Inequality and Redistribution

Essays on Local Elections, Gender and Corruption in Developing Countries

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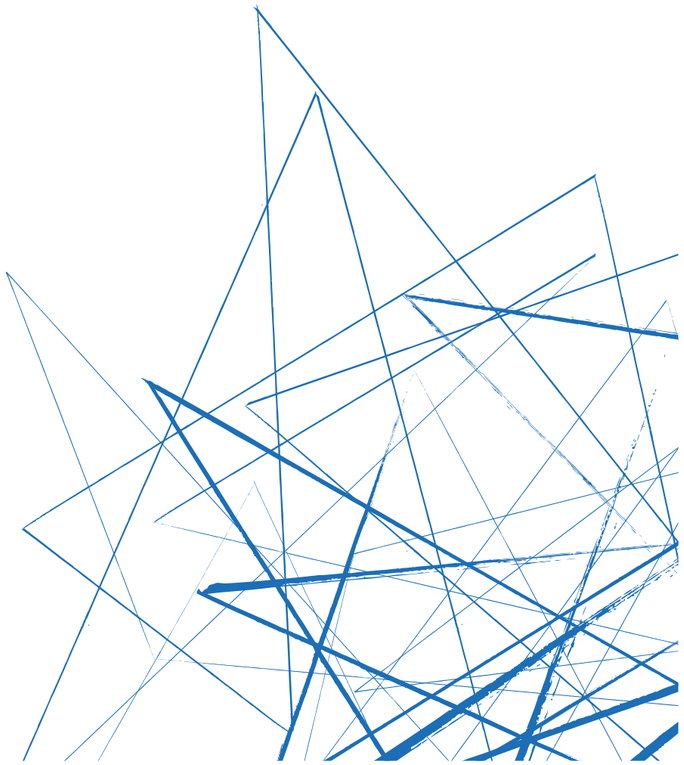

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Sina Smid

INEQUALITY AND REDISTRIBUTION

ESSAYS ON LOCAL ELECTIONS, GENDER AND CORRUPTION IN DEVELOPING COUNTRIES

Department of International Economics, Government and Business

PhD Series 22.2023

CBS COPENHAGEN BUSINESS SCHOOL
HANDELSHØJSKOLEN

Ph.D. Dissertation

Inequality and Redistribution

Essays on Local Elections, Gender and Corruption in Developing Countries

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Submitted: April 30, 2023
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Abstract

Persistent economic and political inequalities in developing countries have intensified public debates about the causes of inequality and the implementation of redistributive policies. While inequality and redistribution are outcomes of political processes and institutions, this thesis aims to address understudied aspects of political partisanship, gender, and corruption, and their impact on inequality and redistribution in Bolivia, Brazil, and Tanzania. This thesis provides a comprehensive perspective on inequality, encompassing income and wealth distribution (economic inequality) and the distribution of political power between genders (political inequality).

The thesis uses a combination of novel (quasi-)experimental methods, survey data collection in Brazil and Tanzania, and innovative data collection in Bolivia using nighttime satellite data and election forensics. To enable causal inference, the thesis uses survey experiments, and a regression discontinuity design to provide insights into the political economy of these countries.

The findings of this thesis offer several important contributions to the political economy literature. On the supply side, the findings reveal the impact of local government partisanship on poverty and economic inequalities. On the demand side, the findings offer insights into voter evaluations of local candidates involved in corruption, promoting pro-poor policies, with strong ties to firms, and their gender. By examining both the demand and supply sides of redistribution, the thesis provides a comprehensive understanding of the factors contributing to persistent economic and political inequalities.

The insights from this thesis have significant implications for developing effective policy interventions. By analysing the complex relationship between voter support for political candidates, redistribution and affirmative action policies, this research contributes to a broader understanding of why high economic and political inequality and low redistribution coexist in developing countries. The empirical evidence offers valuable insights for political economy research in developing countries, emphasising the relevance of local level granular data for addressing inequality and promoting sustainable development.

Resumé

Vedvarende økonomiske og politiske uligheder i udviklingslandene har intensiveret den offentlige debat om årsagerne til ulighed og implementeringen af omfordelingspolitikker. Mens ulighed og omfordeling er resultatet af politiske processer og institutioner, har denne afhandling til formål at behandle de underbelyste aspekter af partipolitiske tilhørsforhold, køn og korruption samt deres indvirkning på ulighed og omfordeling i Bolivia, Brasilien og Tanzania. Denne afhandling giver et omfattende perspektiv på ulighed, der både omfatter betydningen af indkomst- og formuefordeling (økonomisk ulighed) og fordelingen af politisk magt mellem kønnene (politisk ulighed).

Afhandlingen anvender en kombination af nye (kvasi-)eksperimentelle metoder, indsamling af undersøgelsesdata i Brasilien og Tanzania samt innovativ dataindsamling i Bolivia ved hjælp af satellitdata og teknikker for analyse af valg- og stemmesvindel. For at muliggøre kausal inferens anvender afhandlingen eksperimenter med undersøgelser og et regressionsdiskontinuitetsdesign for at give indsigt i den politiske økonomi i disse lande.

Resultaterne tilføjer flere vigtige bidrag til litteraturen om politisk økonomi. På udbudssiden viser resultaterne effekten af lokale regeringers partipolitiske tilhørsforhold for fattigdom og økonomisk ulighed. På efterspørgselssiden giver resultaterne indsigt i vælgernes evaluering af lokale kandidater, baseret på kandidaternes mulige involvering i korruption, promovering af *pro-poor* politik, tilknytning til erhvervslivet og kandidatens køn. Ved at undersøge både efterspørgsels- og udbudssiden af omfordeling giver undersøgelsen en omfattende forståelse af de faktorer, der bidrager til vedvarende økonomiske og politiske uligheder.

Indsigterne har betydelige implikationer for udviklingen af effektive politiske interventioner. Ved at analysere forholdet mellem vælgernes støtte til politiske kandidater, omfordelingspolitikker og positiv særbehandling bidrager denne forskning til en dybere forståelse for stor økonomisk og politisk uligheds sameksistens med lav omfordeling i udviklingslande. Det empiriske materiale bidrager med værdifulde indsigter inden for forskningen af politisk økonomi i udviklingslandene og understreger vigtigheden af *local level* granulær data i undersøgelsen af ulighed og fremme af bæredygtig udvikling.

Introduction

Today, many countries, particularly developing countries, grapple with persistent inequalities (World Bank, 2023). This situation has ignited public debate about inequality, aiming to understand its causes and policy choices (Acemoglu and Robinson, 2015; Atkinson, 2015; Piketty, 2014). Inequality and redistribution are consequences of political processes embedded within political institutions and guided by voter support and elections of politicians and political parties (Iversen and Soskice, 2011; Lupu and Pontusson, 2011). While debates on inequality and redistribution typically focus on economic and social policies, the significance of political partisanship, gender, and corruption remains understudied. Therefore, understanding the reasons for persistent inequalities and their impediments to sustainable and inclusive development trajectories requires a more in-depth examination of voter preferences and the demands of politicians. Simultaneously, it is important to recognize that persistent inequalities cannot be solely attributed to voters' demands, as the outcomes of inequality are also influenced by the nature of redistributive policies and the politicians who implement them.

Redistributive policies can be defined as policies designed to reduce inequalities and promote sustainable development (Kohler, 2015). By connecting voter support for redistributive policies with politicians in office, it has been suggested that left-leaning and female politicians prioritise redistributive policies, such as progressive taxation or social security policies (Amy et al., 2020; Iversen and Rosenbluth, 2006; Lupu and Pontusson, 2011; Pettersson-Lidbom, 2008). In contrast, wealthy politicians with connections to corporations and those involved in corruption may obstruct redistributive policies and lobby for their own interests or those of corporations (Stokes et al., 2013; Szakonyi, 2021).

Table 1: The link between inequality and redistribution in this thesis

Inequality Type	Definition	Redistributive Policy Tool
Economic inequality	Unequal distribution of income and wealth in a country	Progressive taxation; cash transfers
Political inequality	Unequal gender representation of political seats in a political system	Gender quotas in politics

This thesis understands inequality as the unequal distribution of income and wealth (economic inequality) and political representation (political inequality). Table 1 illustrates the link between economic and political inequality and the redistributive tools covered in this thesis. This thesis connects voter preferences with the effective implementation of policies that address economic inequalities (such as taxation and cash transfers) and political gender inequalities (such as gender quotas) in Bolivia, Brazil, and Tanzania. Although numerous social groups endure underrepresentation in politics and the intersectionalities between social identities are crucial (Crenshaw, 1991), this thesis primarily focuses on gender inequalities. While the role of perceptions of inequality in distributive preferences for income and wealth inequality has been extensively investigated (Alesina and Angeletos, 2005; Alesina and Giuliano, 2011; Alesina et al., 2018; Kuziemko et al., 2015; Stantcheva, 2021), there has been comparatively less exploration of preferences for gender distributions in politics. This thesis aims to study the determinants of and policy options for addressing persistent economic and political inequalities. Consequently, the analysis offers a more comprehensive perspective on inequality by not only addressing the extensively debated aspects of income and wealth redistribution but also engaging in discussions regarding the redistribution of political power between genders.

Traditional voting theories are based on the widely accepted yet still-debated premise that informed voters make reasoned choices about whom to elect (Lupia and McCubbins, 1998). However, this assumption does not always hold in real elections (Bernhardt et al., 2008). If voters are not well-informed about the political candidates in an election, objective criteria such as gender often serve as a shortcut (Popkin, 1991; Sanbonmatsu, 2002). The well-known Meltzer and Richard (1981) model develops assumptions about the level of inequality and consequential redistribution referring to the rational and well-informed voter.[1] The rational choice model assumes that rising levels of inequality will lead to greater redistribution, depending on the difference between the income of the median voter and the mean income. The median voter favours redistribution and as a result, policymakers will adopt redistributive policies to address the concerns of the median voter.

Real-world applications of the median voter model show that its assumptions often fail to hold in practice (Iversen and Soskice, 2011). Preferences for redistribution are more complex and one of the factors shaping preferences may include perceptions of and preferences for inequality (Norton and Ariely, 2011). Other explanations include perceptions of fairness (Alesina and Angeletos, 2005; Alesina and Giuliano, 2011), social mobility (Alesina and Giuliano, 2011; Benabou and Ok, 2001), misinformation (Kuziemko et al., 2015), and the expectation of reciprocity (Castañeda and Doyle, 2019). The institutional set-up, centralization vs. decentralization, perceptions of government capacity for equitable and efficient redistribution, and the role of corruption and tax ineffectiveness also shape preferences for redistribution (Chong and Gradstein, 2018). These explanations for persistent income and wealth inequality may equally apply to explain preferences for gender-based distributions of political power. For example, gender quotas are often criticised for violating merit principles and being perceived as 'unfair'. To address difficulties in measuring and eliciting 'real' preferences for redistribution, this

[1]The other most influential voting theories are the sociological model (Lazarsfeld et al., 1944) and the psychosocial model (Campbell et al., 1960).

thesis connects people's preferences to estimations of inequality and employs survey experiments.

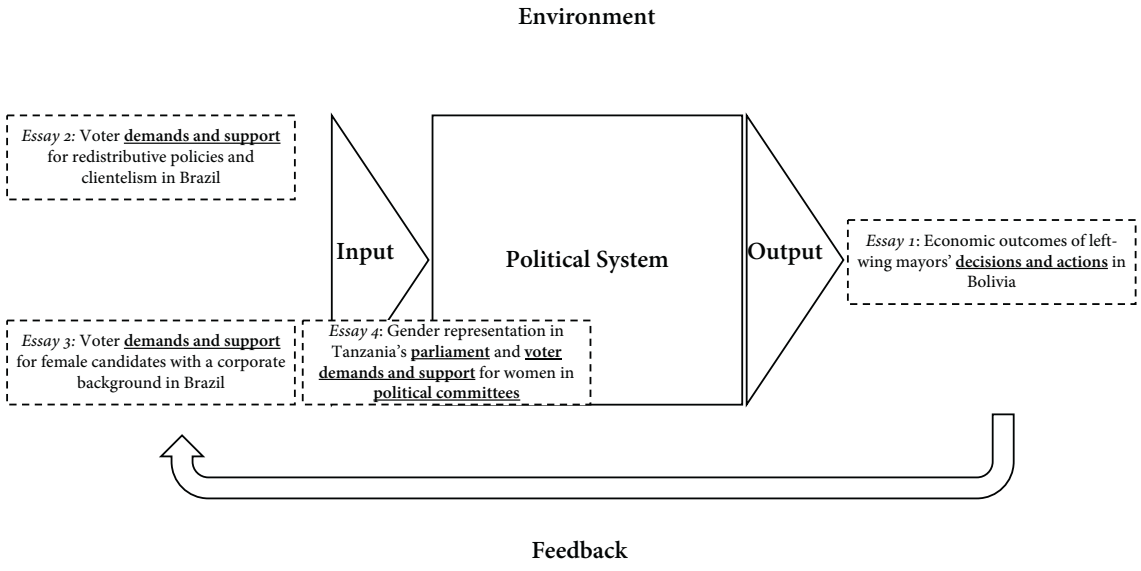
Preference-based arguments help to illustrate gender inequality in political bodies and measure preferences for redistributing political power between genders. Gender quotas have gained traction as a policy instrument for addressing women's descriptive representation in politics, though they often fail to ensure substantive representation (Dahlerup et al., 2014; Nugent and Krook, 2015; Stemplowska and Swift, 2012). These characteristics of political and electoral systems directly influence political representation (Pitkin, 1967). For example, parties often possess the power to decide who runs for office (Bjarnegård and Zetterberg, 2022). Conversely, voters may vote for candidates supporting policies contrary to their interests due to insufficient information (Ditonto, 2017). For example, Macdonald (2018) found that Tanzanian women were more inclined than men to vote for the governing party due to a lack of information and party and policy alternatives. Lastly, individuals who disagree with political gender inequalities may still hold strong preferences against gender quotas to 'redistribute' political seats. This thesis speaks to these debates by measuring people's perceptions of and preferences for gender inequality in Tanzanian politics, revealing that people's estimations of inequality and their gender are strong predictors of preferences for or against inequality-tackling policies.

This thesis contributes to understanding persistent economic and political inequalities in the context of voting choices and socioeconomic policies. The thesis generates new data, using underexplored quantitative methods that facilitate causal inference and engages with different theoretical concepts drawn from political theory, voting theory, and political representation. In accordance with the aforementioned median voter model, voter demands and who gets elected matter for our understanding of why high inequality and low redistribution coexist. The analysis of voter support requires a closer look at voters' misperceptions, politicians' background, government diversity, policy platforms and local governance structures. This thesis deepens the understanding of voter preferences for politicians who support redistributive policies, emphasising the importance of their gender and relationships to firms.

The political economy's challenges contribute to explaining high inequality and low redistribution. These challenges, such as the dysfunction of political institutions, clientelism, candidate selection, and government diversity, are particularly relevant in developing countries and 'weak states' (Fergusson et al., 2022; Keefer and Khemani, 2005), where feedback loops are less effective, societies are often more fragmented and polarised, and political systems and politicians lack credibility. The thesis offers an empirical contribution to the field of political economy by focusing on countries with these particular challenges. All four essays within this thesis address local elections in some capacity, as local governments and politicians often address the daily needs of their electorate and directly engage with the most vulnerable population groups (Kramon, 2017). Broadly, the thesis pertains to unequal distributions, redistribution, gender quotas, and corruption in developing countries.

This thesis covers the cycle of redistributive policies, following the understanding of the political system as a connected input-output system analysis (Easton, 1957). The guiding question that combines all four essays of this thesis is: how are redistributive policies in developing countries channelled through the political system (Figure 1)? The demand side of redistribution is addressed through voter demands while the supply side encompasses redistributive policies; and the political system itself is considered in terms of gender quotas, parliament, and committee composition. Essay 1 uncovers the reasons for economic inequalities at the sub-national level on the output side of local politics, whereas Essays 2 and 3 study the input side in terms of voting choices and the evaluation of local political candidate types (mayors and councillors). Essay 4 analyses the demand for women in politics. Essay 1 examines local government responsiveness in relation to politicians' partisanship, corruption, and local governance structures, while Essay 4 focuses on women's descriptive representation in the parliament and substantive representation in the political committees. The feedback loops embedded within the political system facilitate an understanding of whether redistributive policies benefit marginalised groups, such as women, lower-income groups, and indigenous communities. Table 2 provides an overview of the four essays' theory, data, empirical strategy and conclusions.

Figure 1: How are redistributive policies in developing countries channelled through the political system?

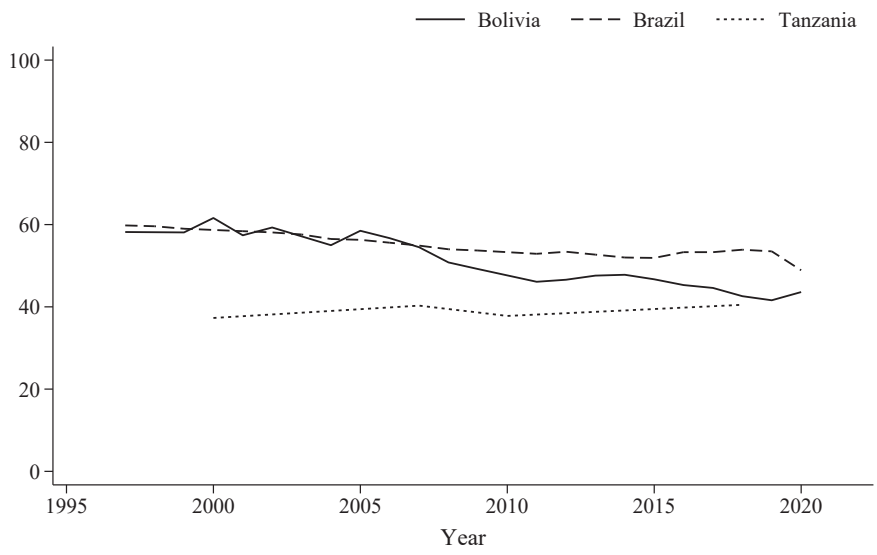


Note: The figure shows the political system by Easton (1957) and how the four essays of this thesis fit into the framework by combining the political input, processes, and output.

Context and Methods

Despite covering different contexts, all essays analyse the political challenges of countries in which economic and social inequalities are large and political systems fragile. Even though income inequality in Bolivia and Brazil (measured as the Gini Index in Figure 2) has been decreasing since the 1990s, levels remain high in international comparisons. Conversely, Tanzania faces increasing inequality, but overall levels are lower than in the two South American countries (World Bank, 2023). Each essay covers a unique political context given the geographical, cultural, and historical differences. The three countries are characterised by distinct political systems but share difficulties in developing or sustaining consolidated democratic systems (V-Dem Institute, 2022). While the four essays should be viewed as separate studies, the economic and political challenges faced by Bolivia, Brazil, and Tanzania have implications for the traditional political economy theories employed in this thesis and their applicability in these contexts. For example, voter demand for female politicians is higher than expected in Brazil and Tanzania, and the similarities between Bolivia and Brazil in the relationship between politics and corruption in local elections are noteworthy.

Figure 2: Income inequality in Bolivia, Brazil and Tanzania



Note: The figure shows the Gini Index in Bolivia, Brazil and Tanzania. Data are from the World Bank, Poverty and Inequality Platform (World Bank, 2023). The index ranges from 0 (perfect equality) to 100 (perfect inequality) and uses household survey data to show the deviation of the income distribution in a given country from a perfectly equal distribution.

The thesis employs novel (quasi-)experimental methods, draws on survey evidence from Brazil and Tanzania, and innovative data collection in Bolivia. The analysis is based on survey data collection in Brazil during March 2021 and in Tanzania across three survey rounds between October 2020 and April 2021, covering two crucial political events: the 2020 national election resulting in the president's landslide re-election and the subsequent appointment of the first female president of the country following the

president's unexpected passing. The use of nightlight data and election forensics in Bolivia helps to fill gaps in granular data on economic and political outcomes. Implementing survey experiments in Brazil and Tanzania allows for drawing causal conclusions. The analysis of local governments' partisanship in Bolivia exploits a close regression discontinuity design as a causal identification strategy.

Related Literature

This thesis makes several significant contributions to two interrelated streams of the political economy literature. First, on the supply side, the thesis contributes to understanding local policy delivery and the effect of partisanship on poverty and economic inequalities (Essay 1). Second, on the demand side, the thesis addresses voter evaluations of local candidates involved with corruption and advocating pro-poor policy platforms (Essay 2), candidates' relationships with firms (Essay 3) and their gender (Essay 3 and 4).

First, the thesis engages with the literature on partisanship and local policy delivery. The effect of partisanship on economic inequalities is estimated by using a regression discontinuity design to measure the economic outcomes of left-wing mayors in Bolivia. Left-wing governments are often associated with income redistribution achieved through higher taxes and social spending, such as local cash transfer programs and healthcare and education expenditures. Some evidence from developed democracies supports local government responsiveness and the impact of partisanship/ideology on local policy and outcomes (Aragon and Pique, 2020; Einstein and Kogan, 2016; Einstein and Glick, 2018; Hajnal and Trounstine, 2010; Hill and B.Jones, 2017; Magaloni et al., 2019; Pettersson-Lidbom, 2008; Rocha et al., 2018). However, not all scholars agree (Ferreira and Gyourko, 2009; Gerber and Hopkins, 2011; Minkoff, 2009; Peterson, 1981). Local policymaking might be particularly challenging for any political party in developing countries due to weak fiscal capacities. Political and ethnic favouritism, distribution of funds to politically or ethnically aligned districts, and clientelistic political structures have been cited as reasons for a lack of government responsiveness (Asher and Novosad, 2017; Brollo and Nannicini, 2012; Burgess et al., 2015). This thesis develops insights into within-country economic inequalities by analysing the effect of left-wing Bolivian mayors on poverty, inequality reduction, and inclusive policymaking.

Second, this thesis contributes to the extensive literature on voter evaluations of political candidates at the local level. These encompass voter preferences for female candidates (Benstead et al., 2015; Dolan, 2008; Eagly and Karau, 2002), candidates advocating for redistributive policies (Pellicer et al., 2020), candidates with a business background (Gehlbach et al., 2010; Szakonyi, 2021) and candidates involved in corrupt behavior (Breitenstein, 2019; De Vries and Solaz, 2017; Klašnja et al., 2021). In contrast to numerous studies that focus on the supply side of redistribution (Acemoglu et al., 2011; Fergusson et al., 2022; Khemani, 2015), a significant portion of this thesis focuses on the demand side of distributive politics and how the presence of clientelist strategies, revolving-door/business types, and female candidates shapes the extent to which elections channel demand for public policies into the political system.

Political clientelism, revolving door practices, and the underrepresentation of women in politics all present significant challenges to the democratic system. These challenges are crucial for explaining inherent disparities in electoral and political outcomes, which may not always benefit all societal groups equitably, despite their original intention to serve collective interests. Political clientelism, for example, has far-reaching effects on redistributive politics in young democracies (Cruz et al., 2021; Khemani, 2015; Kramon, 2017; Mares and Young, 2019; Nichter, 2018; Stokes et al., 2013). This thesis helps to explain why high levels of inequality, low levels of redistribution, and widespread political clientelism often coexist in equilibrium (Fergusson et al., 2022). Concurrently, the entry of businesspeople into politics heightens the risk that government serves corporate interests. These politicians may exploit public office to benefit related companies, particularly in countries with weak institutions and pervasive corruption (Gehlbach et al., 2010; Szakonyi, 2021). Lastly, women's interests are less frequently channelled into the political system due to unconscious biases, gender norms, and stereotypes, exacerbating the challenges faced by women running for office (Heursen et al., 2020; Vasconcelos, 2018).

Results

The results and implications of the four essays are presented below.

1. The *first essay* explores the economic implications of Bolivian mayors representing the left-wing party Movimiento al Socialismo (MAS). I test whether municipalities with MAS-affiliated mayors exhibit a greater reduction in inequality and poverty than municipalities with opposition mayors. The analysis relies on satellite nighttime lights as a proxy for economic inequality and election forensics as a proxy for municipality-level corruption. I use a close election regression discontinuity design at municipal elections in 2004, 2010 and 2015. I find that MAS' mayors have no significant impact on the employed metrics of poverty but do show inequality increases. These results underscore the importance of sub-national analysis on inequality and poverty reduction. Policy decisions and local investments require granular and disaggregated data on vulnerable population groups to further decrease local inequality and poverty disparities and to boost local resilience to address exogenous shocks such as COVID-19 or climate disasters.

2. The *second essay* examines how voters reward or punish political candidates who vary in their mix of programmatic and clientelist distribution, drawing on evidence from a conjoint experiment of voter preferences for city councillors in Brazil. The existing literature predominantly focuses on the spending side, exploring how candidates distribute goods or make promises about future welfare service allocations. Our experimental set-up includes treatments on different tax schemes, which may affect how voters evaluate candidates and their distributive politics. Our findings reveal that clientelism negatively impacts voter support, even when programmatic redistribution is part of a candidate's policy platform. However, clientelism involving work or jobs incurs less punishment than cash offers and might even make candidates more electorally viable. Poor voters are especially lenient toward clientelist distribution involving work when combined with pro-poor

programmatic distribution. Our findings help to explain why politicians continue to use certain types of clientelism to mobilise voter support.

3. The *third essay*, also drawing on evidence from Brazil, focuses on the underrepresentation of women in Brazilian politics. In Brazil, numerous local candidates, predominantly male, enter politics after experiencing success in the private sector. This essay examines how voters evaluate female candidates when involved in corruption revolving around political connections to firms. It draws on a conjoint candidate experiment conducted in Brazil during 2021. We find that, in contests for mayoral positions in local governments, voters on average prefer female politicians over male politicians, even when both have connections to corrupt firms. Notably, both female and male voters are more likely to support female candidates involved in corruption. Interestingly, in municipalities with a higher share of women in the local council, support for male candidates (affiliated with 'clean' firms) increases, suggesting a potential backlash effect of increased female representation. Our findings highlight the importance of considering gender equality in the design of anti-corruption initiatives related to firms' involvement in politics.

4. The *fourth essay* advances the understanding of the underrepresentation of women in political office, a form of inequality persisting across countries, levels of government, and time. This essay analyses inequality in the distribution of political power between women and men as a problem of distributive justice. The discrepancy between a person's desired distribution of political power between genders and their perception of the current distribution serves as a suitable approximation for the *demand for change* in political gender inequality, making our survey results relatable to actual affirmative action policies and meritocracy. We find no evidence for preferences for gendered specialization in political committees. However, we provide support for female respondents holding female candidates to higher standards than male candidates, as well as meritocratic disbelief and support for affirmative action. By collecting survey data in Tanzania, we present a method to elicit individual value judgements concerning societal outcomes and contribute to understanding the mechanisms that sustain people's preferences for gender gaps in political representation.

Table 2: Essay overview, PhD Dissertation, 2023

Title	Country	Theory	Data	Empirical Strategy	Conclusions
Local Economic Outcomes of Morales' Legacy in Bolivia	Bolivia	Redistribution and decentralization (Oates, 1999); Partisanship in local politics	Administrative data; secondary survey data; satellite imagery	Regression Discontinuity Design	• The analysis shows robust inequality *increases* among MAS-run municipalities. Poverty *decreased* significantly in MAS-won municipalities exposed to more irregularities. • The relatively limited influence of left-wing mayors on average underscores the significance of alternative mechanisms, such as local level corruption. • The findings emphasize the importance of conducting sub-national analyses when addressing inequality and poverty reduction in developing countries.
Programmatic Redistribution and Clientelism: Evidence from a Conjoint Survey Experiment in Brazil	Brazil	The median voter, preferences for redistribution and corruption (Meltzer and Richard, 1981)	Cross-sectional survey data collected (non-probability sample)	Conjoint Survey Experiments	• Our findings show that clientelism negatively affects voter support, even in cases where candidates incorporate programmatic redistribution into their policy platform. • Poor voters are more lenient toward clientelist distribution involving work when combined with pro-poor programmatic distribution. • This paper offers insights into the persistence of politicians' use of specific forms of clientelism as a means to mobilize voter support.
Gendered Crooks: Gender, Revolving Doors, and Voter Tolerance of Corruption	Brazil	Gender Affinity Effects (Dolan, 2008); Role Congruity Theory (Eagly and Karau, 2002; Benstead et al., 2015)	Cross-sectional survey data collected (non-probability sample)	Conjoint Survey Experiments	• Our conjoint experiment results indicate that female and male voters express a preference for female over male mayor candidates, regardless of both having ties to a corrupt firm; but corrupt men are perceived as more likely to get things done. • In municipalities with a higher share of women in the local council, support for male candidates increases, suggesting a potential backlash effect of increased female representation. • These findings underscore the significance of simultaneously advancing anti-corruption measures and bolstering women's representation in politics.
What is the Ideal Number of Women in Politics?: Distributive Preferences, Inequality and Meritocracy	Tanzania	The Veil of Ignorance (Harsanyi, 1977; Rawls, 1971, 1996); Descriptive and Substantive Representation (Pitkin, 1967)	Multiple survey rounds collected (unbalanced panel; convenience sample)	Correlated Random Effects Models; Vignette Survey Experiments	• We suggest a method for uncovering moral preferences regarding societal outcomes to examine preferences for gender (in)equality in politics. • We find that women have on average significantly higher ideals for female representation and these preferences are robust over the appointment of the first female president. Our survey experiment reveals that women tend to believe that female candidates require a higher level of education to enter politics compared to male candidates. • These results contribute to a deeper understanding of the fundamental preferences related to women's participation in politics, affirmative action policies, and preferences regarding meritocracy.

References

Acemoglu, D. and Robinson, J. A. (2015). The Rise and Decline of General Laws of Capitalism. *The Journal of Economic Perspectives*, 29(1):3–28.

Acemoglu, D., Ticchi, D., and Vindigni, A. (2011). Emergence and persistence of inefficient states. *Journal of the European Economic Association*, 9(2):177–208.

Alesina, A. and Angeletos, G.-M. (2005). Fairness and redistribution. *American Economic Review*, 95(4):960–980.

Alesina, A. and Giuliano, P. (2011). Chapter 4 - Preferences for Redistribution. volume 1 of *Handbook of Social Economics*, pages 93–131. North-Holland.

Alesina, A., Stantcheva, S., and Teso, E. (2018). Intergenerational Mobility and Preferences for Redistribution. *American Economic Review*, 108(2):521–554.

Amy, A., Bagenholm, A., and Charron, N. (2020). Are women more likely to throw the rascals out? The mobilizing effect of social service spending on female voters. *Public Choice*, 184(3):235–261.

Aragon, F. and Pique, P. (2020). Better the devil you know? Reelected politicians and policy outcomes under no term limits. *Public Choice*, 182:1–16.

Asher, S. and Novosad, P. (2017). Politics and Local Economic Growth: Evidence from India. *American Economic Journal: Applied Economics*, 9(1):229–273.

Atkinson, A. B. A. B. (2015). *Inequality: What Can Be Done?* Harvard University Press, Cambridge, Massachusetts.

Benabou, R. and Ok, E. (2001). Social mobility and the demand for redistribution: The poum hypothesis. *The Quarterly Journal of Economics*, 116(2):447–487.

Benstead, L. J., Jamal, A. A., and Lust, E. (2015). Is It Gender, Religiosity or Both? A Role Congruity Theory of Candidate Electability in Transitional Tunisia. *Perspectives on Politics*, 13(1):74–94.

Bernhardt, D., Krasa, S., and Polborn, M. (2008). Political Polarization and the Electoral Effects of Media Bias. *Journal of Public Economics*, 92(5-6):1092 – 1104. Cited by: 109; All Open Access, Green Open Access.

Bjarnegård, E. and Zetterberg, P. (2022). How autocrats weaponize women's rights. *Government and Opposition*, 33(2):60–75.

Breitenstein, S. (2019). Choosing the crook: A conjoint experiment on voting for corrupt politicians. *Research and Politics*, 6(1).

Brollo, F. and Nannicini, T. (2012). Tying your Enemy's Hands in Close Races: The Politics of Federal Transfers in Brazil. *American Political Science Review*, 106(4):742–761.

Burgess, R., Jedwab, R., Miguel, E., Morjaria, A., and i Miquel, G. P. (2015). The Value of Democracy: Evidence from Road Building in Kenya. *The American Economic Review*, 105(6):1817–1851.

Campbell, A., Converse, P. E., Miller, W. E., and Stokes, D. E. (1960). *The American Voter*. John Wiley, Oxford, United Kingdom.

Castañeda, N. and Doyle, D. (2019). Progressive tax policy and informal labor in developing economies. *Governance*, 32(4):595–618.

Chong, A. and Gradstein, M. (2018). Imposed institutions and preferences for redistribution. *Journal of Institutional Economics*, 14(1):127–156.

Crenshaw, K. (1991). Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color. *Stanford Law Review*, 43(6):1241–1299.

Cruz, C., Keefer, P., and Labonne, J. (2021). Buying Informed Voters: New Effects of Information on Voters and Candidates. *The Economic Journal*, 131(635):1105–1134.

Dahlerup, D., Hilal, Z., Kalandadze, N., and Kandawasvika-Nhundu, R. (2014). Atlas of electoral gender quotas.

De Vries, C. E. and Solaz, H. (2017). The Electoral Consequences of Corruption. *Annual Review of Political Science*, 20:391–408.

Ditonto, T. (2017). A High Bar or a Double Standard? Gender, Competence, and Information in Political Campaigns. *Political Behavior*, 39:301–325.

Dolan, K. (2008). Is There a "Gender Affinity Effect" in American Politics?: Information, Affect, and Candidate Sex in U.S. House Elections. *Political Research Quarterly*, 61(1):79–89.

Eagly, A. and Karau, S. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109(3):573–598.

Easton, D. (1957). An Approach to the Analysis of Political Systems. *World Politics*, 9(3):383–400.

Einstein, K. L. and Glick, D. M. (2018). Mayors, Partisanship, and Redistribution: Evidence Directly from U.S. Mayors. *Urban Affairs Review*, 54(1):74–106.

Einstein, K. L. and Kogan, V. (2016). Pushing the City Limits: Policy Responsiveness in Municipal Government. *Urban Affairs Review*, 52(1):3–32.

Fergusson, L., Molina, C. A., and Robinson, J. A. (2022). The Weak State Trap. *Economica (London)*, 89(354):293–331.

Ferreira, F. and Gyourko, J. (2009). Do Political Parties Matter? Evidence from U.S. Cities. *The Quarterly Journal of Economics*, 124(1):399–422.

Gehlbach, S., Sonin, K., and Zhuravskaya, E. (2010). Businessman Candidates. *American Journal of Political Science*, 54(3):718–736.

Gerber, E. R. and Hopkins, D. J. (2011). When mayors matter: Estimating the impact of mayoral partisanship on city policy. *American Journal of Political Science*, 55(2):326–339.

Hajnal, Z. L. and Trounstine, J. (2010). Who or What Governs?: The Effects of Eco-

nomics, Politics, Institutions, and Needs on Local Spending. *American Politics Research*, 38(1):1130–1163.

Harsanyi, J. C. (1977). Morality and the theory of rational behavior. *Social Research*, 44(4):623–656.

Heursen, L., Ranehill, E., and Weber, R. A. (2020). Are Women Less Effective Leaders Than Men? Evidence from Experiments Using Coordination Games. *CESifo Working Paper No. 8713*.

Hill, A. J. and B.Jones, D. (2017). Does partisan affiliation impact the distribution of spending? Evidence from state governments' expenditures on education. *Journal of Economic Behavior Organization*, 143:58–77.

Iversen, T. and Rosenbluth, F. (2006). The Political Economy of Gender: Explaining Cross-National Variation in the Gender Division of Labor and the Gender Voting Gap. *American journal of political science*, 50(1):1–19.

Iversen, T. and Soskice, D. (2011). Inequality and Redistribution: A Unified Approach to the Role of Economic and Political Institutions. *Revue économique*, 62(4):629–649.

Keefer, P. and Khemani, S. (2005). Democracy, Public Expenditures, and the Poor: Understanding Political Incentives for Providing Public Services. *The World Bank Research Observer*, 20(1):1–27.

Khemani, S. (2015). Buying votes versus supplying public services: Political incentives to under-invest in pro-poor policies. *Journal of Development Economics*, 117:84–93.

Klašnja, M., Lupu, N., and Tucker, J. A. (2021). When Do Voters Sanction Corrupt Politicians? *Journal of Experimental Political Science*, 8:161–171.

Kohler, P. (2015). Redistributive Policies for Sustainable Development: Looking at the Role of Assets and Equity. *DESA Working Paper*, 139.

Kramon, E. (2017). *Why is Electoral Clientelism Effective?: Experimental Evidence*, page 95–119. Cambridge University Press.

Kuziemko, I., Norton, M. I., Saez, E., and Stantcheva, S. (2015). How Elastic Are Preferences for Redistribution? Evidence from Randomized Survey Experiments. *American Economic Review*, 105(4):1478–1508.

Lazarsfeld, P. F., Berelson, B., and Gaudet, H. (1944). *The People's Choice: How the Voter Makes up his Mind in a Presidential Campaign*. Oxford University Press, Duell, Sloan, and Pearce.

Lupia, A. and McCubbins, M. D. (1998). *The democratic dilemma: can citizens learn what they need to know?* Cambridge, U.K.: Cambridge University Press).

Lupu, N. and Pontusson, J. (2011). The Structure of Inequality and the Politics of Redistribution. *American Political Science Review*, 105(2):316–336.

Macdonald, R. (2018). Age and Gender Voting Trends in the 2015 Tanzanian General Election. *Journal of Eastern African Studies*, 12(1):44–62.

Magaloni, B., Díaz-Cayeros, A., and Euler, A. R. (2019). Public Good Provision and Traditional Governance in Indigenous Communities in Oaxaca, Mexico. *Comparative Political Studies*, (12).

Mares, I. and Young, L. (2019). *Conditionality & Coercion: Electoral Clientelism in Eastern Europe*. Oxford University Press, Oxford.

Meltzer, A. H. and Richard, S. F. (1981). A Rational Theory of the Size of Government. *Journal of Political Economy*, 89(5):914–927.

Minkoff, S. L. (2009). Minding Your Neighborhood: The Spatial Context of Local Redistribution. *Social Science Quarterly*, 90(3):516–537.

Nichter, S. (2018). *Votes for Survival: Relational Clientelism in Latin America*. Cambridge University Press, Cambridge.

Norton, M. I. and Ariely, D. (2011). Building a better america—one wealth quintile at a time. *Perspectives on Psychological Science*, 6(1):9–12.

Nugent, M. K. and Krook, M. L. (2015). All-Women Shortlists: Myths and Realities. *Parliamentary Affairs*, 69(1):115–135.

Oates, W. E. (1999). An Essay on Fiscal Federalism. *Journal of Economic Literature*, 37(3):1120–1149.

Pellicer, M., Wegner, E., Bayer, M., and Tischmeyer, C. (2020). Clientelism from the Client's Perspective: A Meta-Analysis of Ethnographic Literature. *Perspectives on Politics*, page 1–17.

Peterson, P. (1981). *City Limits*. University of Chicago Press.

Pettersson-Lidbom, P. (2008). Do parties matter for economic outcomes? A regression discontinuity approach. *Journal of the European Economic Association*, 6(5):1037–1056.

Piketty, T. (2014). *Capital in the twenty-first century*. The Belknap Press of Harvard University Press, Cambridge Massachusetts.

Pitkin, H. F. (1967). *The Concept of Representation*. University of California Press.

Popkin, S. L. S. L. (1991). *The Reasoning Voter: Communication and Persuasion in Presidential Campaigns*. University of Chicago Press, Chicago.

Rawls, J. (1971). *A Theory of Justice*. Belknap Press of Harvard University Press, Cambridge, Massachussets, 1 edition.

Rawls, J. (1996). *Political Liberalism*. Columbia classics in philosophy. Columbia University Press, New York.

Rocha, F., Orellana, V. I. F., and Bugarin, K. (2018). Elected in a close race: Mayor's characteristics and local public finances. *Economia*, 19:149–163.

Sanbonmatsu, K. (2002). Gender Stereotypes and Vote Choice. *American Journal of Political Science*, 46(1):20–34.

Stantcheva, S. (2021). Perceptions and preferences for redistribution. *NBER Working Paper*, 29370.

Stemplowska, Z. and Swift, A. (2012). *Ideal and Nonideal Theory*, pages 1–17. Oxford University Press.

Stokes, S. C., Dunning, T., Nazareno, M., and Brusco, V. (2013). *Brokers, Voters, and Clientelism: The Puzzle of Distributive Politics*. Cambridge University Press.

Szakonyi, D. (2021). Private Sector Policy Making: Business Background and Politicians' Behavior in Office. *The Journal of Politics*, 83(1):260–276.

V-Dem Institute (2022). Democracy Report 2022: Autocratization Changing Nature?

Vasconcelos, A. F. (2018). Gender and leadership stereotypes theory: Is it reaching the boundaries? *Management Research Review*, 41(11):1336–1355.

World Bank (2023). World Bank Poverty and Inequality Platform.

Chapter 1

Local Economic Outcomes of Morales' Legacy

Left-wing governments are frequently associated with income redistribution through increased taxes and social spending. Yet, the evidence regarding the effect of partisanship on local redistribution in developing countries is mixed. In this paper, I explore the impact of Bolivian mayors representing Movimiento al Socialismo (MAS), headed by Evo Morales as president of Bolivia from 2006 to 2019. I test whether municipalities with MAS-affiliated mayors exhibit higher reductions in inequality and poverty than municipalities with opposition mayors. I anticipate that MAS mayors fulfil voters' demands for redistributive policies in congruence with the party's ideology and thereby achieve higher reductions in inequality during their governing period than the opposition, and I explore corruption as a potential intervening mechanism. The analysis relies on administrative data and satellite nighttime light data as proxies for economic development and inequality. I use a close election regression discontinuity design for three municipal elections in Bolivia (2004, 2010, and 2015). Contrary to my expectation, I find that MAS-led municipalities show significant increases in inequality. Yet, in municipalities with higher irregularities, poverty reduced significantly. The analysis contributes to the literature on redistributive policies of local governments and their effects on poverty and inequality reduction at the local level in developing countries. The findings pose implications for local governance and responsiveness in developing countries.[1]

Keywords: Inequality measurement, Local inequality, Poverty reduction, Left-wing politics, Redistribution.

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1.1 Introduction

Left-wing governments are often associated with income redistribution achieved through increased taxes and social spending. Yet, evidence regarding the effect of partisanship on local redistribution in developing countries is mixed (Herwartz and Theilen, 2017). The 2000s in Latin America have been characterized by a wave of progressive-left and center-left governments that have prioritized social equity and promoted an increase in living standards for low income classes through the implementation of redistributive policies and social programs (Cannon and Kirby, 2012).

Longstanding theoretical debate concerns whether local policies differ based on partisanship (Besley and Coate, 1997; Downs, 1957; Osborne and Slivinski, 1996; Peterson, 1981; Tiebout, 1956). Some also argue that local governments in general refrain from engaging in redistributive policies. However, in practice, municipalities often influence local development by implementing local social protection policies and infrastructure investments - such as roads, water and sewage systems - to varying degrees of efficiency (Faguet, 2012).

Using the case of Bolivia, this paper taps into the widely debated question of whether mayors and sub-national governments affiliated with left-wing political parties have a distinct effect on local economic outcomes. The impact of local governments on inequality reduction and inclusive development has been widely studied by looking at political input and output in the form of government budget and spending patterns. Policy and economic outcomes, in contrast, have been generally understudied, as data on poverty and inequality levels are often scarce at the local level. More attention should be paid to the analysis of local policies and outcomes, as local governments and politicians address the daily needs of their electorate and directly engage with the most vulnerable population groups (Kramon, 2017). Local politics also often gives rise to policy capture and clientelism (Nichter, 2018; Sugiyama and Hunter, 2013), with substantial effects on the efficiency of policy implementation (Cárdenas, 2010).

Despite extensive studies in various countries, the empirical literature on the relationship between partisanship of local politicians and governments and economic outcomes is mixed (Alonso and Andrews, 2020; Fiva et al., 2018; Ornstein et al., 2022), including work on the effect of national and local party alignment (Asher and Novosad, 2017; Borcan, 2020; Ventura, 2021) on policymaking and policy outcomes. Many studies have investigated the impact of party affiliation on municipal funding, spending, and policy implementation. While the majority of these studies focus on the United States and other high-income countries, researchers have also examined the policy impact of local governments in Brazil (Akhtari et al., 2022; Brollo and Nannicini, 2012; Brollo and Troiano, 2016; Goncalves, 2014; Hollenbach and Silva, 2019; Hott and Menezes-Filho, 2023). Specific examples include the effect of female mayors on COVID-19 policies (Bruce et al., 2022), the incumbency effect on clientelism (Hidalgo and Nichter, 2016), and party structures (Folke et al., 2016). To date, Latin American countries have received limited attention in these analyses (Lucardi et al., 2023), with few exceptions such as Brazil (Feierherd, 2022; Gouvêa and Girardi, 2021), Chile (Argote and Navia, 2018), and Peru (Natividad, 2022). This research gap concerning local policymaking and economic outcomes in developing countries is partly due to the scarcity of local-level and granular data.

I fill this local level research gap by using a sharp close election regression discontinuity design (RDD) to examine the local average treatment effect of the left-wing party Movement Toward Socialism (*Movimiento al Socialismo* - MAS) on local economic outcomes in Bolivia. The analysis covers municipal elections in 2004, 2010, and 2015, which allows for exploring long-term outcomes during a time in which MAS gained national and local influence in Bolivian politics.[2]. The winning margin of MAS serves as the running variable, to estimate the effect for municipalities where MAS mayors barely won, compared to those where MAS mayors barely lost. The RDD provides a unique opportunity to measure the causal effect of partisanship on local economic outcomes in a scarce-data context at the sub-national level of a developing country.

Various studies have implemented quasi-experimental RDDs in democracies around the world to measure the causal impact of politicians' characteristics and partisanship during close elections. Such designs exploit a sub-sample of municipalities in which politicians barely lost and barely won, assuming they are similar in unobservable characteristics. In this way, RDDs help to estimate the influence of certain characteristics of narrow election winners and opponents, such as incumbency (Aragon and Pique, 2020; Lippmann, 2023; Lucardi et al., 2023; Meriläinen and Tukiainen, 2022), electoral corruption (Bartnicki et al., 2022; Dulay and Go, 2022), partisanship (Asher and Novosad, 2017), gender (Ferreira and Gyourko, 2014; Lippmann, 2023), age (Alesina et al., 2019), education (Carnes and Lupu, 2016) and ethnicity (Burgess et al., 2015).

The effect of mayors affiliated with MAS on economic inequality and poverty is an important question in the context of Bolivia, where little is known about the results of MAS' inclusive policies and enforcement of the political demands of the poor and indigenous communities (Van Cott, 2008). A local-level analysis of this topic adds value because MAS mayors are well-known figures in political life and are perceived as key actors in representing the interests of vulnerable communities, potentially leading to decreases in inequality and poverty. Evo Morales led Bolivia between 2006 and 2019 as the first indigenous president, gaining vast support from indigenous groups that were, until then, mostly excluded from political decision-making. MAS advocates a left-wing socialist policy platform, often characterized as a mix of indigenism, nationalism, redistribution and communitarian socialism (Achtenberg and Currents, 2015). Yet, criticism of the party's integrity and its anti-democratic and clientelist practices overshadowed positive economic, social and participatory developments over the course of Morales' presidency (Escobari and Hoover, 2020; Mebane, 2019). Indeed, MAS has long been seen as a catalyst for decreasing inequality while at the same time developing autocratic tendencies during the later years in government (V-Dem Institute, 2023).

The analysis uncovers three main findings. First, in contrast to my expectation that MAS-led municipalities would demonstrate a higher reduction in inequality than opposition-led municipalities, the evidence suggests that inequality increased in MAS-led municipalities. Policy capture, corruption and local governance structures may be important intervening factors for explaining changes in economic outcomes in MAS municipalities compared to non-MAS municipalities. Second, I find that poverty decreased significantly in MAS-

[2]The last municipal election was postponed from 2020 to March 7, 2021, but it is not included in the analysis because no long-term outcomes can be observed yet. Yet, the latest local election results from 2021 illustrate the continuous success of the MAS party in local politics (Modica and Ascarrunz, 2021).

won municipalities exposed to more irregularities, but conversely, inequality increased significantly in municipalities exposed to fewer irregularities. These findings provide suggestive evidence for one of the potential channels for poverty and inequality reduction. Third, the examination of possible mechanisms related to local governance structures indicates a significant rise in inequality in all municipalities governed by MAS in the absence of autonomous governance structures, but no significant effects of the gender of the mayor.

This paper offers two main contributions to the literature on redistribution and local policy implementation through analysing the local settings of a developing country, and drawing on innovative methods and data.

First, while existing studies have largely looked at the United States (de Benedictis-Kessner and Warshaw, 2016, 2020; Eggers et al., 2015; Ferreira and Gyourko, 2007; Gerber and Hopkins, 2011)[3] and higher-income countries - such as Germany, Italy, Norway, Romania, Spain, and the United Kingdom (Alonso and Andrews, 2020; Carozzi and Repetto, 2019; Fiva et al., 2018; Folke et al., 2016; Freier and Thomasius, 2016; Klašnja and Pop-Eleches, 2022) - this work presents an in-depth study of a developing country, which has shown large reductions in inequality since redistributive policies were implemented and in which municipal governments have had sufficient autonomy to influence local economic and social developments (Faguet and Sánchez, 2008; Faguet, 2012, 2019). Bolivia represents an interesting case to study the implementation of redistributive policies in a developing country context as local policies play a crucial role in addressing day-to-day voter demands, for example, in the form of public service delivery and innovative local participatory mechanisms (Magaloni et al., 2019; Van Cott, 2008). The resulting insights are valuable, as the effect of decentralization and local autonomy on inequality, poverty reduction and economic development in developing countries has long been debated (Eaton et al., 2011), and the empirical results are mixed (Chavis, 2010; Miguel and Gugerty, 2005; Sanogo, 2019; Véron, 2001; Ye et al., 1999).

Second, this paper examines how local governments affect poverty and inequality reduction by measuring the causal effect of political party affiliation on local economic outcomes using novel data and quasi-experimental methods in the form of a sharp RDD. To measure local changes in inequality, I calculate a Gini Night Light Index for municipalities based on satellite nighttime data, bridging the data gaps on local economic outcomes. In addition, to investigate potential poverty and inequality reduction channels, I use election forensics methods to estimate the probability of electoral irregularities in the 2004, 2010, and 2015 municipal elections. This measure serves as a proxy for corrupt practices in political processes in municipalities, which are important barriers to policymaking that undermine policy implementation and social and economic development. Lastly, I compiled the gender of Bolivian mayors and municipalities' local governance structures, i.e. whether municipalities were run by autonomous indigenous associations and followed different local democratic systems.

The paper is structured as follows: Section 1.2 addresses the relevant literature on the importance of partisanship for local policymaking and develops the hypotheses that guide

[3]Including RDDs to measure the causal impact of mayors on policy outcomes (Ferreira and Gyourko, 2007; Gerber and Hopkins, 2011) and interviews with mayors on their preferences for redistribution (Einstein and Glick, 2018).

the analysis. Section 1.3 then describes Bolivia's electoral setting and economic context. Section 1.4 introduces the data and estimations used for the analysis. The results of the RDD are presented in Section 1.5. Section 1.6 presents the discussion and conclusion.

1.2 Local Policy Outcomes and Partisanship

The importance of partisanship for local policymaking and policy outcomes has been widely debated. Most theoretical arguments predict either *policy convergence*, in which partisanship does not influence policy decisions, or *policy divergence*, where partisanship and politicians' individual preferences shape policymaking. Most analyses in this area do not distinguish between politicians' partisan affiliations and their ideology and instead infer ideology based on party membership, often distinguishing between left- and right-leaning parties (Baltrunaite et al., 2014). In studying the effect of MAS leadership in municipalities, not only partisanship, but also national government alignment, matters. Municipalities that are politically aligned with the national government have been shown to enjoy various benefits (Asher and Novosad, 2017). Yet, most findings in the literature are not transferable to country contexts with different political and economic institutions and histories, such as Bolivia.

Extensive theoretical models and empirical studies have contemplated the roles of politicians and voters in shaping local policymaking, with a focus on Western democracies. The oldest theoretical models propose that, in democracies, policies aim to win the most votes; therefore, partisanship and ideology matter little. Politicians prioritize policies that respond to the demands of the median voter (Downs, 1957; Meltzer and Richard, 1981). Downs' economic theory of political action (Downs, 1957) argues that political parties develop ideologies solely to attract the most voters. These ideologies often fall along a left-right continuum and align with voters' beliefs. Meanwhile, the well-known Tiebout sorting model posits that citizens select their community based on factors such as taxation and public service outcomes (Tiebout, 1956). These theories imply that local policies generally do not include redistributive measures, which can increase costs and have a limited impact on reducing local inequality and poverty. Furthermore, politicians often cater to homogeneous voter groups in small political entities by adopting moderate policies (Minkoff, 2009; Peterson, 1981). Most importantly for this research, in Downs' rational perspective of politicians and voters and in Tiebout's moving model, policies converge to the middle, whereas in candidate-citizen models politicians hold policy preferences leading to strong electoral competition on this basis (Besley and Coate, 1997; Osborne and Slivinski, 1996).

Policy divergence may not be the outcome only of politicians and voter preferences, but also of distributive policy models, in which central governments distribute public funds disproportionally to different parties and politicians to maximize voters' support. In this framing, policy implementation is mainly strategic and policies are designed for specific constituencies to attract the most votes, such as that politicians specifically target competitive or swing districts. Political and ethnic favouritism, as well as political clientelism and corruption, have attracted substantial attention, showing that in some countries, politicians distribute funds based on political or ethnically aligned districts (Asher and Novosad, 2017; Borcan, 2020; Burgess et al., 2015; Ventura, 2021). In

contrast, local politicians have been deemed less ideological and aligned with national parties' policies than national politicians (Ervik, 2015). This paper contributes to these theoretical debates by estimating the effect of left-wing-led municipalities by looking at the party leadership of MAS, which was also heading the national government during the study period.

RDD applications and close elections are increasingly popular for empirically estimating the effects of local partisanship. However, RDD applications differ in their focus on economic, political, and social outcomes as well as their institutional setting. This paper is situated among related research aiming to explain differences in local governments' spending patterns and budget sizes. Hill and B.Jones (2017), for example, used education spending to measure the effect of Republican and Democratic mayors in the United States, finding that Democrats spend significantly more in districts with large minority populations. Additionally, de Benedictis-Kessner and Warshaw (2016) illustrate the importance of partisanship for municipal governments in the United States, finding that Democratic mayors issue higher expenditures (and debt) than their Republican counterparts. In congruence with these findings, Chepoi et al. (2008) find that local left-wing governments in Sweden spend and tax more and have lower unemployment rates than the opposition government. Yet, few studies have examined party effects on policies and economic outcomes, such as inequality, largely because granular data on these outcomes are often scarce at the local level.

Moreover, local policymaking may be especially challenging in developing countries, which often have weak fiscal capacities (Cárdenas, 2010) and clientelist political structures (Nichter, 2018; Sugiyama and Hunter, 2013). Indeed, most studies on the influence of local governments, parties and ideologies in Latin America are inconclusive. Natividad (2022) highlight the significant effects of Peruvian mayors belonging to a national party (following a decentralization reform) on local level investments and fiscal responsibility. In contrast, Brazilian left-wing mayors showed no effects on government size or budget and minimal effects on social spending (Gouvêa and Girardi, 2021). Further evidence from Brazil emphasizes the policy misalignment between voters and left-wing local governments, showing that especially when competing for re-election, Brazilian Workers' Party mayors prioritize nonprogrammatic instead of pro-poor policies in housing, health policy and education as well as participatory initiatives (Johannessen, 2020). Left-wing mayors in Brazil have also been shown to have less of an effect on labor market regulations (Feierherd, 2022).

Few previous studies have measured the partisan effect on policy outcomes in the form of negative externalities, such as crime and unemployment rates, or proxies for economic activity, such as satellite nighttime data (Asher and Novosad, 2017) and financial market variables (stock market prices, exchange rates) (Girardi, 2020). For example, Asher and Novosad (2017) finds that mayors from the ruling party in India significantly affect economic development. Additionally, in Brazil, fewer federal transfers for public services are allocated to municipalities run by the opposition to weaken them during the years before the election (Brollo and Nannicini, 2012). These findings add to the literature on how politicians favour and distribute funds differently to opposition and ruling districts, with unequal effects on economic outcomes.

The relevant literature can be summarized as a debate on the difference in local policymaking based on partisanship. On the one hand, some argue that local policies do not include redistributive measures and politicians often cater to homogeneous voter groups in smaller political entities by adopting moderate policies. On the other hand, others reinforce the argument that political and party ideologies significantly influence policy direction. Left-wing mayors in Latin American countries have shown to campaign on pro-poor policies, with limited success in policy implementation (Johannessen, 2020). Following these ideological policy choices of left-wing parties and the voter base to which they cater, I expect municipalities with MAS-affiliated mayors to show a higher inequality reduction relative to the opposition during their governing period. Following the theoretical perspectives developed in this section, there are two possible arguments regarding the policymaking approach of MAS mayors. The first argument, known as *policy convergence*, suggests that MAS mayors fulfil the demands of their electorate. The second argument referred to as *policy divergence*, proposes that MAS mayors prioritize their own preferred policies. However, both scenarios predict similar outcomes due to the party's pro-poor ideology and its core voter base, which is mostly comprised of lower-middle class and indigenous voters. This alignment makes it likely that MAS mayors would implement redistributive local policies and that one would find higher inequality and poverty reduction in MAS-run municipalities.

H_1: Municipalities with MAS-affiliated mayors show higher *inequality reduction* during the governing period.

H_2: Municipalities with MAS-affiliated mayors show higher *poverty reduction* during the governing period.

Recent survey data from the Americas Barometer, LAPOP 2018/2019 (Figure 1.1),[4] illustrates the variation in potential voter demands and demonstrates the relevance of H_1 and H_2 in the context of Bolivia, where municipalities hold legislative authority, including resource management and fiscal autonomy, which is why I expect partisan effects on local economic outcomes. The LAPOP survey findings for the available municipalities reveal a broad range of perceptions regarding income inequality and redistribution (e.g. 'the state should implement policies to redistribute income inequality') as well as different positions on the political left-right spectrum among respondents in the surveyed municipalities. Some of the municipalities that supported the MAS movement from early on (around Cochabamba and La Paz) exhibit some of the highest perceived levels of left-wing ideology 1.1a) and agreement with redistributive measures (Figure 1.1b).

However, respondents in these municipalities also perceive politicians as more corrupt. Furthermore, previous studies indicate that local policymaking might be especially challenging in developing countries, which often have weak fiscal capacities and local politics that are influenced by clientelist political structures (Nichter, 2018). At the same time, clientelist relationships have also been shown to fill institutional voids and help vulnerable

[4]The LAPOP survey data is not representative on the municipal level, and thus the sample does not include all municipalities.

population groups (Kramon, 2017). Following these arguments on the importance of efficient and sound institutions for poverty and inequality reduction, I test for heterogeneous effects with the following sub-hypothesis.

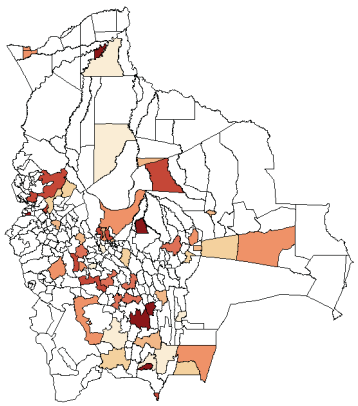
$H_{1.1}$: Municipalities with MAS-affiliated mayors *that are less corrupt* show higher inequality reduction during the governing period.

Inclusive and participatory local institutions may serve to channel demands of the electorate into the political system and create the foundation for a responsive local government beyond the government's partisanship. Magaloni et al. (2019), for example, found no support for the effect of local governments' partisanship on public service delivery. Instead, culture-specific elements in local governance, shaped by customs and traditions appear to matter more. Magaloni et al. (2019) showed that municipalities in Oaxaca, Mexico, governed by formalized customs and traditions in the form of direct and participatory local democracy perform better in public service delivery. Autonomous governance structures have been equally important in Bolivia, where in 2004, citizens and indigenous groups were running for office alongside political parties, a right that has been anchored in Bolivia's new constitution.

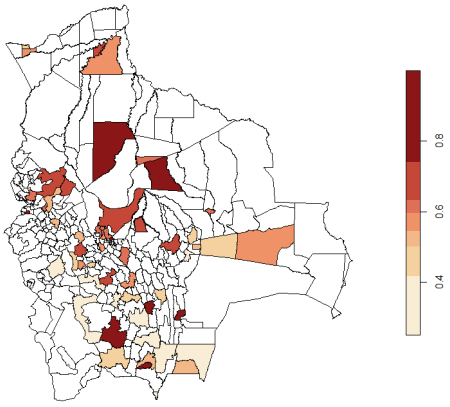
I test the mediating effect of local governance structures in Bolivia on the effect of MAS-led municipalities on decreasing poverty and inequality with the following sub-hypothesis.

$H_{1.2}$: Municipalities with MAS-affiliated mayors *that follow autonomous governance structures* show higher inequality reduction during the governing period.

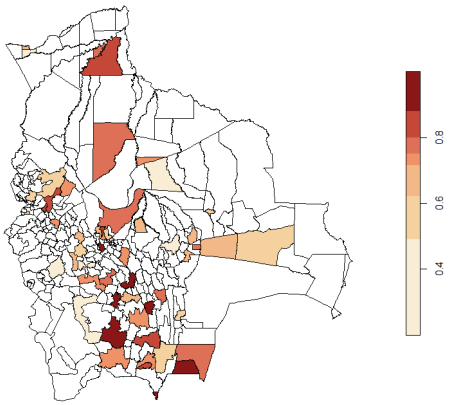
Figure 1.1: Survey perceptions on left-right ideology, redistribution and corruption, by % in municipalities that agree with the statement



(a) % left ideology



(b) % agree with inequality reducing policies



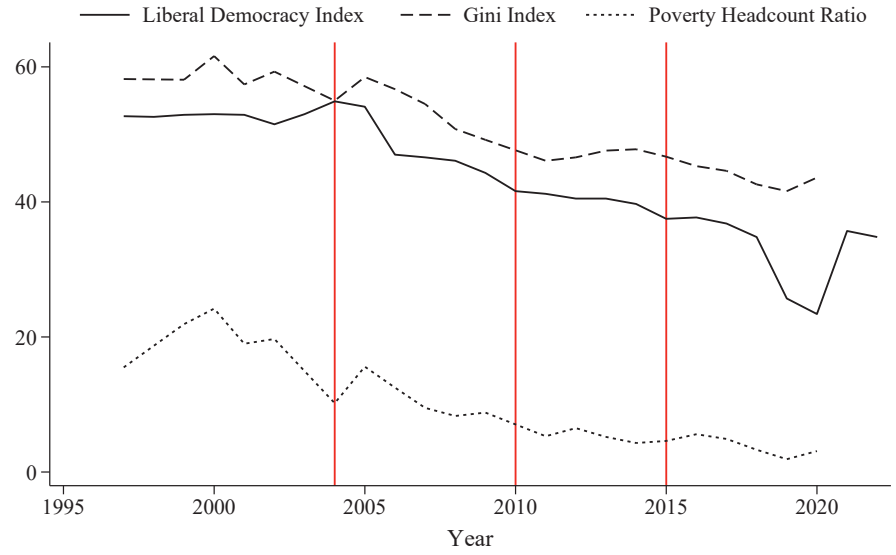
(c) % perception corrupt politicians

Note: The figure maps perceptions of corruption, inequality, and redistributive policies, aggregated on the municipal level. The survey data are from the Americas Barometer and LAPOP (2018–2019) and are not representative at the municipal level. Thus, not all municipalities are represented in the sample, and the mapping only serves to give an indication of the variation in people's perceptions of these issues on the local level. The sample size was 1,682 based on a probability sample and the sample frame from the 2012 Population Census in Bolivia, with fieldwork dates of March 14–May 12, 2019. The survey questions were a) 'Nowadays, when we speak of political leanings, we talk of those on the left and those on the right. In other words, some people sympathize more with the left and others with the right. According to the meaning that the terms 'left' and 'right' have for you, and thinking of your own political leanings, where would you place yourself on this scale?'; b) 'The Bolivian government should implement strong policies to reduce income inequality between the rich and the poor. To what extent do you agree or disagree with this statement?'; and c) 'Thinking of the politicians of Bolivia, how many of them do you believe are involved in corruption?'. The latest survey data from 2021 do not include the same survey questions on inequality.

1.3 Economic and Political Context in Bolivia

Bolivia presents a compelling case for studying the impact of politicians' partisan affiliations on economic outcomes. Bolivia has experienced a significant reduction in poverty and income inequality since the start of the 2000s, while the left-leaning party MAS, which initially emerged from local political organisations, has gained increasing popularity (Van Cott, 2008). The years of this study were shaped by fundamental economic, social, and institutional changes, which I examine in this chapter and which are important for understanding the local poverty and inequality reduction during the period (And and Linera, 2014).

Figure 1.2: Bolivia's democratic and economic development, 1995-2022



Note: The figure illustrates the Gini index and poverty headcount ratio in Bolivia sourced from the World Bank's Poverty and Inequality Platform (https://pip.worldbank.org/home). The data are based on primary household survey data obtained from government statistical agencies and World Bank country departments. The poverty headcount ratio at $2.15 a day (2017 PPP) indicates the % of the population subject to poverty. The Liberal Democracy Index is sourced from V-Dem Institutes' Database (https://www.v-dem.net/), rescaled from 0-100. In red are the municipal elections studied in this paper (2004, 2010 and 2015).

National inequality levels in Bolivia decreased by 84%[5] from 2000 to 2018 and relative poverty decreased over the same period (Figure 1.2). The latest data from the World Bank illustrate that the largest poverty gaps remain between rural and urban parts of Bolivia. Whereas in 2000, only 1% of the urban population was considered poor, 13% of the rural population was poor, as measured by the international poverty line. In 2021, 70% of the Bolivian population lived in urban areas, and this figure is projected to increase to 80% in 2030 (World Bank, 2023). At the same time, within-country inequalities are the largest in Bolivian cities. Researchers have argued that positive economic developments during the 2000s can be partly attributed to increasing minimum

[5]61.6 to 42.2 (Gini index) (World Bank, 2023)

wages and state revenues from natural resources that have been redistributed to lower income groups via cash transfers and other social programs (Chumacero, 2019; Lavinas, 2013). At the same time, Figure 1.2 highlights a negative trend in the quality of Bolivia's democracy between 2005 and 2019 (V-Dem Institute, 2023) during the governing period of Morales.[6] These developments and within-country inequalities highlight the need for a local lens in analysing poverty and inequality reduction in Bolivia.

To evaluate MAS mayors' policies in subsequent years, it is important first to understand the rise of the MAS party at the beginning of 2000. Over the years, there has been debate regarding how MAS left-wing and politically inclusive policies contributed to recent economic successes. At the same time as these successes, the country also shifted towards autocratic and centralized structures (V-Dem Institute, 2023). Yet, large parts of Bolivia's indigenous population have benefited from increasing income and, more importantly, gained influence in political decision-making processes, which was legally manifested in the new constitution in 2009 in an attempt to build the foundation for an inclusive and participatory Bolivian society (Hicks et al., 2018; Webber, 2011). It is, however, contested to what extent positive externalities, such as high commodity prices, were responsible for continuous economic growth in Bolivia (Chumacero, 2019). Criticism of Morales' integrity and anti-democratic practices at the end of his presidency led to pushback, resulting in his resignation and, ultimately, his recent comeback and internal fights within the MAS party.

The path to democracy and recent institutional changes

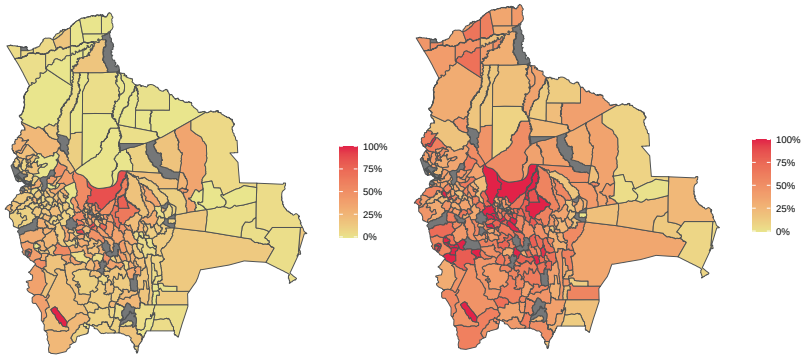
Bolivia's consolidation period ended at the beginning of 2000 in a political crisis, which resulted in the uprising of MAS and the election of its protest leader Morales as president in 2005. The party attracted many critics and supporters, including loyal support from coca farmers. The primary driving cause of the social movement was criticism of dominating democratic structures that formally excluded the indigenous population from the political decision-making process (Webber, 2011). Other causes for dissatisfaction among the population were increasing poverty and inequality (Jost, 2008). These developments are important to understand MAS's positioning on redistributive and inclusive policies (Faguet, 2019; Hicks et al., 2018; Webber, 2011).

After the national election of Morales in 2005 and his reelection in 2009 and 2014, Bolivia underwent drastic political, economic, and social transformations, which MAS labelled a 'democratic revolution'. It is debated to what extent these transformations have had an influence on decreasing poverty and inequality. The goal of the renewed 2009 constitution was to strengthen participatory democracy and the political inclusion of indigenous groups and women through a 'plurinational constitution' (McNelly, 2020; Mokrani and Chávez, 2012; Wolff, 2011). In addition, the constitution allowed 11 municipalities to start the process of transitioning to autonomous indigenous territories (Autonomía Indigena Originaria Campesina (AIOC); Ley No. 4021, Decreto Supremo No. 231) and re-shifted legislative power to departments and municipalities (Quispe, 2012; Robinson, 2008). The implemented changes included the election of political representatives in indigenous communities, the expansion of civil rights, legitimate interference of the state in the

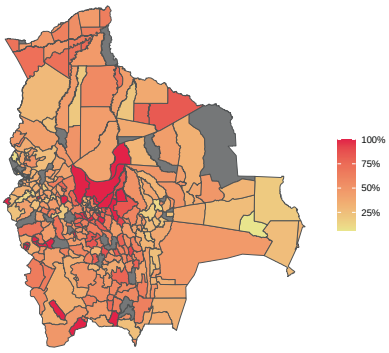
[6]The liberal democracy index ranges from low (0) to high (1) levels of democracy (V-Dem Institute, 2023) and is here rescaled from 0 to 100.

economy, and direct democratic elements, such as an obligatory referendum for any constitutional changes (Schilling-Vacaflor, 2011; Wolff, 2011). MAS' increasing influence in Bolivia's national politics is founded on local-level participatory structures and an increasing number of municipalities run by MAS mayors (Faguet, 2019). Figure 1.3 presents the municipal election outcomes from 2004, 2010, and 2015, illustrating that most MAS-led municipalities during those years were located in the western highlands, while the eastern region was predominantly governed by the opposition.

