Redistributive Politics Under Spatial Inequality*

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August 20, 2023

Short title: Redistributive Politics Under Spatial Inequality

Abstract

Most research on redistributive politics has neglected the spatial concentration of rising inequality and its consequences on political preferences and electoral politics. In this paper, I argue that the geographic 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, demand for redistributive policies and voting for left-leaning parties is concentrated in a few districts. This limits the legislative power left parties can amass while disincentivizing left 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 rising inequality has not led to more redistribution, which suggests that political geography can weaken political responses to inequality and electoral representation.

Keywords: redistribution; spatial inequality; electoral politics; political preferences

*For very helpful comments and suggestions, I would like to thank Pablo Beramendi, Mitchell Bosley, Costin Ciobanu, Dan Hopkins, Annabelle Hutchinson, Martin Vinæs Larsen, Noah Nathan, Tom O'Grady, Grigo Pop-Eleches, George Tsebelis, Alice Xu, and seminar participants at GRIPE, the CIREQ Workshop at McGill University, the University of Michigan, Princeton University, and the 2022 Annual Meetings of the European and American Political Science Associations. Replication files are available in the JOP Data Archive on Dataverse (`https://dataverse.harvard.edu/dataverse/jop`). The empirical analysis has been successfully replicated by the JOP replication analyst.

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Income inequality has grown in many rich democracies and threatens social cohesion and fuels political polarization (McCarty, Poole and Rosenthal 2006; Piketty 2014). Most of the spotlight has been cast on *national-level* inter-personal inequality—and most notably the rise of the "top 1%"—while much less attention has been paid to the spatial distribution of inequality *within* countries. Such 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), and yet we know little about the implications for political responses to growing inequality.

In this paper, I argue that geographically concentrated inequality undermines the political logic of redistribution when elections are held under plurality rule. Standard political economy models predict that rising inequality should lead to more redistribution (Meltzer and Richard 1981), but empirically we often observe that 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 (Elsässer, Hense and Schäfer 2020; Enns 2015; Gilens 2012), lower turnout and lower levels of information among the poor (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) 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 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 multi-party 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 multi-party 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, however, 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. Recent work has documented that the spatial concentration of voters, in particular by class and income, matters for policy preferences (Beramendi 2012; 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 under spatial inequality and majoritarian electoral rule.

Combining insights from electoral geography with political economy models of redistributive politics and partisan strategies, I argue that when inequality is spatially concentrated, 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 even when spatial inequality is growing.

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 regional inequality in different types of electoral regimes using comparative manifesto data. Using data on regional incomes and party manifestos, I find that when regional inequality is growing, left-wing party platforms more strongly support redistribution in countries with PR electoral systems but do not change their policy stance on welfare in countries with plurality electoral regimes. Since their key electoral target, the median district, is less unequal than the nation as a whole, left-wing parties under plurality rule 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 (i) constraining demands for redistribution and support for left-wing parties and (ii) limiting left-wing parties' strategic incen-

tives 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 (Minkoff and Lyons 2019; Newman 2020), 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 constituency or region. 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.

Spatial Inequality and Redistributive Politics

Most research on redistributive politics has focused on inequalities across people, including work documenting the rise of the "top 1%" (e.g., Piketty 2014). This inter-personal inequality perspective is fundamental to political economy models of redistributive preferences that predict greater demand for redistribution when inequality is rising 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 and post-tax inequality through redistributive policies (Huber and Stephens 2001; Morel, Palier and Palme 2012). Others have argued that the one-dimensional focus of the Meltzer-Richard model on the tax rate and fiscal redistribution ignores

[1] See Kenworthy and Pontusson (2005); on the importance of the structure of inequality see Lupu and Pontusson (2011).

other salient facets: the welfare state's social insurance 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). 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 multi-party 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 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.

By focusing on inter-personal inequalities (i.e., national level inequality), these arguments share the 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.

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 (Broz, Frieden and Weymouth 2021; 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. In the following sections, 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.

Local Inequality and 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) (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 (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). 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 (Sands and de Kadt 2020). Franko (2016), for example, demonstrates that growing state-level income inequality is associated with a more liberal policy mood among state voters. Similarly, Minkoff and Lyons (2019) illustrate that people who live in unequal localities 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.

Party Policy Positions and Strategies

The second implication of spatial inequality under plurality rule is that political parties adopt less redistributive party platforms. In an environment of competitive elections over programmatic policy choices, parties must balance the interests of their core partisan constituents with potential swing voters in median districts when they decide how much to emphasize redistribution in their electoral manifestos. The dominant parties will face a tradeoff between moving closer together in the preference space to increase votes and moving further apart to avoid entry by a third-party challenger. If a candidate moves too far away from the constituency median, she risks losing votes to the main competitor from the other party or entry of a third-party candidate (Besley and Preston 2007). In extreme cases where a district is too far away from the national party's average position such that a candidate could no longer credibly run under the party label, the party may consider surrendering the district to the third-party candidate.

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.

The median voter in the median district is the relevant electoral target for all parties competing under plurality rule in single-member district elections as long as political candidates are responsive to the preferences of the constituency they are hoping to win. This is an important distinction from spatial voting models, which typically treat candidate competition in a single district the same way as party competition in a national election and assume that either the distribution of voter preferences is identical across districts, or that the distribution of individuals and their preferences mirrors the distribution of district medians (Rodden 2010). My argument incorporates

differences in the geographical distribution of voter preferences and, as a result, political candidates running for a seat in different districts. These electoral dynamics follow work by Snyder (1994) and Ansolabehere, Leblanc and Snyder (2012), who argue that national party platforms in plurality-rule countries are the aggregation of the policy positions of individual candidates and incumbents who care primarily about securing their own election/re-election.[2] Since the median voter in the median district is exposed to lower levels of inequality, and is therefore less supportive of redistribution as I will show below, 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 even when regional inequality is increasing. 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.

Defining and Measuring "Local"

The choice of the relevant contextual unit and its boundaries is an important and unresolved question. Some contextual effects may play out in smaller geographic areas while others may unfold in larger ones such as counties or regions. I argue that for a locality to matter for political preferences and electoral behavior, it must be a relevant and salient boundary, have substantively important variation in the contextual variable, and be meaningful to voters to shape their "lived experience" and political attitudes. In this paper, I rely on two measures of locality: regions in the cross-country comparative analyses and constituencies in the UK case. Regions—as the first level of subnational government—as well as constituencies are politically relevant units that provide focal points for voters and politicians. Regions are large enough areas that residents are aware of economic inequalities. Voters perceive economic inequalities between and within cities, towns, or suburbs based on their personal experience, salience, and social comparisons across geographies. Growing regional inequality has become a salient feature in newspaper coverage and policy debates and has prompted high-level policy responses such as the UK government's "Levelling Up"

[2] In multiparty systems with coalition governments, I assume that coalition formations are driven by ideological proximity. However, parties may also form strategic, non-ideological alliances through vote-trading (e.g., in MMM systems), where core supporters of a larger party vote for a small allied party to maximize votes and seats (Catalinac and Motolinia 2021). The larger party need only cater to its own and its ally's supporters, making swing voters potentially less relevant for electoral gains. Still, these dynamics should not make left-wing parties' platforms more redistributive because voters in the majority of districts are not exposed to inequality and, therefore, do not demand more redistribution.

plan to address regional inequalities.

Constituencies and their levels of inequality are particularly relevant for preference formation and vote choice. Politicians running for office reference socio-economic conditions in their constituency to garner votes, highlighting inequalities and deprivation within the constituency while also anchoring people's experience of and exposure to inequality to the constituency. For example, the Labour party's candidate Emma Dent Coad won the seat in Kensington—the most unequal constituency in the UK—in the 2017 general election on a platform that shed the spotlight on extreme levels of inequality in the constituency and promised political remedies.[3] Constituencies are particularly salient boundaries for residents during election periods, when people may be more likely to think about government policies that could address inequality and may cast votes with constituency-level issues in mind. For example, Koch et al. (2021) draw on case studies to show that residents in more unequal cities in the UK are aware of local inequalities and connect them to government policies.

Prior work has used various boundary definitions ranging regions and metro-areas to constituencies to study the effect of contextual variables such as trade shocks, racial and socio-economic composition, and immigration (Colantone and Stanig 2018; Franko 2016; Hopkins 2010; Oliver and Mendelberg 2000). We should therefore expect that awareness of inequality at both the regional and constituency levels impacts political attitudes and electoral behavior. In this paper, I use measures of inequality at the regional and constituency-level because comparative measures of regional inequality are limited by data constraints. Additionally, these two boundaries demonstrate that local context across different scales matters for political attitudes and behavior.

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, which contains information on regional pre-tax Gini coefficients measured at the first tier of sub-national government level and offers the most comprehensive cross-national data on regional income distributions available. The Gini index ranges from 0 (perfect equality) to 1 (perfect inequality). The outcome of interest is the extent of a country's

[3] "Kensington's first Labour MP vows to tackle area's inequality," *Guardian*, June 11, 2017.

level of national redistribution, measured as the difference between pre- and post-tax Gini coefficients obtained from the OECD Income Distribution Database. The main independent variable is the spatial concentration of pre-tax inequality, which I measure with the regional pre-tax Gini coefficients.

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 electoral rules of Germany, Hungary, Japan, and New Zealand, which International IDEA classifies as "mixed" as follows: I classify Germany as well as New Zealand (since 1994) as PR; I code Hungary and Japan as plurality rule countries.[4] Excluding countries with data for only one region, the final dataset contains 252 regions in 25 countries; seven countries with a total of 116 regions have plurality electoral rules. Appendix Table A.1 presents details on regions covered and summary statistics.

Figure 1 illustrates the correlation between the spatial distribution of pre-tax inequality as measured by regional Gini coefficients and nationwide redistribution across plurality and PR electoral regimes. Countries with a PR electoral system redistribute more on average (mean 0.18) than countries with plurality rule (mean 0.14), a difference of 0.9 standard deviations; they also redistribute more in light of spatially concentrated inequality than plurality rule countries.

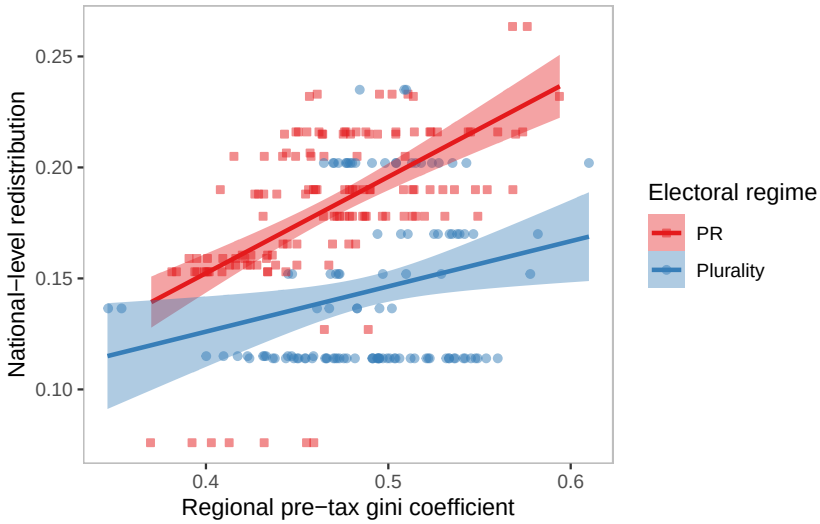
To account for potential confounders, I formally estimate the effect of electoral rules on redistributive outcomes when pre-tax inequality is spatially concentrated in a regression framework:

$$Y_i = \beta_1 Gini^{pre}_{r[i]} + \beta_2 E_i + \beta_3 \left(Gini^{pre}_{r[i]} \cdot E_i\right) + \mathbf{X}_i'\gamma + \mathbf{Z}_r'\lambda + \alpha_i + \epsilon_i \tag{1}$$

where Y_i is fiscal redistribution in country i, measured as the difference in the national pre- and post-tax Gini coefficients. $Gini^{pre}_{r[i]}$ is a measure of regional pre-tax inequality in region r of country i. 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 country-level covariates. I include GDP and the unemployment rate to account for macro-economic conditions that can influence inequality and the demand for social policies.

[4]Germany combines a FPTP system for 299 members with a list proportional representation for the remaining seats to adjust the overall seat distribution proportionately. Hungary uses a mixed-member majoritarian electoral system (MMM) with more than half of candidates elected in SMDs using a FPTP system. In Japan's MMM system, 300 of the 480 seats are elected in single-member election districts; the remaining 180 members are elected through proportional representation.

Figure 1: Spatial Concentration of Inequality and Redistribution Across Electoral Regime



Notes: Data from 252 regions across 25 OECD countries.

