protest. We then review the notes of each protest event in the gross list in detail and manually remove protests that are not related to service delivery. We limit our sample to events from November 2017 to April 2019, which leaves us with a total of 315 service delivery protests in the period, or equivalently an average of 18 per month - around 40% are peaceful and 60% are violent.

a.2 DiD and bias in Two-Way Fixed Effects Models

Bias in the Difference-in-Differences TWFE

Recent research on difference-in-difference estimators has shown that the average treatment effect on the treated (ATT) in the two-way-fixed-effects (TWFE) model is potentially biased when individuals receive treatment at different times (Goodman-Bacon, 2021; Callaway and Sant’Anna, 2021; De Chaisemartin and D’Haultfoeuille, 2020; Sun and Abraham, 2021). The bias may arise when the ATT varies over time and already treated individuals enter in the control group for newly treated individuals. We do not use the TWFE model in this analysis as our data is repeated cross-section and not a panel. But the bias may, in principle, still arise as respondents in our sample receive the treatment at different points in time. However, we expect the bias to be minimal in size in our setting for two reasons. First, we make sure that already treated respondents do not end up in the control group for newly treated respondents, as treated respondents keep their treatment status throughout the sample. Second, we would not expect the ATT to change substantially in size over the time period given that we study a relative short time period of ten months, which does not collide with any major political events like national or municipal elections. Ideally, we would check the robustness of our results using one
of the newly developed difference-in-difference estimators (Callaway and Sant’Anna, 2021; De Chaisemartin and D’Haultfoeuille, 2020; Sun and Abraham, 2021). However, the only estimators that has been adapted to repeated cross-sections data is Callaway and Sant’Anna (2021) and De Chaisemartin and D’Haultfoeuille (2020), but these both require very high statistical power - and many more observations - than we have with the data at hand.

### 3. Design Validation

Figure A.3.1: Average protest sympathy across days between interview and protest

Note: On the left side of the figure, the dots show the average level of protest sympathy by respondents interviewed $t = 1, ..., 200$ days before a peaceful and violent protest, respectively (conditional on no protest happening within the ward of the respondent 200 days preceding the interview). On the right side, the dots show the average level of protest sympathy by respondents interviewed $t = 1, ..., 200$ days after a peaceful or violent protest, respectively. The lines and grey areas are local polynomial regression fitting and 95% confidence intervals.

**Independence check** We first construct a panel with data of all wards in South Africa for all dates in 2018. We then define a binary variable indicating whether a protest happened in a specific ward x date crossing - and a similar variable for survey interviews. We use a dynamic panel model with ward fixed effects to test whether protest events (in the past seven days) predict survey interviews. The results are summarised presented in Table A.3.1, and show that protest events does not have a significant effect on the timing of survey interviews.
Table A.3.1: The effect of the occurrence of protest events on the occurrence of survey interviews

<table>
<thead>
<tr>
<th>Dependent Variable:</th>
<th>Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protest</td>
<td>0.0024</td>
</tr>
<tr>
<td></td>
<td>(0.0077)</td>
</tr>
<tr>
<td>Protest_t−1</td>
<td>0.0094</td>
</tr>
<tr>
<td></td>
<td>(0.0099)</td>
</tr>
<tr>
<td>Protest_t−2</td>
<td>-0.0035</td>
</tr>
<tr>
<td></td>
<td>(0.0055)</td>
</tr>
<tr>
<td>Protest_t−3</td>
<td>-0.0028</td>
</tr>
<tr>
<td></td>
<td>(0.0063)</td>
</tr>
<tr>
<td>Protest_t−4</td>
<td>0.0026</td>
</tr>
<tr>
<td></td>
<td>(0.0082)</td>
</tr>
<tr>
<td>Protest_t−5</td>
<td>0.0087</td>
</tr>
<tr>
<td></td>
<td>(0.0082)</td>
</tr>
<tr>
<td>Protest_t−6</td>
<td>0.0012</td>
</tr>
<tr>
<td></td>
<td>(0.0070)</td>
</tr>
<tr>
<td>Protest_t−7</td>
<td>0.0090</td>
</tr>
<tr>
<td></td>
<td>(0.0106)</td>
</tr>
</tbody>
</table>

Ward fixed effects  Yes
Observations 939,034

*Dynamic panel model with ward fixed effects.*
*The dependent variable indicates whether a survey interview happened in a specific ward \( x \) date crossing.*
*The independent variable indicates whether a protest event happened in a specific ward \( x \) date crossing.*
*Standard errors are clustered at the ward level*
*Significance levels: ***: 0.01, **: 0.05, *: 0.1*

**Excludability check** We run a robustness analysis, in which we remove treated respondents, if other protest events (not related to service delivery) occur in their wards in the time period in question. We first use ACLED data to identify a gross list of protest events (other than service delivery), which occur in our sampling period. We then link these with first respondents’ wards and, second, with the different time windows. We remove respondents, if another protest event occur in the same time window as the service delivery protest event (before or after). This leaves us with a reduced sample of respondents that are exposed to a service delivery protest and nothing else. However, this exercise also cut the number of treated respondent into half, which of course also
References

Affect our results. Table A.3.2 show that our results are overall robust. The coefficients differ in size which is arguably due to the reduced number of treated respondents.

Table A.3.2: Excludability check

<table>
<thead>
<tr>
<th>Variables</th>
<th>20 days</th>
<th>30 days</th>
<th>45 days</th>
<th>60 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>protests_proximity</td>
<td>-0.0512</td>
<td>-0.0125</td>
<td>-0.0072</td>
<td>0.0232</td>
</tr>
<tr>
<td></td>
<td>(0.0265)</td>
<td>(0.0107)</td>
<td>(0.0175)</td>
<td>(0.0319)</td>
</tr>
<tr>
<td>recent_protest_peaceful</td>
<td>0.1039***</td>
<td>0.0900**</td>
<td>0.1207**</td>
<td>0.0470</td>
</tr>
<tr>
<td></td>
<td>(0.0391)</td>
<td>(0.0426)</td>
<td>(0.0561)</td>
<td>(0.0505)</td>
</tr>
<tr>
<td>recent_protest_violent</td>
<td>-0.1297***</td>
<td>-0.0898*</td>
<td>-0.0389</td>
<td>-0.0543</td>
</tr>
<tr>
<td></td>
<td>(0.0490)</td>
<td>(0.0503)</td>
<td>(0.0377)</td>
<td>(0.0505)</td>
</tr>
<tr>
<td>female</td>
<td>-0.0341***</td>
<td>-0.0354***</td>
<td>-0.0317***</td>
<td>-0.0315***</td>
</tr>
<tr>
<td></td>
<td>(0.0097)</td>
<td>(0.0096)</td>
<td>(0.0102)</td>
<td>(0.0100)</td>
</tr>
<tr>
<td>black_coloured</td>
<td>0.0409*</td>
<td>0.0396*</td>
<td>0.0405*</td>
<td>0.0419**</td>
</tr>
<tr>
<td></td>
<td>(0.0244)</td>
<td>(0.0239)</td>
<td>(0.0229)</td>
<td>(0.0212)</td>
</tr>
<tr>
<td>age</td>
<td>-0.0008**</td>
<td>-0.0008**</td>
<td>-0.0009**</td>
<td>-0.0009**</td>
</tr>
<tr>
<td></td>
<td>(0.0004)</td>
<td>(0.0003)</td>
<td>(0.0004)</td>
<td>(0.0004)</td>
</tr>
<tr>
<td>lsm_low</td>
<td>-0.0234</td>
<td>-0.0344</td>
<td>-0.0231</td>
<td>-0.0228</td>
</tr>
<tr>
<td></td>
<td>(0.0297)</td>
<td>(0.0328)</td>
<td>(0.0318)</td>
<td>(0.0314)</td>
</tr>
<tr>
<td>metro</td>
<td>0.0152</td>
<td>0.0110</td>
<td>0.0230</td>
<td>0.0236</td>
</tr>
<tr>
<td></td>
<td>(0.0425)</td>
<td>(0.0428)</td>
<td>(0.0381)</td>
<td>(0.0365)</td>
</tr>
<tr>
<td>urban</td>
<td>-0.0362***</td>
<td>-0.0531***</td>
<td>-0.1132**</td>
<td>-0.1008**</td>
</tr>
<tr>
<td></td>
<td>(0.0107)</td>
<td>(0.0197)</td>
<td>(0.0490)</td>
<td>(0.0394)</td>
</tr>
<tr>
<td>ANC_supporter</td>
<td>-0.0140</td>
<td>-0.0140</td>
<td>-0.0086</td>
<td>-0.0088</td>
</tr>
<tr>
<td></td>
<td>(0.0095)</td>
<td>(0.0098)</td>
<td>(0.0099)</td>
<td>(0.0076)</td>
</tr>
</tbody>
</table>

Conley (50km) standard-errors in parentheses
Signif. Codes: ***: 0.01, **: 0.05, *: 0.1

SUTVA Check To test SUTVA (spill-over effects, in particular), we run a robustness analysis, in which we remove respondents in wards that are adjacent to treated wards. We first define neighbour wards as wards that share a positive proportion of their boundary with the given treated ward (using rook’s weight matrix). We then identify untreated
respondents living in these neighbouring wards and remove these from the sample. Finally, we repeat our analysis based on this reduced sample. Results are presented in Table A.3.3, which show that our main findings are robust.

Table A.3.3: SUTVA check

<table>
<thead>
<tr>
<th>Dependent Variable:</th>
<th>20 days</th>
<th>30 days</th>
<th>45 days</th>
<th>60 days</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>protests_proximity</td>
<td>-0.0118</td>
<td>-0.0416</td>
<td>0.0173</td>
<td>0.0234</td>
</tr>
<tr>
<td></td>
<td>(0.0355)</td>
<td>(0.0303)</td>
<td>(0.0430)</td>
<td>(0.0531)</td>
</tr>
<tr>
<td>recent_protest_peaceful</td>
<td>0.1625***</td>
<td>0.2125***</td>
<td>0.0762**</td>
<td>0.0628</td>
</tr>
<tr>
<td></td>
<td>(0.0373)</td>
<td>(0.0267)</td>
<td>(0.0357)</td>
<td>(0.0711)</td>
</tr>
<tr>
<td>recent_protest_violent</td>
<td>-0.1562***</td>
<td>-0.0812*</td>
<td>-0.0652</td>
<td>-0.0685*</td>
</tr>
<tr>
<td></td>
<td>(0.0515)</td>
<td>(0.0451)</td>
<td>(0.0545)</td>
<td>(0.0412)</td>
</tr>
<tr>
<td>female</td>
<td>-0.0411***</td>
<td>-0.0393***</td>
<td>-0.0401***</td>
<td>-0.0432***</td>
</tr>
<tr>
<td></td>
<td>(0.0094)</td>
<td>(0.0133)</td>
<td>(0.0102)</td>
<td>(0.0115)</td>
</tr>
<tr>
<td>black_coloured</td>
<td>0.0616***</td>
<td>0.0572**</td>
<td>0.0587***</td>
<td>0.0663***</td>
</tr>
<tr>
<td></td>
<td>(0.0202)</td>
<td>(0.0259)</td>
<td>(0.0200)</td>
<td>(0.0167)</td>
</tr>
<tr>
<td>age</td>
<td>-0.0010***</td>
<td>-0.0010***</td>
<td>-0.0011***</td>
<td>-0.0011***</td>
</tr>
<tr>
<td></td>
<td>(0.0004)</td>
<td>(0.0003)</td>
<td>(0.0004)</td>
<td>(0.0004)</td>
</tr>
<tr>
<td>lsm_low</td>
<td>-0.0284</td>
<td>-0.0324</td>
<td>-0.0235</td>
<td>-0.0286</td>
</tr>
<tr>
<td></td>
<td>(0.0370)</td>
<td>(0.0403)</td>
<td>(0.0380)</td>
<td>(0.0411)</td>
</tr>
<tr>
<td>metro</td>
<td>0.0421</td>
<td>0.0860*</td>
<td>0.0667</td>
<td>0.0335</td>
</tr>
<tr>
<td></td>
<td>(0.0373)</td>
<td>(0.0493)</td>
<td>(0.0543)</td>
<td>(0.0576)</td>
</tr>
<tr>
<td>urban</td>
<td>-0.0739***</td>
<td>-0.0959***</td>
<td>-0.1376***</td>
<td>-0.1158***</td>
</tr>
<tr>
<td></td>
<td>(0.0085)</td>
<td>(0.0312)</td>
<td>(0.0491)</td>
<td>(0.0328)</td>
</tr>
<tr>
<td>ANC_supporter</td>
<td>-0.0121***</td>
<td>-0.0112</td>
<td>-0.0167**</td>
<td>-0.0114***</td>
</tr>
<tr>
<td></td>
<td>(0.0046)</td>
<td>(0.0158)</td>
<td>(0.0085)</td>
<td>(0.0032)</td>
</tr>
<tr>
<td>Municipal fixed effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Survey wave fixed effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Observations</td>
<td>4,572</td>
<td>4,342</td>
<td>4,098</td>
<td>4,152</td>
</tr>
<tr>
<td>No. of treated</td>
<td>95</td>
<td>131</td>
<td>190</td>
<td>227</td>
</tr>
</tbody>
</table>

*Conley (50km) standard-errors in parentheses

Signif. Codes: ***: 0.01, **: 0.05, *: 0.1

**Attrition check** We estimate correlation coefficient and corresponding p-value of the correlation between treatment status and item non-response. We do this for the
different protest types and across all time windows. Results in Table A.3.4 show no significant correlation.

Table A.3.4: Correlation between treatment status and item-non response

<table>
<thead>
<tr>
<th>Time window</th>
<th>Correlation coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment status: Any protest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 days</td>
<td>0.02</td>
<td>0.12</td>
</tr>
<tr>
<td>30 days</td>
<td>0.01</td>
<td>0.26</td>
</tr>
<tr>
<td>45 days</td>
<td>0.00</td>
<td>0.66</td>
</tr>
<tr>
<td>60 days</td>
<td>0.00</td>
<td>0.58</td>
</tr>
<tr>
<td>Treatment status: Peaceful protest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 days</td>
<td>0.01</td>
<td>0.38</td>
</tr>
<tr>
<td>30 days</td>
<td>0.00</td>
<td>0.56</td>
</tr>
<tr>
<td>45 days</td>
<td>0.00</td>
<td>0.90</td>
</tr>
<tr>
<td>60 days</td>
<td>-0.00</td>
<td>0.87</td>
</tr>
<tr>
<td>Treatment status: Violent protest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 days</td>
<td>0.02</td>
<td>0.19</td>
</tr>
<tr>
<td>30 days</td>
<td>0.01</td>
<td>0.33</td>
</tr>
<tr>
<td>45 days</td>
<td>0.00</td>
<td>0.65</td>
</tr>
<tr>
<td>60 days</td>
<td>0.00</td>
<td>0.46</td>
</tr>
</tbody>
</table>

Note: The table displays Pearson’s correlation coefficients between treatment status (exposure to any protest, peaceful protest or violent protest) and item non-response (respondents who have not responded to the outcome question of protest sympathy) as well as the corresponding p-values across treatment status for the different time windows.

Parallel trends check We test the parallel trends assumption to make sure that our outcome, protest sympathy, does not differ across the treatment and control group prior to protest exposure. We first identify groups of respondents who are interviewed in a 30 days window before they are exposed to a peaceful or violent protest (with 20, 45 and 60 days as robustness checks). We then re-estimate our model comparing these “prior-to-treatment” groups with the control group of “never-treated” respondents. The results, summarised in Table A.3.5 and A.3.6 below, show no significant difference in protest sympathy across the groups prior to treatment.
A difference-in-differences analysis
### Table A.3.5: The effect of future service delivery protest on protest sympathy (20, 30, 45 and 60 days window), OLS

<table>
<thead>
<tr>
<th>Dependent Variable:</th>
<th>20 days</th>
<th>30 days</th>
<th>45 days</th>
<th>60 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protests proximity</td>
<td>-0.0333</td>
<td>-0.0211</td>
<td>-0.0169</td>
<td>0.0111</td>
</tr>
<tr>
<td>(0.0896)</td>
<td>(0.0874)</td>
<td>(0.0640)</td>
<td>(0.0631)</td>
<td>(0.0470)</td>
</tr>
<tr>
<td>Future peaceful protest</td>
<td>0.0152</td>
<td>0.0053</td>
<td>0.0535</td>
<td>0.0507</td>
</tr>
<tr>
<td>(0.1022)</td>
<td>(0.0958)</td>
<td>(0.0623)</td>
<td>(0.0607)</td>
<td>(0.0533)</td>
</tr>
<tr>
<td>Future violent protest</td>
<td>0.0072</td>
<td>-0.0066</td>
<td>0.0067</td>
<td>0.0017</td>
</tr>
<tr>
<td>(0.0675)</td>
<td>(0.0600)</td>
<td>(0.0660)</td>
<td>(0.0631)</td>
<td>(0.0423)</td>
</tr>
<tr>
<td>Female</td>
<td>-0.0329***</td>
<td>-0.0355***</td>
<td>-0.0344***</td>
<td>-0.0346***</td>
</tr>
<tr>
<td>(0.0091)</td>
<td>(0.0087)</td>
<td>(0.0088)</td>
<td>(0.0086)</td>
<td></td>
</tr>
<tr>
<td>Black/coloured</td>
<td>0.0413*</td>
<td>0.0401*</td>
<td>0.0421*</td>
<td>0.0427*</td>
</tr>
<tr>
<td>(0.0246)</td>
<td>(0.0237)</td>
<td>(0.0231)</td>
<td>(0.0220)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-0.0008**</td>
<td>-0.0008**</td>
<td>-0.0008**</td>
<td>-0.0008**</td>
</tr>
<tr>
<td>(0.0003)</td>
<td>(0.0003)</td>
<td>(0.0003)</td>
<td>(0.0003)</td>
<td></td>
</tr>
<tr>
<td>Low income</td>
<td>-0.0126</td>
<td>-0.0211</td>
<td>-0.0182</td>
<td>-0.0214</td>
</tr>
<tr>
<td>(0.0273)</td>
<td>(0.0273)</td>
<td>(0.0259)</td>
<td>(0.0251)</td>
<td></td>
</tr>
<tr>
<td>Metropolitan area</td>
<td>0.0188</td>
<td>0.0163</td>
<td>0.0175</td>
<td>0.0180</td>
</tr>
<tr>
<td>(0.0396)</td>
<td>(0.0380)</td>
<td>(0.0362)</td>
<td>(0.0354)</td>
<td></td>
</tr>
<tr>
<td>Urban area</td>
<td>-0.0190</td>
<td>-0.0118</td>
<td>-0.0552**</td>
<td>-0.0706**</td>
</tr>
<tr>
<td>(0.0195)</td>
<td>(0.0216)</td>
<td>(0.0275)</td>
<td>(0.0315)</td>
<td></td>
</tr>
<tr>
<td>ANC supporter</td>
<td>-0.0124</td>
<td>-0.0117</td>
<td>-0.0096</td>
<td>-0.0099</td>
</tr>
<tr>
<td>(0.0099)</td>
<td>(0.0093)</td>
<td>(0.0092)</td>
<td>(0.0081)</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Signif. Codes: ***: 0.01, **: 0.05, *: 0.1. The dependent variable is protest sympathy; all specifications include municipal and survey wave fixed effects; standard errors are corrected for spatial correlation using a diffusion parameter of 50 km, cf. Conley (1999, 2008); all regressions are estimated using OLS.
Table A.3.6: The effect of future service delivery protest on protest sympathy (20, 30, 45 and 60 days window), Logit