Figure 1.3: MAS shares in municipal elections: 2004, 2010 and 2015



(a) 2004 Election (b) 2010 Election



(c) 2015 Election

Note: Shares won by MAS in municipal elections in 2004, 2010 and 2015 according to voting data from the Bolivian Electoral Atlas (https://atlaselectoral.oep.org.bo/#/). Municipalities not included in the analysis of this paper (because of municipality splitting over time, see Annex for more details) are highlighted in grey.

Decentralization, local elections and local policymaking

The three municipal elections studied in this paper were impacted by two key developments: the decentralization reform in 1994 and the constitutional change in 2009. Since the first decentralization reform in 1994, municipalities have become increasingly important and independent in their policymaking, when 311 municipalities were established for the first time as sub-national political units. This reform marked a transition from the domination of national-level politics to local, bottom-up policy involvement (Faguet, 2012). Researchers have debated whether these reforms had a positive effect on service provision and democratic accountability (Robinson, 2008). The 1994 reform allocated

2% of national funds to municipalities on a per capita basis. This national contribution is often referred to as the 'fiscal contract' and structures the distribution of hydrocarbon revenues based on the latest census population estimates. Municipalities reserve the right to make decisions regarding public services, such as education, health care, irrigation, sports, and culture and infrastructure, such as water and sewage development. Their largest mandate rests on education, urban development, water, and sanitation (Faguet, 2009).

Politically, these constitutional changes and the establishment of an electoral code in 1999 have had significant effects on mobilizing voters at the local level (Lazarte, 2005). As of 2004, local parties and political candidates are only required to be registered in their relevant municipality, which has led to an increase in new parties. Most of these parties have adopted non-conventional policy agendas that are difficult to place on a traditional left-right scale (Faguet, 2009). During the 2004 election, individual candidates as well as non-partisan organisations could run for office, which decreased partisan control and enhanced the personalization of politics and the importance of local-level social movements. In addition, following the 2004 election, some municipalities were organized by 'Agrupaciones Ciudadanas' (citizen groups)[7] and 'Pueblos Indígenas' (indigenous communities).[8] In the 2004 election, mayors were elected according to the absolute majority principle. If elections did not yield an absolute majority for any candidate, the council elected the mayor from among the top candidates, following the former tradition from 1994, when the council appointed mayors.

The new Electoral Law (Ley del Regimen Electoral, 30 June 2010) changed the structure of municipalities and their election processes. Today, the 339 municipal governments in Bolivia are ruled by mayors and councillors formally combined under provinces and departments. Local elections take place every five years, and mayors are selected after the simple majority principle with no second round and no council election as in 2004. Mayor candidates are listed on separate party lists from municipal council candidates. Voting is compulsory but not enforced.[9]

Since the 2004 election, voters have increasingly focused on individual candidates rather than on party platforms and party alignment. Hence, municipal elections in Bolivia are often characterized by a different dynamic than national elections, and voters might vote for a different party and mayoral candidate than they would in national elections (Fidler, 2015; Modica and Ascarrunz, 2021).

[7] Article No. 4. '*Las Agrupaciones Ciudadanas son personas jurídicas de Derecho Público, sin fines de lucro, con carácter indefinido, creadas exclusivamente para participar por medios lícitos y democráticos en la actividad política del país, a través de los diferentes procesos electorales, para la conformación de los Poderes Públicos.*' (Ley de Agrupaciones Ciudadanas y Pueblos Indigenas Ley 2771)

[8] Article No. 5. '*Los Pueblos Indígenas son organizaciones con personalidad jurídica propia reconocida por el Estado, cuya organización y funcionamiento obedece a los usos y costumbres ancestrales. Estos pueblos pueden participar en la formación de la voluntad popular y postular candidatos en los procesos electorales, en el marco de lo establecido en la presente Ley, debiendo obtener su registro del Órgano Electoral.*' (Ley de Agrupaciones Ciudadanas y Pueblos Indigenas Ley 2771)

[9] Ley del Regimen Electoral, 30 June 2010, Article No. 70 (Composición) and 71 (Elección de alcaldesas o alcaldes) in section III (Composición y elección de Gobiernos Municipales).

1.4 Data and Estimation

The analysis in this paper relies on satellite nighttime data, voting data and other administrative sources, such as census data. The data used in the close election RDD are validated in Annex A and assumptions are tested for robustness in Annex D. Further information on the coding of elections and municipalities can be found in Annex B.

1.4.1 Data

Table 1.1: Indicators and data sources

Variable Type	Data Source	Indicator
Running variable	Municipality elections	MAS winning margin 2004/2010/2015
Covariate	Municipal Atlas 2020	Gini index of education (2012)
Covariate	Municipal Atlas 2020	Inequality in electrical consumption (2016)
Covariate	Municipal Atlas 2020	Population that does not speak Spanish (2012)
Covariate	Census 2001/2012	(log)population
Covariate	Census 2001/2012	Urbanisation rate
Covariate	Census 2001/2012	Average years of education (above 19 years)
Covariate	Census 2001/2012	Percentage of population with basic needs satisfied
Covariate	Statistical Bulletin	Mayor's gender (coded from names)
Covariate	Statistical Bulletin	Municipalities' governance structure
Covariate	Election Forensics-Votes	Probability electoral irregularities
Outcome	Census 2001/2012	Percentage of population under poverty line
Outcome	Satellite Night Lights	(log)average luminosity per capita (pp change)
Outcome	Satellite Night Lights	(log)average luminosity per area with population control (pp change)
Outcome	Satellite Night Lights	(log)average luminosity per area (pp change)
Outcome	Satellite Night Lights	(log)total luminosity per area (pp change)
Outcome	Satellite Night Lights	Pixel Gini Index (pp change)

Note: Table lists the main indicators and data sources used in the analysis of this paper.

Night Lights. Satellite nighttime data serve as a proxy for economic outcomes. To measure whether MAS mayors or the opposition achieve higher inequality reductions in their governed municipalities, I calculate the percentage change in the Gini Night Light Index between the first month and the last month in office. In addition, I run different specifications of the RDD, including controlling for time lags to account for future changes in inequality (Table D.2).[10] The usage of satellite nighttime data for measuring economic activity has significantly increased in the last years. Most researchers in previous studies based their analyses on light images collected by the U.S. Air Force Defense Meteorological Satellite Program (DMSP) Operational Linescan System (OLS). Since 2011, new satellite imagery has been collected using the updated Visible Infrared Imaging Radiometer Suite (VIIRS) technology. Recent applications of VIIRS data in China and Africa show that the images are more useful for subnational analysis because of their higher pixel footprint. In addition, the new pictures are not subject to the common saturation problem, in which low levels of economic activity are not equally measurable with light density (Chen and Nordhaus, 2019; Elvidge et al., 2013). The VIIRS data are available for public usage and

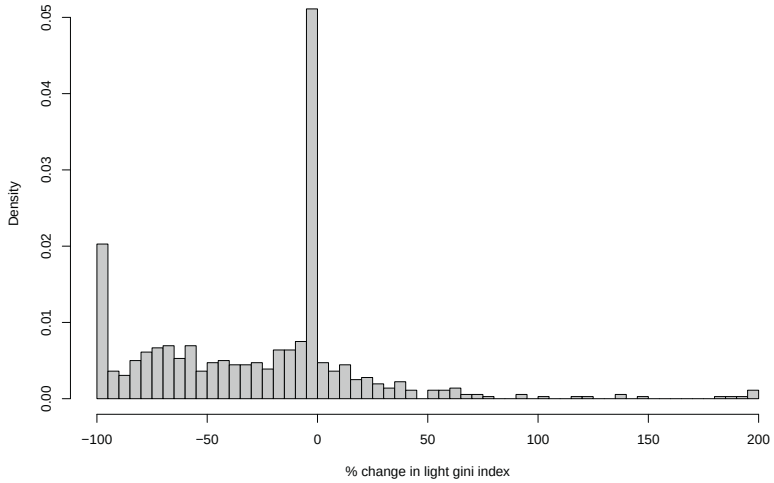
[10]This specification is similar to Asher and Novosad (2017), who examined economic outcomes five years after the elections to account for the time effects of implemented policies.

comprise monthly and annual data since 2011.[11] Elvidge et al. (2013) provide a detailed technical description of the differences between VIIRS and DMSP-OLS data. OLS satellite data are available for the period 1992-2013. Studies have employed satellite nighttime data in two ways: using it as a proxy for GDP per capita or combining it with other (survey-) data to measure economic development. Henderson et al. (2012) compare measurements of reported GDP growth, predicted growth based on nightlight data and a combination of both indicators. Their analysis highlights that the composite measure is the best indicator for measuring income growth, depending on whether countries have good or bad data quality for income measures (Elvidge et al., 2012). Income differences can be calculated based on the Lorenz curve to measure the distribution of light across the population on a national and sub-national level. Elvidge et al. (2012) find that the national Night Light Development Index (NLDI) correlates with the Human Development Index (HDI), electrification and poverty rates, similar to what I find regarding the correlation of the Gini Night Light Index in Bolivia with Sustainable Development Indicators (Figure A.1 and Figure A.2), including also electrification poverty. Elvidge et al. (2012) therefore argue that these light measures provide a better indicator of socioeconomic development rather than income inequality.

As a basis for the analysis in this paper, I use measures of night light intensity (sum, mean, minimum and maximum) - population weighted - and measure differences in light intensity per capita, with the known limitation that these measures often perform better in urbanized areas (Elvidge et al., 2013). In addition, I calculate a Gini Night Light Index, following the methodology implemented by Ivan et al. (2019) to measure within-municipality income inequality. I implement the standard night light cleaning steps, such as removing gas flares from the DMSP data, adding population data and computing pixel-based statistics in R (Lowe, 2014). I also top code outliers (top 99%). Table 1.1 presents the different light indicators that I employ and Figure 1.4 illustrates the distribution of changes in the Gini Night Light Index. Figure A.5 depicts the positive correlation between the Gini Night Light Index and other light-based indicators often used as a proxy for economic growth rather than inequality. The Gini Night Light Index is also positively correlated with the Relative Wealth Index, developed by Data for Good (Chi et al., 2022), which is partly based on satellite imagery, merged with survey data and other administrative data (Figure A.3). In line with the studies outlined above, Figures A.1 and A.2 confirm the positive correlation between the Gini Night Light Index and relevant municipal level outcomes related to the Sustainable Development Goals (SDG), as mapped in the SDG Municipal Atlas for Bolivia in 2016. This analysis validates their usage to capture within-municipality inequality and economic development. Most indicators are strongly and positively associated with the Gini Night Light Index, with particularly high correlations with electricity coverage and inequality (SDG 7.1) - possibly due to the measurement of light intensity - but also showing a positive and strong correlation with the level of unsatisfied basic needs (SDG 1.1) and wastewater treatment (SDG 6.3).

[11] https://payneinstitute.mines.edu/eog/viirs/

Figure 1.4: Distribution of changes in Gini Night Light Index, 2004-2019

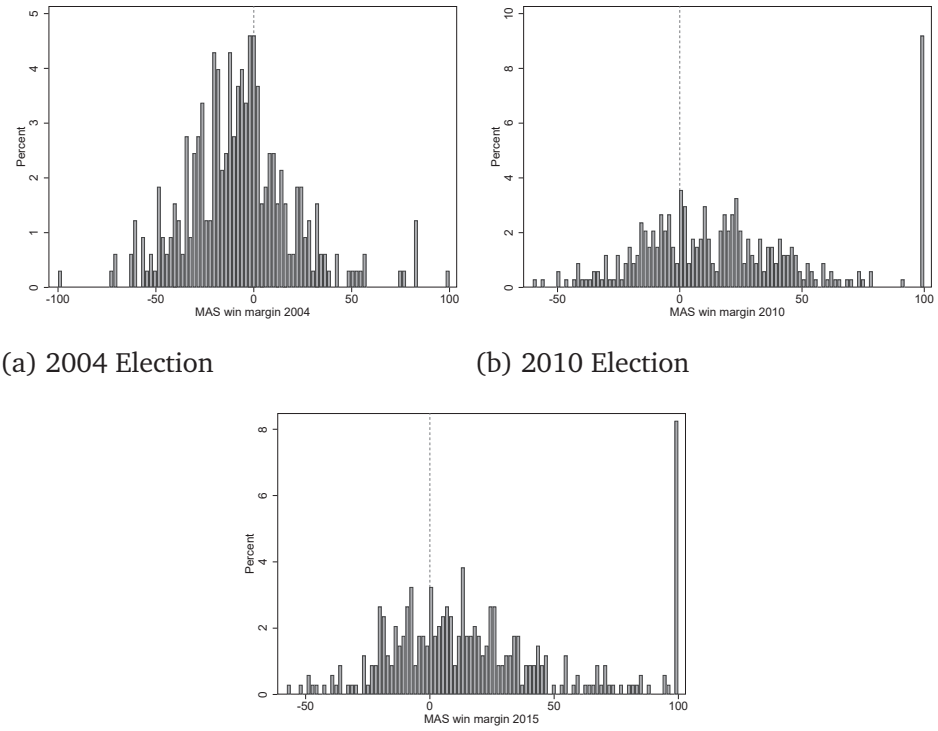


Note: Inequality reduction is calculated as the percentage point change in inequality between 1) 2004 and 2010; 2) 2010 and 2015; and 3) 2015 and 2019 in Bolivian municipalities. The Gini Night Light Index is calculated based on DMSP and VIIRS NASA satellite night light data.

Voting Data. The analysis uses voting data from the Bolivian Electoral Atlas for the municipal elections in 2004, 2010, and 2015.[12] I measure long-term economic outcomes of the subsequent governing periods and hence, the 2021 election is not included in the analysis. The electoral atlas provides information on recent election outcomes by party; number of valid votes; blank, null, or spoiled ballots; and registered voters. Data for national and sub-national elections are freely available online. I calculate the winning margin as the difference in vote margins between the MAS-affiliated mayoral candidate and the opposition candidate with the most votes, defined as follows: $\frac{v_{MAS}-v_{opp}}{v_{tot}}$ and shown in Figure 1.5. In 2010 and 2015, most candidates with a party affiliation belonged to MAS (Table 1.2). Especially in 2015, the opposition presented no unified candidates and was largely divided. Nevertheless, corruption scandals involving several MAS candidates in big cities around the country triggered a defeat, including in their core vote base '*El Alto*' (Achtenberg and Currents, 2015). I define opposition candidates in this analysis as all other candidates running against MAS candidates, most of which run without a (national) party affiliation because of local party fragmentation. I also codified the mayors' gender, and the municipalities' governance structure, (i.e., whether they were run by indigenous communities or citizen groups, following the 2004 election or whether municipalities officially voted for becoming autonomous indigenous communities in December 2009, following the renewal of the constitution). The mayors' names and municipal councils' party organizations are published in statistical bulletins for each election.

[12] https://atlaselectoral.oep.org.bo/#/. Some of the municipalities hold elections at different times.

Figure 1.5: MAS win margin 2004-2015



(a) 2004 Election (b) 2010 Election

(c) 2015 Election

Note: The figure presents the MAS winning margin in municipal elections 2004, 2010 and 2015m based on voting data from the Bolivian Electoral Atlas (https://atlaselectoral.oep.org.bo/#/)

Table 1.2: The distribution of MAS mayors and the opposition

Date	MAS mayors elected	Largest opposition
December 6, 2004	112/327 municipalities	Movimiento de Izquierda Revolucionaria (MIR)
April 4, 2010	231/337 municipalities	Movimiento Sin Miedo (MSM)
March 29, 2015	225/339 municipalities	Movimiento Demócrata Social (MDS)

Electoral Irregularities. I use election forensics to develop a measurement of the probability of electoral irregularities in the 2004, 2010 and 2015 municipal elections, as a proxy for municipal-level irregularities and corruption. The results, showing in which municipalities electoral fraud was most likely, are used in the RDD to examine whether MAS-affiliated municipalities were more likely to be subject to electoral irregularities and whether poverty and inequality reduction were lower (or higher) in these municipalities. The underlying idea of election forensics is that manipulated elections can be detected through irregular patterns in polling stations and voting data. Election forensics applies this concept using statistical tests on turnout data and vote counts/percentages. More precisely, the analysis looks at the number of votes and turnout rates and compares these findings to the expected distribution of votes or turnout if no fraud occurred. This expected distribution is a theoretical baseline that randomly generated datasets and voting data in stable democratic elections have been shown to follow. The statistical tests used

in this paper are based on Benford's law as a theoretical baseline (e.g. '1BL' and '2BL'), reflecting the assumption that non-manipulated numbers and vote counts from 1 to 9 (either the first- or second digit) are not equally distributed in large datasets. If the actual distribution of votes or turnout in a polling station differs significantly from the expected one, it indicates a high probability of irregularities such as vote suppression, inflation or stealing. However, the results need to be interpreted in light of the election context, and are only indicative. Apart from applying party-specific data when testing for vote stealing, other election forensic models use party vote percentages to compute the likelihood of fraud by the 'winning' party in each polling station. Looking at the practical implications, election forensics offers a tool for which the results must be carefully reviewed in light of the contextual setting and political situation. Most analyses focus on uncovering general electoral irregularities, but not specifically the extent or type of electoral fraud, similar to the analysis in this paper. Election forensics provides a valuable addition to most common forms of electoral monitoring, and is usable for past elections whenever vote counts data are available. The analysis in this work follows the University of Michigan's toolkit for detecting electoral irregularities (Mebane and Klaver, 2015), which runs several statistical tests using vote counts and percentages as well as turnout rates. Mebane (2019) implemented the election forensics toolkit to detect electoral fraud in Bolivia's presidential election in 2019, following widespread claims of irregularities and large blackouts during the vote counting and electronic publishing of results. The analysis concluded that, despite detected irregularities, the correct results could not have swayed the results enough to prevent Morales from being re-elected (Mebane, 2019). Escobari and Hoover (2020) further provide suggestive evidence of an irregular increase of MAS votes following the shutdown of the counting system in 2019. Similar election forensics analyses have been conducted in other Latin American elections, such as Peru (Mebane, 2021) and Argentina (Zhang et al., 2019).

Other Data. Census data from 2001 and 2012 were used to provide the outcome variable on poverty reduction (population living under the poverty line) as well as economic and social background information on municipalities, used as validation checks and covariates. The relevant background variables include urbanisation rate, years of education, population living without basic needs satisfied, share of the indigenous population and ethnic fragmentation. In addition, I use the Municipal Atlas of the SDGs in Bolivia 2020.[13] The atlas was an initiative to collect disaggregated data on the SDGs in Bolivian municipalities, financed by the Sustainable Development Solutions Network (SDSN) in Bolivia, and launched in July 2020. The atlas tracks several indicators for each SDG (though only for one year) that are standardized from 0-100. For SDG 10, reduction in inequality, three indicators are included, the Gini index of education (2012), inequality in electrical consumption (2016), and the population that does not speak Spanish (2012).

1.4.2 Estimation

I employ a sharp RDD as a method for causal inference to account for endogeneity because of unobservable municipal and mayor characteristics. Because it is impossible to compare the same municipality's outcomes with and without a MAS mayor, I use a

[13] https://www.sdsnbolivia.org/Atlas/

RDD that addresses these limitations by comparing close elections, assuming that these municipalities around the cutoff have similar characteristics. The running variable is the MAS winning margin, comparing municipalities where a MAS mayor was barely elected with municipalities where an opposition mayor was barely not elected. The design uses the cutoff point of $c = 0$.

I implement several robustness checks to address some of the limitations of a close RDD design.[14] First, party assignment may not be random. This restriction implies that MAS affiliation may be confounded with other politicians' characteristics in this analysis. In addition, Marshall (2022) argue that close election RDDs require additional assumptions to attribute the effect solely to the chosen characteristic - in this case MAS party affiliation - because politicians in close races could have specific features that make winning more likely or (un)likely, which they call compensating differentials (Marshall, 2022). I manually collected mayors' genders to account for at least one important characteristic and control for municipal-level characteristics, including local governance structures. Second, another limitation of a RDD design is its restricted external validity (de la Cuesta and Imai, 2016), because the analysis is restricted to a small sample of municipalities in which races are close ('discontinuity sample'). To mitigate this limitation, I test for different bandwidths specifications, following Cattaneo et al. (2020), using local polynomial regressions with MSE-optimal bandwidth selection, robust significance levels, standard errors clustered at the municipality level and election fixed effects. I also test the alternative CER-optimal bandwidth selection and find that the results are robust to a different bandwidth selection.

I estimate the average causal effect as the local average treatment effect (LATE) (Imbens and Lemieux, 2010; Lee and Lemieux, 2014) as follows. τ_{SRD} at $X_{it} = c$. $Y_{it}(0)$ is the outcome of the control group for municipality $_i$ during the governing period that follows the election at time $_t$. $Y_{it}(1)$ is the outcome of the treatment group. Estimating the effect at the cutoff, it follows:

$$\tau_{SRD} = E[Y_{it}(1) - Y_{it}(0) \mid X = c] = E[Y_{it}(1) \mid X_{it} = c] - E[Y_{it}(0) \mid X = c] \tag{1.1}$$

But treatment assignment is deterministic at $X_{it} = c$, hence, the LATE, continuous at $x = c$, around the cutoff is estimated as:

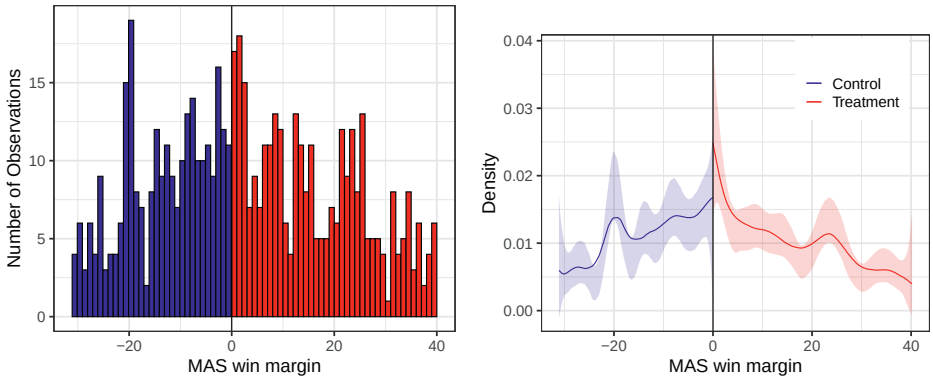
$$\lim_{x \to c} E[Y_{i_t} \mid X_{i_t} = x] - \lim_{c \leftarrow x} E[Y_{i_t} \mid X_{i_t} = x] \tag{1.2}$$

The sharp RDD assumes that all municipalities are compliant with the treatment (i.e., that every municipality with a positive MAS margin is also effectively governed by the

[14] Another recent point of criticism of close election RDDs is the incumbent advantage, which implies that close elections are not, in fact, comparable. Eggers et al. (2015), however, show for several national and local elections in different countries that there is no systematic difference between incumbents and newcomers, and argue that the incumbency advantage is random (Eggers, 2017). Hainmueller et al. (2015) further show that the incumbency effect in the United States is similar for close elections while also using broader bandwidths.

MAS). Yet, in the studied municipal elections this assumption is only fully satisfied after the constitutional change in 2009. In the 2004 election, MAS mayors were elected by the council if the election did not yield an absolute majority and mayors were not directly elected. Table B.3 lists the municipalities from the 2004 election, where the council majority did not correspond to the mayor's party affiliation. I run a fuzzy RDD as a robustness check to account for non-compliant treatment assignment in the 2004 election, which yields similar results to the sharp RDD (Table D.3).

Figure 1.6: Density Estimation



Note: The figures show the McCrary density estimations for the RD estimates, following Cattaneo et al. (2020).

Assumption 1: Continuity of the Conditional Distribution Function. The RDD assumes that there is no endogenous manipulation (electoral fraud in close elections), which is tested using the McCrary density test (2008), as in Cattaneo et al. (2020). Using election forensics, this assumption is further tested in the main analysis. Figure 1.6 shows that there is no electoral manipulation in the running variable, as there is no discontinuity at the cutoff.

Assumption 2: Continuity of Conditional Regression Functions. The second assumption of a RDD is based on pre-treatment continuity and covariate smoothness around the cutoff point. The covariate analysis and RD estimates are shown in Table 1.3 and Table 1.4 and RD plots for covariates in Figure D.1. Both tables show that almost all of the robust p-values are insignificant, except for voter turnout. MAS-led municipalities exhibit a higher voter turnout than municipalities governed by the opposition (significant conventional p-value in column (2) in Table 1.3). Because of these limitations, I test the robustness of the RD regression results by including covariates in Table D.1.

Table 1.3: Covariates - Presidential Election (RD Estimates)

Variables	(1) Opposition	(2) Voter turnout	(3) MAS share	(4) No. parties
RD_Estimate	-0.006	0.028	0.009	-0.062
Robust 95% CI	[-0.067 , 0.055]	[0.010 , 0.046]	[-0.076 , 0.094]	[-0.354 , 0.229]
Kernel Type	Triangular	Triangular	Triangular	Triangular
BW Type	mserd	mserd	mserd	mserd
Observations	308	312	308	367
Conventional Std. Error	0.009	0.003	0.043	0.149
Conventional p-value	0.851	0.002	0.841	0.675
Robust p-value	0.608	0.002	0.623	0.583
Order Loc. Poly. (p)	1.000	1.000	1.000	1.000
Order Bias (q)	2.000	2.000	2.000	2.000
BW Loc. Poly. (h)	14.960	14.283	13.869	13.82
BW Bias (b)	26.129	25.031	22.861	20.625
Election FE	Yes	Yes	Yes	Yes

Note: Election fixed effects included in (1), (2), (3) and (4). Observations are effective observations.

Table 1.4: Covariates - Municipal characteristics (RD Estimates)

Variables	(1) Pop density	(2) Ethnic fractionalization	(3) Indigenous share	(4) Avg. educ years
RD_Estimate	0.049	-0.044	0.017	0.094
Robust 95% CI	[-0.710 , 0.820]	[-0.116 , 0.027]	[-0.108 , 0.141]	[-0.519 , 0.706]
Kernel Type	Triangular	Triangular	Triangular	Triangular
BW Type	mserd	mserd	mserd	mserd
Observations	347	367	458	312
Conventional Std. Error	0.323	0.036	0.064	0.313
Conventional p-value	0.879	0.223	0.791	0.765
Robust p-value	0.888	0.166	0.966	0.957
Order Loc. Poly. (p)	1.000	1.000	1.000	1.000
Order Bias (q)	2.000	2.000	2.000	2.000
BW Loc. Poly. (h)	17.528	17.388	17.655	15.844
BW Bias (b)	26.318	30.378	27.453	27.008
Election FE	Yes	Yes	Yes	Yes

Note: Election fixed effects included in (1), (2), (3) and (4). Observations are effective observations.

1.5 Results

I begin by outlining the main findings on inequality and poverty reduction among MAS-led mayors. Following these baseline findings, the analysis highlights potential mechanisms of poverty and inequality reduction, in the form of 1) corruption, 2) mayors' gender, and 3) local governance structures. The results contribute to the long-discussed importance of local politicians and parties in local policymaking and economic outcomes and provide a local lens on poverty and inequality reduction in Bolivia.

The RD results in Table 1.5 indicate significant differences in inequality, but not poverty reduction in MAS-led municipalities when looking at the robust p-values. The regression results suggest that MAS-led mayors achieved more success with reducing poverty (RD-Estimate = -0.003), though not statistically significant, and less success in reducing inequality (RD-Estimate = 22.331, corresponding to approximately 1/3 of the standard deviation). The significant robust p-value on inequality even suggests that MAS-run municipalities experienced increases in inequality.

Table 1.5: The effect of the MAS party (RD Estimates)

	(1)	(2)	(3)
Variables	Inequality	Poverty	Electoral irregularities
RD_Estimate	22.331	-0.003	-0.113
Robust 95% CI	[1.839, 51.164]	[-0.010 , 0.003]	[-0.267 , 0.040]
Kernel Type	Triangular	Triangular	Triangular
BW Type	mserd	mserd	mserd
Observations	252	114	420
Conventional Std. Error	11.206	0.003	0.078
Conventional p-value	0.046	0.329	0.148
Robust p-value	0.035	0.335	0.227
Order Loc. Poly. (p)	1.000	1.000	1.000
Order Bias (q)	2.000	2.000	2.000
BW Loc. Poly. (h)	11.925	17.245	21.321
BW Bias (b)	22.155	25.458	35.320
Election FE	Yes	2010	Yes

Note: No covariates are included because of smoothness at cutoff. Results with covariates can be found in Table D.1 in the Appendix. Election fixed effects are included in (1) and (3). The dependent variables are the change in inequality (1) and poverty (2) in the three studied electoral periods. Positive values show inequality and poverty increasing in the governing period, and negative values show inequality and poverty decreasing. Column (3) shows the probability of electoral irregularities in all three elections. Observations are effective observations.

The Appendix shows the results accounting for covariates (Table D.1) and including time lags (Table D.2). Table D.4 and Table D.5 show RD results for the effect of MAS-led municipalities on public sector investment budget: none of the MAS-led municipalities show significant differences in the budget share allocated to different policy areas. Scatterplots for the poverty and inequality outcome measures are shown in Table A.4.

The presidential election of Morales in 2019 and disruptions during the vote count have led to far-reaching discussions of potential electoral irregularities, including on the local level (Escobari and Hoover, 2020; Mebane, 2019). In turn, the nearly significant p-value

in column (3) of Table 1.5 suggests a lower probability of electoral irregularities among MAS-won municipalities during all three municipal elections.

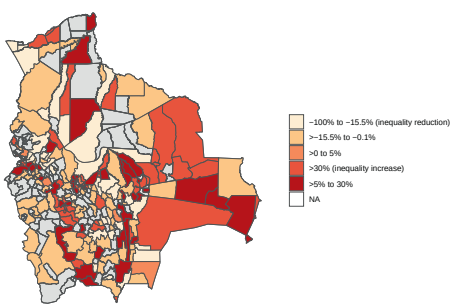
1.5.1 Inequality Reduction

The results in Table 1.5 for the close elections in 2004, 2010, and 2015 using year fixed effects in columns (1) and (3) show, contrary to the expectation in H_1, statistically significant and robust increases in inequality in MAS ruled municipalities, compared to the opposition, when looking at robust p-values. The RD estimate in column (1) presents the Gini Night Light Index as the outcome variable and serves to measure local changes in inequality reduction in 2004, 2010 and 2019 elections, during which time the MAS party gained substantial influence (Table 1.5). At the national level, some have argued that the MAS government has enabled the reduction of poverty and inequality in Bolivia. One would therefore expect MAS municipalities to support pro-poor and redistributive policies on the local level.

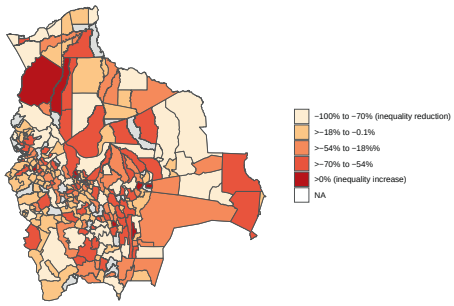
The results show increased inequality among MAS-led municipalities compared to the opposition, in contrast to the anticipated inequality reduction in MAS municipalities as predicted in H_1. Yet, the maps in Figure 1.7 show the distribution of income changes in quintiles and highlight that inequality has significantly decreased over time in most Bolivian municipalities. Especially during the last electoral cycle in the study period (2015-2019),[15] inequality reductions were high compared to the first electoral period (2004-2010). Overall, MAS-supported municipalities located in the Eastern Highlands showed large decreases in inequality relative to the East (i.e., in the department of Santa Cruz), largely run by opposition parties. A few municipalities stand out with large increases in inequality over time (Figure 1.8), such as Tiahuanaco and Tito Yupanqui at lake Titicaca; and Corque, located in the Department of Oruro. All of these municipalities are largely rural, and one of the explanations for this result might be the limitation of the Gini Night Light Index, for which measurement is more accurate in urbanized areas than rural areas (Elvidge et al., 2013). I further test for potential inequality spillover effects to neighbouring municipalities by estimating the spatial autocorrelation of inequality reduction (Figure C.1).

[15]The last municipal election was held in 2021, but due to the devastating effect of COVID-19 in Bolivia, changes in inequality are measured up to the outbreak of COVID-19.

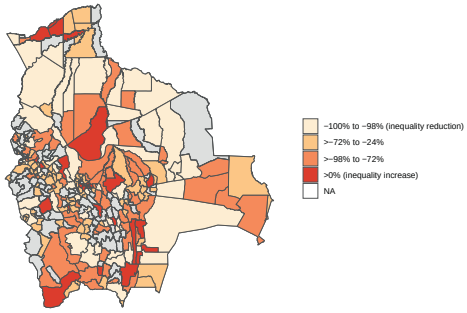
Figure 1.7: Inequality reduction in 2004, 2010, 2015



(a) Inequality reduction 2004-2010



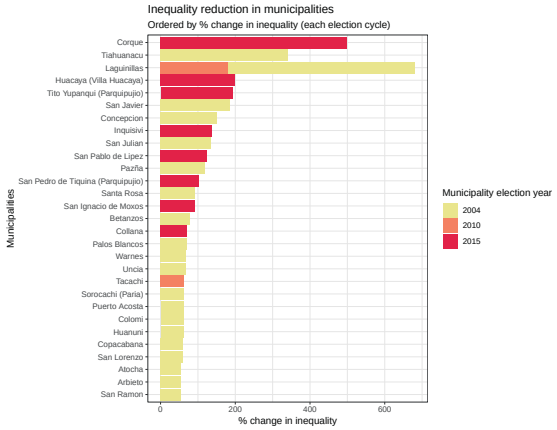
(b) Inequality reduction 2010-2015



(c) Inequality reduction 2015-2019

Note: Inequality reduction is calculated as the percentage point change in inequality between 1) 2004 and 2010; 2) 2010 and 2015, and 3) 2015 and 2019 in Bolivian municipalities. The Gini Night Light Index is calculated based on DMSP and VIIRS NASA Satellite Night Light data.

Figure 1.8: Inequality reduction in Bolivian municipalities, 2001-2012

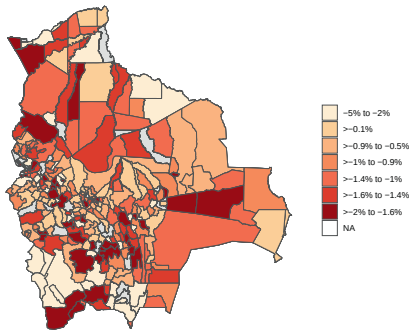


Note: Inequality reduction is calculated as the percentage point change in inequality between 1) 2004 and 2010, 2) 2010 and 2015, and 3) 2015 and 2019 in Bolivian municipalities. The Gini Night Light Index is calculated based on DMSP and VIIRS NASA satellite nightlight data. The ranking shows the top 20 municipalities with the largest inequality increase in 2004, 2010, and 2015 (highlighted in colours depending on the election cycle).

1.5.2 Poverty Reduction

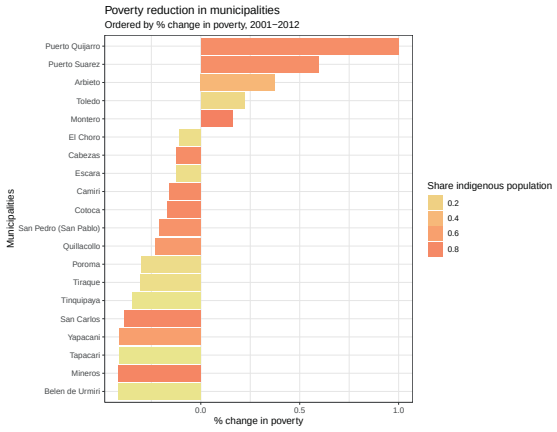
Municipalities with high inequality often also have high poverty rates. At the same time, local redistributive policies and inequality reduction help to reduce poverty. The non-significant conventional and robust p-value suggests, if anything, potential positive effects of MAS politics on poverty reduction at the local level. The dependent variable measures change in poverty. Hence, a negative coefficient lends support to H_2 indicating that MAS mayors may have been more successful in reducing poverty in their governed municipalities, though not by much and not statistically significant (RD-Estimate = -0.003) (Table 1.5).

Figure 1.9: Poverty reduction in 2001-2012



Note: Poverty reduction is calculated as the percentage change in poverty between 2001 and 2012 in Bolivian municipalities. The data are from UDAPE (https://www.udape.gob.bo) and I calculate the change in poverty rate between the 2012 and 2001 census. No newer data is available at the municipal level.

Figure 1.10: Poverty reduction in Bolivian municipalities, 2001-2012



Note: Poverty reduction is calculated as the percentage change in poverty between 2001 and 2012 in Bolivian municipalities. The data are from UDAPE (https://www.udape.gob.bo) and I calculate the change in poverty rate between the 2012 and 2001 census. No newer data is available at the municipal level. The ranking shows the top 20 municipalities with the largest poverty increase by the share of the indigenous population in the municipalities.

Using official poverty measures at the municipal level calculated based on census data, Figure 1.9 shows the relative poverty decrease in all Bolivian municipalities between 2001 and 2012, a period in which most Latin American countries experienced large inequality and poverty reductions. Poverty rates increased only in five municipalities, shown in Figure 1.10, which are located at the border with Brazil (Puerto Quijarro and Puerto Suarez) and in the Departments of Cochabamba (Arbierto) and Santa Cruz (Montero). Importantly, these municipalities are not the same ones that demonstrated the largest increases in inequality, pointing to different poverty and inequality reduction mechanisms in Bolivia (Figure 1.10).

1.5.3 Corruption

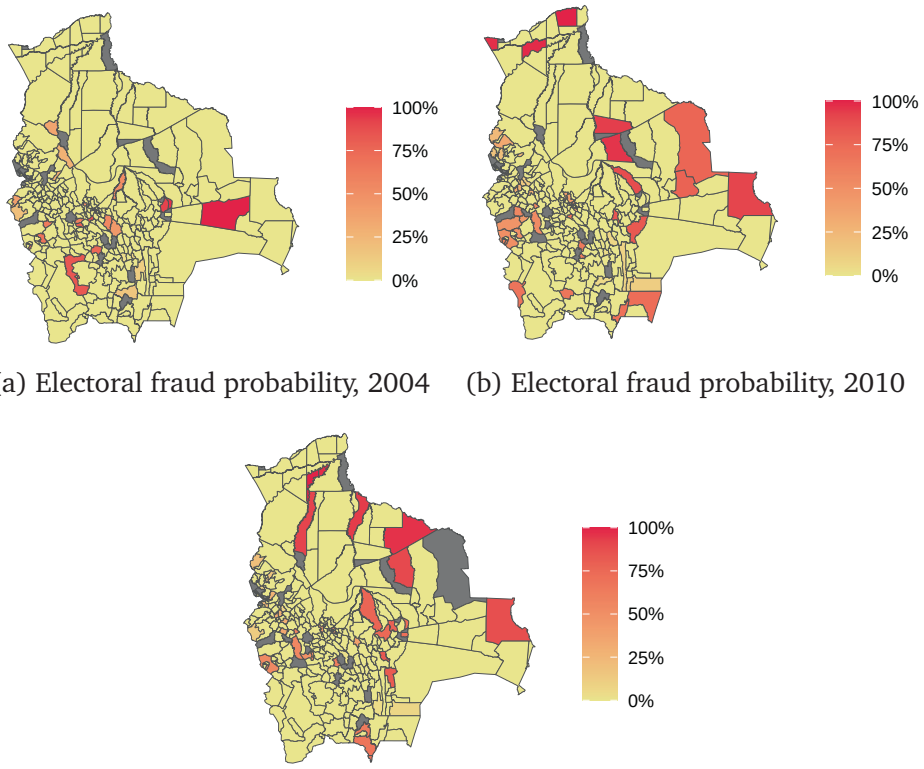
In the aftermath of Morales' resignation and allegations of electoral fraud during the 2019 election, Bolivia stabilized politically and strengthened its democratic institutions (V-Dem Institute, 2023). Yet, corruption scandals surrounding several MAS electoral candidates at earlier municipal elections have led to defeats in some cities (Achtenberg and Currents, 2015). Electoral irregularities in local elections not only serve to win close elections but also offer an indication and proxy for the level of corruption in these municipalities. Table 1.5 shows that close MAS-elected municipalities exhibited a lower probability of electoral irregularities, yet the coefficient is not statistically significant (RD-Estimate=-0.113). Similar to the baseline results for poverty and inequality reduction, these findings are similar when including covariates (Table D.1) and estimating a fuzzy RDD accounting for non-compliance during the 2004 election (Table D.3).

Table 1.6: The effect of the MAS party by corruption (RD Estimates)

	(1)	(2)	(3)	(4)
	Low corruption		High corruption	
Variables	Inequality	Poverty	Inequality	Poverty
RD_Estimate	35.847	-0.003	7.971	-0.015
Robust 95% CI	[11.883 , 73.006]	[-0.008 , 0.003]	[-23.638 , 50.440]	[-0.025 , -0.006]
Kernel Type	Triangular	Triangular	Triangular	Triangular
BW Type	mserd	mserd	mserd	mserd
Observations	139	102	142	40
Conventional Std. Error	13.825	0.002	16.303	0.004
Conventional p-value	0.010	0.454	0.625	0.001
Robust p-value	0.006	0.503	0.478	0.010
Order Loc. Poly. (p)	1.000	1.000	1.000	1.000
Order Bias (q)	2.000	2.000	2.000	2.000
BW Loc. Poly. (h)	11.174	18.529	17.366	23.684
BW Bias (b)	23.690	27.659	24.039	28.694
Election FE	Yes	2010	Yes	2010
Covariates	Yes	Yes	Yes	Yes

Note: Election fixed effects included in (1) and (3). The dependent variables are the change in inequality (1) and poverty (2) in the three studied electoral periods. Positive values show inequality and poverty increasing in the governing period, and negative values show inequality and poverty decreasing. Observations are effective observations. Low and high corruption is defined based on the probability that electoral fraud is observed in all three municipal elections studied (2004, 2010, 2015).

Figure 1.11: Electoral irregularities at municipal elections: 2004, 2010 and 2015



(a) Electoral fraud probability, 2004 (b) Electoral fraud probability, 2010

(c) Electoral fraud probability, 2015

Note: Electoral irregularities are calculated using vote shares at the 2004, 2010 and 2015 municipal elections. The data are from the Bolivian Electoral Atlas: https://atlaselectoral.oep.org.bo/#/

Table 1.7: Number of municipal elections with higher fraud probability (2004, 2010, 2015)

Municipality	Number of elections with higher probability
Villamontes	2 elections
Quillacollo	2 elections
Porvenir (Campo Ana)	2 elections
Colquencha	2 elections
Camargo	2 elections

Note: Electoral irregularities are calculated using vote shares at the 2004, 2010 and 2015 municipal elections. The data are from the Bolivian Electoral Atlas: https://atlaselectoral.oep.org.bo/#/. The ranking shows the five municipalities with higher probabilities of electoral fraud in two out of three municipal elections. None of the municipalities showed a higher probability in all elections.

Interestingly, Table 1.6 shows the statistically significant moderating effect of the level of corruption on poverty and inequality reduction in MAS-led municipalities. In MAS-led municipalities showing lower probabilities of corruption, inequality increases significantly, shown in column (1) of Table 1.6. In contrast to these findings, MAS-led municipalities exposed to higher irregularities show significant decreases in poverty, shown in column (4) of Table 1.6. These findings suggest that the level of electoral irregularities has significant implications for local poverty and inequality reductions, with reversing trends.

Lastly, only five municipalities showed a higher probability of electoral irregularities during two of the three studied municipal elections (Figure 1.11 and Table 1.7). Hence, these findings suggest that irregularities affected most municipalities only during one of the three elections.

1.5.4 Mechanisms: Gender and Autonomous Governance

Different political factors might mediate the effect of MAS mayors on inequality and poverty reduction, such as the mayor's gender or local governance structures. Despite Bolivia being a frontrunner on women's equal political representation in parliament, cultural patriarchal structures are deeply rooted (Achtenberg and Currents, 2015). Female-run municipalities may therefore exhibit different policy outcomes due to the higher likelihood of female politicians advocating for women's interests and the unique needs of their constituents (Chattopadhyay and Duflo, 2004; Erikson and Verge, 2020). Female politicians have also been associated with positive health (Macmillan et al., 2018), education (Beaman et al., 2012), and labor market outcomes (Ghani et al., 2013), and with higher trust in government (Barnes and Taylor-Robinson, 2018) and lower levels of corruption (Alexander et al., 2023).

Table 1.8: The effect of the MAS party in male-led and non-autonomous governed municipalities (RD Estimates)

	(1)	(2)	(3)	(4)
	Male-led		Non-autonomous governance	
Variables	Inequality	Poverty	Inequality	Poverty
RD_Estimate	22.909	-0.004	21.012	-0.003
Robust 95% CI	[-0.840 , 55.236]	[-0.012 , 0.003]	[-0.643 , 51.286]	[-0.010 , 0.004]
Kernel Type	Triangular	Triangular	Triangular	Triangular
BW Type	mserd	mserd	mserd	mserd
Observations	231	104	223	111
Conventional Std. Error	12.569	0.003	11.860	0.003
Conventional p-value	0.068	0.217	0.049	0.347
Robust p-value	0.057	0.236	0.037	0.341
Order Loc. Poly. (p)	1.000	1.000	1.000	1.000
Order Bias (q)	2.000	2.000	2.000	2.000
BW Loc. Poly. (h)	11.620	16.491	11.570	17.163
BW Bias (b)	20.599	25.893	23.188	25.213
Election FE	Yes	2010	Yes	2010

Note: Covariates not included because of smoothness at cutoff. Election fixed effects are included in (1) and (3). The dependent variables are the change in inequality (1) and poverty (2) in the three studied electoral periods. Positive values show inequality and poverty increasing in the governing period, and negative values show inequality and poverty decreasing. Observations are effective observations. Columns (1) and (2) show the results for a sub-sample of municipalities that are male-led and columns (3) and (4) show the results for a sub-sample of municipalities that have non-autonomous governance structures. The results for female-led and autonomous governed municipalities are not shown because of too small sample sizes, one of the possible reasons for similar results as in Table 1.5.

To test the effect of female and male mayors affiliated with the left-wing MAS party on poverty and inequality reduction, I run the same RDD as specified in Table 1.5 using a

sub-sample of male mayors. Table 1.8 shows that the local average treatment effect of MAS on inequality and poverty reduction is similar for female and male mayors. Even though the number of women in politics has increased over the years in Bolivia and despite Bolivia's commitment to gender parity in politics, in the 2015 election, only 8% of the municipalities were run by women, providing only a small sample of female-led municipalities as a comparison.

Local governance structures have been shown to be an important factor for policy implementation and government responsiveness (Magaloni et al., 2019; Mullin, 2008), for example on public service provision and health outcomes (Ciccone et al., 2014), especially when following citizen-centred community decisions (Bakker et al., 2012). As formulated in $H_{1.2}$, inclusive and participatory local institutions may serve to channel demands of the electorate into the political system and create the foundation for a responsive local government, which is why I expect higher poverty and inequality reduction in these municipalities. Yet, few Bolivian municipalities have completed the process of becoming autonomous municipalities, providing only a small sub-sample for measuring the effect of alternative forms of local democracy. Contrary to my expectation, the RDD results show a robust inequality increase among MAS-run municipalities in all municipalities with no autonomous governance structures (Table 1.8), similar to the baseline findings shown in Table 1.5.

1.6 Conclusion

The reasons for large poverty and inequality reductions in Latin America during the 2000s have been widely discussed. However, robust analysis of within-country developments and drivers for these changes in poverty and inequality have been largely overlooked, in part because of a significant lack of data on local level political processes, policies and outcomes. This paper highlights the need for better analysis and innovative data and methods at the local level to improve understanding of the institutional, political and social causes for poverty and inequality trajectories in developing countries.

The results presented in this paper complement previous research on the impact of local governments' partisanship in developing countries that find minimal differences between politicians from different parties and ideologies. The results of the close election RDD for municipal elections in 2004, 2010 and 2015 provide suggestive evidence that in Boliva MAS-led mayors have achieved more success in reducing poverty, but less success in reducing inequality in their governed municipalities relative to the opposition. MAS-led municipalities even show significantly higher inequality increases. High local responsiveness and the strong effects of partisanship and ideology have been replicated across different contexts, mostly in high-income and consolidated democracies. In the context of Bolivia, one would expect MAS-affiliated municipalities to engage in pro-poor policies. In addition, theories of partisan alignment would suggest that MAS mayors have access to more material and immaterial resources from their governing party, especially because intra-country conflicts make MAS mayors particularly important for the national government. The findings emphasize the importance of municipal-level irregularities for poverty and inequality reduction. Notably, the mediating effect points in two directions for changes in poverty and inequality, and in municipalities with higher irregularities,

poverty has decreased significantly among MAS-led municipalities.

The negative impact of left-wing mayors on local inequality reduction highlights the importance of other mechanisms that foster inequality reduction, and points to an equal distribution of inequality reduction in Bolivia (within-country). The results further highlight the importance of sub-national inequality and poverty reduction analyses. Policy decisions and local investments require granular and disaggregated data on vulnerable population groups to decrease local inequality and poverty and boost local resilience to deal with exogenous shocks, such as COVID-19 and climate disasters. Specific policy mechanisms such as local participatory budgeting can help to engage vulnerable populations in the decision-making process at the local level and tailor policies to local needs. The data gap is especially wide in developing countries and it can only be partly filled by satellite imagery and novel data analysis, such as election forensics, as the analysis in this paper shows.

Overall, the results of this paper contribute to the long-discussed importance of local politicians and parties in local policymaking and offer a local lens on inequality and poverty reduction in Bolivia. Local politicians are at the forefront of addressing citizens' needs and demands on the local level, and more attention should be paid to the channels through which local politics affect inequality and poverty reduction in fragile democracies and developing country contexts.

References

Achtenberg, E. and Currents, R. (2015). How Evo Morales's Third Term Will Challenge Bolivia's Social Movements. *NACLA*.

Akhtari, M., Moreira, D., and Trucco, L. (2022). Political Turnover, Bureaucratic Turnover, and the Quality of Public Services. *The American Economic Review*, 112(2):442–493.

Alesina, A., Cassidy, T., and Troiano, U. (2019). Old and Young Politicians. *Economica*, 86(344):689–727.

Alexander, A., Charron, N., and Justesen, M. K. (2023). Female representation and electoral clientelism: New insights from South African municipal elections. *Electoral Studies*, 82:102580.

Alonso, J. M. and Andrews, R. (2020). Political Ideology and Social Services Contracting: Evidence from a Regression Discontinuity Design. *Public Administration Review*, 80(5):743–754.

And, S. and Linera, B. A. G. (2014). *Plebeian Power: Collective Action and Indigenous, Working-Class and Popular Identities in Bolivia*, volume 55 of *Historical Materialism Book Series*. BRILL, Boston.

Aragon, F. and Pique, P. (2020). Better the devil you know? Reelected politicians and policy outcomes under no term limits. *Public Choice*, 182:1–16.

Argote, P. and Navia, P. (2018). Do Voters Affect Policies? Within-Coalition Competition in the Chilean Electoral System. *Journal of Politics in Latin America*, 10(1):3–28.

Asher, S. and Novosad, P. (2017). Politics and Local Economic Growth: Evidence from India. *American Economic Journal: Applied Economics*, 9(1):229–273.

Bakker, J., Denters, B., Vrielink, M. O., and Klok, P.-J. (2012). Citizens' Initiatives: How Local Governments Fill their Facilitative Role. *Local Government Studies*, 38(4):395–414.

Baltrunaite, A., Bello, P., Casarico, A., and Profeta, P. (2014). Gender quotas and the quality of politicians. *Journal of Public Economics*, 118:62–74.

Barnes, T. D. and Taylor-Robinson, M. M. (2018). *Women Cabinet Ministers in Highly Visible Posts and Empowerment of Women: Are the Two Related?*, pages 229–255. Springer International Publishing, Cham.

Bartnicki, S., Alimowski, M., and Górecki, M. A. (2022). The anomalous electoral advantage: Evidence from over 17,000 mayoral candidacies in Poland. *European Journal of Political Economy*, 72:102109.

Beaman, L., Duflo, E., Pande, R., and Topalova, P. (2012). Female leadership raises aspirations and educational attainment for girls: a policy experiment in India. *Science*, 335(6068):582–586.

Besley, T. and Coate, S. (1997). An Economic Model of Representative Democracy. *The Quarterly Journal of Economics*, 112(1):85–114.

Borcan, O. (2020). The Illicit Benefits of Local Party Alignment in National Elections. *The Journal of Law, Economics, and Organization*, 36(3):461–494.

Brollo, F. and Nannicini, T. (2012). Tying your Enemy's Hands in Close Races: The Politics of Federal Transfers in Brazil. *American Political Science Review*, 106(4]):742–761.

Brollo, F. and Troiano, U. (2016). What happens when a woman wins an election? Evidence from close races in Brazil. *Journal of Development Economics*, 122:28–45.

Bruce, R., Cavgias, A., Meloni, L., and Remígio, M. (2022). Under pressure: Women's leadership during the COVID-19 crisis. *Journal of Development Economics*, 154.

Burgess, R., Jedwab, R., Miguel, E., Morjaria, A., and i Miquel, G. P. (2015). The Value of Democracy: Evidence from Road Building in Kenya. *The American Economic Review*, 105(6):1817–1851.

Cannon, B. and Kirby, P. (2012). *Civil Society and the State in Left-led Latin America: Challenges and Limitations to Democratization*. Zed Books, London and New York.

Cárdenas, M. (2010). State Capacity in Latin America. *Economía*, 10(2):1–45.

Carnes, N. and Lupu, N. (2016). What Good Is a College Degree? Education and Leader Quality Reconsidered. *The Journal of Politics*, 78(1):35–49.

Carozzi, F. and Repetto, L. (2019). Distributive politics inside the city? The political economy of Spain's Plan E. *Regional Science and Urban Economics*, 75:85–106.

Cattaneo, M. D., Idrobo, N., and Titiunik, R. (2020). *A Practical Introduction to Regression Discontinuity Designs: Foundations*. Elements in Quantitative and Computational Methods for the Social Sciences. Cambridge University Press.

Chattopadhyay, R. and Duflo, E. (2004). Women as Policy Makers: Evidence from a Randomized Policy Experiment in India. *Econometrica*, 72(5):1409–1443.

Chavis, L. (2010). Decentralizing development: Allocating public goods via competition. *Journal of Development Economics*, 93(2):264–274.

Chen, X. and Nordhaus, W. D. (2019). VIIRS Nighttime Lights in the Estimation of Cross-Sectional and Time-Series GDP. *Remote Sensing*, 11:1057.

Chepoi, V., Dragan, F. F., Newman, I., Rabinovich, Y., and Vaxes, Y. (2008). Do Parties Matter for Economic Outcomes? A Regresssion Discontinuity Approach. *Journal of the European Economic Association*, 6(5):1037–1056.

Chi, G., Fang, H., Chatterjee, S., and Blumenstock, J. E. (2022). Microestimates of wealth for all low- and middle-income countries. *Proceedings of the National Academy of Sciences*, 119(3):e2113658119.

Chumacero, R. A. (2019). Skill versus Luck: Bolivia and its recent Bonanza. *Latin American Economic Review*, 28(7):2–27.

Ciccone, D. K., Vian, T., Maurer, L., and Bradley, E. H. (2014). Linking governance mechanisms to health outcomes: A review of the literature in low- and middle-income countries. *Social Science Medicine*, 117:86–95.

de Benedictis-Kessner, J. and Warshaw, C. (2016). Mayoral Partisanship and Municipal Fiscal Policy. *The Journal of Politics*, 78(4):1124–1138.

de Benedictis-Kessner, J. and Warshaw, C. (2020). Politics in Forgotten Governments: The Partisan Composition of County Legislatures and County Fiscal Policies. *The Journal of Politics*, 82(2):460–475.

de la Cuesta, B. and Imai, K. (2016). Misunderstandings About the Regression Discontinuity Design in the Study of Close Elections. *Annual Review of Political Science*, 7:375–396.

Downs, A. (1957). An Economic Theory of Political Action in a Democracy. *Journal of Political Economy*, 65(2):135–150.

Dulay, D. and Go, L. (2022). When Running for Office Runs in the Family: Horizontal Dynasties, Policy, and Development in the Philippines. *Comparative Political Studies*, 55(4):588–627.

Eaton, K., Kaiser, K.-A., and Smoke, P. J. (2011). *The Political Economy of Decentralization Reforms*. The World Bank.

Eggers, A. C. (2017). Quality-Based Explanations of Incumbency Effects. *The Journal of Politics*, 79(4):1315–1328.

Eggers, A. C., Fowler, A., Hainmueller, J., Hall, A. B., and Jr., J. M. S. (2015). On the Validty of the Regression Discontinuity Design for Estimating Electoral Effects: New Evidence from Over 40,000 Close Races. *American Journal of Political Science*, 59:259–274.

Einstein, K. L. and Glick, D. M. (2018). Mayors, Partisanship, and Redistribution: Evidence Directly from U.S. Mayors. *Urban Affairs Review*, 54(1):74–106.

Elvidge, C. D., Baugh, K. E., S. J. Anderson and, P. C. S., and Ghosh, T. (2012). The Night Light Development Index (NLDI): a spatially explicit measure of human development from satellite data. *Social Geography*, 7:23–35.

Elvidge, C. D., Baugh, K. E., Zhizhin, M., and Hsu, F.-C. (2013). Why VIIRS data are superior to DMSP for mapping nighttime lights. *Proceedings of APAN 201*, 35.

Erikson, J. and Verge, T. (2020). Gender, Power and Privilege in the Parliamentary Workplace. *Parliamentary Affairs*, 75(1):1–19.

Ervik, B. (2015). Does the Mayor's Party Brand Matter? The Prospect of Statewide Parties' Policy in Local Government. *Local Government Studies*, 41(3):339–361.

Escobari, D. and Hoover, G. A. (2020). Evo Morales and Electoral Fraud in Bolivia: A Natural Experiment and Discontinuity Evidence. Available at SSRN: https://ssrn.com/abstract=3492928 or http://dx.doi.org/10.2139/ssrn.3492928.

Faguet, J.-P. (2009). Governance from below in Bolivia: A Theory of Local Government with Two Empirical Tests. *Latin American Politics and Society*, 51(4):29–68.

Faguet, J.-P. (2012). *Decentralization and Popular Democracy: Governance from Below in Bolivia*. University of Michigan Press.

Faguet, J.-P. (2019). Revolution from Below: Cleavage Displacement and the Collapse of Elite Politics in Bolivia. *Politics & Society*, 47(2):205–250.

Faguet, J.-P. and Sánchez, F. (2008). Decentralization's Effects on Educational Outcomes in Bolivia and Colombia. *World Development*, 36(7):1294–1316.

Feierherd, G. (2022). Courting Informal Workers: Exclusion, Forbearance, and the Left. *American Journal of Political Science*, 66(2):418–433.

Ferreira, F. V. and Gyourko, J. (2007). Do Political Parties Matter? Evidence from U.S. Cities.

Ferreira, F. V. and Gyourko, J. (2014). Does Gender Matter for Political Leadership? The Case of U.S. Mayors. *Journal of Public Economics*, 112:24–39.

Fidler, R. (2015). Bolivia's voters reaffirm 'process of change' but issue warnings to the governing MAS.

Fiva, J. H., Folke, O., and Sørensen, R. J. (2018). The Power of Parties: Evidence from Close Municipal Elections in Norway. *The Scandinavian Journal of Economics*, 120(1):3–30.

Folke, O., Persson, T., and Rickne, J. (2016). The Primary Effect: Preference Votes and Political Promotions. *American Political Science Review*, 110(3):559–578.

Freier, R. and Thomasius, S. (2016). Voters prefer more qualified mayors, but does it matter for public finances? Evidence for Germany. *International Tax and Public Finance*, 23(5):875–910.

Gerber, E. R. and Hopkins, D. J. (2011). When Mayors Matter: Estimating the Impact of Mayoral Partisanship on City Policy. *American Journal of Political Science*, 55(2):326–339.

Ghani, E., Mani, A., and O'Connell, S. D. (2013). *Can Political Empowerment Help Economic Empowerment? Women Leaders and Female Labor Force Participation in India*. The World Bank.

Girardi, D. (2020). Partisan Shocks and Financial Markets: Evidence from Close National Elections. *American Economic Journal: Applied Economics*.

Goncalves, S. (2014). The Effects of Participatory Budgeting on Municipal Expenditures and Infant Mortality in Brazil. *World Development*, 53:94–110.

Gouvêa, R. and Girardi, D. (2021). Partisanship and local fiscal policy: Evidence from Brazilian cities. *Journal of Development Economics*, 150:102637.

Hainmueller, J., Hangartner, D., and Yamamoto, T. (2015). Validating vignette and conjoint survey experiments against real-world behavior. *Proceedings of the National Academy of Sciences of the United States of America*, 112(8):2395–2400.

Henderson, V., Storeygard, A., and Weil, D. N. (2012). Measuring Economic Growth from Outer Space. *American Economic Review*, 102:994–1028.

Herwartz, H. and Theilen, B. (2017). Ideology and redistribution through public spending. *European Journal of Political Economy*, 56:74–90.

Hicks, D. L., Maldonado, B., Piper, B., and Rios, A. G. (2018). Identity, Patronage, and Redistribution: Economic Inequality in Bolivia under Evo Morales. *Journal of Econommics, Race and Policy*, pages 1–26.

Hidalgo, F. D. and Nichter, S. (2016). Voter Buying: Shaping the Electorate through Clientelism. *American Journal of Political Science*, 60(2):436–455.

Hill, A. J. and B.Jones, D. (2017). Does partisan affiliation impact the distribution of spending? Evidence from state governments' expenditures on education. *Journal of Economic Behavior Organization*, 143:58–77.

Hollenbach, F. M. and Silva, T. N. (2019). Fiscal Capacity and Inequality: Evidence from Brazilian Municipalities. *The Journal of Politics*, 81(4):1434–1445.

Hott, H. A. C. F. and Menezes-Filho, N. (2023). Are newcomers financially responsible? Evidence from close elections in Brazilian Municipalities. *Local Government Studies*, ahead-of-print(ahead-of-print):1–39.

Imbens, G. W. and Lemieux, T. (2010). Regression Discontinuity Designs in Economics. *Journal of Economic Literature*, 48:281–355.

Ivan, K., Holobâca, I.-H., Benedek, J., and Török, I. (2019). Potential of Night-Time Lights to Measure Regional Inequality. *Remote Sensing*, 12(33).

Johannessen, P. G. (2020). Linkage Switches in Local Elections: Evidence From the Workers' Party in Brazil. *Comparative Political Studies*, 53(1):109–143.

Jost, S. (2008). Bolivien: Politische Neugründung in der Sackgasse. *GIGA Focus Lateinamerika*.

Klašnja, M. and Pop-Eleches, G. (2022). Anticorruption Efforts and Electoral Manipulation in Democracies. *The Journal of Politics*, 84(2):739–752.

Kramon, E. (2017). *Why is Electoral Clientelism Effective?: Experimental Evidence*, page 95–119. Cambridge University Press.

Lavinas, L. (2013). Anti-Poverty Schemes Instead of Social Protection. *desiguALdades.net Working Paper Series 51, Berlin: desiguALdades.net International Research Network on Interdependent Inequalities in Latin America*.

Lazarte, J. (2005). Bolivia. In Nohlen, D., editor, *Elections in the Americas: A Data Handbook*, chapter Bolivia, pages 123–162. Oxford University Press, Oxford.

Lee, D. S. and Lemieux, T. (2014). Does Gender Matter for Political Leadership? The Case of U.S. Mayors. *Journal of Public Economics*, 112:24–39.

Lippmann, Q. (2023). Persistence of incumbents and female access to political positions. *Journal of Economic Behavior Organization*, 206:327–349.

Lowe, M. (2014). Nigh Lights and ArcGIS: A Brief Guide.

Lucardi, A., Micozzi, J. P., and Vallejo, A. (2023). Does the early bird always get the worm? First round advantages and second round victories in Latin America. *Electoral Studies*, 81:102570.

Macmillan, R., Shofia, N., and Sigle, W. (2018). Gender and the Politics of Death: Female Representation, Political and Developmental Context, and Population Health in a Cross-National Panel. *Demography*, 55:1905–1934.

Magaloni, B., Díaz-Cayeros, A., and Euler, A. R. (2019). Public Good Provision and Traditional Governance in Indigenous Communities in Oaxaca, Mexico. *Comparative Political Studies*, (12).

Marshall, J. (2022). Can Close Election Regression Discontinuity Designs Identify Effects of Winning Politician Characteristics? *American Journal of Political Science*, n/a(n/a).

McNelly, A. (2020). The incorporation of Social Organizations under the MAS in Bolivia. *Latin American Perspectives*, 47(233):76–95.

Mebane, W. R. (2019). Evidence Against Fraudulent Votes Being Decisive in the Bolivia 2019 Election. http://websites.umich.edu/ wmebane/Bolivia2019.pdf.

Mebane, W. R. (2021). Analysis of the Peru 2021 Presidential Election. http://www.umich.edu/ wmebane/Peru2021.pdf.

Mebane, Jr., W. R. and Klaver, J. (2015). Election Forensics: Strategies versus Election Frauds in Germany. *Annual Meeting of the Midwest Political Science Association, Chicago, April 16–19, 2015*.

Meltzer, A. H. and Richard, S. F. (1981). A Rational Theory of the Size of Government. *The Journal of Political Economy*, 89(5):914–927.

Meriläinen, J. and Tukiainen, J. (2022). The Advantage of Incumbents in Coalitional Bargaining. *Legislative Studies Quarterly*, 47(4):921–957.

Miguel, E. and Gugerty, M. K. (2005). Ethnic diversity, social sanctions, and public goods in Kenya. *Journal of Public Economics*, 89(11):2325–2368.

Minkoff, S. L. (2009). Minding Your Neighborhood: The Spatial Context of Local Redistribution. *Social Science Quarterly*, 90(3):516–537.

Modica, L. and Ascarrunz, J. A. (2021). Bolivia Elecciones Subnacionales 2021 (Elecciones de Autoridades Departamentales, Regionales y Municipales). https://doi.org/10.6084/m9.figshare.14396402.v1. Preprint.

Mokrani, D. and Chávez, M. (2012). Perspectivas del proceso de cambio tras la última victoria electoral del Movimiento al Socialismo. In Ernst, T. and Schmalz, S., editors, *El primer gobierno de Evo Morales: Un balance retrospectivo.*, chapter Perspectivas del proceso de cambio tras la última victoria electoral del Movimiento al Socialismo, page 375–396. Plural Editores, La Paz.

Mullin, M. (2008). The Conditional Effect of Specialized Governance on Public Policy. *American Journal of Political Science*, 52(1):125–141.

Natividad, G. (2022). Decentralizing investment: Evidence from municipal organization after close elections. *Journal of Economics & Management Strategy*, 31(3):734–761.

Nichter, S. (2018). *Votes for Survival*. Cambridge University Press, Cambridge.

Ornstein, J. T., Hays, J. C., and Franzese Jr., R. J. (2022). The interest premium for left government: Regression-discontinuity estimates. *Economics & Politics*, 34(3):429–443.

Osborne, M. J. and Slivinski, A. (1996). A model of Political Competition with Citizen-Candidates. *The Quarterly Journal of Economics*, 111:65–96.

Peterson, P. (1981). *City Limits*. University of Chicago Press.

Quispe, E. (2012). *La democracia desde los márgenes: Transformaciones en el campo político boliviano*. Clasco.

Robinson, J. A. (2008). The Political Economy of Decentralization in Bolivia.

Sanogo, T. (2019). Does fiscal decentralization enhance citizens' access to public services and reduce poverty? Evidence from Côte d'Ivoire municipalities in a conflict setting. *World Development*, 113:204–221.

Schilling-Vacaflor, A. (2011). Bolivia's New Constitution: Towards Participatory Democracy and Political Pluralism? *European Review of Latin American and Carribeean Studies*, 90:3–22.

Sugiyama, N. B. and Hunter, W. (2013). Whither Clientelism? Good Governance and Brazil's "Bolsa Família" Program. *Comparative Politics*, 46(1):43–62.

Tiebout, C. M. (1956). A Pure Theory of Local Expenditures. *Journal of Political Economy*, 64(5):416–424.

V-Dem Institute (2023). Democracy Report 2023: Defiance in the Face of Autocratization. *V-Dem Institute, University of Gothenburg*.

Van Cott, D. L. (2008). *Radical Democracy in the Andes*. Cambridge University Press.

Ventura, T. (2021). Do mayors matter? Reverse coattails on congressional elections in Brazil. *Electoral Studies*, 69:102242.

Véron, R. (2001). The "New" Kerala Model: Lessons for Sustainable Development. *World Development*, 29(4):601–617.

Webber, J. R. (2011). *From Rebellion to Reform in Bolivia: Class Struggle, Indigenous Liberation, and the Politics of Evo Morales*. Haymarket Books, Chicago, IL.

Wolff, J. (2011). Challenges to Democracy Promotion: The Case of Bolivia. *Carnegie Endowment for International Peace*.

World Bank (2023). World Bank Poverty and Inequality Platform.

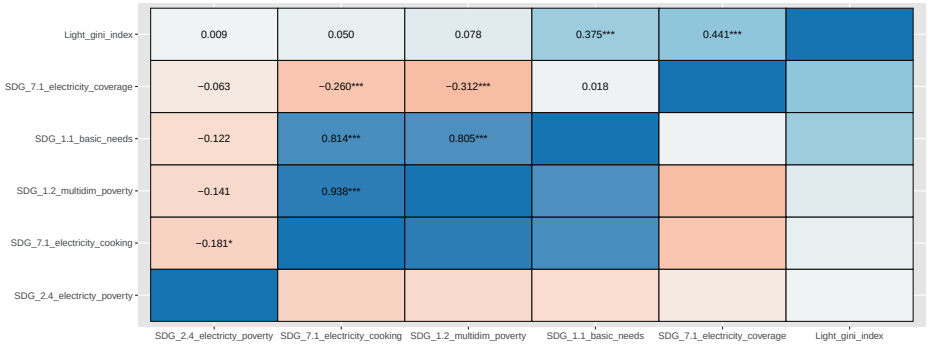
Ye, X., Donnelly-Roark, P., and Ouedraogo, K. (1999). *Can Local Institutions Reduce Poverty? Rural Decentralization in Burkina Faso*. The World Bank.

Zhang, M., Alvarez, M., and Levin, I. (2019). Election forensics: Using machine learning and synthetic data for possible election anomaly detection. *PLoS One*, (10).