Since unions can influence pre-tax inequality through wage compression and union wages (Huber and Stephens 2001), I control for trade union density. I also account for whether a country is a member of the European Union to capture supra-national regional transfers. 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. I further 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, including indicators for weak and strong federalism, presidentialism, and bicameralism. $\mathbf{Z}'_r$ is a matrix of three regional-level covariates. I include the regional unemployment rate and the regional share of labor force with at least secondary education to capture local economic conditions. I also control for regional turnout in general elections 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). ϵ_{it} is the idiosyncratic error term. Bootstrapped standard errors are clustered at the country level to account for spatial correlation of regions within countries. Appendix Table A.2 provides summary statistics and data sources.

The results, reported in Table 1, demonstrate that the spatial concentration of inequality is as-

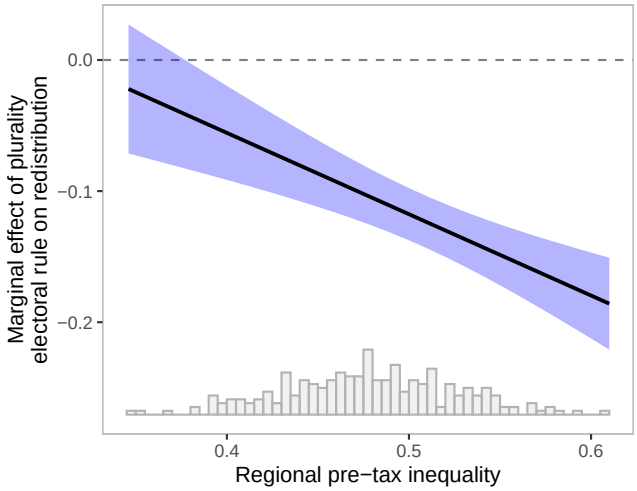
Table 1: Effect of Spatial Inequality on Redistribution By Electoral Regime

	Dependent variable:					
	National redistribution					
	OLS			*2SLS*	*OLS*	*2SLS*
	(1)	(2)	(3)	(4)	(5)	(6)
Plurality rule	0.191***	0.190***	0.218***	0.193***	0.226***	0.229**
	(0.015)	(0.016)	(0.017)	(0.073)	(0.022)	(0.090)
Pre-tax gini	0.389***	0.350***	0.464***	0.714***	0.497***	0.982***
	(0.028)	(0.029)	(0.028)	(0.091)	(0.045)	(0.125)
Plurality rule	−0.393***	−0.402***	−0.470***	−0.620***	−0.502***	−0.772***
× Pre-tax gini	(0.033)	(0.035)	(0.036)	(0.143)	(0.048)	(0.172)
Mean DV	0.165	0.165	0.165	0.165	0.164	0.164
No. countries	25	25	25	25	22	22
Macro-economic covariates	✓	✓	✓	✓	✓	✓
Political covariates	–	✓	✓	✓	✓	✓
Regional covariates	–	–	✓	✓	✓	✓
F-Statistic	–	–	–	12.11	–	10.65
Wu-Hausman	–	–	–	31.22	–	50.08
Observations	252	252	252	252	246	246
R^2	0.798	0.830	0.849	0.533	0.860	0.406
Adjusted R^2	0.792	0.821	0.838	0.501	0.850	0.364

Notes: All models are based on equation 1. The Gini index measures regional inequality within countries. National redistribution is the difference in pre- and post-tax Ginis. 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 electoral regime. The regressions in columns 5 and 6 estimate the models without Ireland, New Zealand, and Slovenia. Full results in Appendix Table A.5. *p<0.1; **p<0.05; ***p<0.01.

sociated with considerably less redistribution in countries with plurality rule than in those with PR electoral systems. The results are robust to controlling for political covariates (column 2) and regional covariates (column 3). A potential concern with this cross-sectional model is that electoral rules are endogenous to inequality and redistribution because, for example, the choice of election regime reflects partisan bargains between left and right parties over constitutional design (Boix 1999; Rodden 2019). I address this by estimating a two-stage least squares (2SLS) model in which I instrument electoral rules with the year when a country introduced the current electoral regime. This instrument leverages historical waves in the design of electoral rules and relies on the notion that older constitutions and electoral regimes tend to be majoritarian, whereas more recent constitutions and constitutional electoral changes are more likely to adopt PR electoral rule. Appendix Section A.2 provides full details on the instrumental variable approach and the exclusion restriction. Column 4 in Table A.5 presents the 2SLS results, confirming the substantive findings from the OLS regressions. Figure 2 plots the interaction effect, which shows that greater spatial

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.

concentration of inequality is associated with less redistribution under plurality rule. The models in columns 5 and 6 show results from regression models without Ireland, New Zealand, and Slovenia—the three countries for which data only includes two regions—to alleviate concerns that the results are skewed by measures of regional inequality based on very few regions. The results remain the same.

To investigate why the spatial concentration of inequality undermines redistribution in countries with plurality rule but not those with PR regimes, I focus on a country with plurality election rules in the next section. 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.

The Geography of Inequality and Redistributive Preferences in Britain

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%.[5] 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 inequal-

[5]Office of National Statistics (ONS). 2020. Household Income Inequality FY 2020.

ity 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.

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.

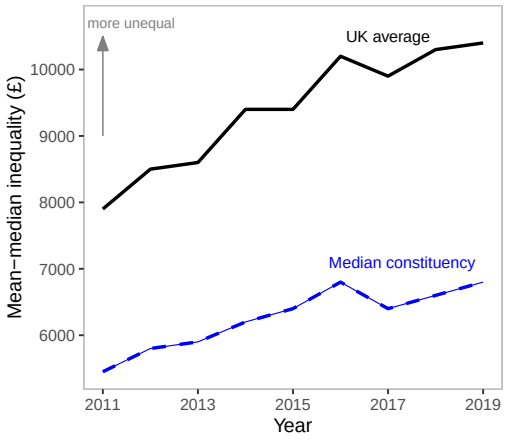
To contextualize the spatial distribution of income inequality and assess its concentration in urban centers of the knowledge economy, I use constituency population density based on ONS data as well as a classification of constituencies into six categories along the urban–rural spectrum.[6] Where constituencies 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. 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).[7] Median inequality across constituencies, however, has increased by only 25% during the same period. In 2019, 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.

[6] Categories are based on the House of Commons Library's City and Town Classification of Constituencies. Where population density is not available, I calculate it by dividing the constituency-level population by the constituency's surface area. Constituencies remained unchanged during this period.

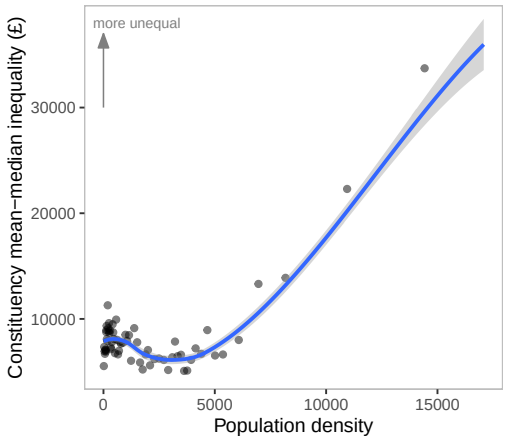
[7] ONS. 2020. Average household income, UK: Financial year 2020.

Figure 3: Spatial Dimension of Income Inequality in the UK

(a) By UK Average and Median Constituency



(b) By Population Density



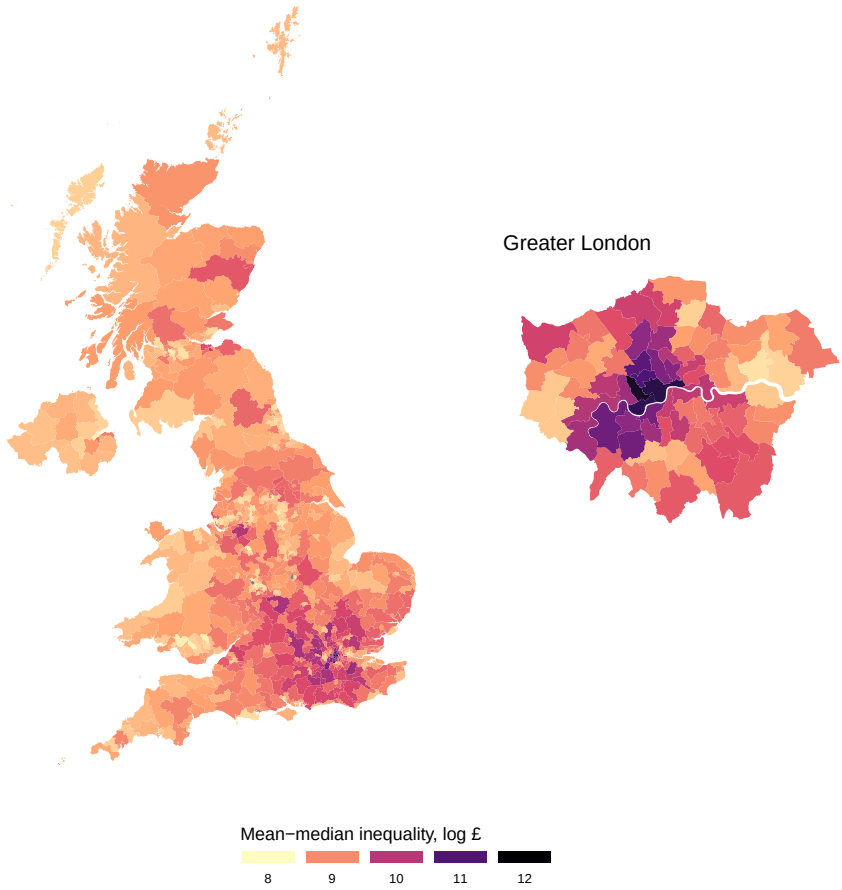
Notes: Inequality is measured as the difference between mean and median income. Data for all 650 UK constituencies. Panel (b) shows a binscatter plot with a loess-smoothed regression line fitted to the full data for the period 2011–2019.

The binscatter plot in Figure 3b divides all 650 constituencies in 60 equally-sized bins and 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 constituency 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 Greater London area.

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 sur-

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.

vey 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 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 estimates, I exclude

constituency-years with fewer than 50 respondents.[8] The average number of respondents per constituency is 139 (SD 83). The results are similar if the full data is used. Appendix Section B.4 report summary statistics.

Constituency 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 to account for right-skew. 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. Since ethnic and racial diversity is higher in urban areas and can influence demand for redistribution (Alt and Iversen 2017; Morgan and Kelly 2017), I further control for the constituency share of non-white residents, which I calculate based on respondents' ethnicity in the BES data. Finally, I account for the fact that a place's political ideology may influence redistribute preferences by controlling for constituency-level vote share for the Labour party.[9] Constituency fixed effects (α_c) capture all time-invariant constituency characteristics, ensuring within-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.

[8] Appendix Table B.9 reports the results of regression models using the full sample including constituencies with 50 respondents or less.

[9] I assign the constituency vote share of the prior election for survey years without an election.

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

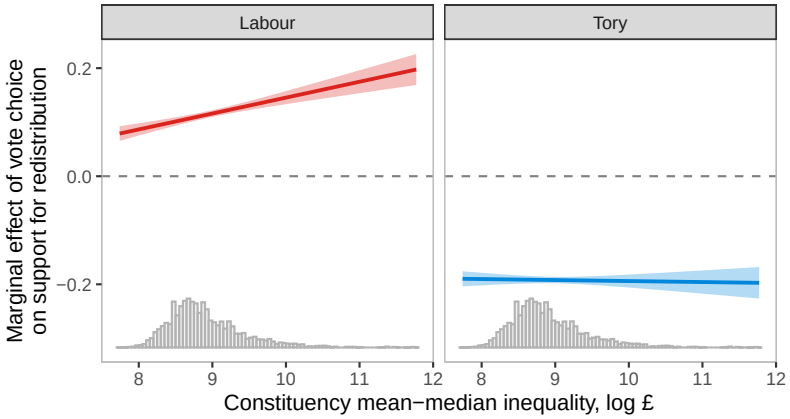
	Dependent variable:			
	Support for redistribution			
	(1)	(2)	(3)	(4)
Constituency inequality (log)	0.029***	0.020**	0.024**	−0.011
	(0.009)	(0.010)	(0.010)	(0.010)
Vote for Labour				−0.149***
				(0.045)
Vote for Tories				−0.176***
				(0.047)
Constituency inequality (log) × Vote for Labour				0.029***
				(0.005)
Constituency inequality (log) × Vote for Tories				−0.002
				(0.005)
Mean DV	0.561	0.559	0.559	0.557
Constituency FE	✓	✓	✓	✓
Year FE	✓	✓	–	✓
Year trend	–	–	✓	–
Individual covariates	✓	✓	✓	✓
Constituency covariates	–	✓	✓	✓
UK-wide inequality	–	–	✓	–
Observations	266,011	247,065	247,065	217,111
R^2	0.092	0.092	0.092	0.237
Adjusted R^2	0.090	0.089	0.089	0.234

Notes: All models are based on equation 2. Voting for other parties is the omitted baseline. Full results in Appendix Table B.8. *p<0.1; **p<0.05; ***p<0.01.

