Redistributive Politics Under Spatial Inequality*

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Abstract

Why has rising inequality not led to more redistribution? And what explains the cross-national variation in countries' responses (or lack thereof) to inequality? Combining insights from electoral geography with political economy models of redistributive politics and partisan strategies, I argue that the spatial distribution of inequality undermines the political logic of redistribution when elections are held under plurality rule. When inequality in the median electoral district is lower than in the nation as a whole, the demand for redistributive policies and voting for left-leaning parties is concentrated in a few districts. This limits the number of seats left-wing parties gain in elections and disincentivizes left-wing parties from offering pro-redistributive platforms. I provide empirical evidence to support my argument using cross-national data on regional inequalities, local-level administrative and geocoded survey data from the United Kingdom, and comparative manifesto data. The findings offer a new explanation of why some countries redistribute more than others, which suggests that political geography can weaken political responses to inequality and electoral representation.

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1 Introduction

Rising income inequality is a defining feature of many rich economies that threatens social cohesion and fuels political polarization (McCarty, Poole and Rosenthal 2006; Piketty 2014). Yet political responses to growing inequality vary considerably across countries. While standard political economy models predict that rising inequality should lead to more redistribution (Meltzer and Richard 1981), empirically we often observe the opposite: countries with high levels of inequality redistribute less. Scholars have developed behavioral, institutional, and structural explanations of what (Lindert 2004) calls the "Robin Hood Paradox." Some argue that policymakers' differential responsiveness to the preferences of the rich (Bartels 2010; Elsässer, Hense and Schäfer 2020; Gilens 2012), lower turnout and lower levels of information among the poor (Flavin 2012; Kuziemko et al. 2015; Peters and Ensink 2015), and biased beliefs about upward mobility or deservingness (Alesina, Stantcheva and Teso 2018; Cavaillé and Trump 2015; Fong 2001) undermine the link between inequality and redistribution.

Others have suggested that institutional and structural factors such as veto points, federalism, and electoral rules can explain cross-national differences. It is well known that countries with plurality rule and single-member districts (SMD) tend to spend and redistribute less than those with proportional representation (PR) electoral regimes. One reason is that plurality-rule countries are more likely to produce center-right governments because the middle class (or median voter) faces lower taxes if a center-right party deviates to the right, but higher taxes and redistribution to low-income groups if a center-left party deviates to the left. In PR countries with multiparty systems, however, the middle class sides with the poor to form a center-left coalition that taxes the rich and redistributes more (Iversen and Soskice 2006). Class coalitions explain the degree of redistribution. An alternative explanation for higher spending and redistribution in PR countries with multiparty systems is that those countries are more likely to have fragmented party systems and, as a result, coalition governments. Coalitions devote more resources to programs favored by the parties represented in government because no single party fully internalizes the fiscal costs of spending (Persson, Roland and Tabellini 2007).

These arguments rest on an important assumption—that society is divided into equal-sized and homogeneously distributed groups, and that since political parties represent their interests,

these groups remain agnostic about the spatial distribution of voters and policy preferences. I show that this assumption is problematic. Combining insights from electoral geography with political economy models of redistributive politics and partisan strategies, I argue that the spatial distribution of inequality undermines the political logic of redistribution when elections are held in single-member districts under plurality rule. Inter-regional inequalities have grown in many countries, often along urban–rural cleavages and driven by agglomeration effects of the modern knowledge economy (Ansell and Gingrich 2021; Iversen and Soskice 2019; Rodden 2019). Recent work has documented that the spatial concentration of voters, in particular by class and income, matters for policy preferences (Beramendi 2012; Bradbury and Crain 2005; Enos 2017; Rodden 2010; Warshaw and Rodden 2012) and political representation (Döring and Manow 2017; Jusko 2017), but we know little about the distribution of political preferences, electoral behaviors, and partisan strategies when inequality is spatially concentrated and elections are held under plurality rule. Taking political and economic geography into account can shed new light on why in some countries, inequality has not led to more redistribution.

I argue that when inequality is geographically clustered, the median district is less unequal than the nation as a whole. This pattern undermines both the demand for (and the supply of) redistributive policies in majoritarian electoral systems for two reasons. First, while voters respond to higher levels of inequality by demanding more redistribution and voting for left-wing parties, the spatial concentration of such voters in a small number of districts limits the extent to which their redistributive preferences and votes for left-leaning parties are translated into seats and political power. Second, political parties target the median voter while balancing the interests of their core partisan supporters and swing voters. Since the median voter in the median district is exposed to less inequality and as a result—as I will show below—is less supportive of redistribution, left-wing parties choose more centrist and less redistributive platforms to appeal to the median district and to fend off competition from challenger parties such as liberals.

I present evidence to support my argument in three steps. I first draw on cross-sectional data on regional inequality for 25 OECD countries to show that when inequality is geographically concentrated, plurality-rule countries distribute less to reduce inequality than PR countries with similar levels of spatially concentrated inequality. Second, I turn to the United Kingdom—a parliamentary democracy with majoritarian elections—to examine the relationship between the spatial

distribution of inequality and redistributive politics under plurality rule. Using local-level administrative data, I document that income inequality is concentrated and growing in dense, highly populated urban areas. As a result, inequality in the median constituency is considerably lower than in the nation as a whole. I analyze geo-coded survey data from the 2014–2020 British Election Study, and show that spatially concentrated inequality limits the demand for redistributive policies to a few high-inequality constituencies. This effect is driven almost entirely by supporters of the Labour Party; supporters of the Conservative Party are virtually unresponsive to higher levels of inequality in their constituency. These contextual and spatial dynamics have implications for electoral politics and left-wing political power. Across all four general elections held between 2010 and 2019, the above-median-inequality constituencies won by the Labour Party had a population density that was five times higher—and a considerably larger vote surplus—than similarly unequal constituencies won by members of the Conservative Party (known colloquially as Tories). But the spatial concentration of inequality severely constrains the extent to which demands for redistribution and voting for leftist parties translate into political power under plurality rule: the Labour Party won significantly fewer seats—only about one-third of all above-median-inequality constituencies, on average—than the Conservative Party. Finally, I examine how political parties' platforms respond to changes in the level of inequality in different types of electoral regimes using comparative manifesto data. I find that in countries with plurality electoral systems, left-wing party platforms do not more strongly support redistribution when inequality is high. Since their key electoral target, the median district, is less unequal than the nation as a whole, left-wing parties have few incentives to become more pro-redistribution.

This paper contributes to work on political geography, inequality, and redistribution in two important ways. First, by integrating political and economic geography into models of comparative political economy, it proposes a new explanation of why countries with majoritarian electoral regimes redistribute less in response to inequality than those with PR systems. In contrast to explanations that focus on class coalitions within the electorate (Iversen and Soskice 2006) or fiscal negotiations in coalition governments (Persson, Roland and Tabellini 2007), this paper demonstrates that the spatial distribution of inequality and preferences undermines the political logic of redistribution in plurality countries such as the United Kingdom by (1) constraining demands for redistribution and support for left-wing parties and (2) limiting left-wing parties' strategic

incentives to run on pro-redistributive platforms. Second, the paper advances work on how contextual effects and local exposure to income inequality influence political preferences and electoral behavior. Evidence of voters' responses to changing levels of inequality is mixed; some studies report positive and others negative effects (Franko 2016; Kelly and Enns 2010; Schmidt-Catran 2016). This paper suggests that different conceptualizations of inequality could be driving these inconclusive findings. It adds a comparative perspective to recent work in the US context which suggests that *local* levels of inequality are associated with stronger demands for redistribution and more liberal policies (Newman 2020; Newman, Reny and Ooi 2021), highlighting the importance of inter-regional and local-level (rather than inter-personal) inequality. The relevant metric for inequality for voters' perceptions and politicians' electoral strategies is thus not necessarily the nation; it may well be the neighborhood or constituency. As local economic contexts shape individuals' political preferences and electoral behavior, the spatial distribution of inequality and the growing urban–rural divides in the knowledge economy make policy responses to address inequalities more difficult under plurality rule.

2 Spatial Inequality and Redistributive Politics

Why rising inequality has not led to more redistribution is a key question in comparative political economy. The workhorse Meltzer-Richard model of redistributive preferences and politics predicts that a rise in inequality should lead to greater demand for redistribution and, therefore, a reduction in post-tax inequality (Meltzer and Richard 1981; Romer 1975). Yet there is little (and often contradictory) empirical support for these claims.[1] Rich democracies with high levels of inequality tend to redistribute less, while more equal countries tend to redistribute more. There are several explanations for this "Robin Hood Paradox" (Lindert 2004). Power resource theory suggests that cross-national variation in the strength of unions and left-wing parties shapes pre-tax inequality through earnings compression and social investment policies (Morel, Palier and Palme 2012) and post-tax inequality through redistributive policies (Huber and Stephens 2001; Korpi 1983). Others have argued that the one-dimensional focus of the Meltzer-Richard model on the tax rate and fiscal redistribution ignores other salient facets: the welfare state's social in-

[1] See, for example, Milanovic (2000) and Kenworthy and Pontusson (2005), as well as Lupu and Pontusson (2011) on the importance of the *structure* of inequality.

surance dimension implies that higher-income earners demand more social protection (Moene and Wallerstein 2001); beliefs about upward mobility and deservingness could undermine support for redistribution even if inequality is growing (Alesina, Stantcheva and Teso 2018; Cavaillé and Trump 2015; Fong 2001). Still others have suggested that rising inequality may not lead to more redistribution due to differences in turnout between low- and high-income voters (Gallego 2015; Leighley 2013), the differential responsiveness of policymakers who are more attentive to the preferences of the rich than those of the poor (Elsässer, Hense and Schäfer 2020; Enns 2015; Gilens 2012), and lower levels of information (as well as misinformation about inequality) among the poor (Elkjær and Iversen 2020; Kuziemko et al. 2015)—all of which could undermine the link between low-income voters' demand for redistributive policies and policy outcomes.

An influential literature maintains that political institutions and electoral rules help explain cross-national variation in the relationship between inequality and redistributive policies. Iversen and Soskice (2006) argue that in countries with multiparty PR regimes, the center party is more likely to electorally align with a leftist than a rightist party and to form a left-leaning coalition government that taxes the rich, redistributes more, and, therefore, reduces post-tax inequality. By contrast, countries with plurality rule, which Duverger's Law predicts to have two-party systems, are more likely to be governed by a center-right single-party government that redistributes less; the middle class votes for the center-right party since taxation would be higher under a center-left party. Persson, Roland and Tabellini (2007) alternatively argue that redistribution is higher under PR *not* because of class coalition dynamics, but because PR rule promotes fragmented party systems and coalition governments in which each party aims to increase spending on programs it favors without fully internalizing the fiscal costs.

As mentioned above, these arguments share an important assumption—that society is divided into equal-sized and homogeneously distributed groups, and that political parties represent the groups' shared interests. However, I demonstrate that ignoring electoral and economic geography masks a crucial reason why inequality has not led to higher levels of redistribution. Combining insights from electoral geography with political economy models of redistributive politics, I argue that the spatial distribution of inequality can undermine the political logic of redistribution. In countries where inequality is geographically concentrated and elections are held under plurality rule with single-member districts, the electorally relevant median district is less unequal than

the nation as a whole. This feature undermines popular support for redistribution and voting for left-wing parties. It also weakens parties' incentives to develop policy platforms that favor redistributive policies.

Inter-personal inequalities (i.e., national-level inequality) and the rise of the "top 1%" have received considerable attention recently (e.g., Piketty 2014), but in many—though not all—countries, inter-regional inequalities have grown as well. For example, the United States has experienced a considerable divergence of incomes across states over the past decade (Ganong and Shoag 2017). The UK has one of the highest levels of regional inequality in the OECD (McCann 2020). The growing rifts between urban cores of the knowledge economy and "left-behind" areas are politically consequential: they have been identified as important drivers of populism and resentment, the vote for Brexit and the rise of Trump, and the polarization of policy preferences (Cramer 2016; McKee 2008; Rodríguez-Pose 2018). In many countries, urban voters with cosmopolitan values are loyal supporters of left-wing parties, while those in rural areas are more likely to vote for conservative parties (Gimpel et al. 2020; Maxwell 2019; Rodden 2019).