<table>
<thead>
<tr>
<th>Dependent Variable:</th>
<th>Protest Sympathy</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20 days</td>
<td>30 days</td>
<td>45 days</td>
<td>60 days</td>
<td></td>
</tr>
<tr>
<td>Protest proximity</td>
<td>-0.1453</td>
<td>-0.0875</td>
<td>-0.0744</td>
<td>0.0452</td>
<td>0.0455</td>
</tr>
<tr>
<td></td>
<td>(0.3849)</td>
<td>(0.3764)</td>
<td>(0.2784)</td>
<td>(0.2761)</td>
<td>(0.2172)</td>
</tr>
<tr>
<td>Future peaceful protest</td>
<td>0.0576</td>
<td>0.0160</td>
<td>0.2385</td>
<td>0.2312</td>
<td>0.1693</td>
</tr>
<tr>
<td></td>
<td>(0.4429)</td>
<td>(0.4170)</td>
<td>(0.2787)</td>
<td>(0.2766)</td>
<td>(0.2480)</td>
</tr>
<tr>
<td>Future violent protest</td>
<td>0.0246</td>
<td>-0.0401</td>
<td>0.0240</td>
<td>0.0002</td>
<td>-0.0572</td>
</tr>
<tr>
<td></td>
<td>(0.2940)</td>
<td>(0.2587)</td>
<td>(0.2927)</td>
<td>(0.2795)</td>
<td>(0.1973)</td>
</tr>
<tr>
<td>Female</td>
<td>-0.1584***</td>
<td>-0.1711***</td>
<td>-0.1658***</td>
<td>-0.1661***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0487)</td>
<td>(0.0468)</td>
<td>(0.0463)</td>
<td>(0.0442)</td>
<td></td>
</tr>
<tr>
<td>Black/coloured</td>
<td>0.1959*</td>
<td>0.1903*</td>
<td>0.1994*</td>
<td>0.2024*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.1171)</td>
<td>(0.1132)</td>
<td>(0.1099)</td>
<td>(0.1047)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-0.0040**</td>
<td>-0.0037**</td>
<td>-0.0038**</td>
<td>-0.0040***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0016)</td>
<td>(0.0015)</td>
<td>(0.0015)</td>
<td>(0.0015)</td>
<td></td>
</tr>
<tr>
<td>Low income</td>
<td>-0.0593</td>
<td>-0.1021</td>
<td>-0.0882</td>
<td>-0.1026</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.1321)</td>
<td>(0.1292)</td>
<td>(0.1229)</td>
<td>(0.1181)</td>
<td></td>
</tr>
<tr>
<td>Metropolitan area</td>
<td>0.0894</td>
<td>0.0776</td>
<td>0.0833</td>
<td>0.0867</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.1789)</td>
<td>(0.1717)</td>
<td>(0.1636)</td>
<td>(0.1593)</td>
<td></td>
</tr>
<tr>
<td>Urban area</td>
<td>-0.1014</td>
<td>-0.0653</td>
<td>-0.2784***</td>
<td>-0.3532**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0930)</td>
<td>(0.1065)</td>
<td>(0.1358)</td>
<td>(0.1539)</td>
<td></td>
</tr>
<tr>
<td>ANC supporter</td>
<td>-0.0601</td>
<td>-0.0561</td>
<td>-0.0460</td>
<td>-0.0476</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0458)</td>
<td>(0.0430)</td>
<td>(0.0431)</td>
<td>(0.0373)</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>6,416</td>
<td>6,416</td>
<td>6,657</td>
<td>6,657</td>
<td>6,957</td>
</tr>
</tbody>
</table>

Note: Signif. Codes: ***: 0.01, **: 0.05, *: 0.1. The dependent variable is protest sympathy; all specifications include municipal and survey wave fixed effects; standard errors are corrected for spatial correlation using a diffusion parameter of 50 km, cf. Conley (1999, 2008); all regressions are estimated using Logit models.
4.4 Additional results
Table A.4.1: The effect of service delivery protest on protest sympathy, 20, 30, 45 and 60 days window (Logit model)

<table>
<thead>
<tr>
<th>Variable</th>
<th>20 days</th>
<th>30 days</th>
<th>45 days</th>
<th>60 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protest proximity</td>
<td>-0.2503***</td>
<td>-0.2306**</td>
<td>-0.0917**</td>
<td>-0.0667</td>
</tr>
<tr>
<td></td>
<td>(0.0783)</td>
<td>(0.1053)</td>
<td>(0.0404)</td>
<td>(0.0414)</td>
</tr>
<tr>
<td>Peaceful protest</td>
<td>0.8380***</td>
<td>0.9086***</td>
<td>0.8634***</td>
<td>0.9152***</td>
</tr>
<tr>
<td></td>
<td>(0.2318)</td>
<td>(0.2397)</td>
<td>(0.1917)</td>
<td>(0.2008)</td>
</tr>
<tr>
<td>Violent protest</td>
<td>-0.4987**</td>
<td>-0.4875***</td>
<td>-0.4472**</td>
<td>-0.4753***</td>
</tr>
<tr>
<td></td>
<td>(0.2001)</td>
<td>(0.1737)</td>
<td>(0.1962)</td>
<td>(0.1692)</td>
</tr>
<tr>
<td>Female</td>
<td>-0.1584***</td>
<td>-0.1638***</td>
<td>-0.1501***</td>
<td>-0.1492***</td>
</tr>
<tr>
<td></td>
<td>(0.0521)</td>
<td>(0.0507)</td>
<td>(0.0529)</td>
<td>(0.0499)</td>
</tr>
<tr>
<td>Black/coloured</td>
<td>0.1928</td>
<td>0.1930*</td>
<td>0.1929</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.1190)</td>
<td>(0.1167)</td>
<td>(0.1177)</td>
<td>(0.1118)</td>
</tr>
<tr>
<td>age</td>
<td>-0.0039**</td>
<td>-0.0040**</td>
<td>-0.0042**</td>
<td>-0.0043**</td>
</tr>
<tr>
<td></td>
<td>(0.0017)</td>
<td>(0.0016)</td>
<td>(0.0016)</td>
<td>(0.0017)</td>
</tr>
<tr>
<td>Low income</td>
<td>-0.1128</td>
<td>-0.1670</td>
<td>-0.1117</td>
<td>-0.1073</td>
</tr>
<tr>
<td></td>
<td>(0.1407)</td>
<td>(0.1509)</td>
<td>(0.1493)</td>
<td>(0.1466)</td>
</tr>
<tr>
<td>Metropolitan area</td>
<td>0.0715</td>
<td>0.0494</td>
<td>0.0543</td>
<td>0.0551</td>
</tr>
<tr>
<td></td>
<td>(0.1915)</td>
<td>(0.1904)</td>
<td>(0.1865)</td>
<td>(0.1807)</td>
</tr>
<tr>
<td>Urban area</td>
<td>-0.2265***</td>
<td>-0.3050***</td>
<td>-0.6053***</td>
<td>-0.5301***</td>
</tr>
<tr>
<td></td>
<td>(0.0576)</td>
<td>(0.0961)</td>
<td>(0.2330)</td>
<td>(0.1812)</td>
</tr>
<tr>
<td>ANC supporter</td>
<td>-0.0669</td>
<td>-0.0654</td>
<td>-0.0504</td>
<td>-0.0494</td>
</tr>
<tr>
<td></td>
<td>(0.0452)</td>
<td>(0.0461)</td>
<td>(0.0505)</td>
<td>(0.0429)</td>
</tr>
<tr>
<td>Observations</td>
<td>5,879</td>
<td>5,879</td>
<td>5,950</td>
<td>5,950</td>
</tr>
<tr>
<td>No. of treated</td>
<td>95</td>
<td>95</td>
<td>131</td>
<td>131</td>
</tr>
</tbody>
</table>

Note: Conley (50km) standard-errors in parentheses. All regressions include municipal- and wave-fixed effects. Signif. Codes: ***: 0.01 **: 0.05 *: 0.1
As a robustness check, we run our analysis with an alternative definition of violent protest, where we define *peaceful protest* as "Protest" and *violent protest* as "Riots" in ACLED. Results in Table A.4.2 are almost similar to our main findings.

Table A.4.2: The effect of service delivery protest on protest sympathy, 20, 30, 45 and 60 days window (OLS) - Alternative definition of violent protest

<table>
<thead>
<tr>
<th>Variables</th>
<th>20 days</th>
<th>30 days</th>
<th>45 days</th>
<th>60 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protests proximity</td>
<td>-0.0118</td>
<td>-0.0416</td>
<td>0.0173</td>
<td>0.0234</td>
</tr>
<tr>
<td></td>
<td>(0.0355)</td>
<td>(0.0303)</td>
<td>(0.0430)</td>
<td>(0.0531)</td>
</tr>
<tr>
<td>Recent protest peaceful</td>
<td>0.1625**</td>
<td>0.2125***</td>
<td>0.0762**</td>
<td>0.0628</td>
</tr>
<tr>
<td></td>
<td>(0.0373)</td>
<td>(0.0267)</td>
<td>(0.0357)</td>
<td>(0.0711)</td>
</tr>
<tr>
<td>Recent protest violent</td>
<td>-0.1562***</td>
<td>-0.0812*</td>
<td>-0.0652</td>
<td>-0.0685*</td>
</tr>
<tr>
<td></td>
<td>(0.0515)</td>
<td>(0.0451)</td>
<td>(0.0545)</td>
<td>(0.0412)</td>
</tr>
<tr>
<td>Female</td>
<td>-0.0411***</td>
<td>-0.0393***</td>
<td>-0.0401***</td>
<td>-0.0432***</td>
</tr>
<tr>
<td></td>
<td>(0.0094)</td>
<td>(0.0133)</td>
<td>(0.0102)</td>
<td>(0.0115)</td>
</tr>
<tr>
<td>Black or Coloured</td>
<td>0.0616***</td>
<td>0.0572**</td>
<td>0.0587***</td>
<td>0.0663***</td>
</tr>
<tr>
<td></td>
<td>(0.0202)</td>
<td>(0.0259)</td>
<td>(0.0200)</td>
<td>(0.0167)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.0010***</td>
<td>-0.0010***</td>
<td>-0.0011***</td>
<td>-0.0011***</td>
</tr>
<tr>
<td></td>
<td>(0.0004)</td>
<td>(0.0003)</td>
<td>(0.0004)</td>
<td>(0.0004)</td>
</tr>
<tr>
<td>LSM low</td>
<td>-0.0284</td>
<td>-0.0324</td>
<td>-0.0235</td>
<td>-0.0286</td>
</tr>
<tr>
<td></td>
<td>(0.0370)</td>
<td>(0.0403)</td>
<td>(0.0380)</td>
<td>(0.0411)</td>
</tr>
<tr>
<td>Metro</td>
<td>0.0421</td>
<td>0.0860*</td>
<td>0.0667</td>
<td>0.0335</td>
</tr>
<tr>
<td></td>
<td>(0.0373)</td>
<td>(0.0493)</td>
<td>(0.0543)</td>
<td>(0.0576)</td>
</tr>
<tr>
<td>Urban</td>
<td>-0.0739***</td>
<td>-0.0959***</td>
<td>-0.1376***</td>
<td>-0.1158***</td>
</tr>
<tr>
<td></td>
<td>(0.0085)</td>
<td>(0.0312)</td>
<td>(0.0491)</td>
<td>(0.0328)</td>
</tr>
<tr>
<td>ANC supporter</td>
<td>-0.0121***</td>
<td>-0.0112***</td>
<td>-0.0167***</td>
<td>-0.0114***</td>
</tr>
<tr>
<td></td>
<td>(0.0046)</td>
<td>(0.0158)</td>
<td>(0.0085)</td>
<td>(0.0032)</td>
</tr>
<tr>
<td>Municipal fixed effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Survey wave fixed effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Observations</td>
<td>4,572</td>
<td>4,342</td>
<td>4,098</td>
<td>4,152</td>
</tr>
<tr>
<td>No. of treated</td>
<td>95</td>
<td>131</td>
<td>190</td>
<td>227</td>
</tr>
</tbody>
</table>

*Note: Conley (50km) standard-errors in parentheses; Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*
C SURVEY SAMPLE

Sampling Strategy

Our original sampling strategy was a non-probability sample with quotas on gender, age, province and living standard measure (LSM) categories. However, both LSM categories, especially the lowest categories, turned out to be hard to reach through the online mode, despite efforts from the survey provider and despite the survey period being extended from three to seven weeks. Consequently, we ended up with more respondents than we originally planned for, which we leverage for the two survey experiments. We have a total of 11,000 respondents (after basic data cleaning, but including incomplete responses) from which we randomly draw two samples with quotas on gender, age and province. This leaves us with a sample of 3,200 respondents for the vignette experiment and 2,000 respondents for the conjoint experiment (with an overlap of 1,300 respondents). The vignette sample is larger, because more respondents replied to this as this was placed in the beginning of the survey, while the conjoint came later in the survey.
Descriptive Statistics

Table C.0.1: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Vignette sample</th>
<th>Conjoint sample</th>
<th>Population 2020/21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>0.51</td>
<td>0.51</td>
<td>0.51</td>
</tr>
<tr>
<td>Male</td>
<td>0.49</td>
<td>0.49</td>
<td>0.49</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td>0.34</td>
<td>0.32</td>
<td>0.26</td>
</tr>
<tr>
<td>30-39</td>
<td>0.30</td>
<td>0.28</td>
<td>0.28</td>
</tr>
<tr>
<td>40-49</td>
<td>0.21</td>
<td>0.19</td>
<td>0.19</td>
</tr>
<tr>
<td>50-59</td>
<td>0.10</td>
<td>0.12</td>
<td>0.13</td>
</tr>
<tr>
<td>60+</td>
<td>0.06</td>
<td>0.08</td>
<td>0.14</td>
</tr>
<tr>
<td>Province</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gauteng</td>
<td>0.29</td>
<td>0.27</td>
<td>0.26</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>0.18</td>
<td>0.20</td>
<td>0.19</td>
</tr>
<tr>
<td>Western Cape</td>
<td>0.16</td>
<td>0.14</td>
<td>0.12</td>
</tr>
<tr>
<td>Eastern Cape</td>
<td>0.11</td>
<td>0.11</td>
<td>0.11</td>
</tr>
<tr>
<td>Limpopo</td>
<td>0.08</td>
<td>0.10</td>
<td>0.10</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>0.06</td>
<td>0.07</td>
<td>0.08</td>
</tr>
<tr>
<td>North West</td>
<td>0.05</td>
<td>0.05</td>
<td>0.07</td>
</tr>
<tr>
<td>Free State</td>
<td>0.05</td>
<td>0.06</td>
<td>0.05</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Racial Identification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>0.65</td>
<td>0.65</td>
<td></td>
</tr>
<tr>
<td>Coloured</td>
<td>0.10</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>0.20</td>
<td>0.22</td>
<td></td>
</tr>
<tr>
<td>Indian/Asian</td>
<td>0.04</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>LSM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-4</td>
<td>-</td>
<td>0.02</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>-</td>
<td>0.05</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>-</td>
<td>0.23</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>-</td>
<td>0.23</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>-</td>
<td>0.16</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>-</td>
<td>0.12</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>-</td>
<td>0.19</td>
<td>-</td>
</tr>
<tr>
<td>Highest Educational level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary school/no schooling</td>
<td>-</td>
<td>0.01</td>
<td>-</td>
</tr>
<tr>
<td>Secondary school</td>
<td>-</td>
<td>0.38</td>
<td>-</td>
</tr>
<tr>
<td>Higher education</td>
<td>-</td>
<td>0.46</td>
<td>-</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>-</td>
<td>0.19</td>
<td>-</td>
</tr>
<tr>
<td>Employed (full/part time)</td>
<td>-</td>
<td>0.53</td>
<td>-</td>
</tr>
<tr>
<td>Self-employed</td>
<td>-</td>
<td>0.12</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Total vignette sample size is n = 3,236 and total conjoint sample size is n = 1,979. Population data is from Statistics South Africa.

D VIGNETTE EXPERIMENT

d.1 Experiment Design

Each protest is framed as a current event, taking place in July 2022, inspired by real events, e.g. SABC News. The photos are publicly available, obtained from online news articles. Photo of peaceful protest obtained from Daily Maverick and violent protest from Telegraph.
Table D.1.1: Vignette Experiment

<table>
<thead>
<tr>
<th>Baseline</th>
<th>In South Africa, basic service delivery includes the provision of clean water, electricity and sanitation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment 1 and 2</td>
<td>In South Africa, basic service delivery includes the provision of clean water, electricity and sanitation.</td>
</tr>
<tr>
<td></td>
<td>In July 2022, many South Africans took to the streets to show their dissatisfaction with water shortages. After several days with shortage of clean drinking water, the citizens [were frustrated and demanded water supply to be restored immediately / blamed the municipal government and demanded the municipality to restore water supply immediately].</td>
</tr>
<tr>
<td>Treatment 3 and 4</td>
<td>In South Africa, basic service delivery includes the provision of clean water, electricity and sanitation.</td>
</tr>
<tr>
<td></td>
<td>In July 2022, many South Africans took to the streets to show their dissatisfaction with water shortages. After several days with shortage of clean drinking water, the citizens [were frustrated and demanded water supply to be restored immediately / blamed the municipal government and demanded the municipality to restore water supply immediately].</td>
</tr>
</tbody>
</table>
Table D.1.2: Outcome questions

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>RESPONSE CATEGORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Policy Support</strong></td>
<td></td>
</tr>
<tr>
<td>How much do you agree or disagree with the following statements...?</td>
<td></td>
</tr>
<tr>
<td>1 “The municipal government should increase spending to improve service delivery in poor settlements.” <em>Remember that increasing spending could require higher taxes for people like you - or less spending on other municipal services.</em></td>
<td>Strongly agree / Agree / Somewhat agree / Neither agree nor disagree / Somewhat disagree / Disagree / Strongly disagree</td>
</tr>
<tr>
<td>2 “The national government should do more to improve trade relations with China” [placebo]</td>
<td>Strongly agree / Agree / Somewhat agree / Neither agree nor disagree / Somewhat disagree / Disagree / Strongly disagree</td>
</tr>
<tr>
<td><strong>Protest Sympathy</strong></td>
<td></td>
</tr>
<tr>
<td>How much do you agree or disagree with the following statements...?</td>
<td></td>
</tr>
<tr>
<td>3 “I support people who protest against lack of service delivery”</td>
<td>Strongly agree / Agree / Somewhat agree / Neither agree nor disagree / Somewhat disagree / Disagree / Strongly disagree</td>
</tr>
<tr>
<td>4 “People who protest against lack of service delivery are causing unnecessary public disorder”</td>
<td>Strongly agree / Agree / Somewhat agree / Neither agree nor disagree / Somewhat disagree / Disagree / Strongly disagree</td>
</tr>
<tr>
<td>5 “People who protest against lack of service delivery deserve help from the municipal government”</td>
<td>Strongly agree / Agree / Somewhat agree / Neither agree nor disagree / Somewhat disagree / Disagree / Strongly disagree</td>
</tr>
</tbody>
</table>

d.2 Estimation

We analyze our vignette experiment using a difference-in-means analysis by estimating the following regression

\[ Y_i = \alpha + \beta_1 T_1^i + \beta_2 T_2^i + \beta_3 T_3^i + \beta_4 T_4^i + \delta X_i + \pi_p + \epsilon_i \]  

(4)
where $Y_i$ denotes our outcomes measured by a seven point Likert scales; $\alpha$ denotes the average level of support for respondents in the control group; $\{T_1^i, T_2^i, T_3^i, T_4^i\}$ denotes the four treatments (peaceful protest, peaceful protest with blame attribution, violent protest and violent protest with blame attribution); $\beta_k \in \{\beta_1, \beta_2, \beta_3, \beta_4\}$ are the parameters of interest, i.e. the causal effects of the treatments (exposure to protest) on the outcomes under the assumption of full randomization of the treatments, $E[\epsilon_i | T] = 0$; $X_i$ are optional controls, e.g. respondents' age, gender and race; $\pi_p$ are regional fixed effects. This approach simply test whether responses in the control and treatments are different.