Table 2 shows that an increase in constituency mean-median inequality is associated with more support for redistribution. 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 and housing wealth, ethnicity, or political ideology. To assess how important local level inequality is compared to the nation-wide inequality, I add UK-wide inequality to the model in column 3. Since this variable is the same for each respondent in a given year, I replace the year fixed effects with a linear time trend. Local inequality still matters for respondents' redistributive demands, while nation-wide inequality has no effect (Appendix Table B.8, columns 3 and 6.) In Appendix Section B.7, I show that these results are robust to measuring local inequality at the smaller level of Middle-layer Super Output Areas (MSOAs).

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

Figure 5: Effect of Constituency Inequality on Redistributive Preferences, by Party Vote Choice



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

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 an indicator of individuals' vote choice to see whether partisanship mediates how exposure to 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 party vote choice variable that indicates if the respondents voted for Labour, the Tories, or another third party, which is the omitted baseline. The results, displayed in column 4 in Table 2 and Figure 5, show that higher levels of inequality lead to more support for redistribution among Labour but not Tory voters, relative to those voting for other third parties. 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 B.7).

These findings indicate 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 clustering of inequality concentrates and limits voters' demand for redistribution and support for left-wing parties to a few high-inequality constituencies. In Appendix Section C, I further document that regional inequality shapes support for redistribution

across a wider set of countries using data from the European Social Survey. 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.

Implications for Political Power and Left Political Coalitions

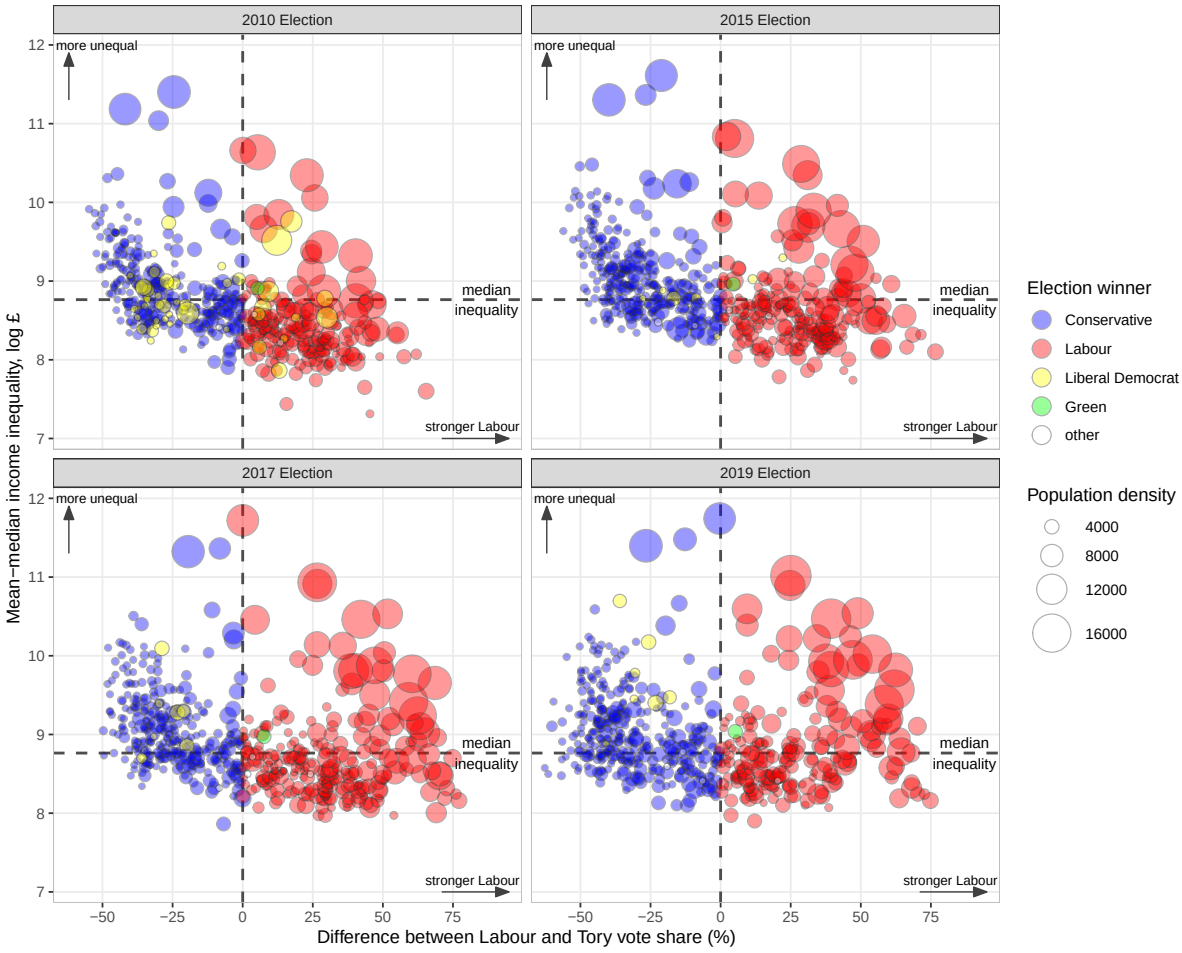
So far, I have documented that spatially concentrated inequality undermines the political logic of redistribution under plurality rule by concentrating and limiting demand for redistribution and electoral support for left-wing parties to a few densely populated urban constituencies. I now examine the 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 of left-wing parties.[10] 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.

Figure 3b above and Appendix Figure B.3b 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 6 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 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

[10] 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 6: 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.

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 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

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

			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.

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.[11] 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.[12] 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 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 upshot is that more densely populated urban constituencies with high levels of inequality and strong support for the Labour party are electorally under-represented. 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

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

[12] 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.

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 5), the demand for redistribution is overall lower even in highly unequal Tory constituencies.

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 growing spatial 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, compared to 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), 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 ecological parties, social democratic parties, socialist or other left parties as "left wing." I use the same electoral regime coding as before, except that Hungary is coded as plurality rule since 2012 and Italy is coded as PR between 1993 and 2004. To measure regional inequality, I collect data on regional incomes for countries of the European Union on disposable income of private households at the level of NUTS 2 regions. This is the lowest regional level for which this data is available. For the United Kingdom, I use data on gross disposable household income at equivalent ITL 2 regions. In the United States, I draw on county-level data on regional personal incomes. Appendix Section D.1 provides details on measures and data sources. The US data is a close approximation of regional income data at NUTS 2 units in Europe, but it does not match the European data perfectly. This drawback is alleviate by the use of country fixed effects in the regression models below, which rely on within-country variations to estimate the effect of regional inequality on party positions. I measure regional inequality as the standard deviation of regional incomes within a country. 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 then calculate the annual percent change in regional inequality.[13] The final dataset contains 25 countries for the 2000-2018 period, with 293 unique party-election-year observations.

I focus on left-wing parties to examine how much their policy stances vary across electoral regimes as regional inequality changes in the following model:

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

[13] Appendix Figures D.1 and D.2 show cross-country changes in regional inequality over time.

where Y_{it} denotes party i's position on welfare in election year t. I_{it}^{chg} is the year-to-year percent change in regional inequality in country i. E_{it} is a binary indicator of whether a country has plurality electoral rules. $\mathbf{X}_{it}$ 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 further control for GDP 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_c 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.

How much do left-wing parties' policy positions on welfare vary across electoral regimes as a function of inequality? Table 4 and Figure 7 illustrate that left-wing parties respond to increases in regional inequality with a more pro-redistributive policy stance when elections are held under PR but do not change their welfare policy position under plurality rule. The results are robust to controlling for economic covariates (column 2) and party- and country-level political covariates (column 3). Adding party fixed effects (column 4) does not change the results. A 10-percentage point growth in regional inequality is associated with a 0.41-standard-deviation increase in left-wing parties' pro-redistributive policy stance under proportional representation but no statistically significant change under plurality rule.

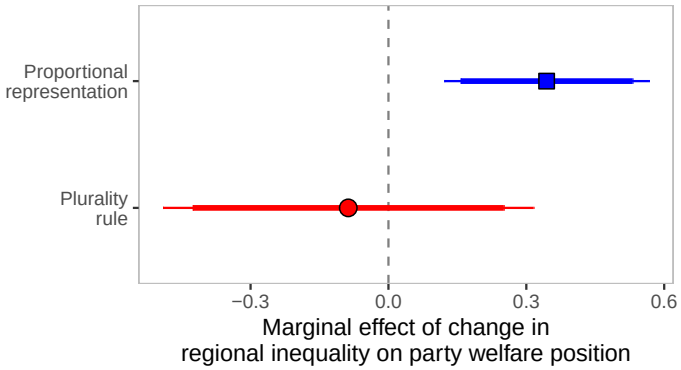
Together, the findings suggest that when elections are held under plurality rule, left-wing party platforms do *not* become more pro-redistribution when regional inequality is growing. Since inequality in most countries is spatially concentrated, as I have documented here, the median constituency is 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,

Table 4: Effect of Regional Inequality on Left Party Welfare Position by Electoral Regime

	Dependent variable:			
	Welfare position			
	(1)	(2)	(3)	(4)
Plurality rule	−0.02	−0.06	−0.08*	−0.02
	(0.04)	(0.05)	(0.04)	(0.07)
Change in regional inequality	0.34***	0.32***	0.34***	0.33***
	(0.11)	(0.11)	(0.11)	(0.11)
Plurality rule	−0.40**	−0.46**	−0.43**	−0.31
× Change in regional inequality	(0.17)	(0.19)	(0.19)	(0.26)
Mean DV	0.38	0.38	0.38	0.38
Country FE	✓	✓	✓	✓
Election year FE	✓	✓	✓	✓
Party FE	–	–	–	✓
Economic covariates	–	✓	✓	✓
Political covariates	–	–	✓	✓
Observations	293	293	293	293
R^2	0.43	0.44	0.45	0.69
Adjusted R^2	0.33	0.33	0.33	0.41

Notes: All models are based on equation 3. Full results in Appendix Table E.2. *p<0.1; **p<0.05; ***p<0.01.

Figure 7: Marginal Effects of Regional Inequality on Left Party Welfare Position by Electoral Regime



Notes: Regression coefficients with 90/95% confidence intervals based on column 3 in Table 4. Higher values on the normalized welfare dimension indicate a more favorable position.

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. 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 third-party challengers.

Discussion and Conclusion

This paper has developed a new argument about the political consequences of rising spatial inequalities across and within countries, 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 compared to 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 regionally concentrated inequality is rising. 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. These findings show that the local economic context affects political behavior and electoral dynamics and help explain why rising inequality has not resulted in more redistribution.

This paper raises several implications for the future of redistributive policies under spatially concentrated inequality that merit further attention. From a policy perspective, one 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. Another 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. It might be more appealing to high income and highly educated left-wing voters—particularly those residing in unequal urban areas—because this group is often less supportive of traditional redistributive policies and more interested in social investment policies such as education or childcare.

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).[14] If the influx of middle- and upper-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.

References

Alesina, Alberto, Stefanie Stantcheva and Edoardo Teso. 2018. "Intergenerational Mobility and Preferences for Redistribution." *American Economic Review* 108(2):521–554.

Alt, James and Torben Iversen. 2017. "Inequality, Labor Market Segmentation, and Preferences for Redistribution." *American Journal of Political Science* 61(1):21–36.

Ansell, Ben and Jane Gingrich. 2021. Concentration and Commodification: The Political Economy of Postindustrialism in America and Beyond. In *The American Political Economy: Politics, Markets,*

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

and Power, ed. Alexander Hertel-Fernandez, Jacob Hacker, Kathleen Thelen and Paul Pierson. Cambridge: Cambridge University Press pp. 375–406.

Ansolabehere, Stephen, William Leblanc and James M. Snyder. 2012. "When Parties Are Not Teams: Party Positions in Single-Member District and Proportional Representation Systems." *Economic Theory* 49(3):521–547.

Beck, Paul Allen, Russell J. Dalton, Steven Greene and Robert Huckfeldt. 2002. "The Social Calculus of Voting: Interpersonal, Media, and Organizational Influences on Presidential Choices." *American Political Science Review* 96(1):57–73.

Beramendi, Pablo. 2012. *The Political Geography of Inequality: Regions and Redistribution*. Cambridge: Cambridge University Press.