But we know little about the political consequences of the spatial distribution of inequality—or how it affects redistributive politics across countries. To fully understand why some countries redistribute more than others in response to rising inequality, we must take into account economic and political geography—which, as Rodden (2010) has observed, remains a blind spot in much comparative political economy work. In the following section, I develop my argument that the spatial concentration of inequality undermines redistributive politics under plurality rule by shaping voters' demands for redistribution and electoral support for left-wing parties as well as parties' strategic policy positions.

2.1 Political Preferences for Redistribution

The first implication of spatially concentrated inequality is that support for redistributive policies and leftist parties is concentrated in areas with high levels of inequality. The causes for locality-specific political preferences and behavior are still hotly debated. They may arise due to either *contextual effects* (i.e., living in a certain area and being exposed to particular socio-economic conditions and groups influences individuals' preferences and behavior), or *composition or selection*

effects (i.e., individuals self-select into specific localities, creating communities of like-minded people) (Bishop 2009; Gallego et al. 2016; Maxwell 2019).

Regardless of the causes, there are at least three reasons why local socio-economic conditions and contextual effects, including exposure to inequality, shape people's policy preferences and electoral behavior. First, people become attached to where they live, which creates and defines a politically relevant group (Agnew 1996; Johnston et al. 2000). For example, prior social psychology research has documented that on average, people care more about those who live close by than those who are further away (Tajfel et al. 1971). People develop context-specific attitudes through interpersonal interactions, persuasion, and political socialization (Beck et al. 2002; Huckfeldt and Sprague 1995). The second reason is that the objective local context and characteristics create subjective perceptions of place. Such "geotropic" considerations (Reeves and Gimpel 2012) about local economic factors and specific socio-economic groups and their (perceived) interests in turn shape evaluations of the economy and influence policy preferences and vote choice (Cutler 2007; Ebeid and Rodden 2006). Newman, Johnston and Lown (2015), for example, show that in highly unequal counties in the United States, low-income residents are more likely to reject notions of meritocracy, while high-income residents support this ideal. Finally, economic inequality is an abstract concept that people perceive concretely through personal experience, salience, and social comparison. Voters are more aware of local levels of inequality (Newman, Shah and Lauterbach 2018), in part because local cues are easier to observe and process than national-level statistics (Cho and Rudolph 2008). By providing information about the extent of inequality and highlighting status differences, local exposure to inequality increases support for redistribution (Franko 2016; Kraus, Park and Tan 2017; Sands and de Kadt 2020). For instance, Minkoff and Lyons (2019) illustrate that people who live in unequal neighborhoods are more likely to perceive a large income gap and to believe it should be reduced. Together, these reasons suggest that people who reside in high-inequality localities should be more supportive of redistribution.

Electoral rules amplify the effect of spatial inequality on preference formation and vote choice (Rodden 2010, 2019). When inequality is spatially concentrated, the median district is less unequal than the nation as whole. Under plurality rule, this pattern undermines the link between inequality and redistribution because it concentrates support for redistribution and vote choice among left-leaning parties in a few districts. If population density and vote margins are high enough in

these districts that votes and preferences are "inefficiently" distributed from the perspective of leftist parties, a pro-redistribution coalition can garner only a limited number of seats and accumulate only a modest amount of political power.

2.2 Party Policy Positions and Strategies

The second implication of spatial inequality under plurality rule is that political parties adopt less redistributive party platforms. When parties decide how much to emphasize redistribution in their electoral manifestos, they must balance the interests of their loyal core constituency with those of swing voters they are trying to win over. The median voter in the median district—the key electoral target in majoritarian systems—is exposed to lower levels of inequality, and is thus less supportive of redistribution as I will show below. As a result, left-wing parties choose more centrist and less redistributive platforms to appeal to this median voter and to fend off competition from third-party challengers (Besley and Preston 2007).

Under plurality rule, parties have a greater incentive to provide targeted pork-barrel spending to increase their chances of staying in office, while PR rule encourages politicians to spend more on universalist programs (Catalinac and Motolinia 2021; Chang 2008; Rickard 2018). Jusko (2017) documents that the distribution of low-income voters across electoral districts influences politicians' incentives to enact policies that are in their interests. Jurado and León (2019) similarly demonstrates that parties in majoritarian countries are more responsive to social policy recipients when they are geographically concentrated because beneficiaries become pivotal voters in a given district, which increases the potential electoral rewards of courting them and helps politicians coordinate their electoral strategies. If inequality and voters' ensuing demands for redistribution are clustered in space, left-wing political parties have few electoral incentives to promote broad, national redistributive programs when elections are held under plurality rule. In the following sections, I provide empirical evidence to support my argument.

3 Cross-National Variation in Spatial Inequality and Redistribution

I begin with a cross-national perspective on how the relationship between spatial inequality and redistribution varies across countries with different electoral regimes. I analyze data from the OECD Regional Wellbeing Database (OECD 2018), which contains information on regional pre-

and post-tax Gini coefficients and offers the most comprehensive cross-national data on regional income distributions. The Gini index ranges from 0 (perfect equality) to 1 (perfect inequality). The outcome of interest is the extent of a country's level of redistribution, measured as the difference between pre- and post-tax regional Gini coefficients. The main independent variable is the spatial concentration of pre-tax inequality, which I measure by calculating the nationwide standard deviation of the regional pre-tax Gini coefficients: higher values indicate that income inequality is concentrated in a few regions, whereas lower values reflect a more equal distribution of regional income inequality. I also calculate the nationwide Gini index of the regional Gini coefficients as an alternative indicator of spatial inequality. I use the classification of electoral regimes developed by the International Institute for Democracy and Electoral Assistance (International IDEA) to create a binary indicator of PR or plurality/majoritarian rule. I code the following countries that International IDEA classifies as "mixed" as PR: Germany and Hungary as well as Japan since 1994 and New Zealand since 1996. Excluding countries with data for only one region, the final dataset contains 252 regions in 25 countries. Appendix Table A.1 presents detailed summary statistics.

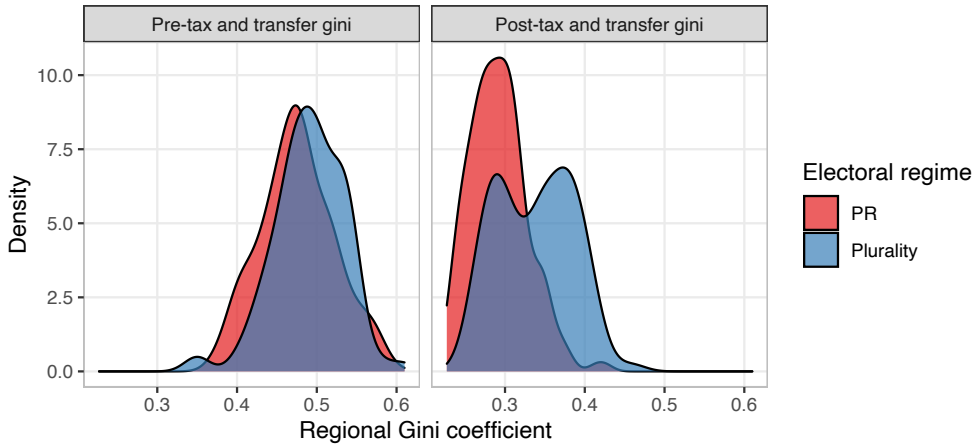
Figure 1 illustrates the spatial distribution of pre- and post-tax inequality as measured by regional Gini coefficients across plurality and PR electoral regimes. The nationwide distribution of *pre-tax* regional inequality varies little across electoral regimes, while *post-tax* regional inequality is one standard deviation lower in countries that have a PR electoral system (mean 0.29) than in those with plurality rule (mean 0.34).

To account for potential confounders, I formally estimate the effect of electoral rules on redistributive outcomes when pre-tax inequality is spatially concentrated using the following regression model:

$$Y_{r[i]} = \beta_1 SD_i^{Gini} + \beta_2 E_i + \beta_3 \left(SD_i^{Gini} \cdot E_i\right) + \mathbf{X}_i'\gamma + \alpha_i + \epsilon_i \tag{1}$$

where $Y_{r[i]}$ is fiscal redistribution in region r of country i, measured as the difference in the regional pre- and post-tax Gini coefficients. SD_i^{Gini} is the country-level standard deviation of pre-tax regional inequality, the measure of spatial concentration of inequality. E_i is a binary indicator that is coded 1 for plurality rule and 0 for PR electoral regimes. $\mathbf{X}_i$ is a matrix of the following country-level covariates. I include per capita GDP and the unemployment rate to account for macro-economic conditions that can influence inequality and the demand for social policies. Since

Figure 1: Spatial Distribution of Pre- and Post-Tax Regional Inequality By Electoral Regime



Notes: Data from 252 regions across 25 OECD countries.

unions can influence pre-tax inequality through wage compression and union wages (Huber and Stephens 2001), I control for union density and the adjusted wage bargaining coverage rate using data from the OECD/AIAS Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts database.[2] I control for voter turnout to account for income bias in voting—in particular low turnout among the poor, which could undermine the link between inequality and redistribution (Gilens 2012). To rule out the possibility that countries with a higher probability of electing left-leaning governments (Iversen and Soskice 2006) and forming coalition governments (Persson, Roland and Tabellini 2007) are driving the link between electoral rules and redistribution, I control for the share of cabinet seats held by leftist parties and whether the government is a coalition government Finally, I include a set of indicators that captures veto points and gridlock, either of which could make it harder for left-leaning parties to overcome opposition to redistribution (Huber, Ragin and Stephens 1993), including indicators for weak and strong federalism, presidentialism, and bicameralism. ϵ_{it} is the idiosyncratic error term. Robust standard errors are clustered at the country level to account for spatial correlation of regions within countries.

The results, reported in Table 1, demonstrate that the spatial concentration of inequality is associated with considerably less redistribution in countries with plurality rule than in those with

[2]https://www.oecd.org/employment/ictwss-database.htm

Table 1: Effect of Spatial Concentration of Inequality on Redistribution

	Dependent variable:					
	Difference pre-/post-tax Gini					
	OLS			*2SLS*	*OLS*	*2SLS*
	(1)	(2)	(3)	(4)	(5)	(6)
Plurality rule	0.03***	0.10***	0.12***	0.13***	0.14***	0.14***
	(0.01)	(0.01)	(0.01)	(0.03)	(0.02)	(0.03)
SD pre-tax Gini	0.90***	1.22***	2.31***	2.49***		
	(0.11)	(0.18)	(0.20)	(0.34)		
Gini of pre-tax Gini					2.57***	2.57***
					(0.26)	(0.42)
Plurality rule	−2.04***	−2.92***	−4.89***	−6.09***		
× SD pre-tax Gini	(0.37)	(0.35)	(0.62)	(1.30)		
Plurality rule					−5.55***	−5.98***
× Gini of pre-tax Gini					(0.61)	(1.08)
Mean DV	0.18	0.18	0.18	0.18	0.18	0.18
Countries	25	25	25	25	25	25
Macro-economic covariates	–	✓	✓	✓	✓	✓
Political covariates	–	–	✓	✓	✓	✓
F-statistic	–	–	–	274.38	–	289.98
Observations	304	304	304	304	304	304
R^2	0.18	0.34	0.61	0.60	0.59	0.59
Adjusted R^2	0.17	0.32	0.59	0.58	0.58	0.57

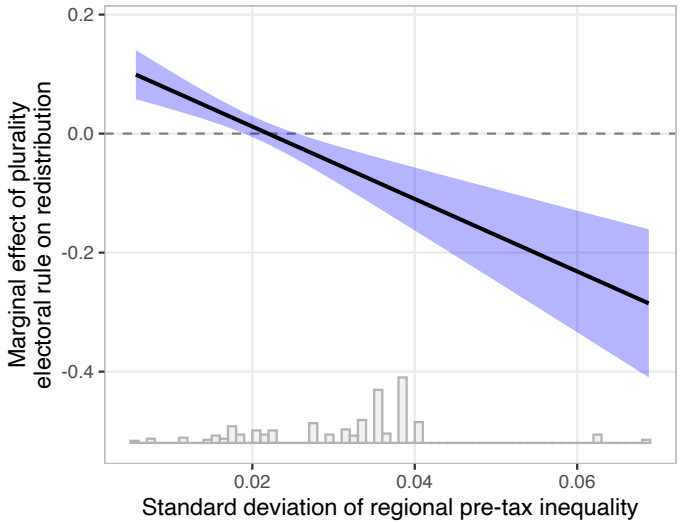
Notes: All models are based on equation 1. The Gini index measures regional inequality within countries. Bootstrapped standard errors are clustered at the country level and reported in parentheses. The 2SLS regressions (columns 4 and 6) instrument plurality rule with the year a country adopted its current constitutional electoral rule. Full results in Appendix Table A.2. *p<0.1; **p<0.05; ***p<0.01.