### d.3 Experiment validation

Figure D.3.1: Check of Simple Randomization
Table D.3.1: Descriptive Statistics across Treatment Groups

<table>
<thead>
<tr>
<th>Variables</th>
<th>Control</th>
<th>Treatment 1</th>
<th>Treatment 2</th>
<th>Treatment 3</th>
<th>Treatment 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>0.54</td>
<td>0.52</td>
<td>0.50</td>
<td>0.53</td>
<td>0.47</td>
</tr>
<tr>
<td>Male</td>
<td>0.46</td>
<td>0.48</td>
<td>0.50</td>
<td>0.47</td>
<td>0.53</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td>0.34</td>
<td>0.32</td>
<td>0.32</td>
<td>0.34</td>
<td>0.36</td>
</tr>
<tr>
<td>30-39</td>
<td>0.30</td>
<td>0.30</td>
<td>0.30</td>
<td>0.30</td>
<td>0.29</td>
</tr>
<tr>
<td>40-49</td>
<td>0.20</td>
<td>0.24</td>
<td>0.19</td>
<td>0.21</td>
<td>0.20</td>
</tr>
<tr>
<td>50-59</td>
<td>0.09</td>
<td>0.09</td>
<td>0.11</td>
<td>0.10</td>
<td>0.08</td>
</tr>
<tr>
<td>60+</td>
<td>0.06</td>
<td>0.05</td>
<td>0.07</td>
<td>0.05</td>
<td>0.07</td>
</tr>
<tr>
<td>Province</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gauteng</td>
<td>0.29</td>
<td>0.28</td>
<td>0.28</td>
<td>0.30</td>
<td>0.29</td>
</tr>
<tr>
<td>Kwazulu-Natal</td>
<td>0.18</td>
<td>0.19</td>
<td>0.17</td>
<td>0.18</td>
<td>0.18</td>
</tr>
<tr>
<td>Western Cape</td>
<td>0.15</td>
<td>0.16</td>
<td>0.17</td>
<td>0.16</td>
<td>0.16</td>
</tr>
<tr>
<td>Eastern Cape</td>
<td>0.12</td>
<td>0.11</td>
<td>0.10</td>
<td>0.12</td>
<td>0.10</td>
</tr>
<tr>
<td>Limpopo</td>
<td>0.08</td>
<td>0.08</td>
<td>0.10</td>
<td>0.08</td>
<td>0.08</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>0.06</td>
<td>0.08</td>
<td>0.05</td>
<td>0.06</td>
<td>0.07</td>
</tr>
<tr>
<td>North West</td>
<td>0.06</td>
<td>0.04</td>
<td>0.06</td>
<td>0.03</td>
<td>0.04</td>
</tr>
<tr>
<td>Free State</td>
<td>0.04</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.07</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>0.02</td>
<td>0.01</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Racial Identification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>0.66</td>
<td>0.65</td>
<td>0.64</td>
<td>0.66</td>
<td>0.64</td>
</tr>
<tr>
<td>Coloured</td>
<td>0.11</td>
<td>0.11</td>
<td>0.08</td>
<td>0.10</td>
<td>0.10</td>
</tr>
<tr>
<td>White</td>
<td>0.20</td>
<td>0.19</td>
<td>0.23</td>
<td>0.19</td>
<td>0.22</td>
</tr>
<tr>
<td>Indian/Asian</td>
<td>0.03</td>
<td>0.05</td>
<td>0.04</td>
<td>0.04</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Note: Total sample size is $n = 3,236$. Treatment 1 and 2 are peaceful protests without and with blame attribution, respectively, and treatment 3 and 4 are violent protests without and with blame attribution, respectively.
Figure D.3.2: Placebo check, where outcome variable is “The national govt should do more to improve trade relations with China”

### Additional results

Table D.4.1: Outcome variable: Policy Support (“The municipal govt. should increase spending to improve service delivery in poor settlements”)

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>4.96***</td>
<td>4.96***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.08)</td>
<td>(0.11)</td>
<td></td>
</tr>
<tr>
<td>Peaceful without blame</td>
<td>−0.04</td>
<td>−0.04</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>(0.11)</td>
<td>(0.12)</td>
<td>(0.12)</td>
</tr>
<tr>
<td>Peaceful with blame</td>
<td>−0.02</td>
<td>−0.02</td>
<td>−0.01</td>
</tr>
<tr>
<td></td>
<td>(0.11)</td>
<td>(0.12)</td>
<td>(0.12)</td>
</tr>
<tr>
<td>Violent without blame</td>
<td>−0.13</td>
<td>−0.13</td>
<td>−0.14</td>
</tr>
<tr>
<td></td>
<td>(0.11)</td>
<td>(0.09)</td>
<td>(0.09)</td>
</tr>
<tr>
<td>Violent with blame</td>
<td>−0.03</td>
<td>−0.03</td>
<td>−0.04</td>
</tr>
<tr>
<td></td>
<td>(0.11)</td>
<td>(0.10)</td>
<td>(0.11)</td>
</tr>
<tr>
<td>Num. obs.</td>
<td>3,208</td>
<td>3,208</td>
<td>3,208</td>
</tr>
<tr>
<td>Clustered std. errors</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Municipal FE</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*** p < 0.001; ** p < 0.01; * p < 0.05
Table D.4.2: Outcome variable: Protest Sympathy ("I support people who protest against lack of service delivery")

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>5.38***</td>
<td>5.38***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.07)</td>
<td>(0.06)</td>
<td></td>
</tr>
<tr>
<td>Peaceful without blame</td>
<td>−0.00</td>
<td>−0.00</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>(0.10)</td>
<td>(0.07)</td>
<td>(0.08)</td>
</tr>
<tr>
<td>Peaceful with blame</td>
<td>0.01</td>
<td>0.01</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td>(0.10)</td>
<td>(0.08)</td>
<td>(0.08)</td>
</tr>
<tr>
<td>Violent without blame</td>
<td>−0.32***</td>
<td>−0.32***</td>
<td>−0.32***</td>
</tr>
<tr>
<td></td>
<td>(0.10)</td>
<td>(0.08)</td>
<td>(0.08)</td>
</tr>
<tr>
<td>Violent with blame</td>
<td>−0.24*</td>
<td>−0.24*</td>
<td>−0.24*</td>
</tr>
<tr>
<td></td>
<td>(0.10)</td>
<td>(0.10)</td>
<td>(0.10)</td>
</tr>
<tr>
<td>Num. obs.</td>
<td>3,204</td>
<td>3,204</td>
<td>3,204</td>
</tr>
<tr>
<td>Clustered std. errors</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Municipal FE</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***p < 0.001; **p < 0.01; *p < 0.05
Figure D.4.1: Alternative baseline: Peaceful protest without blame attribution

(a) Outcome: Protest Sympathy

(b) Outcome: Policy Support

Note: The coefficients (dots) show the marginal effects of the treatments (relative to the baseline). Standard errors are clustered at the municipal level; bars represent 95% confidence intervals. \( n = 3,204 \).
Figure D.4.2: Outcome variables: Public Disorder (“People who protest against lack of service delivery are causing unnecessary public disorder”) and Deservingness (“People who protest against lack of service delivery deserve help from the municipal government”)

(a) Outcome: Public Disorder

(b) Outcome: Deservingness

Note: The coefficients (dots) show the marginal effects of the treatments (relative to the baseline). Standard errors are clustered at the municipal level; bars represent 95% confidence intervals. $n = 3181$. 
e CONJOINT EXPERIMENT

e.1 Experiment Design

Table E.1.1: Outcome questions

<table>
<thead>
<tr>
<th>Questions</th>
<th>Protest A</th>
<th>Protest B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  ... should the municipal government do most to improve service delivery in the protesters’ area?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Protest Sympathy

<table>
<thead>
<tr>
<th>Questions</th>
<th>Protest A</th>
<th>Protest B</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 . . . would you most likely support?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 . . . would most likely get support from other people?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 . . . are protesters causing the most unnecessary public disorder?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 . . . do protesters deserve the most help from the municipal govern-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In which of the above protests...

... should the municipal government do most to improve service delivery in the protesters’ area?

2 . . . would you most likely support?

3 . . . would most likely get support from other people?

4 . . . are protesters causing the most unnecessary public disorder?

5 . . . do protesters deserve the most help from the municipal government?

e.2 Estimation

We analyze our conjoint experiment by estimating the following regression

\[ Y_{ijk} = \alpha + \sum_{l=1}^{L} \sum_{d=1}^{D_l-1} \beta_{ld} T_{ijkl} + \epsilon_i \]  

(5)

where \( Y_{ijk} \) denotes our outcomes measured by forced-choice, where \( i \in \{1, \ldots, N\} \) and \( N \) is the total number of respondents, \( j \in \{1, \ldots, J\} \) and \( J \) is the number of competing profiles (two in our case) and \( k \in \{1, \ldots, K\} \) and \( K \) is the total number of tasks (three in our case); \( \alpha \) denotes the average level of support for respondents in all the baselines; \( T_{ijkl} \) is the treatment of the \( d \)th of the \( l \)th attributes, where \( D_l \) is the total level for the \( l \)th with a total number of \( L \) attributes; \( \beta_{ld} \) is the parameter of interest, which is the average marginal causal effect of level \( d \) of attribute \( l \) relative to its baseline category when three key assumptions are satisfied: full randomization, no carry-over effects and no profile-order effects (Hainmueller et al., 2014).
3.3 Experiment Validation

We carry out diagnostics checks to test three key assumptions for causal inference in conjoint experiments (Hainmueller et al., 2014), summarized in Figure E.3.1. First, we perform balance checks to test that attributes levels are properly randomized (Figure E.3.1a). Second, we address potential carryover effects by checking whether responses depend on prior candidate profiles already seen in the experiments (Figure E.3.1b). Third, we check for potential profile-order effects, which could affect responses (Figure E.3.1c).

Figure E.3.1: Diagnostics

(a) Frequencies of Conjoint Features
(b) Carryover Effects
(c) Profile order Effects

Figure E.3.1a confirms that all attribute levels are fully randomized, Figure E.3.1b shows no carryover effects across all attribute levels and Figure E.3.1c shows no profile-order effects.

We furthermore check whether respondents are primed by the vignette experiment by checking whether the effects differ across treatments groups. Figure E.3.1c confirms that this is not the case.
Figure E.3.2: Vignette Treatment Effects Check
### Table E.4.1: Protest Sympathy, AMCEs

<table>
<thead>
<tr>
<th>feature</th>
<th>level</th>
<th>Conjoint Features</th>
<th>AMCEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>10 protesters</td>
<td>0.0534758</td>
<td>0.0121702</td>
</tr>
<tr>
<td>Participants</td>
<td>100 protesters</td>
<td>0.0687218</td>
<td>0.0124870</td>
</tr>
<tr>
<td>Participants</td>
<td>500 protesters</td>
<td>0.0702094</td>
<td>0.0123568</td>
</tr>
<tr>
<td>Grievance</td>
<td>lack of sanitation</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Grievance</td>
<td>lack of clean water</td>
<td>0.0793973</td>
<td>0.0155757</td>
</tr>
<tr>
<td>Blame</td>
<td>nobody</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Blame</td>
<td>the municipal government</td>
<td>0.1570430</td>
<td>0.0158920</td>
</tr>
<tr>
<td>Blame</td>
<td>the national government</td>
<td>0.1526584</td>
<td>0.0152684</td>
</tr>
<tr>
<td>Blame</td>
<td>the president of South Africa</td>
<td>0.0793973</td>
<td>0.0155757</td>
</tr>
<tr>
<td>Blame</td>
<td>the ward councillor</td>
<td>0.1160498</td>
<td>0.0156802</td>
</tr>
<tr>
<td>Tactics</td>
<td>a peaceful march</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tactics</td>
<td>riots</td>
<td>-0.2968446</td>
<td>0.0122357</td>
</tr>
<tr>
<td>Tactics</td>
<td>road blocks</td>
<td>-0.1939232</td>
<td>0.0123003</td>
</tr>
<tr>
<td>Duration</td>
<td>1 day</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Duration</td>
<td>3 days</td>
<td>-0.0174285</td>
<td>0.0120152</td>
</tr>
<tr>
<td>Duration</td>
<td>7 days</td>
<td>-0.0336630</td>
<td>0.0122515</td>
</tr>
<tr>
<td>Police</td>
<td>are not present</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Police</td>
<td>dissolve the protest by force</td>
<td>-0.0509936</td>
<td>0.0121305</td>
</tr>
<tr>
<td>Police</td>
<td>observe the protest</td>
<td>0.0509809</td>
<td>0.0118874</td>
</tr>
</tbody>
</table>
## Table E.4.2: Protest Sympathy, MMs

<table>
<thead>
<tr>
<th>Conjoint Features</th>
<th>MMss</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>feature</strong></td>
<td><strong>level</strong></td>
</tr>
<tr>
<td>Participants</td>
<td>10 protesters</td>
</tr>
<tr>
<td>Participants</td>
<td>100 protesters</td>
</tr>
<tr>
<td>Participants</td>
<td>500 protesters</td>
</tr>
<tr>
<td>Grievance</td>
<td>lack of sanitation</td>
</tr>
<tr>
<td>Grievance</td>
<td>lack of clean water</td>
</tr>
<tr>
<td>Grievance</td>
<td>lack of electricity</td>
</tr>
<tr>
<td>Blame</td>
<td>nobody</td>
</tr>
<tr>
<td>Blame</td>
<td>the municipal government</td>
</tr>
<tr>
<td>Blame</td>
<td>the national government</td>
</tr>
<tr>
<td>Blame</td>
<td>the president of South Africa</td>
</tr>
<tr>
<td>Blame</td>
<td>the ward councillor</td>
</tr>
<tr>
<td>Tactics</td>
<td>a peaceful march</td>
</tr>
<tr>
<td>Tactics</td>
<td>riots</td>
</tr>
<tr>
<td>Tactics</td>
<td>road blocks</td>
</tr>
<tr>
<td>Duration</td>
<td>1 day</td>
</tr>
<tr>
<td>Duration</td>
<td>3 days</td>
</tr>
<tr>
<td>Duration</td>
<td>7 days</td>
</tr>
<tr>
<td>Police</td>
<td>are not present</td>
</tr>
<tr>
<td>Police</td>
<td>dissolve the protest by force</td>
</tr>
<tr>
<td>Police</td>
<td>observe the protest</td>
</tr>
</tbody>
</table>
Table E.4.3: Policy Support, AMCEs