Besley, Timothy and Ian Preston. 2007. "Electoral Bias and Policy Choice: Theory and Evidence." *The Quarterly Journal of Economics* 122(4):1473–1510.

Boix, Carles. 1999. "Setting the Rules of the Game: The Choice of Electoral Systems in Advanced Democracies." *The American Political Science Review* 93(3):609–624.

Broz, J. Lawrence, Jeffry Frieden and Stephen Weymouth. 2021. "Populism in Place: The Economic Geography of the Globalization Backlash." *International Organization* 75(2):464–494.

Catalinac, Amy and Lucia Motolinia. 2021. "Geographically Targeted Spending in Mixed-Member Majoritarian Electoral Systems." *World Politics* 73(4):668–711.

Cavaillé, Charlotte and Kris-Stella Trump. 2015. "The Two Facets of Social Policy Preferences." *The Journal of Politics* 77(1):146–160.

Chang, Eric C.C. 2008. "Electoral Incentives and Budgetary Spending: Rethinking the Role of Political Institutions." *The Journal of Politics* 70(4):1086–1097.

Cho, Wendy K. Tam and Thomas J. Rudolph. 2008. "Emanating Political Participation: Untangling the Spatial Structure Behind Participation." *British Journal of Political Science* 38(2):273–289.

Chou, Winston and Rafaela Dancygier. 2021. "Why Parties Displace Their Voters: Gentrification, Coalitional Change, and the Demise of Public Housing." *American Political Science Review* 115(2):429–449.

Colantone, Italo and Piero Stanig. 2018. "The Trade Origins of Economic Nationalism: Import Competition and Voting Behavior in Western Europe." *American Journal of Political Science* 62(4):936–953.

Cramer, Katherine J. 2016. *The Politics of Resentment: Rural Consciousness in Wisconsin and the Rise of Scott Walker*. Chicago: University of Chicago Press.

Cutler, Fred. 2007. "Context and Attitude Formation: Social Interaction, Default Information, or Local Interests?" *Political Geography* 26(5):575–600.

Döring, Holger and Philip Manow. 2017. "Is Proportional Representation More Favourable to the Left? Electoral Rules and Their Impact on Elections, Parliaments and the Formation of Cabinets." *British Journal of Political Science* 47(1):149–164.

Ebeid, Michael and Jonathan Rodden. 2006. "Economic Geography and Economic Voting: Evidence from the US States." *British Journal of Political Science* 36(3):527–547.

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

Elsässer, Lea, Svenja Hense and Armin Schäfer. 2020. "Not Just Money: Unequal Responsiveness in Egalitarian Democracies." *Journal of European Public Policy* 0(0):1–19.

Enns, Peter K. 2015. "Relative Policy Support and Coincidental Representation." *Perspectives on Politics* 13(4):1053–1064.

Enos, Ryan D. 2017. *The Space between Us: Social Geography and Politics*. Cambridge: Cambridge University Press.

Ezrow, Lawrence. 2008. "Parties' Policy Programmes and the Dog That Didn't Bark: No Evidence That Proportional Systems Promote Extreme Party Positioning." *British Journal of Political Science* 38(3):479–497.

Franko, William W. 2016. "Political Context, Government Redistribution, and the Public's Response to Growing Economic Inequality." *The Journal of Politics* 78(4):957–973.

Gallego, Aina. 2015. *Unequal Political Participation Worldwide*. New York: Cambridge University Press.

Gallego, Aina, Franz Buscha, Patrick Sturgis and Daniel Oberski. 2016. "Places and Preferences: A Longitudinal Analysis of Self-Selection and Contextual Effects." *British Journal of Political Science* 46(3):529–550.

Ganong, Peter and Daniel Shoag. 2017. "Why Has Regional Income Convergence in the U.S. Declined?" *Journal of Urban Economics* 102:76–90.

Gilens, Martin. 2012. *Affluence and Influence: Economic Inequality and Political Power in America*. Princeton University Press.

Gimpel, James G., Nathan Lovin, Bryant Moy and Andrew Reeves. 2020. "The Urban–Rural Gulf in American Political Behavior." *Political Behavior* 42(4):1343–1368.

Hopkins, Daniel J. 2010. "Politicized Places: Explaining Where and When Immigrants Provoke Local Opposition." *American Political Science Review* 104(1):40–60.

Huber, Evelyne and John D Stephens. 2001. *Development and Crisis of the Welfare State: Parties and Policies in Global Markets*. Chicago: University of Chicago Press.

Iversen, Torben and David Soskice. 2006. "Electoral Institutions and the Politics of Coalitions: Why Some Democracies Redistribute More Than Others." *American Political Science Review* 100(2):165–181.

Iversen, Torben and David W. Soskice. 2019. *Democracy and Prosperity: Reinventing Capitalism Through a Turbulent Century*. Princeton: Princeton University Press.

Johnston, Ron, Charles Pattie, Daniel Dorling, Iain MacAllister, Helena Tunstall and David Rossiter. 2000. "Local Context, Retrospective Economic Evaluations, and Voting: The 1997 General Election in England and Wales." *Political Behavior* 22(2):121–143.

Jurado, Ignacio and Sandra León. 2019. "Geography Matters: The Conditional Effect of Electoral Systems on Social Spending." *British Journal of Political Science* 49(1):81–103.

Jusko, Karen Long. 2017. *Who Speaks for the Poor? Electoral Geography, Party Entry, and Representation*. Cambridge: Cambridge University Press.

Kelly, Nathan J. and Peter K. Enns. 2010. "Inequality and the Dynamics of Public Opinion: The Self-Reinforcing Link Between Economic Inequality and Mass Preferences." *American Journal of Political Science* 54(4):855–870.

Kenworthy, Lane and Jonas Pontusson. 2005. "Rising Inequality and the Politics of Redistribution in Affluent Countries." *Perspectives on Politics* 3(03):449–471.

Koch, Insa, Mark Fransham, Sarah Cant, Jill Ebrey, Luna Glucksberg and Mike Savage. 2021. "Social Polarisation at the Local Level: A Four-Town Comparative Study on the Challenges of Politicising Inequality in Britain." *Sociology* 55(1):3–29.

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

Le Galès, Patrick and Paul Pierson. 2019. ""Superstar Cities" & The Generation of Durable Inequality." *Daedalus* 148(3):46–72.

Leighley, Jan E. 2013. *Who Votes Now? Demographics, Issues, Inequality, and Turnout in the United States*. Princeton: Princeton University Press.

Lindert, Peter H. 2004. *Growing Public: Social Spending and Economic Growth Since the Eighteenth Century*. New York: Cambridge University Press.

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

Maxwell, Rahsaan. 2019. "Cosmopolitan Immigration Attitudes in Large European Cities: Contextual or Compositional Effects?" *American Political Science Review* 113(2):456–474.

McCann, Philip. 2020. "Perceptions of Regional Inequality and the Geography of Discontent: Insights from the UK." *Regional Studies* 54(2):256–267.

McCarty, Nolan M., Keith T. Poole and Howard Rosenthal. 2006. *Polarized America: The Dance of Ideology and Unequal Riches*. Cambridge, Mass.: MIT Press.

McKee, Seth C. 2008. "Rural Voters and the Polarization of American Presidential Elections." *PS: Political Science & Politics* 41(1):101–108.

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

Minkoff, Scott L. and Jeffrey Lyons. 2019. "Living With Inequality: Neighborhood Income Diversity and Perceptions of the Income Gap." *American Politics Research* 47(2):329–361.

Moene, Karl Ove and Michael Wallerstein. 2001. "Inequality, Social Insurance, and Redistribution." *The American Political Science Review* 95(4):859–874.

Morel, Nathalie, Bruno Palier and Joakim Palme. 2012. *Towards a Social Investment Welfare State? Ideas, Policies and Challenges*. Bristol: Policy Press.

Morgan, Jana and Nathan J. Kelly. 2017. "Social Patterns of Inequality, Partisan Competition, and Latin American Support for Redistribution." *The Journal of Politics* 79(1):193–209.

Newman, Benjamin J. 2020. "Inequality Growth and Economic Policy Liberalism: An Updated Test of a Classic Theory." *The Journal of Politics* 82(2):765–770.

Newman, Benjamin J., Christopher D. Johnston and Patrick L. Lown. 2015. "False Consciousness or Class Awareness? Local Income Inequality, Personal Economic Position, and Belief in American Meritocracy." *American Journal of Political Science* 59(2):326–340.

Newman, Benjamin J., Sono Shah and Erinn Lauterbach. 2018. "Who Sees an Hourglass? Assessing Citizens' Perception of Local Economic Inequality." *Research & Politics* 5(3).

Oliver, J. Eric and Tali Mendelberg. 2000. "Reconsidering the Environmental Determinants of White Racial Attitudes." *American Journal of Political Science* 44(3):574–589.

Persson, Torsten, Gerard Roland and Guido Tabellini. 2007. "Electoral Rules and Government Spending in Parliamentary Democracies." *Quarterly Journal of Political Science* 2(2):155–188.

Peters, Yvette and Sander J. Ensink. 2015. "Differential Responsiveness in Europe: The Effects of Preference Difference and Electoral Participation." *West European Politics* 38(3):577–600.

Piketty, Thomas. 2014. *Capital in the Twenty-First Century*. Cambridge: The Belknap Press.

Reeves, Andrew and James G. Gimpel. 2012. "Ecologies of Unease: Geographic Context and National Economic Evaluations." *Political Behavior* 34(3):507–534.

Rickard, Stephanie J. 2018. *Spending to Win: Political Institutions, Economic Geography, and Government Subsidies*. Cambridge: Cambridge University Press.

Rodden, Jonathan. 2010. "The Geographic Distribution of Political Preferences." *Annual Review of Political Science* 13(1):321–340.

Rodden, Jonathan. 2019. *Why Cities Lose: The Deep Roots of the Urban-Rural Political Divide*. New York: Basic Books.

Rodríguez-Pose, Andrés. 2018. "The Revenge of the Places That Don't Matter (and What to Do About It)." *Cambridge Journal of Regions, Economy and Society* 11(1):189–209.

Romer, Thomas. 1975. "Individual Welfare, Majority Voting, and the Properties of a Linear Income Tax." *Journal of Public Economics* 4(2):163–185.

Sands, Melissa L. and Daniel de Kadt. 2020. "Local Exposure to Inequality Raises Support of People of Low Wealth for Taxing the Wealthy." *Nature* 586(7828):257–261.

Schmidt-Catran, Alexander W. 2016. "Economic Inequality and Public Demand for Redistribution: Combining Cross-Sectional and Longitudinal Evidence." *Socio-Economic Review* 14(1):119–140.

Snyder, James M. 1994. "Safe Seats, Marginal Seats, and Party Platforms: The Logic of Platform Differentiation." *Economics & Politics* 6(3):201–213.

Tajfel, Henri, M. G. Billig, R. P. Bundy and Claude Flament. 1971. "Social Categorization and Intergroup Behaviour." *European Journal of Social Psychology* 1(2):149–178.

Warshaw, Christopher and Jonathan Rodden. 2012. "How Should We Measure District-Level Public Opinion on Individual Issues?" *The Journal of Politics* 74(1):203–219.

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Supplementary Appendix

Redistributive Politics Under Spatial Inequality

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A Supporting Information for Cross-National Regional Inequality

A.1 Background Information

Table A.1: Summary Statistics, OECD Regional Data

Country	*Regions (number within country)*	*Electoral Rule*	*SD pre-tax Gini index*	*SD national redistribution*	*Origin year of electoral regime*
Australia	States/territories (8)	Plurality	0.06	0.14	1901
Austria	Bundesländer (9)	PR	0.04	0.21	1945
Belgium	Régions (3)	PR	0.07	0.23	1894
Canada	Provinces and territories (10)	Plurality	0.02	0.12	1867
Czech Republic	Oblasti (8)	PR	0.03	0.20	1995
Denmark	Regioner (5)	PR	0.01	0.19	1920
Finland	Suuralueet (4)	PR	0.02	0.23	1917
France	Régions + Régions d'outre-mer (22)	Plurality	0.03	0.20	1986
Germany	Bundesländer (13)	PR	0.03	0.22	1949
Greece	Regions (4)	PR	0.02	0.22	1974
Hungary	Planning statistical regions (3)	Plurality	0.01	0.23	1989
Ireland	Groups Regional Authority Regions (2)	PR	0.01	0.26	1937
Italy	Regioni (21)	PR	0.04	0.19	2005
Japan	Groups of prefectures (10)	Plurality	0.04	0.15	1994
Netherlands	Provinces (12)	PR	0.02	0.15	1917
New Zealand	Regional councils (2)	PR	0.02	0.13	1993
Norway	Landsdeler (7)	PR	0.01	0.16	1919
Poland	Vojewodztwa (6)	PR	0.02	0.17	1989
Slovakia	Zoskupenia krajov (4)	PR	0.01	0.16	1993
Slovenia	Kohezijske regije (2)	PR	0.01	0.21	1991
Spain	Comunidades autonomas (19)	PR	0.03	0.18	1976
Sweden	Riksomraden (8)	PR	0.02	0.16	1917
Switzerland	Grandes regions (7)	PR	0.03	0.08	1918
United Kingdom	Regions and countries (12)	Plurality	0.02	0.17	1837
United States	States and the District of Columbia (51)	Plurality	0.04	0.11	1800

Notes: Includes only regions for which income inequality data is available. The OCED regional inequality data is for 2009 for Japan; 2010 for France, Slovenia, and Switzerland; 2011 for New Zealand and the United Kingdom; 2014 for the Netherlands, Norway, Sweden, and the United States; and 2013 for all other countries. National redistribution is calculated as the difference in pre- and post-tax Gini coefficients. *Sources:* OECD Regional Wellbeing Dataset. 2014. OECD Income Distribution Database. 2022.