Supplementary Material: Chapter 1

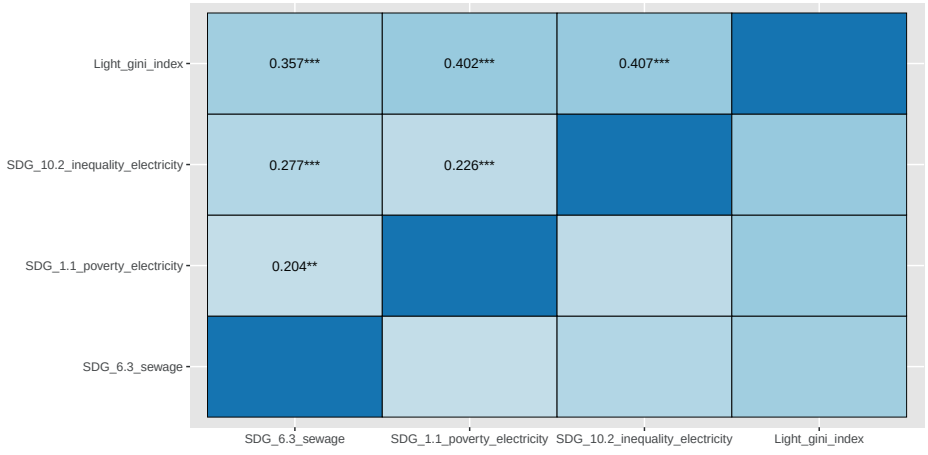
A Gini Night Light Validation

Figure A.1: Night Light Gini Index Correlation with SDG Municipal Atlas, 2012



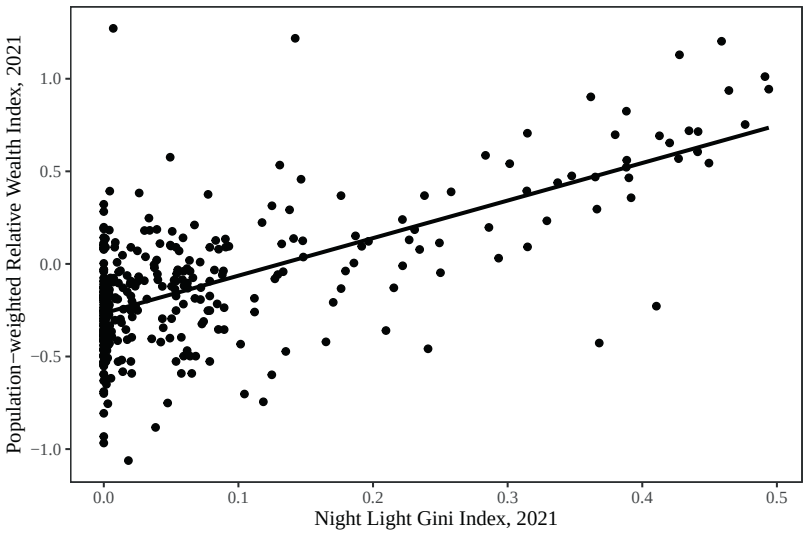
Note: The correlation matrix shows the correlation between the Night Light Gini Index used in the main analysis and other municipality level indicators of inequality. Data are from the Municipal Atlas of the Sustainable Development Goals (SDG)(https://www.sdsnbolivia.org/Atlas/). The Night Light Gini Index shows the Gini index based on light intensity in 2012, used in the analysis of this paper. SDG1.1 refers to unsatisfied basic needs, in 2012 (% of population). SDG1.2 refers to the Multidimensional Poverty Index, in 2012. SDG2.4 refers to average area per agricultural productive unit (ha), in 2012. SDG7.1 refers to electricity coverage, 2012 (% of population). SDG7.1 refers to clean energy for cooking, in 2012 (% of households).

Figure A.2: Night Light Gini Index Correlation with SDG Municipal Atlas, 2016



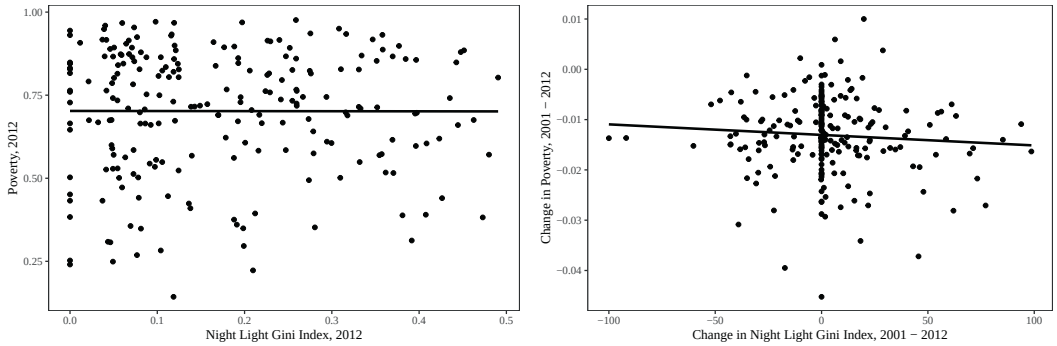
Note: The correlation matrix shows the correlation between the Night Light Gini Index used in the main analysis and other municipality level indicators of inequality. Data are from the Municipal Atlas of the Sustainable Development Goals (SDG)(https://www.sdsnbolivia.org/Atlas/). The Night Light Gini Index shows the Gini index based on light intensity in 2016, used in the analysis of this paper. SDG1.1 refers to extreme energy poverty rate, in 2016 (% of homes). SDG6.3 refers to wastewater treatment, in 2016 (% of sewage). SDG10.2 refers to inequality in electricity consumption, in 2016 (% of households).

Figure A.3: Night Light Gini Index Correlation with Relative Wealth Index, 2021



Note: The Night Light Gini Index shows the Gini index based on light intensity in 2021, used in the analysis of this paper. The poverty rate comes from Census 2001 and Census 2012 data from UDAPE (https://www.udape.gob.bo).

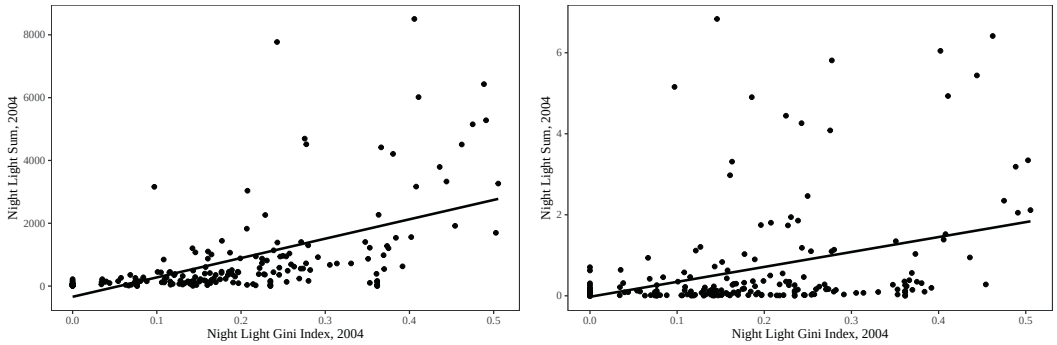
Figure A.4: Night Light Gini Index Correlation with Relative Poverty, 2001-2012



(a) Poverty Rate, 2012 (b) Change in Poverty Rate, 2001-2012

Note: The Night Light Gini Index shows the Gini index based on light intensity in 2021, used in the analysis of this paper. The Relative Wealth Index is provided by Data for Good for the year 2021, and is calculated using machine learning combining satellite imagery with conventional household surveys and other non-traditional data, for more details see: https://dataforgood.facebook.com/dfg/tools/relative-wealth-index and Chi et al. (2022).

Figure A.5: Night Light Gini Index Correlation with Night Lights, 2021



(a) Night Light Sum, 2001-2012 (b) Night Light Mean, 2001-2012

Note: The Night Light Gini Index shows the Gini index based on light intensity in 2021, used in the analysis of this paper. Night Lights Sum is the sum of the night light intensity in each municipality and Night Lights Mean is the mean of the night light intensity in each municipality.

B Details on Municipalities, Elections and Mayors

Table B.1: Municipality changes over time

Department	Province	Municipality	Description
Chuquisaca	Nor Cinti	Villa Charcas	Not existent in 2004
La Paz	Omasuyos	Chua Cocani	Not existent in 2004; 2010
La Paz	Omasuyos	Huarina	Not existent in 2004
La Paz	Omasuyos	Santiago de Huata	Not existent in 2004
La Paz	Omasuyos	Huatajata	Not existent in 2004; 2010
La Paz	Camacho	Humanata	Not existent in 2004
La Paz	Camacho	Escoma	Not existent in 2004
La Paz	Caranavi	Alto Beni	Not existent in 2004; 2010
Cochabamba	Ayopaya	Cocapata	Not existent in 2004
Cochabamba	Mizque	Raqaypampa (Indigenous Territory)	Not existent in 2004; 2010
Cochabamba	Tiraque	Shinahota	Not existent in 2004
Potosi	Rafagueel Bustillo	Chuquiuta Ayllu Jucumani	Not existent in 2004
Potosi	Chayanta	San Pedro de Macha	Not existent in 2004; 2010

Note: Over time, several municipalities were split up. The table shows these municipalities and when they are represented in the analysis.

Table B.2: Organisational Groups in Municipalities

Election	Department	Municipality	Explanation
2010/2015	Chuquisaca	Mojocaya	Shifted in 2009
2010/2015	Chuquisaca	Tarabuco	Shifted in 2009
2010/2015	Chuquisaca	Huacaya	Shifted in 2009
2010/2015	La Paz	Charazani	Shifted in 2009
2010/2015	La Paz	General Juan Jose Perez	Shifted in 2009
2010/2015	La Paz	Jesus de Machaca	Shifted in 2009
2010/2015	Oruro	Salinas de Garcí Mendoza	Shifted in 2009
2010/2015	Oruro	Pampa Aullayao	Shifted in 2009
2010/2015	Oruro	Chipaya	Shifted in 2009
2010/2015	Oruro	Totora	Shifted in 2009
2010/2015	Chuquisaca	Chayanta	Shifted in 2009
2010/2015	Chuquisaca	Charagua	Shifted in 2009

Note: Following the constitutional change in 2009, several municipalities legally shifted to become local autonomous municipalities.

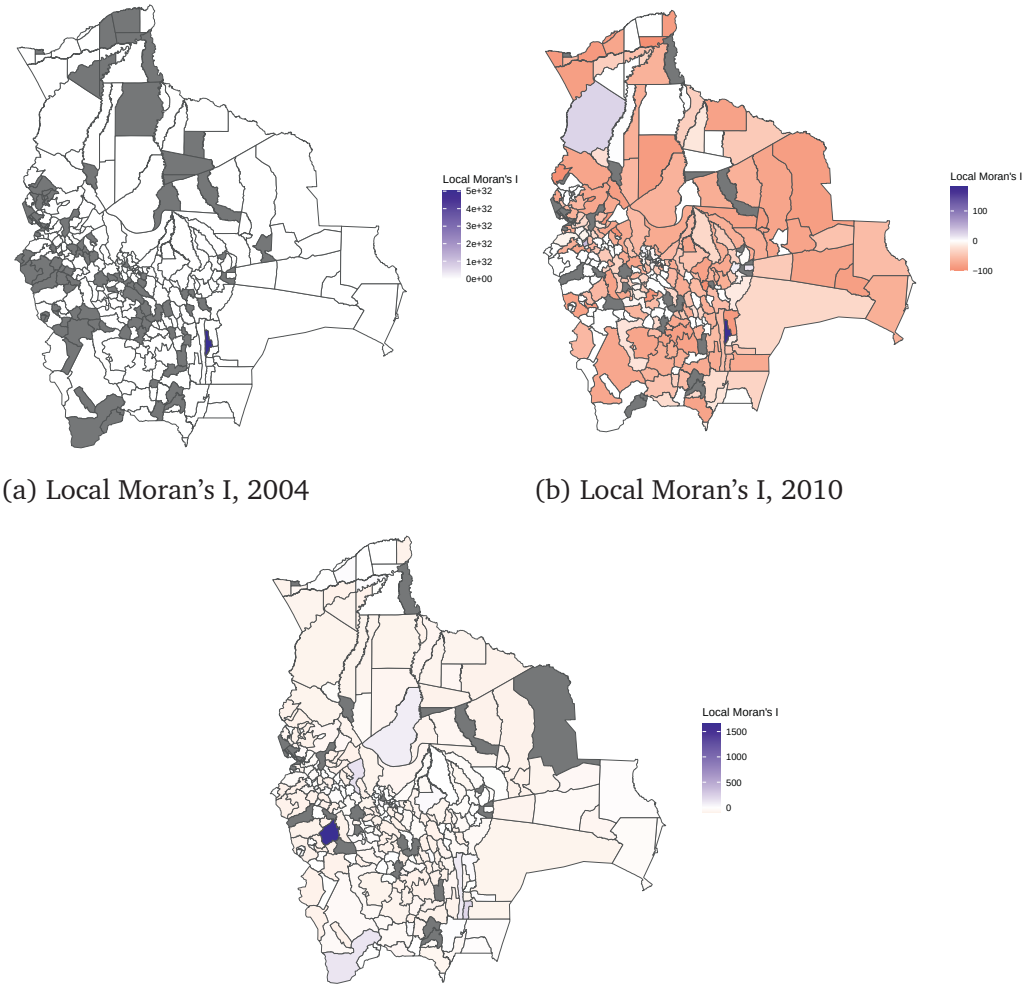
Table B.3: Mayor differences

Election	Department	Municipality	Explanation
2004	Chuquisaca	Camargo	MAS mayor despite no council majority
2004	Chuquisaca	Camataqui	MAS mayor despite no council majority
2004	Chuquisaca	Yamparáez	MAS mayor despite no council majority
2004	Chuquisaca	Icla	MIS mayor despite no council majority
2004	Chuquisaca	Incahuasi	MIP mayor despite no council majority
2004	Chuquisaca	San Lucas	UN mayor despite no council majority
2004	La Paz	Andrés de Machaca	MAS mayor despite no council majority
2004	La Paz	Aucapata	MAS mayor despite no council majority
2004	La Paz	Mecapaca	MAS mayor despite no council majority
2004	La Paz	Nazacara de Pacajes	MAS mayor despite no council majority
2004	La Paz	Quime, Sorata y Tito Yupanqui	MAS mayor despite no council majority
2004	La Paz	Vida en Achocalla y Batallas	MAS mayor despite no council majority
2004	La Paz	Cajuata	ADEPCOCA mayor despite no council majority
2004	La Paz	Combaya	UN mayor despite no council majority
2004	La Paz	Coro Coro	PPQA mayor despite no council majority
2004	La Paz	Palos Blancos	PP mayor despite no council majority
2004	Cochabamba	Aiquile	CT-1 mayor despite no council majority
2004	Cochabamba	Anzaldo	NFR mayor despite no council majority
2004	Cochabamba	Pocona	SOL mayor despite no council majority
2004	Oruro	Eucaliptos	MSM mayor despite no council majority
2004	Oruro	Totora	MIP mayor despite no council majority
2004	Oruro	Villa Poopó	MIR mayor despite no council majority
2004	Oruro	Huachacalla	MAS mayor despite no council majority
2004	Potosí	Chaqui	ASCH mayor despite no council majority
2004	Potosí	Porco	SCS mayor despite no council majority
2004	Potosí	Sacaca	MAS mayor despite no council majority
2004	Potosí	San Pablo de Lipez	MIR mayor despite no council majority
2004	Tarija	Uriondo	MNR mayor despite no council majority
2004	Santa Cruz	Buena Vista	MOVIBOL mayor despite no council majority
2004	Santa Cruz	Okinawa, Pailón y Pucara	MIR mayor despite no council majority
2004	Santa Cruz	Pampa Grande	FRAC mayor despite no council majority
2004	Santa Cruz	Puerto Fernández Alonso	MAS mayor despite no council majority
2004	Beni	Guayaramerín	MNR mayor despite no council majority
2004	Beni	Loreto	MIR mayor despite no council majority
2004	Beni	San Ignacio	ADN mayor despite no council majority
2004	Pando	Bella Flor	MIR mayor despite no council majority
2004	Pando	Cobija	MIR mayor despite no council majority
2004	Pando	San Pedro	MAR mayor despite no council majority

Note: In some municipalities, the party or organization with most councillors does not provide the mayor. In these municipalities, the mayor is not represented by the biggest party or organization because the council votes among the two leading candidates if no party or organisation has the absolute majority. In Oruro, the municipalities 'Santuario de Quillazas' and 'Cruz de Machacamarca' are not organized in municipal councils, but they are run by citizens and indigenous groups. Sources: Boletin Estadisticos, Bolivia.

C Local Clustering

Figure C.1: Local Moran's I Statistic for Inequality Reduction



(a) Local Moran's I, 2004

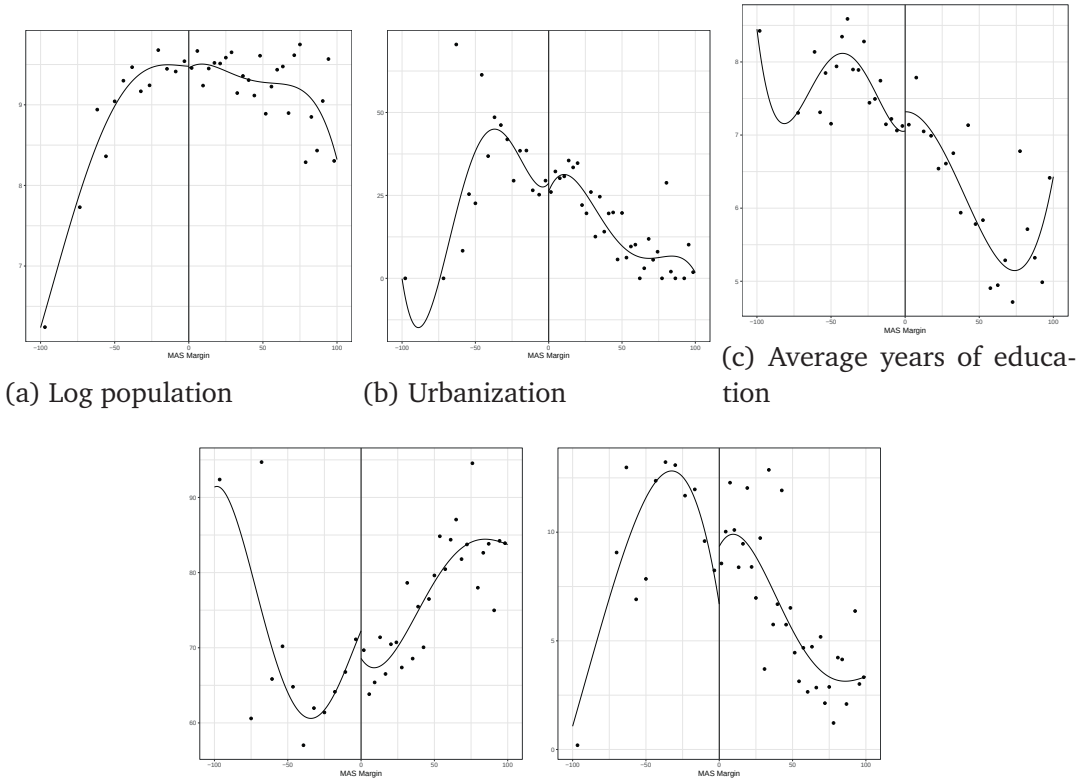
(b) Local Moran's I, 2010

(c) Local Moran's I, 2019

Note: The figure shows the estimations of local clustering of inequality reduction in 2004, 2010 and 2015, calculating the local Moran's I statistic. Positive results represent similar values close to the municipality and negative values represent dissimilar values close to the municipality. The p-value is significant for 2010.

D Robustness of Main Findings

Figure D.1: Local Linear RD Effects for Covariates



(a) Log population (b) Urbanization (c) Average years of education

(d) % population with basic needs satisfied (e) % population under poverty line

Note: The figures show the RD plots for the following covariates: 1) log population, 2) urbanization, 3) average years, of education (above 19 years), 4) percentage of population with basic needs satisfied, and 5) percentage of population under the poverty line

Table D.1: The effect of the MAS party (RD Estimates) [WITH COVARIATES]

Variables	(1) Inequality	(2) Poverty	(3) Electoral irregularities
RD_Estimate	28.553	-0.003	-0.093
Robust 95% CI	[8.305 , 58.613]	[-0.009 , 0.002]	[-0.271 , 0.102]
Kernel Type	Triangular	Triangular	Triangular
BW Type	mserd	mserd	mserd
Observations	241	126	403
Conventional Std. Error	11.605	0.002	0.079
Conventional p-value	0.014	0.231	0.237
Robust p-value	0.009	0.270	0.373
Order Loc. Poly. (p)	1.000	1.000	1.000
Order Bias (q)	2.000	2.000	2.000
BW Loc. Poly. (h)	11.315	19.129	20.295
BW Bias (b)	23.044	28.042	33.252
Election FE	Yes	2010	Yes
Covariates	Yes	Yes	Yes

Note: Election fixed effects included in (1) and (3). The dependent variables are the change in inequality (1) and poverty (2) in the three studied electoral periods. Positive values show inequality and poverty increasing in the governing period, and negative values show inequality and poverty decreasing. Observations are effective observations. Column (3) shows the probability of electoral irregularities in all three elections. Covariates included are blank votes, population density, ethnic fractionalization index, share indigenous population, average education, and election turnout.

Table D.2: The effect of the MAS party (RD Estimates) [WITH TIME LAGS]

Variables	(1) Inequality
RD_Estimate	-12.443
Robust 95% CI	[-48.439 , 23.554]
Kernel Type	Triangular
BW Type	mserd
Observations	204
Conventional Std. Error	18.366
Conventional p-value	0.498
Robust p-value	0.579
Order Loc. Poly. (p)	1.000
Order Bias (q)	2.000
BW Loc. Poly. (h)	15.625
BW Bias (b)	24.469
Election FE	Yes
Covariates	Yes
Time lag	Yes

Note: Election fixed effects included in (1). The dependent variable is the change in inequality (1) in the three studied electoral periods. Positive values show inequality and poverty increasing in the governing period, and negative values show inequality and poverty decreasing. Observations are effective observations. Covariates included are blank votes, population density, ethnic fractionalization index, share indigenous population, average education, and election turnout.

Table D.3: The effect of the MAS party (RD Estimates) [FUZZY]

Variables	(1) Inequality	(2) Poverty	(3) Electoral irregularities
RD_Estimate	22.309	-0.003	-0.127
Robust 95% CI	[5.716 , 54.593]	[-0.009 , -0.010]	[-0.321 , 0.067]
Kernel Type	Triangular	Triangular	Triangular
BW Type	mserd	mserd	mserd
Observations	338	117	301
Conventional Std. Error	10.477	0.003	0.099
Conventional p-value	0.033	0.228	0.200
Robust p-value	0.016	0.257	0.259
Order Loc. Poly. (p)	1.000	1.000	1.000
Order Bias (q)	2.000	2.000	2.000
BW Loc. Poly. (h)	16.938	17.433	14.644
BW Bias (b)	27.062	27.277	35.205
Election FE	Yes	2010	Yes
Fuzzy	Yes	Yes	Yes
Covariates	Yes	Yes	Yes

Note: Election fixed effects in (1) and (3). The dependent variables are the change in inequality (1) and poverty (2) in the three studied electoral periods. Positive values show inequality and poverty increasing in the governing period, and negative values show inequality and poverty decreasing. Observations are effective observations. Column (3) shows the probability of electoral irregularities in all three elections. Covariates included are blank votes, population density, ethnic fractionalization index, share indigenous population, average education, and election turnout.

Table D.4: The effect of MAS party on Public Sector Investment Budget - 1 (RD Estimates)

Variables	(1) Education/Culture	(2) Industry/Tourism	(3) Agriculture	(4) Energy
RD_Estimate	-0.004	0.010	-0.004	0.011
Robust 95% CI	[-0.090 , 0.078]	[-0.011 , 0.024]	[-0.046 , 0.045]	[-0.031 , 0.055]
Kernel Type	Triangular	Triangular	Triangular	Triangular
BW Type	mserd	mserd	mserd	mserd
Observations	179	159	172	145
Conventional Std. Error	0.036	0.008	0.020	0.018
Conventional p-value	0.922	0.240	0.974	0.552
Robust p-value	0.889	0.452	0.623	0.583
Order Loc. Poly. (p)	1.000	1.000	1.000	1.000
Order Bias (q)	2.000	2.000	2.000	2.000
BW Loc. Poly. (h)	18.280	14.360	11.406	20.240
BW Bias (b)	27.333	26.798	23.209	28.337
Election FE	2004	2004	2004	2004

Note: Public Sector Investment Budget in percentage related to the total municipal budget. Data on Public Sector Investment Budget from Faguet (2012).

Table D.5: The effect of MAS party on Public Sector Investment Budget - 2 (RD Estimates)

Variables	(1) Transport	(2) Health/Social Protection	(3) Basic Sanitation	(4) Housing
RD_Estimate	-0.019	0.011	0.022	0.0005
Robust 95% CI	[-0.072 , 0.024]	[-0.030 , 0.059]	[-0.029 , 0.071]	[-0.031 , 0.032]
Kernel Type	Triangular	Triangular	Triangular	Triangular
BW Type	mserd	mserd	mserd	mserd
Observations	177	178	178	178
Conventional Std. Error	0.022	0.019	0.021	0.013
Conventional p-value	0.383	0.547	0.279	0.970
Robust p-value	0.608	0.534	0.404	0.959
Order Loc. Poly. (p)	1.000	1.000	1.000	1.000
Order Bias (q)	2.000	2.000	2.000	2.000
BW Loc. Poly. (h)	21.411	14.562	15.720	24.868
BW Bias (b)	29.908	19.994	23.097	33.417
Election FE	2004	2004	2004	2004

Note: Public Sector Investment Budget in percentage related to the total municipal budget. Data on Public Sector Investment Budget from Faguet (2012).

Chapter 2

Programmatic Redistribution and Clientelism

Evidence from a Conjoint Survey Experiment in Brazil

with Sigrid Koob and Mogens K. Justesen[1]

In real-world elections, voters mostly do not face a choice between 'good' or 'bad' candidates but rather between candidates who attempt to mobilize 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 programmatic and clientelistic distribution mix. 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 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 mobilize voter support.

Keywords: Clientelism, Redistribution, Conjoint Experiment, Survey Experiments, Candidate Support, Elections, Brazil.

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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 mobilize 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 distributive politics by analyzing 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 also analyse how voter support and beliefs about candidates are shaped by differences in the type of programmatic goods (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. If this is the case, we should observe different voter responses to clientelist transactions that involve either cash-for-votes on the electoral spot market or more enduring opportunities for jobs or work that are characteristic of patronage networks. 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, disapprove of candidates employing clientelist distribution, voter support also hinges on the specific mix of programmatic and clientelist distribution and the type of clientelism candidates use. 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 (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 mobilize support during elections.

We marshal evidence from a conjoint survey experiment ($n = 1900$) 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 - as well as the intersection between the two - on voter support.

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 helping the poor and delivering sufficient public services.

Why, then, would candidates even want to employ clientelist distribution during election campaigns? Our results shed light on this question, too. We find, second, that although voters typically have a negative perception of candidates employing clientelist strategies, they are more lenient towards clientelist distribution involving job offers (relative to cash handouts) (Klašnja et al., 2021). This suggests that the nature of the clientelist relations 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 too 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 do not believe their fellow voters 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 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). Recent contributions have also addressed the reverse relationship, i.e the impact of clientelism on programmatic redistribution, and have 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 focus on the demand side of redistributive politics (Berens and Ruth-Lovell, 2021; Guerra and Justesen, 2022; Pellicer et al., 2022). In particular, we show how clientelist strategies shape voter demands for programmatic redistribution that is channelled into the political system and we provide insight into *why* clientelism may lower voter support for programmatic redistribution. Namely, when clientelism is part of a candidate's campaign, voters perceive such candidates as less capable of providing public services, regardless of their track record of programmatic policies. Finally, while the existing literature almost exclusively focuses on the spending side of redistribution, we include information on the funding side (taxation), which may matter for how voters evaluate candidates and the trade-offs between different types of programmatic and non-programmatic redistribution. In the bigger picture, our findings contribute to our understanding of why clientelism tends to undermine the social contract between citizens and states - and why high levels of inequality, low levels of redistribution, and widespread political clientelism often co-exist in equilibrium (Fergusson et al., 2022).

Second, 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 behaviour. 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 (Bøttkjær 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 versus 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 an introduction to the conjoint experiment. We then analyse and discuss the findings from our conjoint experiment. The final section concludes.

2.2 Voter 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 formalized, 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 progressive redistribution, 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 formalized, 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., 2023). Clientelist distribution can take 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 low-income groups (Jensen and Justesen, 2014; Kramon, 2017; Mares and Young, 2016; Stokes et al., 2013) who may also be more favourable 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).

2.2.1 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 (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.

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 materialize as short-term cash-for-votes transactions 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, clientelism may entail more enduring forms of relational clientelism, where 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) argue that patronage relationships are a more credible way for clientelist politicians to commit to redistributing resources, because allocating work or jobs creates a repeated flow of rents 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 (Bøttkjær 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 favourably.

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 goods 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 the context of widespread poverty, which provides fertile grounds for candidates to emphasize 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.

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 the 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 favourable 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: 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 job or work-based clientelist distribution is more valuable to voters than one-time 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 (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 co-exist with widespread clientelist distribution, and both are mainly targeted at poor and vulnerable groups (Nichter, 2018). The decentralized nature of Brazil's public sector creates a significant role for elected 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-centred electoral system - connects citizens and politicians both during and in between municipal elections (Nichter, 2018).

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 low-income 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 8% of Brazil's 5,570 municipalities have expanded the Bolsa Família program by introducing municipal CCTs to citizens in their local area. Most of these are in bigger cities where income inequality and segregation have increased 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.

CCT programs in Brazil are tax funded. However, similar to other Latin American countries, the Brazilian tax system's progressivity is limited. While president 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 % starting from a monthly income of R$4655, (ca. 900 US$) 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 is part of the narrative of enduring clientelist relations between voters and politicians (Nichter, 2018; Scott, 1969). Various forms of political clientelism are relatively widespread in Brazil. Local politicians and their party brokers are a crucial part of many communities and the electoral process, especially in the country's low-income, North-Eastern part and 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 for 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 the family (Ansell, 2018; Hidalgo and Nichter, 2016). Indeed, local politicians are often able to monitor declarations of political support and use this information to distribute goods as rewards or punishments to voters (Nichter and Nunnari, 2022). 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). Brazil, therefore, serves as an excellent case to shed light on voter reactions to allegedly corrupt candidates (Anduiza et al., 2013; Zucco, 2013).

Indeed, 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. In a 2021 survey, six out of ten civil servants reported having witnessed some form of unethical behaviour and most often cited the use of civil servants' position to help family and friends (World Bank, 2021).[2]

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 clientelist 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

[2]Similarly, in our 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.

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 focusing on individual candidates' qualities, rather than party labels (Hicken, 2007). In fact, open-list proportional systems are particularly prone to the use of clientelist voter mobilization 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 from their own party to obtain office. The institutionalized intra-party competition of open-list 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 councillors during municipal elections in Brazil. The conjoint survey experiment was pre-registered at OSF on October 16, 2020 (https://osf.io/zxc57).

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. The survey design and data collection were approved by the Ethics Council of the authors' home institution before the data collection on March 9, 2021.

2.4.1 Data Collection

The survey was administered in collaboration with the two survey-research companies IBPS and Qualibest[3] 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.[4] The survey was programmed in Qualtrics and Qualibest sent out individual questionnaire links via their internal survey platform. Qualibest compensated respondents who completed the 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

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

[4]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.

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 (Mercer et al., 2017).[5] We conduct the analyses on a sample of respondents with complete answers from respondents who conducted the survey in a reasonable time frame[6], while also verifying each observation as a unique respondent in the data (see Appendix A).

2.4.2 The Conjoint Experiment

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 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 experiments 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 Appendix A.

Treatment Effects: Attributes and Values

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 councillors. The design is based on retrospective voting models (De Kadt and Lieberman, 2020; De Vries and Solaz, 2017) with competing (incumbent) candidates with varying past performances in terms of programmatic distribution. We use elections for city councillors to measure voter support for local politicians because clientelist relationships are often embedded in local politics in Brazil (Nichter, 2018). In addition, mayors are often well-known figures in local politics which might induce responses that are biased by perceptions of the current mayor in their municipality. This problem is alleviated by designing the experiment as a contest between two city councillor candidates.[7]

[5] In our sample too, vulnerable and rural survey respondents are underrepresented in the final sample. Since these groups may be more responsive to - and inclined to engage in - clientelist practices, our results may provide somewhat conservative estimates of the effects of clientelist distribution.

[6] We exclude all responses with completion times longer than three days.

[7] 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. Rather, they will provide important indications about voters' candidate preferences (Abramson et al., 2022; de la Cuesta et al., 2022; Hainmueller et al., 2015)

Table 2.1 summarizes candidates' attributes and values. The first three are generic characteristics of gender (male/female), age and occupation, which are used to make the profiles more realistic. Age is varied in 10-year intervals from 35-55, corresponding to the average age interval for most city councillors in Brazil (see Appendix A for an overview of the characteristics of city councillor candidates in the 2020 election). Candidates' occupation comprises lawyer, manager of a big company, and factory worker in a big company.

We incorporate two attributes modelling differences in programmatic redistribution - on the spending and revenue side. Since the conjoint experiment mimics a voting decision between two hypothetical city council candidates, these attributes cover policies within the decision-making realm of municipality-level politics. On the spending side, we design one attribute after the candidates' previous record of delivering programmatic distribution in the municipality. The attribute has three values: 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). Local CCT programs are currently implemented in around 8% of Brazilian municipalities and widely discussed on the local level and their inclusion increases the external validity of the 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 formalized rules with little ground for systematic manipulation (Fried, 2012; Nichter, 2018).

We also assign an attribute to candidates' position on income tax policy to account for the revenue side of programmatic redistribution. While income taxes are outside of the decision-making authority of municipalities in Brazil and are determined at the state level, 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 programmes like Bolsa Família. Instead of providing information on actual performance in local government, the taxation attribute in the conjoint experiment varies candidates' *preferences* (or policy positions) for income taxation. The tax attribute has three values. First, maintaining the status quo of income taxation. Second, 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, 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. Importantly for our purposes, Brazilian citizens often reach out to members of the city council about public services that are provided by the municipality and city councillors are

[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).

also often involved in clientelistic exchanges with citizens (Bobonis et al., 2017; Nichter, 2018; Sugiyama and Hunter, 2013). 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 mobilize voters. The second level reflects a situation where the candidate engages in vote buying. This comes as 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

We ask respondents two questions for each pair of candidates 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 electorate's behaviour 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 (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.3 in the Appendix). 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 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.

Table 2.1: Conjoint Survey Experiment: Attributes and Values

Attributes	**Values**	**Example Candidate A**	**Example Candidate B**
Age	1) 35 years 2) 45 years 3) 55 years	35 years	45 years
Gender	1) Female 2) Male	Male	Female
Occupation	1) Lawyer 2) Manager of a big company 3) Factory worker in a big company	Manager of a big company	Lawyer
Programmatic distribution: the candidate has...	1) ... worked hard to keep the current level of public services in your municipality 2) ... worked hard to build more public health clinics in your municipality 3) ... worked hard to implement a local conditional cash transfer program [programa de transferência de renda] for Bolsa Família recipients in your municipality with a monthly supplement of R$ 100 per family	... worked hard to build more public health clinics in your municipality	... worked hard to implement a new conditional cash transfer program [programa de transferência de renda] for Bolsa Família recipients in your municipality with a monthly supplement of R$ 100 per family
Clientelistic distribution: the candidate has...	1) ... not offered you work or money in return for your vote 2) ... offered you work in the local municipality in return for your vote at this year's municipal elections 3) ... offered you R$ 100 in return for your vote at this year's municipal elections	... offered you R$ 100 in return for your vote at this year's municipal elections	... offered you work in the local municipality in return for your vote at this year's municipal elections
Preferences for income taxation: the candidate is a strong advocate for...	1) ... the current income tax as it is 2) ... increasing the income tax for the richest 15%, who earn more than around R$ 4700 3) ... a 1% tax increase for all	... increasing the income tax for the richest 15%, who earn more than around R$ 4700	... the current income tax

2.5 Results

Figure 2.1 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 2.1 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 demonstrates that the AMCEs average over both the direction and intensity of individual preferences (Abramson et al., 2022; Bansak et al., 2022).[9] 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.[10] Figure C.1 in the Appendix 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 perform 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 attribute values are properly randomized. 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 profile-order effects. In Appendix A we show that all three assumptions hold.[12] The Appendix A 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).

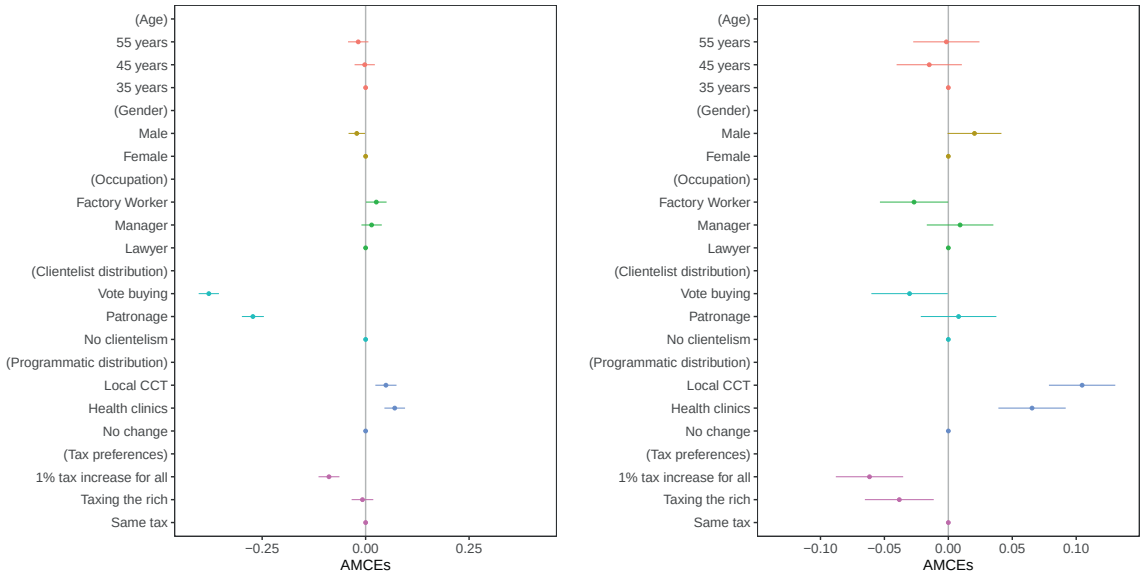
[9] As pointed out by Abramson et al. (2022), AMCEs cannot be interpreted as preferences of the majority. Recent literature has proposed alternative estimates (e.g., Ganter (2023); Zhirkov (2022)), but AMCEs remain the most commonly applied estimates in the empirical literature. This may be because some of these estimators (e.g., Zhirkov (2022)) put additional restrictions on the survey design and data collection.

[10] Recent work by Clayton et al. (2023) shows that conjoint experiments may generate measurement error due to intra-respondent reliability. However, they also 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 randomized designs are the differences between the MMs of a given attribute level and its baseline.

[12] All attribute values are fully randomized, and there are no profile order effects for almost all attribute values (the only exception is '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 2.1: 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.1 in the Appendix for details.

2.5.1 Voter Responses to Programmatic Distribution

Figure 2.1a 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 favourably among large parts of the electorate (Bergman, 2019).

Voters likewise perceive candidates as more electorally viable if they run on platforms signalling 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 favourable (see Figure C.2 in the Appendix). 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 voter support by significant 9 percentage points (Figure 2.1a) and lowers voter beliefs in candidates' electoral viability (Figure 2.1b). While 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 2.1b).

2.5.2 Voter Responses to Clientelism

Figure 2.1a 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 substantial 27 percentage points. 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 mobilize support. Voters' aversion to clientelist distribution also holds in absolute terms (see Figure C.1 in the Appendix). Moreover, both the relative and absolute effects of vote buying and patronage differ significantly, showing that vote buying is perceived as a greater vice than patronage. This resonates with the findings of Ansell (2018) who show that cash offers are perceived as more immoral than other types of clientelism in Brazil.

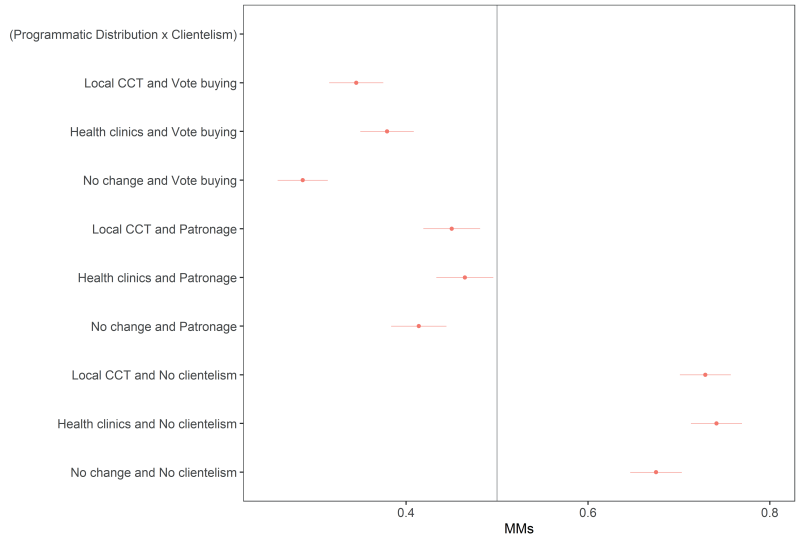
Regarding the effects of clientelist distribution on electoral viability (Figure 2.1b), voters' beliefs about candidates' likelihood of winning are strikingly different from the effects on candidate support. Voters tend to believe that clientelist distribution makes little or no difference to candidates' 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 behaviour 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 way of connecting 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 using clientelistic distribution are associated with weak fiscal capacity, corruption, and a lower likelihood of reducing inequality. And vote buying candidates are perceived as worse than candidates using patronage (Figures C.2 and C.3 in the Appendix).

2.5.3 The Grey Zone: Mixing Programmatic and Clientelist Distribution

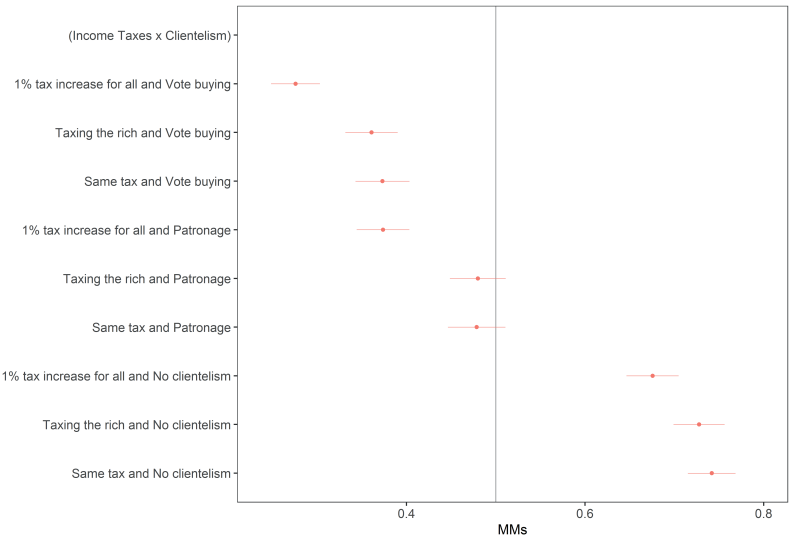
The results so far show that voters in Brazil are favourable towards candidates who campaign on platforms of programmatic redistribution and tend to punish candidates who employ clientelist strategies during election campaigns, although this does not detract from candidates' electoral viability. The results match findings in the literature showing that voters generally disapprove of candidates involved in clientelism and corruption more broadly (Bøttkjær 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 (H_1)? Figure 2.2 shows predicted probabilities of voting for candidates with different platforms of distributive politics. We only show results for the interaction terms. Figure 2.2a shows interactions between programmatic and clientelist distribution and Figure 2.2b the interaction between clientelist distribution and programmatic income taxation. We display coefficients as marginal means, i.e. the probability of voting for candidates with different platforms of distributive politics. All predicted probabilities are bench-marked against 0.5, which is the overall probability in forced-choice experiments (Leeper et al., 2020).

Figure 2.2: Interaction Effects on Candidate Support, Programmatic Redistribution x Clientelism



(a) Programmatic Distribution x Clientelism



(b) Income Taxes 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.2 in the Appendix for details.

Figure 2.2 shows 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.[13]

In terms of electoral viability, mixing programmatic and clientelist redistribution does not make voters think that candidates are less capable of winning elections (see Figure C.4 in the Appendix). 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 who offers 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.

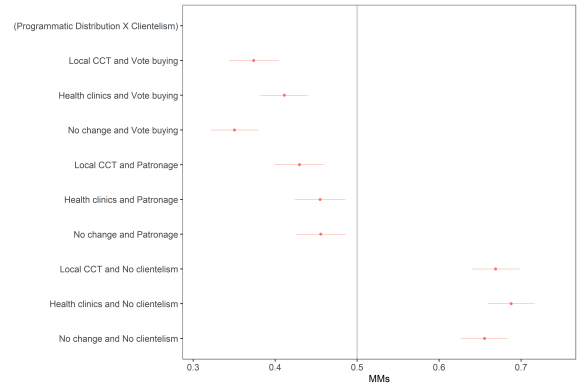
Voter beliefs about candidate qualities and competences also change when clientelist distribution is mixed with a programmatic policy platform, as shown in Figure 2.3.[14] While voters on average associate a candidate with a track record of programmatic redistribution with improved fiscal capacity, no corruption, and as being more likely to help the poor and people in economic distress, 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 lower fiscal capacity, a lower likelihood of delivering public services, and a higher likelihood of engaging in corruption. Such candidates are similarly associated with weaker abilities to support poor people and people in need as well as being worse at reducing Brazil's high level of inequality. This suggests that - in the Brazilian context - clientelist distribution does not work (well) as a signal of intent to redistribute to the poor or, more generally, as a strategy for obfuscating the normatively undesirable feature of clientelism (Mares and Young, 2019; Kramon, 2017).

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 favourably 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

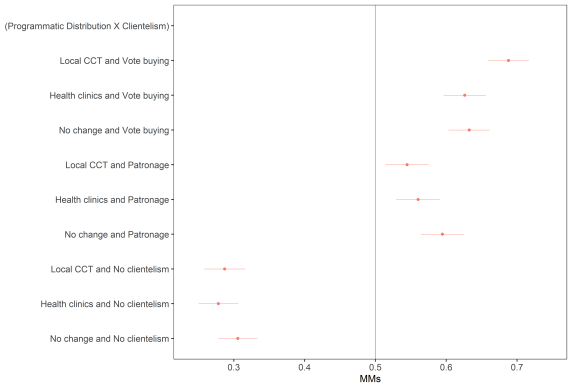
[13] Party identification and political ideology may affect perceptions of clientelism and redistributive policies. In our survey sample, 24% of respondents answered yes to the question of whether they identify with a political party. Of these respondents, 26% identify with the Workers' Party (PT), and 5% with the Brazilian Social Democracy Party. The remaining respondents feel close to various other parties. Yet, 39% of respondents stated that they voted for Jair Bolsonoro (PSL) at the latest presidential election and 30% for Fernando Haddad (PT). Figure C.16 shows the main interaction effects by people who voted for Jair Bolsonaro in 2018 (president at the time of the survey) vs. those who did not. Further, we find no significant differences by gender (Appendix, Figure C.14) or education (Appendix, Figure C.15). However, supporters of other parties than the current government are more prone to candidates campaigning on a mix of taxing the rich and no clientelist distribution.

[14] The interactions of clientelism and income tax policies are available in Figure C.5 in the Appendix.

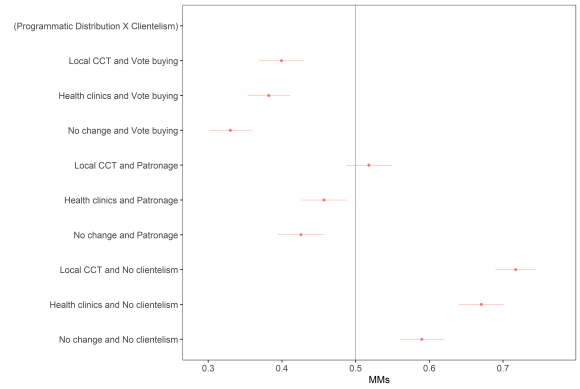
Figure 2.3: Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs



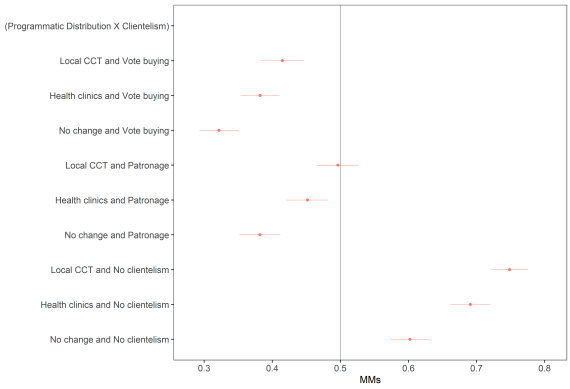
(a) Improve fiscal capacity



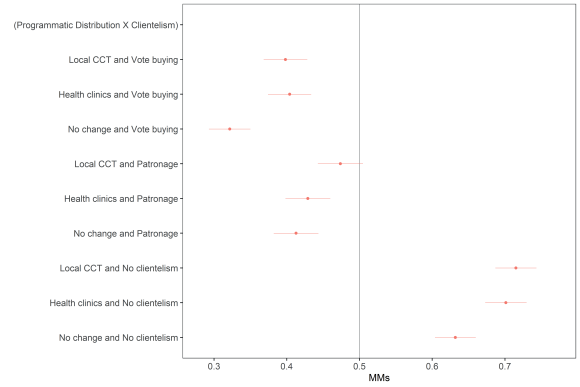
(b) Engage in corruption



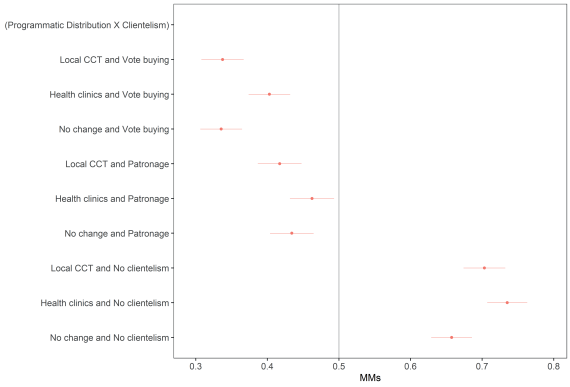
(c) Help in economic distress



(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 bench-marked against 0.5. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $n = 8{,}520$. See Table B.3 to Table B.8 in the Appendix for details.

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 interpersonal confidence that clientelist distribution will be electorally sanctioned.

Overall, these findings are in 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. Our findings further suggest 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 affects 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 clientelist distribution as a signal of candidates' ability and commitment to engage in pro-poor redistribution.

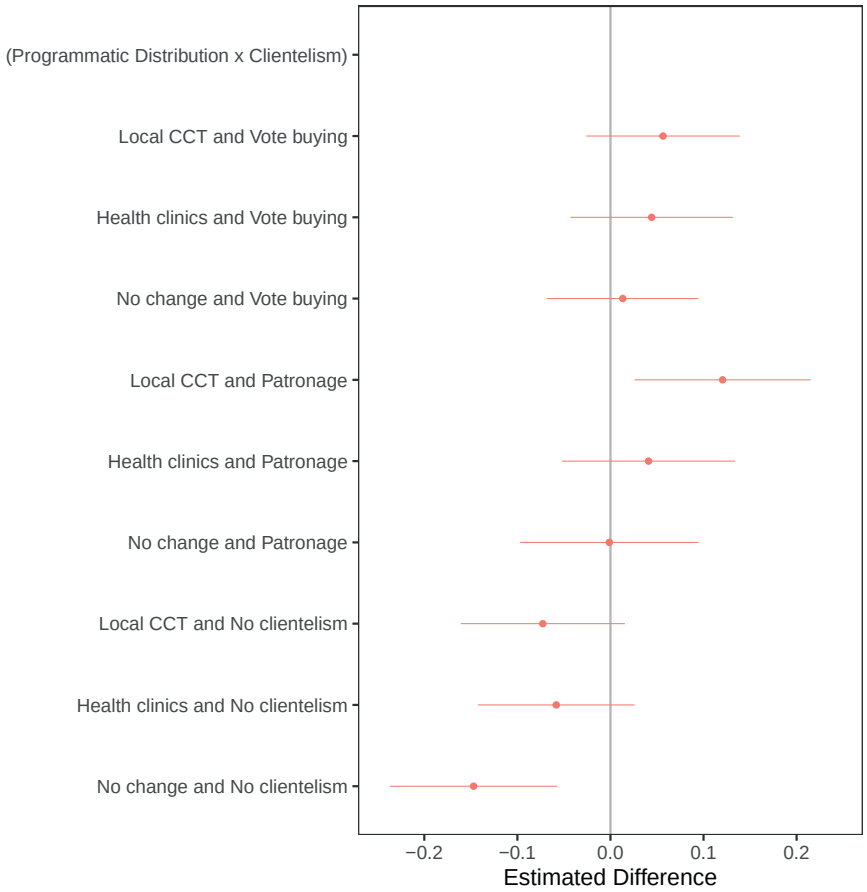
For the subgroup analyses, we rely only on differences in marginal means (MMs) because differences in AMCEs are sensitive to the choice of baseline values and can give misleading results, especially when preferences for baseline values differ across subgroups (Leeper et al., 2020). We construct a poverty measure by combining two survey items and we validate the approach with different approaches to assess respondents' poverty leels. Details can be found in the Appendix C.[15]. The Appendix also includes the main effects on candidate support, by poverty (Figure C.13). To measure poverty, we first create an indicator for people who receive support from Bolsa Família. The program is designed for low-income families, i.e., a monthly per capita income of R$154 or lower (at the time of the survey). We categorize 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'.[16] Second, to include non-compliant poor respondents - who do not qualify for or choose not to rely on Bolsa Família - we use

[15]Further details are available from the correlation matrix of the different poverty indicators we collected in the survey and for validation of the poverty indicator used in the analysis (Figure C.12)

[16]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.

a survey question measuring food insecurity, 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. The poverty indicator, therefore, includes Bolsa Família household beneficiaries and respondents who have experienced food shortages over the last year.

Figure 2.4: 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. $n = 8{,}520$ ($n_{poor} = 1{,}206.$). See Table B.9 in the Appendix for details.

Figure 2.4 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 Appendix Figure C.6). For non-poor voters, mixing clientelist distribution with programmatic distribution lowers candidate support (Figure C.7). While the picture is less clear for poor voters, the results do not generally match the expectation (H_3) 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 mobilize support. However, they do not reward candidates refraining from 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 points 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 mobilizing political support.[17]

When we turn to voter assessments of candidates' electoral viability, it is striking that neither poor nor non-poor voters believe clientelist distribution makes candidates less likely to win elections (see Figure C.8 in the Appendix). 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 (see Appendix, Figure C.9, C.10, and C.11). Non-poor voters clearly associate candidates' mix of programmatic and clientelist distribution with weak fiscal capacity, corruption, and a low likelihood of helping the poor (see Figure C.9). In some respects, poor voters' beliefs about the qualities and competences of the candidate do not change much when clientelism is part of the 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.10). 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 undermining 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 shapes voter support for programmatic redistribution.

We address one part of this puzzle by inquiring into 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 pre-registered hypotheses, whereas

[17] As a robustness check, we estimated differences by education, Figure C.15 in the Appendix, which also showed that voters with lower educational levels are more lenient towards patronage than are more educated voters.

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 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 normatively undesirable.

The research setting of our results - local elections in Brazil - obviously affects the extent to which our findings generalize beyond the Brazilian context. The most important scope conditions surrounding our findings arguably pertain to the mix of programmatic and clientelist distribution in Brazil, Brazil's status as a middle-income country with high levels of inequality, and the competitiveness of (local) elections in the country. Even so, it is plausible that our findings travel to other contexts too. Clientelism co-exists alongside programmatic cash transfer and social grant systems in other high-inequality, middle-income countries like Argentina (De La O, 2013), Mexico (Diaz Cayeros et al., 2016), India (Auerbach, 2016; Auerbach and Thachil, 2018), South Africa (Woller et al., 2023), and even higher-income countries like Hungary and Romania (Mares and Young, 2019), suggesting that we might find similar patterns among that group of countries. While Brazil's democracy is competitive, dominant party systems like South Africa too have significant party competition at the level of the local government (Dawson et al., 2023). This suggests that voters face trade-offs between candidates mixing programmatic and clientelist distribution, even in democracies dominated by one party. Indeed, 'grey zone' candidates - mixing 'good' and 'bad' modes of distributional politics during election campaigns - are a widespread phenomenon across the world's democracies, which suggests not only that the issue and findings of this paper are pertinent to the operation of democracy across countries, but also that we need to learn more about the mechanisms generating voter support for these types of political candidates.

From that perspective, our findings have at least two important implications. First, if

clientelism is more effective when it involves the distribution of work or jobs in return for votes, this creates a potential incumbency bias where current office holders are privileged relative to opposition candidates because they have the means to allocate public sector work based on partisan criteria. Second, patronage may impact the distribution of jobs outside the public sector. In fact, the relative importance of patronage in clientelist exchange suggests that we - beyond incumbents' ability to distribute public sector work - should pay more attention to links between politicians and business owners, who employ people at the workplace and therefore have jobs and work to distribute (Frye et al., 2014). Networks between business owners and politicians may directly impact elections in cases where political connections allow political candidates to broker access to not just public sector work but also jobs in the private sector. This suggests that the impact of clientelism extends beyond electoral politics with implications for the ties between voters, politicians, and politically connected employers.

References

Abramson, S. F., Kocak, K., and Magazinnik, A. (2022). What Do We Learn about Voter Preferences from Conjoint Experiments? *American Journal of Political Science*, 66(4):1008–1020.

Acemoglu, D. and Robinson, J. A. (2006). *Economic origins of dictatorship and democracy*. Cambridge University Press, Cambridge New York.

Acemoglu, D., Ticchi, D., and Vindigni, A. (2011). Emergence and persistence of inefficient states. *Journal of the European Economic Association*, 9(2):177–208.

Albertus, M. (2013). Vote Buying With Multiple Distributive Goods. *Comparative Political Studies*, 46(9):1082–1111.

Anduiza, E., Gallego, A., and Muñoz, J. (2013). Turning a Blind Eye: Experimental Evidence of Partisan Bias in Attitudes Toward Corruption. *Comparative Political Studies*, 46(12):1664–1692.

Ansell, A. (2018). Clientelism, elections, and the dialectic of numerical people in Northeast Brazil. *Current Anthropology*, 59:128–S137.

Auerbach, A. M. (2016). Clients and communities: The political economy of party network organization and development in india's urban slums. *World Politics*, 68(1):111–148.

Auerbach, A. M. and Thachil, T. (2018). How Clients Select Brokers: Competition and Choice in India's Slums. *American Political Science Review*, 112(4):954–970.

Bansak, K., Hainmueller, J., Hopkins, D. J., and Yamamoto, T. (2018). The Number of Choice Tasks and Survey Satisficing in Conjoint Experiments. *Political Analysis*, 26(1):112–119.

Bansak, K., Hainmueller, J., Hopkins, D. J., and Yamamoto, T. (2021). *Conjoint Survey Experiments*, page 19–41. Cambridge University Press.

Bansak, K., Hainmueller, J., Hopkins, D. J., and Yamamoto, T. (2022). Using Conjoint Experiments to Analyze Election Outcomes: The Essential Role of the Average Marginal Component Effect. *Political Analysis*, pages 1–19.

Berens, S. and Ruth-Lovell, S. (2021). Does Clientelism Hinder Progressive Social Policy in Latin America? *Acta politica*, 56(4):694–718.

Bergman, E. (2019). *Clientelism, conditional cash transfers, and cross-class coalitions: why governments expand pro-poor redistribution*. PhD thesis, University of Gothenburg.

Boas, T. C., Hidalgo, F. D., and Melo, M. A. (2019). Norms versus Action: Why Voters Fail to Sanction Malfeasance in Brazil. *American Journal of Political Science*, 63(2):385–400.

Bobonis, G. J., Gertler, P., Gonzalez-Navarro, M., and Nicther, S. (2017). Vulnerability and Clientelism. NBER Working Paper No. 23589.

Breitenstein, S. (2019). Choosing the crook: A conjoint experiment on voting for corrupt politicians. *Research and Politics*, 6(1).

Bustikova, L. and Corduneanu-Huci, C. (2017). Patronage, trust, and state capacity: The historical trajectories of clientelism. *World Politics*, 69(2):277–326.

Bøttkjær, L. and Justesen, M. K. (2021). Why do voters support corrupt politicians ? Experimental evidence from South Africa. *The Journal of Politics*, 83(2):788–793.

Carnes, N. and Lupu, N. (2016). Do Voters Dislike Working-Class Candidates? Voter Biases and the Descriptive Underrepresentation of the Working Class. *American Political Science Review*, 110(4):832–844.

Clayton, K., Horiuchi, Y., Kaufman, A. R., King, G., and Komisarchik, M. (2023). Correcting Measurement Error Bias in Conjoint Survey Experiments.

Corbacho, A., Gingerich, D. W., Oliveros, V., and Ruiz-Vega, M. (2016). Corruption as a Self-Fulfilling Prophecy: Evidence from a Survey Experiment in Costa Rica. *American Journal of Political Science*, 60(4):1077–1092.

Cruz, C., Keefer, P., and Labonne, J. (2021). Buying Informed Voters: New Effects of Information on Voters and Candidates. *The Economic Journal*, 131(635):1105–1134.

Dawson, S., Charron, N., and Justesen, M. K. (2023). Electoral competition, political parties and clientelism: evidence from local elections in south africa. *Democratization*, 30(3):479–500.

De Kadt, D. and Lieberman, E. S. (2020). Nuanced Accountability: Voter Responses to Service Delivery in Southern Africa. *British Journal of Political Science*, 50(1):185–215.

de la Cuesta, B., Egami, N., and Imai, K. (2022). Improving the External Validity of Conjoint Analysis: The Essential Role of Profile Distribution. *Political Analysis*, 30(1):19–45.

De La O, A. L. (2013). Do Conditional Cash Transfers Affect Electoral Behavior? Evidence from a Randomized Experiment in Mexico. *American Journal of Political Science*, 57(1):1–14.

De Vries, C. E. and Solaz, H. (2017). The Electoral Consequences of Corruption. *Annual Review of Political Science*, 20:391–408.

Diaz Cayeros, A., Estevez, F., and Magaloni, B. (2016). *The Political Logic of Poverty Relief: Electoral Strategies and Social Policy in Mexico*. Cambridge University Press.

Dixit, A. and Londregan, J. (1996). The determinants of success of special interests in redistributive politics. *Journal of Politics*, 58(4):1132–1155.

Elkjær, M. A. and Iversen, T. (2020). The Political Representation of Economic Interests: Subversion of Democracy or Middle-Class Supremacy? *World Politics*, 72(2):254–290.

Fergusson, L., Molina, C. A., and Robinson, J. A. (2022). The Weak State Trap. *Economica (London)*, 89(354):293–331.

Fisman, R. and Golden, M. A. (2017). *Corruption: What Everyone Needs to Know*. Oxford University Press.

Frey, A. (2019). Cash transfers, clientelism, and political enfranchisement: Evidence from Brazil. *Journal of Public Economics*, 176:1–17.

Fried, B. J. (2012). Distributive Politics and Conditional Cash Transfers: The Case of Brazil's Bolsa Familia. *World Development*, 40:1042–1053.

Frye, T., Reuter, O. J., and Szakonyi, D. (2014). Political Machines at Work Voter Mobilization and Electoral Subversion in the Workplace. *World Politics*, 66(2):195–228.

Gans-Morse, J., Mazzuca, S., and Nichter, S. (2014). Varieties of Clientelism: Machine Politics during Elections. *American Journal of Political Science*, 58(2):415–432.

Ganter, F. (2023). Identification of Preferences in Forced-Choice Conjoint Experiments: Reassessing the Quantity of Interest. *Political nalysis*, 31(1):98–112.

Gherghina, S., Saikkonen, I., and Bankov, P. (2022). Dissatisfied, uninformed or both? Democratic satisfaction, political knowledge and the acceptance of clientelism in a new democracy. *Democratization*, 29(2):211 – 231. Cited by: 3; All Open Access, Green Open Access, Hybrid Gold Open Access.

Gonzalez-Ocantos, E. A., Muñoz, P., Pavão, N., and Hidalgo, V. B. (2023). *Prosecutors, Voters and The Criminalization of Corruption in Latin America: The Case of Lava Jato*. Cambridge Studies in Law and Society. Cambridge University Press.

Guerra, A. and Justesen, M. K. (2022). Vote buying and redistribution. *Public Choice*, 193(3-4):315 – 344.

Hainmueller, J., Hangartner, D., and Yamamoto, T. (2015). Validating vignette and conjoint survey experiments against real-world behavior. *Proceedings of the National Academy of Sciences of the United States of America*, 112(8):2395–2400.

Hainmueller, J., Hopkins, D. J., and Yamamoto, T. (2014). Causal inference in conjoint analysis: Understanding multidimensional choices via stated preference experiments. *Political Analysis*, 22(1):1–30.

Hicken, A. (2007). How Do Rules and Institutions Encourage Vote Buying? In Schaffer, F. C., editor, *Elections for Sale: The Causes and Consequences of Vote Buying*, pages 47–60. Lynne Rienner Publisher.

Hicken, A. (2011). Clientelism. *Annual Review of Political Science*, 14:289–310.

Hidalgo, F. D. and Nichter, S. (2016). Voter Buying: Shaping the Electorate through Clientelism. *American Journal of Political Science*, 60(2):436–455.

Higgins, S. and Pereira, C. (2014). The Effects of Brazil's Taxation and Social Spending on the Distribution of Household Income. *Public Finance Review*, 42(3):346–367.

Horiuchi, Y., Markovich, Z., and Yamamoto, T. (2022). Does Conjoint Analysis Mitigate Social Desirability Bias? *Political Analysis*, 30(4):535–549.

Incerti, T. (2020). Corruption Information and Vote Share: A Meta-Analysis and Lessons for Experimental Design. *American Political Science Review*, 114(3):761–774.

Jensen, P. S. and Justesen, M. K. (2014). Poverty and vote buying: Survey-based evidence from Africa. *Electoral Studies*, 33(1):220–232.

Keefer, P. (2007). Clientelism, credibility, and the policy choices of young democracies. *American Journal of Political Science*, 51(4):804–821.

Khemani, S. (2015). Buying votes versus supplying public services: Political incentives to under-invest in pro-poor policies. *Journal of Development Economics*, 117:84–93.

Kirkland, P. and Coppock, A. (2018). Candidate Choice Without Party Labels. *Political Behavior*, 40(3):571–591.

Klašnja, M., Lupu, N., and Tucker, J. A. (2021). When Do Voters Sanction Corrupt Politicians? *Journal of Experimental Political Science*, 8:161–171.

Kramon, E. (2017). *Money for Votes: The Causes and Consequences of Electoral Clientelism in Africa*. Cambridge University Press.

Kyriacou, A. P. (2023). Clientelism and fiscal redistribution: Evidence across countries. *European Journal of Political Economy*, 76:102234.

Leeper, T. J., Hobolt, S. B., and Tilley, J. (2020). Measuring Subgroup Preferences in Conjoint Experiments. *Political Analysis*, 28(2):207–221.

Mares, I. and Visconti, G. (2019). Voting for the lesser evil: Evidence from a conjoint experiment in Romania. *Political Science Research and Methods*, 8(2):315–328.

Mares, I. and Young, L. (2016). Buying, Expropriating,and Stealing Votes. *Annual Review of Political Science*, 19(2):267–288.

Mares, I. and Young, L. (2019). *Conditionality & Coercion: Electoral Clientelism in Eastern Europe*. Oxford University Press, Oxford.

MDS (2022). Bolsa Familía. https://www.mds.gov.br/bolsafamilia. Accesed: 2022-10-04.

Meltzer, A. H. and Richard, S. F. (1981). A Rational Theory of the Size of Government. *Journal of Political Economy*, 89(5):914–927.

Mercer, A. W., Kreuter, F., Keeter, S., and Stuart, E. A. (2017). Theory and Practice in Nonprobability Surveys: Parallels between Causal Inference and Survey Inference. *Public Opinion Quarterly*, 81(1):250–271.

Nichter, S. (2018). *Votes for Survival: Relational Clientelism in Latin America*. Cambridge University Press, Cambridge.

Nichter, S. and Nunnari, S. (2022). Declared support and clientelism. *Comparative Political Studies*, 55(13):2178–2216.

Nichter, S. and Peress, M. (2017). Request Fulfilling: When Citizens Demand Clientelist Benefits. *Comparative Political Studies*, 50(8):1086–1117.

Pellicer, M., Wegner, E., Bayer, M., and Tischmeyer, C. (2022). Clientelism from the client's perspective: A meta-analysis of ethnographic literature. *Perspectives on Politics*, 20(3):931–947.

Pellicer, M., Wegner, E., Benstead, L. J., and Lust, E. (2021). Poor people's beliefs and the dynamics of clientelism. *Journal of Theoretical Politics*, 33(3):300–332.

Rains, E. and Wibbels, E. (2023). Informal Work, Risk, and Clientelism: Evidence from 223 Slums across India. *British Journal of Political Science*, 53(1):1 – 24.

Robinson, J. A. and Verdier, T. (2013). The Political Economy of Clientelism. *Scandinavian Journal of Economics*, 115(2):260–291.

Samuels, D. J. and Zucco, C. (2018). *Partisans, Antipartisans, and Nonpartisans: Voting Behavior in Brazil*. Cambridge University Press.

Sanchez, A. and Goda, T. (2018). Corruption and the 'The Paradox of Redistribution'. *Social Indicators Research*, 140(2):675–693.

Scott, J. C. (1969). Corruption, Machine Politics, and Political Change. *American Political Science Review*, 63(4):1142–1158.

Stokes, S. C., Dunning, T., Nazareno, M., and Brusco, V. (2013). *Brokers, Voters, and Clientelism: The Puzzle of Distributive Politics*. Cambridge University Press.

Sugiyama, N. B. and Hunter, W. (2013). Whither Clientelism? Good Governance and Brazil's "Bolsa Família" Program. *Comparative Politics*, 46(1):43–62.

Weitz-Shapiro, R. (2012). What Wins Votes: Why Some Politicians Opt Out of Clientelism. *American Journal of Political Science*, 56(3):568–583.

Woller, A., Hariri, J. G., and Justesen, M. K. (2023). The Cost of Voting and the Cost of Votes. *Journal of Politics*, 85(2):593–608.

World Bank (2021). Ethics and Corruption in the Federal Public Service: Civil Servants' Perspectives. *World Bank Paper*.

Yıldırım, K. and Kitschelt, H. (2020). Analytical perspectives on varieties of clientelism. *Democratization*, 27(1):20–43.

Zhirkov, K. (2022). Estimating and Using Individual Marginal Component Effects from Conjoint Experiments. *Political Analysis*, 30(2):236–249.

Zucco, C. (2013). When Payouts Pay Off: Conditional Cash Transfers and Voting Behavior in Brazil 2002-10. *American Journal of Political Science*, 57(4):810–822.

Supplementary Material: Chapter 2

A Survey Experiment and Robustness Checks

Experimental Set-Up

Table A.1: Experiment Introduction

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

Note: The table shows the English translation of the survey experiment, but the survey and the survey experiment were only conducted in Portuguese.

Table A.2: Outcome questions

Which of the above candidates...			
	Indicator	Candidate A	Candidate B
1	... would you vote for in the next municipal election?		
2	... is more likely to win the next municipal election?		