<table>
<thead>
<tr>
<th>Conjoint Features</th>
<th>AMCEs</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>feature</td>
<td>level</td>
<td>estimate</td>
<td>std.error</td>
</tr>
<tr>
<td>Participants</td>
<td>10 protesters</td>
<td></td>
<td>0.0662375</td>
<td>0.0123599</td>
</tr>
<tr>
<td>Participants</td>
<td>100 protesters</td>
<td></td>
<td>0.0958734</td>
<td>0.0125024</td>
</tr>
<tr>
<td>Grievance</td>
<td>lack of sanitation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grievance</td>
<td>lack of clean water</td>
<td></td>
<td>0.0525469</td>
<td>0.0127327</td>
</tr>
<tr>
<td>Blame</td>
<td>nobody</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blame</td>
<td>the municipal government</td>
<td></td>
<td>0.1460688</td>
<td>0.0158632</td>
</tr>
<tr>
<td>Blame</td>
<td>the national government</td>
<td></td>
<td>0.1297462</td>
<td>0.0157344</td>
</tr>
<tr>
<td>Blame</td>
<td>the president of South Africa</td>
<td></td>
<td>0.0477626</td>
<td>0.0157114</td>
</tr>
<tr>
<td>Blame</td>
<td>the ward councillor</td>
<td></td>
<td>0.0983351</td>
<td>0.0158900</td>
</tr>
<tr>
<td>Tactics</td>
<td>a peaceful march</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tactics</td>
<td>riots</td>
<td></td>
<td>-0.2120316</td>
<td>0.0127732</td>
</tr>
<tr>
<td>Tactics</td>
<td>road blocks</td>
<td></td>
<td>-0.1411351</td>
<td>0.0124724</td>
</tr>
<tr>
<td>Duration</td>
<td>1 day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duration</td>
<td>3 days</td>
<td></td>
<td>0.0005914</td>
<td>0.0121103</td>
</tr>
<tr>
<td>Duration</td>
<td>7 days</td>
<td></td>
<td>-0.0158062</td>
<td>0.0124223</td>
</tr>
<tr>
<td>Police</td>
<td>are not present</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police</td>
<td>dissolve the protest by force</td>
<td></td>
<td>-0.0238207</td>
<td>0.0124747</td>
</tr>
<tr>
<td>Police</td>
<td>observe the protest</td>
<td></td>
<td>0.0522895</td>
<td>0.0121543</td>
</tr>
<tr>
<td>feature</td>
<td>level</td>
<td>Conjoint Features</td>
<td>MMNs</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------</td>
<td>-------------------</td>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>estimate</td>
<td>std.error</td>
<td>lower</td>
</tr>
<tr>
<td>Participants</td>
<td>10 protesters</td>
<td>0.4438553</td>
<td>0.0074919</td>
<td>0.4291715</td>
</tr>
<tr>
<td>Participants</td>
<td>100 protesters</td>
<td>0.5130267</td>
<td>0.0073529</td>
<td>0.4986153</td>
</tr>
<tr>
<td>Participants</td>
<td>500 protesters</td>
<td>0.5431755</td>
<td>0.0072825</td>
<td>0.5289021</td>
</tr>
<tr>
<td>Grievance</td>
<td>lack of sanitation</td>
<td>0.5091830</td>
<td>0.0075638</td>
<td>0.4943582</td>
</tr>
<tr>
<td>Grievance</td>
<td>lack of clean water</td>
<td>0.5597109</td>
<td>0.0074839</td>
<td>0.5450427</td>
</tr>
<tr>
<td>Grievance</td>
<td>lack of electricity</td>
<td>0.4316906</td>
<td>0.0075879</td>
<td>0.4168186</td>
</tr>
<tr>
<td>Blame</td>
<td>nobody</td>
<td>0.4192883</td>
<td>0.0103815</td>
<td>0.3984099</td>
</tr>
<tr>
<td>Blame</td>
<td>the municipal government</td>
<td>0.5627682</td>
<td>0.0105106</td>
<td>0.5421678</td>
</tr>
<tr>
<td>Blame</td>
<td>the national government</td>
<td>0.5475343</td>
<td>0.0099123</td>
<td>0.5281065</td>
</tr>
<tr>
<td>Blame</td>
<td>the president of South Africa</td>
<td>0.4586153</td>
<td>0.0101601</td>
<td>0.4387019</td>
</tr>
<tr>
<td>Blame</td>
<td>the ward councillor</td>
<td>0.5137466</td>
<td>0.0103478</td>
<td>0.4934652</td>
</tr>
<tr>
<td>Tactics</td>
<td>a peaceful march</td>
<td>0.6181310</td>
<td>0.0073973</td>
<td>0.6036326</td>
</tr>
<tr>
<td>Tactics</td>
<td>riots</td>
<td>0.4063757</td>
<td>0.0075164</td>
<td>0.3916438</td>
</tr>
<tr>
<td>Tactics</td>
<td>road blocks</td>
<td>0.4747899</td>
<td>0.0075461</td>
<td>0.4599999</td>
</tr>
<tr>
<td>Duration</td>
<td>1 day</td>
<td>0.5094937</td>
<td>0.0073589</td>
<td>0.4950705</td>
</tr>
<tr>
<td>Duration</td>
<td>3 days</td>
<td>0.5044843</td>
<td>0.0073755</td>
<td>0.4900287</td>
</tr>
<tr>
<td>Duration</td>
<td>7 days</td>
<td>0.4865196</td>
<td>0.0073903</td>
<td>0.4720348</td>
</tr>
<tr>
<td>Police</td>
<td>are not present</td>
<td>0.4869126</td>
<td>0.0073713</td>
<td>0.4724652</td>
</tr>
<tr>
<td>Police</td>
<td>dissolve the protest by force</td>
<td>0.4684428</td>
<td>0.0074221</td>
<td>0.4538958</td>
</tr>
<tr>
<td>Police</td>
<td>observe the protest</td>
<td>0.5437616</td>
<td>0.0072154</td>
<td>0.5296197</td>
</tr>
</tbody>
</table>
Figure E.4.1: Effects on Public Disorder and Derservingness, AMCEs

(a) Public disorder

(b) Deservingness

Note: The coefficients (dots) show the average marginal component effects (AMCEs), i.e. the effect of an attribute level relative to its baseline, averaged over the other attributes. The dots without horizontal bars denote the baseline of an attribute. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $n = 9,546$. 

---

E conjoin experiment 239
Figure E.4.2: Interaction Effects on Protest Sympathy, MMs

(a) Tactics x Blame

(b) Tactics x Grievance

(c) Tactics x No. of Protesters

Note: The coefficients (dots) show marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes. MMs are ordered by size and color-coded according to protest tactics. All predicted probabilities are bench-marked against 0.5. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. n = 9,546
Figure E.4.3: Riots, Interaction Effects on Policy Support, Blame Attribution x Grievance x Participants, MMs

Note: The coefficients (dots) show marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes. All predicted probabilities are benchmarked against 0.5 and differences are benchmarked against 0. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $n = 9,546$
Figure E.4.4: Effects on Policy Support, Racial Group Identification, MMs

<table>
<thead>
<tr>
<th>Event</th>
<th>Black</th>
<th>Other</th>
<th>Other - Black</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Participants):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500 protesters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 protesters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 protesters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Grievance):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lack of electricity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lack of clean water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lack of sanitation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Blame):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the ward councillor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the president of South Africa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the national government</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the municipal government</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>nobody</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Tactics):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>road blocks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>riots</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a peaceful march</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Duration):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 days</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 days</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Police):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>observe the protest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dissolve the protest by force</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>are not present</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The coefficients (dots) show marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes (as well as the differences across the two subgroups). All predicted probabilities are benchmarked against 0.5 and differences are benchmarked against 0. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $n = 9,546$ ($n_{black} = 6,330$.)
Figure E.4.5: Effects on Protest Sympathy, Racial Group Identification, MMs

Note: The coefficients (dots) show marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes (as well as the differences across the two subgroups). All predicted probabilities are bench-marked against 0.5 and differences are bench-marked against 0. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. \( n = 9,546 \) (\( n_{\text{black}} = 6,330 \)).
Figure E.4.6: Effects on Public Disorder and Deservingness, Racial Identification, MMs

(a) Public Disorder

(b) Deservingness

Note: The coefficients (dots) show marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes (as well as the differences across the two subgroups). All predicted probabilities are bench-marked against 0.5 and differences are bench-marked against 0. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. \( n = 9,546 \) (\( n_{\text{black}} = 6,330 \)).
REFERENCES


2004

1. Martin Grieger
Internet-based Electronic Marketplaces and Supply Chain Management

2. Thomas Basbøll
LIKENESS
A Philosophical Investigation

3. Morten Knudsen
Beslutningens vaklen
En systemteoretisk analyse af moderniseringen af et amtskommunalt sundhedsvæsen 1980-2000

4. Lars Bo Jeppesen
Organizing Consumer Innovation
A product development strategy that is based on online communities and allows some firms to benefit from a distributed process of innovation by consumers

5. Barbara Dragsted
SEGMENTATION IN TRANSLATION AND TRANSLATION MEMORY SYSTEMS
An empirical investigation of cognitive segmentation and effects of integrating a TM system into the translation process

6. Jeanet Hardis
Sociale partnerskaber
Et socialkonstruktivistisk casestudie af partnerskabsaktørers virkelighedsopfattelse mellem identitet og legitimitet

7. Henriette Hallberg Thygesen
System Dynamics in Action

8. Carsten Mejer Plath
Strategisk Økonomistyring

9. Annemette Kjærgaard
Knowledge Management as Internal Corporate Venturing – a Field Study of the Rise and Fall of a Bottom-Up Process

10. Knut Arne Hovdal
De profesjonelle i endring
Norsk ph.d., ej til salg gennem Samfundslitteratur

11. Søren Jeppesen
Environmental Practices and Greening Strategies in Small Manufacturing Enterprises in South Africa – A Critical Realist Approach

12. Lars Frode Frederiksen
Industriel forskningsledelse – på sporet af mønstre og samarbejde i danske forskningsintensive virksomheder

13. Martin Jes Iversen
The Governance of GN Great Nordic – in an age of strategic and structural transitions 1939-1988

14. Lars Pynt Andersen
The Rhetorical Strategies of Danish TV Advertising
A study of the first fifteen years with special emphasis on genre and irony

15. Jakob Rasmussen
Business Perspectives on E-learning

16. Sof Thrane
The Social and Economic Dynamics of Networks – a Weberian Analysis of Three Formalised Horizontal Networks

17. Lene Nielsen
Engaging Personas and Narrative Scenarios – a study on how a user-centered approach influenced the perception of the design process in the e-business group at AstraZeneca

18. S.J Valstad
Organisationsidentitet
Norsk ph.d., ej til salg gennem Samfundslitteratur
19. Thomas Lyse Hansen
*Six Essays on Pricing and Weather risk in Energy Markets*

20. Sabine Madsen
*Emerging Methods – An Interpretive Study of ISD Methods in Practice*

21. Evis Sinani
*The Impact of Foreign Direct Investment on Efficiency, Productivity Growth and Trade: An Empirical Investigation*

22. Bent Meier Sørensen
*Making Events Work Or, How to Multiply Your Crisis*

23. Pernille Schnoor
*Brand Ethos
Om troværdige brand- og virksomhedsidentiteter i et retorisk og diskursteoretisk perspektiv*

24. Sidsel Fabech
*Von welchem Österreich ist hier die Rede? Diskursive forhandlinger og magtkampe mellem rivaliserende nationale identitetskonstruktioner i østrigske pressediskurser*

25. Klavs Odgaard Christensen
*Sprogpolitik og identitetsdannelse i flersprogede forbundsstater
Et komparativt studie af Schweiz og Canada*

26. Dana B. Minbaeva
*Human Resource Practices and Knowledge Transfer in Multinational Corporations*

27. Holger Højlund
*Markedets politiske fornuft
Et studie af velfærdens organisering i perioden 1990-2003*

28. Christine Mølgaard Frandsen
*A.s erfaring
Om mellemværendets praktik i en transformation af mennesket og subjektiviteten*

29. Sine Nørholm Just
*The Constitution of Meaning – A Meaningful Constitution? Legitimacy, identity, and public opinion in the debate on the future of Europe*

**2005**

1. Claus J. Varnes
*Managing product innovation through rules – The role of formal and structured methods in product development*

2. Helle Hedegaard Hein
*Mellem konflikt og konsensus – Dialogudvikling på hospitalsklinikker*

3. Axel Rosenø
*Customer Value Driven Product Innovation – A Study of Market Learning in New Product Development*

4. Søren Buhl Pedersen
*Making space
An outline of place branding*

5. Camilla Funck Ellehave
*Differences that Matter
An analysis of practices of gender and organizing in contemporary workplaces*

6. Rigmor Madeleine Lond
*Styring af kommunale forvaltninger*

7. Mette Aagaard Andreassen
*Supply Chain versus Supply Chain Benchmarking as a Means to Managing Supply Chains*

8. Caroline Aggestam-Pontoppidan
*From an idea to a standard
The UN and the global governance of accountants’ competence*


10. Vivienne Heng Ker-ni
*An Experimental Field Study on the*
Effectiveness of Grocer Media Advertising
Measuring Ad Recall and Recognition, Purchase Intentions and Short-Term Sales

11. Allan Mortensen
Essays on the Pricing of Corporate Bonds and Credit Derivatives

12. Remo Stefano Chiari
Figure che fanno conoscere Itinerario sull’idea del valore cognitivo e espressivo della metafora e di altri tropi da Aristotele e da Vico fino al cognitivismo contemporaneo

13. Anders McIlquham-Schmidt
Strategic Planning and Corporate Performance
An integrative research review and a meta-analysis of the strategic planning and corporate performance literature from 1956 to 2003

14. Jens Geersbro
The TDF – PMI Case
Making Sense of the Dynamics of Business Relationships and Networks

15. Mette Andersen
Corporate Social Responsibility in Global Supply Chains
Understanding the uniqueness of firm behaviour

16. Eva Boxenbaum
Institutional Genesis: Micro – Dynamic Foundations of Institutional Change

17. Peter Lund-Thomsen
Capacity Development, Environmental Justice NGOs, and Governance: The Case of South Africa

18. Signe Jarlov
Konstruktioner af offentlig ledelse

19. Lars Stæhr Jensen
Vocabulary Knowledge and Listening Comprehension in English as a Foreign Language

20. Christian Nielsen
Essays on Business Reporting
Production and consumption of strategic information in the market for information

21. Marianne Thejl Fischer
Egos and Ethics of Management Consultants

22. Annie Bekke Kjær
Performance management i Proces-innovation – belyst i et social-konstruktivistisk perspektiv

23. Suzanne Dee Pedersen
GENTAGELENS METAMORFOSE
Om organisering af den kreative gøren i den kunstneriske arbejdspraksis

24. Benedikte Dorte Rosenbrink
Revenue Management Økonomiske, konkurrencemæssige & organisatoriske konsekvenser

25. Thomas Riise Johansen
Written Accounts and Verbal Accounts
The Danish Case of Accounting and Accountability to Employees

26. Ann Fogelgren-Pedersen
The Mobile Internet: Pioneering Users’ Adoption Decisions

27. Birgitte Rasmussen
Ledelse i fællesskab – de tillidsvalgtes formyende rolle

28. Gitte Thit Nielsen
Remerger – skabende ledelseskraefter i fusion og opkøb

29. Carmine Gioia
A MICROECONOMETRIC ANALYSIS OF MERGERS AND ACQUISITIONS
30. Ole Hinz
Den effektive forandringsleder: pilot, pædagog eller politiker?
Et studie i arbejdsslederes meningstilskrivninger i forbindelse med vellykket gennemførelse af ledelsesinitierede forandringsprojekter

31. Kjell-Åge Gotvassli
Et praksisbasert perspektiv på dynamiske læringsnettverk i toppidretten
Norsk ph.d., ej til salg gennem Samfundslitteratur

32. Henriette Langstrup Nielsen
Linking Healthcare
An inquiry into the changing performances of web-based technology for asthma monitoring

33. Karin Tweddell Levinsen
Virtuel Uddannelsespraksis
Master i IKT og Læring – et casestudie i hvordan praksis kan forbedre praksis i virtuelle læringsmiljøer

34. Anika Liversage
Finding a Path
Labour Market Life Stories of Immigrant Professionals

35. Kasper Elmquist Jørgensen
Studier i samspillet mellem stat og erhvervsliv i Danmark under 1. verdenskrig

36. Finn Janning
A DIFFERENT STORY
Seduction, Conquest and Discovery

37. Patricia Ann Plackett
Strategic Management of the Radical Innovation Process
Leveraging Social Capital for Market Uncertainty Management

2006
1. Christian Vintergaard
Early Phases of Corporate Venturing

2. Niels Rom-Poulsen
Essays in Computational Finance

3. Tina Brandt Husman
Organisational Capabilities, Competitive Advantage & Project-Based Organisations
The Case of Advertising and Creative Good Production

4. Mette Rosenkrands Johansen
Practice at the top – how top managers mobilise and use non-financial performance measures

5. Eva Parum
Corporate governance som strategisk kommunikations- og ledelsesværktøj

6. Susan Aagaard Petersen
Culture’s Influence on Performance Management: The Case of a Danish Company in China

7. Thomas Nicolai Pedersen
The Discursive Constitution of Organizational Governance – Between unity and differentiation
The Case of the governance of environmental risks by World Bank environmental staff

8. Cynthia Selin
Volatile Visions: Transactions in Anticipatory Knowledge

9. Jesper Banghøj
Financial Accounting Information and Compensation in Danish Companies

10. Mikkel Lucas Overby
Strategic Alliances in Emerging High-Tech Markets: What’s the Difference and does it Matter?

11. Tine Aage
External Information Acquisition of Industrial Districts and the Impact of Different Knowledge Creation Dimensions
A case study of the Fashion and Design Branch of the Industrial District of Montebelluna, NE Italy

12. Mikkel Flyverbom
Making the Global Information Society Governable
On the Governmentality of Multi-Stakeholder Networks

13. Anette Grønning
Personen bag Tilstedevær i e-mail som interaktionsform mellem kunde og medarbejder i dansk forsikringskontekst

14. Jørn Helder
One Company – One Language? The NN-case

15. Lars Bjerregaard Mikkelsen
Differing perceptions of customer value
Development and application of a tool for mapping perceptions of customer value at both ends of customer-supplier dyads in industrial markets

16. Lise Granerud
Exploring Learning
Technological learning within small manufacturers in South Africa

17. Esben Rahbek Pedersen
Between Hopes and Realities: Reflections on the Promises and Practices of Corporate Social Responsibility (CSR)

18. Ramona Samson
The Cultural Integration Model and European Transformation. The Case of Romania

2007

1. Jakob Vestergaard
Discipline in The Global Economy Panopticism and the Post-Washington Consensus

2. Heidi Lund Hansen
Spaces for learning and working
A qualitative study of change of work, management, vehicles of power and social practices in open offices

3. Sudhanshu Rai
Exploring the internal dynamics of software development teams during user analysis
A tension enabled Institutionalization Model; “Where process becomes the objective”

Ej til salg gennem Samfundslitteratur

5. Serden Ozcan
EXPLORING HETEROGENEITY IN ORGANIZATIONAL ACTIONS AND OUTCOMES
A Behavioural Perspective

6. Kim Sundtoft Hald
Inter-organizational Performance Measurement and Management in Action
– An Ethnography on the Construction of Management, Identity and Relationships

7. Tobias Lindeberg
Evaluative Technologies
Quality and the Multiplicity of Performance

8. Merete Wedell-Wedellsborg
Den globale soldat
Identitetsdannelse og identitetsledelse i multinationale militære organisatior-ner

9. Lars Frederiksen
Open Innovation Business Models
Innovation in firm-hosted online user communities and inter-firm project ventures in the music industry
– A collection of essays

10. Jonas Gabrielsen
Retorisk toposlære – fra statisk ’sted’ til persuasiv aktivitet
11. Christian Moldt-Jørgensen  
*Fra meningsløs til meningsfuld evaluering.*  
Anvendelsen af studentertilfredsheds-målinger på de korte og mellemlange videregående uddannelser set fra et psykodynamisk systemperspektiv

12. Ping Gao  
*Extending the application of actor-network theory*  
*Cases of innovation in the telecommunications industry*

13. Peter Mejlby  
*Frihed og fængsel, en del af den samme drøm?*  
*Et phronetisk baseret casestudie af frigørelsens og kontrollens sam eksistens i værdibaseret ledelse!*

14. Kristina Birch  
*Statistical Modelling in Marketing*

15. Signe Poulsen  
*Sense and sensibility: The language of emotional appeals in insurance marketing*

16. Anders Bjerre Trolle  
*Essays on derivatives pricing and dynamic asset allocation*

17. Peter Feldhütter  
*Empirical Studies of Bond and Credit Markets*

18. Jens Henrik Eggert Christensen  
*Default and Recovery Risk Modeling and Estimation*

19. Maria Theresa Larsen  
*Academic Enterprise: A New Mission for Universities or a Contradiction in Terms?*  
*Four papers on the long-term implications of increasing industry involvement and commercialization in academia*

20. Morten Wellendorf  
*Postimplementering af teknologi i den offentlige forvaltning*  
*Analysen af en organisations kontinuerlige arbejde med informations teknologi*