Origin Year of Electoral Regime

I draw on data from Perrson and Tabellini (2003) (Table 4.2, pp. 83-87) using either the year in which the current electoral rule in a country was first introduced or the first year of democratic rule, whichever came later. I have updated it to reflect changes up to 2014. Changes to the electoral regime are coded only for substantive and significant changes to/from proportional representation and plurality rule. For example, Greece adopted a system of "reinforced proportionality" in 1974 and, with the exception of the 1989–90 period, Greek elections took place under an electoral system that combined PR with single-party majority governments (Dinas, 2020, p. 215). Since none of the electoral changes moved the country toward plurality rule, I use 1974 as the origin

year of Greece's electoral regime. Italy has formally had four different electoral systems between 1948 and 2015, moving between PR (1948–1992) to mixed-member majoritarian (MMM, 1993–2005) to variations of PR again (2005–current) with a majority bonus (Passarelli 2018, p. 855). To reflect the recent switch from MMM to PR, I code the origin year of the current electoral regime as 2005. Changing the origin year to 1948 does not change the results substantively. Japan's electoral system to its House of Representatives was changed in 1994 from a hyper-personalistic single nontransferable voting rule to mixed-member majoritarian (Nemoto 2018). Spain established the current proportional representation electoral system in 1976 with the "Law for Political Reform" (Bosch 2020). New Zealand changed from a first-past-the-post system to a mixed-member proportional electoral system following a referendum in 1993, which became effective in the 1996 election.

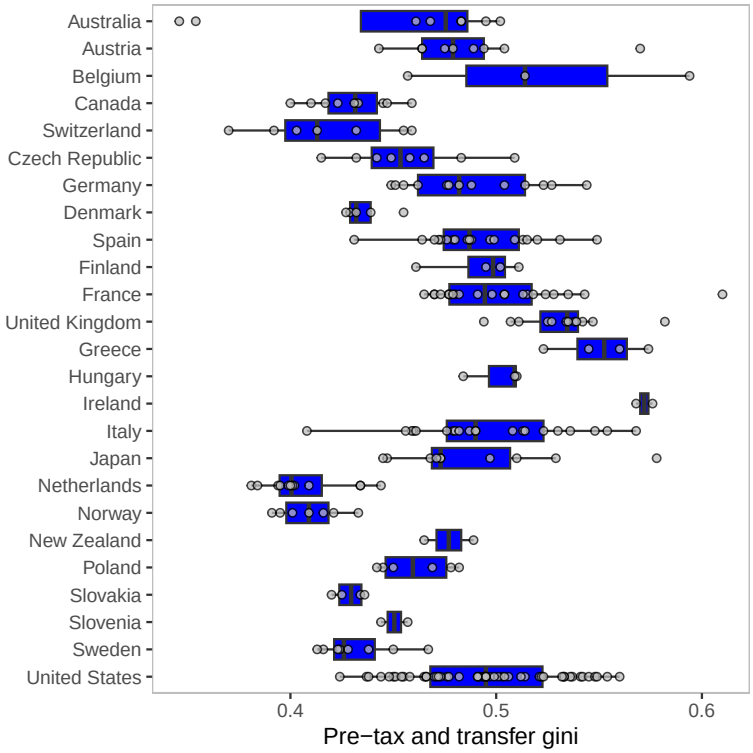
Descriptive Statistics for Country- and Regional-level Covariates

Table A.2: Summary Statistics

Variable	Mean	Std. Dev.	Min	Max	Source
Country level					
GDP (log)	14.42	1.44	10.95	16.68	OECD National Accounts
Unemployment rate	9.26	5.90	3.63	27.49	OECD National Accounts
Trade union density	23.04	15.55	10.70	68.80	OECD National Accounts
Pre-tax gini	0.49	0.04	0.37	0.57	OECD IDD
Post-tax gini	0.32	0.04	0.25	0.39	OECD IDD
Seat share left governments	16.40	24.36	0.00	100.00	CPDS
Presidential system (0/1)	0.29	0.45	0.00	1.00	CPDS
Bicameralism index	2.92	0.99	1.00	4.00	CPDS
Regional level					
Unemployment rate	8.84	6.09	2.20	34.80	OECD RWB
Share of workers with secondary education or higher	81.94	10.42	47.50	97.70	OECD RWB
General election turnout	69.16	11.63	40.40	95.10	OECD RWB

Sources: OECD Regional Wellbeing Database (RWB) 2014; Comparative Political Dataset 1960-2018 (CPDS); OCED National Accounts Database 2022; OCED Income Distribution Database (IDD) 2022.

Figure A.1: Distribution of Regional Pre-Tax and Transfer Inequality Across Countries



Source: OECD Regional Wellbeing Database (RWB).

A.2 Supporting Information for Instrumental Variable Estimation

A potential concern with the OECD cross-sectional regression models in Section 3 is that electoral rules might be endogenous to inequality and redistribution. I address this with a two-stage least squares (2SLS) model in which I instrument electoral rules with the year when a country introduced the current electoral regime. The instrument leverages historical waves in the design of electoral rules and relies on the notion that older constitutions and electoral regimes tend to be majoritarian, whereas more recent constitutions and constitutional electoral changes are more likely to adopt PR electoral rule.[1]

A valid instrumental variable requires three assumptions. First, the instrument correlates with electoral regime type; the more recent the electoral regime is, the less likely it is to be plurality rule. I confirm that the year of origin of the electoral regime (measured as either year or period) has a negative and statistically significant effect on plurality rule (Appendix Table A.3). The conditional F-statistic indicates a reasonably strong instrument. The second assumption is that the year the electoral regime was introduced is exogenous to potential outcomes of interest such as regional inequality and redistribution. This is a plausible assumption since it is unlikely that the historical date – or range of dates, see details below – of the origin of the current electoral rule affects present-day *regional* pre-tax inequality and redistribution. The third and untestable assumption is the exclusion restriction, requiring that the instrument affects regional inequality and redistribution only through its effect on the electoral regime. One concern is that parties that are powerful enough to bargain for changes in the electoral regime could also introduce redistributive programs. For example, if left-wing parties are more likely to negotiate for PR *and* enact redistributive policies subsequently, the exclusion restriction would be violated.

The literature on electoral regime change has identified two classes of explanations as to why countries adopt proportional representation electoral rules (Leemann and Mares 2014). A first set of political arguments suggests that political power and partisan strategies motivate electoral reform (Boix 1999; Rokkan 1970). Shifts to PR occur due to political mobilization by socialist parties and electoral vulnerability of right-wing parties, or due to partisan calculations that PR electoral rule can result in more seats by alleviating disproportionalities in the translation of votes to seats.

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

Several reasons suggests that the adoption of PR is not the result of left-wing party strength *and* subsequent redistributive policies. First, left-wing parties were not necessarily in a position of strength leading up to and following the introduction of PR. Nor were they always the driving force behind electoral reform. In the period of party foundation and consolidation before World War I, socialist parties were severely underrepresented in parliaments in Austria, Denmark, Germany, Italy, Norway, and Switzerland (Bartolini 2000). In Denmark, Germany, and Norway, socialist and social democratic parties had narrow victories *before* the enactment of PR. After the shift to PR, only the German Social Democrats retained a plurality of the vote. In Denmark and Norway, their vote shares declined (Calvo 2009).

Second, it is also not necessarily the case that urban centers with many working-class voters were in the hand of left-wing parties. On the contrary, in many Scandinavian countries, cities were firmly dominated by right-wing parties. Here, the Conservatives spearheaded the shift toward PR because they feared electoral defeat through the introduction of mass suffrage, worker mobilization, and the entry of socialist parties. In Denmark, the Conservatives had the most to gain from proportional representation and entered a cross-class compromise including both Socialists and Conservatives (Rodden 2010).

In line with arguments about vote and seat maximization goals, Cox, Fiva and Smith (2019) argue that party leaders introduced PR because they sought to improve their own control over nominations and their ability to discipline their own members of parliament. Paulsen (2022) shows that the adoption of PR itself, not left-wing party strength, leads to higher levels of redistribution because of increases in political mobilization. In the context of the 1919 electoral reform in Norwegian local elections, she finds that right-wing parties engaged in more redistribution prior to the reform to preempt electoral gains of left-wing parties. More generally, the entry of new electoral competitors who draw considerable votes from one of the established parties will introduce strong partisan biases in the allocation of seats. Here, too, the calculus to adopt PR was not driven by left-wing parties' strength nor their desires to enact redistributive policies. Instead, politicians drove PR adoption due to their concerns about malapportionment and the disproportionality in how votes were translated into seats (Calvo 2009; Leemann and Mares 2014). A similar rationale explains the shift to PR in some countries as a self-preservation effort by liberals. These arguments suggest that the existence of strong left parties and/or demand for more public spending

were not necessarily the reasons behind the shift toward PR. They also cast doubt on claims that socialist parties had enough electoral power to enact redistributive policies immediately following electoral reform.

Finally, many electoral reforms were carried out in countries with weak or non-existent socialist parties (Calvo 2009; Rokkan 1970). In these culturally heterogeneous countries, the shift to PR sought to create political stability and to protect political minorities whose status was threatened by growing electoral competition. In Belgium and Sweden, the Socialists were never in a position to win elections by the time electoral reforms were implemented. The Catholic party remained the dominant party in Belgium for more than twenty years after the introduction of PR electoral.

A second set of economic arguments proposes that structural economic conditions and group preferences motivate electoral regime change. For example, Cusack, Iversen and Soskice (2007) suggest that in countries with consensual labor relationships and high levels of "co-specific" assets, economic groups are more likely to push for PR because it better serves their interests and long-term economic investments than majoritarian systems that are prone to political capture by groups with narrow geographic bases. These explanation are unrelated to the spatial structure of inequality and redistribution. Cusack, Iversen and Soskice (2007) argue that democratization and, more importantly, industrialization had two effects: it pushed regulatory issues around education, vocational training, and collective bargaining to the national level; and it threatened the separate parliamentary existence of regional, confessional, and ethnic "interest carrying" parties, which were sometimes also national liberal and conservative parties (see also Cusack, Iversen and Soskice (2010)). Their argument does not imply that left-wing parties reflected a demand for more redistribution. Instead, it was industrialization that introduced stark disproportionalities that consequently had the potential to undermine consensus-based negotiation over regulatory issues in a locally and regionally rooted representative system in majoritarian countries. The shift to PR was a way to restore a negotiation-based political system in which different economic interests were effectively represented by parties.

Note further that the recent rise in spatial inequalities is predominantly linked to deindustrialization, globalization, and agglomeration effects in urban centers and "superstar cities" of the knowledge economy (Broz, Frieden and Weymouth 2021; Colantone and Stanig 2018; Ganong and Shoag 2017; LeGalès and Pierson 2019).

In sum, it is unlikely that changes in regional inequality *and* redistribution are endogenous to changes in electoral regimes.

As an additional robustness check, I create a new origin time indicator by grouping origin years into periods spanning two decades, starting from 1901-1920, 1921-1940, [...], 2000-2020. This categorical grouping leverages the fact that changes in electoral regimes came in "waves" and alleviates concerns that the specific origin year reflects a particular constellation of partisan bargain power over electoral rules and, subsequently, redistributive policies. The results remain unchanged. (Appendix Table A.5, column 7, and Table A.4 for the first stage).