PR electoral systems. The results are robust to controlling for both macro-economic covariates (column 2) and political covariates (column 3).

A potential concern with this cross-sectional model is that electoral rules are endogenous to inequality and redistribution, for example because their choices reflect partisan bargains between left and right parties over constitutional design (Boix 1999; Rodden 2019). To address potential endogeneity concerns and omitted variable bias, I estimate a two-stage least squares (2SLS) model in which I instrument electoral rules with the year when a country introduced the current electoral rule.[3] The rationale is that older constitutions and electoral regimes tend to be majoritarian, whereas more recent constitutions are more likely to adopt PR electoral rule. The exogeneity assumption requires that the instrument—the year when the constitution (or constitutional reform) was introduced—is unrelated to the outcome of interest and only affects it through the main de-

[3]See Persson and Tabellini (2003) for a similar approach.

Figure 2: Marginal Effect of Plurality Rule on Redistribution by Spatial Concentration of Inequality



Notes: Regression coefficients with 95% confidence bands based on column 4 in Table 1. Plurality rule is instrumented with the constitution's year of origin.

pendent variable, the electoral regime type. There is little reason to expect the timing of constitutional adoption to systematically influence redistributive policies *and* spatial inequality. The first-stage regression confirms that there is a strong relationship between the year the current electoral regime was adopted and the probability of plurality rule; the conditional F-statistic of 275 indicates a strong instrument (see Appendix Table A.3). The results from the 2SLS model in column 4 confirm those from the OLS models. Figure 2 plots the interaction effect, which shows that greater spatial concentration of inequality is associated with less redistribution under plurality rule. As an additional robustness check, I use the Gini index of the region pre-tax Gini coefficients as an alternative measure of the spatial concentration of inequality. The results of the OLS and 2SLS models remain similar (columns 5 and 6). All model specifications indicate that countries with plurality rule redistribute and reduce post-tax inequality much less when inequality is spatially concentrated than those with PR rule.

To investigate why the spatial concentration of inequality undermines redistribution in countries with plurality rule but not those with PR regimes, in the next section I focus on a country with plurality election rules. I examine how the interaction of political geography and the distribution of inequality in the United Kingdom influences voters' demands for redistribution and electoral support for left-wing parties and shapes the political logic of redistribution.

4 The Geography of Inequality and Redistributive Preferences in the United Kingdom

The United Kingdom is an ideal case for studying why rising inequality has not led to more redistribution. Income inequality has grown considerably in the country over the past few decades. By the end of 2020, the income of the richest 20% was six times higher than that of the poorest 20%.[4] But nationwide inequality statistics mask considerable regional variation, as I show below, which has important implications for redistributive politics under plurality rule.

I begin this section by documenting changes in (and spatial concentration of) levels of inequality across the UK. I then draw on individual-level survey data to show how spatially concentrated inequality influences voters' demands for redistribution and electoral support for left-wing parties. Finally, I analyze the outcomes of all four general elections held in the 2010s to document that the spatial concentration of inequality, redistributive preferences, and votes for the Labour Party limit the extent to which preferences and votes are translated into political power.

4.1 Spatial Distribution of Income Inequality

How is inequality distributed within the United Kingdom? I measure regional variation in income inequality by collecting administrative data on annual mean and median total income by parliamentary constituency from HM Revenue & Customs' national statistics on income and taxes. This data is based on the Survey of Personal Incomes, which covers all individuals who are liable for income tax; it is available for 2011–2019. I then follow the Meltzer-Richard framework and calculate constituency-level inequality as the difference between mean and median total income.

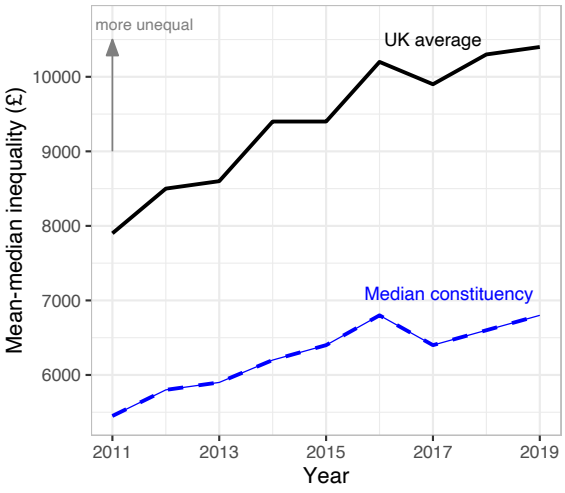
To contextualize the spatial distribution of income inequality and assess its concentration in urban centers of the knowledge economy, I use constituency population density based on ONS data as well as a classification of constituencies into six categories along the urban–rural spectrum.[5] Where constituencies are comprised of different settlement categories, I use the classification that covers more than 50% of a constituency. I then group them into four categories: London, cities outside London, towns, and villages.

[4] Office of National Statistics (ONS). 2020. Household Income Inequality, UK: Financial Year Ending 2020.

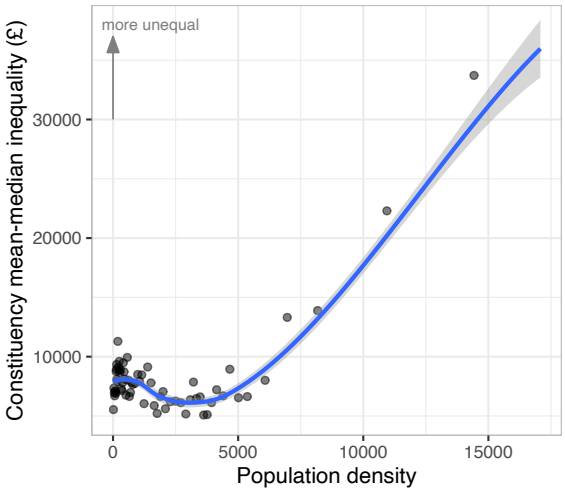
[5] These categories are based on the House of Commons Library's City and Town Classification of Constituencies (core cities, "other" cities, large, medium, and small towns, and villages and small communities). Where population density is not available, I calculate it by dividing the constituency-level population by the constituency's surface area. The number and boundaries of constituencies remained unchanged during this period.

Figure 3: Spatial Dimension of Income Inequality in the UK

(a) By UK Average and Median Constituency



(b) By Population Density



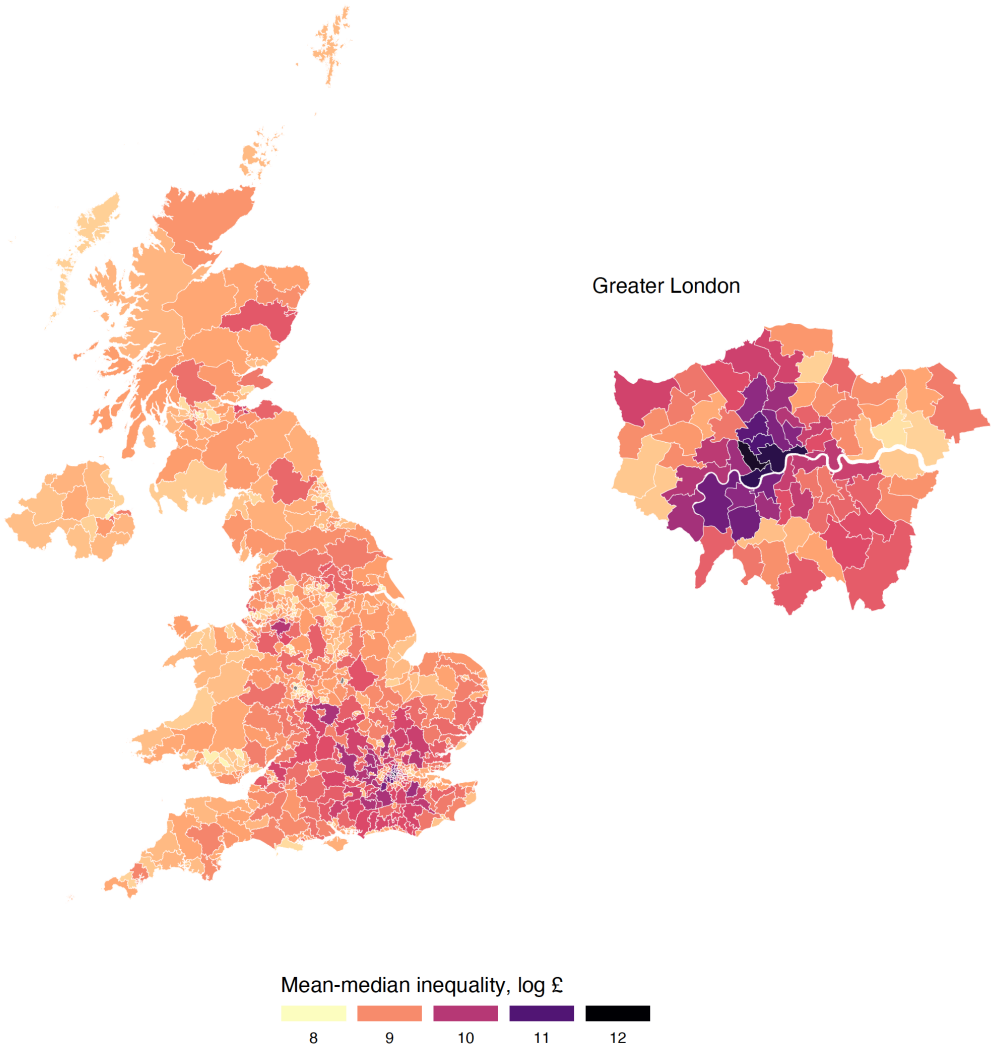
Notes: Inequality is measured as the difference between mean and median income. Data for all 650 UK constituencies. Panel (b) is a binscatter plot with a loess smoothed regression line for the period 2011–2019.

Figure 3a displays changes in income inequality for the UK as a whole and for the median constituency. The nationwide inter-personal income distribution became considerably more unequal during the early 2010s and stabilized slightly later that decade. In 2019, the average total income in the United Kingdom was £10,400 higher than the nationwide median, an increase of 32% compared to 2011—which is one-third of the average UK household income (£29,900 in 2019).[6] Median inequality across constituencies, however, has increased by only 25% during the same period. In 2019, mean-median inequality in the median constituency was £3,600 lower than in the nation overall, highlighting the importance of disentangling inter-personal from inter-regional inequality.

Figure 3b shows that inequality increases sharply with population density. Densely populated urban constituencies are much more unequal than sparsely populated rural areas. These geographic patterns are also visible in Figure 4, which plots inequality across constituencies in the UK and for the 73 constituencies of Greater London in 2019 . Nine of the country's ten most unequal constituencies are in London (the exception is Esher and Walton); Kensington leads with a mean total income that is £125,900 higher than the constituency median. The most equal con-

[6]ONS. 2020. Average household income, UK: financial year 2020.