21. Ekaterina Mhaanna  
*Concept Relations for Terminological Process Analysis*

22. Stefan Ring Thorbjørnsen  
*Forsvaret i forandring*  
*Et studie i officerers kapabiliteter under påvirkning af omverdenens forandringspres mod øget styring og læring*

23. Christa Breum Amhøj  
*Det selvskaebe medlemskab om managementstaten, dens styringsteknologier og indbyggere*

24. Karoline Bromose  
*Between Technological Turbulence and Operational Stability – An empirical case study of corporate venturing in TDC*

25. Susanne Justesen  
*Navigating the Paradoxes of Diversity in Innovation Practice – A Longitudinal study of six very different innovation processes – in practice*

26. Luise Noring Henler  
*Conceptualising successful supply chain partnerships – Viewing supply chain partnerships from an organisational culture perspective*

27. Mark Mau  
*Kampen om telefonen – Det danske telefonvæsen under den tyske besættelse 1940-45*

28. Jakob Halskov  
*The semiautomatic expansion of existing terminological ontologies using knowledge patterns discovered*
on the WWW – an implementation and evaluation

29. Gergana Koleva
   European Policy Instruments Beyond Networks and Structure: The Innovative Medicines Initiative

30. Christian Geisler Asmussen
   Global Strategy and International Diversity: A Double-Edged Sword?

31. Christina Holm-Petersen
   Stolthed og fordom
   Kultur- og identitetsarbejde ved skabelsen af en ny sengeafdeling gennem fusion

32. Hans Peter Olsen
   Hybrid Governance of Standardized States
   Causes and Contours of the Global Regulation of Government Auditing

33. Lars Bøge Sørensen
   Risk Management in the Supply Chain

34. Peter Aagaard
   Det unikkes dynamikker
   De institutionelle mulighedsbetingelser bag den individuelle udforskning i professionelt og frivilligt arbejde

35. Yun Mi Antorini
   Brand Community Innovation
   An Intrinsic Case Study of the Adult Fans of LEGO Community

36. Joachim Lynggaard Boll
   Labor Related Corporate Social Performance in Denmark
   Organizational and Institutional Perspectives

2008

1. Frederik Christian Vinten
   Essays on Private Equity

2. Jesper Clement
   Visual Influence of Packaging Design on In-Store Buying Decisions

3. Marius Brostrøn Kousgaard
   Tid til kvalitetsmåling?
   – Studier af indrulleringsprocesser i forbindelse med introduktionen af kliniske kvalitetsdatabaser i speciallægepraksissektoren

4. Irene Skovgaard Smith
   Management Consulting in Action
   Value creation and ambiguity in client-consultant relations

5. Anders Rom
   Management accounting and integrated information systems
   How to exploit the potential for management accounting of information technology

6. Marina Candi
   Aesthetic Design as an Element of Service Innovation in New Technology-based Firms

7. Morten Schnack
   Teknologi og tværfaglighed
   – en analyse af diskussionen omkring indførelse af EPJ på en hospitalsafdeling

8. Helene Balslev Clausen
   Juntos pero no revueltos – un estudio sobre emigrantes norteamericanos en un pueblo mexicano

9. Lise Justesen
   Kunst at skrive revisionsrapporter.
   En beretning om forvaltningsrevisions beretninger

10. Michael E. Hansen
    The politics of corporate responsibility:
    CSR and the governance of child labor and core labor rights in the 1990s

11. Anne Roepstorff
    Holdning for handling – en etnologisk undersøgelse af Virksomheders Sociale Ansvar/CSR
12. Claus Bajlum
*Essays on Credit Risk and Credit Derivatives*

13. Anders Bojesen
*The Performative Power of Competence – an Inquiry into Subjectivity and Social Technologies at Work*

14. Satu Reijonen
*Green and Fragile – A Study on Markets and the Natural Environment*

15. Ilduara Busta
*Corporate Governance in Banking – A European Study*

16. Kristian Anders Hvass
*A Boolean Analysis Predicting Industry Change: Innovation, Imitation & Business Models – The Winning Hybrid: A case study of isomorphism in the airline industry*

17. Trine Paludan
*De uvidende og de udviklingsparate Identitet som mulighed og restriktion blandt fabriksarbejdere på det aftenlyøriserede fabrikgulv*

18. Kristian Jakobsen
*Foreign market entry in transition economies: Entry timing and mode choice*

19. Jakob Elming
*Syntactic reordering in statistical machine translation*

20. Lars Brømsøe Termansen
*Regional Computable General Equilibrium Models for Denmark – Three papers laying the foundation for regional CGE models with agglomeration characteristics*

21. Mia Reinholt
*The Motivational Foundations of Knowledge Sharing*

22. Frederikke Krogh-Meibom
*The Co-Evolution of Institutions and Technology – A Neo-Institutional Understanding of Change Processes within the Business Press – the Case Study of Financial Times*

23. Peter D. Ørberg Jensen
*OFFSHORING OF ADVANCED AND HIGH-VALUE TECHNICAL SERVICES: ANTECEDENTS, PROCESS DYNAMICS AND FIRMLEVEL IMPACTS*

24. Pham Thi Song Hanh
*Functional Upgrading, Relational Capability and Export Performance of Vietnamese Wood Furniture Producers*

25. Mads Vangkilde
*Why wait? An Exploration of first-mover advantages among Danish e-grocers through a resource perspective*

26. Hubert Buch-Hansen
*Rethinking the History of European Level Merger Control – A Critical Political Economy Perspective*

2009

1. Vivian Lindhardsen
*From Independent Ratings to Communal Ratings: A Study of CWA Raters’ Decision-Making Behaviours*

2. Guðrið Weihe
*Public-Private Partnerships: Meaning and Practice*

3. Chris Nøkkentved
*Enabling Supply Networks with Collaborative Information Infrastructures – An Empirical Investigation of Business Model Innovation in Supplier Relationship Management*

4. Sara Louise Muhr
*Wound, Interrupted – On the Vulnerability of Diversity Management*
| 5. | Christine Sestoft  
    *Forbrugeradfærd i et Stats- og Livsformsteoretisk perspektiv* |
| 6. | Michael Pedersen  
    *Tune in, Breakdown, and Reboot: On the production of the stress-fit self-managing employee* |
| 7. | Salla Lutz  
    *Position and Reposition in Networks – Exemplified by the Transformation of the Danish Pine Furniture Manufacturers* |
| 8. | Jens Forssbæk  
    *Essays on market discipline in commercial and central banking* |
| 9. | Tine Murphy  
    *Sense from Silence – A Basis for Organised Action  
    How do Sensemaking Processes with Minimal Sharing Relate to the Reproduction of Organised Action?* |
| 10. | Sara Malou Strandvad  
    *Inspirations for a new sociology of art: A sociomaterial study of development processes in the Danish film industry* |
| 11. | Nicolaas Mouton  
    *On the evolution of social scientific metaphors: A cognitive-historical enquiry into the divergent trajectories of the idea that collective entities – states and societies, cities and corporations – are biological organisms.* |
| 12. | Lars Andreas Knutsen  
    *Mobile Data Services: Shaping of user engagements* |
| 13. | Nikolaos Theodoros Korfiatis  
    *Information Exchange and Behavior A Multi-method Inquiry on Online Communities* |
| 14. | Jens Albæk  
    *Forestillinger om kvalitet og tværfaglighed på sygehuse – skabelse af forestillinger i læge- og plejegrupperne angående relevans af nye idéer om kvalitetsudvikling gennem tolkningsprocesser* |
| 15. | Maja Lotz  
    *The Business of Co-Creation – and the Co-Creation of Business* |
| 16. | Gitte P. Jakobsen  
    *Narrative Construction of Leader Identity in a Leader Development Program Context* |
| 17. | Dorte Hermansen  
    *“Living the brand” som en brandorienteret dialogisk praxis: Om udvikling af medarbejdernes brandorienterede dømmekraft* |
| 18. | Aseem Kinra  
    *Supply Chain (logistics) Environmental Complexity* |
| 19. | Michael Nørager  
    *How to manage SMEs through the transformation from non innovative to innovative?* |
| 20. | Kristin Wallevik  
    *Corporate Governance in Family Firms The Norwegian Maritime Sector* |
| 21. | Bo Hansen Hansen  
    *Beyond the Process Enriching Software Process Improvement with Knowledge Management* |
| 22. | Annemette Skot-Hansen  
    *Franske adjektivisk afledte adverbier, der tager præpositionssyntagmer indledt med præpositionen à som argumenter En valensgrammatisk undersøgelse* |
| 23. | Line Gry Knudsen  
    *Collaborative R&D Capabilities In Search of Micro-Foundations* |
24. Christian Scheuer
   Employers meet employees
   Essays on sorting and globalization

25. Rasmus Johnsen
   The Great Health of Melancholy
   A Study of the Pathologies of Performativity

26. Ha Thi Van Pham
   Internationalization, Competitiveness
   Enhancement and Export Performance
   of Emerging Market Firms:
   Evidence from Vietnam

27. Henriette Balieu
   Kontrolbegreberts betydning for kausativaalternationen i spansk
   En kognitiv-typologisk analyse

2010
1. Yen Tran
   Organizing Innovation in Turbulent Fashion Market
   Four papers on how fashion firms create and appropriate innovation value

2. Anders Raastrup Kristensen
   Metaphysical Labour
   Flexibility, Performance and Commitment in Work-Life Management

3. Margrét Sigrún Sigurdardottir
   Dependenty independent
   Co-existence of institutional logics in the recorded music industry

4. Ásta Dis Óladóttir
   Internationalization from a small domestic base:
   An empirical analysis of Economics and Management

5. Christine Secher
   E-deltagelse i praksis – politikernes og forvaltningens medkonstruktion og konsekvenserne heraf

6. Marianne Stang Våland
   What we talk about when we talk about space:

7. Rex Degnegaard
   Strategic Change Management
   Change Management Challenges in the Danish Police Reform

8. Ulrik Schultz Brix
   Værdi i rekruttering – den sikre beslutning
   En pragmatisk analyse af perception og synliggørelse af værdi i rekrutterings- og udvælgelsesarbejdet

9. Jan Ole Similä
   Kontraksledelse
   Relasjonen mellom virksomhetsledelse og kontraktshåndtering, belyst via fire norske virksomheter

10. Susanne Boch Waldorff
    Emerging Organizations: In between local translation, institutional logics and discourse

11. Brian Kane
    Performance Talk
    Next Generation Management of Organizational Performance

12. Lars Ohnemus
    Brand Thrust: Strategic Branding and Shareholder Value
    An Empirical Reconciliation of two Critical Concepts

13. Jesper Schlamovitz
    Håndtering af usikkerhed i film- og byggeprojekter

14. Tommy Moesby-Jensen
    Det faktiske livs forbindtlighed
    Førsokratisk informeret, ny-aristotelisk ηθος-tænkning hos Martin Heidegger

15. Christian Fich
    Two Nations Divided by Common Values
    French National Habitus and the Rejection of American Power
16. Peter Beyer
*Processer, sammenhængskraft og fleksibilitet*
Et empirisk casestudie af omstillingsforløb i fire virksomheder

17. Adam Buchhorn
*Markets of Good Intentions*
Constructing and Organizing Biogas Markets Amid Fragility and Controversy

18. Cecilie K. Moesby-Jensen
*Social læring og fælles praksis*
Et mixed method studie, der belyser læringsevne af et lederkursus for et praksisfællesskab af offentlige mellemledere

19. Heidi Boye
*Fødevarer og sundhed i senmodernismen – En indigt i hyggefænomenet og de relaterede fødevarepraksisser*

20. Kristine Munkgård Pedersen
*Flygtige forbindelser og midlertidige mobiliseringer*
Om kulturel produktion på Roskilde Festival

21. Oliver Jacob Weber
*Causes of Intercompany Harmony in Business Markets – An Empirical Investigation from a Dyad Perspective*

22. Susanne Ekman
*Authority and Autonomy Paradoxes of Modern Knowledge Work*

23. Anette Frey Larsen
*Kvalitetsledelse på danske hospitaer – Ledelsens indflydelse på introduktion og vedligeholdelse af kvalitetssstrategier i det danske sundhedsvæsen*

24. Toyoko Sato
*Performativity and Discourse: Japanese Advertisements on the Aesthetic Education of Desire*

25. Kenneth Brinch Jensen
*Identifying the Last Planner System Lean management in the construction industry*

26. Javier Busquets
*Orchestrating Network Behavior for Innovation*

27. Luke Patey
*The Power of Resistance: India’s National Oil Company and International Activism in Sudan*

28. Mette Vedel
*Value Creation in Triadic Business Relationships. Interaction, Interconnection and Position*

29. Kristian Tørning
*Knowledge Management Systems in Practice – A Work Place Study*

30. Qingxin Shi
*An Empirical Study of Thinking Aloud Usability Testing from a Cultural Perspective*

31. Tanja Juul Christiansen
*Corporate blogging: Medarbejderes kommunikative handlekraft*

32. Malgorzata Ciesielska
*Hybrid Organisations. A study of the Open Source – business setting*

33. Jens Dick-Nielsen
*Three Essays on Corporate Bond Market Liquidity*

34. Sabrina Speiermann
*Modstandens Politik Kampagnestyring i Velfærdssstaten. En diskussion af trafikkampagners styringspotentiale*

35. Julie Uldam
*Fickle Commitment. Fostering political engagement in ‘the flighty world of online activism’*
36. Annegrete Juul Nielsen  
*Traveling technologies and transformations in health care*

37. Athur Mühlen-Schulte  
*Organising Development*  
*Power and Organisational Reform in the United Nations Development Programme*

38. Louise Rygaard Jonas  
*Branding på butiksgulvet*  
*Et case-studie af kultur- og identitets-arbejdet i Kvickly*

**2011**

1. Stefan Fraenkel  
*Key Success Factors for Sales Force Readiness during New Product Launch*  
*A Study of Product Launches in the Swedish Pharmaceutical Industry*

2. Christian Plesner Rossing  
*International Transfer Pricing in Theory and Practice*

3. Tobias Dam Hede  
*Samtalekunst og ledelsesdisciplin*  
*– en analyse af coachingsdiskursens genealogi og governmentality*

4. Kim Pettersson  
*Essays on Audit Quality, Auditor Choice, and Equity Valuation*

5. Henrik Merkelsen  
*The expert-lay controversy in risk research and management. Effects of institutional distances. Studies of risk definitions, perceptions, management and communication*

6. Simon S. Torp  
*Employee Stock Ownership: Effect on Strategic Management and Performance*

7. Mie Harder  
*Internal Antecedents of Management Innovation*

8. Ole Helby Petersen  
*Public-Private Partnerships: Policy and Regulation – With Comparative and Multi-level Case Studies from Denmark and Ireland*

9. Morten Krogh Petersen  
*‘Good’ Outcomes. Handling Multiplicity in Government Communication*

10. Kristian Tangsgaard Hvelplund  
*Allocation of cognitive resources in translation - an eye-tracking and key-logging study*

11. Moshe Yonatany  
*The Internationalization Process of Digital Service Providers*

12. Anne Vestergaard  
*Distance and Suffering Humanitarian Discourse in the age of Mediatization*

13. Thorsten Mikkelsen  
*Personligheds indflydelse på forretningsrelationer*

14. Jane Thostrup Jagd  
*Hvorfor fortsætter fusionsbølgen udover “the tipping point”?*  
*– en empirisk analyse af information og kognitioner om fusioner*

15. Gregory Gimpel  
*Value-driven Adoption and Consumption of Technology: Understanding Technology Decision Making*

16. Thomas Stengade Sønderskov  
*Den nye mulighed Social innovation i en forretningsmæssig kontekst*

17. Jeppe Christoffersen  
*Donor supported strategic alliances in developing countries*

18. Vibeke Vad Baunsgaard  
*Dominant Ideological Modes of Rationality: Cross functional*
integration in the process of product innovation

19. Throstur Olaf Sigurjónsson
Governance Failure and Iceland's Financial Collapse

20. Allan Sall Tang Andersen
Essays on the modeling of risks in interest-rate and inflation markets

21. Heidi Tscherning
Mobile Devices in Social Contexts

22. Birgitte Gorm Hansen
Adapting in the Knowledge Economy: Lateral Strategies for Scientists and Those Who Study Them

23. Kristina Vaarst Andersen
Optimal Levels of Embeddedness: The Contingent Value of Networked Collaboration

24. Justine Grønbæk Pors
Noisy Management: A History of Danish School Governing from 1970-2010

25. Stefan Linder
Micro-foundations of Strategic Entrepreneurship: Essays on Autonomous Strategic Action

26. Xin Li
Toward an Integrative Framework of National Competitiveness: An application to China

27. Rune Thorbjørn Clausen
Værdifuld arkitektur: Et eksplorativt studie af bygnings rolle i virksomheders værdiskabelse

28. Monica Viken
Markedsundersøkelser som bevis i varemerke- og markedsføringsrett

29. Christian Wymann
Tattooing: The Economic and Artistic Constitution of a Social Phenomenon

30. Sanne Frandsen
Productive Incoherence: A Case Study of Branding and Identity Struggles in a Low-Prestige Organization

31. Mads Stenbo Nielsen
Essays on Correlation Modelling

32. Ivan Häuser
Følelse og sprog: Etablering af en ekspresiv kategori, eksemplificeret på russisk

33. Sebastian Schwenen
Security of Supply in Electricity Markets

2012

1. Peter Holm Andreasen
The Dynamics of Procurement Management: A Complexity Approach

2. Martin Haulrich
Data-Driven Bitext Dependency Parsing and Alignment

3. Line Kirkegaard
Konsulenten i den anden nat: En undersøgelse af det intense arbejdsliv

4. Tonny Stenheim
Decision usefulness of goodwill under IFRS

5. Morten Lind Larsen
Produktivitet, vækst og velfærd: Industriåret og efterkrigstidens Danmark 1945 - 1958

6. Petter Berg
Cartel Damages and Cost Asymmetries

7. Lynn Kahle
Experiential Discourse in Marketing: A methodical inquiry into practice and theory

8. Anne Roelsgaard Obling
Management of Emotions in Accelerated Medical Relationships
9. Thomas Frandsen
Managing Modularity of Service Processes Architecture

10. Carina Christine Skovmøller
CSR som noget særligt
Et casestudie om styring og menings-skabelse i relation til CSR ud fra en intern optik

11. Michael Tell
Frådragsbeskæring af selskabers finansieringsudgifter
En skatteretlig analyse af SEL §§ 11, 11B og 11C

12. Morten Holm
Customer Profitability Measurement Models
Their Merits and Sophistication across Contexts

13. Katja Joo Dyppel
Beskatning af derivater
En analyse af dansk skatteret

14. Esben Anton Schultz
Essays in Labor Economics
Evidence from Danish Micro Data

15. Carina Risvig Hansen
“Contracts not covered, or not fully covered, by the Public Sector Directive”

16. Anja Svejgaard Pors
Iværksættelse af kommunikation - patientfigurer i hospitalets strategiske kommunikation

17. Frans Bévort
Making sense of management with logics
An ethnographic study of accountants who become managers

18. René Kallestrup
The Dynamics of Bank and Sovereign Credit Risk

19. Brett Crawford
Revisiting the Phenomenon of Interests in Organizational Institutionalism
The Case of U.S. Chambers of Commerce