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

	Dependent variable:		
	Plurality rule		
	(1)	(2)	(3)
Origin year electoral rule	−0.002***	−0.002***	−0.002***
	(0.000)	(0.000)	(0.000)
Log GDP	0.018***	0.031***	0.023***
	(0.000)	(0.006)	(0.007)
Unemployment rate	−0.009***	−0.006	−0.014***
	(0.000)	(0.004)	(0.004)
Union density	−0.001***	−0.001*	−0.004***
	(0.000)	(0.001)	(0.001)
EU Member	−0.113***	−0.162***	−0.182***
	(0.000)	(0.018)	(0.015)
Weak federalism	0.066***	0.012	−0.030
	(0.000)	(0.021)	(0.018)
Strong federalism	−0.720***	−0.750***	−0.723***
	(0.000)	(0.013)	(0.014)
Presidential system	0.257***	0.190***	0.178***
	(0.000)	(0.019)	(0.019)
Bicamerialism index	0.133***	0.142***	0.092***
	(0.000)	(0.010)	(0.012)
Share cabinet seats left parties	−0.007***	−0.007***	−0.008***
	(0.000)	(0.000)	(0.000)
Coalition government	−0.426***	−0.392***	−0.457***
	(0.000)	(0.020)	(0.018)
Regional unemployment rate		0.009**	0.007
		(0.005)	(0.004)
Regional share of workers		0.008***	0.003**
with secondary education or higher		(0.001)	(0.002)
Regional turnout		0.004***	0.004***
		(0.001)	(0.001)
Constant	3.989***	2.887***	3.215***
	(0.000)	(0.253)	(0.260)
No. countries	25	25	22
Observations	252	252	246
R^2	0.771	0.779	0.794
Adjusted R^2	0.761	0.766	0.781

Notes: The results in column 3 estimate the models without Ireland, New Zealand, and Slovenia. *p<0.1; **p<0.05; ***p<0.01.

Table A.4: IV First Stage Results: Effect of Electoral Regime Origin on Electoral Regime Type; By Year Grouping

	Dependent variable:
	Plurality rule
Origin electoral rule: 1900s	-0.455^{***}
	(0.009)
Origin electoral rule: 1920s	-0.936^{***}
	(0.024)
Origin electoral rule: 1940s	-0.311^{***}
	(0.021)
Origin electoral rule: 1960s	-2.212^{***}
	(0.059)
Origin electoral rule: 1980s	-0.192^{***}
	(0.013)
Origin electoral rule: 2000s	-1.362^{***}
	(0.022)
Log GDP	0.099^{***}
	(0.005)
Unemployment rate	0.093^{***}
	(0.004)
Union density	0.004^{***}
	(0.000)
EU Member	-0.478^{***}
	(0.012)
Weak federalism	0.240^{***}
	(0.023)
Strong federalism	-0.565^{***}
	(0.023)
Presidential system	0.014
	(0.012)
Bicamerialism index	0.170^{***}
	(0.010)
Share cabinet seats left parties	-0.005^{***}
	(0.000)
Coalition government	-0.123^{***}
	(0.013)
Regional unemployment rate	-0.002
	(0.003)
Regional share of workers	-0.007^{***}
with secondary education or higher	(0.001)
Regional turnout	0.005^{***}
	(0.001)
Constant	-0.989^{***}
	(0.161)
No. countries	25
Observations	252
R^2	0.886
Adjusted R^2	0.877

Notes: Electoral regime origin years pre-1900 is the omitted baseline. $^{*}p<0.1$; $^{**}p<0.05$; $^{***}p<0.01$.

A.3 Full Regression Results

Table A.5: Effect of Spatial Inequality on Redistribution By Electoral Regime

	Dependent variable:						
	National redistribution						
	OLS			*2SLS*	*OLS*	*2SLS*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Plurality rule	0.191***	0.190***	0.218***	0.193***	0.226***	0.229**	0.207***
	(0.015)	(0.016)	(0.017)	(0.073)	(0.022)	(0.090)	(0.031)
Pre-tax gini	0.389***	0.350***	0.464***	0.714***	0.497***	0.982***	0.507***
	(0.028)	(0.029)	(0.028)	(0.091)	(0.045)	(0.125)	(0.038)
Plurality rule	−0.393***	−0.402***	−0.470***	−0.620***	−0.502***	−0.772***	−0.487***
× Pre-tax gini	(0.033)	(0.035)	(0.036)	(0.143)	(0.048)	(0.172)	(0.063)
Log GDP	−0.006***	−0.004***	−0.005***	−0.001	−0.002	−0.004	−0.004***
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.004)	(0.001)
Unemployment rate	−0.001***	−0.001***	0.000*	−0.000	−0.000	−0.002***	0.000
	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)
Union density	0.000	−0.000	−0.000***	−0.000***	−0.001***	−0.001***	−0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
EU Member	0.068***	0.061***	0.057***	0.038***	0.052***	0.023***	0.053***
	(0.001)	(0.002)	(0.002)	(0.005)	(0.003)	(0.007)	(0.003)
Weak federalism		0.024***	0.011***	0.001	0.008*	−0.024**	0.009**
		(0.003)	(0.004)	(0.008)	(0.005)	(0.011)	(0.005)
Strong federalism		0.000	0.003	−0.058***	0.004	−0.073***	−0.009**
		(0.003)	(0.003)	(0.008)	(0.004)	(0.012)	(0.005)
Presidential system		0.007***	0.005**	0.028***	0.001	0.029***	0.009***
		(0.001)	(0.002)	(0.004)	(0.003)	(0.006)	(0.002)
Bicamerialism index		−0.007***	−0.008***	0.003	−0.016***	−0.007	−0.005***
		(0.001)	(0.002)	(0.003)	(0.002)	(0.005)	(0.002)
Share cabinet seats left parties		−0.000***	−0.000***	−0.001***	−0.000***	−0.001***	−0.000***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Coalition government		0.011***	0.012***	−0.036***	0.008**	−0.068***	0.002
		(0.002)	(0.002)	(0.007)	(0.003)	(0.011)	(0.003)
Regional unemployment rate			−0.002***	−0.003***	−0.002***	−0.005***	−0.002***
			(0.000)	(0.001)	(0.000)	(0.001)	(0.000)
Regional share of workers			−0.000	0.001*	−0.000**	−0.001	0.000
with secondary education or higher			(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Regional turnout			0.000***	0.001***	0.001***	0.001***	0.000***
			(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Mean DV	0.165	0.165	0.165	0.165	0.164	0.164	0.165
No. countries	25	25	25	25	22	22	
F-Statistic	–	–	–	12.11	–	10.65	25.56
Wu-Hausman	–	–	–	31.22	–	50.08	14.47
Observations	252	252	252	252	246	246	252
R^2	0.798	0.830	0.849	0.533	0.860	0.406	0.836
Adjusted R^2	0.792	0.821	0.838	0.501	0.850	0.364	0.825

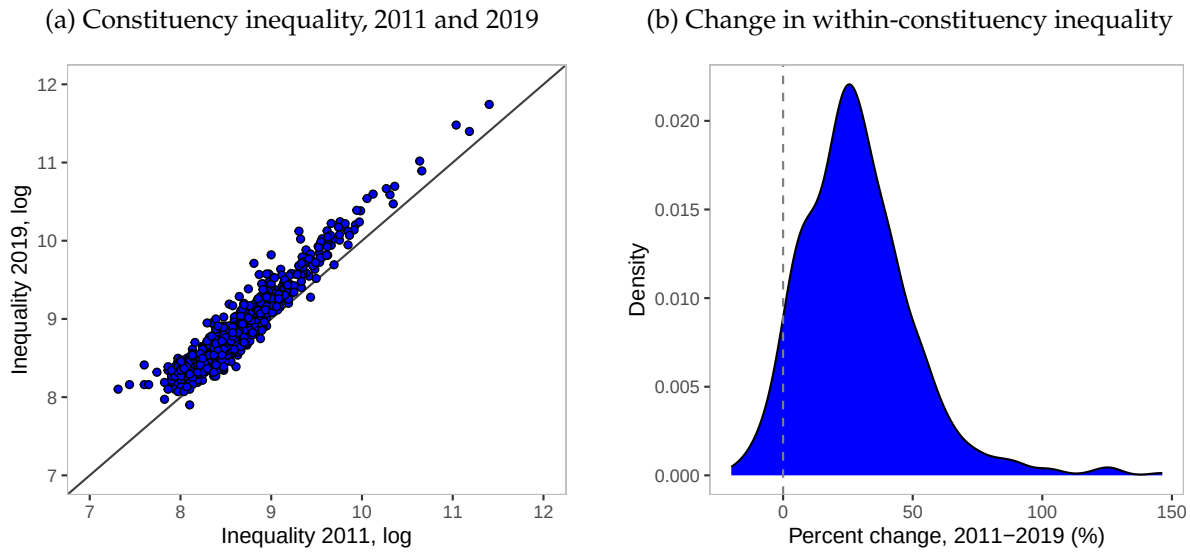
Notes: All models are based on equation 1. The Gini index measures regional inequality within countries. Bootstrapped standard errors are clustered at the country level and reported in parentheses. The 2SLS regressions in columns 4 and 6 instrument plurality rule with the year a country adopted its current electoral regime. The results in columns 5 and 6 estimate the models without Ireland, New Zealand, and Slovenia. The instrument for plurality rule in column 7 is the two-decade period in which the current electoral regime was adopted; pre-1900, 1901-1920, 1921-1940, [...], 2000-2020. The pre-1900 period is the omitted baseline.

B Supporting Information for the UK Case

B.1 Distribution of UK Constituency Inequality

Figure B.1 shows the distribution of constituency-level mean-median inequality over time. Panel (a) compares levels of inequality in 2011 and 2019 for each of the 650 constituencies, showing considerable variation both in terms of levels as well as changes. Panel (b) illustrates the distribution of the percent change in constituency inequality between 2011 and 2019. For example, 91 constituencies saw their levels of inequality grow by 50% or more over the sample period 2011–2019; eight constituencies more than doubled their levels of inequality. 30 constituencies saw their levels of inequality decline.

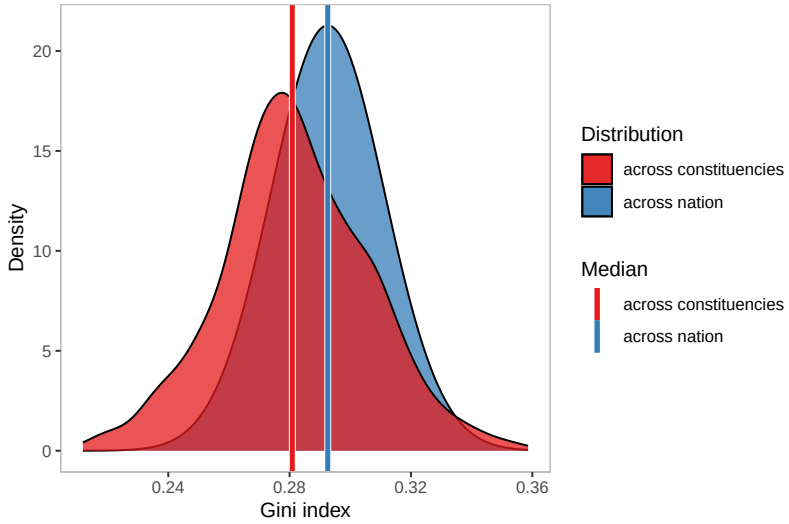
Figure B.1: Variation in Constituency-Level Inequality



Notes: Panel (a) shows levels of constituency inequality in 2011 and 2019. Each dot represents a constituency. Panel (b) shows the distribution of percent change in constituency inequality between 2011 and 2019.

Figure B.2 plots the nation-wide interpersonal inequality and the distribution of constituency-level income inequality as measured with the Gini index based on individual-level income data from the BES. Using this measure, the results confirm the findings based on administrative income data to construct constituency-level inequality (see Figure 3a): the median constituency is less unequal and less right-skewed than the UK nation-wide distribution as a whole.

Figure B.2: Distribution of Gini Coefficients Aross Constituencies and the United Kingdom



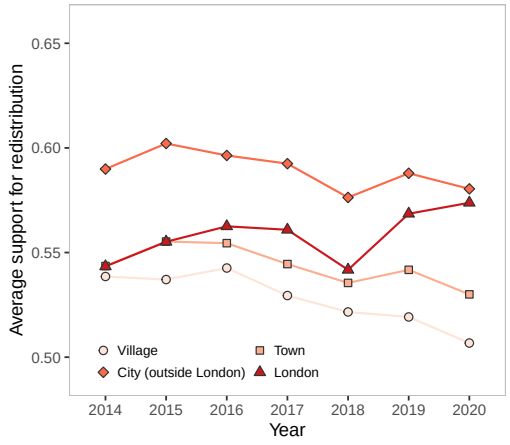
Notes: BES waves 1-4, 6-7, and 10-20.