Table A.3: Follow-up questions to experiment

Which of the above candidates do you think...			
	Indicator	Candidate A	Candidate B
1	... is more likely to improve the **capacity** to collect local taxes and raise revenues in your municipality?		
2	... is more likely to engage in **corruption**?		
3	... is more likely to help **help people like you** when they face economic challenges?		
4	... is more likely to help **poor people**?		
5	... is more likely to reduce **the gap between the rich and the poor**?		
6	... is more likely to **deliver sufficient public services** in your municipality?		

Descriptive Statistics

The Table A.4 shows the descriptive statistics of the main variables used in the analysis.

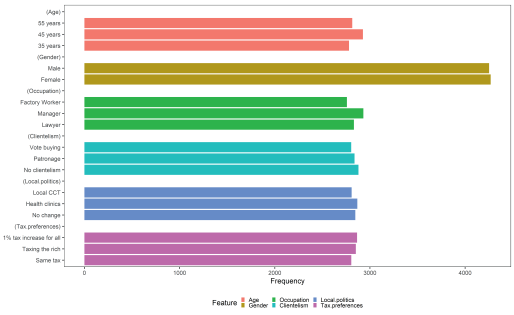
Table A.4: Descriptive Statistics of Variables

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

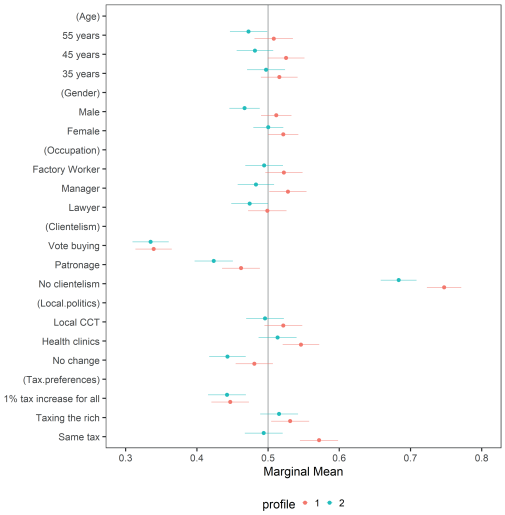
Diagnostic Tests

The diagnostic tests in Figure A.4 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.4a 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.4c 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.4b shows no carryover effects across all attribute values.

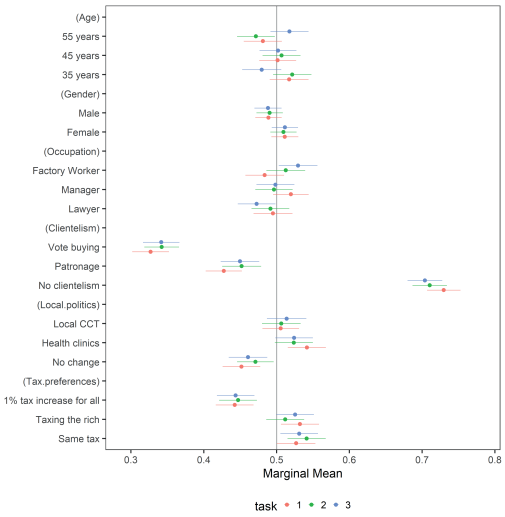
Figure A.1: Diagnostics



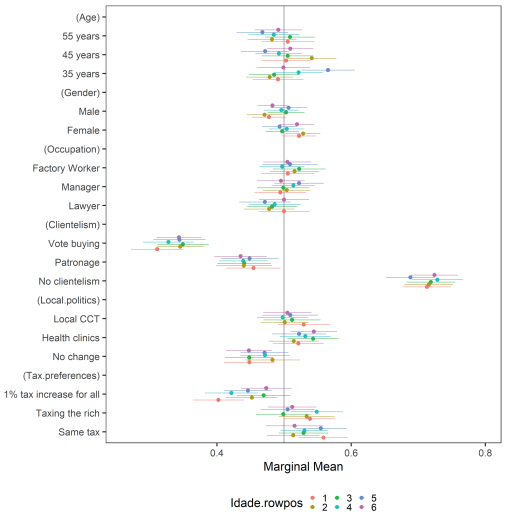
(a) Frequencies of Conjoint Features



(b) Carryover Effects



(c) Profile Order Effects



(d) Attribute Level Effect

Note: The first plot shows Frequencies. The other plots show the marginal means (MMs), i.e. the probability that respondents select an attribute, 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. $N = 8{,}520$.

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.4a) as well as distributive politics (figure A.4a) 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 % of respondents did not pass the first attention check and 1.55 % of respondents did not pass the second attention check.

Figure A.2: Duration of Survey

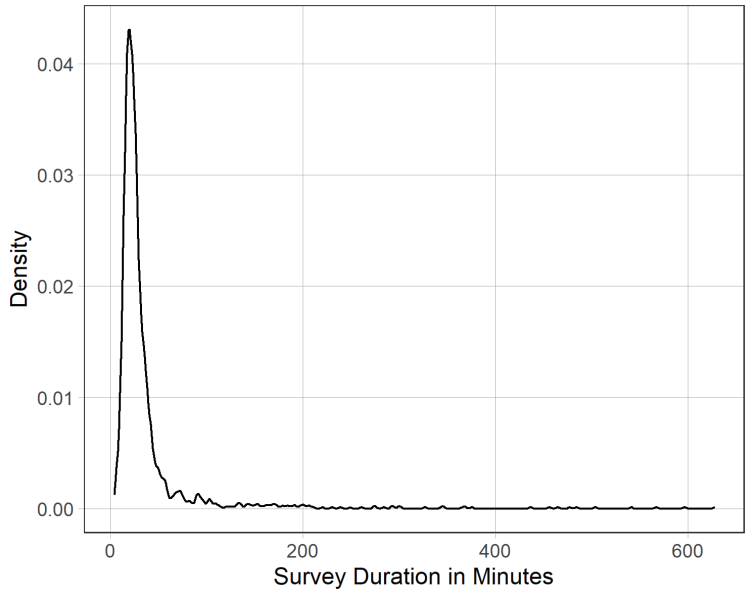
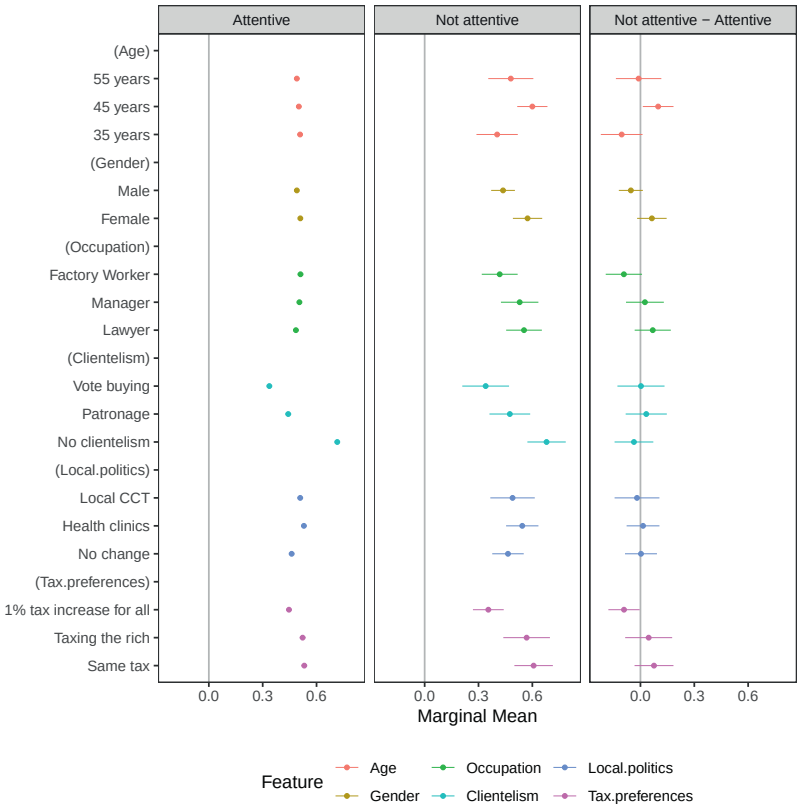
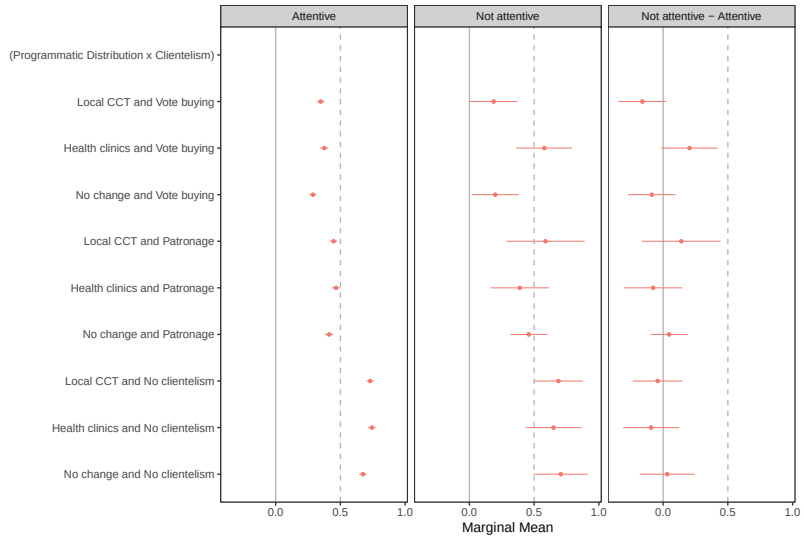


Figure A.3: Main Effects on Candidate Support, by Attention Check

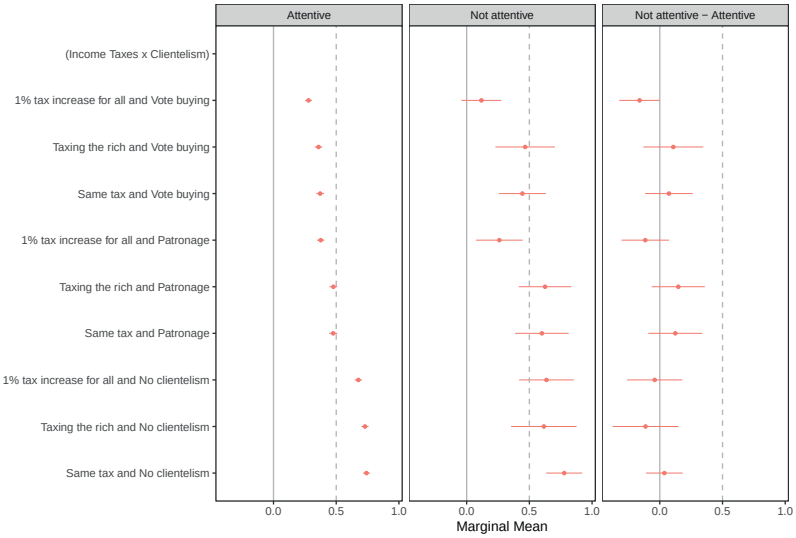


Note: These plots show the marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes. All predicted probabilities are bench-marked against 0.5. Standard errors are clustered at the respondent level; bars represent 95% confidence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

Figure A.4: Interaction Effects, by Attention Check



(a) Programmatic Distribution x Clientelism, by Attention Check



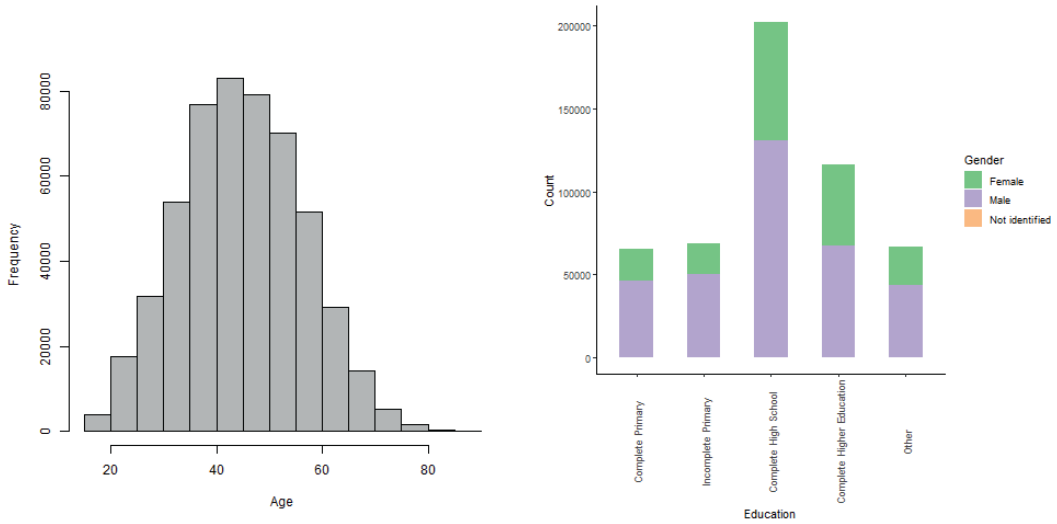
(b) Programmatic Distribution x Income Tax, by Attention Check

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.

Municipal Election 2020: City councillor Candidates

We analyse the profiles of all city councillor candidates from the 2020 election in Brazil[18] 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, Merchant, Businessperson and Housewife. Only 6 % of all political candidates are former city councillors. In relation to the attribute values we use in our experiment, 2 % identify as lawyer, 0.5 % as managers ('*Gerente*'), though we use '*manager of a big company*' and an additional 7 % each are a Businessperson and a Merchant. 3 % 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 %) and have only completed High School, followed by Higher education.

Figure A.5: Characteristics of 2020 City councillor Candidates



(a) Candidates' Age

(b) Candidates' Education and Gender

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

[18]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/

B Main Results

Table B.1: Figure 2.1 - **Main Effects** on Candidate Support and the Likelihood of Winning

Conjoint Features		Candidate Support, AMCE		Likelihood of Winning, AMCEs	
feature	level	estimate	std.error	estimate	std.error
Age	35 years	0.0000000	NA	0.0000000	NA
Age	45 years	-0.0021565	0.0125156	-0.0149389	0.0130191
Age	55 years	-0.0179038	0.0125676	-0.0015570	0.0132202
Clientelist distribution	No clientelism	0.0000000	NA	0.0000000	NA
Clientelist distribution	Patronage	-0.2724095	0.0135457	0.0080129	0.0150838
Clientelist distribution	Vote buying	-0.3789150	0.0125122	-0.0303277	0.0152432
Gender	Female	0.0000000	NA	0.0000000	NA
Gender	Male	-0.0213755	0.0101545	0.0204477	0.0107472
Occupation	Factory Worker	0.0257902	0.0126876	-0.0268286	0.0136112
Occupation	Lawyer	0.0000000	NA	0.0000000	NA
Occupation	Manager	0.0144673	0.0125534	0.0091833	0.0132790
Programmatic distribution	Health clinics	0.0703679	0.0127308	0.0654640	0.0134311
Programmatic distribution	Local CCT	0.0490739	0.0130522	0.1046226	0.0132397
Programmatic distribution	No change	0.0000000	NA	0.0000000	NA
Tax preferences	1% tax increase for all	-0.0885547	0.0128973	-0.0616576	0.0134376
Tax preferences	Same tax	0.0000000	NA	0.0000000	NA
Tax preferences	Taxing the rich	-0.0076372	0.0133638	-0.0383382	0.0137395

Note: The estimates are average marginal component effects (AMCEs), which show the effect of an 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.2: Figure 2.2 - Interaction Effects on Candidate Support, **Programmatic Redistribution x Clientelism**

Conjoint Features		Interaction Effects	
feature	level	estimate	std.error
Programmatic Distribution x Clientelism	No change and No clientelism	0.6748718	0.0145023
Programmatic Distribution x Clientelism	Health clinics and No clientelism	0.7412731	0.0143009
Programmatic Distribution x Clientelism	Local CCT and No clientelism	0.7290323	0.0142921
Programmatic Distribution x Clientelism	No change and Patronage	0.4139037	0.0155125
Programmatic Distribution x Clientelism	Health clinics and Patronage	0.4645161	0.0159716
Programmatic Distribution x Clientelism	Local CCT and Patronage	0.4501542	0.0159226
Programmatic Distribution x Clientelism	No change and Vote buying	0.2863248	0.0140712
Programmatic Distribution x Clientelism	Health clinics and Vote buying	0.3790239	0.0150142
Programmatic Distribution x Clientelism	Local CCT and Vote buying	0.3451327	0.0151569
Income Taxes x Clientelism	Same tax and No clientelism	0.7418335	0.0135939
Income Taxes x Clientelism	Taxing the rich and No clientelism	0.7276507	0.0145847
Income Taxes x Clientelism	1% tax increase for all and No clientelism	0.6756198	0.0149239
Income Taxes x Clientelism	Same tax and Patronage	0.4786325	0.0164164
Income Taxes x Clientelism	Taxing the rich and Patronage	0.4799567	0.0159218
Income Taxes x Clientelism	1% tax increase for all and Patronage	0.3738509	0.0150578
Income Taxes x Clientelism	Same tax and Vote buying	0.3732318	0.0153939
Income Taxes x Clientelism	Taxing the rich and Vote buying	0.3609100	0.0149540
Income Taxes x Clientelism	1% tax increase for all and Vote buying	0.2758997	0.0139661

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.3: Figure 2.3 - Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs: **Improve Fiscal Capacity**

Conjoint Features		Improve fiscal capacity	
feature	level	estimate	std.error
Programmatic Distribution X Clientelism	No change and No clientelism	0.6553846	0.0145852
Programmatic Distribution X Clientelism	Health clinics and No clientelism	0.6878850	0.0145988
Programmatic Distribution X Clientelism	Local CCT and No clientelism	0.6688172	0.0149502
Programmatic Distribution X Clientelism	No change and Patronage	0.4556150	0.0156209
Programmatic Distribution X Clientelism	Health clinics and Patronage	0.4548387	0.0157750
Programmatic Distribution X Clientelism	Local CCT and Patronage	0.4295992	0.0155036
Programmatic Distribution X Clientelism	No change and Vote buying	0.3504274	0.0146322
Programmatic Distribution X Clientelism	Health clinics and Vote buying	0.4112150	0.0149138
Programmatic Distribution X Clientelism	Local CCT and Vote buying	0.3738938	0.0155227

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.3 for survey question.

Table B.4: Figure 2.3 - Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs: **Engage in Corruption**

Conjoint Features		Engage in corruption	
feature	level	estimate	std.error
Programmatic Distribution X Clientelism	No change and No clientelism	0.3056410	0.0141046
Programmatic Distribution X Clientelism	Health clinics and No clientelism	0.2782341	0.0142964
Programmatic Distribution X Clientelism	Local CCT and No clientelism	0.2870968	0.0147170
Programmatic Distribution X Clientelism	No change and Patronage	0.5946524	0.0155099
Programmatic Distribution X Clientelism	Health clinics and Patronage	0.5602151	0.0157237
Programmatic Distribution X Clientelism	Local CCT and Patronage	0.5447071	0.0156428
Programmatic Distribution X Clientelism	No change and Vote buying	0.6324786	0.0149329
Programmatic Distribution X Clientelism	Health clinics and Vote buying	0.6261682	0.0152662
Programmatic Distribution X Clientelism	Local CCT and Vote buying	0.6880531	0.0145982

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.3 for survey question.

Table B.5: Figure 2.3 - Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs: **Help in Economic Distress**

Conjoint Features		Help in economic distress	
feature	level	estimate	std.error
Programmatic Distribution X Clientelism	No change and No clientelism	0.5897436	0.0150128
Programmatic Distribution X Clientelism	Health clinics and No clientelism	0.6704312	0.0153411
Programmatic Distribution X Clientelism	Local CCT and No clientelism	0.7172043	0.0141630
Programmatic Distribution X Clientelism	No change and Patronage	0.4256684	0.0156800
Programmatic Distribution X Clientelism	Health clinics and Patronage	0.4569892	0.0156463
Programmatic Distribution X Clientelism	Local CCT and Patronage	0.5179856	0.0155666
Programmatic Distribution X Clientelism	No change and Vote buying	0.3301282	0.0145872
Programmatic Distribution X Clientelism	Health clinics and Vote buying	0.3821391	0.0147390
Programmatic Distribution X Clientelism	Local CCT and Vote buying	0.3993363	0.0154219

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.3 for survey question.

Table B.6: Figure 2.3 - Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs: **Help poor people**

Conjoint Features		Help poor people	
feature	level	estimate	std.error
Programmatic Distribution X Clientelism	No change and No clientelism	0.6020513	0.0145677
Programmatic Distribution X Clientelism	Health clinics and No clientelism	0.6909651	0.0149900
Programmatic Distribution X Clientelism	Local CCT and No clientelism	0.7483871	0.0138780
Programmatic Distribution X Clientelism	No change and Patronage	0.3818182	0.0153255
Programmatic Distribution X Clientelism	Health clinics and Patronage	0.4516129	0.0156876
Programmatic Distribution X Clientelism	Local CCT and Patronage	0.4964029	0.0158016
Programmatic Distribution X Clientelism	No change and Vote buying	0.3215812	0.0145754
Programmatic Distribution X Clientelism	Health clinics and Vote buying	0.3821391	0.0145852
Programmatic Distribution X Clientelism	Local CCT and Vote buying	0.4148230	0.0158700

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.3 for survey question.

Table B.7: Figure 2.3 - Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs: **Reduce Inequality**

Conjoint Features		Reduce inequality	
feature	level	estimate	std.error
Programmatic Distribution X Clientelism	No change and No clientelism	0.6317949	0.0143003
Programmatic Distribution X Clientelism	Health clinics and No clientelism	0.7012320	0.0145297
Programmatic Distribution X Clientelism	Local CCT and No clientelism	0.7150538	0.0144388
Programmatic Distribution X Clientelism	No change and Patronage	0.4128342	0.0156598
Programmatic Distribution X Clientelism	Health clinics and Patronage	0.4290323	0.0157449
Programmatic Distribution X Clientelism	Local CCT and Patronage	0.4737924	0.0157801
Programmatic Distribution X Clientelism	No change and Vote buying	0.3215812	0.0145221
Programmatic Distribution X Clientelism	Health clinics and Vote buying	0.4039460	0.0151456
Programmatic Distribution X Clientelism	Local CCT and Vote buying	0.3982301	0.0153047

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.3 for survey question.

Table B.8: Figure 2.3 - Interaction Effects of Clientelism x Programmatic Distribution on Voter Beliefs: **Deliver Public Services**

Conjoint Features		Deliver public services	
feature	level	estimate	std.error
Programmatic Distribution X Clientelism	No change and No clientelism	0.6574359	0.0145357
Programmatic Distribution X Clientelism	Health clinics and No clientelism	0.7351129	0.0142899
Programmatic Distribution X Clientelism	Local CCT and No clientelism	0.7032258	0.0148421
Programmatic Distribution X Clientelism	No change and Patronage	0.4342246	0.0155302
Programmatic Distribution X Clientelism	Health clinics and Patronage	0.4623656	0.0157387
Programmatic Distribution X Clientelism	Local CCT and Patronage	0.4172662	0.0155892
Programmatic Distribution X Clientelism	No change and Vote buying	0.3354701	0.0148994
Programmatic Distribution X Clientelism	Health clinics and Vote buying	0.4029076	0.0148114
Programmatic Distribution X Clientelism	Local CCT and Vote buying	0.3373894	0.0150832

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.3 for survey question.

Table B.9: Figure 2.4 - Main effects on Candidate support, **Non-poor vs. Poor Voters**

Conjoint Features		MM Effects	
feature	level	estimate	std.error
Programmatic Distribution x Clientelism	No change and No clientelism (Poor)	0.6973366	0.0151802
Programmatic Distribution x Clientelism	Health clinics and No clientelism (Poor)	0.7494033	0.0152866
Programmatic Distribution x Clientelism	Local CCT and No clientelism (Poor)	0.7393484	0.0150700
Programmatic Distribution x Clientelism	No change and Patronage (Poor)	0.4140436	0.0164809
Programmatic Distribution x Clientelism	Health clinics and Patronage (Poor)	0.4590571	0.0171276
Programmatic Distribution x Clientelism	Local CCT and Patronage (Poor)	0.4326923	0.0168458
Programmatic Distribution x Clientelism	No change and Vote buying (Poor)	0.2844720	0.0151067
Programmatic Distribution x Clientelism	Health clinics and Vote buying (Poor)	0.3724054	0.0160614
Programmatic Distribution x Clientelism	Local CCT and Vote buying (Poor)	0.3363874	0.0164458
Programmatic Distribution x Clientelism	No change and No clientelism (Non-Poor)	0.5503356	0.0432870
Programmatic Distribution x Clientelism	Health clinics and No clientelism (Non-Poor)	0.6911765	0.0401653
Programmatic Distribution x Clientelism	Local CCT and No clientelism (Non-Poor)	0.6666667	0.0423611
Programmatic Distribution x Clientelism	No change and Patronage (Non-Poor)	0.4128440	0.0460474
Programmatic Distribution x Clientelism	Health clinics and Patronage (Non-Poor)	0.5000000	0.0442815
Programmatic Distribution x Clientelism	Local CCT and Patronage (Non-Poor)	0.5531915	0.0453319
Programmatic Distribution x Clientelism	No change and Vote buying (Non-Poor)	0.2977099	0.0386570
Programmatic Distribution x Clientelism	Health clinics and Vote buying (Non-Poor)	0.4166667	0.0415283
Programmatic Distribution x Clientelism	Local CCT and Vote buying (Non-Poor)	0.3928571	0.0387088

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.

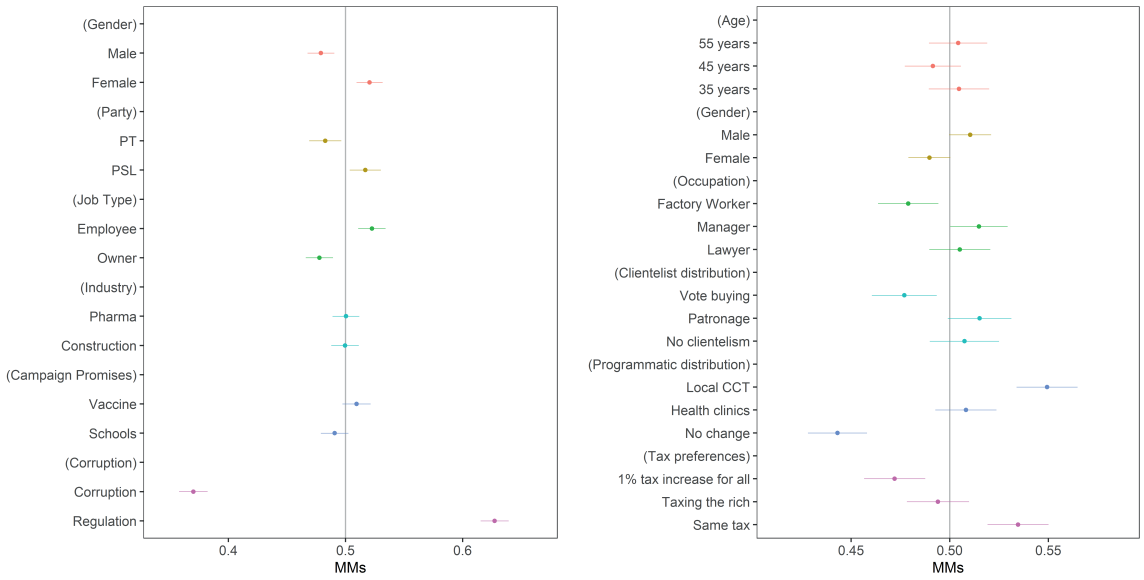
C Additional Results

Main Effects: Programmatic Redistribution and Clientelism

Figure C.1 presents the marginal means (MMs) of the main effects on candidate support (C.1a) and electoral viability (C.1b).

Figure C.2 presents the average marginal component effects (AMCEs) for the main effects on voters beliefs about the candidates (Table A.3). Figure (C.3) presents the marginal means of voter beliefs.

Figure C.1: Effects on Candidate Support and the Likelihood of Winning, MMs

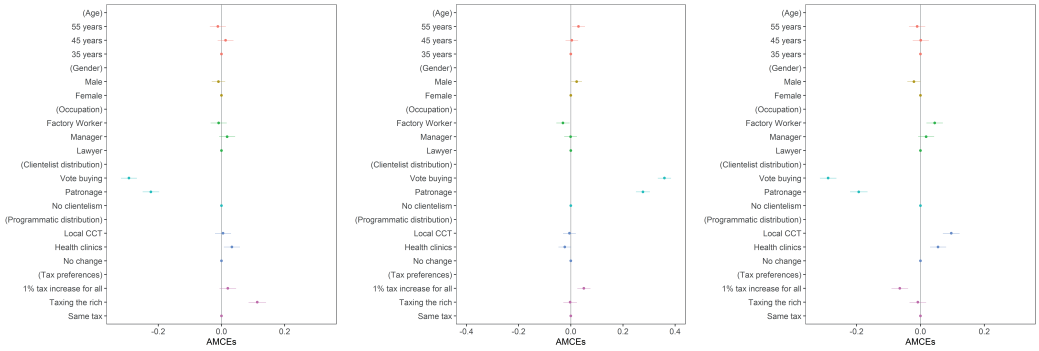


(a) Candidate Support

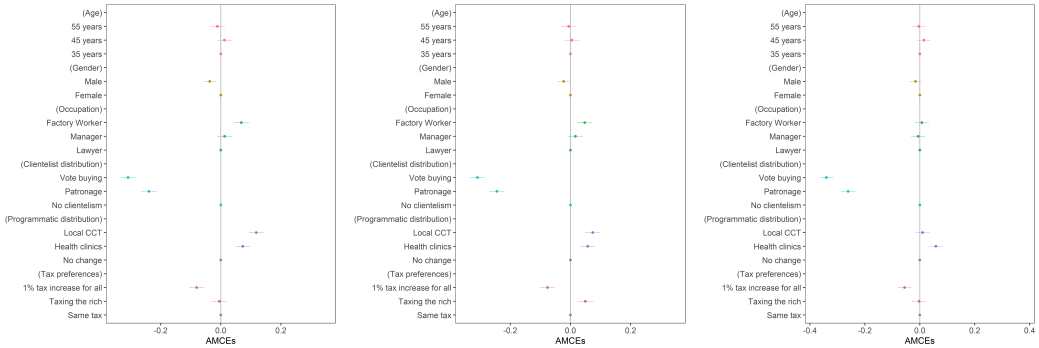
(b) Likelihood of Winning

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.2: Effects on Voter Beliefs, AMCEs



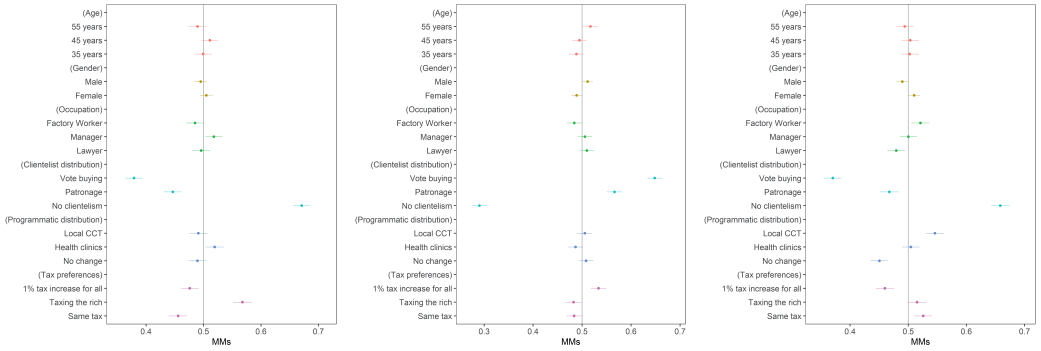
(a) Improve fiscal capacity (b) Engage in corruption (c) Help in economic distress



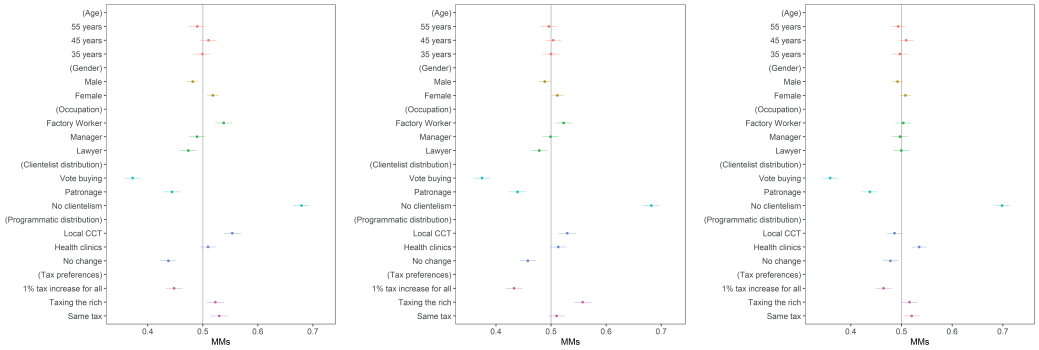
(d) Help poor people (e) Reduce inequality (f) Deliver public service

Note: These plots show the 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. $N = 8{,}520$.

Figure C.3: Effects on Voter Beliefs, MMs



(a) Improve fiscal capacity (b) Engage in corruption (c) Help in economic distress



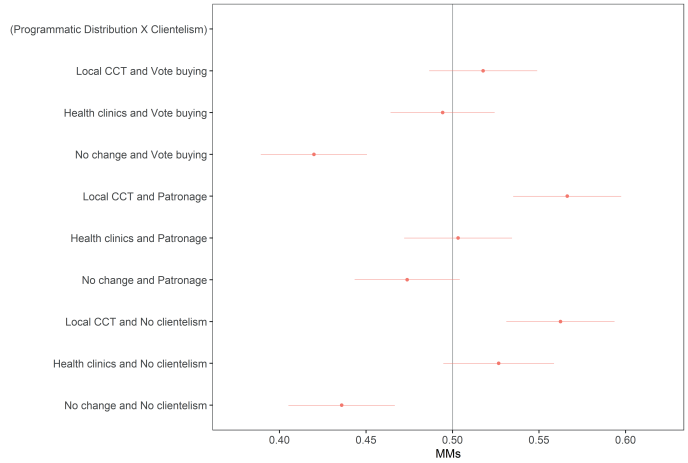
(d) Help poor people (e) Reduce inequality (f) Deliver public service

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. $N = 8{,}520$.

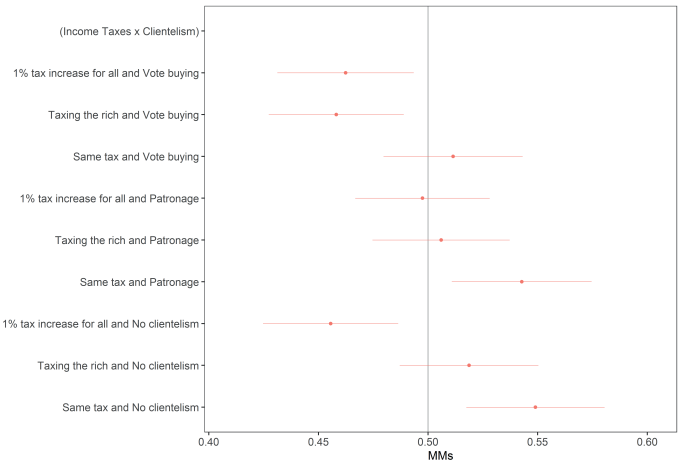
Interaction Effects: Programmatic Redistribution and Clientelism

Figure C.4 presents the interactions effects of clientelism and programmatic redistribution on voters beliefs about a candidate's likelihood of winning.

Figure C.4: Interaction Effects on Likelihood of Winning, Programmatic Redistribution x Clientelism, MMs



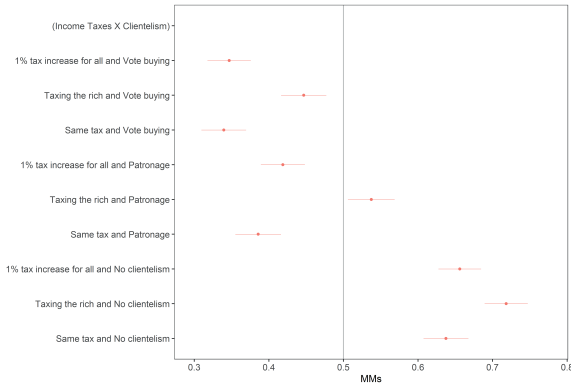
(a) Programmatic distribution x Clientelism



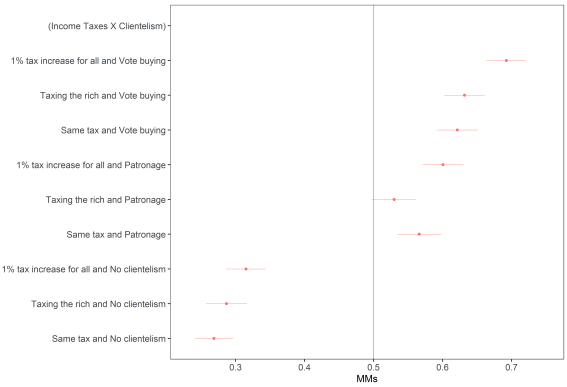
(b) Income taxes x Clientelism

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 bench-marked against 0.5. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 8{,}520$.

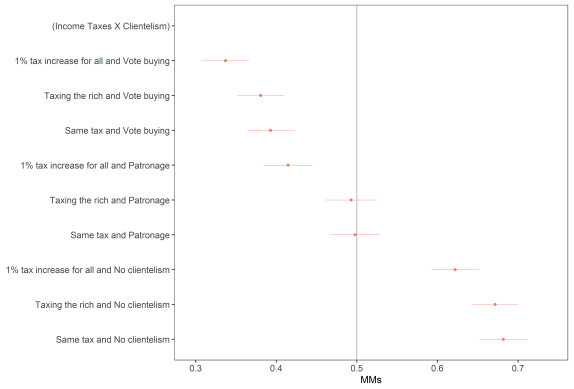
Figure C.5: Interactions Effects on Voter Beliefs, Clientelism x Income Taxes, MMs



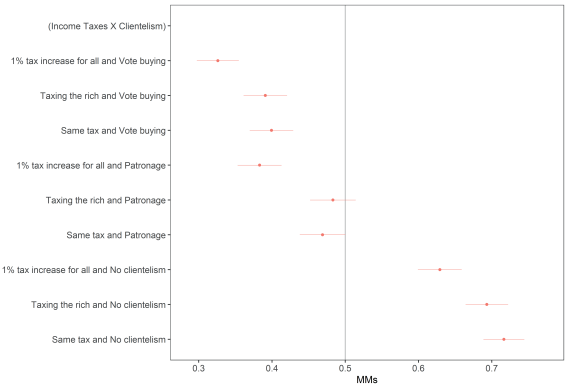
(a) Improve fiscal capacity



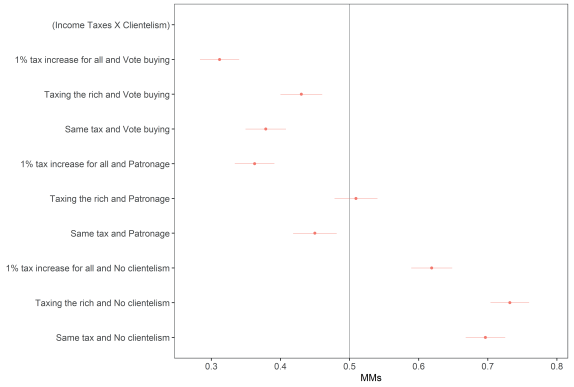
(b) Engage in corruption



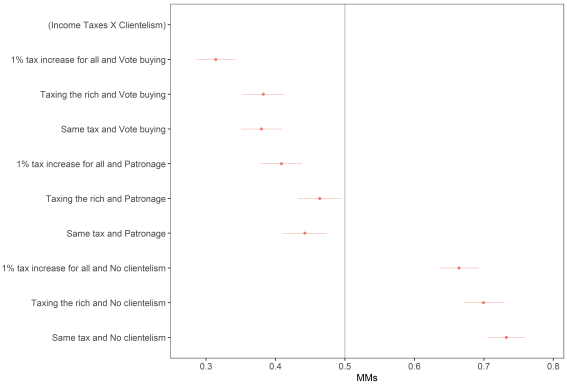
(c) Help in economic distress



(d) Help poor people



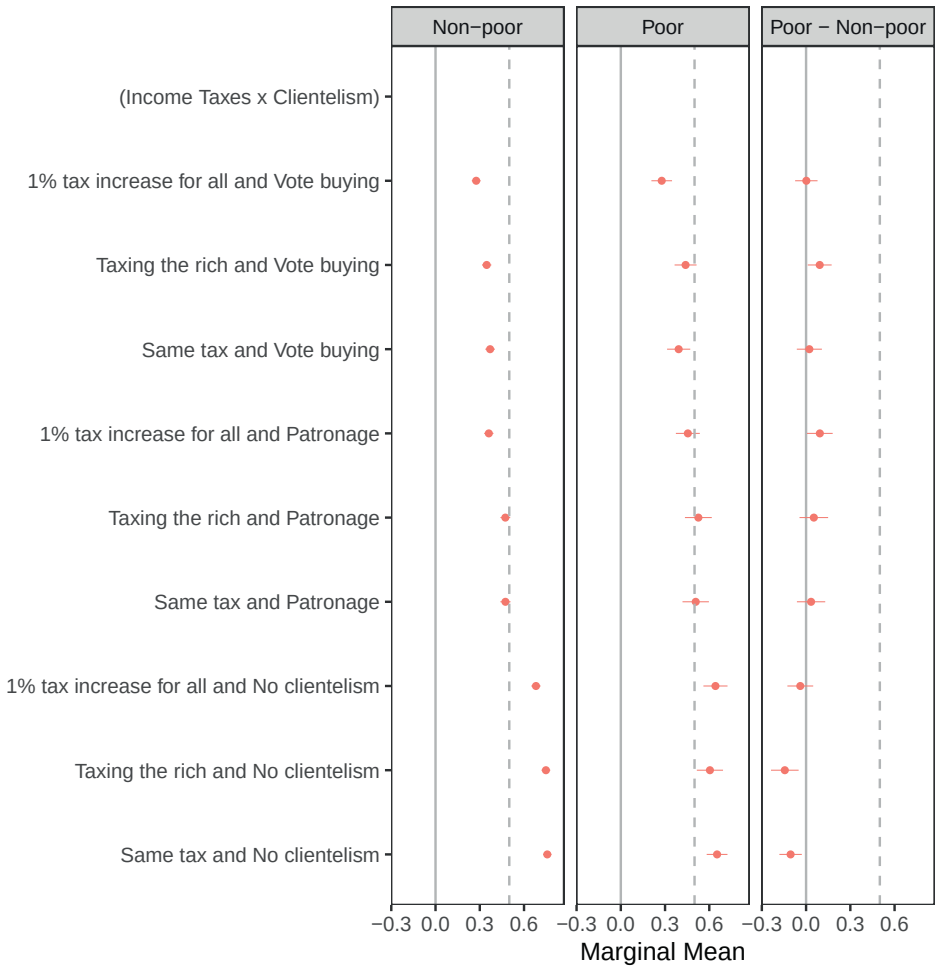
(e) Reduce inequality



(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 bench-marked against 0.5. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 8{,}520$.

Figure C.6: Interaction Effects on Candidate Support, Clientelism x Income Taxes, MMs

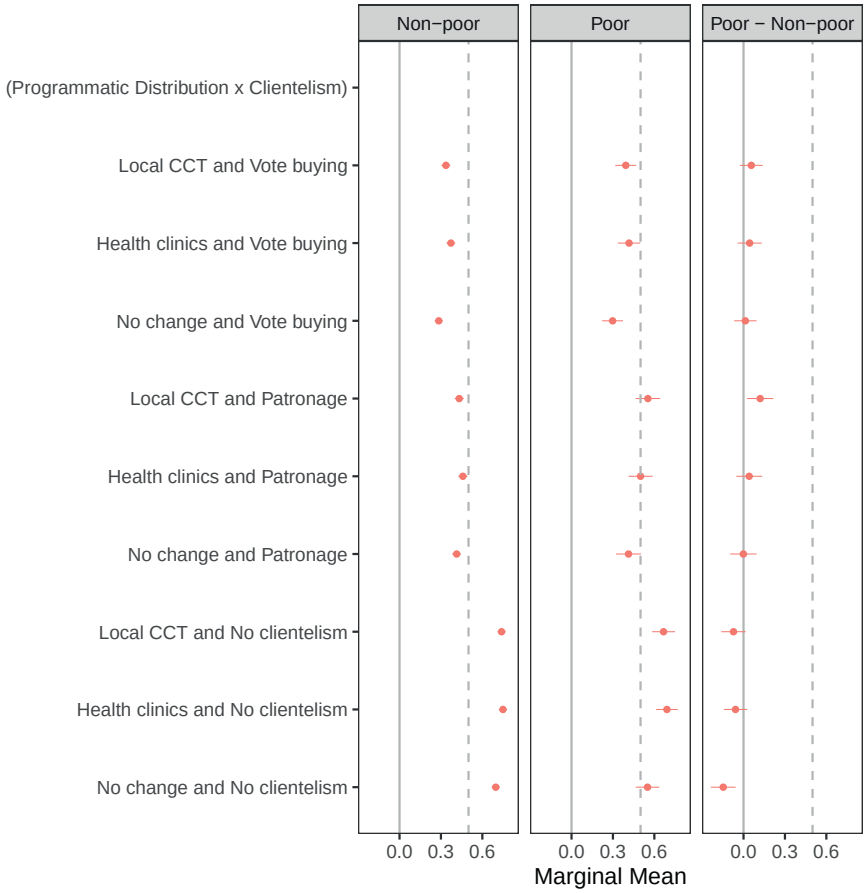


Note: These plots show the marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes (as well as the differences across the two subgroups). All predicted probabilities are bench-marked against 0.5 and differences are bench-marked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

Subgroup Analysis

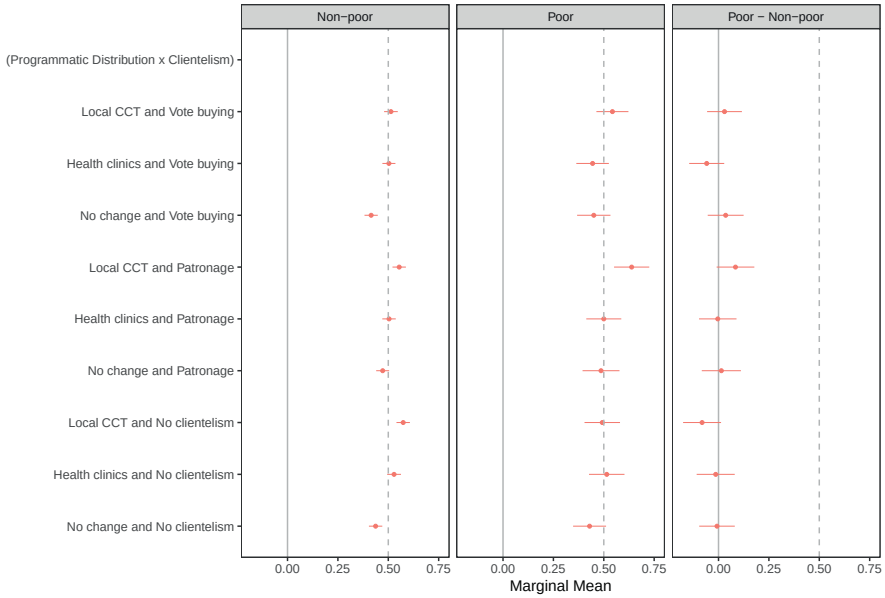
The subgroup analysis shows the correlation matrix of the different poverty indicators that we used in the survey (Figure C.12) and the main effects on candidate support, by poverty (Figure C.13). We also find no significant differences between female and male respondents (Figure C.14).

Figure C.7: Poor vs. Non-poor Voters

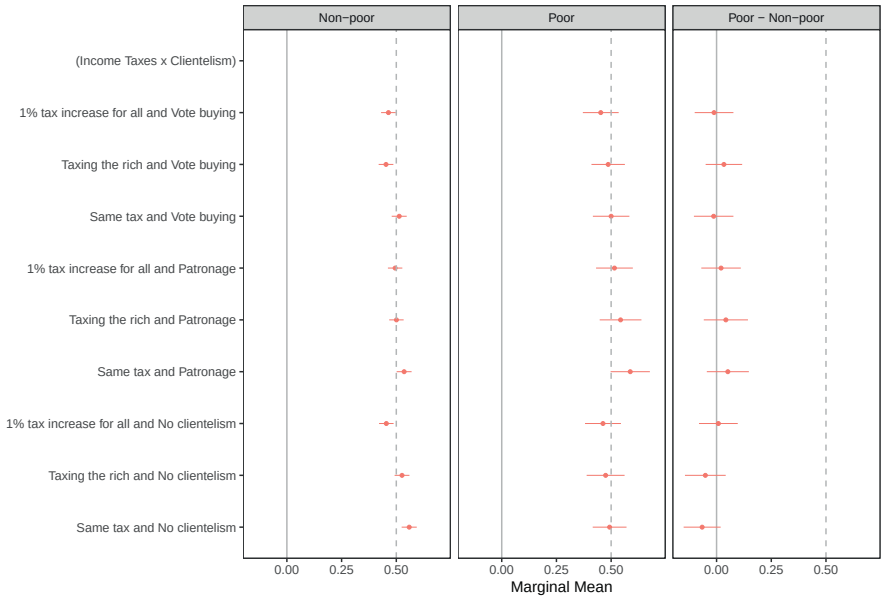


Note: The coefficients (dots) show the difference across the subgroups in marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $n = 8{,}520$ ($n_{poor} = 1{,}206$.).

Figure C.8: Interaction Effects on Likelihood of Winning, Programmatic Redistribution x Clientelism, Non-poor vs. Poor, MMs



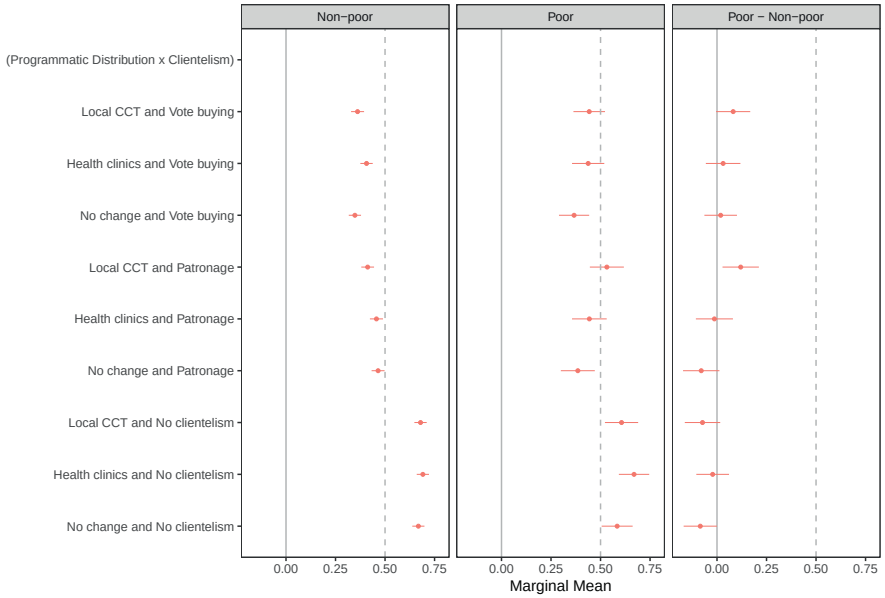
(a) Programmatic Distribution x Clientelism



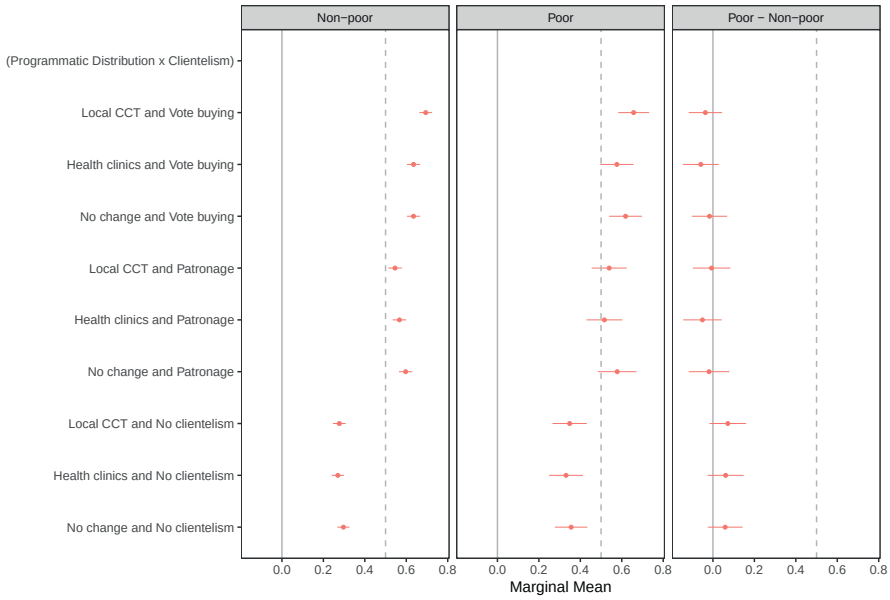
(b) Income Taxes x Clientelism

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 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.9: Interaction Effects on Voter Beliefs I, Programmatic Distribution x Clientelism, Non-poor vs. poor, MMs



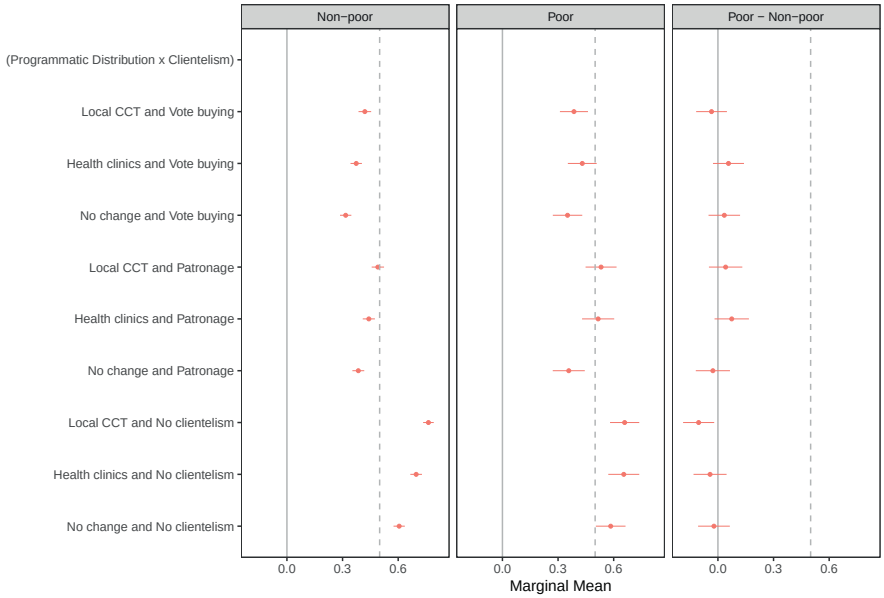
(a) Improve fiscal capacity



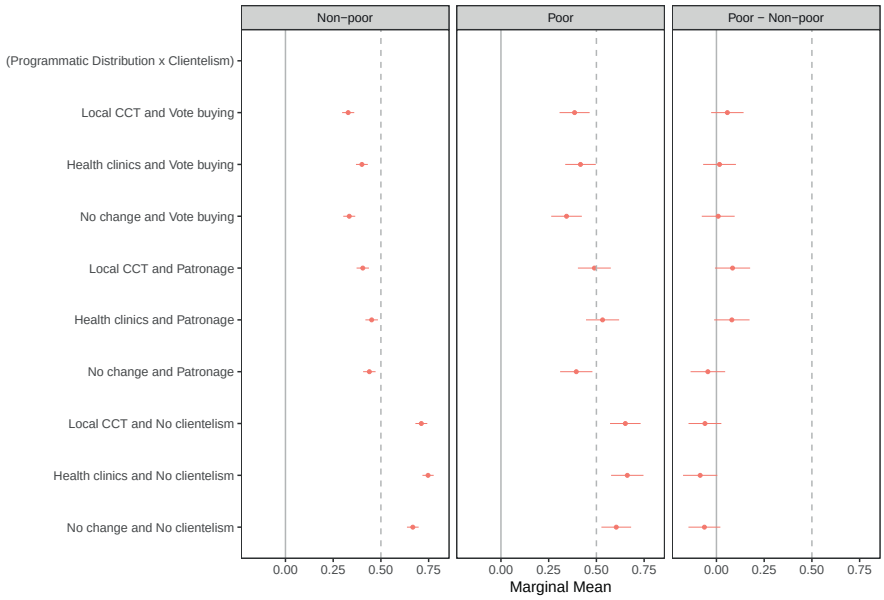
(b) Engage in corruption

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.10: Interaction Effects on Voter Beliefs II, Programmatic Distribution x Clientelism, Non-poor vs. poor, MMs



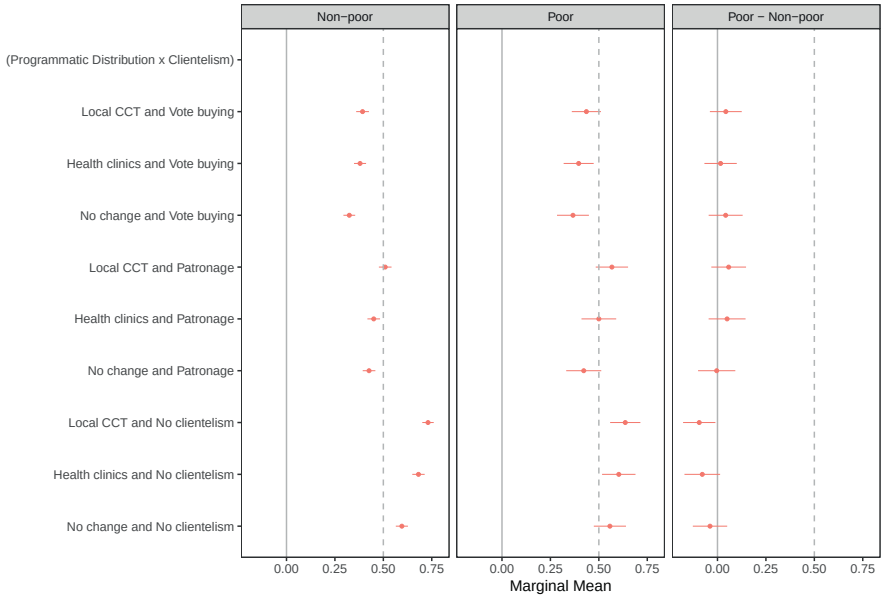
(a) Help the poor



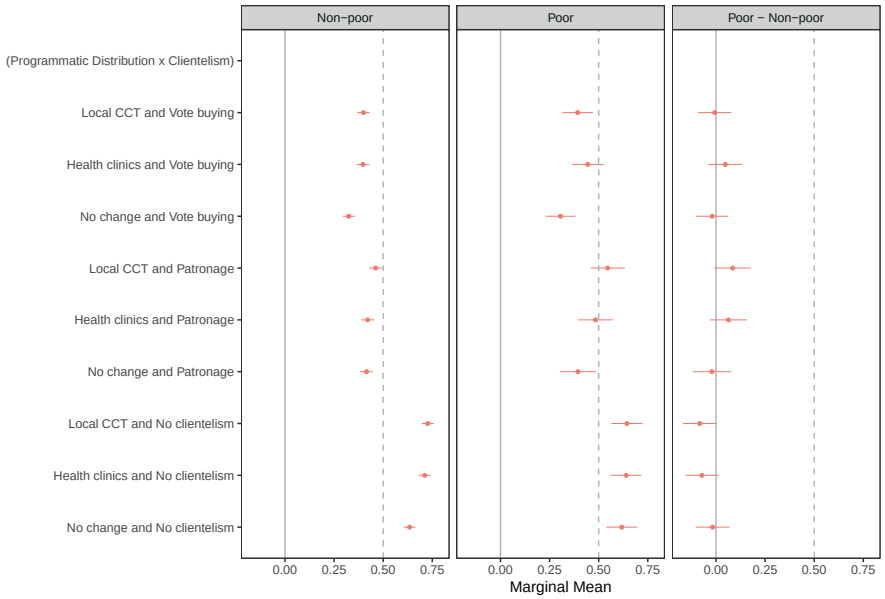
(b) Deliver public services

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.11: Interaction Effects on Voter Beliefs III, Programmatic Distribution x Clientelism, Non-poor vs. poor, MMs



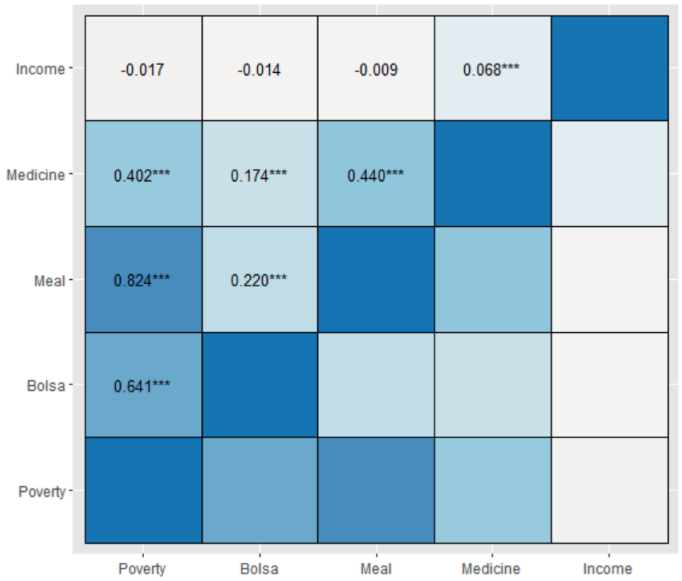
(a) Help in economic distress



(b) Reduce inequality

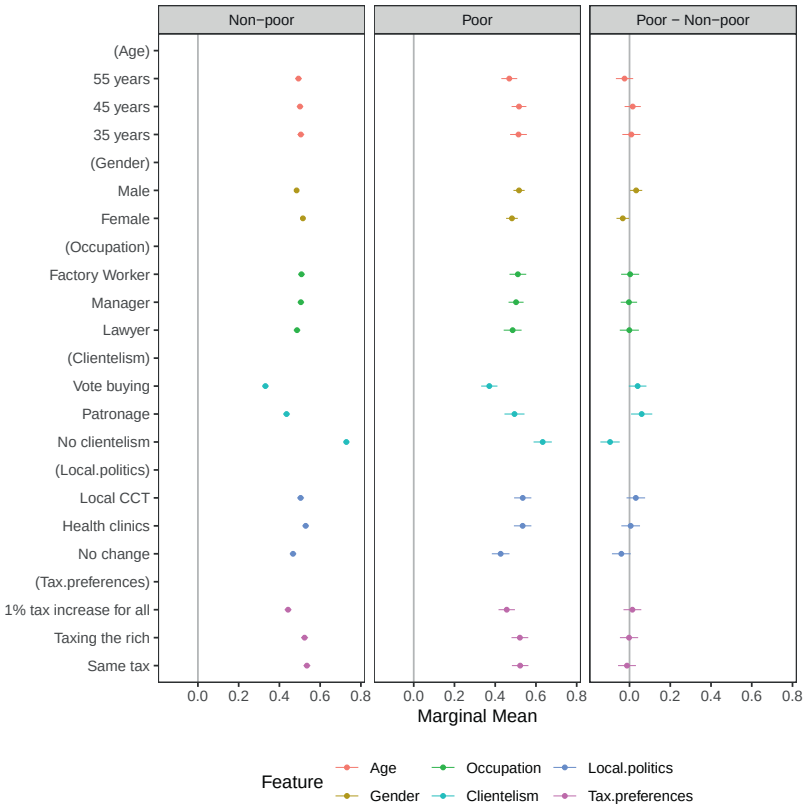
Note: These plots show the marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes (as well as the differences across the two subgroups). All predicted probabilities are bench-marked against 0.5 and differences are bench-marked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

Figure C.12: Correlation Matrix Poverty Indicators



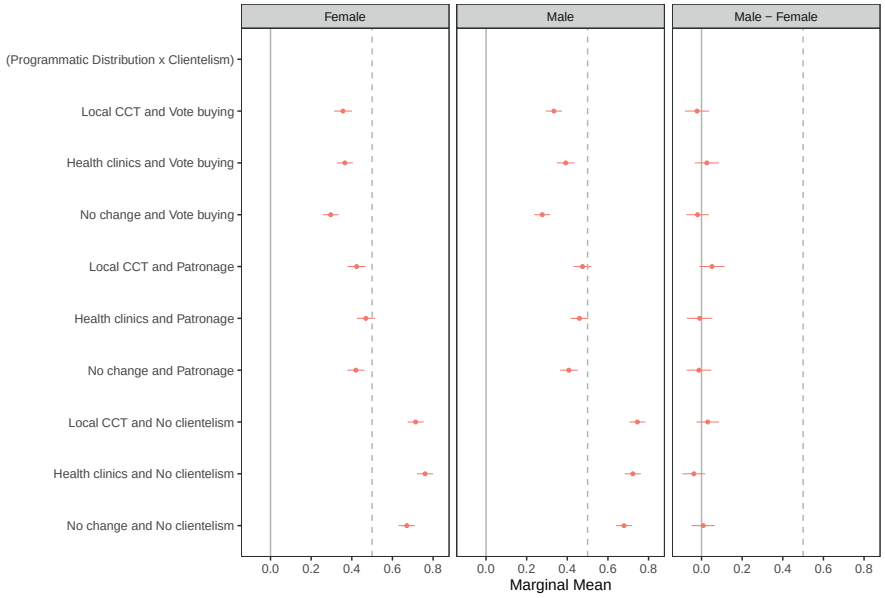
Note: The correlation matrix shows the Spearman correlations of all survey indicators measuring poverty in different ways, i.e. monetary poverty and food insecurity. The question about income corresponds to income bins based on multiples of Brazil's minimum wage. Meal and Medicine are measured by asking 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.13: Main Effects on Candidate Support, by Poverty

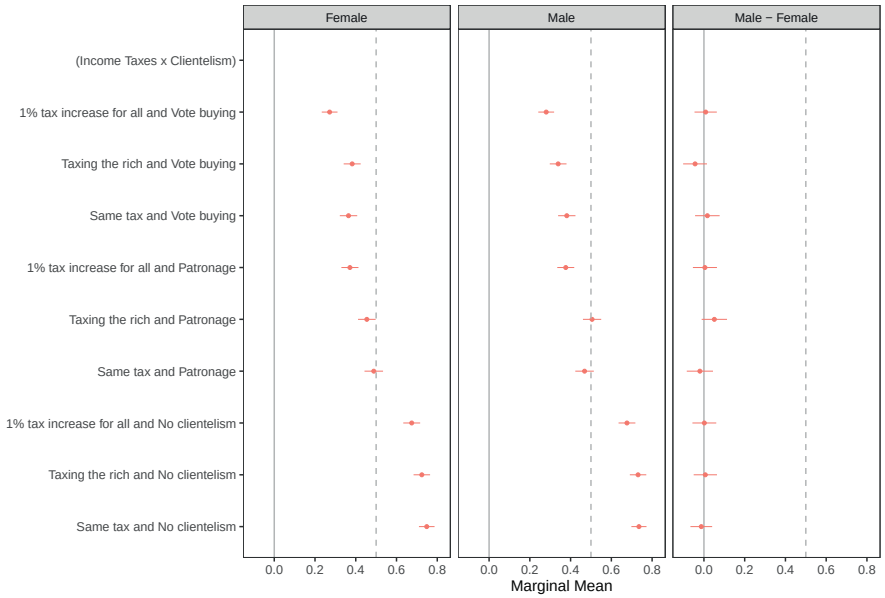


Note: These plots show the marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes. All predicted probabilities are bench-marked against 0.5. Standard errors are clustered at the respondent level; bars represent 95% confidence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

Figure C.14: Interaction Effects, by Gender, MMs



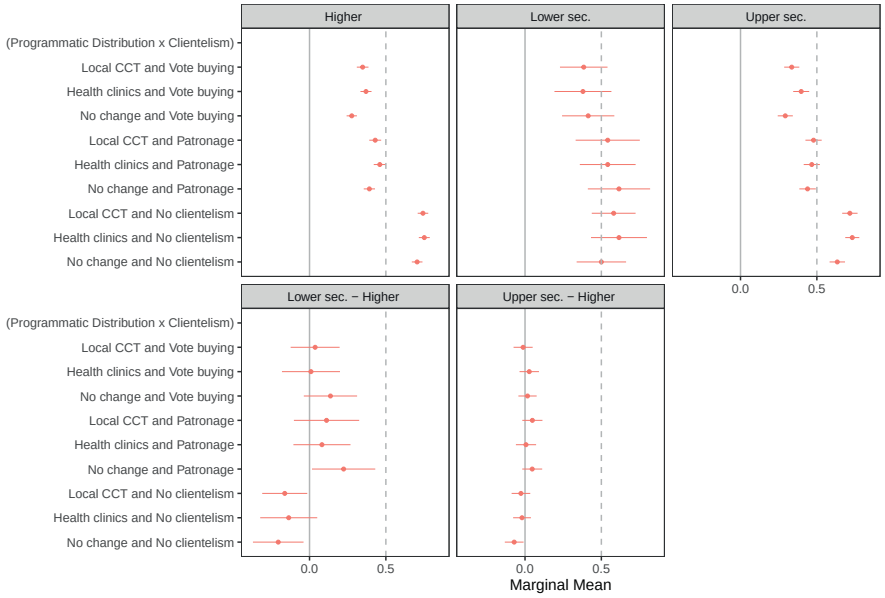
(a) Programmatic Distribution x Clientelism



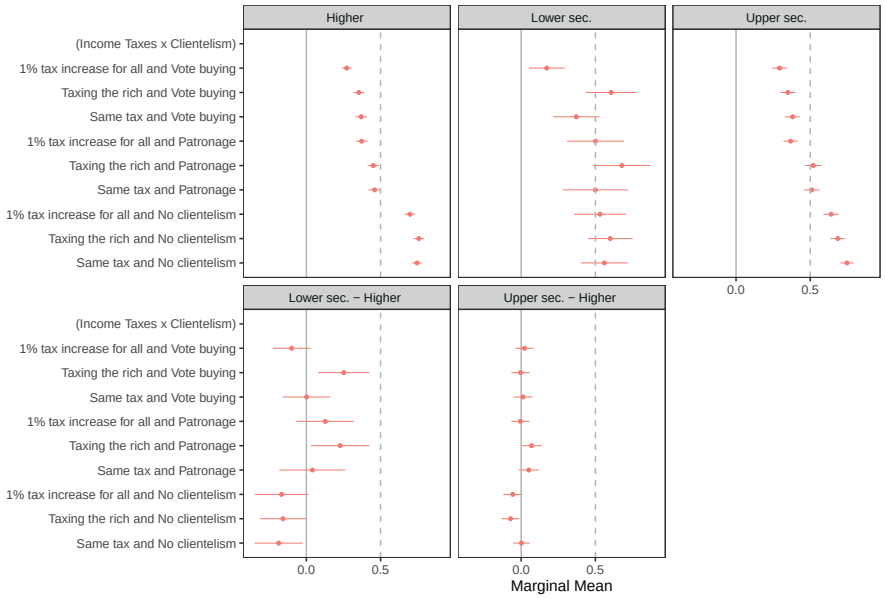
(b) Income Taxes x Clientelism

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.15: Interaction Effects, by Education, MMs



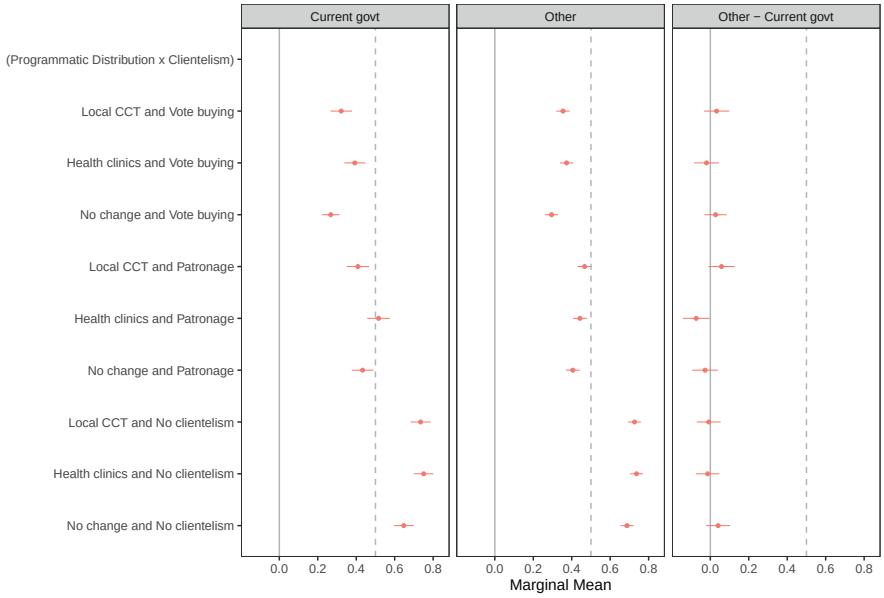
(a) Programmatic Distribution x Clientelism



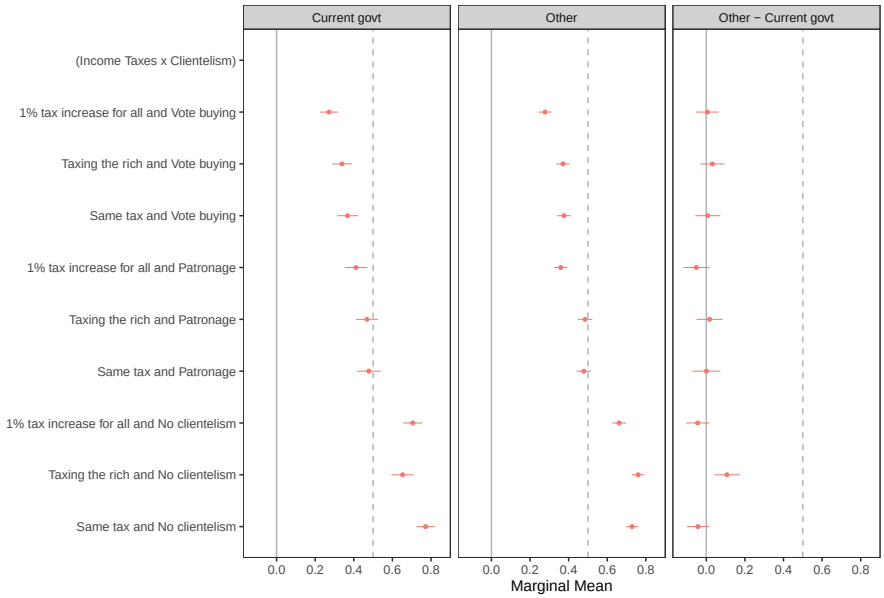
(b) Income Taxes x Clientelism

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 (N_{Higher} = 5,400, $N_{Lowersec.}$ = 258 and $N_{Uppersec.}$ = 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.16: 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.