Figure 4: Spatial Distribution of Inequality across UK Constituencies, 2019



Notes: Inequality is measured as the log difference between mean and median total income. Higher values indicate more inequality.

stituency is Blackpool North and Cleveleys in Lancashire in the Northwest of England. Appendix Table B.1 ranks the ten most unequal and equal constituencies in 2019. These findings illustrate that inequality in the median constituency is considerably lower than in the nation as a whole, and that it is concentrated in densely populated constituencies in large cities—particularly the London metro area.

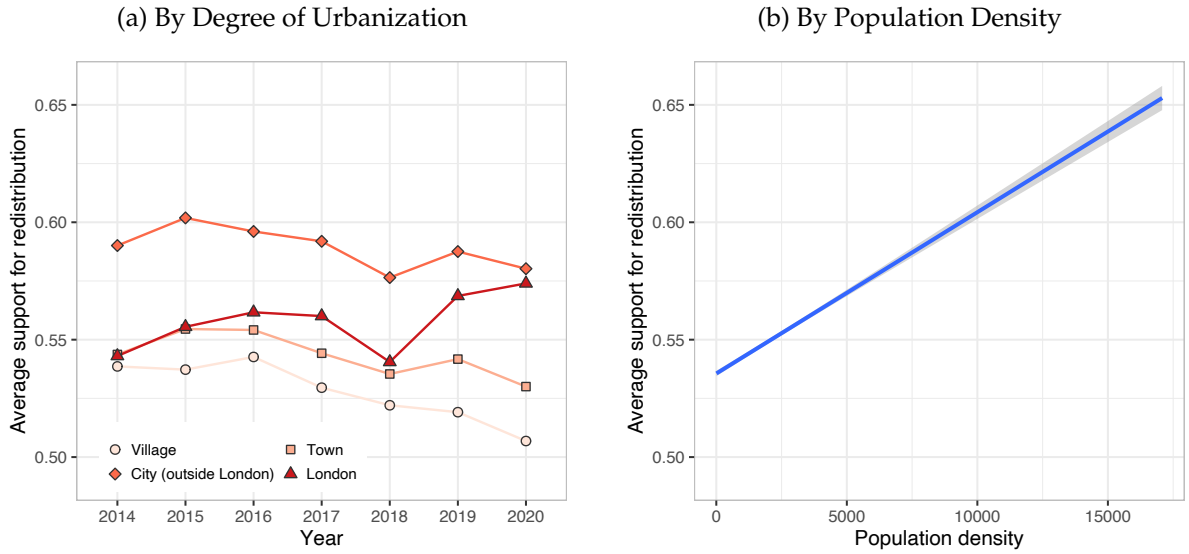
4.2 Spatial Distribution of Preferences

How does the spatial distribution of inequality influence political preferences and support for redistributive policies? I argued above that individuals who live in localities with high levels of inequality should demand more redistribution than those who reside in more equal localities. To test this argument, I combine the previously constructed measures of constituency-level income inequality, population density, and urban–rural classifications with individual-level survey data from several waves of the British Election Study (BES) to estimate the contextual effect of local-level inequality on voters' support for redistribution. The BES is an ideal data source because it contains respondents' constituencies and a large enough sample (about 30,000 respondents per wave) to estimate constituency-level redistributive preferences. In waves 1–4, 6–7, and 10–20 (2014–2020), the BES asked respondents the following question about redistribution: "Some people feel that government should make much greater efforts to make people's incomes more equal. Other people feel that government should be much less concerned about how equal people's incomes are. Where would you place yourself on this scale?" Answers ranged on a 11-point scale from "Government should try to make incomes equal" to "Government should be less concerned about equal incomes." I normalize respondents' answers to range between 0 and 1. Higher values indicate more support for redistribution and income equality. To ensure reliable constituency-level estimates, I exclude constituency-years with fewer than 50 respondents. The average number of respondents per constituency is 139 (SD 83). The results are similar if the full data is used. Appendix Sections C.1 and C.2 report summary statistics.

Descriptive Patterns

Figure 5a plots the development of support for redistribution along the urban–rural classification scheme. In London, support for redistribution has increased since 2018 to match the average level of support found in other cities. Towns, and especially villages, however, became less supportive of redistribution. Since the urban–rural classification can be imprecise, Figure 5b plots the relationship between population density and support for redistribution. More densely populated urban constituencies are more in favor of redistribution than sparsely populated rural constituencies. In 2020, residents of cities, including London, were 0.26 standard deviations more supportive of redistribution than village residents.

Figure 5: Spatial Dimension of Support for Redistribution in England and Wales



Notes: Data from all 650 UK constituencies. Panel (b) is a loess smoothed line.

Local Inequality and Support for Redistribution

I estimate the following regression model to assess how constituency-level inequality shapes voters' redistributive preferences:

$$Y_{it[c]} = \beta_1 Ineq_{ct} + \mathbf{X}'_{it}\gamma + \mathbf{Z}'_{ct}\lambda + \alpha_c + \delta_t + \epsilon_{it} \tag{2}$$

where Y_{it} denotes the level of support for redistribution displayed by individual i in constituency c at time t. $Ineq_{ct}$ is the constituency-level mean-median inequality in log GBP. I add several individual- and constituency-level covariates that could confound the relationship between inequality and redistributive preferences. $\mathbf{X}'_{it}$ is a matrix of individual-level covariates, including age, number of children in the household, gender, employment status, and homeownership. I also control for gross household income and education (six education categories) to account for the fact that high-income and highly educated people are more likely to hold cosmopolitan and socially liberal values and to live in urban areas (Maxwell 2019). $\mathbf{Z}'_{ct}$ is a matrix of constituency-level covariates, including median property price (log), total mean income (log), the share of the population with a degree, and the share of the population that works in the service sector. Constituency fixed effects (α_c) capture all time-invariant constituency characteristics, ensuring within-

Table 2: Effect of Constituency-Level Inequality on Support for Redistribution

	Dependent variable:			
	Support for redistribution			
	(1)	(2)	(3)	(4)
Constituency inequality (log)	0.029***	0.023**	0.005	0.007
	(0.009)	(0.010)	(0.010)	(0.009)
Vote for Labour			−0.112***	
			(0.040)	
Vote for Tories				−0.166***
				(0.036)
Constituency inequality (log) × Vote for Labour			0.034***	
			(0.004)	
Constituency inequality (log) × Vote for Tories				−0.007*
				(0.004)
Mean DV	0.56	0.559	0.558	0.558
Constituency FE	✓	✓	✓	✓
Year FE	✓	✓	✓	✓
Individual-level covariates	✓	✓	✓	✓
Constituency-level covariates	–	✓	✓	✓
Observations	264,721	254,718	250,733	250,733
R^2	0.092	0.092	0.163	0.198
Adjusted R^2	0.090	0.090	0.160	0.196

Notes: All models are based on equation 2. Full results in Appendix Table D.1.
*p<0.1; **p<0.05; ***p<0.01.

constituency comparisons in response to a given level of inequality. Year fixed effects (δ_t) address common time shocks. Robust standard errors are clustered at the constituency level.

Table 2 shows that an increase in constituency mean-median inequality is associated with more support for redistribution.[7] These results take into account individual-level characteristics (column 1) and are robust to adding constituency-level covariates (column 2) that could influence redistributive preferences, such as income levels or house prices (Ansell 2014). My argument suggests that the spatial concentration of inequality undermines redistributive policies because voters who favor redistribution and support left-wing parties are concentrated in a small number of constituencies, which reduces the overall number of parliamentary seats a pro-redistribution political coalition can obtain. One observable implication of this argument is that higher levels of inequality should lead to stronger demands for redistribution among left-leaning voters than among right-leaning voters. I test this hypothesis by interacting my inequality measure with a binary indicator of individuals' vote choice to see whether partisanship mediates how exposure to

[7] Appendix Table D.2 reports the results of regression models using the full sample including constituencies with 50 respondents or less.

local inequality shapes redistributive preferences. In election years, respondents to the BES were asked which party they would vote for (pre-election waves) or did vote for (post-election waves). In off-election years, they were asked "If there were a UK General Election tomorrow, which party would you vote for?" Focusing on the two main parties, I define a binary party vote choice indicator that takes a value of 1 if the respondents indicated voting for either Labour or the Tories, and 0 otherwise.

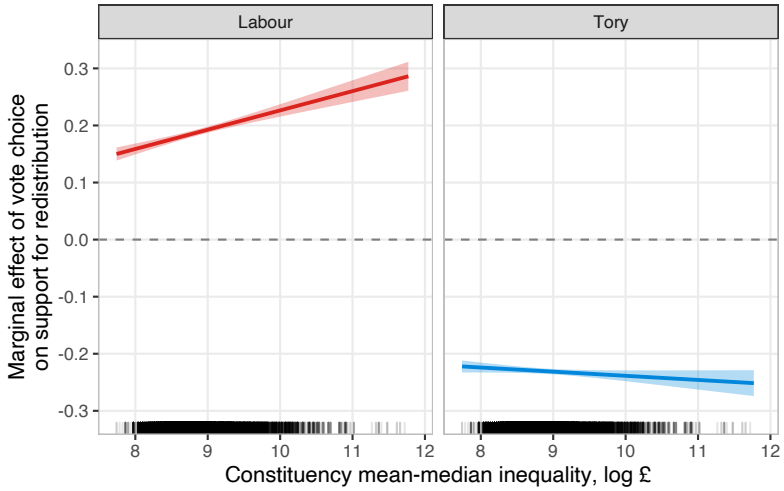
The results, displayed in columns 3 and 4 in Table 2 and Figure 6, show that higher levels of inequality lead to more support for redistribution among Labour Party (but not Conservative Party) voters within similar constituencies. A 50% increase in local inequality strengthens the demand for redistribution among Labour voters by 0.26 standard deviations but leaves Tory voters' preferences virtually unchanged. Labour supporters in above-median constituencies are on average more educated, richer, and less likely to be homeowners and married compared to Labour supporters living in below-median constituencies (Appendix Table C.3).

These findings establish that pro-redistributive preferences are stronger in densely populated urban constituencies with high levels of inequality, and that Labour supporters are the driving force behind the growing demand for redistribution in unequal constituencies. As voters form preferences in response to their local economic context, the spatial concentration of inequality concentrates and limits voters' demand for redistribution and support for left-wing parties to a few high-inequality constituencies. In the next section, I show that these dynamics undermine the political logic of redistributive politics and the political power of left-wing, pro-redistribution coalitions when legislators are elected under plurality rule.

5 Implications for Political Power and Left Political Coalitions

So far, I have documented that spatially concentrated inequality undermines the political logic of redistribution under plurality rule by concentrating and limiting demand for redistribution and electoral support for left-wing parties to a few densely populated urban constituencies. I now examine the 2010, 2015, 2017, and 2019 UK general elections to evaluate the electoral consequences of these dynamics and to show how economic and political geography limits the political power

Figure 6: Effect of Constituency Inequality on Redistributive Preferences, by Party Affiliation



Notes: Regression coefficients with 95% confidence bands based on columns 3 and 4 in Table 2.