B.2 Support for Redistribution By Urban/Rural Classifications

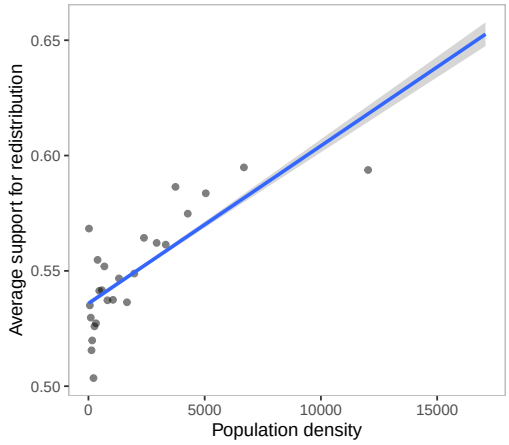
Figure B.3a plots the development of support for redistribution along the urban–rural classification scheme. In London, support for redistribution has increased since 2018 to match the average level of support found in other cities. Towns, and especially villages, however, became less supportive of redistribution. Since the urban–rural classification can be imprecise, Figure B.3b 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 B.3: Spatial Dimension of Support for Redistribution in England and Wales

(a) By Degree of Urbanization



(b) By Population Density



Notes: Data from all 650 UK constituencies. Panel (b) shows a binscatter plot with a regression line fitted to the full data.

B.3 Rankings of Constituencies by Inequality and Population Density

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

10 most unequal constituencies		10 most equal constituencies	
Constituency name	*Inequality (£)*	*Constituency name*	*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.

Table B.2: Inequality in the 10 most densely populated constituencies, 2019

Constituency name	*People/km^2*	*Inequality (£)*
Westminster North	17,079	61,000
Bethnal Green and Bow	16,693	14,300
Islington South and Finsbury	16,582	35,300
Poplar and Limehouse	16,171	20,900
Islington North	16,055	22,500
Hackney North and Stoke Newington	15,854	11,900
Vauxhall	14,525	18,600
Bermondsey and Old Southwark	14,283	20,500
Hackney South and Shoreditch	13,763	18,400
Chelsea and Fulham	13,212	89,100

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

Table B.3: Inequality in the 10 least densely populated constituencies, 2019

Constituency name	*People/km^2*	*Inequality (£)*
Ross, Skye and Lochaber	6	5,500
Caithness, Sutherland and Easter Ross	7	7,400
Na h-Eileanan an Iar	9	4,400
Argyll and Bute	12	6,800
Orkney and Shetland	18	5,300
Dumfriesshire, Clydesdale and Tweeddale	20	7,000
Inverness, Nairn, Badenoch and Strathspey	22	6,200
Brecon and Radnorshire	23	6,100
Dumfries and Galloway	24	4,600
Berwickshire, Roxburgh and Selkirk	25	6,000

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

B.4 Summary Statistics for British Election Study

Table B.4: Summary Statistics for Individual-Level Covariates

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 B.5: Summary Statistics for Individual-Level Covariates

Variable	Mean	Std. Dev.	Min	Max
Support for redistribution	0.56	0.31	0.00	1.00
Gross household income	6.97	3.56	1.00	15.00
Number of children in household	1.35	0.76	1.00	5.00
Age	52.60	15.62	17.00	85.00

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 B.6: Summary Statistics for Constituency-Level Covariates

Variable	Mean	Std. Dev.	Min	Max
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

Table B.7: Socio-Economic Characteristics of Labour Supporters by Constituency Inequality

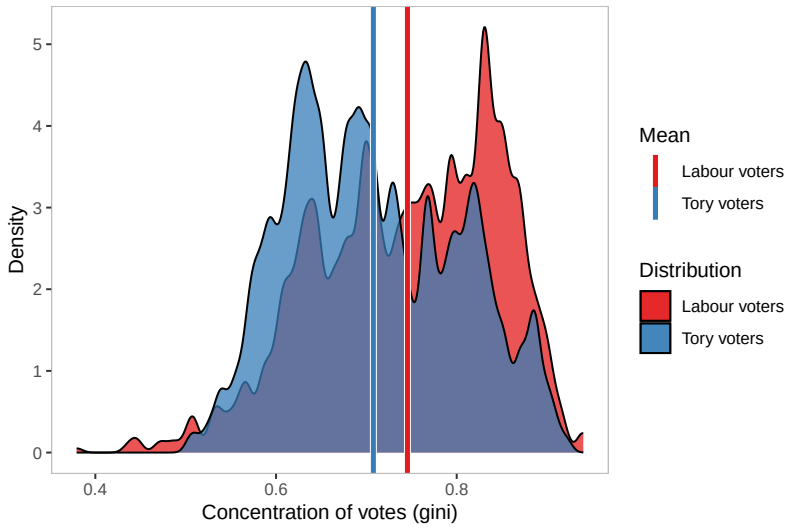
Variable	Constituency inequality	
	below median	*above median*
Shares (%)		
Female	0.52	0.54
No qualifications	0.07	0.05
Less than GCSs	0.04	0.03
GCSE	0.21	0.15
A-level	0.20	0.18
Undergraduate	0.36	0.42
Postgrad	0.11	0.17
Student	0.04	0.05
Unemployed	0.03	0.02
Retired	0.23	0.20
Married	0.49	0.45
Homeowner	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.

B.5 Concentration of Partisan Voters in Constituencies

Figure B.4 shows that Labour voters are more concentrated within constituencies than Conservative voters.

Figure B.4: 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.

B.6 Full Regression Results

Table B.8: Effect of Constituency-Level Inequality on Support for Redistribution

	Dependent variable:					
	Support for redistribution					
	(1)	(2)	(3)	(4)	(5)	(6)
Constituency inequality (log)	0.029***	0.020**	0.024**	−0.010	−0.011	−0.009
	(0.009)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
Vote for Labour				−0.143***	−0.149***	−0.147***
				(0.045)	(0.045)	(0.046)
Vote for Tories				−0.170***	−0.176***	−0.171***
				(0.047)	(0.047)	(0.047)
Constituency inequality (log) × Vote for Labour				0.029***	0.029***	0.029***
				(0.005)	(0.005)	(0.005)
Constituency inequality (log) × Vote for Tories				−0.002	−0.002	−0.002
				(0.005)	(0.005)	(0.005)
Male	−0.023***	−0.024***	−0.024***	−0.019***	−0.019***	−0.019***
	(0.002)	(0.002)	(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)	(0.000)	(0.000)	(0.000)	(0.000)
Education: below GCSs	−0.020***	−0.022***	−0.022***	−0.011*	−0.013**	−0.013**
	(0.007)	(0.007)	(0.007)	(0.006)	(0.006)	(0.006)
Education: GCSE	−0.037***	−0.038***	−0.038***	−0.028***	−0.029***	−0.029***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Education: A-Level	−0.051***	−0.051***	−0.051***	−0.046***	−0.047***	−0.047***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Education: undergraduate	−0.028***	−0.027***	−0.027***	−0.038***	−0.039***	−0.039***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Education: postgraduate	0.008	0.008	0.008	−0.016***	−0.018***	−0.018***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Household gross income	−0.015***	−0.015***	−0.015***	−0.012***	−0.012***	−0.012***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Student	−0.028***	−0.029***	−0.029***	−0.019***	−0.019***	−0.019***
	(0.006)	(0.006)	(0.006)	(0.005)	(0.005)	(0.005)
Unemployed	0.028***	0.027***	0.026***	0.024***	0.023***	0.023***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Retired	−0.049***	−0.048***	−0.048***	−0.035***	−0.035***	−0.036***
	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)
Married	0.005*	0.005	0.005	0.005*	0.004*	0.004*
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Children in household	0.009***	0.009***	0.009***	0.003**	0.003**	0.003**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Homeowner	−0.075***	−0.074***	−0.074***	−0.054***	−0.053***	−0.053***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Median house price (log)		0.046**	0.052***	0.037**	0.039**	0.071***
		(0.021)	(0.019)	(0.018)	(0.019)	(0.018)
Share people with degree		0.000	0.000	−0.000	−0.000	−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)	(0.000)	(0.000)	(0.000)	(0.000)
Mean income (log)		−0.031	−0.026	0.018	0.008	−0.002
		(0.037)	(0.037)	(0.033)	(0.033)	(0.034)
Constituency Labour vote share		0.030**	0.002		−0.011	0.001
		(0.015)	(0.013)		(0.014)	(0.012)
Share non-white		0.049*	0.047*		0.029	−0.024
		(0.027)	(0.026)		(0.025)	(0.024)
UK inequality (log)			0.028			0.036
			(0.033)			(0.034)
Mean DV	0.561	0.559	0.559	0.557	0.557	0.557
Constituency FE	✓	✓	✓	✓	✓	✓
Year FE	✓	✓	–	✓	✓	–
Year trend	–	–	✓	–	–	✓
Observations	266,011	247,065	247,065	225,018	217,111	217,111
R^2	0.092	0.092	0.092	0.238	0.237	0.236
Adjusted R^2	0.090	0.089	0.089	0.235	0.234	0.234

Notes: All models are based on equation 2. Voting for other parties is the omitted baseline. *p<0.1; **p<0.05; ***p<0.01.

Table B.9: Effect of Constituency-Level Inequality on Support for Redistribution, Full Sample

	Dependent variable:					
	Support for redistribution					
	(1)	(2)	(3)	(4)	(5)	(6)
Constituency inequality (log)	0.028***	0.021**	0.026**	−0.009	−0.010	−0.007
	(0.008)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
Vote for Labour				−0.141***	−0.147***	−0.146***
				(0.045)	(0.045)	(0.045)
Vote for Tories				−0.175***	−0.180***	−0.175***
				(0.046)	(0.047)	(0.047)
Constituency inequality (log) × Vote for Labour				0.029***	0.029***	0.029***
				(0.005)	(0.005)	(0.005)
Constituency inequality (log) × Vote for Tories				−0.002	−0.001	−0.002
				(0.005)	(0.005)	(0.005)
Male	−0.023***	−0.024***	−0.024***	−0.019***	−0.020***	−0.020***
	(0.002)	(0.002)	(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)	(0.000)	(0.000)	(0.000)	(0.000)
Education: below GCSs	−0.019***	−0.021***	−0.021***	−0.010	−0.013*	−0.013**
	(0.007)	(0.007)	(0.007)	(0.006)	(0.006)	(0.006)
Education: GCSE	−0.037***	−0.038***	−0.038***	−0.028***	−0.029***	−0.029***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Education: A-Level	−0.050***	−0.050***	−0.050***	−0.046***	−0.047***	−0.046***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Education: undergraduate	−0.027***	−0.027***	−0.027***	−0.038***	−0.039***	−0.039***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Education: postgraduate	0.008	0.008	0.008	−0.016***	−0.017***	−0.017***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Household gross income	−0.015***	−0.015***	−0.015***	−0.012***	−0.012***	−0.012***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Student	−0.028***	−0.029***	−0.029***	−0.018***	−0.019***	−0.019***
	(0.005)	(0.006)	(0.006)	(0.005)	(0.005)	(0.005)
Unemployed	0.027***	0.026***	0.026***	0.023***	0.022***	0.021***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Retired	−0.049***	−0.048***	−0.048***	−0.035***	−0.035***	−0.036***
	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)
Married	0.004	0.004	0.004	0.005*	0.004	0.004
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Children in household	0.009***	0.009***	0.009***	0.003**	0.003**	0.003**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Homeowner	−0.075***	−0.074***	−0.074***	−0.054***	−0.053***	−0.053***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Median house price (log)		0.048**	0.053***	0.038**	0.040**	0.070***
		(0.021)	(0.019)	(0.018)	(0.019)	(0.018)
Share people with degree		0.000	0.000	−0.000	−0.000	−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)	(0.000)	(0.000)	(0.000)	(0.000)
Mean income (log)		−0.031	−0.028	0.018	0.006	−0.004
		(0.036)	(0.037)	(0.032)	(0.033)	(0.033)
Constituency Labour vote share		0.030**	−0.006		−0.010	−0.004
		(0.015)	(0.012)		(0.015)	(0.012)
Share non-white		0.046*	0.047*		0.026	−0.022
		(0.026)	(0.025)		(0.024)	(0.024)
UK inequality (log)			0.016			0.026
			(0.033)			(0.034)
Mean DV	0.56	0.559	0.559	0.557	0.557	0.557
Constituency FE	✓	✓	✓	✓	✓	✓
Year FE	✓	✓	–	✓	✓	–
Year trend	–	–	✓	–	–	✓
Observations	271,682	252,019	252,019	229,257	220,811	220,811
R^2	0.092	0.092	0.092	0.237	0.236	0.236
Adjusted R^2	0.090	0.089	0.089	0.234	0.234	0.233

Notes: All models are based on equation 2. Voting for other parties is the omitted baseline. *p<0.1; **p<0.05; ***p<0.01.