20. Mario Daniele Amore
Essays on Empirical Corporate Finance

21. Arne Stjernholm Madsen
The evolution of innovation strategy
Studied in the context of medical device activities at the pharmaceutical company Novo Nordisk A/S in the period 1980-2008

22. Jacob Holm Hansen
Is Social Integration Necessary for Corporate Branding?
A study of corporate branding strategies at Novo Nordisk

23. Stuart Webber
Corporate Profit Shifting and the Multinational Enterprise

24. Helene Ratner
Promises of Reflexivity
Managing and Researching Inclusive Schools

25. Therese Strand
The Owners and the Power: Insights from Annual General Meetings

26. Robert Gavin Strand
In Praise of Corporate Social Responsibility Bureaucracy

27. Nina Sormunen
Auditor’s going-concern reporting
Reporting decision and content of the report

28. John Bang Mathiasen
Learning within a product development working practice:
- an understanding anchored in pragmatism

29. Philip Holst Riis
Understanding Role-Oriented Enterprise Systems: From Vendors to Customers

30. Marie Lisa Dacanay
Social Enterprises and the Poor
Enhancing Social Entrepreneurship and Stakeholder Theory
31. Fumiko Kano Glückstad  
*Bridging Remote Cultures: Cross-lingual concept mapping based on the information receiver's prior-knowledge*

32. Henrik Barslund Fosse  
*Empirical Essays in International Trade*

33. Peter Alexander Albrecht  
*Foundational hybridity and its reproduction  
Security sector reform in Sierra Leone*

34. Maja Rosenstock  
*CSR - hvor svært kan det være? Kulturanalytisk casestudie om udfordringer og dilemmaer med at forankre Coops CSR-strategi*

35. Jeanette Rasmussen  
*Tweens, medier og forbrug  
Et studie af 10-12 årige danske børns brug af internettet, opfattelse og forståelse af markedsføring og forbrug*

36. Ib Tunby Gulbrandsen  
*‘This page is not intended for a US Audience’  
A five-act spectacle on online communication, collaboration & organization.*

37. Kasper Aalling Teilmann  
*Interactive Approaches to Rural Development*

38. Mette Mogensen  
*The Organization(s) of Well-being and Productivity  
(Re)assembling work in the Danish Post*

39. Søren Friis Møller  
*From Disinterestedness to Engagement Towards Relational Leadership In the Cultural Sector*

40. Nico Peter Berhausen  
*Management Control, Innovation and Strategic Objectives – Interactions and Convergence in Product Development Networks*

41. Balder Onarheim  
*Creativity under Constraints  
Creativity as Balancing  
‘Constrainedness’*

42. Haoyong Zhou  
*Essays on Family Firms*

43. Elisabeth Naima Mikkelsen  
*Making sense of organisational conflict  
An empirical study of enacted sense-making in everyday conflict at work*

2013  

1. Jacob Lyngsie  
*Entrepreneurship in an Organizational Context*

2. Signe Groth-Brodersen  
*Fra ledelse til selvet  
En socialpsykologisk analyse af forholdet imellem selvledeledse, ledelse og stress i det moderne arbejdsliv*

3. Nis Høyrup Christensen  
*Shaping Markets: A Neoinstitutional Analysis of the Emerging Organizational Field of Renewable Energy in China*

*As a matter of size  
THE IMPORTANCE OF CRITICAL MASS AND THE CONSEQUENCES OF SCARCITY FOR TELEVISION MARKETS*

5. Christine D. Isakson  
*Coworker Influence and Labor Mobility Essays on Turnover, Entrepreneurship and Location Choice in the Danish Maritime Industry*

6. Niels Joseph Jerne Lennon  
*Accounting Qualities in Practice  
Rhizomatic stories of representational faithfulness, decision making and control*

7. Shannon O’Donnell  
*Making Ensemble Possible  
How special groups organize for collaborative creativity in conditions of spatial variability and distance*
8. Robert W. D. Veitch  
Access Decisions in a Partly-Digital World  
Comparing Digital Piracy and Legal Modes for Film and Music

9. Marie Mathiesen  
Making Strategy Work  
An Organizational Ethnography

10. Arisa Shollo  
The role of business intelligence in organizational decision-making

11. Mia Kaspersen  
The construction of social and environmental reporting

12. Marcus Møller Larsen  
The organizational design of offshoring

13. Mette Ohm Rørdam  
EU Law on Food Naming  
The prohibition against misleading names in an internal market context

14. Hans Peter Rasmussen  
GIV EN GED!  
Kan giver-idealtyper forklare støtte til velgørenhed og understøtte relationsopbygning?

15. Ruben Schachtenhaufen  
Fonetisk reduktion i dansk

16. Peter Koerver Schmidt  
Dansk CFC-beskatning  
I et internationalt og komparativt perspektiv

17. Morten Froholdt  
Strategi i den offentlige sektor  
En kortlægning af styringsmæssig kontext, strategisk tilgang, samt anvendte redskaber og teknologier for udvalgte danske statslige styrelser

18. Annette Camilla Sjørup  
Cognitive effort in metaphor translation  
An eye-tracking and key-logging study

19. Tamara Stucchi  
The Internationalization of Emerging Market Firms: A Context-Specific Study

20. Thomas Lopdrup-Hjorth  
“Let’s Go Outside”: The Value of Co-Creation

21. Ana Alačovska  
Genre and Autonomy in Cultural Production  
The case of travel guidebook production

22. Marius Gudmand-Høyer  
Stemningssindssygdommenes historie i det 19. århundrede  
Omtydningen af melankolien og manien som bipolære stemningslidelser i dansk sammenhæng under hensyn til dannelsen af det moderne følelseslivs relative autonomi.  
En problematiserings- og erfarings-analytisk undersøgelse

23. Lichen Alex Yu  
Fabricating an S&OP Process  
Circulating References and Matters of Concern

24. Esben Alfort  
The Expression of a Need  
Understanding search

25. Trine Pallesen  
Assembling Markets for Wind Power  
An Inquiry into the Making of Market Devices

26. Anders Koed Madsen  
Web-Visions  
Repurposing digital traces to organize social attention

27. Lærke Højgaard Christiansen  
BREWING ORGANIZATIONAL RESPONSES TO INSTITUTIONAL LOGICS

28. Tommy Kjær Lassen  
EGENTLIG SELVLEDELSE  
En ledelsesfilosofisk afhandling om selvledelsens paradoksale dynamik og eksistentielle engagement
29. Morten Rossing  
Local Adaption and Meaning Creation in Performance Appraisal

30. Søren Obed Madsen  
Lederen som oversætter  
Et oversættelsestheoretisk perspektiv på strategisk arbejde

31. Thomas Høgenhaven  
Open Government Communities  
Does Design Affect Participation?

32. Kirstine Zinck Pedersen  
Failsafe Organizing?  
A Pragmatic Stance on Patient Safety

33. Anne Petersen  
Hverdagslogikker i psykiatrisk arbejde  
En institutionsetnografi sk undersøgelse af hverdagen i psykiatriske organisationer

34. Didde Maria Humle  
Fortællinger om arbejde

35. Mark Holst-Mikkelsen  
Strategieksekvering i praksis  
– barrierer og muligheder!

36. Malek Maalouf  
Sustaining lean  
Strategies for dealing with organizational paradoxes

37. Nicolaj Tofte Brenneche  
Systemic Innovation In The Making  
The Social Productivity of Cartographic Crisis and Transitions in the Case of SEEIT

38. Morten Gylling  
The Structure of Discourse  
A Corpus-Based Cross-Linguistic Study

39. Binzhang YANG  
Urban Green Spaces for Quality Life  
- Case Study: the landscape architecture for people in Copenhagen

40. Michael Friis Pedersen  
Finance and Organization:  
The Implications for Whole Farm Risk Management

41. Even Fallan  
Issues on supply and demand for environmental accounting information

42. Ather Nawaz  
Website user experience  
A cross-cultural study of the relation between users’ cognitive style, context of use, and information architecture of local websites

43. Karin Beukel  
The Determinants for Creating Valuable Inventions

44. Arjan Markus  
External Knowledge Sourcing and Firm Innovation  
Essays on the Micro-Foundations of Firms’ Search for Innovation

2014

1. Solon Moreira  
Four Essays on Technology Licensing and Firm Innovation

2. Karin Strzeletz Ivertsen  
Partnership Drift in Innovation Processes  
A study of the Think City electric car development

3. Kathrine Hoffmann Pii  
Responsibility Flows in Patient-centred Prevention

4. Jane Bjørn Vedel  
Managing Strategic Research  
An empirical analysis of science-industry collaboration in a pharmaceutical company

5. Martin Gylling  
Processuel strategi i organisationer  
Monografi om dobbeltheden i tænkning af strategi, dels som vidensfelt i organisationsteori, dels som kunstnerisk tilgang til at skabe i erhvervsmæssig innovation
6. Linne Marie Lauesen  
*Corporate Social Responsibility in the Water Sector: How Material Practices and their Symbolic and Physical Meanings Form a Colonising Logic*

7. Maggie Qiuzhu Mei  
*LEARNING TO INNOVATE: The role of ambidexterity, standard, and decision process*

8. Inger Høedt-Rasmussen  
*Developing Identity for Lawyers Towards Sustainable Lawyering*

9. Sebastian Fux  
*Essays on Return Predictability and Term Structure Modelling*

10. Thorbjørn N. M. Lund-Poulsen  
*Essays on Value Based Management*

11. Oana Brindusa Albu  
*Transparency in Organizing: A Performative Approach*

12. Lena Olaison  
*Entrepreneurship at the limits*

13. Hanne Sørøm  
*DRESSED FOR WEB SUCCESS? An Empirical Study of Website Quality in the Public Sector*

14. Lasse Folke Henriksen  
*Knowing networks How experts shape transnational governance*

15. Maria Halbinger  
*Entrepreneurial Individuals Empirical Investigations into Entrepreneurial Activities of Hackers and Makers*

16. Robert Spliid  
*Kapitalfondenes metoder og kompetencer*

17. Christiane Stelling  
*Public-private partnerships & the need, development and management of trusting A processual and embedded exploration*

18. Marta Gasparin  
*Management of design as a translation process*

19. Kåre Moberg  
*Assessing the Impact of Entrepreneurship Education From ABC to PhD*

20. Alexander Cole  
*Distant neighbors Collective learning beyond the cluster*

21. Martin Møller Boje Rasmussen  
*Is Competitiveness a Question of Being Alike? How the United Kingdom, Germany and Denmark Came to Compete through their Knowledge Regimes from 1993 to 2007*

22. Anders Ravn Sørensen  
*Studies in central bank legitimacy, currency and national identity Four cases from Danish monetary history*

23. Nina Bellak  
*Can Language be Managed in International Business? Insights into Language Choice from a Case Study of Danish and Austrian Multinational Corporations (MNCs)*

24. Rikke Kristine Nielsen  
*Global Mindset as Managerial Meta-competence and Organizational Capability: Boundary-crossing Leadership Cooperation in the MNC The Case of ‘Group Mindset’ in Solar A/S.*

25. Rasmus Koss Hartmann  
*User Innovation inside government Towards a critically performative foundation for inquiry*
26. Kristian Gylling Olesen  
Flertydig og emergerende ledelse i folkeskolen  
Et aktør-netværksteoretisk ledelses-studie af politiske evalueringsreformers betydning for ledelse i den danske folkeskole

27. Troels Riis Larsen  
Kampen om Danmarks omdømme 1945-2010  
Omdømmearbejde og omdømmepolitik

28. Klaus Majgaard  
Jagten på autenticitet i offentlig styring

29. Ming Hua Li  
Institutional Transition and Organizational Diversity: Differentiated internationalization strategies of emerging market state-owned enterprises

30. Sofie Blinkenberg Federspiel  
IT, organisation og digitalisering: Institutionelt arbejde i den kommunale digitaliseringsproces

31. Elvi Weinreich  
Hvilke offentlige ledere er der brug for når velfærdstænkningen flytter sig – er Diplomuddannelsens lederprofil svaret?

32. Ellen Mølgaard Korsager  
Self-conception and image of context in the growth of the firm – A Penrosian History of Fiberline Composites

33. Else Skjold  
The Daily Selection

34. Marie Louise Conradsen  
The Cancer Centre That Never Was The Organisation of Danish Cancer Research 1949-1992

35. Virgilio Failla  
Three Essays on the Dynamics of Entrepreneurs in the Labor Market

36. Nicky Nøggaard  
Brand-Based Innovation Relational Perspectives on Brand Logics and Design Innovation Strategies and Implementation

37. Mads Gjedsted Nielsen  
Essays in Real Estate Finance

38. Kristin Martina Brandl  
Process Perspectives on Service Offshoring

39. Mia Rosa Koss Hartmann  
In the gray zone With police in making space for creativity

40. Karen Ingerslev  
Healthcare Innovation under The Microscope Framing Boundaries of Wicked Problems

41. Tim Neerup Themsen  
Risk Management in large Danish public capital investment programmes

2015

1. Jakob Ion Wille  
Film som design Design af levende billeder i film og tv-serier

2. Christiane Mossin  
Interzones of Law and Metaphysics Hierarchies, Logics and Foundations of Social Order seen through the Prism of EU Social Rights

3. Thomas Tøth  
TRUSTWORTHINESS: ENABLING GLOBAL COLLABORATION An Ethnographic Study of Trust, Distance, Control, Culture and Boundary Spanning within Offshore Outsourcing of IT Services

4. Steven Højlund  
Evaluation Use in Evaluation Systems – The Case of the European Commission
5. Julia Kirch Kirkegaard  
AMBIGUOUS WINDS OF CHANGE – OR FIGHTING AGAINST WINDMILLS IN CHINESE WIND POWER  
A CONSTRUCTIVIST INQUIRY INTO CHINA’S PRAGMATIC MAPPING CONTROVERSIES OVER A POTENTIAL TURN TO QUALITY IN CHINESE WIND POWER

6. Michelle Carol Antero  

7. Mathew Abraham  
New Cooperativism: A study of emerging producer organisations in India

8. Stine Hedegaard  
Sustainability-Focused Identity: Identity work performed to manage, negotiate and resolve barriers and tensions that arise in the process of constructing or organizational identity in a sustainability context

9. Cecilie Glerup  
Organizing Science in Society – the conduct and justification of resposible research

10. Allan Salling Pedersen  
Implementering af ITIL® IT-governance - når best practice konflikter med kulturen Løsning af implementerings-problemer gennem anvendelse af kendte CSF i et aktionsforskningsforløb.

11. Nihat Misir  
A Real Options Approach to Determining Power Prices

12. Mamdouh Medhat  
MEASURING AND PRICING THE RISK OF CORPORATE FAILURES

13. Rina Hansen  
Toward a Digital Strategy for Omnichannel Retailing

14. Eva Pallesen  
In the rhythm of welfare creation  
A relational processual investigation moving beyond the conceptual horizon of welfare management

15. Gouya Harirchi  
In Search of Opportunities: Three Essays on Global Linkages for Innovation

16. Lotte Holck  
Embedded Diversity: A critical ethnographic study of the structural tensions of organizing diversity

17. Jose Daniel Balarezo  
Learning through Scenario Planning

18. Louise Pram Nielsen  
Knowledge dissemination based on terminological ontologies. Using eye tracking to further user interface design.

19. Sofie Dam  
PUBLIC-PRIVATE PARTNERSHIPS FOR INNOVATION AND SUSTAINABILITY TRANSFORMATION  
An embedded, comparative case study of municipal waste management in England and Denmark

20. Ulrik Hartmyer Christiansen  
Followoing the Content of Reported Risk Across the Organization

21. Guro Refsum Sanden  
Language strategies in multinational corporations. A cross-sector study of financial service companies and manufacturing companies.

22. Linn Gevoll  
Designing performance management for operational level  
- A closer look on the role of design choices in framing coordination and motivation
23. Frederik Larsen
*Objects and Social Actions – on Second-hand Valuation Practices*

24. Thorhildur Hansdottir Jetzek
*The Sustainable Value of Open Government Data Uncovering the Generative Mechanisms of Open Data through a Mixed Methods Approach*

25. Gustav Toppenberg
*Innovation-based M&A – Technological-Integration Challenges – The Case of Digital-Technology Companies*

26. Mie Plotnikof
*Challenges of Collaborative Governance An Organizational Discourse Study of Public Managers’ Struggles with Collaboration across the Daycare Area*

27. Christian Garmann Johnsen
*Who Are the Post-Bureaucrats? A Philosophical Examination of the Creative Manager, the Authentic Leader and the Entrepreneur*

28. Jacob Brogaard-Kay
*Constituting Performance Management A field study of a pharmaceutical company*

29. Rasmus Ploug Jenle
*Engineering Markets for Control: Integrating Wind Power into the Danish Electricity System*

30. Morten Lindholst
*Complex Business Negotiation: Understanding Preparation and Planning*

31. Morten Grynings
*TRUST AND TRANSPARENCY FROM AN ALIGNMENT PERSPECTIVE*

32. Peter Andreas Norn
*Byregimer og styringsevne: Politisk lederskab af store byudviklingsprojekter*

33. Milan Miric
*Essays on Competition, Innovation and Firm Strategy in Digital Markets*

34. Sanne K. Hjordrup
*The Value of Talent Management Rethinking practice, problems and possibilities*

35. Johanna Sax
*Strategic Risk Management – Analyzing Antecedents and Contingencies for Value Creation*

36. Pernille Rydén
*Strategic Cognition of Social Media*

37. Mimmi Sjöklint
*The Measurable Me - The Influence of Self-tracking on the User Experience*

38. Juan Ignacio Staricco
*Towards a Fair Global Economic Regime? A critical assessment of Fair Trade through the examination of the Argentinean wine industry*

39. Marie Henriette Madsen
*Emerging and temporary connections in Quality work*

40. Yangfeng CAO
*Toward a Process Framework of Business Model Innovation in the Global Context Entrepreneurship-Enabled Dynamic Capability of Medium-Sized Multinational Enterprises*

41. Carsten Scheibye
*Enactment of the Organizational Cost Structure in Value Chain Configuration A Contribution to Strategic Cost Management*
1. Signe Sofi Dyrby  
*Enterprise Social Media at Work*

2. Dorte Boesby Dahl  
*The making of the public parking attendant*  
*Dirt, aesthetics and inclusion in public service work*

3. Verena Girschik  
*Realizing Corporate Responsibility*  
*Positioning and Framing in Nascent Institutional Change*

4. Anders Ørding Olsen  
*IN SEARCH OF SOLUTIONS*  
*Inertia, Knowledge Sources and Diversity in Collaborative Problem-solving*