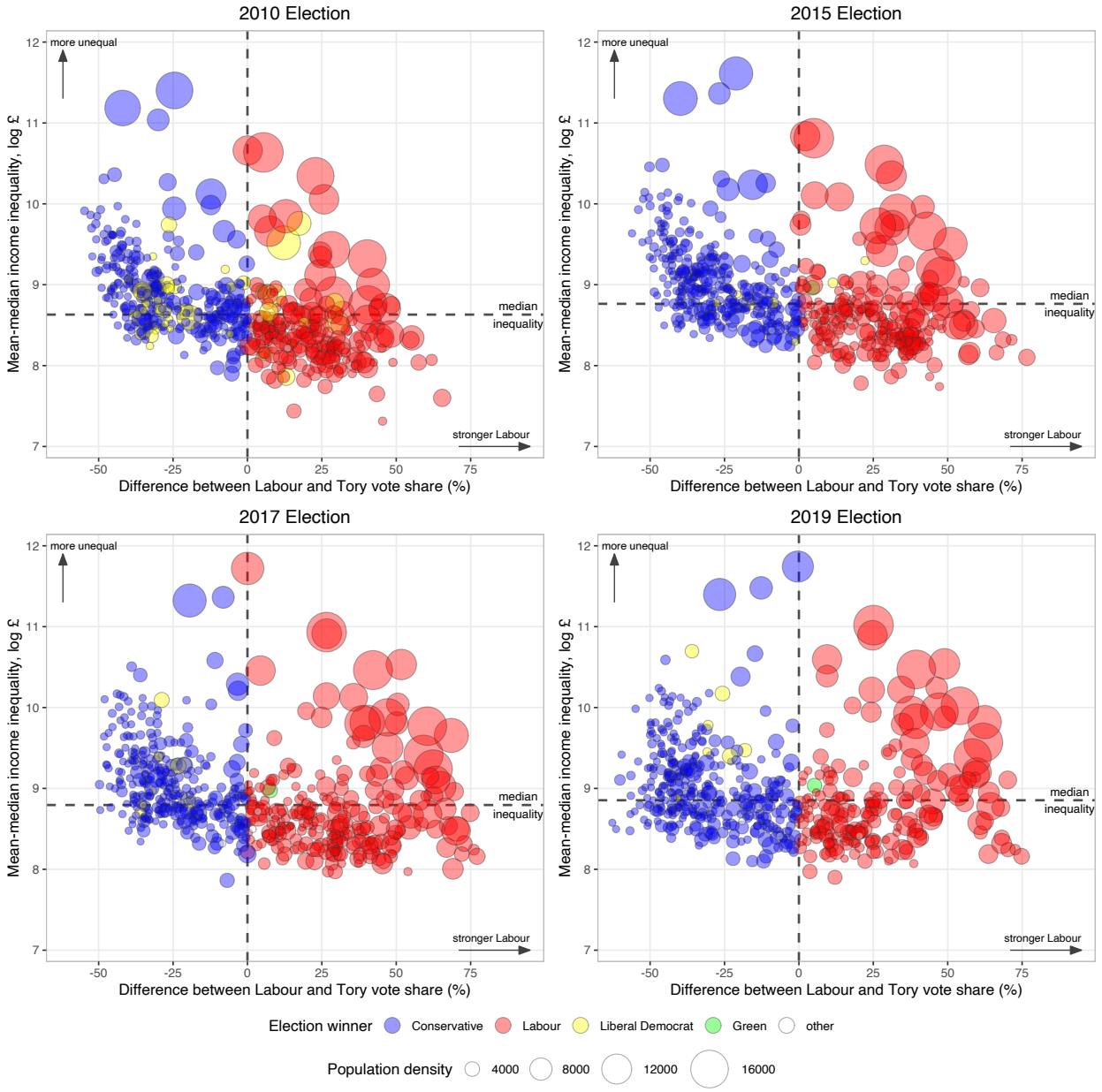
of left-wing parties.[8] I focus on constituencies in England and Wales to assess the electoral competition between the UK's two main parties and combine constituency-level election outcomes, obtained from the House of Commons Library, with my previously constructed mean-median inequality measure. Since inequality data is only available since 2011, I use the 2011 inequality data as a reasonable approximation of inequality levels relevant for the 2010 election.

Figures 3b and 5b documented that densely populated urban constituencies are more unequal and more pro-redistribution and left leaning. To determine the extent to which population density shapes the electoral landscape, I match constituency-level electoral results with previously constructed population density data. The panels in Figure 7 show the election results and seats won for all 573 constituencies in England and Wales, arranged by mean-median inequality and vote margin for the two major parties—Conservative and Labour—for the 2010, 2015, 2017, and 2019 general elections. The size of each circle is proportional to the constituency's population density and color coded according to the party that won the seat. The dashed horizontal line is the log median inequality in a given election year, dividing the electoral space into constituencies with above- and below-median inequality.

Two facts stand out. First, the Labour Party has won considerably fewer constituencies with

[8]Partisan interference through redistricting that would influence spatial inequality and district boundaries is unlikely because redistricting in the UK is conducted through periodic reviews by independent, non-partisan Boundary Commission panels based on Census data to meet legally defined criteria.

Figure 7: Income Inequality, Partisan Leaning, and Seats Won in English and Welsh Constituencies, 2010–2019 General Elections



Notes: Each circle represents one of 573 constituencies in England and Wales. The size of the circle is proportional to population density (measured as people per square kilometer). Constituency inequality is measured as the difference between mean and median total income. "Other" parties include the UK Independence Party, Plaid Cymru and the constituency of the Speaker of the House of Commons.

above-median inequality than the Tories. Second, and perhaps more importantly, Labour-leaning constituencies with above-median levels of inequality (upper-right quadrants) have a much higher population density than Tory-leaning constituencies with above-median inequality (upper-left).

Across all elections, the population density of constituencies with above-median inequality and a

Table 3: Constituencies Won and Population Density by Income Inequality across General Elections

			General Election							
			2010		2015		2017		2019	
			Tory	*Labour*	*Tory*	*Labour*	*Tory*	*Labour*	*Tory*	*Labour*
Constituency inequality	*above median*	Constituencies won	212	48	229	60	204	75	207	71
		Avg. population density	1,146	5,915	1,124	6,445	991	5,750	1,038	6,400
	below median	Constituencies won	92	169	101	171	100	180	152	130
		Avg. population density	1,250	2,640	1,469	2,737	1,255	2,851	1,325	3,220

Notes: Inequality is measured as the mean-median total income difference. Constituencies where the difference between Labour and Tory vote share is larger than zero are classified as Labour leaning (and vice versa for Tories). Data for 573 constituencies in England and Wales won by either the Conservative Party or the Labour Party. Population density is measured as people per square kilometer.

positive Labour vote share is, on average, 5.3 times higher than similarly unequal but conservative-leaning constituencies.

Table 3 details how the Conservatives and the Labour Party fared in each election in constituencies above and below that year's median level of inequality. For each party, I report the number of constituencies won and the average population density. In the December 2019 general election, the Conservative Party led by Boris Johnson won 43.6% of the popular vote and gained a landslide majority of 80 seats. The Labour Party under Jeremy Corbyn won 32.1% of the popular vote and 201 seats in that election. The Tories won 207 of the 287 above-median-inequality constituencies' seats, while the Labour Party won only 71.[9] All high-inequality constituencies won by Labour had a 5.7 times higher population density than those won by the Tories. While the average vote margin in those constituencies in 2019 was 4.4 percentage points higher in Tory than in Labour constituencies, four of the five constituencies that were won by a margin of more than 60% went to the Labour Party.[10] These patterns between Labour and the Conservatives are much less pronounced among below-median-inequality constituencies. In the 2019 election, Labour won 130 constituencies with a 2.1 times higher population density than the 152 constituencies won by the Tories.

These differences hold across all four elections in the 2010s. In 2017—the post-Brexit snap

[9]Seven of the remaining seats went to the Liberal Democrats, one to the Green Party, and one to the Speaker of the House.

[10]Liverpool Riverside (70.2%), Walthamstow (63.9%), Hackney South and Shoreditch (62.4%), and Bethnal Green and Bow (62%). Castle Point, 60.1%, went to the Tories.

election after parliament was dissolved in April—Labour won the most seats out of all four elections (255), but only 60 in high-inequality constituencies. Yet this election, like the others, was electorally costly because Labour won with high vote margins and predominately in constituencies with considerably higher population densities. Labour secured a total of 14 above-median-inequality constituencies in all four elections by a margin of more than 60%; the Tories won only one constituency by such a margin.

The spatial concentration of inequality—and, as a result, the clustering of demand for redistribution and electoral support for Labour—undermines the political power of left-wing parties under plurality rule and makes it difficult to enact redistributive policies. Throughout the 2010s, Labour won less than a third of all seats in above-median-inequality constituencies even though it represented constituencies with nearly six times the population density of those with above-median inequality won by the Tories. And since Tory supporters are largely unresponsive to higher levels of local inequality (see Figure 6), the demand for redistribution is overall lower even in highly unequal Tory constituencies.

6 Comparative Party Strategies: Evidence from Party Manifestos

When spatial inequality meets plurality districts, support for redistribution and voting for leftist parties is concentrated in a few constituencies, which limits the translation of preferences and votes into political power and therefore undermines political responses to inequality. In this final section, I examine the extent to which these dynamics—in particular the lack of redistribution in response to inequality—can be attributed to voters' demands for redistribution and support for left-wing parties vs. differences in the extent of redistributive policies of left-leaning parties' platforms across different electoral regimes.

Party manifestos are strategic documents written by party elites to communicate policy priorities and issue salience. Since parties compete for the median voter in the median district under plurality rule, they carefully calibrate their manifestos to balance the interests of their core partisan constituents with those of potential swing voters in median districts. Left-wing parties that move away from the center risk losing seats to third-party competitors such as liberals (Rodden 2019). We should therefore expect left-wing parties in plurality rule countries to hold more centrist

positions and to be less likely to adopt pro-redistributive platforms when inequality is high than left-wing parties in PR countries.

I evaluate data on party manifestos to examine whether electoral rules shape parties' redistributive policy positions under inequality. Manifestos offer focal points for electoral campaigns and, to varying degrees, commit politicians to specific policy positions. This makes them useful documents to extract comparative policy positions. I draw on data from the Comparative Manifesto Project (CMP; Volkens et al. 2020), which derives parties' policy positions by analyzing the content of their electoral manifestos. This data offers the most appropriate measure of my dependent variable for the largest number of countries and time periods. I use the "Welfare" dimension to measure parties' policy stance on social policy and redistribution. This metric combines a "positive equality" dimension, which includes topics related to social justice and the fair treatment of people and distribution of resources, and a "welfare state expansion" dimension, which includes favorable mentions of the need to introduce, maintain, or expand public social services or social security schemes. The welfare dimension measure ranges from 0 to 50 (SD 7.9); higher values indicate stronger pro-welfare positions. For details, see Appendix Section E.1.

To what extent do electoral rules influence left-wing parties' redistributive policy positions under inequality? I use the CMP classification of party families to code parties as follows: ecological parties, social democratic parties, socialist or other left parties are classified as "left wing," and Christian democratic parties, conservative parties, and nationalist parties are coded as "right wing." Except for New Zealand, which switched from a plurality voting system to PR in 1996, I use the same electoral regime coding as before. I measure inequality as the post-tax national-level Gini coefficient based on the Standardized World Income Inequality Database (Solt 2020). I use post-tax inequality because it captures the type of inequality voters experience and care about. For each election year, I use the post-tax Gini coefficient from the prior election to allow voters and parties to internalize changes in inequality and adjust preferences and party platforms accordingly. The final dataset covers 35 OECD countries for the period 1980–2018. I first estimate how parties' policy positions regarding welfare and redistribution vary across party typologies and electoral regimes in the following regression model:

$$Y_{it} = \beta_1 E_{it} + \beta_2 PT_{it} + \beta_3 \left(E_{it} \cdot PT_{it}\right) + \mathbf{X}'_{it}\gamma + \alpha_i + \delta_t + \epsilon_{it} \tag{3}$$

where Y_{it} denotes party i's position on welfare in election year t. E_{it} is a binary indicator of whether a country has plurality electoral rules. PT_{it} is an indicator of whether party i is left wing or liberal; right-wing parties are the omitted baseline. $\mathbf{X}_{it}$ is a matrix of time-varying country-level covariates that can influence parties' policy stances and issue positions such as party vote and seat shares as well as turnout. Larger parties with more electoral influence are more likely to offer more moderate ideological positions to appeal to a broader segment of the electorate (Ezrow 2008). I control for GDP per capita and the unemployment rate as baseline economic indicators that could influence the demand for and supply of social policies. Finally, I include an index of legislative fractionalization of the party system to account for the political system's degree of political fragmentation and institutional permissiveness, which could incentivize smaller parties to take extreme positions and increase the likelihood of coalition governments. α_i and δ_t are country and election-year fixed effects, which control for time-invariant unobserved heterogeneity across countries as well as common time shocks. Robust standard errors are clustered at the country level. Summary statistics and data sources appear in Appendix Section E.2.