Chapter 3

Gendered Crooks

Gender, Revolving Doors, and Voter Tolerance of Corruption

with Amy Alexander and Mogens K. Justesen[1]

A growing body of research explores whether voters hold female candidates to higher standards and punish them harder than male candidates when involved in malpractice or corruption. However, little attention has been paid to how female candidates are evaluated when involved in corruption revolving around political connections to firms. This is surprising since these connections are often the primary pathways through which money – and corrupt transactions – are linked to candidates pursuing political office. In this paper, we examine how voters evaluate female candidates involved in corruption based on their connections to firms. Our research design is based on a conjoint candidate choice experiment implemented as part of a nationally representative survey in Brazil in 2021. In contests for positions as mayors in local governments, we find that voters, on average, prefer female politicians over male politicians, even when both have connections to corrupt firms. Notably, both female and male voters are more likely to support female candidates involved in corruption. Interestingly, in municipalities with a higher share of women in the local council, support for male candidates (affiliated with 'clean' firms) increases, suggesting a potential backlash effect of increased female representation. Our findings highlight the importance of considering gender equality in the design of anti-corruption initiatives related to firms' involvement in politics.

Keywords: Gender, Corruption, Business candidates, Revolving door, Brazil.

[1]A draft of this chapter was presented at Scancor Seminar Series at Stanford University and at the Money in Politics Conference 2022 at Copenhagen Business School. We are grateful for comments from Nelson Ruiz, Julieta Peveri, Sigrid Koob, Benjamin Egerod, and Francisco Ramirez. We acknowledge funding for this project from Copenhagen Business School's Inequality Platform.

3.1 Introduction

It is well-established that women's inclusion in elected political offices correlates negatively with perceptions of corruption (Alexander, Amy and Bagenholm, Andreas and Charron, Nicholas, 2020; Barnes and Beaulieu, 2014; Esarey and Schwindt-Bayer, 2018; Le Foulon and Reyes-Housholder, 2021; Watson and Moreland, 2014). It is less clear why this is the case. The existing literature identifies two prominent mechanisms: first, voters perceive women as inherently more honest than men; second, voters perceive women as outsiders to corrupt networks, thereby considering them less likely to be recruited into or possess the network capacity to engage in corruption (Alexander, Amy and Bagenholm, Andreas and Charron, Nicholas, 2020; Barnes and Beaulieu, 2014; Barnes and Taylor-Robinson, 2018; Barnes and Beaulieu, 2019; Le Foulon and Reyes-Housholder, 2021; Pereira, 2021; Wiesehomeier and Verge, 2020). The *honesty mechanism* captures voters' potential reliance on essentialist priors that women are inherently more ethical than men, while the *network marginalization mechanism* embodies voters' reliance on heuristics regarding women's exclusion from structures of power relative to men (Le Foulon and Reyes-Housholder, 2021). Voters may draw on either logic to form beliefs about female politicians as less corruptible than male politicians.

In this paper, we marshal survey experimental evidence to shed light on these two mechanisms, thereby enhancing our understanding of how and why gender influences voter perceptions of candidates' involvement in corruption. We approach this question from an angle that is new to the literature on gender and corruption. Rather than assuming that an incumbent (or challenger) is - or is not - involved in corruption, we develop and test an argument wherein both female and male political candidates have credible opportunities to engage in large-scale corruption. To accomplish this, we synthesized the literature on voter support for female and male politicians seeking election for political office (Eggers et al., 2018; Esarey and Schwindt-Bayer, 2018) with the literature on 'business candidates' (Gehlbach et al., 2010; Kirkland, 2021; Szakonyi, 2021), that is businesspeople who select into careers in elected political office. Businesspeople - and business elites - are disproportionately represented in political office in many countries worldwide (Page et al., 2018; Szakonyi, 2021), and close ties between firms and politicians are often associated with grand corruption within the political system (Charron et al., 2017; Domadenik et al., 2016; Fazekas and Tóth, 2016; Lindsey and Teles, 2017; Rod and Pitcher, 2019). Simultaneously, the pool of business candidates in political office tends to be dominated by men (see Appendix A).

Our experiment departs from these features of descriptive representation in contemporary democratic politics by presenting a scenario in which female and male business candidates run for mayor in Brazil. These candidates possess equivalent business backgrounds and political connections, while their firms' involvement in corruption varies. To the best of our knowledge, this approach is the first to highlight how voter support is influenced by the gender of business candidates running for political office while having connections to firms that are potentially involved in corruption.

Indeed, our approach allows us to assess voters' gendered perceptions of corrupt politicians within the context of candidates transitioning between business and politics (Egerod, 2022; Weschle, 2022). The revolving door phenomenon is a mechanism heavily dependent on dense networks between politicians and businesspeople, providing a pathway for illicit

and corrupt exchanges between these two groups (Cerrillo-i Martínez, 2017). Importantly for our purposes, the revolving door phenomenon is closely related to the network marginalization mechanism and its potential association with gendered voter evaluations of candidates. However, the revolving door is distinct and does not necessarily lead to corruption. Similarly, political candidates passing through the revolving door - from business and into politics or vice versa - need not be involved in any form of corruption or wrongdoing. Therefore, the revolving door phenomenon provides a compelling way to credibly link female and male candidates to corporate networks, while varying their involvement in corruption.

To test voter support for female and male candidates in the context of (corrupt) revolving door politics, we marshal evidence from a conjoint survey experiment fielded in Brazil in the Spring 2021. The case of Brazil has a set of features that makes it ideally suited for our purposes: although women are descriptively underrepresented in politics, policy measures and gender quotas have been implemented to enhance women's representation in politics (International IDEA, 2023); corruption is a highly salient issue among the electorate (Gonzalez-Ocantos et al., 2023); and the country exhibits deeply embedded ties between business and politics, which have constituted the core of major corruption scandals (Campos et al., 2021).

Our design revolves around a candidate choice conjoint experiment, wherein we vary political candidates' gender along with attributes describing the candidates' business background, their connections to firms, and the firms' (non)involvement in corruption. Within this experimental environment, voters cannot assume that female political candidates are corruption outsiders. Rather, they are directly exposed to female (and male) business candidates from firms that are, to varying degrees, embedded in corrupt networks – the *corruption network mechanism*. Subsequently, we examine whether voters' exposure to a male or female political candidate affects voter support and perceptions of candidates. We are particularly interested in whether voter support is higher for female political candidates involved in corruption compared to male political candidates – the *honesty mechanism*. Observing this phenomenon would provide empirical support for the assumption in the literature that voters' perception of women's relative predisposition for honesty is significantly influential. It would also suggest that voters rely on the honesty mechanism rather than their perception of women's marginalization from corrupt insider networks. This finding would constitute strong counter-evidence to the research suggesting that voters may punish women more harshly than men when linked to corruption because they violate honesty stereotypes (Eggers et al., 2018).

Our analysis also tests how these individual-level effects of gender and corruption on candidate support vary across salient features of the municipal contexts in which voters are embedded. This is an important additional step because individuals' essentialist gender stereotypes - such as stereotyping women as more honest - can differ depending on how they experience gender equality in their communities (Alexander et al., 2023). Gender stereotypes are likely to be weaker in contexts where women and men possess a more equal share of power, and, consequently, are more equally represented in political office (Benstead et al., 2015). We leverage data at the municipal level in Brazil to measure variation in the share of women in municipal councils - and women as mayors - across the municipalities where survey respondents reside. This approach enables us to assess

whether female representation in local politics moderates the strength of the gender and corruption attributes in the conjoint experiment.

The results of the conjoint experiment reveal several interesting findings. First, in spite of women's descriptive underrepresentation in Brazilian politics, voters, on average, prefer female candidates over male candidates. Second, voter support is lower for candidates with connections to firms involved in corruption. However, the preference for female politicians over male politicians remains even when both have ties to a corrupt firm. Moreover, we do not find female voters sanctioning female candidates more harshly (Eggers et al., 2018); rather, both female and male voters are more tolerant of corrupt female candidates and, conversely, less likely to support corrupt male candidates. The main exception to this pattern involves voters expressing more patriarchal gender norms who are more forgiving of corrupt male candidates. Third, we find much stronger voter support for candidates employed in businesses as opposed to business owners, suggesting that the lack of working class candidates in (Brazilian) politics is not driven by lack of voter demand (Carnes and Lupu, 2016a). Finally, we show crucial contextual heterogeneity in the impact of gender and corruption on candidate support: Respondents in municipalities with a higher share of women in the local council are more likely to favour male candidates (involved in corruption) compared to municipalities without female council representation.

Our paper offers several important contributions to the existing literature based on these results. First, the survey experiment results provide evidence supporting the role of essentialist, stereotypical perceptions of women as more honest than men in evaluations of politicians' corruption, as women are still preferred over men even when characterized as business candidates linked to a corrupt firm. Second, these results do not support research suggesting that voters punish women more severely than men when associated with corruption (Eggers et al., 2018). Third, the analysis incorporating municipality-level variation suggests that the honesty mechanism depends on voters' actual experience with women's marginalization in political decision-making. Voter support for female candidates actually decreases among respondents in municipalities with a high share of female councillors compared to municipalities lacking female council representation. These findings also persist when candidates have similar ties to corrupt firms, with respondents in contexts with high female representation in local councils favouring male (over female) candidates affiliated with law-violating firms compared to municipalities lacking female representation.

This suggests a nuanced interplay between voters' essentialist perceptions of women as honest and their experience of women's marginalization in voter assessments of political candidates' involvement in corruption. The actual context in which voters are situated evokes varying degrees of structuralist reasoning, potentially impacting the role of essentialist reasoning in gendered evaluations of political candidates' corruption tendencies.

The paper is organized as follows. We depart from the survey experimental literature on voters' gendered perceptions of politicians' corruptibility and proceed to develop our theoretical expectations (Section 3.2). Next, we describe the case of Brazil (Section 3.3), our research design and data (Section 3.4). We then present and discuss our results (Section 3.5). The concluding section contemplates the potential implications of our

findings (Section 4.5).

3.2 Expectations: Gendered Perceptions of Crooked Politicians

The literature on candidate gender, gender stereotypes, and corruption appears largely disconnected from existing research on business candidates in politics (Akcigit et al., 2023; Carnes and Lupu, 2016b,a; Gehlbach et al., 2010; Justesen and Markus, 2023; Szakonyi, 2021). Consequently, we know very little about how voter support is affected by gender and involvement in corruption among one of the most powerful and influential subsets of political candidates in many new and established democracies worldwide: candidates who enter politics based on private-sector business careers in business (Carnes, 2018; Carnes and Lupu, 2016a; Justesen and Markus, 2023; Weschle, 2022).

To bridge this gap, we develop our hypotheses around existing work on the role of the honesty and network marginalization mechanisms, examining how they shape voters' gendered perceptions of crooked politicians - politicians involved in corruption, malpractice, or illicit transactions - who seek election for political office based on business careers.

Much of the survey experimental literature on gendered perceptions of politicians' corruptibility agrees that voters' potential assumption of women being inherently more honest than men is an important mechanism (Barnes and Beaulieu, 2014, 2019; Le Foulon and Reyes-Housholder, 2021; Wiesehomeier and Verge, 2020). Based on the literature on essentialist assumptions about women's comparative honesty, there seems to be little reason to suspect that this would not apply to female – compared to male – business candidates too. However, some studies suggest that the honesty mechanism is weaker and only marginally affects perceptions of politicians' corruptibility (Barnes and Beaulieu, 2019; Le Foulon and Reyes-Housholder, 2021). Indeed, recent research indicates that the gender gap in voter evaluations of women and men is minimal and that, overall, voters do not evaluate female and male candidates differently (Schwarz and Coppock, 2022). Given the mixed findings of previous research concerning the effect of gender, our baseline expectation is that voters evaluate female and male (business) candidates similarly.

A prevalent form of grand corruption in many countries relies on exclusive often male-dominated networks connecting business and politics. These networks may be reinforced by the revolving door mechanism, wherein businesspeople pursue careers in politics, or politicians leverage their political connections to acquire jobs in firms or as corporate lobbyists. Despite the rich and expanding literature on gender and corruption networks, existing research (Alexander, Amy and Bagenholm, Andreas and Charron, Nicholas, 2020; Barnes and Beaulieu, 2014; Barnes and Taylor-Robinson, 2018; Barnes and Beaulieu, 2019; Erlich and Beauvais, 2022; Le Foulon and Reyes-Housholder, 2021; Pereira, 2021; Wiesehomeier and Verge, 2020) has largely overlooked the revolving door between business and politics and its embedded networks as a pathway towards corruption (Egerod, 2022; Houston and Ferris, 2015; Weschle, 2021, 2022). This is particularly puzzling, considering that the revolving door phenomenon provides us with one of the

most direct ways to inquire into one of the key pathways linking gender to corruption: *network marginalization*.

Numerous studies have addressed the network marginalization mechanism to explain the relationship between gender and assessments of politicians' corruptibility in general terms (Barnes and Beaulieu, 2019; Wiesehomeier and Verge, 2020). Some work has found that both women and men evaluate female and male politicians as equally corrupt when perceived to have similar opportunities to engage in corruption through ties to local entrepreneurs (Wiesehomeier and Verge, 2020). Others find that women entering political office, who tend to be outsiders to corruption networks, decrease corruption risk in public procurement, a sector that offers ample opportunities for network-based corruption between firms and public officials (Bauhr and Charron, 2021). Lower levels of corruption suspicion regarding female politicians may stem from perceptions of women as politically marginalized from male-dominated power structures, including politics and networks of corruption (Barnes and Beaulieu, 2019).

This paper suggests network exclusion as the primary mechanism underpinning the relationship between gender and (perceptions of) corruption among political candidates. However, network exclusion aligns with arguments that social expectations are more restrictive for women relative to men (Teele et al., 2018) and findings that demonstrate voters judge female politicians more severely for corruption offences (Barnes et al., 2020) as well as that women, particularly, tend to hold female political candidates to higher standards than men (Eggers et al., 2018). Even if network opportunities are similar – such as women and men having similar ties to firms and accessing the same corruption networks – female candidates with ties to corrupt firms may therefore be sanctioned more harshly by voters.

Against this background, we propose the following hypotheses on general voter support for female and male candidates with ties to firms (H_1) and support for similar candidates among female voters relative to male voters (H_2):

H_1: *Voters are more likely to support a male political candidate from a corrupt company (compared to a female political candidate from a corrupt company).*

H_2: *Female voters are more likely to support a male candidate from a corrupt company (compared to male voters).*

3.3 Women's Political Representation and Corruption in Brazil

We test our hypotheses through a survey experiment conducted within the context of local elections in Brazil. We design a conjoint survey experiment featuring two mayoral candidates running for election, asking respondents which candidate they would more likely support. This approach fits Brazil's context because mayors are directly elected via an open-list system and often represent the most well-known candidates in local politics.

Brazil has the largest gender gap in politics throughout Latin America. As of March 2023, Brazil ranks 131st worldwide in terms of women's representation in parliament (Inter-Parliamentary Union, 2023), despite the implementation of several initiatives and laws to promote female representation in politics (International IDEA, 2023; Wylie, 2018). Since 1995, when the first 20% gender quota was introduced in Brazil's local elections, various policy measures have been enacted to increase the number of female politicians in elected office. In 1997 the gender quota was expanded to 30%, mandating that each party or coalition has to nominate a minimum of 30% female candidates - a soft gender quota - aimed at increasing the candidate pool of female candidates (International IDEA, 2023). However, the persistent descriptive underrepresentation may be attributed to parties' noncompliance with these measures, including instances where women run in municipal elections without a realistic chance of winning or using fictitious names as candidates (International IDEA, 2023; Wylie, 2018). [2]

The positive effects of women's representation in politics have been documented in various global contexts, including Brazil (Brollo and Troiano, 2016; Chauvin and Tricaud, 2022; Hessel et al., 2020). Female political representation influences a wide array of policy choices (Chattopadhyay and Duflo, 2004), including policies and outcomes related to health (Macmillan et al., 2018), education (Beaman et al., 2012), labour markets (Ghani et al., 2013), trust in government (Barnes and Taylor-Robinson, 2018), and clientelism (Alexander et al., 2023). Moreover, evidence indicates that female politicians can serve as role model, inspiring other women to run for office (Alexander, 2012). In Brazil, municipalities run by female mayors have experienced decreases in child mortality (Hessel et al., 2020) and helped to mitigate COVID-19 cases during the pandemic by prolonging the duration of lockdown measures (Chauvin and Tricaud, 2022). In addition to improvements in health outcomes, Brazilian municipalities governed by women have shown fewer irregularities in public procurement processes (Brollo and Troiano, 2016).

Brazilian politics has a long history of corruption scandals, often involving connections between politicians and businesses (Campos et al., 2021; Gonzalez-Ocantos et al., 2023). Although Brazil has implemented regulations to combat political corruption, the results have been mixed. Since 2016, companies in Brazil have been prohibited from funding or providing campaign donations to political candidates in national and local elections. Instead of eliminating the legacy of corruption in Brazilian politics, some argue that these rules have favoured wealthy political candidates, who have the means to finance their campaigns using personal resources (Avis et al., 2022). As a result, Brazil's new campaign-financing rules may have disproportionally disadvantaged working-class political candidates while privileging wealthy business candidates at both the national and local levels.

The recent changes in campaign donations and political financing may also produce unintended consequences for female candidates. Not only is it doubtful whether the rule changes have effectively combatted corruption relating to campaign finance, they may also have created a greater advantage for (male) business candidates at the expense of female political candidates. In Brazil, as in other countries, women are underrepresented among

[2] Further, minority rights are constitutionally anchored in Brazil and legislation officially recognizes the right of underrepresented groups to participate in policy making, for example through the National Council to Fight Discrimination against Lesbian, Gay, Bisexual and Transgender individuals (WZB, 2023).

wealthy businesspeople, and the political environment has seen a considerable increase in wealthy businesspeople running for office in recent years. During the 2020 municipal elections, only 14% of mayoral candidates were women (Figure A.1a in Appendix), and the underrepresentation of women among candidates with a business background was even more pronounced at just 8% of candidates (Figure A.1b in Appendix). Many candidates enter local politics based on careers as business owners or private-sector managers, and these candidates are mostly men. Between 2016 and 2020, millionaire business*men* ran half of Brazil's largest municipalities, often emphasizing their business success over political experience during election campaigns. In São Paulo, for instance, the former host of the TV show 'Apprentice Brazil' campaigned with the slogan: 'I'm not a politician, I'm a businessman'.[3] This potentially creates a system of gendered political financing where male candidates have greater indirect influence due to better access to campaign donations and greater direct influence by being disproportionately able to fund their own campaigns (Murray et al., 2023; Sacchet, 2018).

Brazil implemented various policies to bridge the gender gap related to 'money in politics' (Piscopo et al., 2022). These policies include an earmarked amount of 5% of the Special Fund for Financial Assistance to Political Parties and 30% of the Special Fund for Campaign Financing for women's campaigns as well as 30% of free electoral advertising time on radio and TV for women's campaigns (TSE, 2023). However, despite these measures, the supply of female candidates remains low: 60% of Brazilian municipalities had no women running for mayor during the 2020 election (Section A in Appendix).

3.4 Data and Research Design

We collected online survey data in Brazil between March and April 2021 through collaboration with two Brazilian survey companies: IBPS and Qualibest. We conducted a conjoint political candidate survey experiment on the survey platform Qualtrics as part of a large-scale, nationally representative survey covering various topics on political behaviour and attitudes in Brazilian local politics. The survey link was sent out to a panel of online respondents with the help of Qualibest, using non-probability survey quotas (by region, age and gender). The quota ensured representativeness across Brazil's five regions: North, Northeast, Central-West, Southeast and South based on the age and gender distribution in the five regions (balance tests are available in the Appendix Tables A.2 and A.3). Older individuals residing in rural areas of the North and Northeast regions were more challenging to reach with the online survey, possibly due to lower internet connectivity, whereas older individuals were more responsive in the other regions. The survey data are not representative at the municipal level. As part of our analysis uses municipal-level contextual factors, such as the share of female councillors, we present characteristics of the sampled municipalities with and without a high share of female councillors in the Appendix in Table A.4. Sampled municipalities without female councillor representation have on average smaller population sizes. However, the existence of favelas (used as a proxy for urban inequality) is almost equally distributed among municipalities with and without female councillors.

We followed several steps during the data collection to ensure high-quality survey data.

[3] The Washington Post, 2016.

In the questionnaire's consent form, we informed respondents about the survey's purpose, respondent anonymity, and data storage/handling of the data. Participation in the survey was voluntary. Due to the ongoing COVID-19 pandemic, the data collection mode was shifted from the originally planned face-to-face survey to an online survey to alleviate any health risks for both enumerators and survey participants. Respondents received incentives in the form of online tokens for participating. We pre-registered the experiment and all hypotheses for the paper on OSF[4] and received ethics approval from Copenhagen Business School's Ethics Council in March 2021. The candidate profiles in the survey experiment are hypothetical, and the conjoint survey experiment reveals voter preferences in a hypothetical setting rather than actual voting behaviour (Horiuchi et al., 2020). Even so, the experiment is informed by real-life examples and the characteristics of mayoral candidates from the most recent local Brazilian election in 2020 (see section A in the Appendix). The first round of the local elections in Brazil occurred on November 15, 2020 and the second round on November 29, 2020. By launching the survey four months after the local elections, we aimed to run the survey when the election date was not too close in time, but still close enough that local politics and election issues remained salient for voters.

3.4.1 Conjoint Experiment

Our study aims to investigate voter support for mayor candidates using a conjoint experiment. This type of experiment is particularly useful for studying voter choice between candidates who differ on multiple dimensions (Hainmueller et al., 2014). In our design, we simultaneously test the causal effect of six randomly assigned treatments (candidate attributes) on voter support at the same time. Conjoint experiments are also well suited to address sensitive issues, such as corruption or gender discrimination, as they embed the sensitive attribute with several other dimensions, reducing the potential for social desirability bias (Incerti, 2020).

The total sample size used for the analysis is 7,374 (candidate choices) as the experiment is repeated three times for each survey respondent to increase the statistical power (Bansak et al., 2018, 2019; Hainmueller et al., 2014). The experiment, shown in Table 3.1, covers six candidate attributes with two levels each: Gender, Party, Job Type, Industry, Campaign Promises and Revolving door Corruption. We conduct diagnostics checks, following the guidelines of Hainmueller et al. (2014) to test the key assumptions for causal inference in conjoint experiments, including 1) balance tests, 2) carryover effects, and 3) profile-order effects (Section A in the Appendix).

The candidate's gender[5] and involvement in corruption are the primary attributes of interest for our analysis, while other attributes mainly serve to make the candidate profiles realistic or associate them with specific roles and functions within firms, such as owner or worker. Candidate gender appears in the form of names, using the most common female and male names in Brazil, as we decided to display candidate attributes in a text rather

[4]The pre-registered survey experiment can be found on OSF: https://osf.io/wjz4x

[5]We acknowledge that gender is a socially constructed concept and that there exist more than two gender identities, which may differ from biological sex. However, for the purposes of our experiment, we simplify the concept of gender into a binary representation, recognizing that this is a simplification of the complex gender reality.

than a table, making respondents less aware of the corruption treatment (see Section A in the Appendix for the distribution of gender and business candidates during the local election in 2020).

Table 3.1: The experiment

In the following section of the questionnaire, we are presenting you with two hypothetical political candidates that are running as mayor in your municipality. Please read the information about the two candidates carefully and afterwards choose the political candidate that you would most likely support in the next municipal elections. We will ask you to repeat this exercise three times. If you find neither political candidate convincing, please choose the candidate that you would most likely support.

Attribute	**Level**
Gender	**[Ana/João]** is running for mayor for...
Party	**[PT/PSL]** in your municipality.
Job Type	**[She/He]** is **[an employee in/the owner of]** a large...
Industry	**[pharmaceutical/construction]** company in your area.
Campaign Promises	**[She/He]** campaigns to **[establish two new schools/improve COVID-19 vaccine distribution]** in your municipality.
Corruption	The Brazilian Federal Agency (Controladoria-Geral da Uniao, CGU) found that the municipality **[followed all government regulations/accepted bribes]** to award a contract to the company **[she/he]** works in.

The design of the corruption treatment is based on the institutionalized corruption audits conducted by the Brazilian Federal Agency (Controladoria-Geral da União, CGU). CGU is an autonomous, well-known and credible institution in Brazilian public administration that conducts randomized (lottery-based) audits of municipalities (Avis et al., 2018; Ferraz and Finan, 2011) and has done so annually since 2003 (Ferraz and Finan, 2011). After the audits, the CGU shares the results with the Federal Court of Accounts (Tribunal de Contas da União, TCU), public prosecutors and local legislators. These randomized audits have demonstrated long-term effects on voter punishment of corruption, declines in corruption, spill-over effects to neighbouring municipalities through the importance of local media in communicating about the results, and announcement effects of the potential of being audited (Avis et al., 2018; Ferraz and Finan, 2011; Zamboni and Litschig, 2018). In our experiment, the corruption attribute is introduced by informing respondents that the CGU has found that the firm the candidate either owns or works in while seeking election as mayor has either a) followed all government regulations in the process of obtaining a contract from the municipality, or b) paid a bribe to the municipality in return for a contract.

To ensure realistic profiles and incorporate the business candidate dimension, we randomly vary whether candidates are business owners or employees of a large firm (job type). Additionally, we also randomized the industry of the candidate's associated company as either pharmaceutical or construction. While both of these industries have had corruption issues in the past (France, 2020), the construction industry has been affected by one of

the most prominent corruption scandals in Brazil and worldwide, the Odebrecht case (Campos et al., 2021), which also implicated current president Lula.

Candidates' partisanship and programmatic policy position serve as control characteristics in the experiment. We explicitly randomize the party affiliation of the hypothetical candidate to test for partisanship biases, as partisanship identity, especially towards PT, may be more important in Brazil than previously suggested (Samuels and Zucco, 2018). In the experiment, the candidates are affiliated with either Brazil's main Workers' Party (PT) or the right-wing party (PSL), which Bolsonaro, Brazil's president during the time of the survey, belonged to in the 2019 presidential election.[6] The experiment also incorporates a key programmatic policy position for the candidates, namely campaign promises to establish new schools or improve access to the COVID-19 vaccine, a highly salient issue during the experiment's implementation in March/April 2021.

Further information and our motivation for the design of the attribute levels as well as our baseline hypotheses can be found in Table A.1 in the Appendix. An overview of the mayor and councillor candidate characteristics in the 2020 election is provided for all municipalities in Figure A.2 and all sampled municipalities in the survey in Figure A.3.

3.4.2 Outcomes

We measure voter support using a binary choice between the two candidates, as presented in Table 3.2, and examine several mechanisms related to respondents' perceptions of the candidates' competency, efficiency, corruption and beliefs about their representation of women's interests, as displayed in Table 3.3. These measures also function as manipulation checks to ensure that respondents understood the experimental information as intended.

Table 3.2: Outcome indicator: Voter support

Voting Choice (Binary)			
	Indicator	Candidate A	Candidate B
1	Which of the two candidates would you vote for in an election for your municipality?		

Table 3.3: Follow-up questions to experiment (Mechanisms)

Which candidate do you think...			
	Indicator	Candidate A	Candidate B
1	... is more competent as a mayor in your municipality? **(Competency)**		
2	... is more likely to engage in corruption in your municipality? **(Corruption)**		
3	... will get things done in your municipality? **(Efficiency)**		
4	... will best represent the interests of women in your municipality? **(Gender)**		

[6] In addition, PSL was founded in 1994 by a well-known business politician (Langevin and Ruge, 2019).

3.5 Results

3.5.1 Baseline Effects: Gender and Corrupt Candidates

Before examining the key hypotheses, we present the baseline results of the conjoint experiment, as shown in Figure 3.1a and in Figure 3.1b. The average marginal component effects (AMCEs) in Figure 3.1a represent the effect of an attribute level while accounting for other attributes' effects[7] (Bansak et al., 2018; Hainmueller et al., 2014). Figure 3.1b visualizes the marginal means (MMs), the probability of respondents selecting a specific attribute level, averaged over other attributes (Leeper et al., 2020)[8]. This is distinct from interpreting AMCEs as candidate characteristics gaining the majority of votes (Abramson et al., 2022; de la Cuesta et al., 2022; Hainmueller et al., 2015). AMCEs offer a relative preference measure, whereas MMs provide an absolute measure (Leeper et al., 2020).

We begin by outlining the results (AMCEs and MMs) for the main attributes of interest of our experiment: gender and corruption. First, we find that voter support is higher for female political candidates compared to male candidates. Figure 3.1a demonstrates that voters are three percentage points less likely to support a male candidate than a female candidate. This finding aligns with results from other survey experimental studies (Schwarz and Coppock, 2022), which have similarly shown that voters across different contexts tend to favour female over male political candidates. However, exceptions exist, predominantly in countries with higher gender inequalities and patriarchal gender norms.[9] The finding that voters prefer women over men in mayoral contests suggests that the underrepresentation of women in political office in Brazil is less rooted in weak voter demand for women in politics. Instead, it suggests that gender inequalities in political representation may originate from systemic and institutional barriers. Second, and in accordance with related experimental work (Bøttkjær and Justesen, 2021; Incerti, 2020; Klašnja et al., 2021), voter support decreases by a significant and substantial 25 percentage points for political candidates who are affiliated with firms that were deemed corrupt in the CGU audits.

Next, we turn to explain the results of the remaining attributes of the experiment. Regarding business candidacy, we find that voter support is three percentage points higher for candidates running with an employee background compared to those running for mayor as large-company business owners. While related work has not uncovered differences in preferences for affluent or business candidates versus working-class candidates (Carnes and Lupu, 2016a), our findings suggest that - at least in Brazil's context - working-class candidates receive greater voter support than business candidates. Similar to the underrepresentation of women in politics, this suggests that the lack of sufficient representation of working-class candidates in political office is not a result of low demand from voters, but like in the US, is related to institutional and structural inequalities affecting

[7] The effect of an attribute level on the probability of selecting that political candidate, compared to the respective baseline of the attribute, while holding the joint distribution of other attributes equal.

[8] MMs estimate the probability that respondents select a specific combination of attributes, averaged over other attributes.

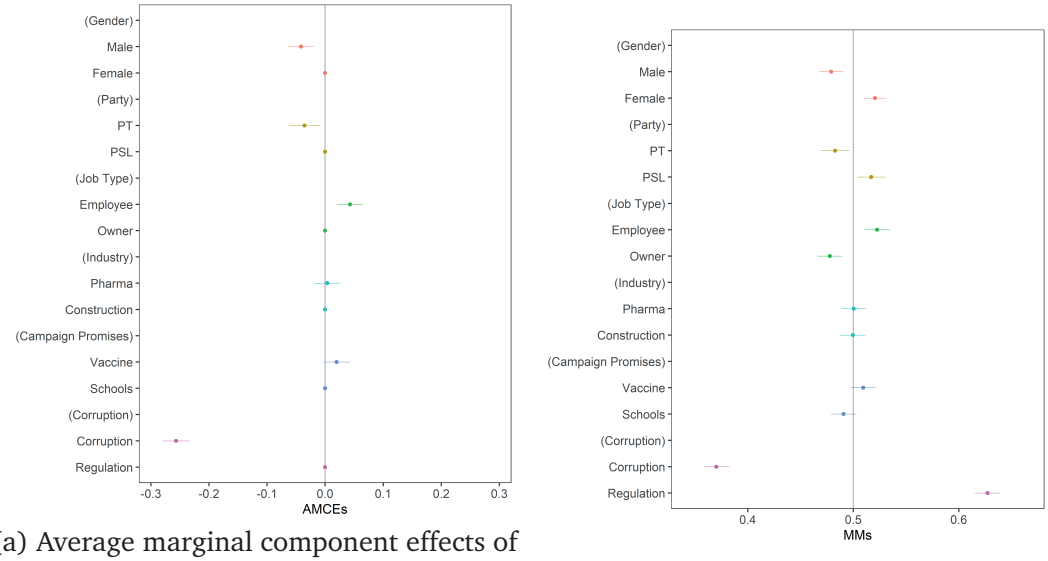
[9] For example women are less favored in Afghanistan (Bermeo and Bhatia, 2017), Jordan (Kao and Benstead, 2021) and Vietnam (Malesky and Schuler, 2020). Malesky and Schuler (2020) run three conjoint survey experiments in 2016, 2017 and 2018. The results for male candidates are only positive and significant in 2018.

working-class candidates (Carnes, 2018; Carnes and Lupu, 2022).

Interestingly, on average, there is no significant difference in respondents' preferences for candidates based on their industry affiliation (pharmaceuticals vs. construction sector). However, voter support increases by one percentage point for candidates campaigning on a COVID-19 vaccine distribution policy. This is likely because the survey was conducted during the midst of the COVID-19 pandemic.

Finally, regarding partisanship, we find that candidate support is three percentage points lower for candidates affiliated with PT compared to Bolsonaro's former party, PSL. This finding may be explained by the timing of the experiment, conducted in early 2021, when Brazil's Workers' Party (PT) had recently lost substantial confidence following a series of corruption scandals (Gonzalez-Ocantos et al., 2023), and Bolsonaro led the country.

Figure 3.1: Baseline effects on voter support



(a) Average marginal component effects of candidate attributes

(b) Marginal means of candidate attributes

Note: Average marginal component effects (AMCEs) denote the effect of an attribute level relative to its baseline, averaged over the other attributes. Marginal means (MMs) denote the probability that respondents select a specific combination of attributes, averaged over 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. $N = 7{,}374$. Survey question and main outcome variable measuring voter support shown in Table 3.2.

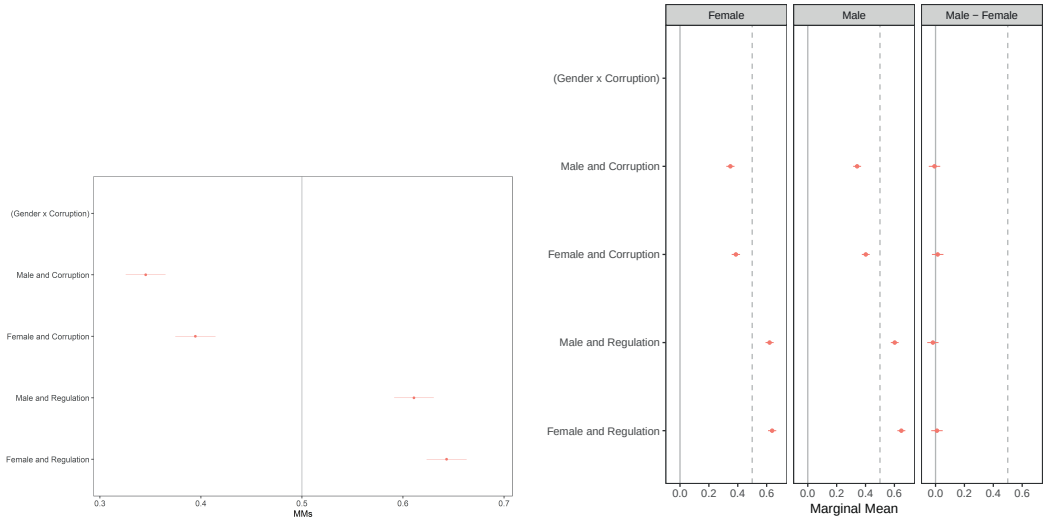
We also probe different potential mechanisms (Figure B.1), which helps us to explain voter support for female candidates. This reveals that female candidates, on average, are not only perceived to be more likely to serve as representatives of women's interests in office, as expected, but are also perceived as more competent, less likely to engage in corruption, and more effective in office (more likely to 'get things done'). While these results support the *honesty mechanism*, they also suggest that there may be additional mechanisms behind support for female candidates. These are a *competency mechanism* and an *effectiveness mechanism* that work to women's (electoral) advantage, but which have not been considered in the literature so far and which may be important avenues

for future research on helping us to understand people's evaluation of gender among political candidates.

Gender, Corruption, and Electoral Support

Next, we move on to the results that test the key hypotheses of the paper. Since this involves interacting candidate attributes, we begin by calculating interaction effects between the experimental treatments. These interaction effects are bench-marked against a 0.5 probability in forced-choice experiments (Leeper et al., 2020) and shown as predicted probabilities (marginal means) to understand the conditions generating voter support (or punishment) for female mayor candidates.

Figure 3.2: Interaction effects: Gender and Corruption



(a) Gender X Corruption (b) Gender

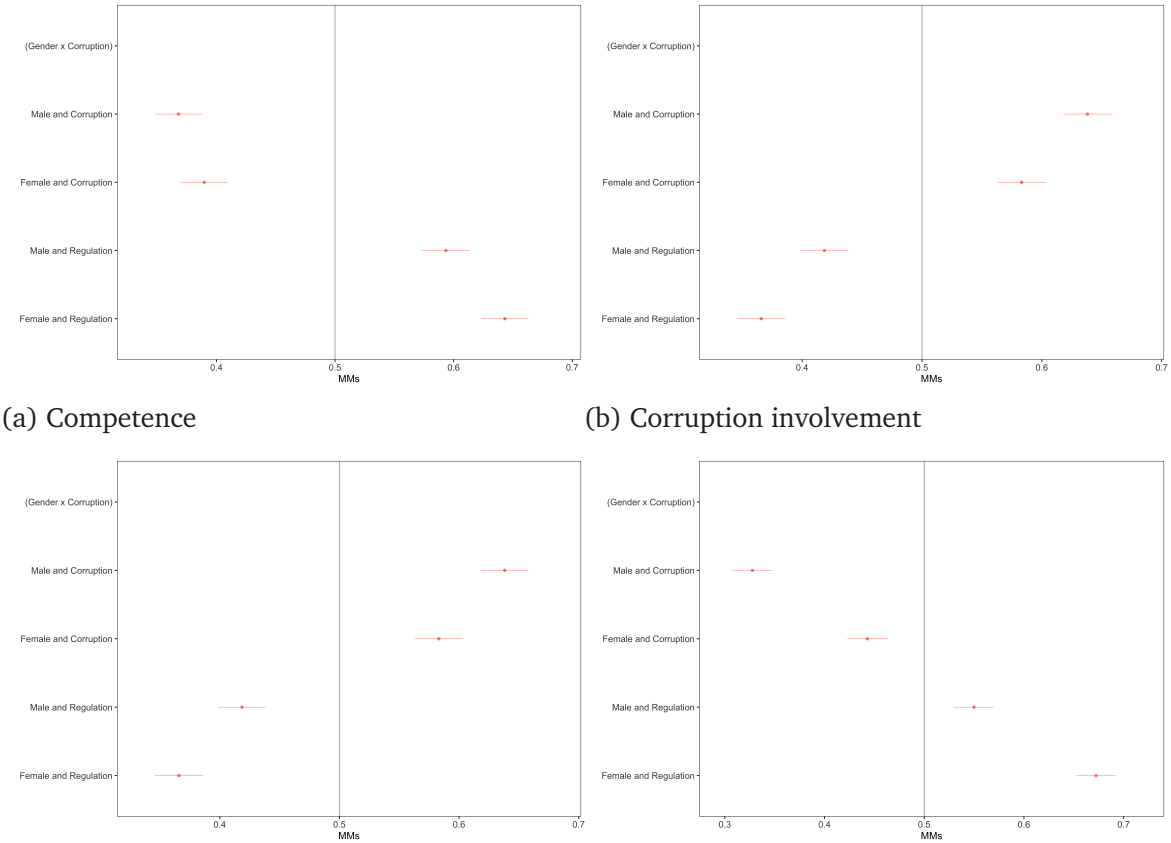
Note: The coefficients (dots) show marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over other attributes. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 7{,}374$. Figure 2b shows interaction effects by respondents' gender.

First, H_1 expects that women (relative to men) would be punished for connections to a corrupt firm, based on the idea that women in politics may be subjected to 'higher standards' than men (Barnes et al., 2020; Teele et al., 2018). Our results suggest the exact opposite, as shown in Figure 3.2a. In fact, the conjoint experiment shows that voter support is higher for female candidates compared to male candidates when both are connected to corrupt firms (though both decrease voter support compared to no corruption). Female candidates with ties to corrupt firms are even perceived to be less likely to engage in corruption than male candidates (Figure 3.3b). Interestingly, male candidates with connections to a corrupt firm are perceived as more likely to 'get things done' in local politics (Figure 3.3c). This contrary finding to the baseline results may be explained by the female underrepresentation in Brazilian politics in which male (corrupt) candidates present the norm, which may lead to respondents being less likely to perceive female (corrupt) candidates to get things done, as respondents are not exposed to female

candidates. People may think that men are better at working in these corrupt networks, yet this is speculative because these networks are traditionally male dominated and this information may benefit the positive evaluation of male (corrupt) candidates. This contrasts with our baseline findings, which show that, on average, female candidates (without being involved in corruption) are evaluated as more likely to get things done (Figure B.1c).

The positive results of female (corrupt) candidates suggest that voters in Brazil draw on honesty mechanisms to evaluate female and male candidates' involvement in corruption. Even when female candidates have ties and networks to firms associated with corruption, respondents evaluate female candidates as inherently less corrupt than male candidates with similar connections to corrupt firms (Figure 3.3b). Voters also perceive female candidates as better representatives of women's interests compared to male candidates when both are involved in corruption (Figure 3.3d). This finding suggests that women are generally seen as pursuing women's interests, such as in public good provision, even if female candidates seem to be involved in corruption.

Figure 3.3: Mechanisms of voter beliefs: Corruption x Gender



(a) Competence

(b) Corruption involvement

(c) Effectiveness: Getting things done

(d) Representing women's interests

Note: The coefficients (dots) show marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over other attributes. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 7{,}374$. Survey questions are shown in Table 3.3.

Second, female politicians often appear less inclined to engage in corruption (Alexander, Amy and Bagenholm, Andreas and Charron, Nicholas, 2020; Bauhr and Charron, 2021; Funk and Philips, 2019) and might be evaluated differently by female and male voters if they become involved in corruption (Eggers et al., 2018). Indeed, our next expectation (H_2) related to gender and corrupt revolving door candidates is that female voters are likely to punish female candidates with connections more severely. Given these arguments on the influence of voters' own gender, we would expect female voters to be more likely than male voters to support a male candidate with ties to a corrupt firm. Interestingly, in our experiment, we find no significant differences between female and male voter support for candidates with connections to corrupt firms (Figure B.10c) as well as voter support for *female* candidates with connections to corrupt firms (Figure 3.2b).[10]

3.5.2 Heterogeneous Treatment Effects

Gender Norms, Corruption and Poverty

While in the previous section we showed evidence of treatment-by-treatment heterogeneity, it is also possible that heterogeneous treatment effects induced by voters' socioeconomic characteristics and normative beliefs may contribute to our understanding of the drivers of voter support for (corrupt) female revolving door candidates. Therefore, we estimate these heterogeneous treatment effects as the interaction between attribute levels from the survey experiment and three variables: 1) respondents' gender-equal or patriarchal gender norms, 2) respondents' perceptions of the mayor's involvement in corruption, and 3) respondents' socioeconomic background.

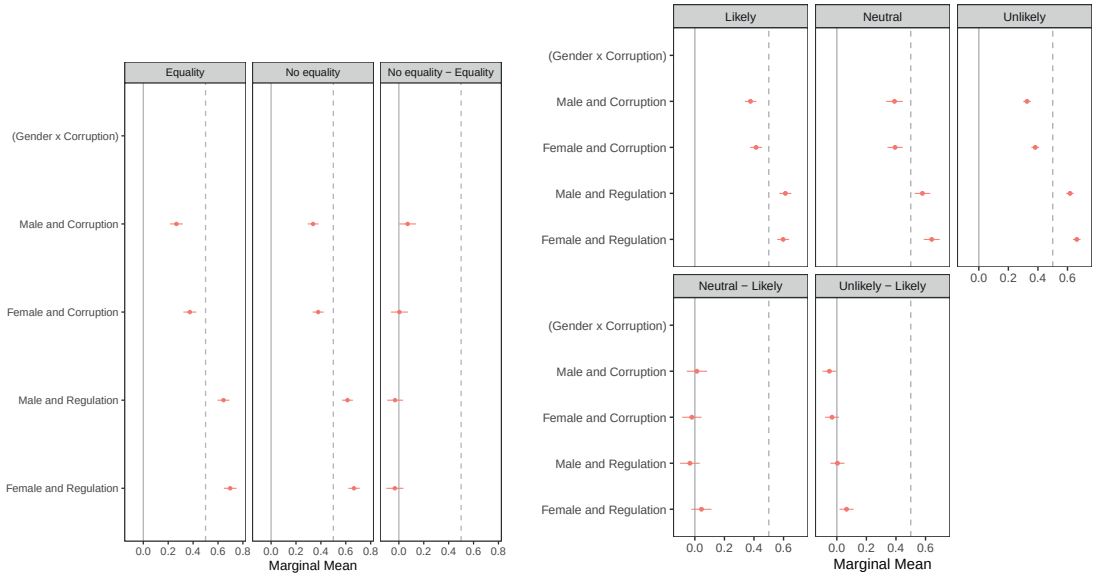
We measure respondents' inherent gender norms using a battery of six survey questions covering gender equality and patriarchal gender norms in education, labour market, family, and including questions on gender norms in politics as well. We aggregated the responses to create a gender norms index as implemented in the Latinobarometer, the World Value Survey, and by others (Blackman and Jackson, 2021). Teele et al. (2018) show in a recent survey experiment that voters often demand pairs of traits from female political candidates - and not from male candidates - that are unrealistic. To examine heterogeneous treatment effects, we report results as marginal means, because AMCEs are dependent on the baseline value, which may vary across subgroups (Leeper et al., 2020).

The results of subgroup analyses by respondents' gender norms confirm that voters who hold patriarchal gender norms are more likely to support corrupt political candidates. Specifically, those who believe that men should be elected for political office (Figure B.10a) and that men are better political leaders (Figure B.10b) are more likely to endorse corrupt political candidates. Furthermore, we find that when evaluating voter support for corrupt male candidates, voters who hold patriarchal gender norms are more forgiving of male and corrupt candidates (Figure 3.4a). These findings align with existing literature, which highlights that gender norms and stereotypes in male-dominated jobs, including politics, reinforce preferences for male leaders, both in political and corporate leadership (Bell and Kaufmann, 2015; Heursen et al., 2020; Vasconcelos, 2018). In politics, female

[10] Interestingly, male respondents are more prone to support the Workers' Party compared to the right-wing party PSL (see Figure B.10c).

politicians are often expected to campaign and follow masculine stereotypes, congruent with their leadership role (Bauer, 2020; Benstead et al., 2015; Benstead and Lust, 2018; Eagly and Karau, 2002), but doing so may result in punishment. Similar to Blackman and Jackson (2021)'s findings in the Tunisian context, our study reveals that gender norms impact voter support for female candidates in Brazil. This result further supports recent research that finds a relationship between patriarchal gender norms and the acceptance of corruption based on the World Value Survey (Merkle and Wong, 2020; Ottervik and Su, 2023).

Figure 3.4: Interaction effects: Gender norms and Perceptions of Corruption



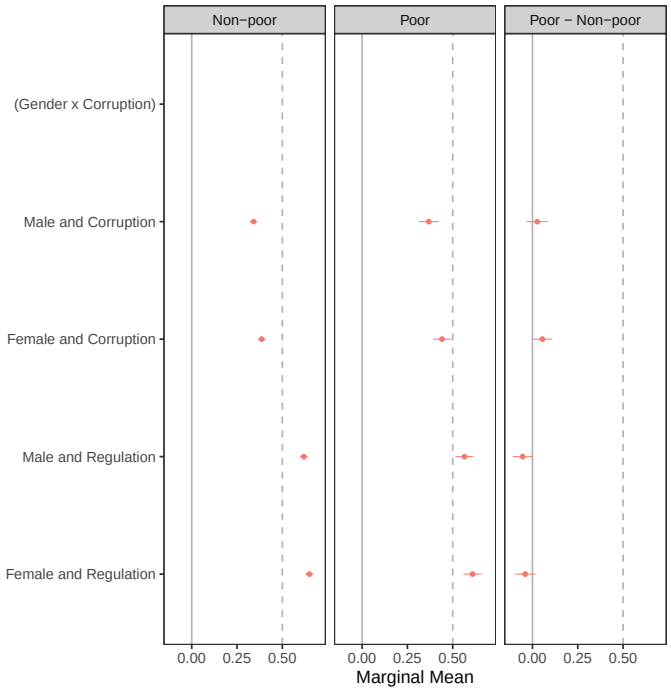
(a) Gender norms (b) Perceived corruption of mayors

Note: The coefficients (dots) show marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over other attributes. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 7{,}374$. Gender norms aggregated gender norms index based on six survey questions. Perceived corruption of mayors survey question: 'To what extent do you believe that (the mayor) is involved in corruption?'.

Moreover, respondents' perceptions of the corruption of their local mayor may shape their leniency towards (female) candidates who are affiliated with corrupt firms. We find that respondents who consider it unlikely that their mayor is involved in corruption are more supportive of female candidates connected to firms not associated with corruption, where the connected firm has 'been following all regulations' (Figure 3.4b). Conversely, respondents who perceive it as likely that the mayor is involved in corruption are more forgiving of male and corrupt candidates, suggesting that respondents favour female (corrupt) candidates only so long until they are exposed to female and corrupt business candidates. These findings also underscore the normalization of corruption in Brazil. In a scenario characterized by high levels of corruption, respondents might not express disappointment when informed about the misconduct of a political candidate.

Lastly, lower income groups, defined in our survey as individuals facing problems of food insecurity and recipients of the cash-support program Bolsa Família[11], are more likely to support female candidates connected to firms, deemed to be involved in municipal government corruption (Figure 3.5). Additional subgroup analysis by income, Bolsa Família beneficiaries and food insecurity can be found in the Appendix in Figure B.9. Because heterogeneous gender effects (in interaction with corruption) may be driven by other voter characteristics, we conduct robustness analyses by relevant groups, such as respondents' political interest. Our results show that voters with lower political interest are stronger supporters of female candidates associated with corruption, compared to voters with higher political interest (Figure B.4b).

Figure 3.5: Interaction Effect: Poverty



Note: The coefficients (dots) show marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over other attributes. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 7{,}374$. The poverty indicator is defined as gone without a meal OR being a Bolsa Família recipient ('Poor') vs. ('Non-poor').

[11]The Bolsa Família program is designed for families with low incomes, i.e., at the time of the survey data collection a monthly per capita income of R$154 or lower. We categorize 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'. To include non-compliant lower-income 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.

Context Factors: Women in Local Councils

While prior work has highlighted the significance of country contexts and gender (in)equality observed by voters in explaining voter support for female politicians (Benstead et al., 2015; Eagly and Karau, 2002), local differences in female representation in politics, particularly in highly diverse countries like Brazil, may be equally crucial. The findings so far do not allow us to test whether women's descriptive underrepresentation may be one of the reasons for voter support for female corrupt candidates over male corrupt candidates. For example, Le Foulon and Reyes-Housholder (2021) found that the impact of the honesty mechanism on voter perceptions varies according to country contexts and levels of women's representation in politics. This suggests that individuals' essentialist and gender stereotypical beliefs, such as stereotyping women as being more honest, can fluctuate significantly based on their experience of gender equality within their local communities.

Therefore, we test whether the gender composition in local politics (municipal councils and gender of the mayor) moderates support for female candidates associated with corruption. It is important to note, however, that these are *post-hoc* analyses that were not part of the pre-registered research design.[12] While we have not developed expectations regarding contextual heterogeneity prior to the data collection, an exploratory analysis may nonetheless shed interesting light on how voter support for (corrupt) female candidates is moderated by local differences in female political representation.[13]

To understand how voter support for various political candidates varies across municipal contexts and the political gender (in)equalities within which voters are situated, we combine our survey data with publicly available local election results at the municipality level.[14] These data provide information on women's representation in local political councils and female mayors across Brazilian municipalities. By matching our survey data with election results data, we obtain information on the gender of the mayor and the gender composition of councils in 440 different municipalities across the country.

Our results show that in municipalities with a higher share of women in the local council, respondents are more likely to favour male candidates over female ones, in contrast to municipalities with no female council representation, where voter support leans towards female candidates. Figure B.5 show the AMCE for the baseline effects and Figure 3.6 the MM for the interaction between the gender and corruption treatment, respectively. In both figures, the share of female councillors is divided into four groups, based on the

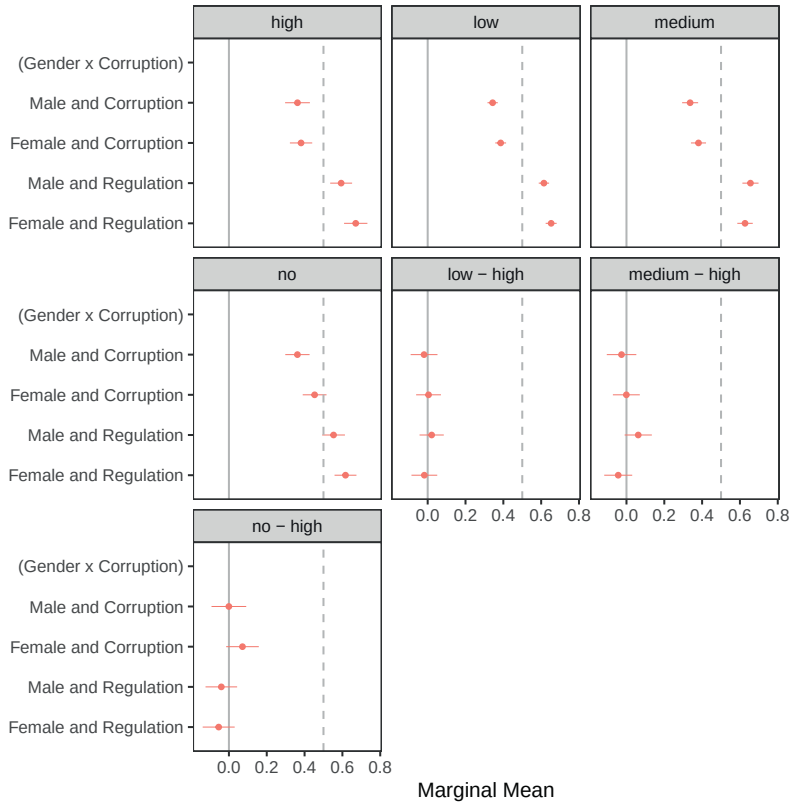
[12] Our pre-registration can be seen at: https://osf.io/wjz4x

[13] The sample does not cover all municipalities and is not representative at the municipality level. However, our data suggest that respondents in larger municipalities prefer female mayoral candidates and are more likely to reject female candidates associated with corruption. We further use the presence of favelas as a proxy for urban inequality (IBGE, Pesquisa de Informações Básicas Municipais – 2020) and show that respondents in municipalities with favelas favour mayoral candidates from the Worker's party and with a background from the pharmaceutical industry compared to the construction industry. This effect might have been largely driven by the ongoing pandemic (Figure B.6b). Respondents in smaller municipalities are less likely to reject candidates associated with corrupt firms, compared to respondents in larger municipalities (Figure B.6a). One reasonable explanation may be that corrupt structures are more common and more difficult to escape in smaller communities, because they fill important welfare voids and are more frequently encountered and used among councillors in smaller and poorer municipalities in Brazil (Rocha et al., 2019).

[14] Tribunal Eleitoral Superior, 2022

distribution of female councillors in Brazil: 1) no female councillors, 2) low share (0-14%), 3) medium share (15-20%), and 4) high share (21-100%). The effects are significant for respondents residing in municipalities with a high share of female councillors compared to those with none (Figure B.5). However, we find no significant differences for respondents in municipalities governed by a female mayor as opposed to a male mayor (Figure B.7b). In addition, the results emphasize the consistency of the effect of high female councillor representation when respondents evaluate female candidates associated with corrupt firms. Figure 3.6 provides suggestive evidence that respondents in municipalities with no presence of female politicians in local councils are more likely to support women, even if they are connected to corrupt firms. This result suggests that when exposed to local female politicians, respondents are more likely to turn to male candidates involved in illicit behaviour, which we speculate may be because of two reasons. First, this could point to a potential backlash effect of increased female representation in politics. Second, when the presence of women in politics is normalized because more women are included in political office, they may be stereotyped less. People may associate female politicians less frequently with being more honest or competent, resulting in voters drawing less on stereotypes in their voting decisions, due to a normalizing effect of increased women's inclusion in politics.

Figure 3.6: Interaction effects: Share of women in council (election 2020)



Note: The coefficients (dots) show marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over other attributes. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 7{,}374$. Based on the distribution of female councillors in Brazil: 1) no female councillors; 2) low share (0-14%); 3) medium share (15-20%); and 4) high share (21-100%).

3.6 Conclusion

While women's representation in politics is increasing, a considerable gender gap persists in many countries, both in consolidated and newer democracies and across different levels of government. In Brazil, only 12% of mayors are currently women and high entry barriers exist in many municipalities (Instituto Alziras, 2018). These barriers for female candidates may be exacerbated by the importance of business networks and campaign finance, which could inadvertently bias the playing field in favour of male candidates with strong business connections. The disadvantage most directly materializes through wealthy business candidates running for office who use the revolving door between politics and the private sector to enter the political office.

The underrepresentation of women in Brazilian mayoral positions thus raises both demand side (Heursen et al., 2020; Teele et al., 2018; Vasconcelos, 2018) and supply side questions (Lowande et al., 2019; Wängnerud, 2009). This paper focuses on voter demand for female candidates associated with corrupt firms. We approach the question of voter support for women and revolving door candidates from a novel perspective, employing a nationally representative survey experiment in Brazil conducted in 2021. Our survey experiment allows us to evaluate how voter support varies for female and male business candidates running for mayor while connected to corrupt firms.

While the results from the experiment do not necessarily align with our pre-registered priors, they uncover several interesting findings that significantly contribute to understanding voter support for female candidates engaged in corruption based on the *honesty mechanism* and the *network mechanism*. We find that voters draw on the honesty mechanism when evaluating female candidates, preferring them over male candidates and perceiving them as less corrupt. Furthermore, even when female and male politicians are associated with corrupt firms, voter support remains higher for female politicians than for male politicians, who are still deemed less likely to engage in corruption. Interestingly, both female and male voters are less likely to support corrupt male candidates. Yet, our results do not suggest evidence for the network mechanism. Women are often regarded as less corrupt because of their perceived outsider status in corrupt networks, a consequence of their marginalization and underrepresentation in politics. Our findings suggest that, even in contexts where both female and male candidates are embedded in corrupt networks, female corrupt candidates are favoured over male candidates, pointing to reasons for voter support beyond the network mechanism. Lastly, we show that respondents in municipalities with a higher share of women in local councils are less likely to favour female (corrupt) candidates compared to municipalities lacking female council representation.

Our paper has several important implications. First, the higher voter support for female mayoral candidates suggests that women's underrepresentation in politics is not driven by low voter demand. Instead, this underrepresentation points to institutional and systemic barriers that must be addressed to achieve gender parity in political office. Second, our findings provide suggestive evidence for a potential backlash effect of increasing female representation in political offices, revealing that candidate support for female mayors decreases when respondents are exposed to municipalities with a high share of female councillors, even when associated with illicit behaviour. Overall, these findings yield valuable insights into the challenges of achieving gender parity in political office

and the necessity of addressing systemic barriers that hinder women's participation in politics, potentially in connection with anti-corruption policies and clear guidelines for firm involvement in politics.

References

Abramson, S. F., Kocak, K., and Magazinnik, A. (2022). What Do We Learn about Voter Preferences from Conjoint Experiments? *American Journal of Political Science*, 66(4):1008–1020.

Adams, B. E., Edward L. Lascher, J., and Martin, D. J. (2021). Ballot Cues, Business Candidates, and Voter Choices in Local Elections. *American Politics Research*, 49(2):186–197.

Akcigit, U., Baslandze, S., and Lotti, F. (2023). Connecting to Power: Political Connections, Innovation, and Firm Dynamics. *Econometrica*, 91(2):529–564.

Alexander, A., Charron, N., and Justesen, M. K. (2023). Female representation and electoral clientelism: New insights from South African municipal elections. *Electoral Studies*, 82:102580.

Alexander, A. C. (2012). Change in Women's Descriptive Representation and the Belief in Women's Ability to Govern: A Virtuous Cycle. *Politics & Gender*, 8(4):437–464.

Alexander, Amy and Bagenholm, Andreas and Charron, Nicholas (2020). Are women more likely to throw the rascals out? the mobilizing effect of social service spending on female voters. *Public Choice*, 184(3):235–261.

Avis, E., Ferraz, C., and Finan, F. (2018). Do Government Audits Reduce Corruption? Estimating the Impacts of Exposing Corrupt Politicians. *Journal of Political Economy*, 126(5):1912–1964.

Avis, E., Ferraz, C., Finan, F., and Varjão, C. (2022). Money and Politics: The Effects of Campaign Spending Limits on Political Entry and Competition. *American Economic Journal: Applied Economics*, 14(4):167–99.

Bansak, K., Hainmueller, J., Hopkins, D. J., and Yamamoto, T. (2018). The Number of Choice Tasks and Survey Satisficing in Conjoint Experiments. *Political Analysis*, 26(1):112–119.

Bansak, K., Hainmueller, J., Hopkins, D. J., and Yamamoto, T. (2019). Conjoint Survey Experiments. *Cambridge Handbook of Advances in Experimental Political Science*.

Barnes, T. D. and Beaulieu, E. (2014). Gender stereotypes and corruption: How candidates affect perceptions of election fraud. *Politics & Gender*, 10(3):365–391.

Barnes, T. D. and Beaulieu, E. (2019). Women Politicians, Institutions, and Perceptions of Corruption. *Comparative Political Studies*, 52(1):134–167.

Barnes, T. D., Beaulieu, E., and Saxton, G. W. (2020). Sex and corruption: how sexism shapes voters' responses to scandal. *Politics, Groups, and Identities*, 8(1):103–121.

Barnes, T. D. and Taylor-Robinson, M. M. (2018). *Women Cabinet Ministers in Highly Visible Posts and Empowerment of Women: Are the Two Related?*, pages 229–255. Springer International Publishing, Cham.

Bauer, N. M. (2020). Running Local: Gender Stereotyping and Female Candidates in Local Elections. *Urban Affairs Review*, 56(1):96–123.

Bauhr, M. and Charron, N. (2021). Will Women Executives Reduce Corruption? Marginalization and Network Inclusion. *Comparative Political Studies*, 54(7):1292–1322. PMID: 34012168.

Beaman, L., Duflo, E., Pande, R., and Topalova, P. (2012). Female Leadership Raises Aspirations and Educational Attainment for Girls: A Policy Experiment in India. *Science*, 335(6068):582–586.

Bell, M. A. and Kaufmann, K. M. (2015). The Electoral Consequences of Marriage and Motherhood: How Gender Traits Influence Voter Evaluations of Female Candidates. *Journal of Women, Politics & Policy*, 36(1):1–21.

Benstead, L. J., Jamal, A. A., and Lust, E. (2015). Is It Gender, Religiosity or Both? A Role Congruity Theory of Candidate Electability in Transitional Tunisia. *Perspectives on Politics*, 13(1):74–94.

Benstead, L. J. and Lust, E. (2018). *Why Do Some Voters Prefer Female Candidates? The Role of Perceived Incorruptibility in Arab Elections*, pages 83–104. Springer International Publishing, Cham.

Bermeo, N. and Bhatia, J. (2017). Strongmen or Technocrats? Experimental Evidence Testing Leadership Preferences in Afghanistan. Technical report, International Growth Center.

Blackman, A. D. and Jackson, M. (2021). Gender Stereotypes, Political Leadership, and Voting Behavior in Tunisia. *Political Behavior*, 43(3):1037–1066.

Bøttkjær, L. and Justesen, M. K. (2021). Why Do Voters Support Corrupt Politicians? Experimental Evidence from South Africa. *The Journal of Politics*, 83(2):788–793.

Brollo, F. and Troiano, U. (2016). What happens when a woman wins an election? Evidence from close races in Brazil. *Journal of Development Economics*, 122:28–45.

Campos, N., Engel, E., Fischer, R. D., and Galetovic, A. (2021). The Ways of Corruption in Infrastructure: Lessons from the Odebrecht Case. *Journal of Economic Perspectives*, 35(2):171–90.

Carnes, N. (2018). *The Cash Ceiling: Why Only the Rich Run for Office–and What We Can Do about It*. Princeton University Press.

Carnes, N. and Lupu, N. (2016a). Do Voters Dislike Working-Class Candidates? Voter Biases and the Descriptive Underrepresentation of the Working Class. *American Political Science Review*, 110(4):832–844.

Carnes, N. and Lupu, N. (2016b). What Good Is a College Degree? Education and Leader Quality Reconsidered. *The Journal of Politics*, 78(1):35–49.

Carnes, N. and Lupu, N. (2022). What Do Voters Think about the Descriptive Underrepresentation of the Working Class? *Contested Representation: Challenges, Shortcomings and Reforms*, 35(1):165–185.

Cerrillo-i Martínez, A. (2017). Beyond Revolving Doors: The Prevention of Conflicts of Interests Through Regulation. *Public Integrity*, 19(4):357–373.

Charron, N., Dahlström, C., Fazekas, M., and Lapuente, V. (2017). Careers, Connections, and Corruption Risks: Investigating the Impact of Bureaucratic Meritocracy on Public Procurement Processes. *The Journal of Politics*, 79(1):89–104.

Chattopadhyay, R. and Duflo, E. (2004). Women as Policy Makers: Evidence from a Randomized Policy Experiment in India. *Econometrica*, 72(5):1409–1443.

Chauvin, J. P. and Tricaud, C. (2022). Gender and Electoral Incentives: Evidence from Crisis Response. *IDB Publication*.

de la Cuesta, B., Egami, N., and Imai, K. (2022). Improving the External Validity of Conjoint Analysis: The Essential Role of Profile Distribution. *Political Analysis*, 30(1):19–45.

Domadenik, P., Prašnikar, J., and Svejnar, J. (2016). Political Connectedness, Corporate Governance, and Firm Performance. *Journal of Business Ethics*, 139(2):411–428.

Eagly, A. and Karau, S. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109(3):573–598.

Egerod, B. C. K. (2022). The lure of the private sector: career prospects affect selection out of Congress. *Political Science Research and Methods*, 10(4):722–738.

Eggers, A. C., Vivyan, N., and Wagner, M. (2018). Corruption, Accountability, and Gender: Do Female Politicians Face Higher Standards in Public Life? *The Journal of Politics*, 80(1):321–326.

Erlich, A. and Beauvais, E. (2022). Explaining women's political underrepresentation in democracies with high levels of corruption. *Political Science Research and Methods*, page 1–19.

Esarey, J. and Schwindt-Bayer, L. A. (2018). Women's Representation, Accountability and Corruption in Democracies. *British Journal of Political Science*, 48(3):659–690.

Fazekas, M. and Tóth, I. J. (2016). From Corruption to State Capture: A New Analytical Framework with Empirical Applications from Hungary. *Political Research Quarterly*, 69(2):320–334.

Ferraz, C. and Finan, F. (2011). Electoral Accountability and Corruption: Evidence from the Audits of Local Governments. *American Economic Review*, 101(4):1274–1311.

France, G. (2020). Sectoral corruption in Brazil: A look at the health, agribusiness and construction sectors. Technical report, Transparency International.

Funk, K. D. and Philips, A. Q. (2019). Representative Budgeting: Women Mayors and the Composition of Spending in Local Governments. *Political Research Quarterly*, 72(1):19–33.

Gehlbach, S., Sonin, K., and Zhuravskaya, E. (2010). Businessman Candidates. *American Journal of Political Science*, 54(3):718–736.

Ghani, E., Mani, A., and O'Connell, S. D. (2013). *Can Political Empowerment Help Economic Empowerment? Women Leaders and Female Labor Force Participation in India*. The World Bank.