5. Pernille Steen Pedersen  
*Udkast til et nyt copingbegreb*  
*En kvalifikation af ledelsesmuligheder for at forebygge sygefravær ved psykiske problemer.*

6. Kerli Kant Hvass  
*Weaving a Path from Waste to Value: Exploring fashion industry business models and the circular economy*

7. Kasper Lindskow  
*Exploring Digital News Publishing Business Models – a production network approach*

8. Mikkel Mouritz Marfelt  
*The chameleon workforce: Assembling and negotiating the content of a workforce*

9. Marianne Bertelsen  
*Aesthetic encounters*  
*Rethinking autonomy, space & time in today’s world of art*

10. Louise Hauberg Wilhelmsen  
*EU PERSPECTIVES ON INTERNATIONAL COMMERCIAL ARBITRATION*

11. Abid Hussain  
*On the Design, Development and Use of the Social Data Analytics Tool (SODATO): Design Propositions, Patterns, and Principles for Big Social Data Analytics*

12. Mark Bruun  
*Essays on Earnings Predictability*

13. Tor Bøe-Lillegraven  
*BUSINESS PARADOXES, BLACK BOXES, AND BIG DATA: BEYOND ORGANIZATIONAL AMBIDEXTERITY*

14. Hadis Khonsary-Atighi  
*ECONOMIC DETERMINANTS OF DOMESTIC INVESTMENT IN AN OIL-BASED ECONOMY: THE CASE OF IRAN (1965-2010)*

15. Maj Lervad Grasten  
*Rule of Law or Rule by Lawyers?*  
*On the Politics of Translation in Global Governance*

16. Lene Granzau Juel-Jacobsen  
*SUPERMARKEDETS MODUS OPERANDI – en hverdagssociologisk undersøgelse af forholdet mellem rum og handlen og understøtte relationsopbygning?*

17. Christine Thalsgård Henriques  
*In search of entrepreneurial learning – Towards a relational perspective on incubating practices?*

18. Patrick Bennett  
*Essays in Education, Crime, and Job Displacement*

19. Søren Korsgaard  
*Payments and Central Bank Policy*

20. Marie Kruse Skibsted  
*Empirical Essays in Economics of Education and Labor*

21. Elizabeth Benedict Christensen  
*The Constantly Contingent Sense of Belonging of the 1.5 Generation Undocumented Youth*  
*An Everyday Perspective*
22. Lasse J. Jessen  
*Essays on Discounting Behavior and Gambling Behavior*  

23. Kalle Johannes Rose  
*Når stifterviljen dør… Et retskonomisk bidrag til 200 års juridisk konflikt om ejendomsretten*  

24. Andreas Søeborg Kirkedal  
*Danish Stød and Automatic Speech Recognition*  

25. Ida Lunde Jørgensen  
*Institutions and Legitimations in Finance for the Arts*  

26. Olga Rykov Ibsen  
*An empirical cross-linguistic study of directives: A semiotic approach to the sentence forms chosen by British, Danish and Russian speakers in native and ELF contexts*  

27. Desi Volker  
*Understanding Interest Rate Volatility*  

28. Angeli Elizabeth Weller  
*Practice at the Boundaries of Business Ethics & Corporate Social Responsibility*  

29. Ida Danneskiold-Samsøe  
*Levende læring i kunstneriske organisationer En undersøgelse af læringssprocesser mellem projekt og organisation på Aarhus Teater*  

30. Leif Christensen  
*Quality of information – The role of internal controls and materiality*  

31. Olga Zarzecka  
*Tie Content in Professional Networks*  

32. Henrik Mahncke  
*De store gaver - Filantropiens gensidighedsrelationer i teori og praksis*  

33. Carsten Lund Pedersen  
*Using the Collective Wisdom of Frontline Employees in Strategic Issue Management*  

34. Yun Liu  
*Essays on Market Design*  

35. Denitsa Hazarbashanova Blagoeva  
*The Internationalisation of Service Firms*  

36. Manya Jaura Lind  
*Capability development in an off-shoring context: How, why and by whom*  

37. Luis R. Boscán F.  
*Essays on the Design of Contracts and Markets for Power System Flexibility*  

38. Andreas Philipp Distel  
*Capabilities for Strategic Adaptation: Micro-Foundations, Organizational Conditions, and Performance Implications*  

39. Lavinia Bleoca  
*The Usefulness of Innovation and Intellectual Capital in Business Performance: The Financial Effects of Knowledge Management vs. Disclosure*  

40. Henrik Jensen  
*Economic Organization and Imperfect Managerial Knowledge: A Study of the Role of Managerial Meta-Knowledge in the Management of Distributed Knowledge*  

41. Stine Mosekjær  
*The Understanding of English Emotion Words by Chinese and Japanese Speakers of English as a Lingua Franca: An Empirical Study*  

42. Hallur Tor Sigurdarson  
*The Ministry of Desire - Anxiety and entrepreneurship in a bureaucracy*  

43. Kätlin Pulk  
*Making Time While Being in Time: A study of the temporality of organizational processes*  

44. Valeria Giacomin  
*Contextualizing the cluster Palm oil in Southeast Asia in global perspective (1880s–1970s)*
Jeanette Willert
Managers’ use of multiple Management Control Systems: The role and interplay of management control systems and company performance

Mads Vestergaard Jensen
Financial Frictions: Implications for Early Option Exercise and Realized Volatility

Mikael Reimer Jensen
Interbank Markets and Frictions

Benjamin Faigen
Essays on Employee Ownership

Adela Michea
Enacting Business Models An Ethnographic Study of an Emerging Business Model Innovation within the Frame of a Manufacturing Company.

Iben Sandal Stjerne
Transcending organization in temporary systems Aesthetics’ organizing work and employment in Creative Industries

Simon Krogh
Anticipating Organizational Change

Sarah Netter
Exploring the Sharing Economy

Lene Tolstrup Christensen

Kyoung(Kay) Sun Park
Three Essays on Financial Economics

2017

1. Mari Bjerck
Apparel at work. Work uniforms and women in male-dominated manual occupations.

2. Christoph H. Flöthmann
Who Manages Our Supply Chains? Backgrounds, Competencies and Contributions of Human Resources in Supply Chain Management

3. Aleksandra Anna Rzeźnik
Essays in Empirical Asset Pricing

4. Claes Bäckman
Essays on Housing Markets

5. Kirsti Reitan Andersen
Stabilizing Sustainability in the Textile and Fashion Industry

6. Kira Hoffmann
Cost Behavior: An Empirical Analysis of Determinants and Consequences of Asymmetries

7. Tobin Hanspal
Essays in Household Finance

8. Nina Lange
Correlation in Energy Markets

9. Anjum Fayyaz
Donor Interventions and SME Networking in Industrial Clusters in Punjab Province, Pakistan

10. Magnus Paulsen Hansen
Trying the unemployed. Justification and critique, emancipation and coercion towards the ‘active society’. A study of contemporary reforms in France and Denmark

11. Sameer Azizi
Corporate Social Responsibility in Afghanistan – a critical case study of the mobile telecommunications industry
12. Malene Myhre
The internationalization of small and medium-sized enterprises: A qualitative study

13. Thomas Presskorn-Thygesen
The Significance of Normativity – Studies in Post-Kantian Philosophy and Social Theory

14. Federico Clementi
 Essays on multinational production and international trade

15. Lara Anne Hale
Experimental Standards in Sustainability Transitions: Insights from the Building Sector

16. Richard Pucci
Accounting for Financial Instruments in an Uncertain World Controversies in IFRS in the Aftermath of the 2008 Financial Crisis

17. Sarah Maria Denta
Kommunale offentlige private partnerskaber
Regulering i skyggen af Furumsagen

18. Christian Östlund
Design for e-training

19. Amalie Martinus Hauge
Organizing Valuations – a pragmatic inquiry

20. Tim Holst Celik
Tension-filled Governance? Exploring the Emergence, Consolidation and Reconfiguration of Legitimatoty and Fiscal State-crafting

21. Christian Bason
Leading Public Design: How managers engage with design to transform public governance

22. Davide Tomio
Essays on Arbitrage and Market Liquidity

23. Simone Stæhr
Financial Analysts’ Forecasts Behavioral Aspects and the Impact of Personal Characteristics

24. Mikkel Godt Gregersen
Management Control, Intrinsic Motivation and Creativity – How Can They Coexist

25. Kristian Johannes Suse Jespersen
Advancing the Payments for Ecosystem Service Discourse Through Institutional Theory

26. Kristian Bondo Hansen
Crowds and Speculation: A study of crowd phenomena in the U.S. financial markets 1890 to 1940

27. Lars Balslev
Actors and practices – An institutional study on management accounting change in Air Greenland

28. Sven Klingler
Essays on Asset Pricing with Financial Frictions

29. Klement Ahrensbach Rasmussen
Business Model Innovation The Role of Organizational Design

30. Giulio Zichella
Entrepreneurial Cognition. Three essays on entrepreneurial behavior and cognition under risk and uncertainty

31. Richard Ledborg Hansen
En forkærlighed til det eksisterende – mellemlederens oplevelse af forandringsmodstand i organisatoriske forandringer

32. Vilhelm Stefan Holsting
Militært chefvirke: Kritik og retfærdiggørelse mellem politik og profession
33. Thomas Jensen
Shipping Information Pipeline: An information infrastructure to improve international containerized shipping

34. Dzmitry Bartalevich
Do economic theories inform policy? Analysis of the influence of the Chicago School on European Union competition policy

35. Kristian Roed Nielsen
Crowdfunding for Sustainability: A study on the potential of reward-based crowdfunding in supporting sustainable entrepreneurship

36. Emil Husted
There is always an alternative: A study of control and commitment in political organization

37. Anders Ludvig Sevelsted
Interpreting Bonds and Boundaries of Obligation. A genealogy of the emergence and development of Protestant voluntary social work in Denmark as shown through the cases of the Copenhagen Home Mission and the Blue Cross (1850 – 1950)

38. Niklas Kohl
Essays on Stock Issuance

39. Maya Christiane Flensborg Jensen
BOUNDARIES OF PROFESSIONALIZATION AT WORK An ethnography-inspired study of care workers’ dilemmas at the margin

40. Andreas Kamstrup
Crowdsourcing and the Architectural Competition as Organisational Technologies

41. Louise Lyngfeldt Gorm Hansen
Triggering Earthquakes in Science, Politics and Chinese Hydropower - A Controversy Study

2018

1. Vishv Priya Kohli
Combatting Falsification and Counterfeiting of Medicinal Products in the European Union – A Legal Analysis

2. Helle Haurum
Customer Engagement Behavior in the context of Continuous Service Relationships

3. Nis Grünberg
The Party-state order: Essays on China’s political organization and political economic institutions

4. Jesper Christensen
A Behavioral Theory of Human Capital Integration

5. Poula Marie Helth
Learning in practice

6. Rasmus Vendler Toft-Kehler
Entrepreneurship as a career? An investigation of the relationship between entrepreneurial experience and entrepreneurial outcome

7. Szymon Furtak
Sensing the Future: Designing sensor-based predictive information systems for forecasting spare part demand for diesel engines

8. Mette Brehm Johansen
Organizing patient involvement. An ethnographic study

9. Iwona Sulinska
Complexities of Social Capital in Boards of Directors

10. Cecilie Fanøe Petersen
Award of public contracts as a means to conferring State aid: A legal analysis of the interface between public procurement law and State aid law

11. Ahmad Ahmad Barirani
Three Experimental Studies on Entrepreneurship
12. Carsten Allerslev Olsen  
*Financial Reporting Enforcement: Impact and Consequences*

13. Irene Christensen  
*New product fumbles – Organizing for the Ramp-up process*

14. Jacob Taarup-Esbensen  
*Managing communities – Mining MNEs’ community risk management practices*

15. Lester Allan Lasrado  
*Set-Theoretic approach to maturity models*

16. Mia B. Münster  
*Intention vs. Perception of Designed Atmospheres in Fashion Stores*

17. Anne Sluhan  
*Non-Financial Dimensions of Family Firm Ownership: How Socioemotional Wealth and Familiarity Influence Internationalization*

18. Henrik Yde Andersen  
*Essays on Debt and Pensions*

19. Fabian Heinrich Müller  
*Valuation Reversed – When Valuators are Valuated. An Analysis of the Perception of and Reaction to Reviewers in Fine-Dining*

20. Martin Jarmatz  
*Organizing for Pricing*

21. Niels Joachim Christfort Gormsen  
*Essays on Empirical Asset Pricing*

22. Diego Zunino  
*Socio-Cognitive Perspectives in Business Venturing*

23. Benjamin Asmussen  
*Networks and Faces between Copenhagen and Canton, 1730-1840*

24. Dalia Bagdziauaitė  
*Brains at Brand Touchpoints. A Consumer Neuroscience Study of Information Processing of Brand Advertisements and the Store Environment in Compulsive Buying*

25. Erol Kazan  
*Towards a Disruptive Digital Platform Model*

26. Andreas Bang Nielsen  
*Essays on Foreign Exchange and Credit Risk*

27. Anne Krebs  
*Accountable, Operable Knowledge Toward Value Representations of Individual Knowledge in Accounting*

28. Matilde Fogh Kirkegaard  
*A firm- and demand-side perspective on behavioral strategy for value creation: Insights from the hearing aid industry*

29. Agnieszka Nowinska  
*SHIPS AND RELATION-SHIPS Tie formation in the sector of shipping intermediaries in shipping*

30. Stine Evald Bentsen  

31. Stine Louise Daetz  
*Essays on Financial Frictions in Lending Markets*

32. Christian Skov Jensen  
*Essays on Asset Pricing*

33. Anders Kryger  
*Aligning future employee action and corporate strategy in a resource-scarce environment*
34. Maitane Elorriaga-Rubio
The behavioral foundations of strategic decision-making: A contextual perspective

35. Roddy Walker
Leadership Development as Organisational Rehabilitation: Shaping Middle-Managers as Double Agents

36. Jinsun Bae
Producing Garments for Global Markets Corporate social responsibility (CSR) in Myanmar’s export garment industry 2011–2015

37. Queralt Prat-i-Pubill
Axiological knowledge in a knowledge driven world. Considerations for organizations.

38. Pia Mølgaard
Essays on Corporate Loans and Credit Risk

39. Marzia Aricò
Service Design as a Transformative Force: Introduction and Adoption in an Organizational Context

40. Christian Dyrlund Wåhlin-Jacobsen
Constructing change initiatives in workplace voice activities Studies from a social interaction perspective

41. Peter Kalum Schou
Institutional Logics in Entrepreneurial Ventures: How Competing Logics arise and shape organizational processes and outcomes during scale-up

42. Per Henriksen
Enterprise Risk Management Rationaler og paradoxer i en moderne ledelseskronologi

43. Maximilian Schellmann
The Politics of Organizing Refugee Camps

44. Jacob Halvas Bjerre
Excluding the Jews: The Aryanization of Danish-German Trade and German Anti-Jewish Policy in Denmark 1937-1943

45. Ida Schrøder
Hybridising accounting and caring: A symmetrical study of how costs and needs are connected in Danish child protection work

46. Katrine Kunst
Electronic Word of Behavior: Transforming digital traces of consumer behaviors into communicative content in product design

47. Viktor Avlonitis
Essays on the role of modularity in management: Towards a unified perspective of modular and integral design

48. Anne Sofie Fischer
Negotiating Spaces of Everyday Politics: -An ethnographic study of organizing for social transformation for women in urban poverty, Delhi, India
1. Shihan Du
ESSAYS IN EMPIRICAL STUDIES
BASED ON ADMINISTRATIVE LABOUR MARKET DATA

2. Mart Laatsit
Policy learning in innovation policy: A comparative analysis of European Union member states

3. Peter J. Wynne
Proactively Building Capabilities for the Post-Acquisition Integration of Information Systems

4. Kalina S. Staykova
Generative Mechanisms for Digital Platform Ecosystem Evolution

5. Ieva Linkeviciute
Essays on the Demand-Side Management in Electricity Markets

6. Jonatan Echebarria Fernández
Jurisdiction and Arbitration Agreements in Contracts for the Carriage of Goods by Sea – Limitations on Party Autonomy

7. Louise Thorn Bøttkjær
Votes for sale. Essays on clientelism in new democracies.

8. Ditte Vilstrup Holm
The Poetics of Participation: the organizing of participation in contemporary art

9. Philip Rosenbaum
Essays in Labor Markets – Gender, Fertility and Education

10. Mia Olsen
Mobile Betalinger - Succesfaktorer og Adfærdsmæssige Konsekvenser

11. Adrián Luis Mérida Gutiérrez
Entrepreneurial Careers: Determinants, Trajectories, and Outcomes

12. Frederik Regli
Essays on Crude Oil Tanker Markets

13. Canca. Wang
Becoming Adaptive through Social Media: Transforming Governance and Organizational Form in Collaborative E-government

14. Lena Lindbjerg Sperling
Economic and Cultural Development: Empirical Studies of Micro-level Data

15. Xia Zhang
Obligation, face and facework: An empirical study of the communicative act of cancellation of an obligation by Chinese, Danish and British business professionals in both L1 and ELF contexts

16. Stefan Kirkegaard Sløk-Madsen
Entrepreneurial Judgment and Commercialization

17. Erin Leitheiser
The Comparative Dynamics of Private Governance
The case of the Bangladesh Ready-Made Garment Industry

18. Lone Christensen
STRATEGIIMPLEMENTERING: STYRINGSBESTRÆBELSER, IDENTITET OG AFFEKT

19. Thomas Kjær Poulsen
Essays on Asset Pricing with Financial Frictions

20. Maria Lundberg
Trust and self-trust in leadership identity constructions: A qualitative exploration of narrative ecology in the discursive aftermath of heroic discourse
21. Tina Joanes
Sufficiency for sustainability
Determinants and strategies for reducing clothing consumption

22. Benjamin Johannes Flesch
Social Set Visualizer (SoSeVi): Design, Development and Evaluation of a Visual Analytics Tool for Computational Set Analysis of Big Social Data

23. Henriette Sophia Groskopff Tvede Schleimann
Creating innovation through collaboration – Partnering in the maritime sector

24. Kristian Steensen Nielsen
The Role of Self-Regulation in Environmental Behavior Change

25. Lydia L. Jørgensen
Moving Organizational Atmospheres

26. Theodor Lucian Vladasel
Embracing Heterogeneity: Essays in Entrepreneurship and Human Capital

27. Seidi Suurmets
Contextual Effects in Consumer Research: An Investigation of Consumer Information Processing and Behavior via the Application of Eye-tracking Methodology

28. Marie Sundby Palle Nickelsen
Reformer mellem integritet og innovation: Reform af reformens form i den danske centraladministration fra 1920 til 2019

29. Vibeke Kristine Scheller
The temporal organizing of same-day discharge: A tempography of a Cardiac Day Unit

30. Qian Sun
Adopting Artificial Intelligence in Healthcare in the Digital Age: Perceived Challenges, Frame Incongruence, and Social Power