I then restrict my attention to left-wing parties to examine how much their policy stances vary as a function of inequality and electoral rules in the following model:

$$Y_{it} = \beta_1 E_{it} + \beta_2 I_{it_{-1}} + \beta_3 \left(E_{it} \cdot I_{it_{-1}}\right) + \mathbf{X}'_{it}\gamma + \alpha_i + \delta_t + \epsilon_{it} \tag{4}$$

where $I_{it_{-1}}$ is country i's post-tax Gini coefficient from the prior election year. The control variables ($\mathbf{X}'_{it}$) remain the same.

The results in Table 4 and Figure 8 show that parties' welfare positions differ considerably across electoral regimes. Left-wing parties in countries with plurality rule are considerably less "pro-welfare" and much closer to (and statistically indistinguishable from) liberal parties compared to left-wing parties in PR election regimes. In those countries, left-wing parties have stronger pro-welfare positions and a distinct profile that separates them from liberal and conservative parties. These results are robust to party- and country-level covariates (column 2).

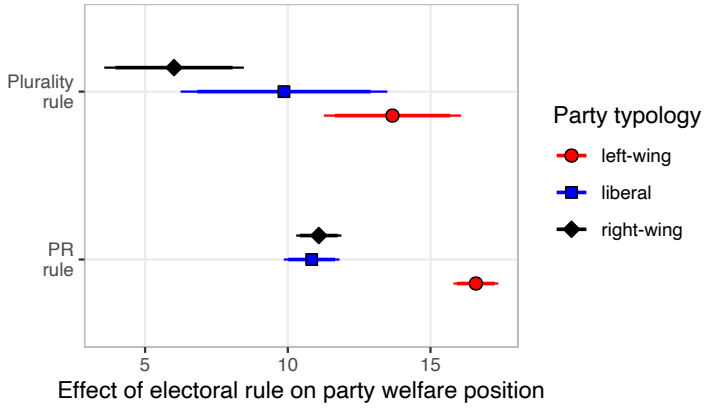
But how much do left-wing parties' policy positions on welfare vary across electoral regimes as a function of inequality? Table 5 and Figure 9 illustrate that left-wing parties are considerably less likely to favor redistribution when inequality is high and elections are held under plurality

Table 4: Effect of Plurality Rule and Party Typology on Welfare Position

	Dependent variable:	
	Welfare Position	
	(1)	(2)
Plurality rule	−4.77***	−5.07***
	(1.72)	(1.46)
Party type: liberal	−0.33	−0.25
	(0.50)	(0.50)
Party type: left-wing	5.50***	5.50***
	(0.53)	(0.51)
Plurality rule × Party type: liberal	4.01***	4.10***
	(1.27)	(1.15)
Plurality rule × Party type: left-wing	2.02	2.15
	(1.37)	(1.39)
Mean DV	13.18	13.18
Country FE	✓	✓
Election year FE	✓	✓
Covariates	–	✓
Observations	1,815	1,815
R^2	0.38	0.38
Adjusted R^2	0.35	0.35

Notes: All models are based on equation 3. Party type "right wing" is the omitted baseline. Full results are in Appendix Table E.2. *p<0.1; **p<0.05; ***p<0.01.

Figure 8: Marginal Means of Electoral Rules on Party Welfare Positions



Notes: Regression coefficients with 90% and 95% confidence intervals based on column 2 in Table 4. Higher values on the welfare dimension indicate a more favorable position.

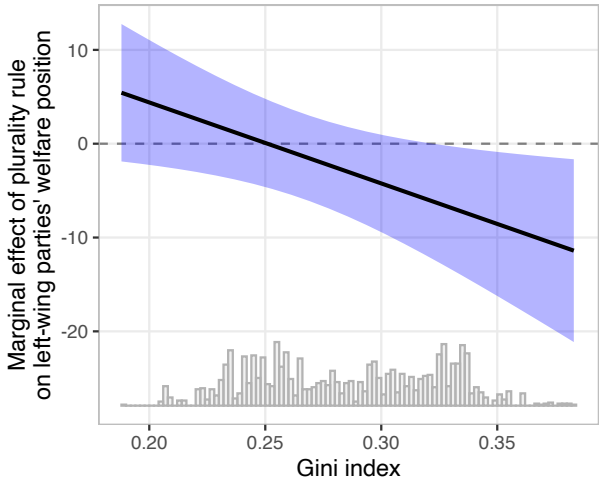
rule vs. PR rule. As before, the results are robust to controlling for party- and country-level covariates (column 2). A one-standard-deviation increase in inequality is associated with a 0.43-standard-deviation decline in left-wing parties' pro-redistributive policy stance under plurality

Table 5: Effect of Plurality Rule and Inequality on Welfare Position among Left-Wing Parties

	Dependent variable:	
	Welfare Position	
	(1)	(2)
Plurality rule	19.06*	21.66**
	(9.69)	(10.26)
Gini_{t-1}	66.70***	62.62**
	(23.40)	(24.12)
Plurality rule × Gini_{t-1}	−77.15**	−86.32**
	(35.76)	(37.57)
Mean DV	−16.42	−16.42
Country FE	✓	✓
Election year FE	✓	✓
Covariates	–	✓
Observations	770	770
R^2	0.41	0.42
Adjusted R^2	0.34	0.35

Notes: All models are based on equation 4. Party type "right wing" is the omitted baseline. Full results in Appendix Table E.3. *p<0.1; **p<0.05; ***p<0.01.

Figure 9: Marginal Effects of Plurality Rule and Inequality on Welfare Position of Left-Wing Parties



Notes: Regression coefficients with 95% confidence bands based on column 2 in Table 5. Higher values on the welfare dimension indicate a more favorable position.

rule. In other words, left-wing parties adopt a more pro-welfare stance when inequality is high in countries with PR rule but not in those with plurality rule.

Together, the findings suggest that when elections are held under plurality rule, left-wing party platforms do *not* become more pro-redistribution when inequality is high. Since inequality in most

countries is spatially concentrated, as I have documented here, the median constituency is much less unequal than the nation as a whole. As a result, the median voter in the median constituency is less exposed to inequality and, therefore, less likely to demand redistribution and support left-wing parties, all else equal. Left-wing parties target the median voter in the median constituency and have few electoral incentives to deviate from the constituency median, not least because they face competition from liberal parties in swing constituencies.

The geographic clustering of inequality undermines electoral gains because redistributive preferences and electoral support for left-wing parties are concentrated in (and limited to) a few urban and densely populated constituencies. These findings provide an alternative explanation of why redistribution in response to inequality is lower under plurality rule than under PR rule. Unlike explanations that highlight class coalitions in the electorate (Iversen and Soskice 2006) or fiscal negotiations in coalition governments (Persson, Roland and Tabellini 2007) as key drivers of higher spending under PR rule, the evidence presented here suggests that the spatial distribution of inequality and preferences not only constrains electoral support for left-wing parties and limits their political power, but also incentivizes them to offer more moderate policy platforms to appeal to the median constituency and remain competitive against liberal parties.

7 Discussion and Conclusion

Why has rising inequality not resulted in more redistribution? This paper provides a new perspective on this question by arguing that the interaction between electoral rules and the geographical distributions of inequality and political preferences undermines the political logic of redistribution. Using cross-sectional data on regional inequality, I show that countries with plurality rule redistribute less when inequality is spatially concentrated than countries with PR rule. I then draw on administrative and micro-level data from the United Kingdom to document that the spatial concentration of inequality makes the median constituency less unequal than the nation as a whole. These dynamics restrict and limit demands for redistribution and electoral support for left-wing parties to a few densely populated urban constituencies where inequality is concentrated. Evidence from comparative party manifestos shows that plurality rule also weakens left-wing parties' incentives to advocate pro-redistributive policy platforms, even when inequality is high. Together, these dynamics undermine the political power of left-wing coalitions. Across

all four general elections in the UK in the 2010s, the Labour Party won considerably fewer constituencies with above-median levels of inequality than the Tories. However, Labour won these constituencies by a much higher vote margin and a 5.3 times higher population density than similarly unequal but conservative-leaning constituencies. The local economic context thus affects political behavior and electoral dynamics. One limitation of this paper, however, is that it does not disentangle contextual and compositional effects linking local-level inequality, policy preferences, and vote choice. The fact that in highly unequal constituencies only Labour supporters but not Tory supporters demand more redistribution suggests that political beliefs and ideology plays some role in activating or making salient contextual effects.

What are the implications for the future of redistributive policies under spatially concentrated inequality? One approach to addressing increasingly concentrated inequality is to reform electoral rules and move toward PR, which would strengthen the political representation of voters in densely populated urban areas. However, since PR favors smaller parties, changes in the electoral regime seem unlikely, especially in countries dominated by two parties. Another possibility would be for parties to design platforms that convince voters outside the big cities, particularly in suburban constituencies, to care about inequality and redistributive policies. For example, parties could mobilize around issues such as affordable housing and access to high-quality schooling, which could create a broader political coalition in favor of greater social equality. A final approach would be to shift attention from nationwide redistributive efforts to place-based policies that specifically aim to reduce inequality in cities, for example by increasing locality-specific minimum wages to strengthen the earnings power of workers without college degrees, by raising taxes on incomes and assets such as the property of high-income voters, or by providing affordable housing and educational opportunities so that families can choose neighborhoods with good earnings opportunities relative to living costs.

Yet spatially concentrated inequality may create its own political externalities and backlashes. The rise of superstar cities and winner-take-all geographies in the knowledge economy increasingly displaces all but high-income voters, forcing them to move out of urban areas with rising living costs and growing inequality into suburbs and other areas with lower levels of inequality (Chou and Dancygier 2021; Le Galès and Pierson 2019).[11] If the influx of middle- and upper-

[11] See, for example, "Housing is a growing political problem for the Conservatives," *Economist*, August 5, 2017.

middle-income voters increases inequality in such areas, it could strengthen the demand for redistribution and voting for left-wing parties. Current residents, who are exposed to more inequality, form preferences and vote based on the changing local economic context, while newcomers from unequal areas already favor redistribution and vote for leftist parties. The economic displacement and resulting movement of voters could reshuffle the economic and political geography of inequality.

The dynamics described in this paper are likely to become more prevalent in the future. Many countries are shifting toward knowledge economies, which generates strong agglomeration effects and growing urban–rural divides. Political institutions, partisan strategies, and voters' behaviors will play a crucial role in mediating and mitigating policy responses to new spatial patterns of economic and political inequality.