Gonzalez-Ocantos, E. A., Chirinos, P. M., Pavão, N., and Hidalgo, V. B. (2023). *Prosecutors, Voters and the Criminalization of Corruption in Latin America: The Case of Lava Jato*. Cambridge Studies in Law and Society. Cambridge University Press.

Hainmueller, J., Hangartner, D., and Yamamoto, T. (2015). Validating Vignette and Conjoint Survey Experiments Against Real-World Behavior. *Proceedings of the National Academy of Sciences of the United States of America*, 112(8):2395–2400.

Hainmueller, J., Hopkins, D. J., and Yamamoto, T. (2014). Causal Inference in Conjoint Analysis: Understanding Multidimensional Choices via Stated Preference Experiments. *Political Analysis*, 22(1):1–30.

Hessel, P., Jaramillo, M. J. G., Rasella, D., Duran, A. C., and Sarmiento, O. L. (2020). Increases In Women's Political Representation Associated With Reductions In Child Mortality In Brazil. *Health Aff (Milwood)*, 39(7):1166–1174.

Heursen, L., Ranehill, E., and Weber, R. A. (2020). Are Women Less Effective Leaders Than Men? Evidence from Experiments Using Coordination Games. *CESifo Working Paper No. 8713*.

Horiuchi, Y., Smith, D. M., and Yamamoto, T. (2020). Identifying voter preferences for politicians' personal attributes: a conjoint experiment in Japan. *Political Science Research and Methods*, 8(1):75–91.

Houston, R. and Ferris, S. (2015). Does the revolving door swing both ways? The value of political connections to US firms. *Managerial Finance*, 41(10):1002–1031.

Incerti, T. (2020). Corruption Information and Vote Share: A Meta-Analysis and Lessons for Experimental Design. *The American Political Science Review*, 114(3):761–774.

Instituto Alziras (2018). Profile of the Female Mayors in Brazil: 2017-2020 Mandate. http://prefeitas.institutoalziras.org.br/?lg=en.

Inter-Parliamentary Union (2023). Women in Politics: March 2023. Accessed: 2023-04-23.

International IDEA (2023). Gender quotas database. Accessed: 2023-04-23.

Justesen, M. K. and Markus, S. (2023). Tycoon Candidates, Electoral Strategies, and Voter Support: A Survey Experiment in South Africa. Working Paper. Copenhagen Business School.

Kao, K. and Benstead, L. J. (2021). Female Electability in the Arab World: The Advantages of Intersectionality,. *Comparative Politics*, 53(3):427–464.

Kirkland, P. A. (2021). Business Owners and Executives as Politicians: The Effect on Public Policy. *The Journal of Politics*, 83(4):1652–1668.

Klašnja, M., Lupu, N., and Tucker, J. A. (2021). When Do Voters Sanction Corrupt Politicians? *Journal of Experimental Political Science*, 8:161–171.

Langevin, M. S. and Ruge, E. (2019). The remarkable rise of the brazilian president's social liberal party. Working Paper, BrazilWorks.net.

Le Foulon, C. and Reyes-Housholder, C. (2021). Candidate sex, corruption and vote choice. *Electoral Studies*, 69:102270.

Leeper, T. J., Hobolt, S. B., and Tilley, J. (2020). Measuring Subgroup Preferences in Conjoint Experiments. *Political Analysis*, 28(2):207–221.

Lindsey, B. and Teles, S. M. (2017). *The Captured Economy: How the Powerful Become Richer, Slow Down Growth, and Increase Inequality*. Oxford University Press.

Lowande, K., Ritchie, M., and Lauterbach, E. (2019). Descriptive and Substantive Representation in Congress: Evidence from 80,000 Congressional Inquiries. *American Journal of Political Science*, 63(3):644–659.

Macmillan, R., Shofia, N., and Sigle, W. (2018). Gender and the Politics of Death: Female Representation, Political and Developmental Context, and Population Health in a Cross-National Panel. *Demography*, 55:1905–1934.

Malesky, E. and Schuler, P. (2020). Single-party incumbency advantage in vietnam: A conjoint survey analysis of public electoral support. *Journal of East Asian Studies*, 20(1):25–52.

Merkle, O. and Wong, P.-H. (2020). *It Is All about Power: Corruption, Patriarchy and the Political Participation of Women*, pages 353–368. Springer International Publishing, Cham.

Murray, R., Muriaas, R., and Wang, V. (2023). Editorial introduction: Gender and political financing. *International Political Science Review*, 44(1):3–12.

Ottervik, M. and Su, Z. (2023). Gender system and corruption: Patriarchy as a predictor of "fairness". *Governance*, 36(2):629–649.

Page, B. I., Seawright, J., and Lacombe, M. J. (2018). *Billionaires and Stealth Politics*. Chicago University Press.

Pereira, F. (2021). Do Female Politicians Face Stronger Backlash for Corruption Allegations? Evidence from Survey-Experiments in Brazil and Mexico. *Political Behavior*, 43:1–20.

Piscopo, J. M., Hinojosa, M., Thomas, G., and Siavelis, P. M. (2022). Follow the Money: Gender, Incumbency, and Campaign Funding in Chile. *Comparative Political Studies*, 55(2):222–253.

Rocha, M., Souza, A., and Araújo, P. (2019). Clientelism and Local Politics: Interactions Between Municipal Councilors and Voters in the State of Minas Gerais. *Brazilian Political Science Review*, 13(3).

Rod, A. and Pitcher, A. (2019). Resisting State Capture in South Africa. *Journal of Democracy*, 30(4).

Sacchet, T. (2018). Why gender quotas don't work in Brazil? The role of the electoral system and political finance. *Colombia Internacional*, 95:25–54.

Samuels, D. J. and Zucco, C. (2018). *Partisans, Antipartisans, and Nonpartisans: Voting Behavior in Brazil*. Cambridge University Press.

Schwarz, S. and Coppock, A. (2022). What Have We Learned about Gender from Candidate Choice Experiments? A Meta-Analysis of Sixty-Seven Factorial Survey Experiments. *The Journal of Politics*, 84(2):655–668.

Szakonyi, D. (2021). Private Sector Policy Making: Business Background and Politicians' Behavior in Office. *The Journal of Politics*, 83(1):260–276.

Teele, D. L., Kalla, J., and Rosenbluth, F. (2018). The Ties That Double Bind: Social Roles and Women's Underrepresentation in Politics. *American Political Science Review*, 112(3):525–541.

TSE (2023). Expanding women's participation. Accessed: 2023-04-23.

Vasconcelos, A. F. (2018). Gender and leadership stereotypes theory: Is it reaching the boundaries? *Management Research Review*, 41(11):1336–1355.

Watson, D. and Moreland, A. (2014). Perceptions of Corruption and the Dynamics of Women's Representation. *Politics & Gender*, 10(3):392–412.

Weschle, S. (2021). Campaign finance legislation and the supply-side of the revolving door. *Political Science Research and Methods*, 9(2):365–379.

Weschle, S. (2022). *Money in politics : self-enrichment, campaign spending, and golden parachutes*. Cambridge University Press, Cambridge.

Wiesehomeier, N. and Verge, T. (2020). Corruption, Opportunity Networks, and Gender: Stereotypes of Female Politicians' Corruptibility. *Public Opinion Quarterly*, 84(2):538–550.

Wylie, K. N. (2018). *Brazil's Quota Law and the Challenges of Institutional Change Amidst Weak and Gendered Institutions*, page 55–77. Cambridge Studies in Gender and Politics. Cambridge University Press.

WZB (2023). LATINNO: Innovations for Democracy in Latin America. Accessed: 2023-04-23.

Wängnerud, L. (2009). Women in Parliaments: Descriptive and Substantive Representation. *Annual Review of Political Science*, 12(1):51–69.

Zamboni, Y. and Litschig, S. (2018). Audit risk and rent extraction: Evidence from a randomized evaluation in Brazil. *Journal of Development Economics*, 134:133–149.

Supplementary Material: Chapter 3

A Survey Experiment and Robustness Checks

Baseline Hypotheses

Table A.1: The conjoint experiment: Overview of registered baseline hypotheses and research questions

Dimension	Research question/Hypothesis	Explanation
Gender	Are voters more likely to support female candidates?	We include candidates' gender in the form of the most common female and male names in 2021 in Brazil, using a binary distinction of gender. We acknowledge that gender is a socially constructed concept and that there exist more than two gender identities, which may differ from biological sex. However, for the purposes of our experiment, we simplify the concept of gender into a binary representation, recognizing that this is a simplification of the complex gender reality.
Party	Do voters favor a specific party?	We included the PT (Workers' Party) and the PSL (Social Liberal Party) to test how influential partisanship is.
Job type	Do voters favor business owners over employees as candidates?	The job type represents the candidates' current job position in the private sector, which we embed in the experiment as an owner/employee. We choose two different positions on the high and low end of a company's hierarchy to measure respondents' perceptions of responsibility regarding their involvement in corruption.
Industry	Do voters have a preference for candidates from a specific industry?	The survey experiment tells the story of a political candidate that would like to enter political office with a background in the private sector (and has worked in a company involved in corruption, see corruption dimension). We choose two different industries that are known for corrupt practices in Brazil and have recently gained much attention over corruption scandals (France, 2020). These have shown that in both industries it is common practice to bribe politicians and public officials during the procurement process. Importantly for this experiment is that both industries vary in their gender representation, i.e. the construction sector is mostly male and the pharmaceutical sector has a higher female labor force participation (France, 2020).
Campaign promises	Are female candidates that campaign on social services more favorably viewed?	To provide a realistic candidate profile of someone running for election, we include campaign promises in the form of schools and vaccine distributions, both social services that were relevant during the COVID-19 health crisis in Brazil.
Corruption	Do voters favor non-corrupt candidates?	We include a treatment on corrupt public procurement. We design the treatment as the positive and negative outcome of an audit by the Brazilian Federal Agency, which regularly audits municipalities in Brazil. Results are often widely distributed in the news and the agency is well-known and trusted (Avis et al., 2018).

Survey Sample

Table A.2: Balance table: Comparison of survey sample and census data

Category	Survey sample (%)	Census data (%)	Difference (pp)
Regions			
Norte	10.4	7.5	2.9
Nordeste	27.5	26.9	0.6
Sudeste	41.1	43.4	−2.3
Sul	13.4	14.8	−1.4
Centro-Oeste	7.5	7.3	0.2
Gender			
Female	53.4	56.1	−2.7
Male	46.5	43.9	2.6
Age			
15-29	34.9	35.5	−0.6
30-49	46.4	37.6	8.8
50+	18.7	26.9	−8.2

Note: The table shows the population size by region, gender and age group based on the latest Census 2010 and our survey sample. Data are from IBGE: IBGE, Pesquisa de Informações Básicas Municipais – 2020.

Table A.3: Age distribution by region: Comparison of survey sample and census data

Region	Age group	Survey sample (%)	Census data (%)
Norte			
	15-29	36.4	42.8
	30-49	47.9	37.2
	50+	15.8	20.0
Nordeste			
	15-29	47.3	38.4
	30-49	41.3	36.4
	50+	11.4	25.2
Sudeste			
	15-29	31.0	33.0
	30-49	49.8	38.1
	50+	19.2	28.9
Sul			
	15-29	26.2	32.8
	30-49	44.4	37.7
	50+	29.4	29.5
Centro-Oeste			
	15-29	25.8	36.7
	30-49	48.3	39.8
	50+	25.8	23.5

Note: The table shows the population size by region and age group based on the latest Census 2010 and our survey sample. Data are from IBGE: IBGE, Pesquisa de Informações Básicas Municipais – 2020.

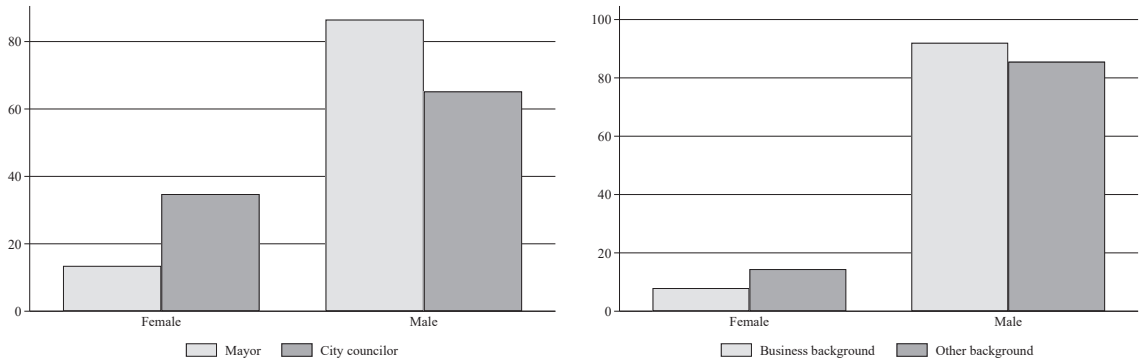
Table A.4: Female councillors: Comparison of survey sample and census data

Category	Survey sample *No female councillors* (%)	Survey sample *High share >20%* (%)	Survey sample (%)	Census data (%)
Size				
Small	46.4	30.2	36.4	31.6
Medium	50.0	55.2	52.1	56.5
Large	3.6	14.6	11.5	11.8
Existence of favelas				
Yes	54.7	50.0	50.6	53.3
No	45.3	50.0	49.4	46.7

Note: The table shows the population size of the municipalities and the existence of favelas in Brazil (Census Data) and in the sampled municipalities, separately for municipalities with a no female councillors and a high share of female councillors represented in the local government. Data are from IBGE: IBGE, Pesquisa de Informações Básicas Municipais – 2020.

Mayor and Councilor Candidates

Figure A.1: Election 2020: Gender and business background of local candidates

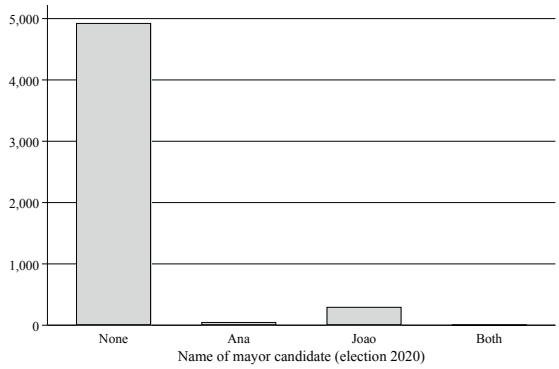


(a) Candidates' gender

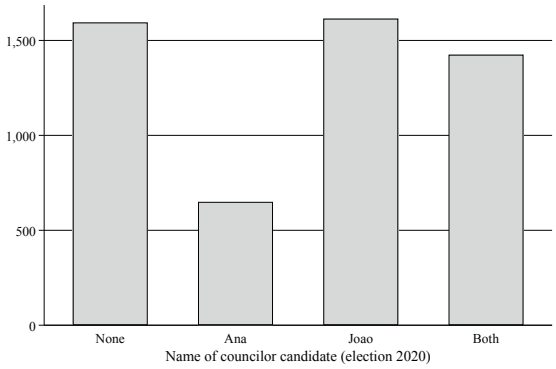
(b) Candidates' gender and business background

Note: The figure shows the share of mayor and councillor candidates in the 2020 local election in Brazil who identified ad 'Male' and 'Female' and the share of business candidates (candidates with an occupation as 'Business Person' or 'Manager'), both characteristics of political candidates used in the conjoint survey experiment.

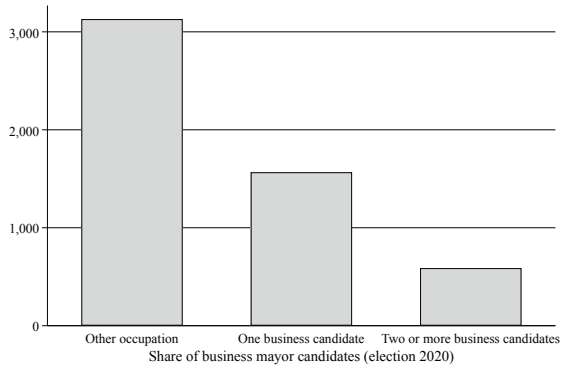
Figure A.2: Election 2020: Names and occupation of local candidates



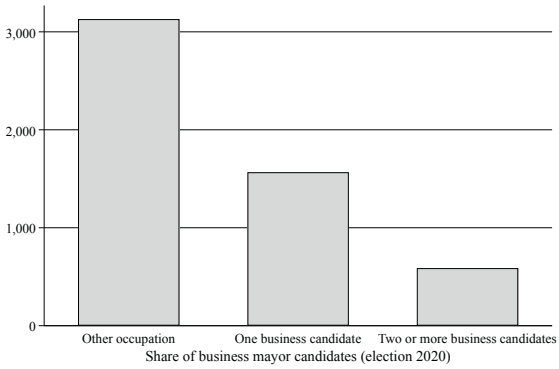
(a) Names: Mayor candidates



(b) Names: Councillor candidates



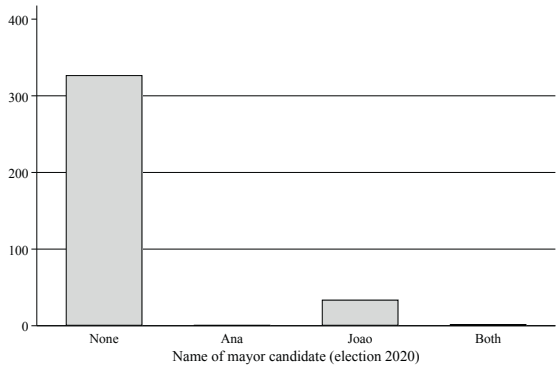
(c) Occupation: Mayor candidates



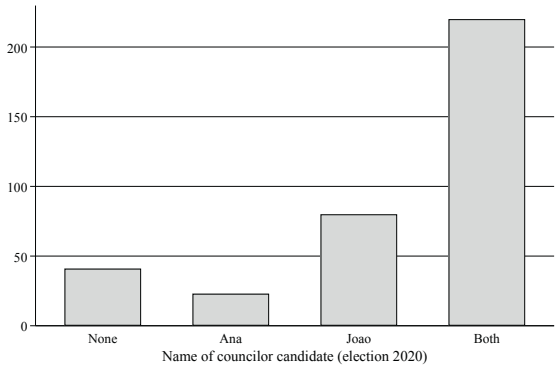
(d) Occupation: Councillor candidates

Note: The figure shows the share of mayor and councillor candidates in the 2020 local election in Brazil with the names 'Ana' and 'João' and the share of business candidates (candidates with an occupation as 'Business Person' or 'Manager'), both characteristics of political candidates used in the conjoint survey experiment.

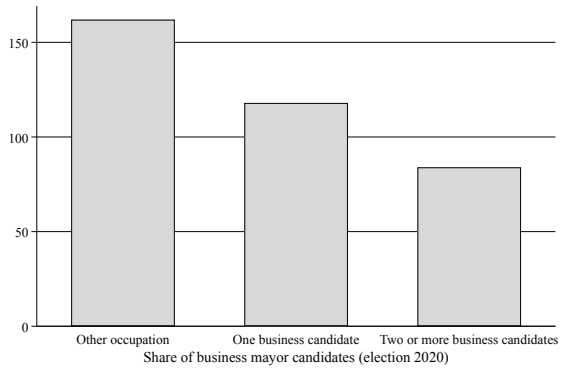
Figure A.3: Sampled municipalities (election 2020): Names and occupation of local candidates



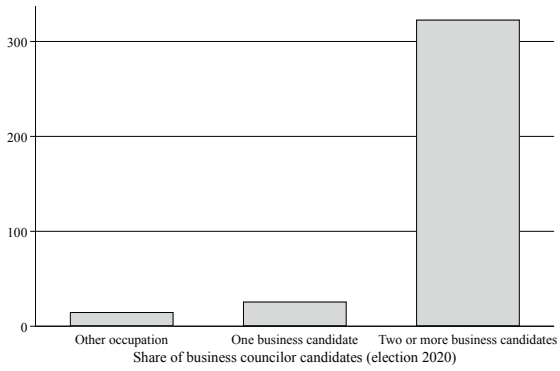
(a) Names: Mayor candidates



(b) Names: Councillor candidates



(c) Occupation: Mayor candidates



(d) Occupation: Councillor candidates

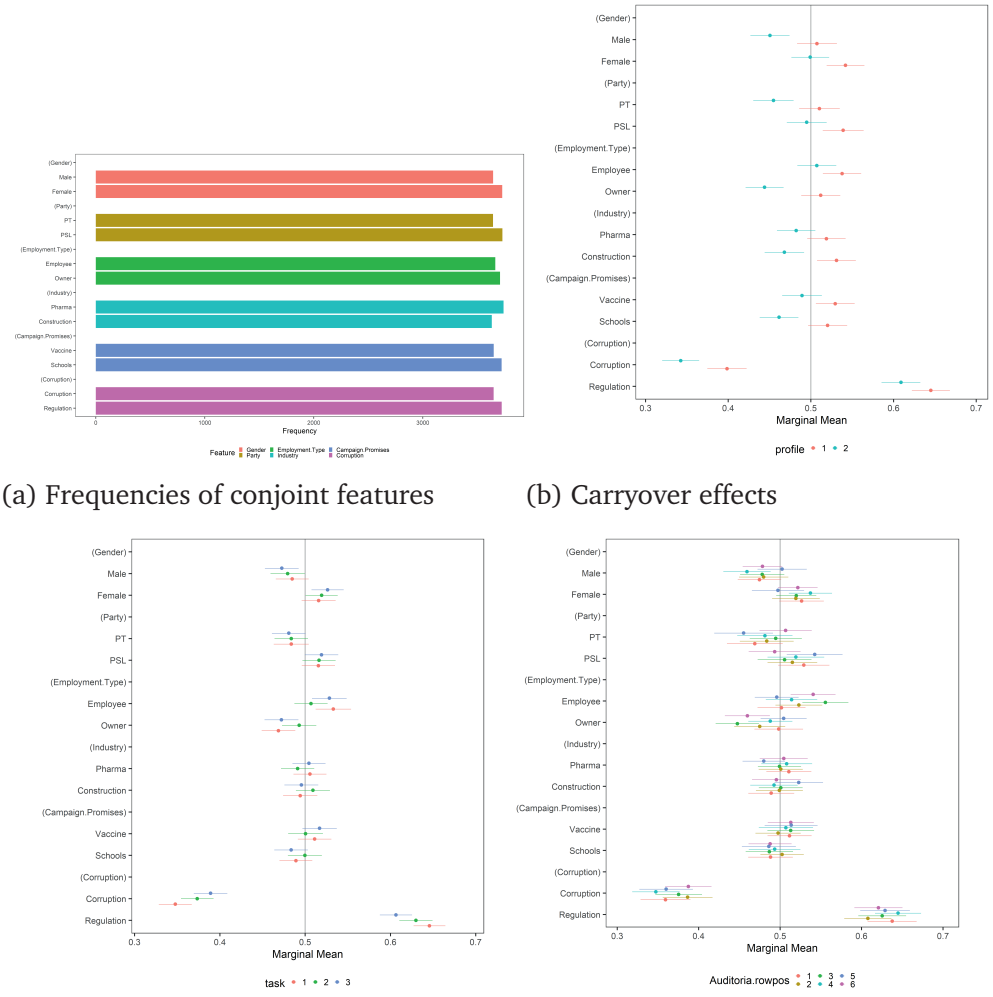
Note: The figure shows the share of mayor and councillor candidates in the 2020 local election in Brazil that were sampled in the survey with the names 'Ana' and 'João' and the share of business candidates (candidates with an occupation as 'Business Person' or 'Manager'), both characteristics of political candidates used in the conjoint survey experiment.

Diagnostic Tests

The diagnostic tests in Figure A.4 are robust to the three assumptions in conjoint experiments (Hainmueller et al., 2014):

1. *Randomization of profiles:* All attribute levels are fully randomized (Figure A.4a) with no constraints, uniform distribution and equal weights of each profile.
2. *No profile-order effects:* We detect slight profile order effect for the 'corruption treatment' (Figure A.4c), which are less frequently selected in the last task, compared to the first task. Yet, in all tasks a 'clean firm' has positive values (above 0.5).
3. *No carry-over effects:* None across all attribute values (Figure A.4b), except for the 'corruption' treatment.

Figure A.4: Diagnostics of conjoint experiment



(a) Frequencies of conjoint features

(b) Carryover effects

(c) Profile order effects

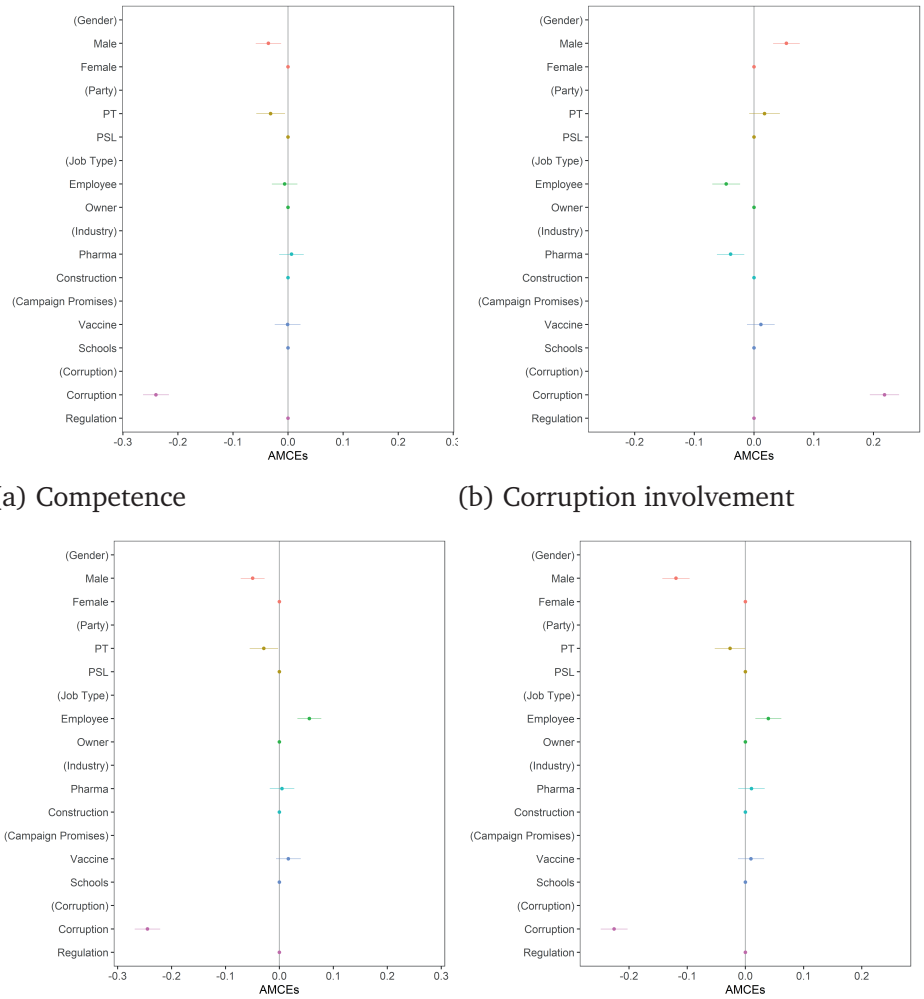
(d) Attribute level effect

Note: The first plot shows frequencies. The other plots show the marginal means (MMs), i.e. the probability that respondents select an attribute, 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. $N = 7{,}374$.

B Additional Results

Mechanisms

Figure B.1: Mechanisms of voter beliefs

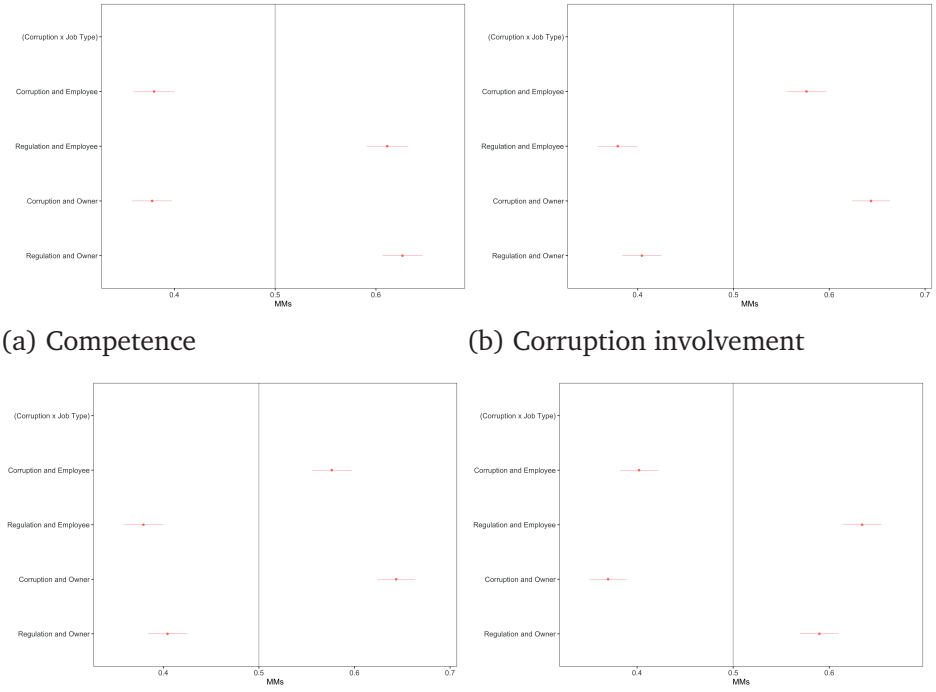


(a) Competence (b) Corruption involvement

(c) Effectiveness: Getting things done (d) Representing women's interests

Note: 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. $N = 7{,}374$. Survey questions are shown in Table 3.3.

Figure B.2: Mechanisms of voter beliefs: Corruption x Job type



(a) Competence (b) Corruption involvement

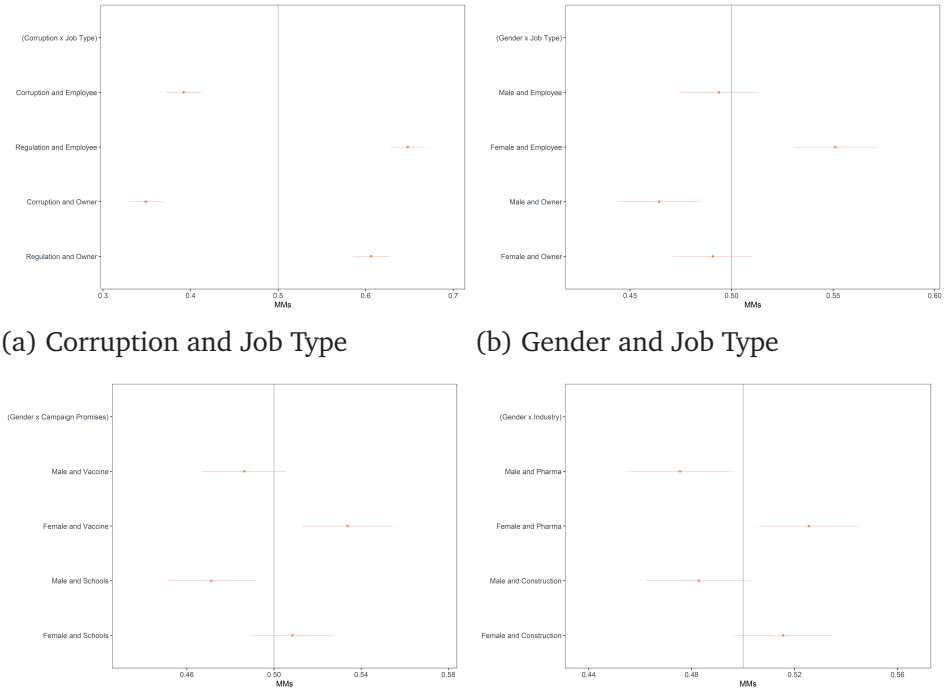
(c) Effectiveness: Getting things done (d) Representing women's interests

Note: 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. $N = 7{,}374$. Survey questions are shown in Table 3.3.

Interaction effects: Voter support

In line with our priors and experimental research on working class and business candidates in other contexts (Adams et al., 2021; Carnes, 2018; Carnes and Lupu, 2016a), Figure B.3a shows that voters prefer candidates that work as an employee (over a business owner) in companies that have followed government's regulations, which gives an indication for whom they may hold accountable in the corruption case.

Figure B.3: Additional experimental interaction effects

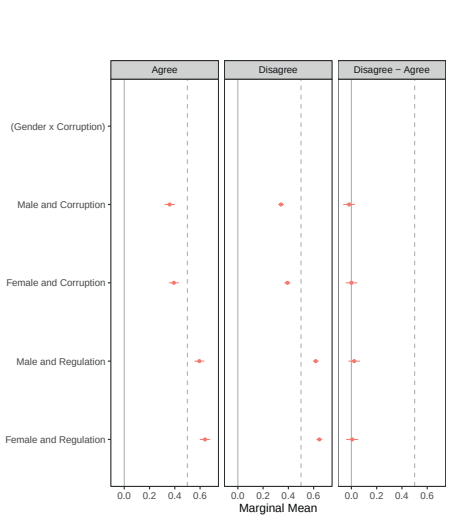


(a) Corruption and Job Type (b) Gender and Job Type

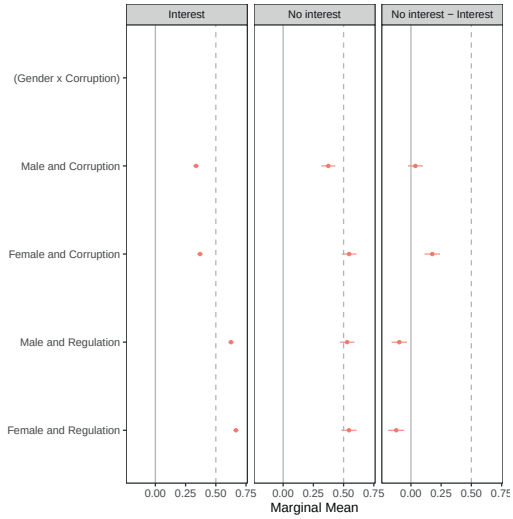
(c) Gender and Campaign Promises (d) Gender and Industry

Note: Marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over other attributes. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 7{,}374$.

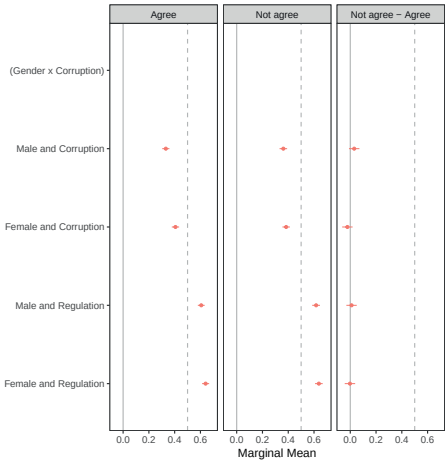
Figure B.4: Interaction Effects: Gender and Corruption



(a) Men are more corrupt



(b) Political interest

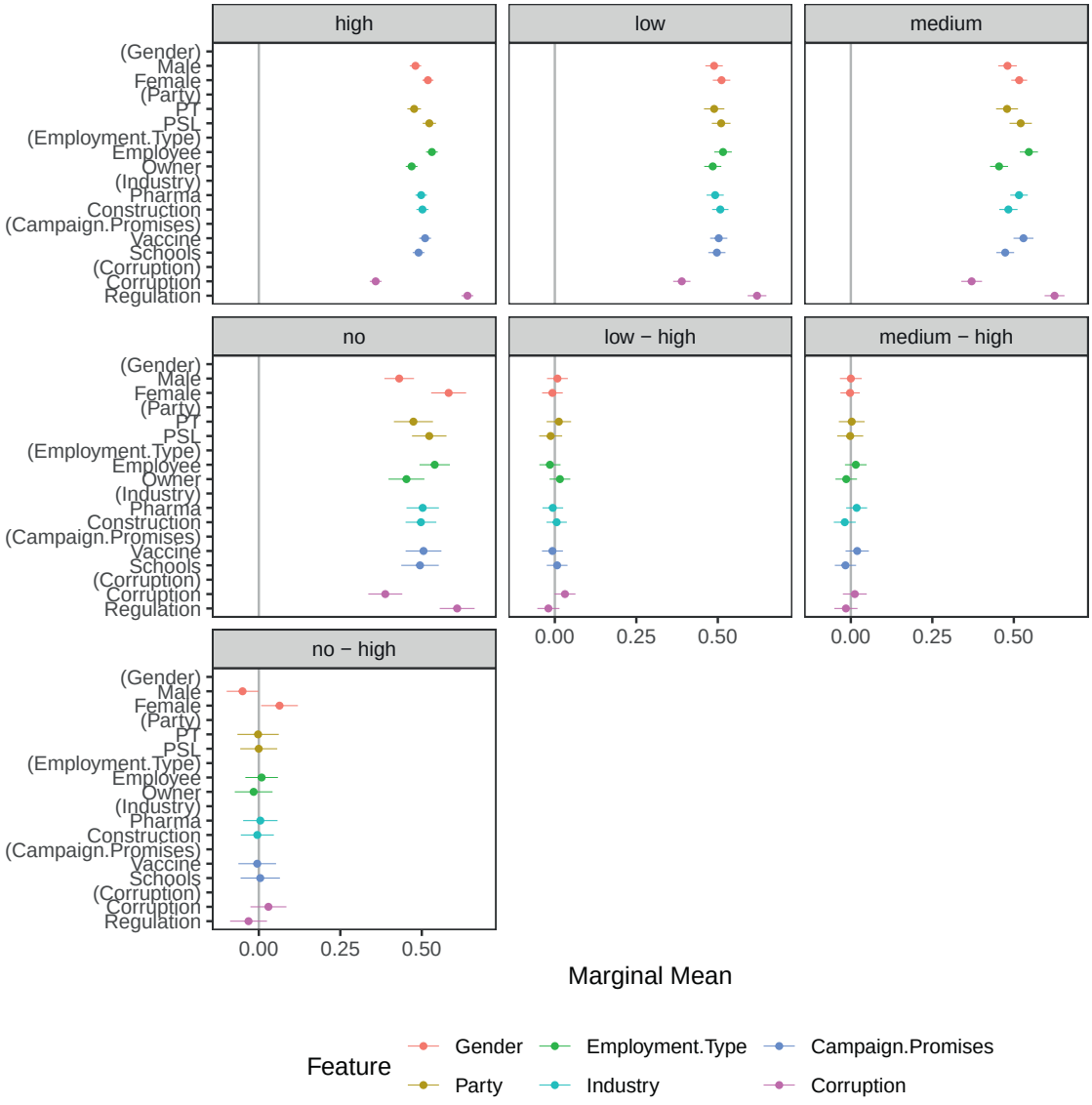


(c) Gender quota approval

Note: Marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over other attributes. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 7{,}374$. Men are more corrupt: 'On the whole, men are more corrupt than women.'. Gender quota approval: 'Agreement with 30% gender quota.'.

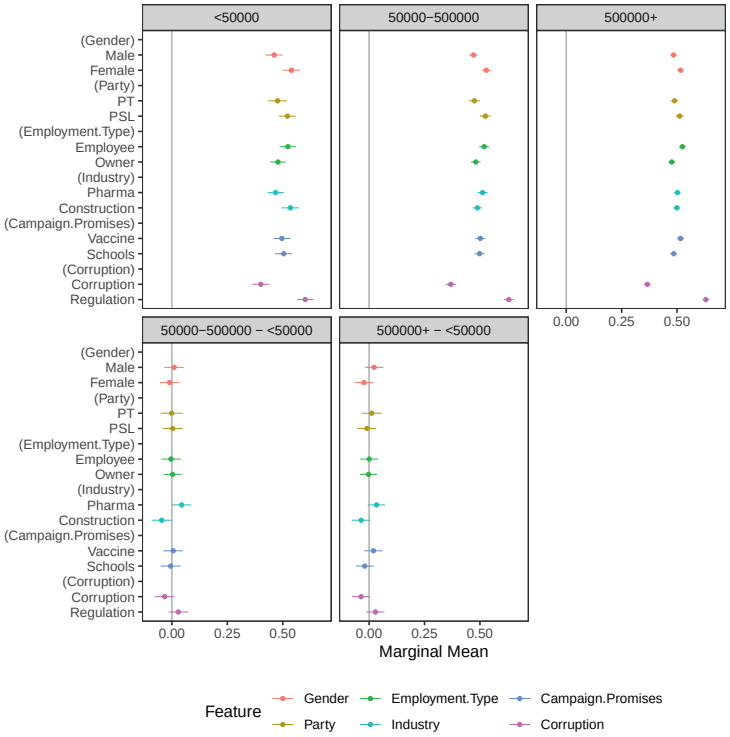
Municipality Characteristics

Figure B.5: Baseline effects: Share of women in council (election 2020)

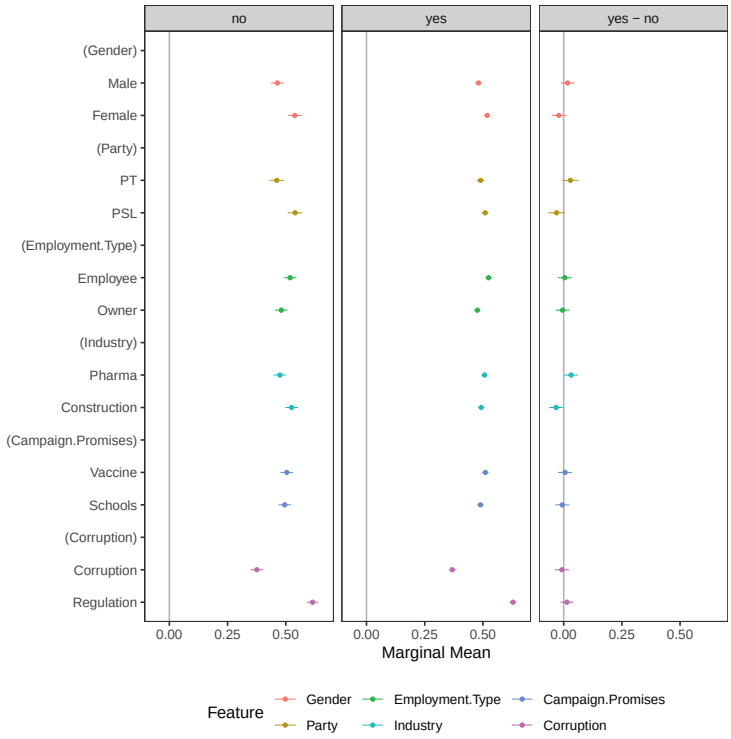


Note: The coefficients (dots) show marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over other attributes. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 7{,}374$. Based on the distribution of female councillors in Brazil: 1) no female councillors; 2) low share (0-14%); 3) medium share (15-20%); and 4) high share (21-100%).

Figure B.6: Municipality Size and Inequality



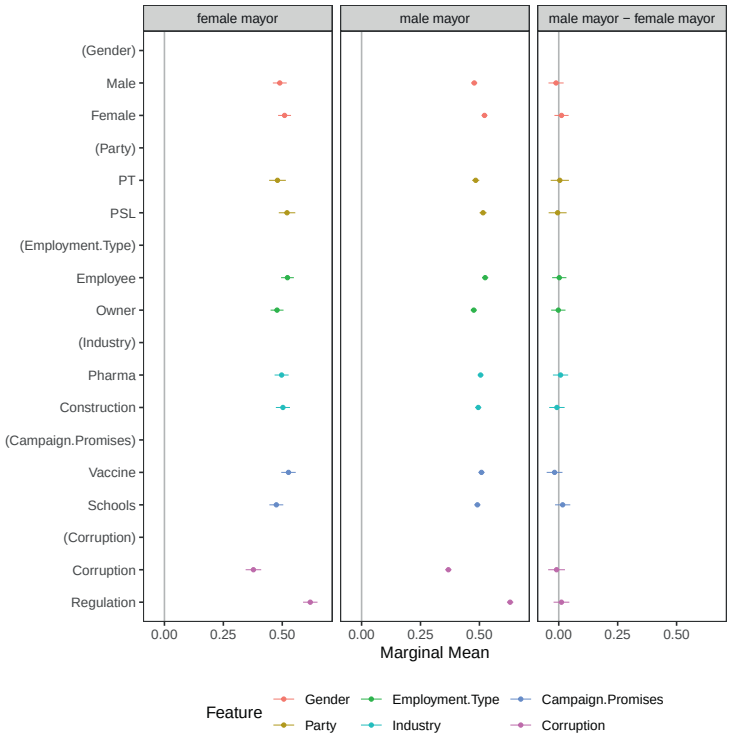
(a) Population size in municipality



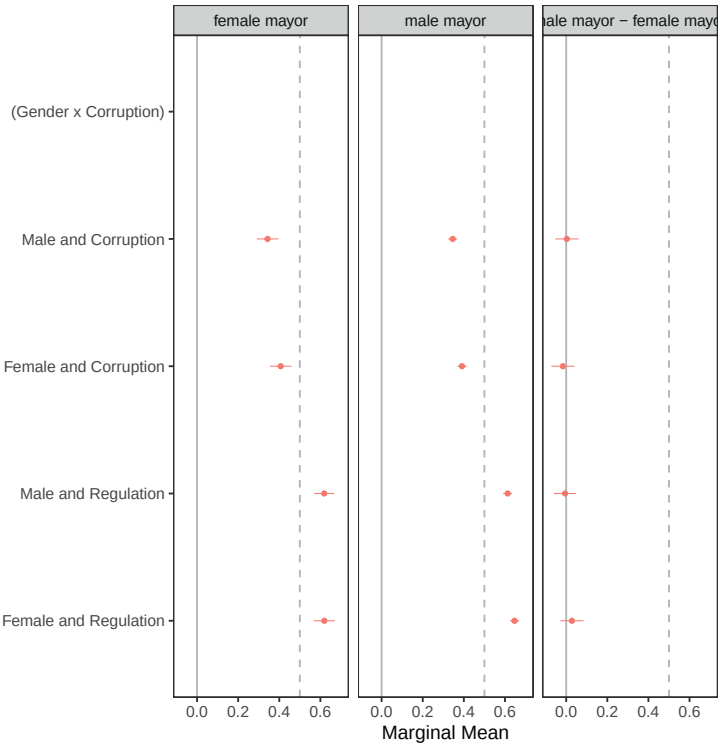
(b) Existence of favela(s) in municipality (yes/no): "Existem no município: Favelas, mocambos, palafitas ou assemelhados"

Note: The coefficients (dots) show marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over other attributes. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 7{,}374$.

Figure B.7: Interaction effects (Gender and Corruption): Women's political representation in municipalities



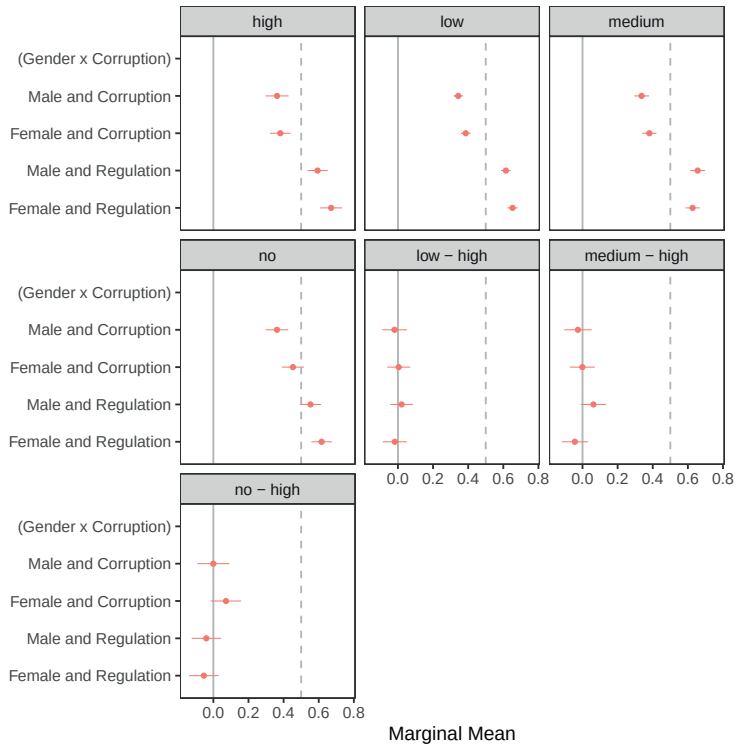
(a) Baseline effects: Mayor's gender (election 2021)



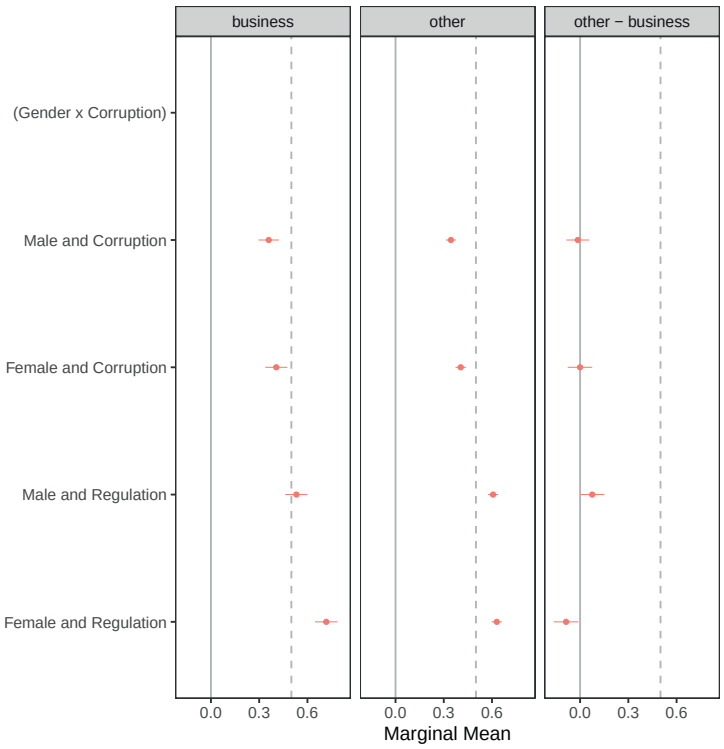
(b) Interaction effects: Mayor's gender (election 2021)

Note: The coefficients (dots) show marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over other attributes. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 7{,}374$.

Figure B.8: Business politicians in municipalities



(a) Interaction effects: Share of business councillors (election 2020)

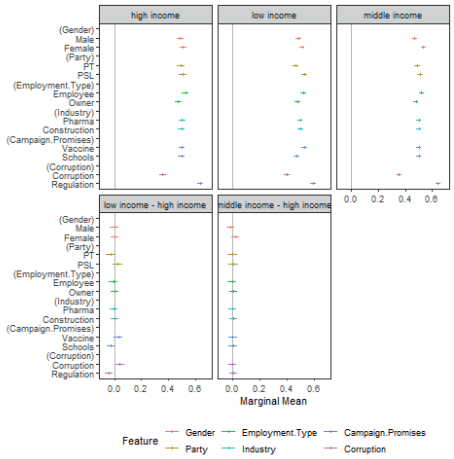


(b) Interaction effects: Business mayors (election 2020)

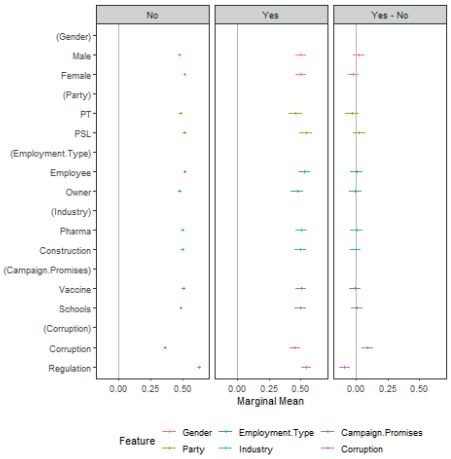
Note: Figure B.8a shows that the presence of businesspeople in local politics may also influence individuals' perceptions of female and male candidates connected to (corrupt) firms. We observe that voters are more likely to support female candidates connected to 'clean' firms, when exposed to a mayor with a corporate background, compared to a mayor with a different background (Figure B.8b). Our experiment only exposes respondents to corporate candidates, making respondents more accustomed to business candidates in politics. Yet, in municipalities that have no local councillors with business backgrounds, voters tend to favour women affiliated with corrupt firms. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 7{,}374$.

Respondents Socioeconomic Characteristics

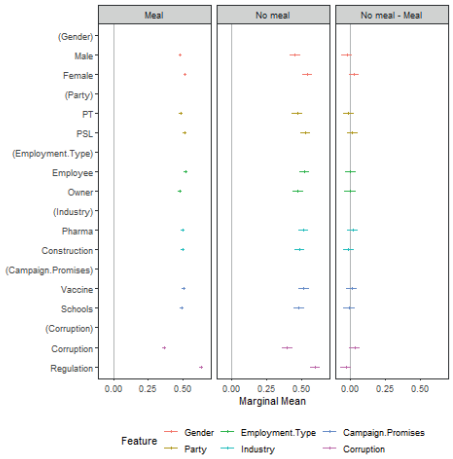
Figure B.9: Subgroup analysis by vulnerability and income



(a) Income levels



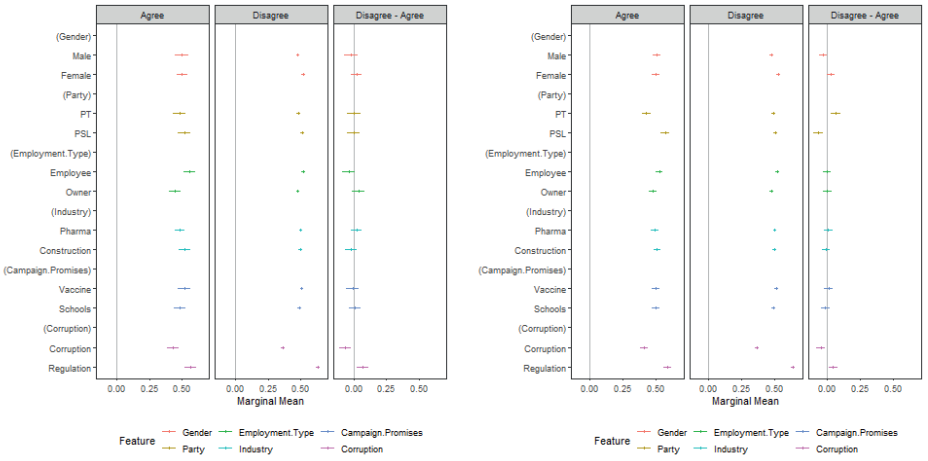
(b) Recipient of Bolsa Família



(c) Food insecurity

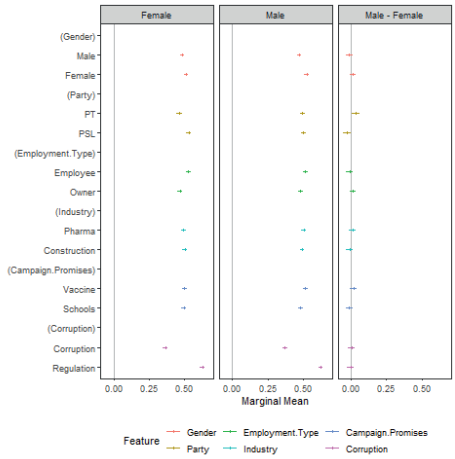
Note: These plots show the marginal means (MMs), i.e. the probability that respondents select a specific combination of attributes, averaged over the other attributes. All predicted probabilities are bench-marked against 0.5. Standard errors are clustered at the respondent level; bars represent 95% confidence intervals. $N = 7{,}374$. Income defined as a multiple of minimum wage in Brazil: 'What is your household's average monthly income in R$ relative to the minimum wage? (Income should include all family member's salaries, wages, rental, transfer, etc.)' Recipient of Bolsa Família: 'Including yourself, does anyone in your household receive Bolsa Família?'. Food insecurity: 'Over the past year, how often, if ever, have you or anyone in your family gone without a meal a day?'.

Figure B.10: Subgroup analysis by gender and gender norms



(a) Men should be elected

(b) Men are better political Leaders



(c) Gender

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. $N = 7{,}374$. Gender norms survey questions are agreement with 'On the whole, men should be elected rather than women.' and 'On the whole, men make better political leaders than women do.'. Gender is respondents' self-identified gender.

Chapter 4

What is the Ideal Number of Women in Politics?

Distributive Preferences, Inequality, and Meritocracy

with Edith Zink and Pablo Selaya[1]

We address the underrepresentation of women in politics as a distributive justice concern. Using an online survey in Tanzania, we asked respondents to estimate current and ideal numbers of women in politics, while imagining they participated in a *lottery of nature* that would allow them to abstract from their personal characteristics and social position. This approach enables us to interpret their preferences as impersonal and genuine value judgements about social welfare. The survey responses reveal an ideal share of women in politics of 39%, lower than the 50% threshold of equality, indicating a preference for inequality in the distribution of political power between women and men. The result is robust and not confounded by personal characteristics and is stable over time. We explore two mechanisms to explain these (inequality) preferences: limited gender specialization in political committees and differing meritocratic expectations for female political candidates. Our research sheds light on the persistence of preferences for women's political underrepresentation, pointing to the importance of further analysis on the origins and consequences of meritocratic values in society.

Keywords: Women in politics, Distributive preferences, Online survey experiments.

[1]We thank Esther Chevrot-Bianco, Olle Folke, Johanna Rickne, Carl-Johan Dalgaard, and seminar participants at the University of Dar es Salaam, Bocconi University, and Uppsala University for comments and discussion. We are also grateful to Servacius Likwelile and Joel Lincoln of the University of Dar es Salaam, who were co-authors of an earlier version of this study and provided help at the start of the project. Finally, we are grateful for financial support from DANIDA and the Growth and Development Research Project (GDRP) of the United Nations University's World Institute for Development Economics Research (UNU-WIDER), the Development Economics Research Group at University of Copenhagen, and the Department of Economics at the University of Dar es Salaam.

> *[When will there be enough women on the United States supreme court?]*
> *So now the perception is, yes, women are here to stay. And when I'm sometimes asked when will there be enough? And I say when there are nine, people are shocked. But there'd been nine men, and nobody's ever raised a question about that.*
>
> — Ruth Bader Ginsburg (2012)

4.1 Introduction

Most countries have been led by male politicians most of the time. This phenomenon has been a regularity across continents, different levels of government, and it has even resisted the expansion of political rights and democracy. For example, countries admitting electoral processes and pluralism have had an elected male head of state 94% of the time during the last five years (Figure 4.1a). Only six countries currently have more than 50% women as members of their parliament (Figure 4.1b).

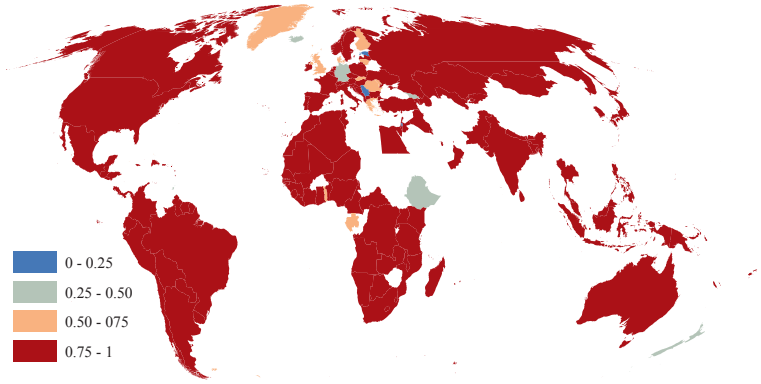
Inequality in the distribution of political power between women and men is clearly both prevalent and stubborn. However, an alternative, or *ideal* distribution, is frequently a topic of debate. One reason is the difficulty of building societal consensus about such an ideal. For example, many people in public opinion debates and academia interpret gender inequality in politics as an outcome of various forms of discrimination that reduce possibilities for women to start and consolidate political careers (Bertrand, 2018; Folke and Rickne, 2016). Such views have frequently called for affirmative action policies to achieve equality. Many countries have indeed responded by adopting gender quotas and systems of reserved seats for women in political parties, ministerial cabinets, or parliaments (Dahlerup, 2006; Rosen, 2017).[2] However, many other people interpret gender inequality in politics as the outcome of cultural values and individual choices that give women a less prominent role in politics, and thereby reduce their incentives to embark on political careers. This view interprets the resulting unequal distribution of power between women and men as a fair societal outcome, and hence reduces the demand for affirmative action and policy interventions to increase women's participation in politics. It may even strengthen opposition against the use of such policies, under the rationale that they would create a costly trade-off with meritocratic values as a guideline for the selection of politicians.[3]

In this paper, we analyse inequality in the distribution of political power between women and men as a problem of distributive justice (Harsanyi, 1953, 1977; Rawls, 1971), and ask what constitutes the ideal number of women in politics. We start by designing a questionnaire that would allow us to interpret an individual's response about the ideal distribution of political power between women and men as a genuine value judgment concerning social welfare. Harsanyi (1953, 1977)'s theory of moral value judgments (or moral preferences) concerning social welfare provides a suitable framework for designing

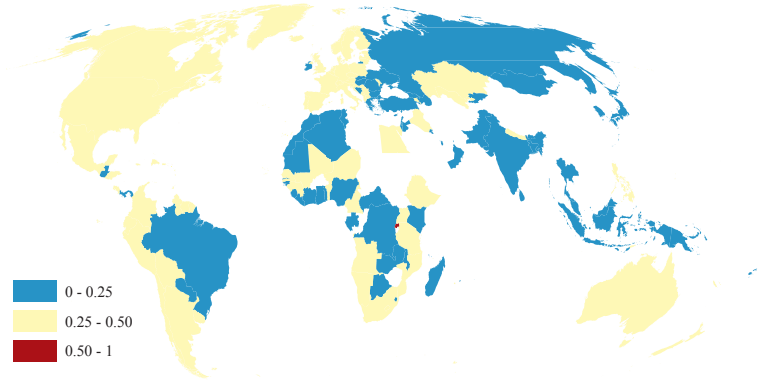
[2]The Gender Quotas Database shows that 134 countries at present have enacted a gender quota at the electoral and political party system level, or through a constitutional amendment. Figure 4.1c illustrates the different quota levels adopted in different countries.

[3]See, for example, the discussions about different reasons why women attain less influence than men in Casas-Arce and Saiz (2015), and differences in support for gender equality in politics in societies in Dehingia et al. (2022).

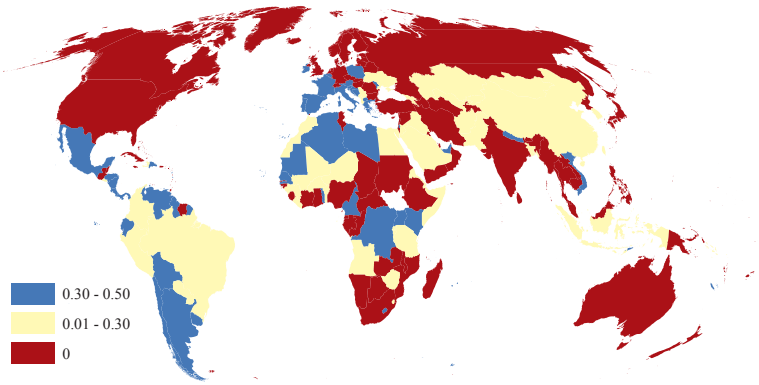
Figure 4.1: Gender inequality in politics



(a) Share of male leaders (2016–2023)



(b) Share of female members of parliament (2016–2023)



(c) Gender quotas in politics (2023)

Note: The top figure (a) shows the percentage of days since 1 January 2016 with a male head of state, across countries holding electoral processes. The middle figure (b) shows the share of women in (lower/single house) parliament. Data are from IPU's monthly ranking of women in national parliaments, as of March 2023 (see www.ipu.org). The bottom figure (c) shows the gender quota levels in all countries that as of April 2023 have had legislated gender quotas in politics in their single, lower, upper houses or sub-national level, either in the form of legislated candidate quotas or reserved seats. If a country has several gender quotas, the highest level is displayed. In all figures, countries not shown do not have data as they are assigned 0 in The Economist's Intelligence Unit's Democracy Index's category on *electoral process and pluralism* (EIU, 2023). Data compiled from International IDEA Gender Quota Database.

the survey questions. It allows us to interpret individual responses as preferences for societal outcomes (such as the distribution of political power), rather than merely individual preferences biased by a respondent's personal characteristics and social position. Harsanyi (1977) proposes that such moral preferences are revealed if individuals express them while (*a*) ignoring their own relative position in society, and (*b*) thinking that they can obtain any position in society with equal probability. Harsanyi (1977) proposes such a stance as the *equiprobability postulate*. Rawls (1971) concept of the *veil of ignorance* is similar. It allows individuals to carry out a thought experiment of being in the *original position of equality* from which they would be able to agree on a set of justice principles to design distributive processes and political institutions in society.

Our survey questionnaire contains three main features. First, we use the share of seats occupied by women in parliament as the main indicator for descriptive representation and the distribution of political power between women and men. Second, given the importance of individuals' perceptions of reality for the formation of socially determined aspirations (Bursztyn et al., 2023; Genicot and Ray, 2020; Stantcheva, 2021), we ask respondents to estimate the actual number of women in parliament. Third, we operationalize the equiprobability postulate (or veil of ignorance), by asking respondents to imagine a specific scenario. That is before they state their preferences about the ideal distribution of parliament seats, they would participate in a *lottery of nature*, in which it was equally likely that they would be female or male, rich or poor, sick or healthy, and so on. Therefore, in the hypothetical scenario they could end up in any possible position in society.

We distributed our questionnaire to university students in Tanzania as an online survey, which we conducted in three rounds between October 2020 and May 2021. Tanzania is a suitable context for this research because the country has debated and acted upon affirmative action policies to address gender inequality in the distribution of political power since before its independence in 1961 (Slaa, 2011). Additionally, our study period includes two important events: the national election held on October 28, 2020 - which resulted in the re-election of President John Magufuli with a landslide win - and the appointment of elected Vice President Samia Suluhu Hassan as the country's first female president on March 19, 2021, after President Magufuli's unexpected passing on March 17, 2021. These two salient political events allow us to test whether respondents' estimates of the actual and the ideal distributions of power were affected by the re-election of a male president and the unexpected appointment of a female president in the country.

Our empirical analysis focuses on two indicators: people's estimates and ideals. That is, estimates of the actual and preferences of the ideal proportion of women to men on both the extensive and the intensive margin. The *extensive margin* is defined as the number (estimated and ideal) of female politicians in parliament and the *intensive margin* as which types of policy fields female politicians cover, measured in the distribution of seats filled by women in the various parliamentary committees. We use specialization of female members of parliament (MP) across the different political committees to capture variations in female MP representation in various (gendered) policy spheres. Our definition and measurements on the extensive and intensive margin are similar to descriptive and substantive representation widely used in political science literature, both terms largely inspired by Pitkin (1967). Similar to other papers that measure

substantive representation (Escobar-Lemmon and Taylor-Robinson, 2009; Krook and O'Brien, 2012), we use political committee membership as an indicator of substantive representation in politics. The relationship between descriptive (extensive margin) and substantive representation (intensive margin) of women is not straightforward. Even though both levels of representation often increase equally, descriptive representation does not necessarily lead to substantive representation (Pitkin, 1967).

Our first set of results includes two main findings. First, survey respondents underestimate the actual number of seats held by women in the parliament (141 seats, equivalent to 36% of total seats) by 4 percentage points (pp) on average. Second, although respondents underestimate the number of women in parliament, on average they believe the ideal number of women in parliament is 39% of total seats. The number is 3 pp higher among female respondents than among men. Both female and male respondents presented an ideal number of women in parliament that is lower than the actual 50% target of an egalitarian distribution. These results are robust to controlling for a range of respondents' characteristics. Overall, these results suggest a preference for inequality in the ideal distribution of political power between women and men.

In the next part of our analysis, we probe the potential reasons. We begin by looking at gender differences in politicians' specialization in specific policy areas. We hypothesize that if there are preferences for female politicians to work in specific policy fields that are relatively smaller or less attractive (for instance, because they are underfunded or otherwise regarded as relatively less important in public opinion), the effect would be discouraging for women to enter politics. This would potentially lead to a lower ideal level of participation in politics for women than for men. To test this hypothesis, we estimate the actual degree of specialization of female members of parliament across current parliamentary committees. We ask survey respondents to provide their own estimates of the actual and ideal distributions of female MPs across these committees.

In our analyses, we account for the fact that there are fewer women represented in parliament. We find that the actual share of female MPs is, on average, roughly the same across all committees. We also find that respondents generally estimate the actual number of female MPs across committees accurately, and that they report a similar ideal distribution of MPs for all committees. We examine whether female respondents, who on average prefer more women in parliament, allocate additional female MPs in a way that indicates a preference for specialization in female dominated committees, and find that this is not the case. Given these results, and that the rules for allocation of MPs to policy committees within the parliament allow MPs to self-select into committees in different policy areas, we find no support for preferences for a gendered specialization in policy fields. Therefore, we find no support for the idea that female politicians' interests or specialization in specific policy areas contribute to explaining an overall lower level of ideal female participation in politics.[4]

[4]The Standing Orders (Part 15) of the Tanzanian parliament indicate that: *"Any Member of Parliament who is not a Minister or the Attorney General of the Government may be appointed as a Member of any Standing Committee of Parliament concerned with this Rule; and the Minister responsible for any matter referred to or discussed by the Committee, together with the Deputy Minister appointed to assist the Minister, will be members of the Committee when the Committee is dealing with the matter." Followed by some further specifications that the Speaker should follow when assigning MPs to parliamentary committees: "[he] will consider all types of Members of Parliament and appoint different types of Members of Parliament for each*

As a second potential mechanism, we test the common argument that meritocratic values may justify unequal distributions. We hypothesize that, if women and men believed in equal meritocratic requirements for female and male political candidates to become successful politicians, gender inequality in the actual distribution of political power could be considered fair, because the selection of politicians would be perceived to be the consequence of a meritocratic selection. We test this hypothesis, by conducting a survey experiment in which we randomize the gender of a hypothetical political candidate running as a MP. The experiment asks respondents about the importance of experience, effort, and education – three specific meritocratic qualities – for a political candidate to become a successful politician.

The results from our experiments show that respondents believe there are generally no significant differences in the meritocratic standards to which female and male political candidates are held. When we analyse these results by gender, we note that females place less emphasis on education as a requisite for political candidates, unless the political candidate is a woman, in which case the importance of education becomes significantly higher. This result suggests that female respondents hold female political candidates to higher standards in terms of their education compared to male candidates. These results further suggest that female respondents were more aware that female political candidates are held to higher standards than male candidates and help to explain an overall lower ideal level for female participation in politics. These interpretations are supported by recent research. For example, Teele et al. (2018) use survey experiments and show that voters make different and largely unreasonable demands of female candidates compared to traits demanded of male political candidates. Bertrand et al. (2018) demonstrate that unconscious biases have increased the challenges faced by women who seek to advance to leadership positions. Further, gender norms and stereotypes, especially in male-dominated jobs, reinforce existing preferences for male leaders, both in political and corporate leadership (Heursen et al., 2020; Vasconcelos, 2018).