31. Dorthe Thorning Mejlhede
Artful change agency and organizing for innovation – the case of a Nordic fintech cooperative

32. Benjamin Christoffersen
Corporate Default Models: Empirical Evidence and Methodical Contributions

33. Filipe Antonio Bonito Vieira
Essays on Pensions and Fiscal Sustainability

34. Morten Nicklas Bigler Jensen
Earnings Management in Private Firms: An Empirical Analysis of Determinants and Consequences of Earnings Management in Private Firms

2020

1. Christian Hendriksen
Inside the Blue Box: Explaining industry influence in the International Maritime Organization

2. Vasileios Kosmas
Environmental and social issues in global supply chains: Emission reduction in the maritime transport industry and maritime search and rescue operational response to migration

3. Thorben Peter Simonsen
The spatial organization of psychiatric practice: A situated inquiry into ‘healing architecture’

4. Signe Bruskin
The infinite storm: An ethnographic study of organizational change in a bank

5. Rasmus Corlin Christensen
Politics and Professionals: Transnational Struggles to Change International Taxation

6. Robert Lorenz Törmer
The Architectural Enablement of a Digital Platform Strategy
7. Anna Kirkebæk Johansson Gosovic  
*Ethics as Practice: An ethnographic study of business ethics in a multinational biopharmaceutical company*

8. Frank Meier  
*Making up leaders in leadership development*

9. Kai Basner  
*Servitization at work: On proliferation and containment*

10. Anestis Keremis  
*Anti-corruption in action: How is anti-corruption practiced in multinational companies?*

11. Marie Larsen Ryberg  
*Governing Interdisciolinarity: Stakes and translations of interdisciplinarity in Danish high school education.*

12. Jannick Friis Christensen  
*Queering organisation(s): Norm-critical orientations to organising and researching diversity*

13. Thorsteinn Sigurdur Sveinsson  
*Essays on Macroeconomic Implications of Demographic Change*

14. Catherine Casler  
*Reconstruction in strategy and organization: For a pragmatic stance*

15. Luisa Murphy  
*Revisiting the standard organization of multi-stakeholder initiatives (MSIs): The case of a meta-MSI in Southeast Asia*

16. Friedrich Bergmann  
*Essays on International Trade*

17. Nicholas Haagensen  
*European Legal Networks in Crisis: The Legal Construction of Economic Policy*

18. Charlotte Biil  
*Samskabelse med en sommerfuglemodel: Hybrid ret i forbindelse med et partnerskabsprojekt mellem 100 selvejende daginstitutioner, deres paraplyorganisation, tre kommuner og CBS*

19. Andreas Dimmelmeier  
*The Role of Economic Ideas in Sustainable Finance: From Paradigms to Policy*

20. Maibrith Kempka Jensen  
*Ledelse og autoritet i interaktion - En interaktionsbaseret undersøgelse af autoritet i ledelse i praksis*

21. Thomas Burø  
*LAND OF LIGHT: Assembling the Ecology of Culture in Odsherred 2000-2018*

22. Prins Marcus Valiant Lantz  
*Timely Emotion: The Rhetorical Framing of Strategic Decision Making*

23. Thorbjørn Vittenhof Fejerskov  
*Fra værdi til invitationer - offentlig værdiskabelse gennem affekt, potentialitet og begivenhed*

24. Lea Acre Foverskov  
*Demographic Change and Employment: Path dependencies and institutional logics in the European Commission*

25. Anirudh Agrawal  
*A Doctoral Dissertation*

26. Julie Marx  
*Households in the housing market*

27. Hadar Gafni  
*Alternative Digital Methods of Providing Entrepreneurial Finance*
| 28. | Mathilde Hjerrild Carlsen  
*Ledelse af engagementer: En undersøgelse af samarbejde mellem folkeskoler og virksomheder i Danmark* |
| 29. | Suen Wang  
*Essays on the Gendered Origins and Implications of Social Policies in the Developing World* |
| 30. | Stine Hald Larsen  
*The Story of the Relative: A Systems-Theoretical Analysis of the Role of the Relative in Danish Eldercare Policy from 1930 to 2020* |
| 31. | Christian Casper Hofma  
*Immersive technologies and organizational routines: When head-mounted displays meet organizational routines* |
| 32. | Jonathan Feddersen  
*The temporal emergence of social relations: An event-based perspective of organising* |
| 33. | Nageswaran Vaidyanathan  
*ENRICHING RETAIL CUSTOMER EXPERIENCE USING AUGMENTED REALITY* |

2021

| 1. | Vanya Rusinova  
*The Determinants of Firms’ Engagement in Corporate Social Responsibility: Evidence from Natural Experiments* |
| 2. | Lívia Lopes Barakat  
*Knowledge management mechanisms at MNCs: The enhancing effect of absorptive capacity and its effects on performance and innovation* |
| 3. | Søren Bundgaard Brøgger  
*Essays on Modern Derivatives Markets* |
| 4. | Martin Friis Nielsen  
*Consuming Memory: Towards a conceptualization of social media platforms as organizational technologies of consumption* |
| 5. | Fei Liu  
*Emergent Technology Use in Consumer Decision Journeys: A Process-as-Propensity Approach* |
| 6. | Jakob Romer Barfod  
*Ledelse i militære hørisikoteams* |
| 7. | Elham Shafiei Gol  
*Creative Crowdwork Arrangements* |
| 8. | Árni Jóhan Petersen  
*Collective Imaginary as (Residual) Fantasy: A Case Study of the Faroese Oil Bonanza* |
| 9. | Søren Bering  
*“Manufacturing, Forward Integration and Governance Strategy”* |
| 10. | Lars Oehler  
*Technological Change and the Decomposition of Innovation: Choices and Consequences for Latecomer Firm Upgrading: The Case of China’s Wind Energy Sector* |
| 11. | Lise Dahl Arvedsen  
*Leadership in interaction in a virtual context: A study of the role of leadership processes in a complex context, and how such processes are accomplished in practice* |
| 12. | Jacob Emil Jeppesen  
*Essays on Knowledge networks, scientific impact and new knowledge adoption* |
| 13. | Kasper Ingeman Beck  
*Essays on Chinese State-Owned Enterprises: Reform, Corporate Governance and Subnational Diversity* |
| 14. | Sønnich Dahl Sønnichsen  
*Exploring the interface between public demand and private supply for implementation of circular economy principles* |
| 15. | Benjamin Knox  
*Essays on Financial Markets and Monetary Policy* |
16. Anita Eskesen
*Essays on Utility Regulation: Evaluating Negotiation-Based Approaches in the Context of Danish Utility Regulation*

17. Agnes Guenther
*Essays on Firm Strategy and Human Capital*

18. Sophie Marie Cappelen
*Walking on Eggshells: The balancing act of temporal work in a setting of culinary change*

19. Manar Saleh Alnamlah
*About Gender Gaps in Entrepreneurial Finance*

20. Kirsten Tangaa Nielsen
*Essays on the Value of CEOs and Directors*

21. Renée Ridgway
*Re:search - the Personalised Subject vs. the Anonymous User*

22. Codrina Ana Maria Lauth
*IMPACT Industrial Hackathons: Findings from a longitudinal case study on short-term vs long-term IMPACT implementations from industrial hackathons within Grundfos*

23. Wolf-Hendrik Uhlbach
*Scientist Mobility: Essays on knowledge production and innovation*

24. Tomaz Sedej
*Blockchain technology and inter-organizational relationships*

25. Lasse Bundgaard
*Public Private Innovation Partnerships: Creating Public Value & Scaling Up Sustainable City Solutions*

26. Dimitra Makri Andersen
*Walking through Temporal Walls: Rethinking NGO Organizing for Sustainability through a Temporal Lens on NGO-Business Partnerships*

27. Louise Fjord Kjærgaard
*Allocation of the Right to Tax Income from Digital Products and Services: A legal analysis of international tax treaty law*

28. Sara Dahlman
*Marginal alternativity: Organizing for sustainable investing*

29. Henrik Gundelach
*Performance determinants: An Investigation of the Relationship between Resources, Experience and Performance in Challenging Business Environments*

30. Tom Wraight
*Confronting the Developmental State: American Trade Policy in the Neoliberal Era*

31. Mathias Fjællegaard Jensen
*Essays on Gender and Skills in the Labour Market*

32. Daniel Lundgaard
*Using Social Media to Discuss Global Challenges: Case Studies of the Climate Change Debate on Twitter*

33. Jonas Sveistrup Søgaard
*Designs for Accounting Information Systems using Distributed Ledger Technology*

34. Sarosh Asad
*CEO narcissism and board composition: Implications for firm strategy and performance*

35. Johann Ole Willers
*Experts and Markets in Cybersecurity On Definitional Power and the Organization of Cyber Risks*

36. Alexander Kronies
*Opportunities and Risks in Alternative Investments*
37. Niels Fuglsang  
_The Politics of Economic Models: An inquiry into the possibilities and limits concerning the rise of macroeconomic forecasting models and what this means for policymaking_

38. David Howoldt  
_Policy Instruments and Policy Mixes for Innovation: Analysing Their Relation to Grand Challenges, Entrepreneurship and Innovation Capability with Natural Language Processing and Latent Variable Methods_

2022

01. Ditte Thøgersen  
_Managing Public Innovation on the Frontline_

02. Rasmus Jørgensen  
_Essays on Empirical Asset Pricing and Private Equity_

03. Nicola Giommetti  
_Essays on Private Equity_

04. Laila Starr  
_When Is Health Innovation Worth It? Essays On New Approaches To Value Creation In Health_

05. Maria Krystfeldt Rasmussen  
_Den transformative ledelsesbyrde – etnografisk studie af en religionsinspireret ledelsesfilosofi i en dansk modevirksomhed_

06. Rikke Sejer Nielsen  
_Mortgage Decisions of Households: Consequences for Consumption and Savings_

07. Myriam Noémy Marending  
_Essays on development challenges of low income countries: Evidence from conflict, pest and credit_

08. Selorm Agbleze  
_A BEHAVIORAL THEORY OF FIRM FORMALIZATION_

09. Rasmus Arler Bogetoft  
_Rettighedshavers faktisk lidte tab i immaterialretssager: Studier af dansk ret med støtte i økonomisk teori og metode_

10. Franz Maximilian Buchmann  
_Driving the Green Transition of the Maritime Industry through Clean Technology Adoption and Environmental Policies_

11. Ivan Olav Vulchanov  
_The role of English as an organisational language in international workplaces_

12. Anne Agerbak Bilde  
_TRANSFORMATIONER AF SKOLELEDELSE - en systemteoretisk analyse af hvordan betingelser for skoleledelse forandres med læring som genstand i perioden 1958-2020_

13. JUAN JOSE PRICE ELTON  
_EFFICIENCY AND PRODUCTIVITY ANALYSIS: TWO EMPIRICAL APPLICATIONS AND A METHODOLOGICAL CONTRIBUTION_

14. Catarina Pessanha Gomes  
_The Art of Occupying: Romanticism as Political Culture in French Prefigurative politics_

15. Mark Ørberg  
_Fondsretten og den levende vedtægt_

16. Majbritt Greve  
_Maersk’s Role in Economic Development: A Study of Shipping and Logistics Foreign Direct Investment in Global Trade_

17. Sille Julie J. Abildgaard  
_Doing-Being Creative: Empirical Studies of Interaction in Design Work_

18. Jette Sandager  
_Glitter, Glamour, and the Future of (More) Girls in STEM: Gendered Formations of STEM Aspirations_

19. Casper Hein Winther  
_Inside the innovation lab - How paradoxical tensions persist in ambidextrous organizations over time_
20. Nikola Kostić  
*Collaborative governance of inter-organizational relationships: The effects of management controls, blockchain technology, and industry standards*

21. Saila Naomi Stausholm  
*Maximum capital, minimum tax: Enablers and facilitators of corporate tax minimization*

22. Robin Porsfelt  
*Seeing through Signs: On Economic Imagination and Semiotic Speculation*

23. Michael Herburger  
*Supply chain resilience – a concept for coping with cyber risks*

24. Katharina Christiane Nielsen Jeschke  
*Balancing safety in everyday work - A case study of construction managers’ dynamic safety practices*

25. Jakob Ahm Sørensen  
*Financial Markets with Frictions and Belief Distortions*

26. Jakob Laage-Thomsen  
*Nudging Leviathan, Protecting Demos - A Comparative Sociology of Public Administration and Expertise in the Nordics*

27. Kathrine Søs Jacobsen Cesko  
*Collaboration between Economic Operators in the Competition for Public Contracts: A Legal and Economic Analysis of Grey Zones between EU Public Procurement Law and EU Competition Law*

28. Mette Nelund  
*Den nye jord – Et feltstudie af et bæredygtigt virke på Farendløse Mosteri*

29. Benjamin Cedric Larsen  
*Governing Artificial Intelligence – Lessons from the United States and China*

30. Anders Brøndum Klein  
*Kollektiv meningsdannelse iblandt heterogene aktører i eksperimentelle samskabelsesprocesser*

31. Stefano Tripodi  
*Essays on Development Economics*

32. Katrine Maria Lumbye  
*Internationalization of European Electricity Multinationals in Times of Transition*

33. Xiaochun Guo  
*Dynamic Roles of Digital Currency – An Exploration from Interactive Processes: Difference, Time, and Perspective*

34. Louise Lindbjerg  
*Three Essays on Firm Innovation*

35. Marcela Galvis Restrepo  
*Feature reduction for classification with mixed data: an algorithmic approach*

36. Hanna Nyborg Storm  
*Cultural institutions and attractiveness – How cultural institutions contribute to the development of regions and local communities*

37. Anna-Bertha Heeris Christensen  
*Conflicts and Challenges in Practices of Commercializing Humans – An Ethnographic Study of Influencer Marketing Work*

38. Casper Berg Lavmand Larsen  
*A Worker-Centered Inquiry into the Contingencies and Consequences of Worker Representation*

39. Niels le Duc  
*The Resource Commitment of Multinational Enterprise R&D Activities*

40. Esben Langager Olsen  
*Change management tools and change managers – Examining the simulacra of change*

41. Anne Sophie Lassen  
*Gender in the Labor Market*
42. Alison E. Holm  
Corrective corporate responses to accusations of misconduct on societal issues  

43. Chenyan Lyu  
Carbon Pricing, Renewable Energy, and Clean Growth – A Market Perspective  

44. Alina Grecu  
UNPACKING MULTI-LEVEL OFFSHORING CONSEQUENCES: Hiring Wages, Onshore Performance, and Public Sentiment  

45. Alexandra Lüth  
Offshore Energy Hubs as an Emerging Concept – Sector Integration at Sea  

2023  

01. Cheryl Basil Sequeira  
Port Business Development – Digitalisation of Port Authority and Hybrid Governance Model  

02. Mette Suder Franck  
Empirical Essays on Technology Supported Learning – Studies of Danish Higher Education  

03. Søren Lund Frandsen  
States and Experts – Assembling Expertise for Climate Change and Pandemics  

04. Guowei Dong  
Innovation and Internationalization – Evidence from Chinese Manufacturing Enterprises  

05. Eileen Murphy  
In Service to Security – Constructing the Authority to Manage European Border Data Infrastructures  

06. Bontu Lucie Guschke  
THE PERSISTENCE OF SEXISM AND RACISM AT UNIVERSITIES – Exploring the imperceptibility and unspeakability of workplace harassment and discrimination in academia  

07. Christoph Viebig  
Learning Entrepreneurship – How capabilities shape learning from experience, reflection, and action  

08. Kasper Regenburg  
Financial Risks of Private Firms  

09. Kathrine Møller Solgaard  
Who to hire? – A situated study of employee selection as routine, practice, and process  

10. Jack Kværnø-Jones  
Intersections between FinTech Imaginaries and Traditional Banking – A study of disciplinary, implementary, and parasitic work in the Danish financial sector  

11. Stine Quorning  
Managing Climate Change Like a Central Banker – The Political Economy of Greening the Monetary Technocracy  

12. Amanda Bille  
No business without politics – Investigating the political nature of supply chain management  

13. Theis Ingerslev Jensen  
Essays on Empirical Asset Pricing  

The Agile Imperative – A Qualitative Study of a Translation Process in the Danish Tax Administration  

15. Nicolai Søgaard Laursen  
Longevity risk in reinsurance and equity markets  

16. Shelter Selorm Kwesi Teyi  
STRATEGIC ENTREPRENEURSHIP IN THE INFORMAL ECONOMY  

17. Luisa Hedler  
Time, Law and Tech – The introduction of algorithms to courts of law  

18. Tróndur Møller Sandoy  
Essays on the Economics of Education
19. Nathan Rietzler  
*Crowdsourcing Processes and Performance Outcomes*

20. Sigrid Alexandra Koob  
*Essays on Democracy, Redistribution, and Inequality*
TITLER I ATV PH.D.-SERIEN

1992
1. Niels Kornum
   Servicesamkørsel – organisation, økonomi og planlægningsmetode

1995
2. Verner Worm
   Nordiske virksomheder i Kina
   Kulturspecifikke interaktionsrelationer ved nordiske virksomhedsetableringer i Kina

1999
3. Mogens Bjerre
   Key Account Management of Complex Strategic Relationships
   An Empirical Study of the Fast Moving Consumer Goods Industry

2000
4. Lotte Darsø
   Innovation in the Making Interaction Research with heterogeneous Groups of Knowledge Workers creating new Knowledge and new Leads

2001
5. Peter Hobolt Jensen
   Managing Strategic Design Identities
   The case of the Lego Developer Network

2002
6. Peter Lohmann
   The Deleuzian Other of Organizational Change – Moving Perspectives of the Human

7. Anne Marie Jess Hansen
   To lead from a distance: The dynamic interplay between strategy and strategizing – A case study of the strategic management process

2003
8. Lotte Henriksen
   Videndeling
   – om organisatoriske og ledelsesmæssige udfordringer ved videndeling i praksis

9. Niels Christian Nickelsen
   Arrangements of Knowing: Coordinating Procedures Tools and Bodies in Industrial Production – a case study of the collective making of new products

2005
10. Carsten Ørts Hansen
    Konstruktion af ledelsesteknologier og effektivitet

TITLER I DBA PH.D.-SERIEN

2007
1. Peter Kastrup-Misir
   Endeavoring to Understand Market Orientation – and the concomitant co-mutation of the researched, the researcher, the research itself and the truth

2009
1. Torkild Leo Thellefsen
   Fundamental Signs and Significance effects
   A Semeiotic outline of Fundamental Signs, Significance-effects, Knowledge Profiling and their use in Knowledge Organization and Branding

2. Daniel Ronzani
   When Bits Learn to Walk Don’t Make Them Trip. Technological Innovation and the Role of Regulation by Law in Information Systems Research: the Case of Radio Frequency Identification (RFID)

2010
1. Alexander Carnera
   Magten over livet og livet som magt
   Studier i den biopolitiske ambivalens