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Supplementary Appendix

Redistributive Politics Under Spatial Inequality

A Additional Information on Regional Inequality

Table A.1: Summary Statistics, OECD Regional Data

Country	*Regions (number within country)*	*Electoral Rule*	*SD pre-tax Gini index*	*SD post-tax Gini index*	*Origin year of constitution*
Australia	States/territories (8)	Plurality	0.06	0.04	1901
Austria	Bundesländer (9)	PR	0.04	0.03	1945
Belgium	Régions (3)	PR	0.07	0.06	1899
Canada	Provinces and territories (10)	Plurality	0.02	0.02	1867
Czech Republic	Oblasti (8)	PR	0.03	0.02	1993
Denmark	Regioner (5)	PR	0.01	0.02	1920
Finland	Suuralueet (4)	PR	0.02	0.01	1917
France	Régions + Régions d'outre-mer (22)	Plurality	0.03	0.03	1986
Germany	Bundesländer (13)	PR	0.03	0.02	1949
Greece	Regions (4)	PR	0.02	0.02	1975
Hungary	Planning statistical regions (3)	PR	0.01	0.01	1990
Ireland	Groups Regional Authority Regions (2)	PR	0.01	0.02	1937
Israel	Districts (6)	PR	0.05	0.05	1948
Italy	Regioni (21)	PR	0.04	0.03	1972
Japan	Groups of prefectures (10)	PR	0.04	0.02	1994
Netherlands	Provinces (12)	PR	0.02	0.02	1917
New Zealand	Regional councils (2)	PR	0.02	0.00	1993
Norway	Landsdeler (7)	PR	0.01	0.02	1919
Poland	Vojewodztwa (6)	PR	0.02	0.01	1989
Slovakia	Zoskupenia krajov (4)	PR	0.01	0.00	1993
Spain	Comunidades autonomas (19)	PR	0.03	0.03	1978
Sweden	Riksomraden (8)	PR	0.02	0.03	1917
Switzerland	Grandes regions (7)	PR	0.03	0.03	1918
USA	States and the District of Columbia (51)	Plurality	0.04	0.03	1800
United Kingdom	Regions and countries (12)	Plurality	0.02	0.03	1837

Notes: Data from OECD Regional Wellbeing Dataset. 2014. Includes only regions for which income inequality data is available. Regime origin data comes from Persson and Tabellini (2003) and reflects the 1994 change in Japan's and 1996 change in New Zealand's electoral systems to a mixed-member majoritarian system, which I code as PR. The OCED data is for 2013, except 2009 for Japan, 2010 for Germany and Switzerland, 2011 for New Zealand and the United Kingdom, 2014 for Israel, the Netherlands, and Norway, Sweden, and the United States.

Table A.2: Effect of Spatial Concentration of Inequality on Redistribution

	Dependent variable:					
	Difference pre/post tax gini					
		OLS		*instrumental variable*	*OLS*	*instrumental variable*
	(1)	(2)	(3)	(4)	(5)	(6)
Plurality rule	0.033***	0.099***	0.120***	0.134***	0.143***	0.141***
	(0.012)	(0.012)	(0.015)	(0.028)	(0.016)	(0.026)
SD pre-tax gini	0.902***	1.223***	2.311***	2.486***		
	(0.114)	(0.176)	(0.204)	(0.344)		
Gini of pre-tax gini					2.572***	2.570***
					(0.257)	(0.420)
Log GDP		−0.008***	−0.008***	−0.012**	−0.006*	−0.008*
		(0.002)	(0.003)	(0.005)	(0.003)	(0.004)
Unemployment rate		0.000	0.004***	0.005***	0.004***	0.004***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Union density		−0.000***	−0.000***	−0.000***	−0.000***	−0.000***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Adjusted bargaining coverage		0.000*	−0.000***	−0.000***	−0.000***	−0.000***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Turnout		0.001***	0.002***	0.002***	0.002***	0.002***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Coalition government			0.041***	0.027**	0.030***	0.022*
			(0.007)	(0.012)	(0.007)	(0.011)
Share cabinet seats left parties			−0.000***	−0.000***	−0.000***	−0.000***
			(0.000)	(0.000)	(0.000)	(0.000)
Weak federalism			0.040***	0.051***	0.049***	0.056***
			(0.009)	(0.011)	(0.009)	(0.010)
Strong federalism			−0.032***	−0.051***	−0.028***	−0.039***
			(0.009)	(0.015)	(0.008)	(0.011)
Presidential system			0.099***	0.132***	0.115***	0.133***
			(0.014)	(0.027)	(0.013)	(0.023)
Bicamerialism index			−0.004	0.006	−0.010**	−0.004
			(0.005)	(0.008)	(0.004)	(0.006)
Plurality rule × SD pre-tax gini	−2.040***	−2.916***	−4.894***	−6.086***		
	(0.375)	(0.353)	(0.620)	(1.298)		
Plurality rule × Gini of pre-tax gini					−5.547***	−5.978***
					(0.612)	(1.084)
Constant	0.159***	0.183***	0.040	0.056	0.005	0.015
	(0.004)	(0.034)	(0.040)	(0.041)	(0.041)	(0.040)
Mean DV	0.18	0.18	0.18	0.18	0.18	0.18
No. countries	25	25	25	25	25	25
Observations	304	304	304	304	304	304
R^2	0.176	0.339	0.606	0.601	0.595	0.592
Adjusted R^2	0.168	0.321	0.586	0.582	0.575	0.573

Note: *p<0.1; **p<0.05; ***p<0.01

Table A.3: IV First Stage Results: Effect of Constitutional Origin on Electoral Regime Type

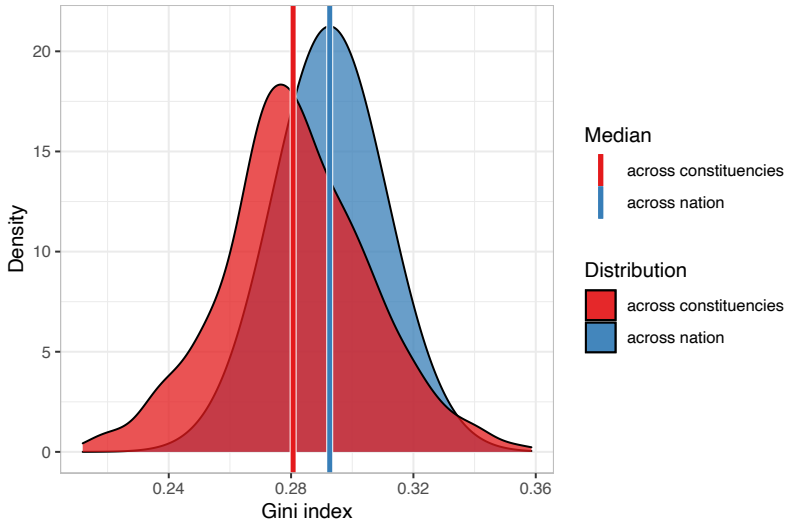
	Dependent variable:			
	Plurality rule			
	(1)	(2)	(3)	(4)
Year of constitution origin	-0.004^{***}	-0.004^{***}	-0.003^{***}	-0.003^{***}
	(0.000)	(0.000)	(0.000)	(0.000)
Log GDP	0.103^{***}	0.076^{***}	-0.165^{***}	-0.165^{***}
	(0.017)	(0.019)	(0.021)	(0.021)
Unemployment rate	-0.005	-0.006	0.015^{***}	0.015^{***}
	(0.004)	(0.004)	(0.003)	(0.003)
Union density		-0.003^{***}	0.002^{***}	0.002^{***}
		(0.001)	(0.001)	(0.001)
Adjusted bargaining coverage		0.000	-0.002^{***}	-0.002^{***}
		(0.000)	(0.000)	(0.000)
Turnout		-0.002	0.009^{***}	0.009^{***}
		(0.002)	(0.002)	(0.002)
Coalition government			-0.276^{***}	-0.276^{***}
			(0.039)	(0.039)
Share cabinet seats left parties			-0.009^{***}	-0.009^{***}
			(0.001)	(0.001)
Weak federalism			0.142^{**}	0.142^{**}
			(0.058)	(0.058)
Strong federalism			-0.663^{***}	-0.663^{***}
			(0.051)	(0.051)
Presidential system			0.820^{***}	0.820^{***}
			(0.046)	(0.046)
Bicamerialism index			0.295^{***}	0.295^{***}
			(0.028)	(0.028)
Constant	5.889^{***}	7.074^{***}	8.166^{***}	8.166^{***}
	(0.813)	(1.054)	(0.719)	(0.719)
Observations	304	304	304	304
R^2	0.561	0.589	0.874	0.874
Adjusted R^2	0.557	0.581	0.868	0.868

Note: *p<0.1; **p<0.05; ***p<0.01

B Additional Figures for UK Constituency Inequality

Figure B.1 plots the nation-wide interpersonal inequality as well as the distribution of constituency-level income inequality as measured with the gini index using individual-level income data from the BES. Using this measure, the results confirm the findings using administrative income data to construct constituency-level inequality (Figure 3a): the median constituency is less unequal and less right-skewed than the United Kingdom as a whole.

Figure B.1: Distribution of Gini Coefficients across Constituencies and the United Kingdom



Notes: BES waves 1-4, 6-7, and 10-20.

Table B.1: Most equal and unequal constituencies, 2019

10 most unequal constituencies		10 most equal constituencies	
Constituency name	*Inequality (£)*		*Inequality (£)*
Kensington	125,900	Leicester West	2,700
Cities of London and Westminster	96,700	Wolverhampton South East	2,900
Chelsea and Fulham	89,100	Belfast West	3,200
Westminster North	61,000	Rhondda	3,200
Hampstead and Kilburn	53,800	Kingston upon Hull North	3,300
Richmond Park	44,200	Stoke-on-Trent North	3,300
Wimbledon	42,900	Wolverhampton North East	3,300
Battersea	40,000	Glasgow North East	3,300
Esher and Walton	39,700	Blaenau Gwent	3,300
Holborn and St Pancras	37,800	Blackpool North and Cleveleys	3,400

Notes: Inequality is measured as the difference between mean and median total income.

C Summary Statistics

C.1 British Election Study

Table C.1

Variable	Share (%)
Socio-demographics	
Female	0.51
Married	0.52
Homeowner	0.68
Student	0.03
Unemployed	0.02
Retired	0.28
Educational degree	
No qualifications	0.07
Less than GCSs	0.04
GCSE	0.22
A-level	0.20
Undergraduate	0.35
Postgraduate	0.12
Vote choice	
Vote for Labour	0.28
Vote for Tories	0.29

Source: BES waves 1-4, 6-7, and 10-20.

Table C.2

Variable	Mean	Std. Dev.	Min	Max
Support for redistribution	0.56	0.31	0.00	1.00
Gross household income	6.96	3.56	1.00	15.00
Number of children in household	1.35	0.76	1.00	5.00
Age	52.52	15.66	14.00	113.00

Notes: The BES measures gross household income in the following categories: 1 = for under £5,000 per year; 2 = £5,000 to £9,999; 3 = £10,000 to £14,999; 4 = £15,000 to £19,999; 5 = £20,000 to £24,999; 6 = £25,000 to £29,999; 7 = £30,000 to £34,999; 8 = £35,000 to £39,999; 9 = £40,000 to £44,999; 10 = £45,000 to £49,999; 11 = £50,000 to £59,999; 12 = £60,000 to £69,999; 13 = £70,000 to £99,999; 14 = £100,000 to £149,999; 15 = £150,000 and over. *Source:* BES waves 1-4, 6-7, and 10-20.

Table C.3: Socio-Economic Characteristics of Labour Supporters by Constituency Inequality

Variable	Constituency inequality	
	below median	*above median*
Shares (%)		
Female	0.53	0.54
No qualifications	0.07	0.05
Less than GCSs	0.04	0.03
GCSE	0.21	0.15
A-level	0.20	0.18
Undergraduate	0.36	0.42
Postgrad	0.11	0.18
Student	0.04	0.05
Unemployed	0.03	0.02
Retired	0.23	0.20
Married	0.49	0.45
Homeowner	0.63	0.58
Averages		
Gross household income	6.38	7.38
Age	49.82	48.36
Number of children in household	1.44	1.39

Notes: The BES measures gross household income in the following categories: 1 = for under £5,000 per year; 2 = £5,000 to £9,999; 3 = £10,000 to £14,999; 4 = £15,000 to £19,999; 5 = £20,000 to £24,999; 6 = £25,000 to £29,999; 7 = £30,000 to £34,999; 8 = £35,000 to £39,999; 9 = £40,000 to £44,999; 10 = £45,000 to £49,999; 11 = £50,000 to £59,999; 12 = £60,000 to £69,999; 13 = £70,000 to £99,999; 14 = £100,000 to £149,999; 15 = £150,000 and over. *Source:* BES waves 1-4, 6-7, and 10-20.