The idea that women are held to higher standards than men is also akin to Sandel (2021)'s related observation that certain attitudes towards economic success are embedded in meritocratic values that elevate the importance of individual effort and hard work over good luck. These attitudes generate hubris in society so that both winners and losers in the distribution of economic gains believe that they fairly deserve the outcomes they receive. However, a widening gap in the distribution of gains between winners and losers gives rise to stronger beliefs that individuals' positions regarding the distribution are a result of their individual efforts and achievements – that is, their merits or lack thereof. According to Sandel (2021), this belief can potentially create a society in which values of individual meritocracy cause a 'tyranny of merit'. This would reinforce a dynamic of general economic inequality, polarization, and social unrest. Reviewing data about current MPs in Tanzania, we find higher levels of educational attainment among female MPs than male MPs or women in the general population. Our survey results show that women are stronger supporters of Tanzania's current gender quota, which redistributes political power between women and men regardless of their meritocratic achievements.

Committee, guided by the criteria of the percentage of each type of Member of Parliament in the Parliament; as much as possible, he will give priority to the wishes of the Members of Parliament but he will not be obliged to satisfy every wish or request, and will consider the need for each Committee to have Members of Parliament with experience or specialized knowledge about the Committee's work."

In addition, women are more likely to say they would take up action to support gender equality in politics. Taken together, these results suggest that women, as a group that is underrepresented in politics compared to men, are aware of a mechanism similar to the *tyranny of merit* (Sandel, 2021), regarding the distribution of political - rather than economic - power.

The remainder of this paper is organized as follows. Section 4.2 summarizes various strands of literature relevant to our paper. Section 4.3 describes the data collection and the context. Section 4.4 presents and discusses the results. Section 4.5 concludes the paper.

4.2 Related Literature

Our paper relates to various strands of research. First, it is relevant to literature on distributive justice, particularly, research that applies *deliberative settings* as a theoretical method to characterize optimal and fair outcomes of distributive processes at the societal level (Weale, 2020). Deliberative settings are thought experiments in which people are deprived of their own position in society, which enables an abstraction from specific social and economic characteristics (such as interests, abilities, or parental income) that would otherwise introduce biases in individuals' preferences about societal outcomes. Deliberative settings, therefore, induce people to select distributive principles individually, rationally and impartially (not driven by selfish motivation). This gives them a socially optimal character, since they should support everyone's interests. While many believe the abstraction into deliberative settings is necessary to develop ideal distributive principles, critics of deliberative settings have emphasized that such ideals are ideological and not useful to handle injustices in the real world (see for example Pateman and Mills (2007); Sen (2006). Stemplowska and Swift (2012) argue against this criticism, highlighting the importance of an ideal societal consensus for long-term achievements of societal goals such as gender equality in politics and in public life. Deliberative settings can thereby help to develop testable predictions, aspirations, and benchmarks for social arrangements, not just theoretically or in a laboratory, but also in the real world (Gaus, 2011; Kang, 2016; Rawls, 1996). Examples of deliberative settings are Harsanyi (1953)'s theory of moral value judgements, and Rawls (1971)'s theory of justice. The concepts of the *equiprobability postulate* and the *veil of ignorance* play central roles in these theories. Similar concepts appear in Buchanan (1977)'s *veil of uncertainty*, and Smith (1759)'s *impartial spectator*.

We relate to this literature by operationalizing a deliberative setting using the idea of a *lottery of nature*. This is a hypothetical situation in which survey respondents are asked to imagine that they could be rich or poor, healthy or ill, male or female, religious or not, part of a small or large ethnic group, and so on. Then, the respondents were asked to answer questions that probed their preferences for an ideal distribution of political power between women and men. Ackert et al. (2007); Cappelen et al. (2013); Faillo et al. (2015); Frohlich et al. (1987); Lissowski et al. (1991); Norton and Ariely (2011) present applications of deliberative settings to study income distributions, and propose laboratory experiments and survey designs to simulate a deliberative setting that allows studying individuals' decision-making and how it complies with different

distributive principles – for example, how they relate to the max-min principle in Rawls (1971) or principles of utilitarianism in Harsanyi (1953, 1977). This literature, however, focuses exclusively on distributions of income and wealth, whereas we focus on the distribution of political influence between women and men. Theoretical extensions apply the hypothetical thought experiment to cross-country measurements of economic well-being (Jones and Klenow, 2016); and propose rankings of alternative allocations that differ in the number of people and their respective welfare (de la Croix and Doepke, 2021).[5]

Second, our work is related to recent research that has measured preferences for redistribution using online survey data collection. This literature has generally concentrated on redistribution of income or wealth. It shows that the deviation between a person's subjective understanding of such a distribution and objective measures of the same distribution can explain divergent attitudes in favour of or against policies for redistribution (Alesina and Angeletos, 2005; Alesina et al., 2018; Ashok et al., 2015; Campos-Vazquez et al., 2022; Gimpelson and Treisman, 2018; Roth and Wohlfart, 2018); see Stantcheva (2021) for a review). We measure these perceptions as respondents' estimations of the actual distribution. We propose that the difference between perceptions (actual) and preferences (ideal) approximates people's discontent with the status quo and therefore provides a measure of the potential demand for redistribution. In our case, the use of quotas can be seen as a corrective measure for the distribution of political power between women and men just as taxes are corrective measures for income distribution. This literature also found that redistributive preferences are often shaped by whether individuals believe in effort or luck for economic success. Individuals who believe that hard work and effort lead to greater wealth are more likely to oppose redistributive policy tools (Alesina and Angeletos, 2005; Alesina and Giuliano, 2011). In our survey experiments, we address the importance of meritocratic beliefs for gender inequality in politics.

People's preferences can change in response to information about income or wealth; similarly, subjective understanding, knowledge, and information also play a role in political voting decisions. These factors determine who gets elected (Lau et al., 2008; Singh and Roy, 2014). If voters are not well-informed about the political candidates in an election, objective criteria, such as gender often serve as a shortcut or heuristic mechanism (Popkin, 1991; Sanbonmatsu, 2002) and may be one of the reasons why women are underrepresented in politics based on gender stereotyping (Dolan, 2014; Dolan and Hansen, 2018).

By studying gender preferences for political influence in parliament, we contribute to the literature on political representation in two ways. First, we address preferences for both descriptive and substantive representation of women in politics, tapping into a large body of research (Krook, 2009a; Neundorf and Shorrocks, 2021) (see Dahlerup et al. (2014) for an overview). While women remain largely underrepresented in politics, around the world, gender quotas have been implemented as a binding measure to increase women's numeric representation in political bodies (Besley et al., 2017; Clayton, 2021; Krook, 2009b). One study shows that individuals favour gender quotas if 'quota women' are

[5] de la Croix and Doepke (2021) reconstruct the idea of the veil of ignorance as a world where souls live through multiple reincarnations, not knowing which position in society they will be born into after their current life.

equally qualified (Nugent and Krook, 2015). Other contributions to the debate on gender quotas indicate that descriptive representation is not sufficient: even though gender quotas might address gender imbalances in terms of descriptive representation, they might not address imbalances in terms of policy making or political influence (Krook, 2015). Given that women remain a minority in Tanzania's parliament, we focus on the important question of whether preferences for unequal representation in descriptive representation translate into preferences for unequal influence in substantive political representation. We define perceptions of substantive representation as people's preferences for women and men to work in specific political committees and policy areas. Our work follows similar applications in different contexts (Escobar-Lemmon and Taylor-Robinson, 2009; Heath et al., 2005; Krook and O'Brien, 2012; Murray and Sénac, 2018).

Recent studies on gender norms (Bursztyn et al., 2020; Bursztyn and Yang, 2022; Bursztyn et al., 2023) have shown that people's unequal gender norms are largely sustained by individuals' misperceptions that other people also hold unequal gender norms. In this regard, we asked respondents to reflect on socially optimal levels of gender equality in politics. We believe that respondents' beliefs about what other people think or consider ideal, versus what the actual level is, are a significant component of the ideals we measured. This literature has advocated for informational treatment to correct social misperceptions. Since we conducted our survey in several rounds, we allowed for the possibility that respondents themselves would collect the relevant information to correct their misperceptions. We found that indeed they did. However, the difference between their estimates and ideals remained constant, which highlights again the relevance of eliciting perceptions when analyzing preferences for social outcomes.

4.3 Data and Context

We collected data during three rounds of an online survey that we conducted among students at the University of Dar es Salaam (UDSM) between October 2020 and May 2021. [6] Despite not presenting a representative sample of the Tanzanian population, a survey of university students was suitable for our empirical analysis for the following four reasons. First, the sample was homogeneous regarding several relevant individual observable characteristics (see balance table in Appendix C). Second, all students were living in Dar es Salaam, and politics was a familiar topic to them. For instance, 43% of the students stated in the survey that they were interested or very interested in politics, and 96% reported knowledge about the gender quota system in the country.[7] Third, university students are a highly educated elite and are likely to take on important positions in society in the future. For example, Figures and show that politicians with a tertiary degree are overrepresented in the Tanzanian parliament, compared to the general population. In addition, the analysis of MP's background highlights the prevalence of economic education. Fourth, the University of Dar es Salaam is the biggest university in Tanzania, and students from all over the country are enrolled.

The first survey round was launched online two weeks before the national election on

[6] All students were enrolled in the undergraduate and graduate programs at the Departments of Economics. In the third round, we included students from the Department of Sociology and Anthropology.

[7] Poncheri et al. (2008) show that interested respondents are more engaged and respond more faithfully.

October 28, 2020. In that election, the governing party was re-elected with a large majority (84% of votes). The second survey round started on November 29, 2020. The third survey round followed on May 30, 2021, about two months after former vice president Samia Suluhu Hassan took over from the newly reelected John Magufuli, who had passed away unexpectedly on March 17, 2021.

Each survey round lasted between two and three weeks. All survey respondents were invited via email to participate in the survey.[8] The average survey completion time was 15 minutes. Each participant received 5,000 TZS (about 2 USD) after completing the first and second survey rounds and 10,000 TZS (about 4 USD) after the third survey round, to incentivize participation in all rounds. We distributed the survey to 1,550 students. Among them, 433 replied at least once and 70 participated in all rounds. Details on the response rates by survey round appear in the Appendix B. One well-known phenomenon in survey research is the over-reporting of admirable attitudes and behaviours and under-reporting of those that are not socially respected (Krosnick, 1999). An attractive feature of online surveys is that it has been shown to reduce social desirability bias (Kreuter et al., 2008; Krosnick, 1999; Vaus, 2014). We implement a composite index to account for potential social desirability biases in our survey, as a short version of Crowne and Marlowe (1960)'s social desirability index developed by Reynolds (1982).

Our questionnaire consisted of three modules: (1) respondents' characteristics and background; (2) preferences for the distribution of seats between women and men, gender norms, and political attitudes; and (3) survey experiments. We implemented two survey experiments with simple randomization between treatment and control group and we repeated each of the survey experiments in all survey rounds (Figure B.4). Prior to its launch, we pre-registered the survey and the survey experiments and details about the wording of the experiment and the power analysis can be found in Appendix B.[9]

Our sample is certainly not representative of the general Tanzanian population in several regards. For example, according to the 2012 census and Afrobarometer (2019), no more than about 2% of society has higher secondary education. However, comparing perceptions in our sample and Afrobarometer's representative sample, we do not find any significant differences in gender norms regarding political involvement. In the Appendix we provide further analysis using Afrobarometer data A, which indicates that our results for preferences and beliefs are not significantly different.

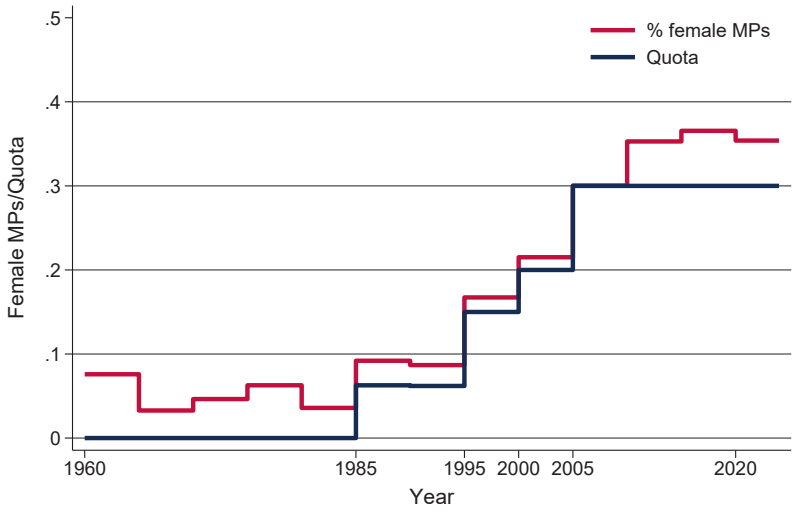
We combine our survey data with publicly available information about MPs and parliamentary committees in Tanzania.[10] There are currently 264 single-member National Assembly constituencies in mainland Tanzania.[11] In each committee, one person is elected through a first-past-the-post system. Five seats are allocated to members of Zanzibar's House of Representatives and the elected president appoints a maximum of ten MPs, half of whom should be women. The remaining 30% of seats in the parliament are reserved for women, and are known as *special seats*. Following party-internal nomination principles, each party nominates several women, more than the number it expects to seat, on a list

[8] We sent participation reminders on email and WhatsApp.
[9] Access to pre-registered experiments: https://www.socialscienceregistry.org/trials/6584.
[10] Data on the parliamentary committees was collected from the following three sources: composition list, committee types, parliament committees, last accessed 30/03/2022.
[11] https://www.nec.go.tz/, last accessed May 22, 2022.

for quota seats. The seats are distributed in proportion to the share of votes cast for each party that receives more than 5% of the national vote (see Constitution (1977), Art. 66). Currently, there are only 26 directly elected female MPs in the Tanzanian parliament.

The inclusion of women in all public spheres, including politics, was legally introduced in the 1977 Constitution of Tanzania. Subsequently, the country adopted a gender quota in the form of special seats reserved for women in local elections in 1982, and in the Parliament in 1985.[12] Despite the gender quota, which has been raised incrementally to the current level of 30%, female political empowerment in the country, measured as the number of women in parliament, in ministerial positions, and as head of state, has increased much less than in other Sub-Saharan countries (USAID, 2020). In fact, the quota has so far served as a low bound for the number of women in parliament (Figure 4.2). This means that since the introduction of the gender quota, the number of women elected in constituency elections and not via reserved seats has been minimal. The share of female MPs has stagnated at around 35% since the 2010 election, when the quota was last increased. Figure 4.2 shows the steady increase of Tanzania's parliamentary gender quota, despite acting as a binding number of female representation in politics.

Figure 4.2: Time trend of gender quota and female representation in politics in Tanzania



Note: The figure shows the evolution of the gender quota in Tanzania's parliament and the share of women elected in the parliament. Data are from Tanzania's parliamentary website.

Whereas numeric representation of women helps to make sense of the number of women who enter politics, Figure G.4 displays the gender composition of the parliament's committees before and after the 2020 election. Much of the evidence on gender quotas and female representation from other countries shows that the collective influence of female politicians on the legislative process is often less than the number of women in parliament might otherwise suggest.[13] Women also occupy fewer executive positions in politics compared to men, and their participation in governments is typically concentrated

[12] Gender Quotas Database: https://www.idea.int/data-tools/data/gender-quotas/database

[13] Data from the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women): www.unwomen.org, and Inter-Parliamentary Union (IPU): www.ipu.org.

on portfolios of social and women's affairs, and gender equality. Apart from numeric representation, female politicians often have less access and influence than men in all spheres of policy making. Evidence shows that quota designs (reserved seats, voluntary party quotas, candidate quotas) and political selection often promote female membership in some legislative committees while discouraging it in others; female legislators are often relegated to committees such as education, culture and welfare, and others that focus on so-called 'minority interests' (Clayton, 2021; Kroeber, 2018). Overall, the results in Figure G.4 suggest that gender segregation in topic-specific political committees is not as large in Tanzania as in other countries.

Most research on affirmative action policies has compared developed democracies around the world, but little evidence exists on the functioning of gender quotas in the governing institutions of autocracies and defective democracies (Krook, 2013). Evidence from around the world highlights reasons for adopting affirmative action policies in politics in 'new' and transitioning democracies. These reasons revolve around sustaining political legitimacy (Krook, 2013), and signaling both modernization (Bush and Zetterberg, 2020; Hughes et al., 2015) and international social norm diffusion (Bush, 2011), primarily in an effort to attract international development aid. Meena (2004) points out that the main rationale for the early adoption of reserved seats in Tanzania was to include diverse voices in the political decision-making process, but not necessarily to change the fundamental gender imbalance in politics at the time. International pressure and the early involvement of women in politics in Tanzania during the pre-independence political movement might have led to its first adoption. Others argue that, at first, the quota aimed to secure the political regime's legitimacy and attract foreign development funds (Bush, 2011). Along similar lines, (Bjarnegård and Zetterberg, 2016, 2022) document how semi-free governments can use quotas in politics to favour the already powerful and weaken the opposition. In democratic political systems, democratically elected representatives have an influence on political processes, including subsequent increases of gender quotas. In authoritarian regimes, where policymakers do not rely on the same bases of legitimacy, public perceptions of gender quotas might also be very different; quotas might be seen as a tool used by the government to sustain itself in power (Alesina et al., 2018).

4.4 Results

Men represent the majority of politicians and political leaders around the world. This type of gender inequality occurs across countries, different levels of government, and has persisted strongly over time.[14] However, public opinion and academia hold dissonant views about an alternative, or *ideal* distribution.

We propose a measurement of the ideal distribution of political power between women and men by applying Harsanyi (1977)'s model of moral value judgements, or moral

[14]This is at odds with a large majority of people disagreeing with the idea that men make better political leaders or that they should be elected rather than women (see Figure 4.3). Additionally, there is evidence that voters prefer gender equal distributions in politics. For example, using data for five European countries, Wäckerle (2022) shows that voters favour political parties with an equal distribution of female and male candidates over parties with an unequal distribution, both with a female leader. Various similar studies show that voters prefer equal gender distributions in politics (Sanbonmatsu, 2003; Dolan, 2008; Fernández and Valiente, 2021).

preferences about societal outcomes. These moral views are different from individual preferences. Individual preferences are likely biased by personal characteristics and circumstances, and do not represent genuine, or impersonal judgements about social welfare. Measuring people's moral preferences in the survey responses allows us to elicit their underlying preferences about the ideal share of female MPs. We then interpret those views as genuine value judgements concerning societal outcomes. We, therefore, follow Harsanyi (1953, 1977) and ask respondents to abstract from their own position in society. We instruct respondents to imagine that they participated in a lottery of nature, which we define in the survey questionnaire as:

> *A hypothetical situation in which:*
>
> 1. *you do not know whether you will be rich or poor, healthy or ill, male or female, religious or not, belonging to a small ethnic group or a large one, etc., and*
>
> 2. *you could be any of them.*

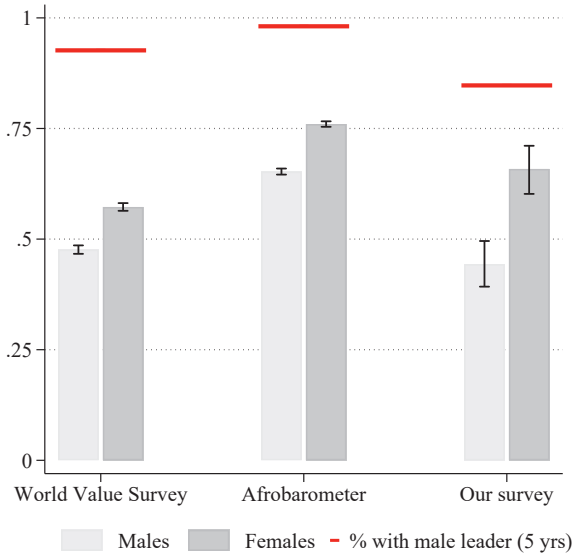
Participation in a lottery of nature helps respondents to abstract from knowledge about their position in society. Hence, this approach resembles the conditions in Harsanyi (1977)'s equiprobability postulate or (Rawls, 1971)'s veil of ignorance.

Figure 4.3 illustrates the higher disagreement among women as compared to men with the idea that men make better political leaders and should be elected rather than women all over the world, in Sub-Saharan Africa, and in Tanzania. Sandel (2021) points to the importance of examining the beliefs held by disadvantaged groups, in particular whether they feel they deserve their outcomes because more privileged factions of societies have earned theirs. In our study, women are the group that is disadvantaged in the distribution of political power. We, therefore, focus on gender differences in all our analyses and test whether specialization or meritocratic values can account for an ideal distribution that allocates less political power to women.

4.4.1 Actual, Ideal, and Estimated

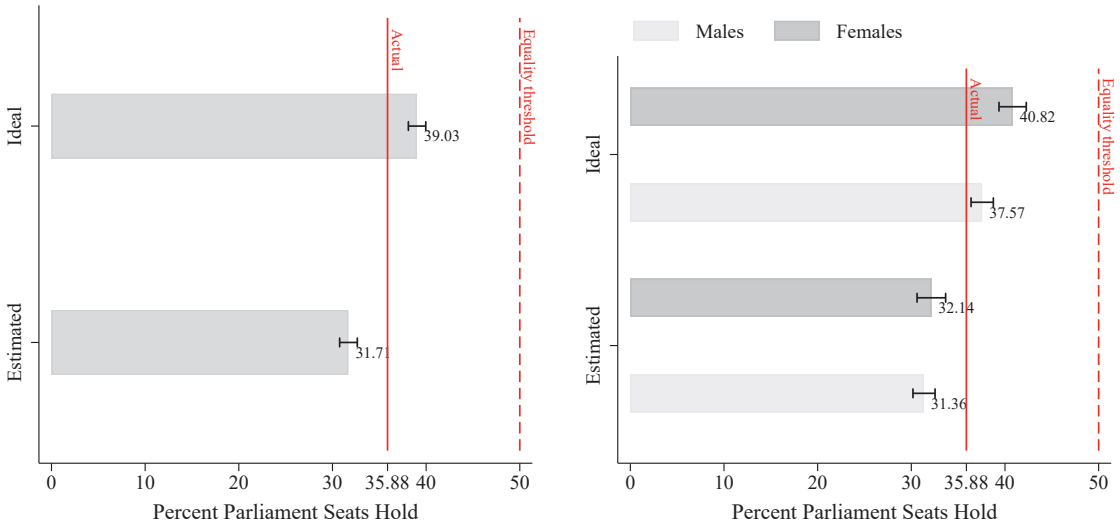
Figure 4.4 plots the estimated and ideal shares of parliamentary seats for women, based on our survey data, illustrating three main results. First, women and men alike underestimate the actual distribution of women and men in parliament. The density plots of the underlying distributions of the estimated levels show that respondents' estimates are anchored by the existing gender quota in parliament (see Appendix D). Second, the reported ideal levels are on average significantly higher than both the estimated and actual levels but significantly below the equality threshold of 50%. Third, while we do not find significant gender differences in the estimated share, we find that women prefer on average more women in politics than men do (+3 pp).

Figure 4.3: Men make better political leaders than women: % respondents disagreement



Note: The figure shows the share of male and female respondents who disagree or strongly disagree with the statement that men make better political leaders. There are differences in the way questions were asked in the WVS/EVS, Afrobarometer and in our survey. For the Afrobarometer, disagreement directly implies agreement with the idea that women should have the same chance of being elected, while this is not specified in the WVS/EVS. In our survey, we ask in two different questions whether men make better political leaders and whether men should be elected rather than women. The graph shows the share of male and female respondents who disagree with either of the statements asked in the surveys. Data for the WVS/EVS (Wave 7) was collected 2017-2022, for the Afrobarometer 2016-2018, and for our survey 2020-2021. Data from Afrobarometer and WVS/EVS are weighted.

Figure 4.4: Estimated and ideal distributions of parliament seats



(a) Overall averages (b) Averages by gender

Note: In the survey, respondents give estimate and ideal number of seats for female MPs by moving a slider starting at 0. We compute the share of seats for female MPs and plot the average shares for the whole sample, female, and male respondents with 90% confidence intervals. The actual is the average from before and after the 2020 election. The red dashed line marks the 50% equality threshold.

Using regression analysis, we estimate the size of the gender difference in ideal distributions and test its significance and robustness to potential confounders. Throughout, we present correlated random effects estimations (Wooldridge, 2019), following these specifications:

$$y_{it} = \mathbf{g_t}\eta + \mathbf{x_{it}}\beta + \mathbf{z_i}\delta + c_i + \varepsilon_{it}, \quad \text{where } c_i = \psi + \mathbf{z_i}\lambda + \bar{\mathbf{x}}_\mathbf{i}\xi + \alpha_i \tag{4.1}$$

y_{it} is respondent i's ideal response in round t, $\mathbf{x_{it}}, \mathbf{g_t}$ are time-varying covariates, and $\mathbf{z_i}$ are constant covariates. The individual effect c_i is modelled using $\mathbf{z_i}$ and averages for the time-varying variables $\bar{\mathbf{x}}_\mathbf{i}$. In our case $\bar{\mathbf{x}}_\mathbf{i}$ includes the average survey round indicators, which in the case of a balanced panel would be a vector of constants. The main assumption with this specification is that individual specific averages of time varying variables and time constant controls are proxies for individual fixed effects. In this specification, α_i is part of the error term, which is why standard errors are clustered at the individual level. We choose correlated random effects over fixed effect estimation for the main results, because it allows us to test the significance of time-invariant variables and can be applied to our strongly unbalanced sample.[15] Wooldridge (2019) shows that correlated random effects, when applied to the Chamberlain-Mundlak device (as specified above) reproduce fixed effects estimates for β, η in the general unbalanced case. This allows for unobserved heterogeneity to be correlated with observed covariates and sample selection. When applicable, we estimate coefficients using pooled OLS and fixed effect estimations. The results are in the Appendix D and confirm our conclusions.

Ideals are on average 3 pp higher for female respondents, which corresponds to approximately a fifth of our sample's standard deviation. This gender difference is robust to controlling for field of study, social desirability, religion, ethnicity, and respondents' origin, as shown in Table 4.1. The reported ideal levels are not (upward) biased due to social desirability, since coefficients of the social desirability index are negative and insignificant. Similarly, the gender difference regarding ideal levels is not affected by controlling for respondents' religion, ethnicity, and their own or parents' place of origin (columns (5)-(8)). None of these factors has a significant effect on ideals. The only notable influence was whether someone was born in Dar es Salaam or not, which is associated with 2.6 pp higher ideals on average. Column (8) includes all controls and shows our baseline specification for all subsequent analyses.

We continue to test whether social preferences are affected by political events and whether women's are so differently than men's.[16] The estimates are shown in Table 4.2. Changes over time are interesting. After the 2020 election, the ideal number increased, but not differently among women, and also not after the first female president was appointed. The results in the last two columns of Table 4.2 further show that this trend is solely driven by respondents correcting their estimates and ideals accordingly. We conclude

[15] Another advantage of correlated random effect estimation is that one can test $\xi = 0$ (i.e., regression-based, fully robust Hausman test) in which case random effects estimation will be more efficient. We do not identify δ and λ separately, but only their sum $(\delta + \lambda)$.

[16] Because the appointment of the first female president in Tanzania is so recent, this paper does not address any long-term effects of female political leadership on women's political participation through a potential role model effect on other women, which is often cited as one of the long-term effects of female leaders (Beaman et al., 2012; Hoyt, 2005).

that respondents had incorporated new information resulting in an upwards adjustment of their estimates to an average close to the actual, during the third survey round (for evidence on learning and correction of underestimation see Appendix D).[17] Respondents' ideals increase similarly to their estimates and the difference between estimate and ideal is stable. For our observation period, we find no evidence that respondents in general, or female respondents specifically, reacted to major political events by updating their social preferences. The gender difference in ideals increases to 4 pp.

[17]Other explanations could come from cognitive dissonance theory, which argues that people update their beliefs after an event to fit the outcome (in this case after the political changes), because their beliefs contradict the new information (Grant et al., 2021; Mullainathan and Washington, 2009). Other evidence from candidate-citizen models shows that any change in leadership, even from within the same party, might have a significant impact on political behaviour and voters' beliefs. At the same time, elections (as opposed to appointments) are often perceived as a fair or efficient method of political distribution and practice that renews elite legitimacy (Gandhi and Lust-Okar, 2009). Additionally, Pop-Eleches and Robertson (2015) argue that elections provide new information both to incumbent politicians and, especially in settings with poor political information, to the public. Examples of such new, election-generated information include the strengths and weaknesses of incumbents and the opposition, the degree of freedom of the press, the presence of international election observers and the results of national opinion polls – which in our context might all contribute to decreasing importance of politicians experience and effort in Table 4.3 and updated estimates in Table 4.2.

Table 4.1: Ideal share of women in parliament

	Ideal Share of Parliament Seats for Women							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Female	3.278***	3.241**	3.244**	3.240**	3.297***	3.247**	2.783**	2.842**
	(1.265)	(1.266)	(1.267)	(1.266)	(1.264)	(1.266)	(1.273)	(1.271)
Study Field			-0.442					-0.317
			(1.899)					(1.953)
Desirability Idx.				-5.769				-6.042
				(7.839)				(7.864)
Religion								
Christian					0.023			0.401
					(1.489)			(1.498)
Muslim					1.773			1.796
					(1.826)			(1.877)
Ethnicity								
Chaga						-0.932		-0.715
						(1.494)		(1.500)
Sukuma						-1.904		-1.478
						(2.466)		(2.607)
From Dar es Salaam?								
Respondent							2.697**	2.621*
							(1.336)	(1.356)
Respondent's Father							-2.343	-2.774
							(2.949)	(2.979)
Respondent's Mother							-1.530	-1.529
							(2.263)	(2.252)
Round FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
$\bar{\mathbf{x}}_\mathbf{i}$	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dependent Variable								
- Mean	39.03	39.03	39.03	39.03	39.03	39.03	39.03	39.03
- SD	14.26	14.26	14.26	14.26	14.26	14.26	14.26	14.26
R^b	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03
$N^{obs.}$	639	639	639	639	639	639	638	638
$N^{ind.}$	429	429	429	429	429	429	428	428

Note: Coefficients are estimated via correlated random effects following Equation 4.1 using the unbalanced panel with standard errors clustered at the individual level reported in parentheses. Dependent variable is on a scale from 0-100. Stars indicate statistical significance with the thresholds: * 0.10 ** 0.05 *** 0.01. $\bar{\mathbf{x}}_i$ are individual specific averages for any time varying variables included. R^b is the between individual R^2, $N^{obs.}$ the number of observations, and $N^{ind.}$ the number of different individuals. Results from pooled OLS and fixed effect estimations are in the Appendix D.

Table 4.2: The ideal share of parliament seats for women

	Baseline	Interactions	Control for Estimated	
	(1)	(2)	(3)	(4)
Female	2.842**	4.614**	2.584**	4.305**
	(1.271)	(2.162)	(1.046)	(1.902)
Estimated-Actual			0.500***	0.368***
			(0.041)	(0.089)
Over Time:				
2020 Election *(t=2)*	3.265**	4.510**	1.227	3.023
	(1.503)	(1.891)	(1.539)	(1.854)
× Female		-2.923		-2.987
		(2.655)		(2.546)
Female President *(t=3)*	1.571	2.530	-1.574	0.156
	(1.717)	(1.971)	(1.586)	(1.780)
× Female		-2.279		-2.244
		(2.590)		(2.287)
Controls	Yes	Yes	Yes	Yes
$\bar{\mathbf{x}}_\mathbf{i}$	Yes	Yes	Yes	Yes
$N^{obs.}$	638	638	636	636
$N^{ind.}$	428	428	428	428

Note: Coefficients are estimated via correlated random effects following Equation 4.1 using the unbalanced panel with standard errors clustered at the individual level reported in parentheses. Dependent variable is on a scale from 0-100. Stars indicate statistical significance with the thresholds: * 0.10 ** 0.05 *** 0.01. The set of controls comprises study field, religious affiliation, ethnicity, origin of respondent and respondent's parents, as well as the social desirability index. $\bar{\mathbf{x}}_\mathbf{i}$ are individual specific averages for any time varying variables included. R^b is the between individual R^2, $N^{obs.}$ the number of observations, and $N^{ind.}$ the number of different individuals. Coefficients from fixed effect and pooled OLS estimations can be found in the Appendix D.

4.4.2 Female MPs in Specific Policy Areas

The overall share of seats in parliament provides a measure of women's representation at the extensive margin. We elicit estimates and ideals for each of Tanzania's parliamentary committees also at the intensive margin. Preferences for inequality could be driven by preferences for gender specialization across policy fields and political priorities across these fields. In the case of preferences for gender specialization, we would expect people to prefer that women and men specialize in different policy fields, and men's specialization field would be prioritized and considered more valuable in public opinion. To test for preferences for gender specialization, we aggregate the share of seats for women in each committee in two ways:

1. Average across committees

$$\mu_i = \sum_{c=1}^{18} \frac{f_i^c}{\left(f_i^c + m_i^c\right)} \tag{4.2}$$

where f_i^c, m_i^c are the number of female, male politicians respondent i puts in committee c.

2. Isolation index (Lieberson, 1981)

$$p_i^{f,f} = \sum_{c=1}^{18} \frac{f_i^c}{F_i} \frac{f_i^c}{\left(f_i^c + m_i^c\right)} \tag{4.3}$$

which takes the relative group sizes into account. The intuition is that the probability of a female MP working together in a committee with a male MP is different from the probability of a male MP working with a female MP, when the number of female and male MPs is not the same. $p_i^{f,f}$ captures the isolation of a randomly selected female MP from other female MPs. The isolation of a randomly selected female MP from male MPs working in the same committee, would be $p_i^{f,m} = \sum_{c=1}^{18} \frac{f_i^c}{F_i} \frac{m_i^c}{\left(f_i^c + m_i^c\right)} = 1 - p_i^{f,f}$. The value absent isolation is the probability to meet a female MP absent isolation and, hence, equal to the overall share of women in committees: $\frac{F}{F+M}$.

The average across committees considers the distribution of women within committees. The isolation index additionally weights the distribution of women across committees and, hence, accounts for how equally any given number of women is distributed across committees. If the average (Equation 1) and isolation index (Equation 2) show similar results, respondents did not vary the share of female MPs across committees to a notable extent.[18] The actual average of women across political committees in Tanzania is 37.36%. Two scenarios are likely. First, in an equal distribution there would be ca. 37% of women in all committees. Second, in an unequal distribution, there would be more women in some committees than in others. If there were about 37% of women in every committees and all committees were the same size, the Lieberson would be equal to 37% as well since all weights ($\frac{f_i^C}{F_i}$) are the same. The actual Lieberson is, however, 38.8% showing a small degree of isolation of female MPs in parliamentary committees.

The results for both measures are indeed very similar, shown in Figure 4.5. Results are not statistically different when applying or not applying weights, $\frac{f_i^C}{F_i}$, to the average across committees. We conclude that there are no preferences for segregation and, hence, specialization does not explain preferences for gender inequality in politics.[19]

The respondents' gender matters for preferences of ideals numbers, but if female respon-

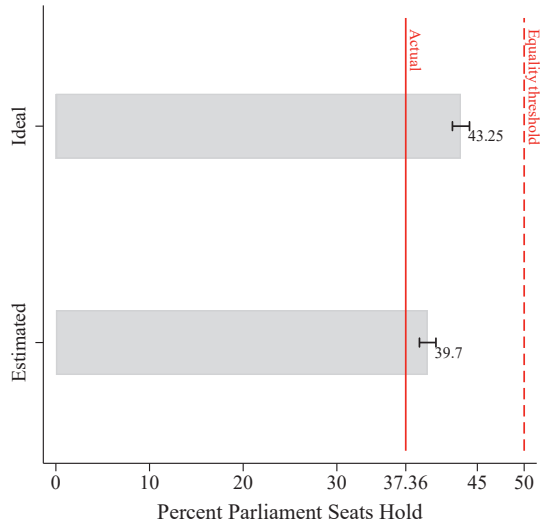
[18] We also compute Duncan and Duncan (1955)'s segregation index (see Appendix E). These indices have been applied in the sociological literature on residential segregation within cities and to occupational segregation of labour markets (Robinson, 1980; White, 1983).

[19] The results based on the average across committees are slightly higher than in our measure of asking respondents about the overall share of women in politics. Being asked about specific committees, respondents tend to allocate more women to the parliament. Despite being slightly higher on average, the overall impression remains the same as in Figure 4.4; corroborating our earlier findings that moral preferences for social outcomes are stable and robust measures.

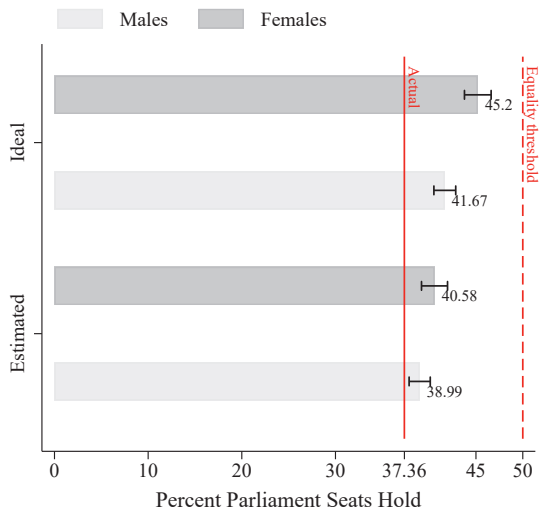
dents on average prefer more women in politics, is this driven by preferences for women in specific, potentially small, thematic fields? Could this explain why a preference for gender inequality in politics remains evident even among women? The gender differences in ideals as plotted in Figure 4.5 are small and not statistically significant. We run regressions and focus on respondents' gender; in these analyses, we separately examine preferences for gender inequality in actual female- and male-dominated committees. The estimates are plotted in Figure 4.6 using both our baseline specification and the fully conditional specification controlling for estimated levels. The results confirm no gender differences in the preference for segregation, apart from female respondents favouring more women in parliament on average. Coefficients on overall, female-dominated, and male-dominated, are the same and not significant different to using the average across committees (Equation 1) or the Lieberson (1981) index as a dependent variable (Equation 2).

Again, if in Tanzania certain policy fields were more valued than others, and these fields were male-dominated, and if the survey preferences indicated this trend, these points could help to explain why there are more men than women in politics. We conclude that existing inequalities and preferences are not driven by preferences for gendered specialization, for two reasons. First, the parliament does not allocate more politicians to certain male-dominated areas (see Appendix E). Second, female respondents who have a preference for more women in politics than male respondents, prefer an equal distribution across policy fields, and not only more female MPs in already female-dominated committees. Second, female respondents wanted significantly more women in politics than did male respondents. However, they would like to see an equal gender distribution across policy fields, not merely more female MPs in already female-dominated committees.

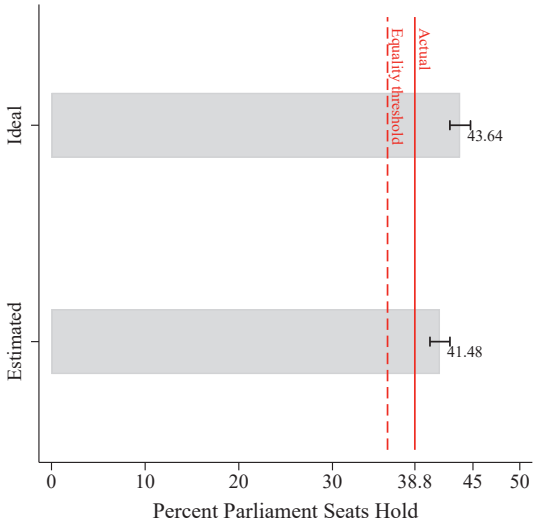
Figure 4.5: Estimated and ideal distributions of parliament seats (intensive margin)



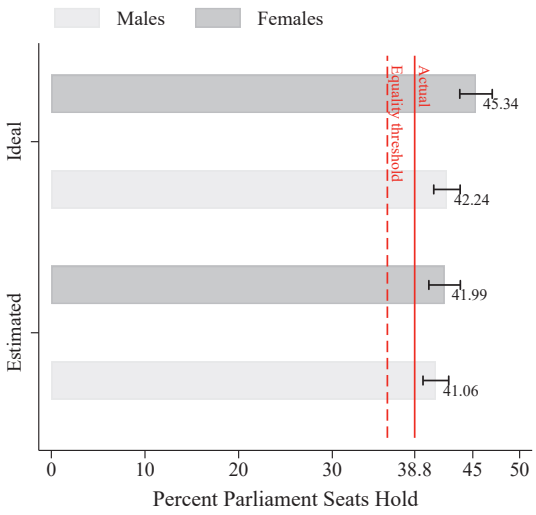
(a) Share across committees



(b) Share across committees by gender



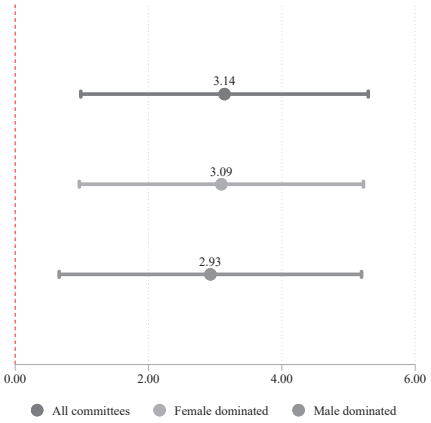
(c) Lieberson index



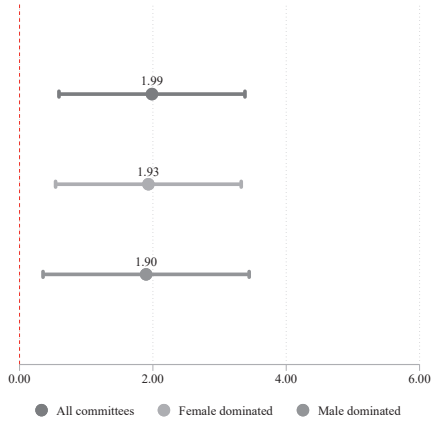
(d) Lieberson index by gender

Note: Estimate and ideal shares at the intensive margin. In the top panel, we computed the average shares across all parliamentary committees following Equation 1. The actual shares for each committee before and after the election are in Appendix E. In the bottom panel, we computed Lieberson (1981)'s isolation index following Equation 2. The equality threshold for the average across committees is 50% as it was for the overall parliament. Lieberson (1981)'s isolation index absent isolation would just be equal to probability to meet a female MP, i.e. overall share of women in parliament which is different from the actual average share across committees, because MPs can be part of several committees. One could also use the sample averages of the ideal and estimated share of women in parliament to mark the equality threshold. In the Appendix E, we have results using Duncan and Duncan (1955)'s segregation index as an alternative measure of the substantive representation (i.e. intensive margin political participation) of women.

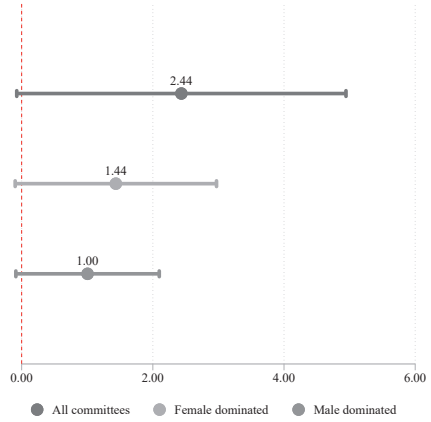
Figure 4.6: Coefficients for female indicator from regressions on intensive margin measures



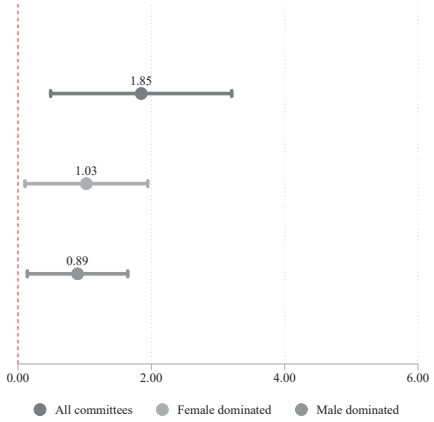
(a) Ideal average across committees (baseline specification)



(b) Ideal average across committees (specification with all controls)



(c) Lieberson index (baseline specification)



(d) Lieberson index (specification with all controls)

Note: Plotted are coefficients for the female indicator in regressions on our intensive margin measures of female political participation. Coefficients are estimated via correlated random effects following Equation 4.1 using the unbalanced panel with standard errors clustered at the individual level. Dependent variables are on a scale from 0-100. We plot 90% confidence intervals. In the baseline model, we control for round fixed effects, study field, religious affiliation, ethnicity, origin of respondent and respondent's parents, social desirability index and individual specific averages for time varying variables ($\overline{\mathbf{x}}_i$). The specification with all controls additionally includes estimated levels as controls. We compute all intensive margin measures (i.e. the dependent variables) based on three sets of committees: first, using all committees; second, using only committees that are actually female dominated; third, using only committees that are actually male dominated. Female dominated committees are the ones where the share of women is higher than the share of women in parliament. A list of female and male dominated committees, together with the underlying regression tables, and results using Duncan and Duncan (1955)'s segregation index are in Appendix E.

4.4.3 Survey Experiments on Meritocratic Beliefs

So far, we have shown that our survey questions about ideal distributions reveal preferences that are related to individual characteristics, particularly the respondent's gender. Furthermore, preferences are stable over time, despite major political changes. We have rejected the notion of preferences for gendered specialization based on political priorities as an explanation for respondents preferring unequal social outcomes. In this section, we will use survey experiments to test causally whether attitudes about meritocracy could explain (a) preferences for inequality and (b) gender differences therein. We conducted pre-registered survey experiments; the details about the wording and the power analysis of the experiment can be found in Appendix B. In one of the experiments, we ask respondents to indicate how important they believe it was for political candidates to have a university degree, accumulate political experience, or exert effort during a political campaign. Numerous reports have stressed the barriers for female politicians during the campaigning stage in Tanzania (IRI, 2015; Sender, 2015). We randomize the gender (female or male) of the hypothetical political candidate that we presented to respondents.[20]

The treatment effect of the gender of the political candidate is mostly positive, small, and insignificant (The results are shown in Table 4.3).[21] We find no significant differences in the importance of previous political experience for female versus male political candidates. The longstanding gender quota in Tanzania, designed to provide women with more parliamentary experience, might be an underlying reason for this finding.

The estimated campaigning effort is 5 pp more important for a female than a male candidate at the baseline in column (3), controlling for round fixed effects and individual specific averages of time-varying variables, significant at the 10% level. This effect disappears when we control for respondents' gender. When we estimate heterogeneous treatment effects by gender, we find that women respond that education has relatively little importance for political candidates in general (-9 pp, a fifth of the sample's standard deviation), unless the candidate is a woman which increases the importance of a university degree by 12 pp, or a third of the sample's standard deviation. These findings provide evidence that, in addition to the general belief that women must apply more effort than men to be elected, mainly women (rather than men) believe that credentials like a university degree are more important for female than male political candidates.

[20] With this experiment, we tap into the distinction between fair and unfair inequality related to meritocracy and relate these arguments in the literature to our work on preferences for ideal gender distributions in politics. Fair inequality might be more stable whereas unfair inequality might call for policy action. Gender inequality in politics could be considered justified and fair following meritocratic considerations, as voters seek the most competent candidate for the position who, due to their qualifications and in accordance with meritocratic reasoning, should be elected. If, for example, men were on average more qualified or showed more credentials of their qualifications, meritocracy could explain unequal yet socially supported outcomes. But for such inequality to be considered fair, meritocratic credentials would need to carry the same value for female and male politicians.

[21] The survey experiment lacks power, as explained in more detail in Appendix B. Realized effect sizes for the importance of university degree and previous political experience are too small to be detected.

Table 4.3: Different standards of merit for male and female MPs (survey experiments)

	Experience		Effort		Education	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.466	-1.302	5.338*	4.043	0.191	-5.305
	(3.194)	(4.408)	(3.010)	(4.052)	(3.325)	(4.526)
Female		-1.658		0.486		-9.002*
		(4.579)		(4.460)		(4.746)
Treatment × Female		3.860		2.936		11.913*
		(6.367)		(6.021)		(6.595)
Over Time:						
2020 Election *(t=2)*	-7.749**	-7.753**	-13.012***	-13.002***	-3.604	-3.607
	(3.769)	(3.776)	(3.605)	(3.611)	(4.126)	(4.134)
Female President *(t=3)*	-4.043	-4.060	-10.134**	-10.140**	-2.285	-2.336
	(4.199)	(4.205)	(4.198)	(4.205)	(4.060)	(4.070)
$\bar{\mathbf{x}}_\mathbf{i}$	Yes	Yes	Yes	Yes	Yes	Yes
Mean control	40.89	40.89	48.11	48.11	53.66	53.66
SD control	36.55	36.55	36.44	36.44	38.29	38.29
$N^{obs.}$	640	640	640	640	642	642
$N^{ind.}$	431	431	430	430	431	431

Note: Coefficients are estimated via correlated random effects following Equation 4.1 using the unbalanced panel with standard errors clustered at the individual level reported in parentheses. Dependent variable is on a scale from 0-100. Stars refer to statistical significance at the thresholds: * 0.10 ** 0.05 *** 0.01. We report the mean and standard deviation of the control group. $N^{obs.}$ the number of observations, and $N^{ind.}$ the number of different individuals. In all columns, we control for round fixed effects and individual specific averages for time varying variables ($\bar{\mathbf{x}}_i$). Our survey experiments are described in detail in Appendix B.

We argue that this finding is a reflection of women being more aware that female candidates are held to higher standards rather than that they themselves necessarily hold them to higher standards. We support this interpretation with two sets of findings.

First, actual female MPs are relatively more educated than male MPs. Figure 4.7, plots the shares of female and male MPs who hold a primary, secondary, and tertiary education in the left panel and the same shares among the overall population in Tanzania in the right panel. MPs are clearly more educated than the average person in Tanzania. The gender difference regarding tertiary education is in line with that of the overall population. However, our data indicates a higher share of female MPs who have a secondary education and relatively more male MPs who hold only a primary education.

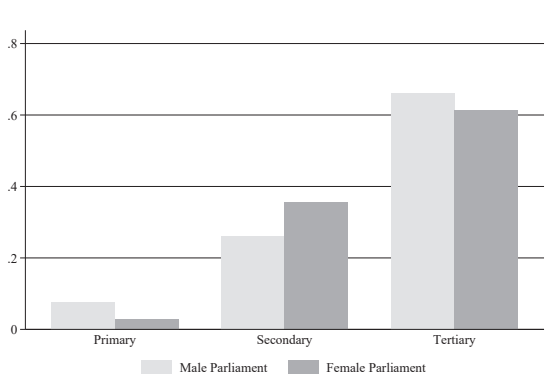
Second, we find that female respondents believe more strongly than male respondents that measures should be implemented to increase the share of women in politics. The first column of Table 4.4 shows that women are significantly more likely than men to support Tanzania's current gender quota. The most frequently mentioned reason for supporting the gender quota from our open text questions is that women should have a role in political

life. Despite generally strong support for the gender quota, female and male respondents prefer policy measures targeting the political process (e.g. extra campaigning support for women) over policies targeting outcomes (e.g. the current gender quota). These findings correspond with Taylor (2009)'s interpretation of Rawls (1971) (see Appendix F for the results on preferences for the gender quota and other policies and Appendix H for an analysis of open-ended survey responses about respondents' associations with the gender quotas).

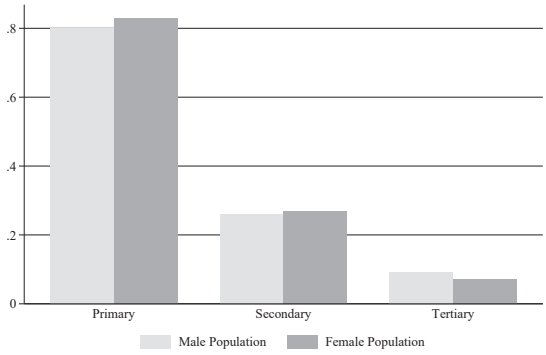
In our second survey experiment, we asked about the probability of engaging in a specific form of civic action to support gender equality in politics (see B for the exact wording). Such action might arguably not be needed whenever actual outcomes are fair and efficient. The treatment in this experiment proposes a rather costly form of civic action. It has a strong negative effect on the self-reported probability of a respondent taking civic action. The interaction with respondents' gender (female) is positive but imprecisely estimated. Respondents' gender, however, has a significant positive effect of 11 pp (one fourth of the control group's standard deviation).

These results indicate that female respondents are on average more willing than men to become active themselves to support gender equality. This evidence could imply that women believe that a *tyranny of merit* (Sandel, 2021) sustains current inequalities in politics and is reflected in preferences about the ideal number of women in politics.

Figure 4.7: Education of MPs compared to overall population



(a) Levels of education among MPs



(b) Levels of education among overall population

Note: The height of the bars corresponds to the share of primary, seondary and tertiary education in the parliament and the population. The left figure shows the education level of male/female. The educational attainment is self-stated by MPs. We scraped the parliament publicly available website to collect the data. The share corresponds to the share of each education level among all women and among all men separately to account for women's underrepresentation in parliament. 16 MPs did not disclose their education. The figure is based on the 2010-2015 parliament. The right figure shows education levels in the population from UNESCO Institute for Statistics (uis.unesco.org) as of February 2020.

Table 4.4: Support for gender quota and gender equality in politics

	Strong Support	High Prob. Take Action		
	(1)	(2)	(3)	(4)
Female	11.209***		12.114***	11.179*
	(4.301)		(4.263)	(5.953)
Over Time:				
2020 Election *(t=2)*	-10.409*	-4.688	-4.691	-4.690
	(5.587)	(4.750)	(4.753)	(4.758)
Female President *(t=3)*	-18.526***	-5.793	-5.808	-5.799
	(6.127)	(6.016)	(6.020)	(6.026)
Experiment civic action				
Donation		-27.655***	-27.801***	-28.653***
		(4.272)	(4.230)	(5.751)
Donation × Female				1.858
				(8.516)
$\overline{\mathbf{x}}_\mathbf{i}$	Yes	Yes	Yes	Yes
Mean (control)	51.09	63.38	63.38	63.38
SD (control)	50.03	48.25	48.25	48.25
$N^{obs.}$	644	641	641	641
$N^{ind.}$	433	432	432	432

Note: Coefficients are estimated via correlated random effects following Equation 4.1 using the unbalanced panel with standard errors clustered at the individual level reported in parentheses. Dependent variable is on a scale from 0-100. Stars refer to statistical significance at the thresholds: * 0.10 ** 0.05 *** 0.01. The last three columns are results from our survey experiment on civic action, for these columns we report mean and standard deviation of the control group. In the first column, mean and standard deviation are based on the whole sample. Our survey experiments are described in detail in Appendix B. $N^{obs.}$ the number of observations, and $N^{ind.}$ the number of different individuals. In all columns, we control for round fixed effects and individual specific averages for time varying variables ($\overline{\mathbf{x}}_i$).

4.5 Conclusion

Gender inequality in politics has been a vast, persistent, and global regularity until the present. Given the broad demand for affirmative action policies aimed at rebalancing the distribution of political power between genders, the question arises of what constitutes an ideal number of women in politics. In this paper, we present a way to elicit individual value judgements concerning social outcomes using survey data. This approach allows us to collect survey responses about the ideal number of women in politics. We then interpret this information to understand preferences for gender (in)equality in politics.

We implemented a survey among university students in Tanzania between 2020 and 2021. The respondents underestimate the actual number of women in politics. In addition, they declare a higher ideal number or would prefer more women to be active in politics than in the current status quo; their reported ideal share is on average 39%. Female respondents report higher ideal levels, but the overall average among respondents is systematically below the equality threshold of 50%. These results are robust to controlling for religion, ethnicity, origin, social desirability, and other individual characteristics. Moreover, these preferences were stable over the course of two major political events, namely the re-election of a male president in 2020 and the unexpected appointment of the first female president in 2021.

To explore potential reasons for the seeming preference for gender inequality, as well as women's higher ideals, we probe two mechanisms. First, we evaluate whether lower preferences for women in politics could be shaped by specialization and preferences for specialization for female politicians in underfunded or undervalued policy fields. We do not find strong evidence for these possibilities. Second, using survey experiments, we find that female respondents are more likely to believe that female candidates require more education than male candidates to get elected. These results are consistent with literature showing that voters hold female candidates to higher standards than male candidates. Our results indicate that women, a minority in the distribution of political power, may perceive the 'tyranny of meritocracy' more strongly than men do. For example, female respondents are more supportive of affirmative action than male respondents. One reason could be that such policies enable women to participate in politics independently of their meritocratic credentials.

Often, it is impossible for voters to vote a female candidate into office because there are few or no female political candidates to choose from, as women are less likely than men to compete in campaigns and elections. There is evidence that if women do compete, they are elected (Kanthak and Woon, 2015). Other research supports that women are equally likely to win an election if both women and men compete for political office (Anastasopoulos, 2016) but women are less likely to believe that they are competent and qualified for the job as a politician, resulting in a 'confidence gap' between women and men (Fox and Lawless, 2011). Supply side issues have received much attention in the literature on gender inequality in politics around the world. This literature provides strong evidence of discrimination against women entering a political career. Among the most documented discriminatory barriers for women are access to campaign financing (Crespin and Deitz, 2009; Piscopo et al., 2021), donor networks (Thomsen and Swers, 2017), and intra-party recruitment and nomination strategies (Folke and Rickne, 2016; Krook, 2009b). While the main focus of our paper is people's demand for women in

politics, our research connects to studies on supply side factors of gender inequality in politics through our analysis of actual committee specialization among female and male MPs.

Our main contribution is to study what people think is the ideal number of women in politics, when this question is formulated as a problem of distributive justice (Harsanyi, 1977; Rawls, 1971). With an empirical estimate of preferences for an ideal distribution of political power between women and men, we calculate the difference from the actual distribution, and thereby approximate people's discontent with the status quo. This difference could provide a measure of the potential demand for redistribution of political power and, for example, the use of gender quotas – which can be seen as a corrective measure for the distribution of political power between men and women, such as taxes are corrective measures for the distribution of income.

Our results reveal a preference for inequality among students in Tanzania. This preference is strongly related to perceptions of the actual distribution of political power between women and men. The importance of perceptions has previously been demonstrated regarding other distributive processes as well (Bursztyn et al., 2020; Gimpelson and Treisman, 2018; Stantcheva, 2021). In future research, it will be interesting to quantify the extent to which beliefs about differential meritocratic standards explain people's preferences for gender (in)equality in politics. For example, studies could elicit perceptions about meritocratic credentials at the individual level and test how much variation in the ideal distribution those perceptions can explain. Further, keeping in mind that Tanzania's political system is not fully democratic, the conclusions on preferences for gender (in)equality in politics might only be helpful for similar political systems, societal norms and cultures. In other political settings, where citizens can exercise their full democratic rights, voters might be better informed and sufficiently knowledgeable to demand political representation because political processes including elections and the election of female politicians as well as sudden changes and appointments of politicians might be more transparent (Lupia and McCubbins, 1998).

We believe that eliciting preferences and their relationship to perceptions and meritocratic standards can help to guide public debates on other topics as well. This has been extensively done in the literature on income and wealth inequality. But it can also guide discussions about policies related to other distributions, not only gender inequality in politics but also racial inequalities, intergenerational justice, and gender inequality in other realms.

References

Ackert, L. F., Martinez-Vaquez, J., and Rider, M. (2007). Social Preferenes And Tax Policy Design: Some Experimental Evidence. *Economic Inquiry*, 45(3):487–501.

Afrobarometer (2019). Round Seven. In *Merged Data - All Countries*. http://www.afrobarometer.org.

Alesina, A. and Angeletos, G.-M. (2005). Fairness and Redistribution. *American Economic Review*, 95(4):960–980.

Alesina, A. and Giuliano, P. (2011). Chapter 4 - Preferences for Redistribution. volume 1 of *Handbook of Social Economics*, pages 93–131. North-Holland.

Alesina, A., Stantcheva, S., and Teso, E. (2018). Intergenerational Mobility and Preferences for Redistribution. *American Economic Review*, 108(2):521–554.

Anastasopoulos, L. (2016). Estimating the gender penalty in House of Representative elections using a regression discontinuity design. *Electoral Studies*.

Ashok, V., Kuziemko, I., and Washington, E. (2015). Support for Redistribution in an Age of Rising Inequality: New Stylized Facts and Some Tentative Explanations. *Brookings Papers on Economic Activity*, pages 367–405.

Beaman, L., Duflo, E., Pande, R., and Topalova, P. (2012). Female Leadership Raises Aspirations and Educational Attainment for Girls: A Policy Experiment in India. *Science*, 335(6068):582–586.

Bertrand, M. (2018). Coase Lecture - The Glass Ceiling. *Economica*, 85(338):205–231.

Bertrand, M., Black, S. E., Jensen, S., and Lleras-Muney, A. (2018). Breaking the Glass Ceiling? The Effect of Board Quotas on Female Labour Market Outcomes in Norway. *The Review of Economic Studies*, 86(1):191–239.

Besley, T., Folke, O., Persson, T., and Rickne, J. (2017). Gender Quotas and the Crisis of the Mediocre Man: Theory and Evidence from Sweden. *American Economic Review*, 107(8):2204–2242.

Bjarnegård, E. and Zetterberg, P. (2016). Gender Equality Reforms on an Uneven Playing Field: Candidate Selection and Quota Implementation in Electoral Authoritarian Tanzania. *Government and Opposition*, 51(3):464–486.

Bjarnegård, E. and Zetterberg, P. (2022). How Autocrats Weaponize Women's Rights. *Government and Opposition*, 33(2):60–75.

Buchanan, J. (1977). *Freedom in Constitutional Contract*. College Station-London: Texas AM University Press.

Bursztyn, L., Cappelen, A., Tungodden, B., Voena, A., and Yanagizawa-Drott, D. (2023). How Are Gender Norms Perceived? Technical report.

Bursztyn, L., González, A., and Yanagizawa-Drott, D. (2020). Misperceived Social Norms: Female Labor Force Participation in Saudi Arabia. *American Economic Review*.

Bursztyn, L. and Yang, D. Y. (2022). Misperceptions About Others. *Annual Review of Economics*, 14(1):425–452.

Bush, S. S. (2011). International Politics and the Spread of Quotas for Women in Legislatures. *International Organization*, 65(1):103–137.

Bush, S. S. and Zetterberg, P. (2020). Gender Quotas and International Reputation. *American Journal of Political Science*.

Campos-Vazquez, R. M., Krozer, A., Ramírez-Álvarez, A. A., de la Torre, R., and Velez-Grajales, R. (2022). Perceptions of inequality and social mobility in Mexico. *World Development*, 151:105778.

Cappelen, A. W., Konow, J., Sørensen, E. Ø., and Tungodden, B. (2013). Just Luck: An Experimental Study of Risk-Taking and Fairness. *American Economic Review*, 103(4):1398–1413.

Casas-Arce, P. and Saiz, A. (2015). Women and Power: Unpopular, Unwilling, or Held Back? *Journal of Political Economy*, 123(3):641–669.

Clayton, A. (2021). How Do Electoral Gender Quotas Affect Policy? *Annual Review of Political Science*, 24(1):235–252.

Cohen, J. (2013). *Statistical Power Analysis for the Behavioral Sciences*. Routledge.

Constitution (1977). The Constitution of the United Republic of Tanzania. 2005.

Crespin, M. H. and Deitz, J. L. (2009). If You Can't Join 'Em, Beat 'Em: The Gender Gap in Individual Donations to Congressional Candidates. *Political Research Quarterly*, 63(3):581–593.

Crowne, D. P. and Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24(4):349–354.

Dahlerup, D. (2006). *Women, Quotas and Politics*. Routledge, New York, 1st edition.

Dahlerup, D., Hilal, Z., Kalandadze, N., and Kandawasvika-Nhundu, R. (2014). Atlas of electoral gender quotas.

de la Croix, D. and Doepke, M. (2021). A soul's view of the optimal population problem. *Mathematical Social Sciences*, 112:98–108.

Dehingia, N., Klugman, J., Ortiz, E., and Raj, A. (2022). Race/Ethnicity and Sex Differences in Attitudes Toward Policies for Gender Equality in the United States. *Feminist Economics*, 29(2):1–31.

Dolan, K. (2008). Is There a "Gender Affinity Effect" in American Politics? *Political Research Quarterly*, 61(1):79–89.

Dolan, K. and Hansen, M. (2018). Blaming Women or Blaming the System? Public Perceptions of Women's Underrepresentation in Elected Office. *Political research quarterly*, 71(3):668–680.

Dolan, K. A. (2014). *When does gender matter? : Women candidates and gender stereotypes in American elections*. Oxford University Press, New York.

Duncan, O. D. and Duncan, B. (1955). A Methodological Analysis of Segregation Indexes. *American Sociological Review*, 20(2):210–217.

EIU (2023). Democracy Index 2022 - Frontline democracy and the battle for Ukraine.

Escobar-Lemmon, M. and Taylor-Robinson, M. M. (2009). Getting to the Top: Career Paths of Women in Latin American Cabinets. *Political Research Quarterly*, 62(4):685–699.

Faillo, M., Ottone, S., and Sacconi, L. (2015). The social contract in the laboratory. An experimental analysis of self-enforcing impartial agreements. *Public Choice*, 163(3-4):225–246.

Fernández, J. J. and Valiente, C. (2021). Gender quotas and public demand for increasing women's representation in politics: an analysis of 28 European countries. *European Political Science Review*, 13(3):351–370.

Folke, O. and Rickne, J. (2016). The Glass Ceiling in Politics. *Comparative Political Studies*, 49(5):567–599.

Fox, R. L. and Lawless, J. L. (2011). Gendered Perceptions and Political Candidacies: A Central Barrier to Women's Equality in Electoral Politics. *American Journal of Political Science*, 55(1):59–73.

Frohlich, N., Oppenheimer, J. A., and Eavey, C. L. (1987). Laboratory Results on Rawls's Distributive Justice. *British Journal of Political Science*, 17(1):1–21.

Gandhi, J. and Lust-Okar, E. (2009). Elections Under Authoritarianism. *Annual Review of Political Science*, 12(1):403–422.

Gaus, G. (2011). *The Order of Public Reason*. Cambridge University Press.

Genicot, G. and Ray, D. (2020). Aspirations and Economic Behavior. *Annual Review of Economics*, 12(1):715–746.

Gimpelson, V. and Treisman, D. (2018). Misperceiving inequality. *Economics & Politics*, 30(1):27–54.

Grant, M. D., Flores, A., Pedersen, E. J., Sherman, D. K., and Van Boven, L. (2021). When election expectations fail: Polarized perceptions of election legitimacy increase with accumulating evidence of election outcomes and with polarized media. *PLOS ONE*, 16(12):1–17.

Harsanyi, J. C. (1953). Cardinal Utility in Welfare Economics and in the Theory of Risk-taking. *Journal of Political Economy*, 61(5):434–435.

Harsanyi, J. C. (1977). Morality and the Theory of Rational Behavior. *Social Research*, 44(4):623–656.

Heath, R. M., Schwindt-Bayer, L. A., and Taylor-Robinson, M. M. (2005). Women on the Sidelines: Women's Representation on Committees in Latin American Legislatures. *American Journal of Political Science*, 49(2):420–436.

Heursen, L., Ranehill, E., and Weber, R. A. (2020). Are Women Less Effective Leaders Than Men? Evidence from Experiments Using Coordination Games. *CESifo Working Paper No. 8713*.

Hoyt, C. L. (2005). The Role of Leadership Efficacy and Stereotype Activation in Women's Identification with Leadership. *Journal of Leadership & Organizational Studies*, 11(4):2–14.

Hughes, M. M., Krook, M. L., and Paxton, P. (2015). Transnational Women's Activism and the Global Diffusion of Gender Quotas. *International Studies Quarterly*, 59(2):357–372.

IRI (2015). Tanzania National Elections Gender Assessment October 25, 2005.

Jones, C. I. and Klenow, P. J. (2016). Beyond GDP? Welfare across Countries and Time. *American Economic Review*, 106(9):2426–2457.

Kang, H. R. (2016). Can Rawls's Nonideal Theory Save his Ideal Theory? *Social Theory and Practice*, 42(1):32–56.

Kanthak, K. and Woon, J. (2015). Women Don't Run? Election Aversion and Candidate Entry. *American Journal of Political Science*, 59(3):595–612.

Kreuter, F., Presser, S., and Tourangeau, R. (2008). Social Desirability Bias in CATI, IVR, and Web Surveys: The Effects of Mode and Question Sensitivity. *Public Opinion Quarterly*, 72(5):847–865.

Kroeber, C. (2018). How to measure the substantive representation of traditionally excluded groups in comparative research: a literature review and new data. *Representation*, 54(3):241–259.

Krook, M. L. (2009a). Beyond Supply and Demand: A Feminist-institutionalist Theory of Candidate Selection. *Political Research Quarterly*, 63(4):707–720.

Krook, M. L. (2009b). *Quotas for Women in Politics: Gender and Candidate Selection Reform Worldwide*. Oxford University Press, Oxford.

Krook, M. L. (2013). Gender quotas and democracy: Insights from Africa and beyond. *Women's Studies International Forum*, 41:160–163.

Krook, M. L. (2015). Empowerment versus backlash: gender quotas and critical mass theory. *Politics, Groups, and Identities*, 3(1):184–188.

Krook, M. L. and O'Brien, D. Z. (2012). All the President's Men? The Appointment of Female Cabinet Ministers Worldwide. *The Journal of Politics*, 74(3):840–855.

Krosnick, J. A. (1999). Survey Research. *Annual Review of Psychology*, 50(1):537–567. PMID: 15012463.

Lau, R. R., Andersen, D. J., and Redlawsk, D. P. (2008). An Exploration of Correct Voting in Recent U.S. Presidential Elections. *American Journal of Political Science*, 52(2):395–411.

Lieberson, S. (1981). *An Asymmetrical Approach to Segregation*, pages 61–82. Croom Helm, London.

Lissowski, G., Tyszka, T., and Okrasa, W. (1991). Principles of Distributive Justice. *Journal of Conflict Resolution*, 35(1):98–119.

Lupia, A. and McCubbins, M. D. (1998). *The democratic dilemma: can citizens learn what they need to know?* Cambridge, U.K.: Cambridge University Press).

Meena, R. (2004). The Implementation of Quotas: African Experiences. In Ballington, J., editor, *Quota Report Series*. IDEA.

Mullainathan, S. and Washington, E. (2009). Sticking with Your Vote: Cognitive Dissonance and Political Attitudes. *American Economic Journal: Applied Economics*, 1(1):86–111.

Murray, R. and Sénac, R. (2018). Explaining Gender Gaps in Legislative Committees. *Journal of Women, Politics & Policy*, 39(3):310–335.

Neundorf, A. and Shorrocks, R. (2021). Revisiting the Impact of Modernization on Support for Women Politicians: The Role of Women's Political Empowerment. *Comparative Political Studies*, page 00104140211066214.

Norton, M. I. and Ariely, D. (2011). Building a Better America—One Wealth Quintile at a Time. *Perspectives on Psychological Science*, 6(1):9–12.

Nugent, M. K. and Krook, M. L. (2015). All-Women Shortlists: Myths and Realities. *Parliamentary Affairs*, 69(1):115–135.

Pateman, C. and Mills, C. W. (2007). *Contract and Social Change: A Dialogue Between Carole Pateman and Charles W. Mills*, pages 200–229. Cambridge: Polity Press.

Piscopo, J. M., Hinojosa, M., Thomas, G., and Siavelis, P. M. (2021). Follow the Money: Gender, Incumbency, and Campaign Funding in Chile. *Comparative Political Studies*, 55(2):222–253.