C.2 Constituency-Level Covariates

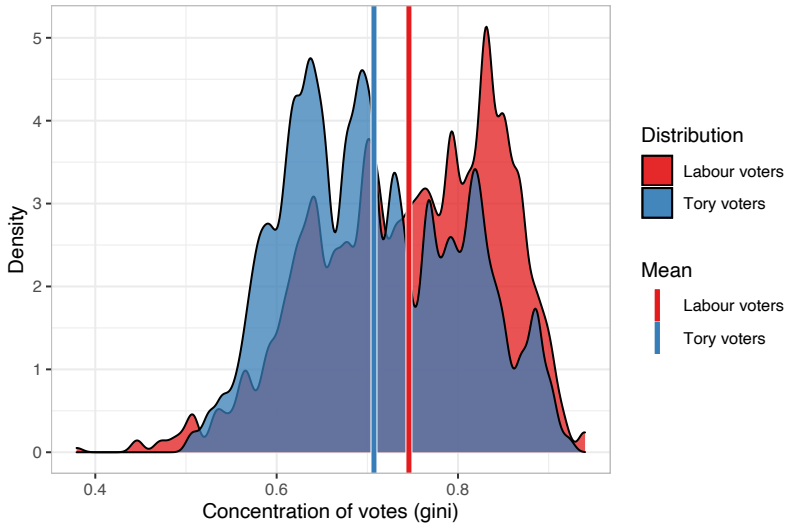
Table C.4: Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max
Individual level				
Mean-median income inequality (log)	8.91	0.51	7.74	11.77
Median property price (log)	12.23	0.46	11.00	14.18
Share NVQ4 (%)	38.25	11.51	10.60	82.90
Share people working in service sector (%)	79.98	6.42	52.70	96.70
Mean total income (log)	10.36	0.24	9.93	12.02
Share people over 60 years old (%)	0.24	0.06	0.08	0.42

C.3 Concentration of Partisan Voters in Constituencies

Figure C.1 shows that Labour voters are more concentrated within constituencies than Conservative voters.

Figure C.1: Concentration of Votes by Constituency



Notes: BES waves 1-4, 6-7, and 10-20. Concentration is measured by the gini index of partisan voters.

D Full Regression Results Based on British Election Study

Table D.1: Effect of Constituency-Level Inequality on Support for Redistribution

	Dependent variable:			
	Support for redistribution			
	(1)	(2)	(3)	(4)
Mean-median inequality (log)	0.029***	0.023**	0.005	0.007
	(0.009)	(0.010)	(0.010)	(0.009)
Vote for Labour			−0.112***	
			(0.040)	
Vote for Tories				−0.166***
				(0.036)
Male	−0.023***	−0.024***	−0.020***	−0.021***
	(0.002)	(0.002)	(0.002)	(0.002)
Age	−0.000**	−0.000**	0.000	0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Education: below GCSs	−0.020***	−0.020***	−0.017***	−0.012**
	(0.007)	(0.007)	(0.006)	(0.006)
Education: GCSE	−0.036***	−0.037***	−0.035***	−0.029***
	(0.005)	(0.005)	(0.005)	(0.005)
Education: A-Level	−0.050***	−0.050***	−0.052***	−0.047***
	(0.005)	(0.005)	(0.005)	(0.005)
Education: undergraduate	−0.027***	−0.027***	−0.038***	−0.036***
	(0.005)	(0.005)	(0.005)	(0.005)
Education: postgraduate	0.009	0.009	−0.007	−0.012**
	(0.006)	(0.006)	(0.006)	(0.006)
Household gross income	−0.015***	−0.015***	−0.014***	−0.012***
	(0.000)	(0.000)	(0.000)	(0.000)
Student	−0.028***	−0.029***	−0.030***	−0.019***
	(0.005)	(0.006)	(0.005)	(0.005)
Unemployed	0.029***	0.029***	0.030***	0.023***
	(0.006)	(0.006)	(0.006)	(0.006)
Retired	−0.048***	−0.048***	−0.043***	−0.036***
	(0.004)	(0.004)	(0.003)	(0.003)
Married	0.004	0.005*	0.003	0.005**
	(0.003)	(0.003)	(0.003)	(0.002)
Children in household	0.009***	0.009***	0.006***	0.005***
	(0.001)	(0.001)	(0.001)	(0.001)
Homeowner	−0.075***	−0.076***	−0.065***	−0.061***
	(0.003)	(0.003)	(0.003)	(0.003)
Log median house price		0.061***	0.049***	0.051***
		(0.020)	(0.019)	(0.018)
Share people with degree		0.000	0.000	0.000
		(0.000)	(0.000)	(0.000)
Share people work in service sector		0.000	0.000	0.000
		(0.000)	(0.000)	(0.000)
Log mean income		−0.017	0.003	−0.012
		(0.036)	(0.034)	(0.033)
Mean-median inequality (log) × Vote for Labour			0.034***	
			(0.004)	
Mean-median inequality (log) × Vote for Tories				−0.007*
				(0.004)
Mean DV	0.56	0.559	0.558	0.558
Constituency FE	✓	✓	✓	✓
Year FE	✓	✓	✓	✓
Observations	264,721	254,718	250,733	250,733
R^2	0.092	0.092	0.163	0.198
Adjusted R^2	0.090	0.090	0.160	0.196

Note: *p<0.1; **p<0.05; ***p<0.01

Table D.2: Effect of Constituency-Level Inequality on Support for Redistribution; Full Sample

	Dependent variable:			
	Support for redistribution			
	(1)	(2)	(3)	(4)
Mean-median inequality (log)	0.028***	0.022**	0.005	0.006
	(0.008)	(0.010)	(0.009)	(0.009)
Vote for Labour			−0.111***	
			(0.039)	
Vote for Tories				−0.173***
				(0.036)
Male	−0.024***	−0.024***	−0.021***	−0.021***
	(0.002)	(0.002)	(0.002)	(0.002)
Age	−0.000**	−0.000**	0.000	0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Education: below GCSs	−0.020***	−0.019***	−0.017***	−0.012*
	(0.007)	(0.007)	(0.006)	(0.006)
Education: GCSE	−0.036***	−0.037***	−0.035***	−0.029***
	(0.005)	(0.005)	(0.005)	(0.005)
Education: A-Level	−0.050***	−0.050***	−0.052***	−0.046***
	(0.005)	(0.005)	(0.005)	(0.005)
Education: undergraduate	−0.027***	−0.027***	−0.038***	−0.035***
	(0.005)	(0.005)	(0.005)	(0.005)
Education: postgraduate	0.009	0.009	−0.007	−0.012**
	(0.006)	(0.006)	(0.006)	(0.006)
Household gross income	−0.015***	−0.015***	−0.014***	−0.012***
	(0.000)	(0.000)	(0.000)	(0.000)
Student	−0.028***	−0.029***	−0.029***	−0.019***
	(0.005)	(0.006)	(0.005)	(0.005)
Unemployed	0.028***	0.029***	0.029***	0.022***
	(0.006)	(0.006)	(0.006)	(0.006)
Retired	−0.048***	−0.047***	−0.043***	−0.036***
	(0.004)	(0.004)	(0.003)	(0.003)
Married	0.004	0.005*	0.003	0.005*
	(0.003)	(0.003)	(0.003)	(0.002)
Children in household	0.009***	0.009***	0.006***	0.006***
	(0.001)	(0.001)	(0.001)	(0.001)
Homeowner	−0.075***	−0.076***	−0.065***	−0.061***
	(0.003)	(0.003)	(0.003)	(0.003)
Log median house price		0.061***	0.049***	0.050***
		(0.020)	(0.019)	(0.018)
Share people with degree		0.000	0.000	−0.000
		(0.000)	(0.000)	(0.000)
Share people work in service sector		−0.000	0.000	0.000
		(0.000)	(0.000)	(0.000)
Log mean income		−0.013	0.007	−0.007
		(0.035)	(0.034)	(0.033)
Mean-median inequality (log) × Vote for Labour			0.034***	
			(0.004)	
Mean-median inequality (log) × Vote for Tories				−0.006
				(0.004)
Mean DV	0.56	0.558	0.558	0.558
Constituency FE	✓	✓	✓	✓
Year FE	✓	✓	✓	✓
Observations	270,470	260,467	256,427	256,427
R^2	0.092	0.092	0.162	0.197
Adjusted R^2	0.090	0.090	0.160	0.195
Note:				*p<0.1; **p<0.05; ***p<0.01

E Additional Information for Manifesto Data

E.1 Definition of Policy Position

Definition of "welfare" policy stance: *welfare = per503 + per504*

- *per503* "Positive equality:" Concept of social justice and the need for fair treatment of all people. This may include: special protection for underprivileged social groups; removal of class barriers; need for fair distribution of resources; the end of discrimination (e.g. racial or sexual discrimination).
- *per504* "Welfare State Expansion:" Favorable mentions of need to introduce, maintain or expand any public social service or social security scheme. This includes, for example, government funding of health care, child care, elder care and pensions, and social housing.

Source: Volkens, Andrea, Tobias Burst, Werner Krause, Pola Lehmann, Theres Matthieß, Nicolas Merz, Sven Regel, Bernhard Weßels and Lisa Zehnter. 2020. "The Manifesto Dataset – Codebook. Manifesto Project. Version 2020b."

E.2 Descriptive Statistics

Table E.1: Summary Statistics, Manifesto Data

Variable	Mean	Std. Dev.	Min	Max
Party level				
Welfare position	13.18	7.86	0.00	47.83
Vote share (%)	15.33	13.13	0.00	67.88
Seat share (%)	0.16	0.16	0.00	0.75
Country level				
Election turnout	72.24	13.79	39.20	95.80
Legislative fractionalization index	0.73	0.10	0.41	0.91
GDP per capita	26789.87	14242.59	5501.04	95245.24
Unemployment rate	7.92	4.52	0.80	24.90

Sources: Welfare position, vote share, and seat share come from the Comparative Manifesto Project (CMP). Election turnout data comes from the Comparative Political Data Set (CPDS) and Voter Turnout Base from the International Institute for Democracy and Electoral Assistance (International IDEA). GDP per capita and the unemployment rate come from the World Bank.

Table E.2: Effect of Plurality Rule and Party Typology on Welfare Position

	Dependent variable:	
	Welfare Position	
	(1)	(2)
Plurality rule	−4.77***	−5.07***
	(1.46)	(1.47)
Party type: liberal	−0.33	−0.25
	(0.47)	(0.47)
Party type: left-wing	5.50***	5.50***
	(0.36)	(0.36)
Plurality rule × Party type: liberal	4.01**	4.10**
	(1.61)	(1.61)
Plurality rule × Party type: left-wing	2.02**	2.15**
	(0.93)	(0.93)
Party vote share		−0.01
		(0.05)
Party seat share		2.30
		(4.10)
Turnout		0.09**
		(0.04)
Legislative fractionalization index		−2.87
		(3.40)
GDP per capita		0.00
		(0.00)
Unemployment rate		−0.06
		(0.07)
Mean DV	13.18	13.18
Country FE	✓	✓
Election year FE	✓	✓
Observations	1,815	1,815
R^2	0.38	0.38
Adjusted R^2	0.35	0.35

Notes: All models are based on equation 3. Party type "right-wing" is the omitted baseline. *p<0.1; **p<0.05; ***p<0.01.

Table E.3: Effect of Plurality Rule and Inequality on Welfare Position among Left-Wing Parties

	Dependent variable:	
	Welfare Position	
	(1)	(2)
Plurality rule	19.06*	21.66**
	(9.69)	(10.26)
Gini_{t-1}	66.70***	62.62**
	(23.40)	(24.12)
Plurality rule $\times$ Gini_{t-1}	−77.15**	−86.32**
	(35.76)	(37.57)
Party vote share		0.09
		(0.08)
Party seat share		−3.51
		(7.33)
Turnout		0.08
		(0.06)
Legislative fractionalization index		−4.90
		(5.54)
GDP per capita		−0.00
		(0.00)
Unemployment rate		−0.12
		(0.12)
Mean DV	−16.42	−16.42
Country FE	✓	✓
Election year FE	✓	✓
Observations	770	770
R^2	0.41	0.42
Adjusted R^2	0.34	0.35

Notes: All models are based on equation 4. Party type "right-wing" is the omitted baseline. *p<0.1; **p<0.05; ***p<0.01.