Pitkin, H. F. (1967). *The Concept of Representation*. University of California Press.

Poncheri, R. M., Lindberg, J. T., Thompson, L. F., and Surface, E. A. (2008). A Comment on Employee Surveys: Negativity Bias in Open-Ended Responses. *Organizational Research Methods*, 11(3):614–630.

Pop-Eleches, G. and Robertson, G. B. (2015). Information, Elections, and Political Change. *Comparative Politics*, 47(4):459–478.

Popkin, S. L. S. L. (1991). *The Reasoning Voter: Communication and Persuasion in Presidential Campaigns*. University of Chicago Press, Chicago.

Rawls, J. (1971). *A Theory of Justice*. Belknap Press of Harvard University Press, Cambridge, Massachussets, 1 edition.

Rawls, J. (1996). *Political Liberalism*. Columbia classics in philosophy. Columbia University Press, New York.

Reynolds, W. M. (1982). Development of Reliable and Valid Short Forms of the Marlowe-Crowne Social Desirability Scale. *Journal of Clinical Psychology*, 38(1):119–125.

Robinson, V. (1980). Lieberson's Isolation Index; A Case Study Evaluation. *Area*, 12(4):307–312.

Rosen, J. (2017). Gender Quotas for Women in National Politics: A Comparative Analysis Across Development Thresholds. *Social Science Research*, 66:82–101.

Roth, C. and Wohlfart, J. (2018). Experienced inequality and preferences for redistribution. *Journal of Public Economics*, 167:251–262.

Sanbonmatsu, K. (2002). Gender Stereotypes and Vote Choice. *American Journal of Political Science*, 46(1):20–34.

Sanbonmatsu, K. (2003). Gender-Related Political Knowledge and the Descriptive Representation of Women. *Political Behavior*, 25(4):367–388.

Sandel, M. J. (2021). *The tyranny of merit : what's become of the common good?* Farrar, Straus and Giroux, New York, first edition. edition.

Sen, A. (2006). What Do We Want from a Theory of Justice? *The Journal of Philosophy*, 103(5):215–238.

Sender, I. A. (2015). Election Observation Delegation to the General Elections in Tanzania (23 - 27 October 2015).

Singh, S. P. and Roy, J. (2014). Political knowledge, the decision calculus, and proximity voting. *Electoral Studies*, 34:89–99.

Slaa, W. (2011). Chaging the standing orders of parliament in Tanzania. In Frederick Stapenhurst, Rasheed Draman, A. I. A. H. C. K., editor, *African parliamentary reform*, chapter 11. Routledge, London.

Smith, A. (1759). *The Theory of Moral Sentiment*. Indianapolis : Liberty Classics, 1982, c1976.).

Stantcheva, S. (2021). Perceptions and Preferences for Redistribution. *The IFS Deaton Review*, (09).

Stemplowska, Z. and Swift, A. (2012). *Ideal and Nonideal Theory*, pages 1–17. Oxford University Press.

Taylor, R. S. (2009). Rawlsian Affirmative Action. *Ethics*, 119(3):476–506.

Teele, D. L., Kalla, J., and Rosenbluth, F. (2018). The Ties That Double Bind: Social Roles and Women's Underrepresentation in Politics. *American Political Science Review*, 112(3):525–541.

Thomsen, D. M. and Swers, M. L. (2017). Which Women Can Run? Gender, Partisanship, and Candidate Donor Networks. *Political Research Quarterly*, 70(2):449–463.

USAID (2020). Gender Equality and Women's Empowerment.

Vasconcelos, A. F. (2018). Gender and leadership stereotypes theory: Is it reaching the boundaries? *Management Research Review*, 41(11):1336–1355.

Vaus, D. D. (2014). *Surveys In Social Research*. Routledge, London.

Weale, A. (2020). *Modern Social Contract Theory*. Oxford University Press.

White, M. J. (1983). The Measurement of Spatial Segregation. *American Journal of Sociology*, 88(5):1008–1018.

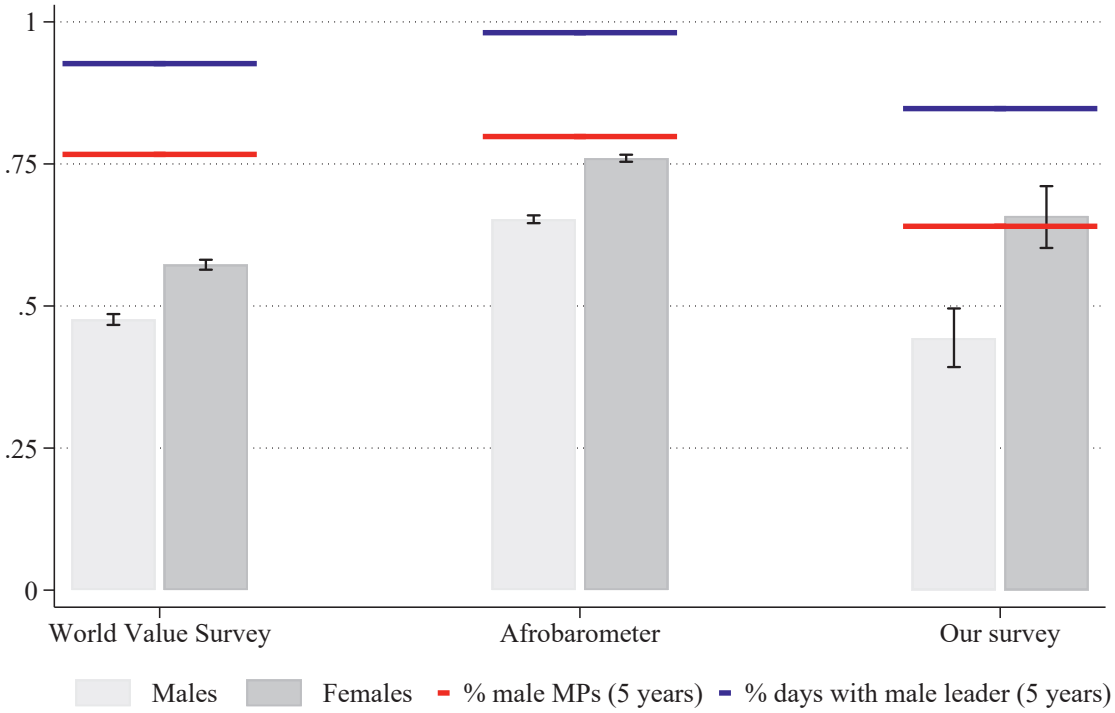
Wooldridge, J. M. (2019). Correlated random effects models with unbalanced panels. *Journal of Econometrics*, 211(1):137–150.

Wäckerle, J. (2022). The end of the all-male party? Voter preferences for gender representation in political parties. *Journal of Elections, Public Opinion and Parties*, pages 1–20.

Supplementary Material: Chapter 4

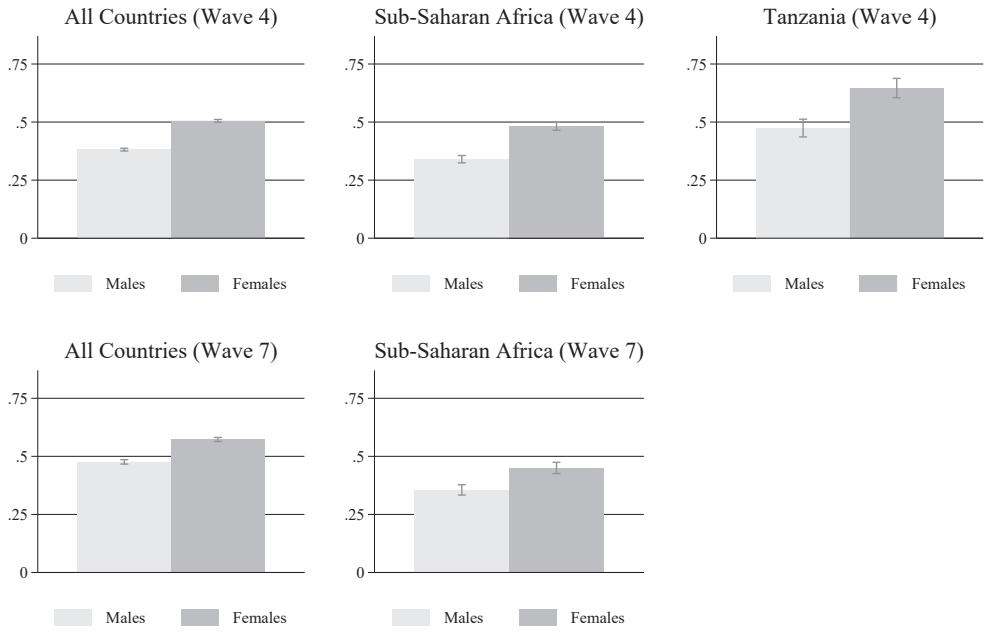
A Comparison with Other Surveys

Figure A.1: Men make better political leaders than women: % respondents disagreement



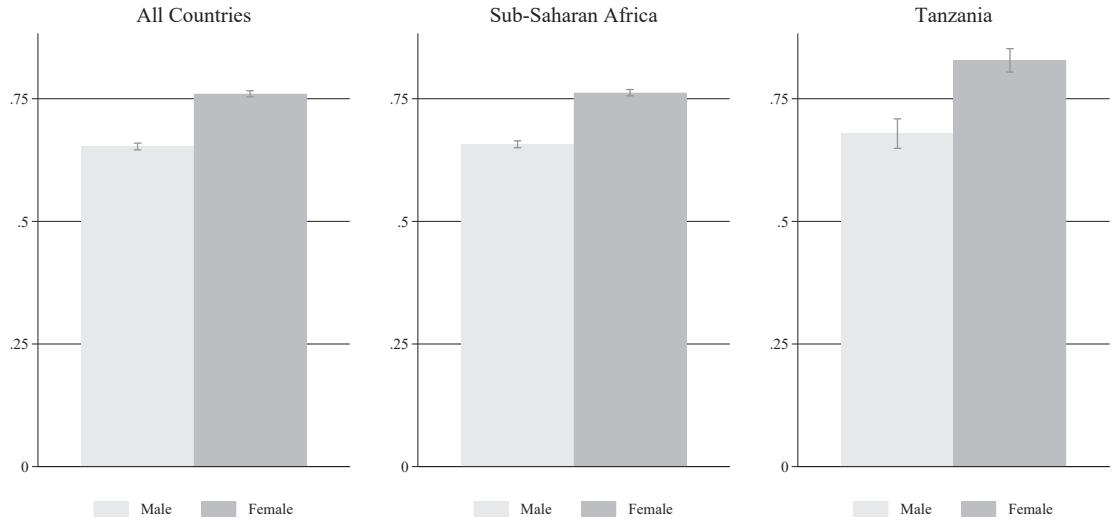
Note: Figure shows the share of female and male respondents who disagree or strongly disagree with the statement that men make better political leaders. There are differences in the way questions were asked in the WVS/EVS, Afrobarometer and in our survey. For the Afrobarometer, disagreement directly implies agreement with the idea that women should have the same chance of being elected, while this is not specified in the WVS/EVS. In our survey, we ask in two different questions whether men make better political leaders and whether men should be elected rather than women. The graph shows the share of female and male respondents who disagree with either of the statements asked in the surveys. Data for the WVS/EVS (Wave 7) was collected 2017-2022, for the Afrobarometer 2016-2018, and for our survey 2020-2021. Data from Afrobarometer and WVS/EVS are weighted.

Figure A.2: Men make better political leaders than women (World Value Survey)



Note: The height of the bars corresponds to the share of male/female respondents who disagree with the statement that men make better political leaders. Wave 4 of the World Value Survey was conducted between 1999 and 2004. Wave 7 was conducted between 2017-2022. Tanzania was not included in Wave 7.

Figure A.3: Men make better political leaders than women (Afrobarometer)



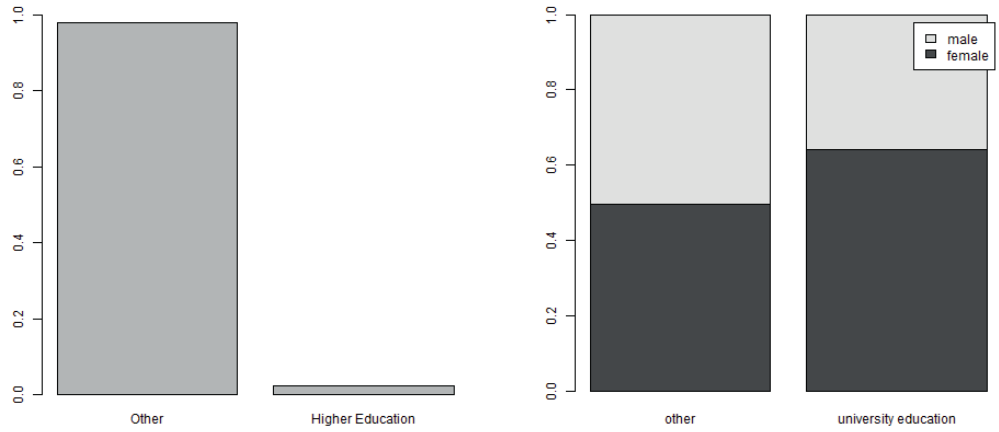
Note: The height of the bars corresponds to the share of male/female respondents who disagree with the statement that men make better political leaders and should be elected rather than women and instead agree with that women should have the same chance of being elected to political office as men. Data from wave 7 of the Afrobarometer, collected 2016-2018.

Representativeness

We use the Afrobarometer survey to compare perceptions of gender equality from our sampled survey with the latest representative survey (weighted data) from round 7 (2018) for Tanzania. The data for each of the survey round for all countries including Tanzania can be accessed here: https://afrobarometer.org/data and the questionnaire for the data collection in Tanzania here: Survey Questionnaire.

Figure A.4: Education levels in Tanzania (Afrobarometer 2018)

(a) Share of education (b) Education levels, by gender

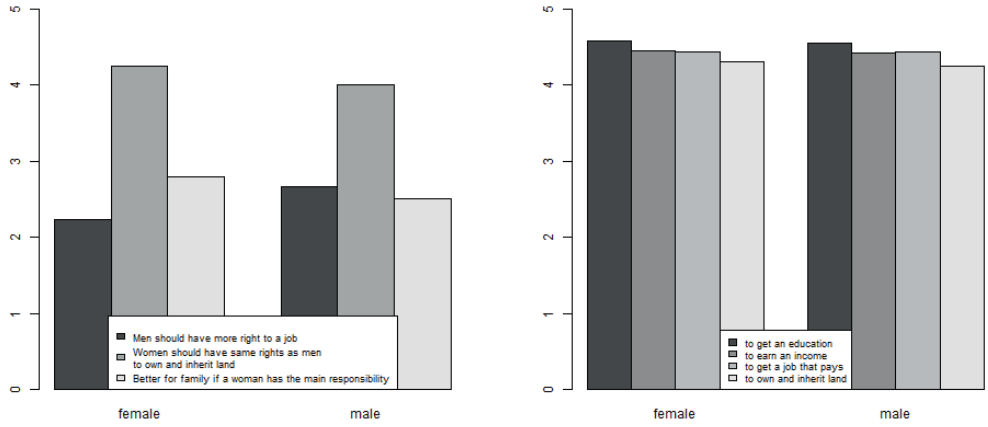


Note: The figure shows the share of university education in Tanzania (by gender) as a comparison of the student population tha we are surveying in this paper. University education includes 1) Some university, 2) University completed, 3) Post-graduate. Data is from the Afrobarometer round 7 (2018), Tanzania only, weighted.

Figure A.5: Gender norms in Tanzania by gender (Afrobarometer 2018)

(a) Rights by gender

(b) Women and men have equal opportunities...

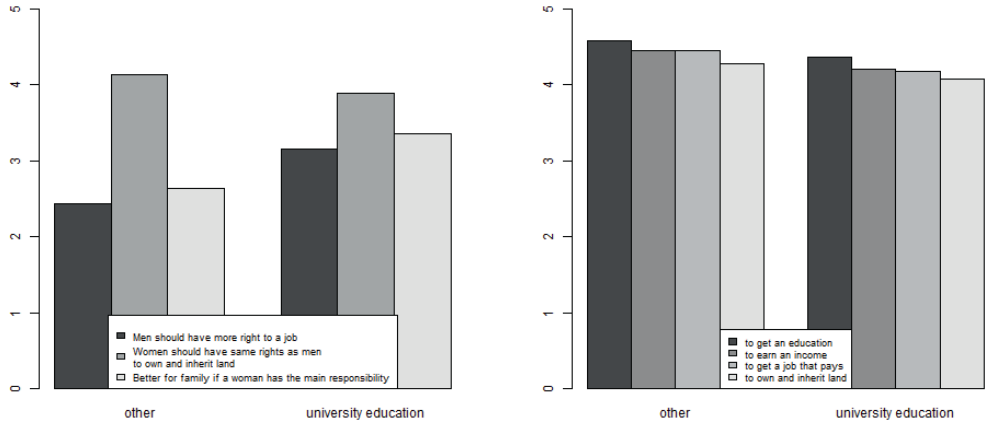


Note: The figure shows weighted average values of survey indicators, by gender. Scale ranges from 1 (Strongly Disagree) to 5 (Strongly Agree) and 3 (Neither Agree Nor Disagree). Data is from the Afrobarometer round 7 (2018), Tanzania only, weighted.

Figure A.6: Gender norms in Tanzania by education (Afrobarometer 2018)

(a) Rights by gender

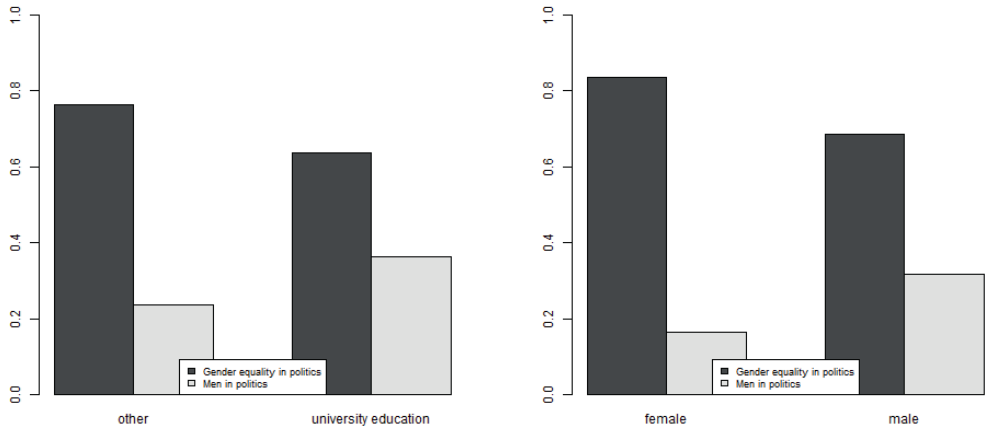
(b) Women and men have equal opportunities...



Note: The figure shows weighted average values of survey indicators, by higher education. Scale ranges from 1 (Strongly Disagree) to 5 (Strongly Agree) and 3 (Neither Agree Nor Disagree). University education includes 1) Some university, 2) University completed, 3) Post-graduate. Data is from the Afrobarometer round 7 (2018), Tanzania only, weighted.

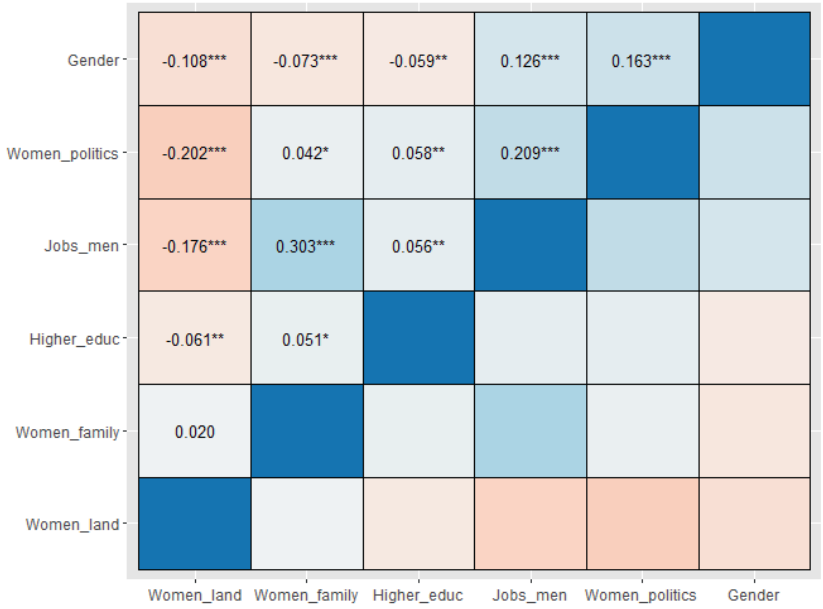
Figure A.7: Political gender norms in Tanzania by gender and education (Afrobarometer 2018)

(a) by higher education (b) by gender



Note: The figure shows the share of respondents that agrees with the following statements: **Statement 1: Men in politics**: Men make better political leaders than women, and should be elected rather than women; **Statement 2: Gender equality in politics**: Women should have the same chance of being elected to political office as men. University education includes 1) Some university, 2) University completed, 3) Post-graduate. Data is from the Afrobarometer round 7 (2018), Tanzania only, weighted.

Figure A.8: Correlation matrix gender norms indicators (Afrobarometer)



Note: The correlation matrix shows the Spearman correlations of all survey indicators measuring gender norms. Scales of the survey questions range from 1 (Strongly Disagree) to 5 (Strongly Agree) and 3 (Neither Agree Nor Disagree). Data is from the Afrobarometer round 7 (2018), Tanzania only, weighted.

B Data Collection and Survey Questionnaire

Table B.1: Overview Data Collection

Round	Date	Distributed	Complete	Rate	Also completed			Once
					Round 1	Round 2	All previous	
1	Oct. 13, 2020	496	186	0.375	-	-	-	62
2	Nov. 25, 2020	493	144	0.292	105	-	-	20
3	May 31, 2021	998	316	0.317	19	17	70	210
Total		1,987	644	0.324				279

Note: The table gives on overview on survey response rates and drop-out/drop-in. From left to right, the table shows the number of survey links send out (Distributed), how many were completed (Complete), the corresponding response rate (Rate), and the number of respondents who also completed previous rounds or have only responded once. The number of distributed links is much higher in the third round because we were able to add students from the Department of Anthropology to the sample consisting only of students from the Department of Economics.

Figure B.1: Example of slider as a response option implemented in online survey

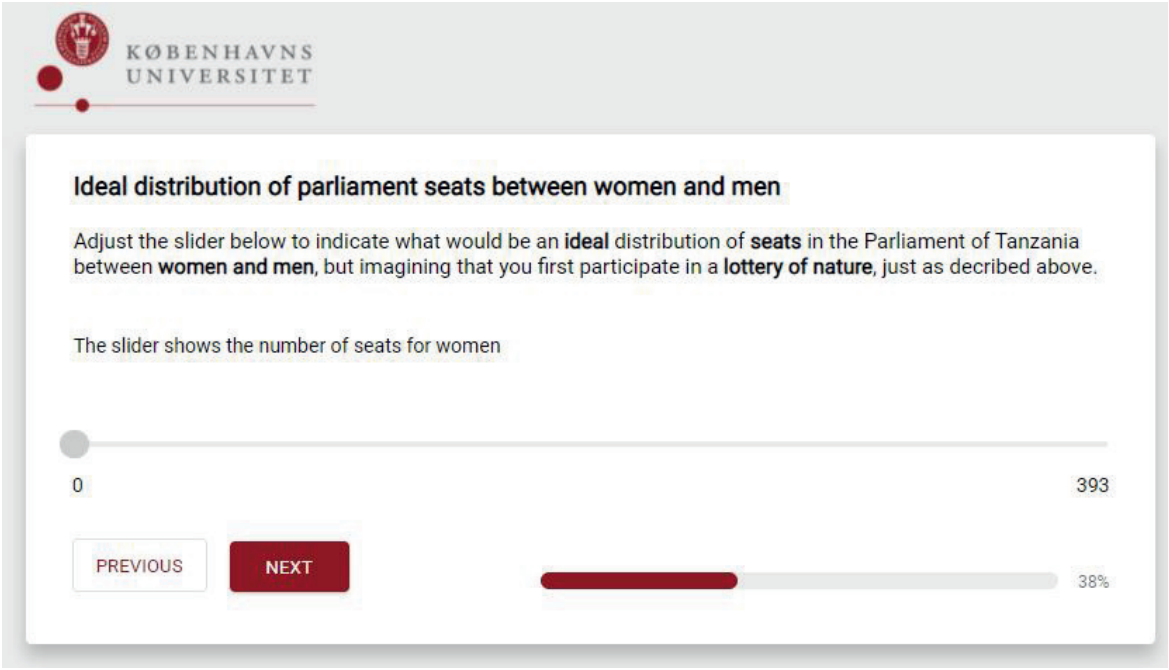


Table B.2: Overview survey questions, round 1-3

	Round 1	**Round 2 & 3**
Consent		
Demographics	Year & month of birth, gender, ethnic group, religion, study program, mother-tongue (self & parents), region of birth (self & parents)	Year of birth, gender, ethnic group, religion, mother-tongue, region of birth (self & parents), labor market participation parents
Estimates	Wealth (& income) distribution between poor & rich, males & females	
	Seats between males & females for national parliament and committees	
Ideals	Wealth (& income) distribution between poor & rich, males & females	
	Seats between males & females for national parliament and committees	
Checks	Is ideal fairer?	... more egalitarian, more efficient, beneficial for everyone, beneficial for self?
	Probability of being opposite gender under lottery of nature?	... different religion, optimistic/pessimistic, risk-loving/risk-averse
Policy goal	Support for equal gender representation in politics.	
	Actual support: {**petition** | **donation**}	
	Level of support for quota system and why.	
	Change in quota: {**increasing** | **decreasing** | **constant**}	Change in quota: increase, constant, decrease & level.
	Long term perspective (SDG)	... & why?
	Associations with gender quotas	Role for government to achieve goal.
	Know about quota system in Tanzania	Ranking of justifiable and effective affirmative policies
	Peers support for quota	Quota on parliament vs. party lists?
		When will quota become obsolete?
Gender norms	UNDP's Gender Social Norms Index (GSNI)	
Identity	Masculine vs. feminine, self and others	
Discrimination	Based on gender, ethnicity, religion	
Meritocracy	Importance of university degree, previous experience, effort for {**male** | **female**} candidate.	
Patronage	Punishment for family relations within parliament: {**male** | **female**} candidate.	
Parliament	Did & will vote	Did vote
	Trust in parliament	
	Interest in politics	
		Did ideal change with election/presidency change, why?
		Round 2 only: Internet cut around the election.
Views	Long-term orientation	
		Liberal vs. conservative
		Hard work vs. luck
		Inequality in last and next 5 years.
Bias	Short version of social desirability index	

Survey Experiments

We conducted the same pre-registered survey experiments in all three survey rounds.[22]

- **Experiment 1:** To test whether specific elements of merit are considered more important for female than for male parliamentary candidates, we randomized a hypothetical candidate's gender and elicited how important (*not important at all – very important*) respondents consider his/her education level, previous experience, and campaigning effort in order to be elected into parliament. We define merit-based appointment of politicians based on candidates' education, experience and effort and ask about the three elements on a 10-point response scale ranging from 1 (not at all important) to 10 (very important).

  The survey experiment in the survey reads as follows:

  > *How important are the following qualities for a [male|female] candidate to become a Member of Parliament?*
  >
  > *(a) Candidate has a university degree.*
  >
  > *(b) Candidate has previous experience as a Member of Parliament.*
  >
  > *(c) Candidate has put a lot of effort into campaigning for the election.*

- **Experiment 2:** We ask on an abstract level about respondents' opinions about whether they theoretically support, or think they should support gender equality in politics and elsewhere. With this experiment, we want to capture respondents' actual support of gender equality matters and see whether signing a petition for gender equality in politics is considered more or less costly than donating money, whether men behave differently than women, and whether over time respondents become more or less willing to bear the cost. 5000 TZS corresponds to ca. 2 USD. It is the same amount that respondents received as incentive to participate in the survey and is a an affordable amount for a student. The response scale ranges from 1 (absolutely not) to 4 (absolutely yes), with no neutral option.

  The survey experiment in the survey reads as follows:

  > *This week, some of your fellow students are going to request action from the government to increase gender equality. Do you think you will support this goal?*

Control Group To show your support, would you sign their petition letter?

[22] Pre-registered with the American Economic Association's registry for randomized control trials, RCT ID: AEARCTR-0006584: https://www.socialscienceregistry.org/trials/6584.

Treatment Group To show your support, would you donate them 5,000 TZS?

Table B.4: Survey experiments: Size of treatment and control groups

Survey Round and Data Collection	Control Group	Treatment Group	Total
1: October 28, 2020	87	99	186
2: November 29, 2020	66	76	142
3: May 30, 2021	163	153	316
Total	316	328	644

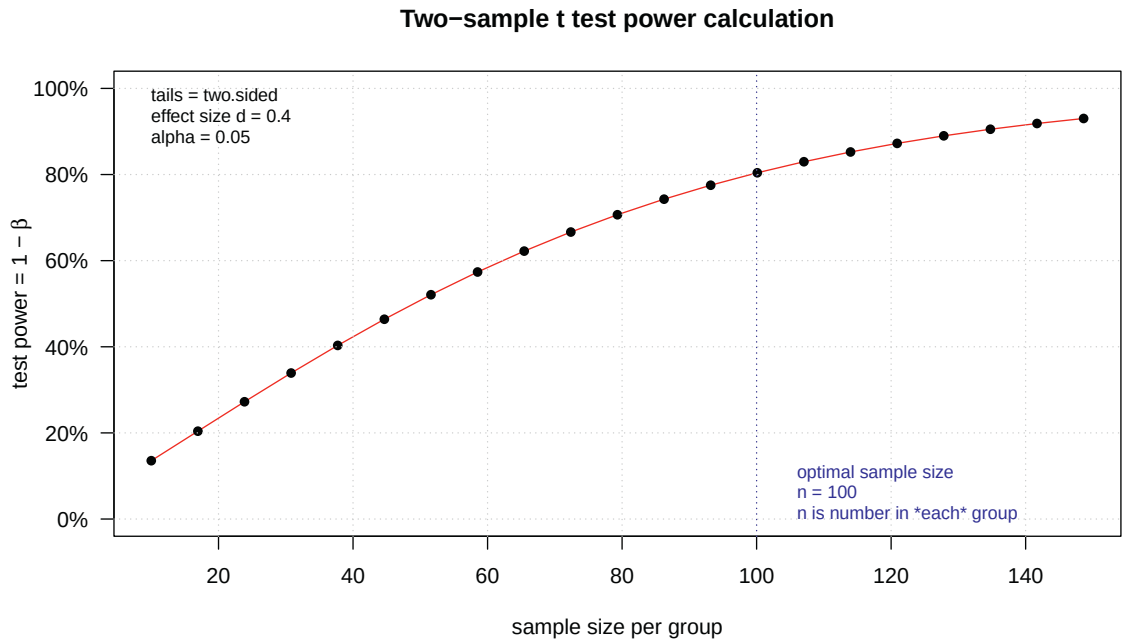
Note: The figure shows the effective sample size of the three survey rounds in the treatment and control group that were conducted in Tanzania between 2020-2021.

Power Analysis We conducted and pre-registered a power analysis expecting ca. 500 responses.[23] Figure B.2 shows that even with lower response rates we would still be able to correctly reject that our treatment had an effect of moderate size with a 80% probability, i.e. the conventional level of power, for a minimum of 200 responses. We do not reach this threshold in every round resulting in lower lower levels of power down to 60% for the first two rounds. Ex post, we computed effect sizes for our treatments and all five outcomes using Cohen (2013)'s d:

$$d = \frac{\overline{Y}_{treated} - \overline{Y}_{control}}{\sqrt{\frac{1}{2}\left(\sigma^2_{treated} + \sigma^2_{control}\right)}}$$

With these, we see that even pooling the sample we have very little power for the meritocracy outcomes. Only for *Experiment 2* on respondents' willingness to take action for gender equality, the realized number of responses allows us to correctly reject that our treatment had an effect with >80% probability. Regarding the importance of campaigning effort, we reach a power level of 63%, for all other outcomes it is <20%.[24] We conclude that in these cases absence of evidence does not necessarily mean evidence of absence.

Figure B.2: Ex-ante power analysis as pre-registered



[23] Pre-registered with the American Economic Association's registry for randomized control trials, RCT ID: AEARCTR-0006584: https://www.socialscienceregistry.org/trials/6584.

[24] All of this was computed using significance level $\alpha = 0.05$ and the `pwr` R package: https://github.com/heliosdrm/pwr.

C Balance of Student Sample Across Survey Rounds

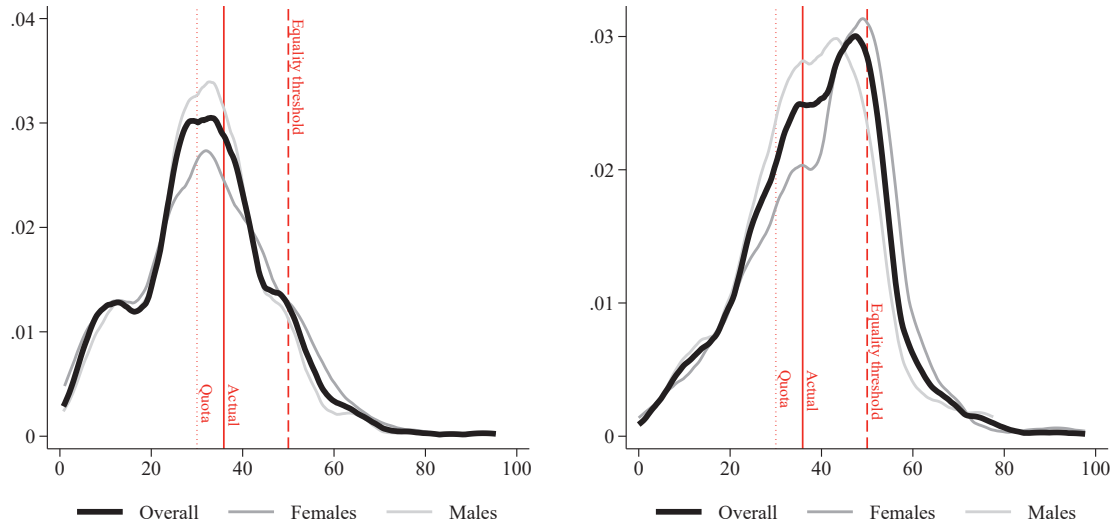
Table C.1: Balance across survey rounds

	Mean (SD)			Difference in Means [p-value]		
	(1) Round 1	(2) Round 2	(3) Round 3	(4) 2-1	(5) 3-1	(6) 3-2
Female	0.48	0.43	0.44	-0.05	-0.04	0.01
	(0.50)	(0.50)	(0.50)	[0.3298]	[0.3401]	[0.8376]
Birth year	1997.51	1997.87	1997.84	0.36	0.33	-0.03
	(2.95)	(1.43)	(1.43)	[0.1875]	[0.1006]	[0.8414]
1^{st} language Kiswahili	0.59	0.77	0.86	0.18	0.27	0.09
	(0.49)	(0.42)	(0.35)	[0.0004]	[0.0000]	[0.0219]
Ethnic group = Chaga	0.22	0.25	0.25	0.03	0.03	-0.01
	(0.42)	(0.44)	(0.43)	[0.4851]	[0.5027]	[0.8787]
From Dar es Salaam	0.35	0.30	0.30	-0.05	-0.05	0.00
	(0.48)	(0.46)	(0.46)	[0.3232]	[0.2478]	[0.9667]
Desirability Idx.	0.61	0.63	0.64	0.01	0.03	0.02
	(0.19)	(0.20)	(0.20)	[0.5059]	[0.0812]	[0.3964]
Anthropology	0.00	0.00	0.28	0.00	0.28	0.28
	(0.00)	(0.00)	(0.45)	[.]	[0.0000]	[0.0000]
Religiosity						
- Not religious	0.25	0.15	0.17	-0.09	-0.07	0.02
	(0.43)	(0.36)	(0.38)	[0.0410]	[0.0456]	[0.6320]
- Christian	0.56	0.61	0.60	0.05	0.05	-0.00
	(0.50)	(0.49)	(0.49)	[0.3996]	[0.3204]	[0.9806]
- Muslim	0.17	0.20	0.18	0.03	0.02	-0.01
	(0.37)	(0.40)	(0.39)	[0.4774]	[0.6333]	[0.7303]
Parental Background						
- Working mother	0.63	0.57	0.58	-0.06	-0.05	0.01
	(0.49)	(0.50)	(0.49)	[0.3349]	[0.3893]	[0.7868]
- From Dar es Salaam	0.11	0.11	0.09	-0.01	-0.02	-0.02
	(0.32)	(0.31)	(0.28)	[0.8353]	[0.3767]	[0.5644]
Observations	186	142	316	328	502	458

Note: All variables shown in the balance table are indicator variables but birth year which is the exact year and the social desirability index which is scaled 0-1. In round 3 we extended our sample to the Department of Anthropology. The share of Anthropology students is, therefore, not balanced across rounds.

D Additional Results - Extensive Margin

Figure D.1: Kernel densities of respondents' distributions of parliament seats



(a) Estimated (b) Ideal

Note: Density plots illustrate that respondents might have referred to focal points when answering the survey questions on their ideal and estimated number of women in parliament. The relevant focal points seem to have been the level of Tanzania's gender quota (30%) which is close to the actual (37%) level of women in parliament. The other focal point that is apparent from the figure is the equality threshold in the ideal shares at 50%. Note that we asked respondent for the number of female MPs not the share.

Table D.1: Share of parliament seats for women [POOLED OLS]

	Baseline	Interactions	Control for Estimated	
	(1)	(2)	(3)	(4)
Female	2.837**	4.261*	2.454**	4.075**
	(1.281)	(2.176)	(1.047)	(1.901)
Estimated-Actual			0.374***	0.372***
			(0.090)	(0.089)
Over Time:				
2020 Election *(t=2)*	3.266**	4.057**	1.727	2.853
	(1.507)	(1.908)	(1.556)	(1.855)
× Female		-1.849		-2.638
		(2.759)		(2.575)
Female President *(t=3)*	1.402	2.262	-0.936	-0.034
	(1.717)	(1.999)	(1.647)	(1.795)
× Female		-2.076		-2.132
		(2.630)		(2.288)
Controls	Yes	Yes	Yes	Yes
$\bar{\mathbf{x}}_\mathbf{i}$	Yes	Yes	Yes	Yes
$N^{obs.}$	638	638	636	636

Note: Coefficients are estimated via pooled OLS using the unbalanced panel with standard errors clustered at the individual level reported in parentheses. The dependent variable is on a scale from 0-100. Stars indicate statistical significance at the thresholds: * 0.10 ** 0.05 *** 0.01. The set of controls comprises study field, religious affiliation, ethnicity, origin of respondent and respondent's parents, as well as the social desirability index. $\bar{\mathbf{x}}_i$ are individual specific averages for any time varying variables included. $N^{obs.}$ is the number of observations.

Table D.2: Share of parliament seats for women [FIXED EFFECTS]

	Baseline	Interactions	Control for Estimated	
	(1)	(2)	(3)	(4)
Estimated-Actual			0.368***	0.365***
			(0.092)	(0.089)
Over Time:				
2020 Election *(t=2)*	3.154**	5.579***	1.772	4.034**
	(1.511)	(1.973)	(1.575)	(1.950)
× Female		-5.690*		-5.322*
		(2.948)		(2.894)
Female President *(t=3)*	1.628	3.062	-0.433	1.104
	(1.735)	(2.125)	(1.692)	(1.891)
× Female		-3.345		-3.575
		(3.564)		(3.375)
Social Desirability	Yes	Yes	Yes	Yes
$N^{obs.}$	351	351	349	349
$N^{ind.}$	141	141	141	141

Note: Coefficients are estimated via fixed effects using only responses from respondents that participated in at least two rounds. Standard errors are clustered at the individual level reported in parentheses. Dependent variable is on a scale from 0-100. Stars indicate statistical significance at the thresholds: * 0.10 ** 0.05 *** 0.01. We control for social desirability. $N^{obs.}$ is the number of observations, and $N^{ind.}$ the number of individuals.

Table D.3: Correction of estimated over time

	All rounds		Rounds 2-3	Once	Several
	(1)	(2)	(3)	(4)	(5)
2020 Election *(t=2)*	-11.943**	-7.613		4.105	-12.055**
	(5.366)	(8.418)		(12.906)	(5.245)
Female President *(t=3)*	-18.355***	-13.206	-4.406	-10.074	-19.939***
	(5.729)	(9.923)	(7.059)	(7.945)	(5.710)
Previous Round		-4.723	-7.968		
		(7.300)	(7.474)		
Controls	Yes	Yes	Yes	Yes	Yes
$\bar{\mathbf{x}}_\mathbf{i}$	Yes	Yes	Yes	No	No
Dependent Variable					
- Mean	61.21		58.11	59.59	62.57
- SD	48.76		49.39	49.16	48.46
$N^{obs.}$	641	641	455	291	350
N^{groups}	432	432	368		141

Note: Coefficients are estimated via correlated random effects following Equation 4.1 using the unbalanced panel with standard errors clustered at the individual level reported in parentheses. The dependent variable is the probability to underestimate the actual number of female MPs and measured on a scale from 0-100. Stars indicate statistical significance at the thresholds: * 0.10 ** 0.05 *** 0.01. The set of controls comprises study field, religious affiliation, ethnicity, origin of respondent and respondent's parents, as well as the social desirability index. $\bar{\mathbf{x}}_i$ are individual specific averages for any time varying variables included. $N^{obs.}$ is the number of observations, and $N^{ind.}$ the number of individuals. The columns are estimations based on different sample compositions. Columns (1)-(2) are based on the whole sample, column (4) uses only rounds two and tree, column (5) only respondents who replied once, and column (6) only respondents who replied more than once. We conclude that the negative coefficients for later rounds on the probability to underestimate the actual number of female MPs are entirely driven by respondents who participate in several rounds.

E Additional Results - Intensive Margin

Table E.1: Average ideal share across committees

	Baseline	Interactions	Control for Estimated	
	(1)	(2)	(3)	(4)
Female	3.140**	4.452**	1.986**	4.043***
	(1.310)	(2.159)	(0.848)	(1.534)
Estimated-Actual			0.585***	0.595***
			(0.088)	(0.087)
Over Time:				
2020 Election *(t=2)*	-1.885	-1.217	-0.415	0.832
	(1.153)	(1.516)	(1.046)	(1.200)
× Female		-1.568		-2.871
		(2.154)		(1.754)
Female President *(t=3)*	0.182	0.992	1.006	2.247*
	(1.393)	(1.514)	(1.210)	(1.177)
× Female		-1.964		-2.947*
		(2.371)		(1.764)
Controls	Yes	Yes	Yes	Yes
$\bar{\mathbf{x}}_\mathbf{i}$	Yes	Yes	Yes	Yes
$N^{obs.}$	604	604	602	602
$N^{ind.}$	393	393	392	392

Note: Coefficients are estimated via correlated random effects following Equation 4.1 using the unbalanced panel with standard errors clustered at the individual level reported in parentheses. Dependent variable is the average ideal share of female MPs across all committees and measured on a scale from 0-100. Stars indicate statistical significance at the thresholds: * 0.10 ** 0.05 *** 0.01. The set of controls comprises study field, religious affiliation, ethnicity, origin of respondent and respondent's parents, as well as the social desirability index. $\bar{\mathbf{x}}_i$ are individual specific averages for any time varying variables included. $N^{obs.}$ is the number of observations, and $N^{ind.}$ the number of individuals.

Table E.2: Lieberson (1981)'s Isolation Index

	Baseline	Interactions	Control for Estimated	
	(1)	(2)	(3)	(4)
Female	2.435	4.071*	1.848**	3.726***
	(1.526)	(2.165)	(0.826)	(1.412)
Estimated-Actual			0.606***	0.611***
			(0.073)	(0.074)
Over Time:				
2020 Election *(t=2)*	-1.372	-0.876	-0.049	0.659
	(1.191)	(1.570)	(0.970)	(1.259)
× Female		-1.156		-1.623
		(2.186)		(1.802)
Female President *(t=3)*	1.229	2.266	1.672	2.872**
	(1.395)	(1.558)	(1.079)	(1.157)
× Female		-2.549		-2.914*
		(2.436)		(1.627)
Controls	Yes	Yes	Yes	Yes
$\bar{\mathbf{x}}_\mathbf{i}$	Yes	Yes	Yes	Yes
$N^{obs.}$	643	643	643	643
$N^{ind.}$	432	432	432	432

Note: Coefficients are estimated via correlated random effects following Equation 4.1 using the unbalanced panel with standard errors clustered at the individual level reported in parentheses. Dependent variable is the ideal isolation index (Lieberson, 1981) and measured on a scale from 0-100. Stars indicate statistical significance at the thresholds: * 0.10 ** 0.05 *** 0.01. The set of controls comprises study field, religious affiliation, ethnicity, origin of respondent and respondent's parents, as well as the social desirability index. $\bar{\mathbf{x}}_i$ are individual specific averages for any time varying variables included. $N^{obs.}$ is the number of observations, and $N^{ind.}$ the number of individuals.

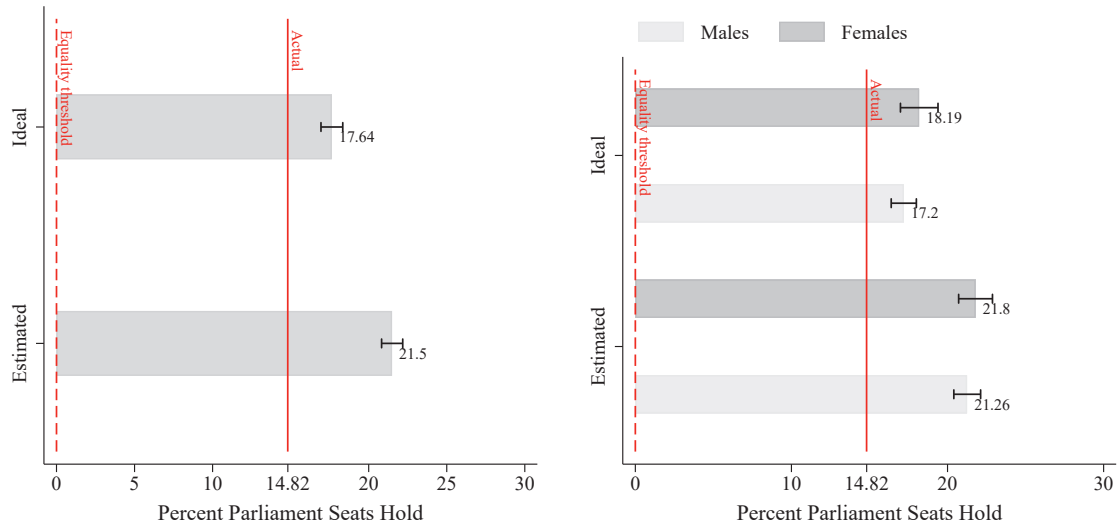
Duncan and Duncan (1955)'s Segregation Index

As an alternative measure of the substantive representation of women, we compute Duncan and Duncan (1955)'s segregation index. This complements our other two measures of the intensive margin of women's political participation. The segregation index is:

$$s_i = \frac{1}{2} \sum_{c=1}^{18} \left| \frac{f_i^c}{F_i} - \frac{m_i^c}{M_i} \right| \tag{4}$$

where F_i, M_i are the total number of female, male MPs across committees, i.e. $F_i = \sum_{c=1}^{18} f_i^c$, for respondent i. s_i measures the share of women and men that would have to move from one committee to another such that the share of female and male MPs in each committee is equal to the proportion of female and male MPs in parliament as a whole, i.e. $\frac{f_i^c}{F_i} = \frac{m_i^c}{M_i}$ for all c. A value of 0 indicates perfect integration, a value of 1 complete segregation.

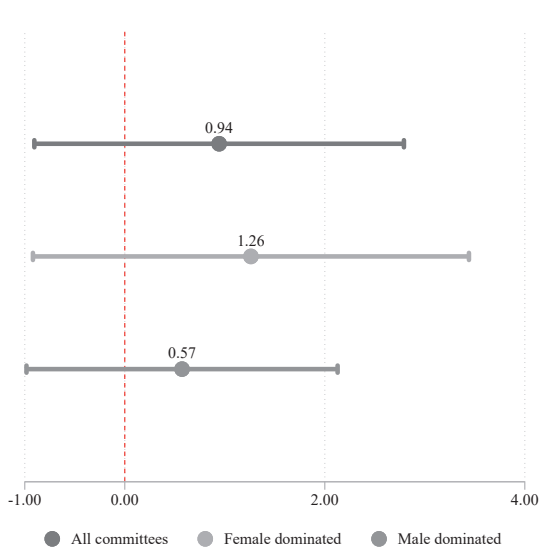
Figure E.1: Estimated and ideal distributions of parliament seats



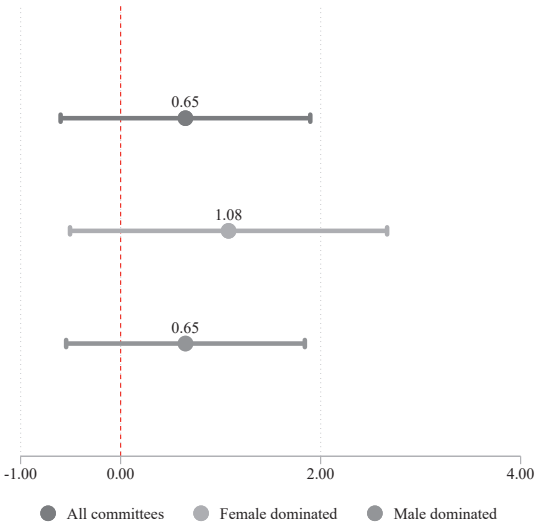
(a) Duncan Index (b) Duncan Index by gender

Note: The equality threshold for the Duncan and Duncan (1955) segregation index is 0. The Figure illustrates that there are preferences for segregation that are not significantly different by respondents' gender. We also see that both estimated and ideal segregation are higher than the actual segregation in the parliament. These results are in line with our findings based on the average share across committees and the Lieberson (1981) isolation index.

Figure E.2: Coefficients for female indicator from regressions on intensive margin measure



(a) Duncan Index (baseline specification)



(b) Duncan Index (specification with all controls)

Note: Plotted are coefficients for the female indicator in regressions on the intensive margin measure of female political participation. Coefficients are estimated via correlated random effects following Equation 4.1 using the unbalanced panel with standard errors clustered at the individual level. Dependent variables are on a scale from 0-100. We plot 90% confidence intervals. In the baseline model, we control for round fixed effects, study field, religious affiliation, ethnicity, origin of respondent and respondent's parents, social desirability index and individual specific averages for time varying variables ($\overline{\mathbf{x}}_i$). The specification with all controls additionally includes estimated levels as controls. We compute all intensive margin measures (i.e. the dependent variables) based on three sets of committees: first, using all committees; second, using only committees that are actually female dominated; third, using only committees that are actually male dominated. Female dominated committees are committees with a share of women higher than the share of women in parliament.

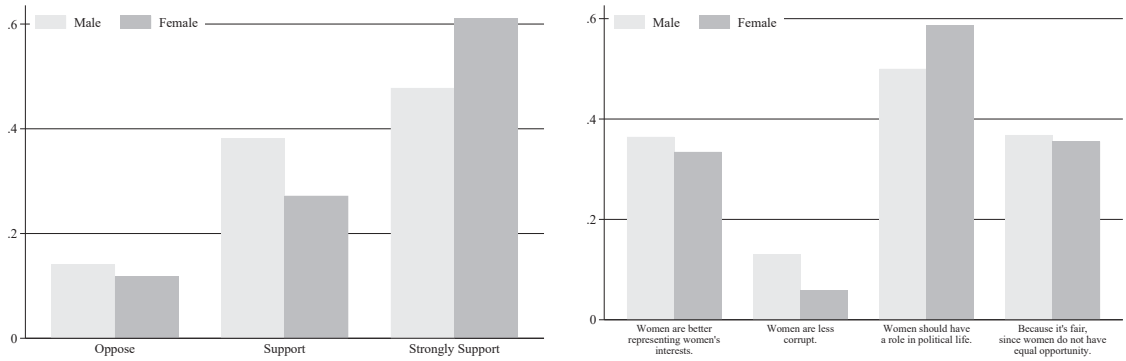
Table E.3: Segregation Index

	Baseline	Interactions	Control for Estimated	
	(1)	(2)	(3)	(4)
Female	0.943	0.658	0.648	0.633
	(1.123)	(1.601)	(0.759)	(1.247)
Estimated-Actual			0.351***	0.350***
			(0.086)	(0.086)
Over Time:				
2020 Election *(t=2)*	-0.341	-0.906	0.242	0.077
	(0.874)	(1.093)	(0.830)	(0.999)
× Female		1.314		0.390
		(1.639)		(1.557)
Female President *(t=3)*	0.746	0.704	1.119	1.166
	(1.072)	(1.144)	(0.945)	(1.022)
× Female		0.054		-0.130
		(1.809)		(1.533)
Controls	Yes	Yes	Yes	Yes
$\bar{\mathbf{x}}_\mathbf{i}$	Yes	Yes	Yes	Yes
$N^{obs.}$	581	581	560	560
$N^{ind.}$	380	380	372	372

Note: Coefficients are estimated via correlated random effects following Equation 4.1 using the unbalanced panel with standard errors clustered at the individual level reported in parentheses. Dependent variable is the ideal segregation index (Duncan and Duncan, 1955) and on a scale from 0-100. Stars indicate statistical significance at thresholds: * 0.10 ** 0.05 *** 0.01. The set of controls comprises study field, religious affiliation, ethnicity, origin of respondent and respondent's parents, as well as the social desirability index. $\bar{\mathbf{x}}_i$ are individual specific averages for any time varying variables included. $N^{obs.}$ is the number of observations, and $N^{ind.}$ the number of individuals.

F Affirmative Action & Gender Quota

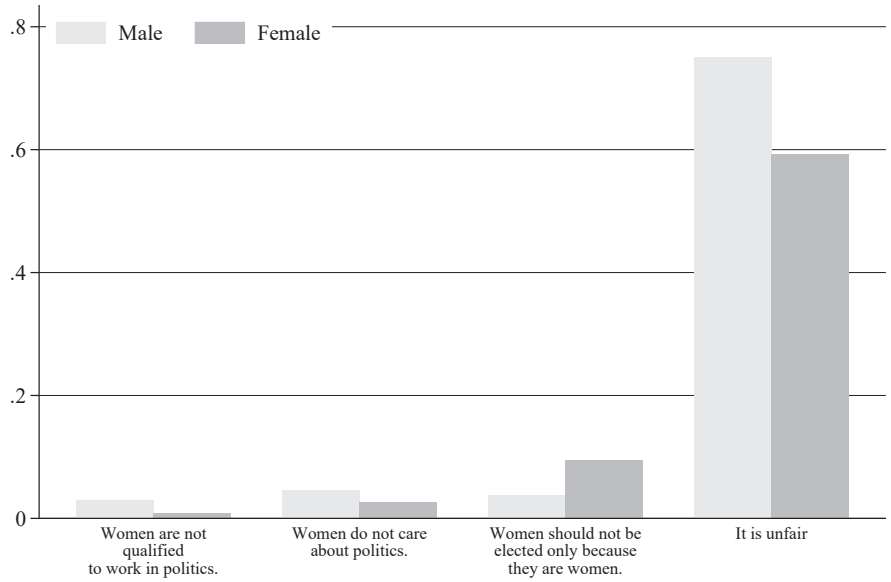
Figure F.1: Views on affirmative action



(a) Support for current gender quota (b) Reasons for support

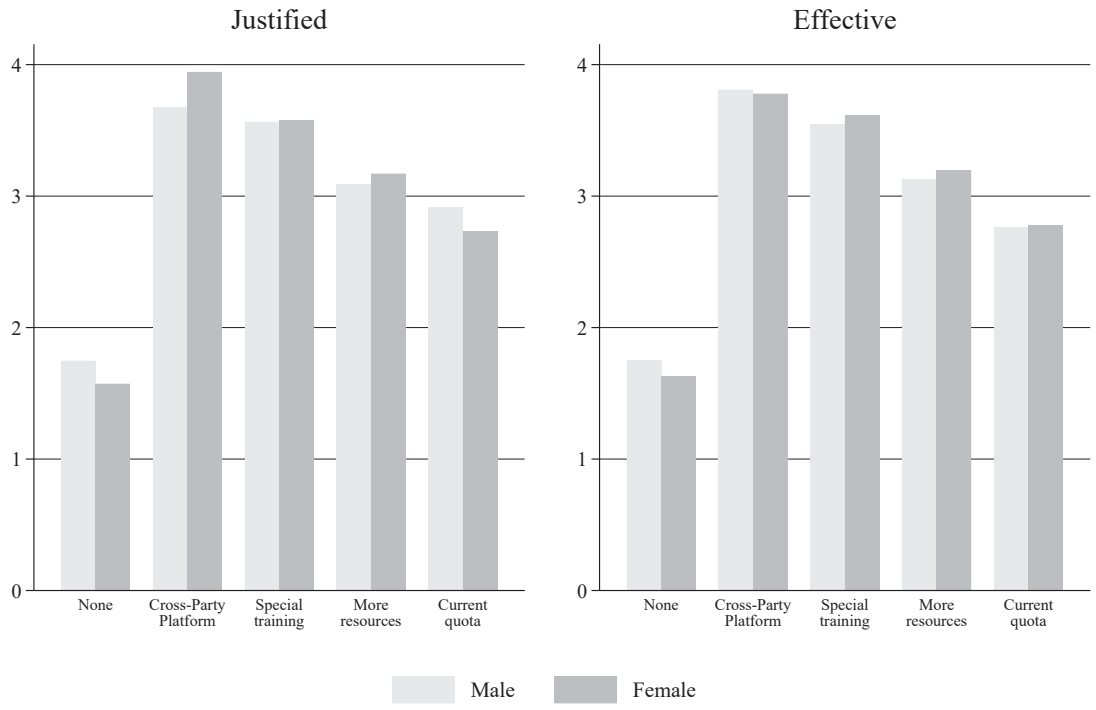
Note: Share of female/male respondents who choose a specific response option on the vertical axis.

Figure F.2: Reasons to oppose the quota



Note: Share of female/male respondents who choose a specific reason to oppose the quota on the vertical axis.

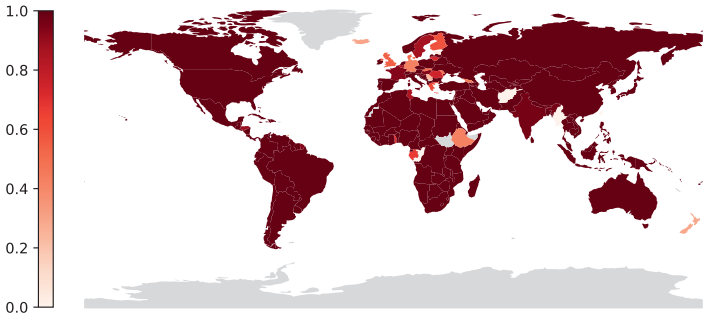
Figure F.3: Average rank (1-5) of affirmative action policy options



Note: The figure shows respondents' average ranking on how justified a policy is on the left-hand side and on how effective a policy is on the right hand side, separately for female and male respondents. The 'Cross-Party Platform' was specified to be a women's organization across parties, whose main task is to monitor women's possibilities to engage in politics. It actually exists in Tanzania. 'More resources' are additional funding as well as more media coverage for female candidates.

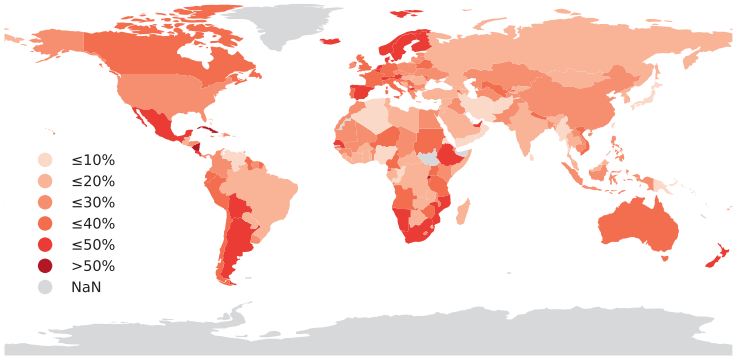
G Additional Evidence on Actual Gender Equality in Politics

Figure G.1: Share of time with male leader (all countries)



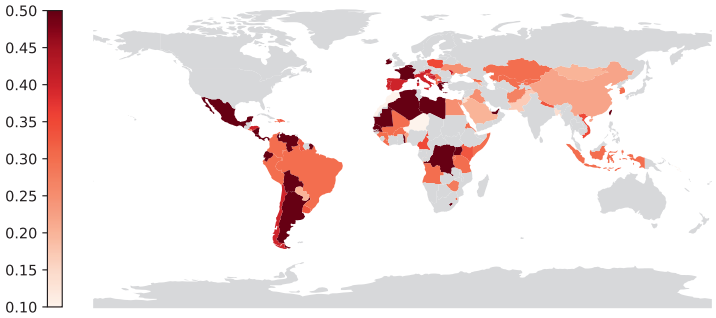
Note: Share of days since January 1, 2016 with a male head of state, across countries that hold electoral processes. Countries in grey do not have data.

Figure G.2: Share of female MPs (all countries)



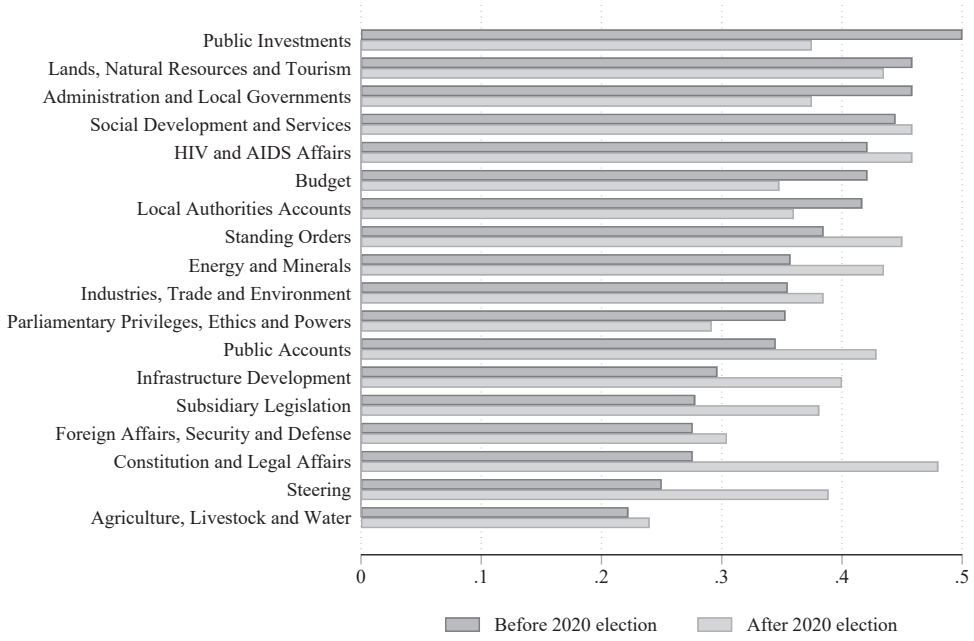
Note: Share of women in lower/single house parliaments across the globe. Data comes from IPU's monthly ranking of women in national parliaments as of March 2023. Countries in gray do not have data.

Figure G.3: Gender quota levels (all countries)



Note: The figure shows gender quota levels in all countries that as of April 1, 2023 have a legislated gender quota implemented in single/lower house, upper house, or on the sub-national level. Quotas are either in the form of legislated candidate quotas or reserved seats. If a country has several gender quotas, the highest level is displayed. Countries without a gender quota are displayed in grey. Data comes from the IDEA Gender Quota Database.

Figure G.4: Actual share of female MPs in political committees in Tanzania



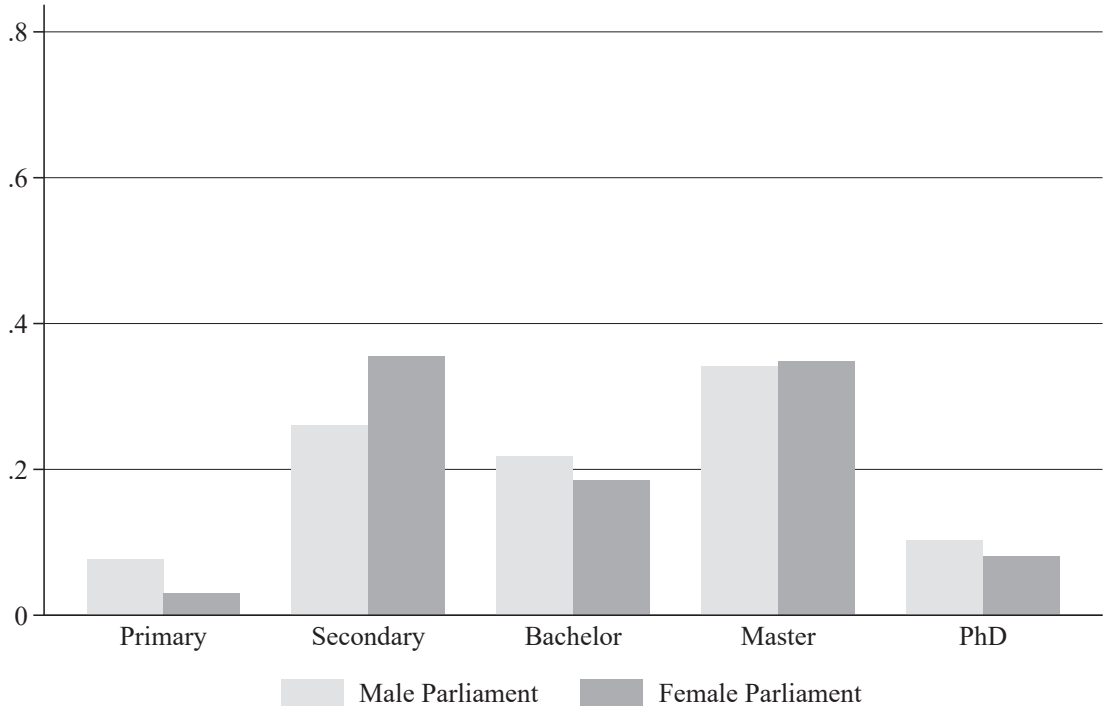
Note: Committees are ranked by the share of women before the election 2020. The bars show the share of women in each of the political committees, before and after the 2020 election.

Table G.1: Actually female and male dominated committees

Committee	Share women	Female dominated
Agriculture, Livestock and Water	23.11	No
Foreign Affairs, Security and Defense	29.01	No
Steering	31.94	No
Parliamentary Privileges, Ethics and Powers	32.23	No
Subsidiary Legislation	32.94	No
Infrastructure Development	34.81	No
Industries, Trade and Environment	36.97	No
Constitution and Legal Affairs	37.79	Yes
Budget	38.44	Yes
Public Accounts	38.67	Yes
Local Authorities Accounts	38.83	Yes
Energy and Minerals	39.6	Yes
Administration and Local Governments	41.67	Yes
Standing Orders	41.73	Yes
Public Investments	43.75	Yes
HIV and AIDS Affairs	43.97	Yes
Lands, Natural Resources and Tourism	44.66	Yes
Social Development and Services	45.14	Yes

Note: Table shows the averages of the actual share of women in each political committee from before and after the 2020 election. Committees are sorted by the actual share. We define female dominated committees as committees for which the actual share is higher than the share of female MPs; computed as the average before and after the election and equal to 37.36%.

Figure G.5: Disaggrgated education among MPs



Note: The height of the bars corresponds to the share of male/female MPs with a completed primary, secondary education, Bachelor, Master or PhD degrees. The educational attainment is self-stated by MPs. We scraped the parliament publicly available website to collect the data. The share corresponds to the share of each education level among all women and among all men separately to account for women's underrepresentation in parliament. 16 MPs did not disclose their education. Figure is based on the 2010-2015 parliament.

H Additional Evidence From Open Text Questions

Associations with the quota

Table H.1: Associations with gender quota

Gender Quota Argument	**Example from Open Survey Answers**	**Pro/Con**
Are gender quotas fair?	'All the issues of gender equity and women participation in politics and office running is so unfair in Tanzania and disgusting'	Con
Patronage	'The few who are in those positions are nepotism favour from the leadership.'	Con
Quota Women	'It really empowers a greater number of women participating in politics but they should also be allowed to take higher positions than something like special seats because in some sense it empowers inferiority notation on them.'	Pro/Con
Substantive Representation	'1:Watchdog Committees: Women can keenly check resources spent by the government in each sector; because they are very good in budgeting.; 2:Sector Committees: Women should be placed mainly in the HIV/AIDS policies.'	Pro/Con
Women are not made for some jobs	'I do think that women are very fragile and to hold these big seats can bring a very sensitive problem'	Con
Discrimination	'Reducing discrimination of women in politics.'	Pro
Removing institutional barriers	'Political parties should encourage and provide enough chances to women to participate in elections.'	Pro
International pressure for quotas	'In politics most of the developing countries do not attain the gender quota which is set. So international organizations must continue encouraging these countries to adopt that system of gender quota in politics also.'	Pro/Con
The importance of education	'Education about awareness still in low stage that's why women lack confidence and awareness to be struggling into the politics.'	Pro/Con
Historical and cultural reasons	'From the colonial era the society thinks that men are better in politics than women by referring the colonial structure of administration.'	Pro/Con
Are women better political leaders?	'Fairness, Justice, Peace, Non-corrupted leader'	Pro

Note: The open survey question was formulated as followed: *Various countries today have gender quotas to increase representation of women and their participation in politics. As examples, gender quotas in politics reserve a number of parliament seats for women, or require a minimum number of women to run as political candidates in each political party. What do you associate with gender quotas in politics? Please list everything that you can think of spontaneously in the following box.*

Changes in Ideals

To assess differences in ideals between survey rounds, we include an open text question in the survey and ask respondents why/why not their ideal shares are different as opposed to the first round. Figure H.1 shows the two wordclouds generated from the answers to these questions. Many terms are central in the responses of both the ones that changed their ideals (Figure H.1a) and the ones that did not (Figure H.1b). These are, in slightly different relative frequencies, woman, man, parliament, election, seat, as well as expressions of continuity/change and consideration. If anything, the difference is that respondents, who changed their ideals did so in the context of updated expectations. Whereas the ones, who did not change their ideals see their expectations confirmed. The name of the leading party and president, as well as terms like *faith* and *commitment* only appear in Figure H.1b while *corrupt*, *hope*, *unfair* or *democracy* appear only in Figure H.1a and others, such as *dominate*, are relatively more important.

A majority of respondents updated their views after the election and with respect to the new parliament. Of those who updated their views, a majority named as a reason that they received new information about the state of female representation in politics in Tanzania (57%). Another 33% said that they changed their ideals because of new information on the political system in Tanzania in general. 10% did not specify a reason. Most of them said that they were not aware of the exact numbers or did not know before.

Figure H.1: Reasons for differences in distributions levels before vs. after 2020 election

(a) Different ideals

(b) Same ideals

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