B.7 Alternative Definition and Measurement of Local Inequality

This section presents results on the effect of local inequality on demands for redistribution when local inequality is measured at a smaller neighborhood scale. I collect data from the ONS Indices of Deprivation, which is available for England in 2010, 2015, and 2019. The Index of Multiple Deprivation (IMD) is an overall relative measure of deprivation constructed by combining the following seven domains of deprivation: income deprivation; employment deprivation; education, skills, and training deprivation; health deprivation and disability; crime; barriers to housing and services; and living environment deprivation.[2] The indices are available for Lower-layer Super Output Areas LSOAs, which are small areas designed to be of a similar population size, with an average of approximately 1,500 residents or 650 households. There are 32,844 LSOAs in England. Since the lowest geographical identifier in the BES is the Middle-layer Super Output Area (MSOA), I aggregate LSOAs to MSOAs using a crosswalk file from ONS. MSOAs have a minimum population of 5,000 and a maximum population of 15,000 and are used for census statistical purposes.

I use the IMD data to measure inequality at the MSOA level in two ways. First, calculate the standard deviation of the income deprivation scores within a given MSOA. Higher values indicate that income deprivation is more concentrated in a given MSOAs. The income deprivation domain measures the proportion of the population experiencing deprivation relating to low income. The definition of low income used includes both those people that are out-of-work, and those that are in work but who have low earnings (and who satisfy the respective means tests). Second, I calculate the standard deviation of the IMD variable, which is the comprehensive measure of deprivation, again at the MSOA level.

I then estimate the model in equation 2 using both measures of neighborhood inequality at the MSOA level as the independent variable. The results in Appendix Table B.10 show that higher levels of MSOA-level inequality are associated with stronger demand for redistribution.

[2]For more information see `https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019`.

Table B.10: Effect of Constituency-Level Inequality on Support for Redistribution, Smaller Local Level

	Dependent variable:	
	Support for redistribution	
	(1)	(2)
SD Income scores	0.046***	
	(0.013)	
SD IMD		0.037***
		(0.012)
Male	−0.032***	−0.031***
	(0.003)	(0.003)
Age	−0.001***	−0.001***
	(0.000)	(0.000)
Education: below GCSs	−0.022**	−0.022**
	(0.009)	(0.009)
Education: GCSE	−0.041***	−0.041***
	(0.007)	(0.007)
Education: A-Level	−0.047***	−0.047***
	(0.007)	(0.007)
Education: undergraduate	−0.026***	−0.026***
	(0.007)	(0.007)
Education: postgraduate	0.012	0.012
	(0.008)	(0.008)
Household gross income	−0.015***	−0.015***
	(0.001)	(0.001)
Student	−0.026***	−0.026***
	(0.009)	(0.009)
Unemployed	0.016	0.016
	(0.010)	(0.010)
Retired	−0.045***	−0.045***
	(0.005)	(0.005)
Married	0.001	0.001
	(0.004)	(0.004)
Children in household	0.007***	0.007***
	(0.002)	(0.002)
Homeowner	−0.073***	−0.073***
	(0.004)	(0.004)
Median house price (log)	−0.027	−0.027
	(0.052)	(0.052)
Share people with degree	−0.000	−0.000
	(0.000)	(0.000)
Share people work in service sector	−0.000	−0.000
	(0.001)	(0.001)
Mean income (log)	−0.117*	−0.116*
	(0.061)	(0.061)
Constituency Labour vote share	0.065	0.066
	(0.042)	(0.042)
Share non-white	0.112**	0.113**
	(0.053)	(0.053)
Mean DV	0.551	0.551
Constituency FE	✓	✓
Year FE	✓	✓
Observations	91,172	91,172
R^2	0.098	0.098
Adjusted R^2	0.093	0.093

Notes: All models are based on equation 2. IMD is the Index of Multiple Deprivation. *p<0.1; **p<0.05; ***p<0.01.

C Regional Inequality and Redistributive Preferences Across European Countries

In this section, I show that regional inequality shapes support for redistribution across a wider set of countries. I use the most recent multilevel data of the European Social Survey (ESS round 9, 2018), which includes a survey item on redistributive preferences as well as contextual variables at the NUTS2 level. Respondents were asked if they agreed or disagreed that "the government should take measures to reduce differences in income levels." I normalize the 5-point scale answer categories into a 0-1 scale, with higher values indicating more support. I measure regional inequality by computing weighted Gini coefficients for respondents NUTS regions using respondents' total household income—which the ESS reports in country-specific deciles—and ESS design weights.[3] The regional identifiers reported in the ESS vary across countries, ranging from NUTS1 to NUTS3 (the most disaggregated level). I remove respondents in countries without regional identifiers and less than three regions. The final dataset covers 25 countries with 252 regions. Appendix Table C.1 shows the number of regions and their NUTS-levels as well as the total number of respondents within a country. The multilevel data includes several contextual variables at the NUTS-2 regional level, such as population and population density, GDP, and the unemployment rate.

I estimate the effect of regional inequality on support for redistribution across countries using the following regression model:

$$Y_{i[j]} = \beta_1 Gini^{reg}_{r[j]} + \mathbf{X}_i'\gamma + \mathbf{Z}_r'\lambda + \alpha_c + \epsilon_i \tag{4}$$

where $Y_{i[j]}$ is respondent i's support for redistribution. $Gini^{reg}_{r[j]}$ is the Gini coefficient in region r of country j. $\mathbf{X}_i'$ is a matrix of individual-level covariates, including gender, age, the highest level of education (ES-ISCED I [less than secondary education] through V [tertiary education]), number of children, employment status, income, foreign born, left-right ideology, and urban or rural living condition. $\mathbf{Z}_r'$ is a matrix of regional NUTS2-level covariates, including population and population density, GDP, and the unemployment rate. Country fixed effects (α_c) capture all time-invariant characteristics and identify the effect using within-country variation. ϵ_i is the idiosyncratic error term. Robust standard errors are clustered at the regional NUTS level to account for spatial

[3] For a similar approach see Winkler (2019)

Table C.1: ESS Round 9, Multilevel Data: Overview

Country	Number of regions	NUTS level	Total number of respondents
AT	9	2	2056
BE	10	2	1586
BG	19	3	1568
CH	7	2	1201
CZ	14	3	1617
DE	14	1	2056
DK	5	2	1356
EE	5	3	1857
ES	10	2	1041
FI	14	3	1502
FR	17	2	1654
GB	12	1	1853
HR	15	3	1208
HU	13	3	852
IE	8	3	1599
IT	5	1	1525
LT	10	3	1581
LV	6	3	820
NL	10	2	1334
NO	7	2	1295
PL	12	2	859
PT	5	2	848
SE	8	2	1438
SI	9	3	1045
SK	8	3	837

Source: ESS Round 9, multilevel data.

correlation of regions within countries. Appendix Table C.2 shows the results.

Across all model specifications, regional inequality is associated with stronger demand for redistributive policies. This effect is robust to the inclusion of socio-economic covariates (column 2); an indicator whether the respondent lives in a big city and a measure of left-right political ideology (column 3); and NUTS2-level socio-economic covariates (column 4). The results are also robust to country- and region-random effects (column 5). Finally, the model in column 6 uses only countries where I can measure inequality at the NUTS3 level. The results remain similar. In sum, the findings demonstrate that regional inequality is associated with stronger demands for redistribution across a larger set of countries with different electoral institutions.

Table C.2: Effect of Regional Inequality on Support for Redistribution

	Dependent variable:					
	Should the government reduce income inequality					
	Full sample			*NUTS2*		*NUTS3*
	(1)	(2)	(3)	(4)	(5)	(6)
Regional inequality	0.33***	0.27***	0.27***	0.38**	0.31***	0.39***
	(0.08)	(0.08)	(0.08)	(0.19)	(0.11)	(0.13)
Female		0.03***	0.02***	0.02***	0.02***	0.02***
		(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Age		0.00	0.00	0.00	0.00	0.00
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Foreign born		−0.01	−0.02**	−0.03***	−0.02***	−0.01
		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
ES-ISCED I		0.02	0.02	0.07*	0.05	0.02
		(0.03)	(0.03)	(0.04)	(0.04)	(0.05)
ES-ISCED II		0.04	0.03	0.06*	0.04	0.02
		(0.03)	(0.03)	(0.04)	(0.04)	(0.04)
ES-ISCED III		0.03	0.02	0.06	0.03	0.01
		(0.03)	(0.03)	(0.04)	(0.04)	(0.04)
ES-ISCED IV		0.01	0.00	0.04	0.03	−0.00
		(0.03)	(0.03)	(0.04)	(0.04)	(0.04)
ES-ISCED V		0.01	0.00	0.03	0.01	−0.02
		(0.03)	(0.03)	(0.04)	(0.04)	(0.04)
Employed		−0.01*	−0.01	−0.01	−0.01	−0.01
		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Unemployed		0.01	0.02*	0.02	0.02*	−0.01
		(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Student		−0.04***	−0.04***	−0.05***	−0.04***	−0.05***
		(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Retired		0.00	0.00	0.01	0.01	0.00
		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
HH income decile 2		−0.00	−0.00	0.01	0.01	0.00
		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
HH income decile 3		0.00	0.01	0.02**	0.03***	0.03***
		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
HH income decile 4		−0.01	−0.01	0.00	0.00	0.02
		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
HH income decile 5		−0.00	0.00	0.02*	0.02*	0.03**
		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
HH income decile 6		−0.02**	−0.01	0.01	0.00	0.02
		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
HH income decile 7		−0.04***	−0.03***	−0.01	−0.01	−0.00
		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
HH income decile 8		−0.04***	−0.04***	−0.02*	−0.02**	−0.02*
		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
HH income decile 9		−0.07***	−0.06***	−0.05***	−0.05***	−0.04**
		(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
HH income decile 10		−0.11***	−0.10***	−0.09***	−0.09***	−0.07***
		(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Married		−0.00	−0.00	−0.00	−0.01	−0.01
		(0.00)	(0.00)	(0.01)	(0.00)	(0.01)
Has children		0.01	0.01	−0.00	0.00	0.01
		(0.00)	(0.00)	(0.01)	(0.01)	(0.01)
Urban residence			−0.01	−0.00	−0.00	−0.01
			(0.01)	(0.01)	(0.01)	(0.01)
Left-right ideology			−0.02***	−0.02***	−0.02***	−0.01***
			(0.00)	(0.00)	(0.00)	(0.00)
NUTS2 Population				0.00*	0.00	
				(0.00)	(0.00)	
NUTS2 Population density				0.00	0.00	
				(0.00)	(0.00)	
NUTS2 GDP (mn. EUR)				−0.00*	−0.00	
				(0.00)	(0.00)	
NUTS2 Unemployment rate				0.00**	−0.00	
				(0.00)	(0.00)	
Mean DV	0.72	0.73	0.72	0.72	0.71	0.74
Number of countries	25	25	25	25	25	25
Country Fixed Effects	✓	✓	✓	–	–	✓
Country Random Effects	–	–	–	–	✓	–
Observations	34,163	21,596	19,627	13,448	13,448	8,047
R^2	0.08	0.11	0.15	0.10		0.16
Adjusted R^2	0.08	0.11	0.15	0.10		0.16
Log Likelihood					130.20	
Akaike Inf. Crit.					-192.41	
Bayesian Inf. Crit.					62.82	

Notes: All models are based on equation 4. The model in columns 5 and 6 use inequality measures at the NUTS2 and NUTS3 levels only, respectively. *p<0.1; **p<0.05; ***p<0.01.

D Additional Regional Inequality Measures Across Countries

D.1 Data Sources

Data on regional incomes used to compute the regional inequality measures in Section comes from the following three sources.

- *European Union* Data for Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden comes from EuroStat's data on "Disposable income of private households by Nomenclature of Units for Territorial Statistics (NUTS) 2 regions (tgs00026)."[4] I obtain this data from the EuroStat Database through an API query using the `restatapi` R package.

- *United Kingdom* Data for the United Kingdom comes from the Office of National Statistics's (ONS) data on "Regional gross disposable household income (GDHI) statistic."[5] Gross disposable household income is defined as the balance of primary income plus the balance of secondary income. GDHI is the amount of money that all of the individuals in the household sector have available for spending or saving after they have paid direct and indirect taxes and received any direct benefits. ONS has adopted the new UK classification of International Territorial Levels (ITL) in place of the NUTS classification. This transition has not changed the names of regions or the areas covered by them; the units are directly comparable to NUTS2 units from EuroStat.

- *United States* Data for the United States comes from the Bureau of Economic Analysis's (BEA) data on "Personal Income by County, Metro, and Other Areas" using the `bea.R` R package.[6] I use the CAINC1 county-level measures of per-capita personal income.

Figure D.1 shows changes in regional inequalities as measured by the standard deviation of regional incomes across all countries in the data.

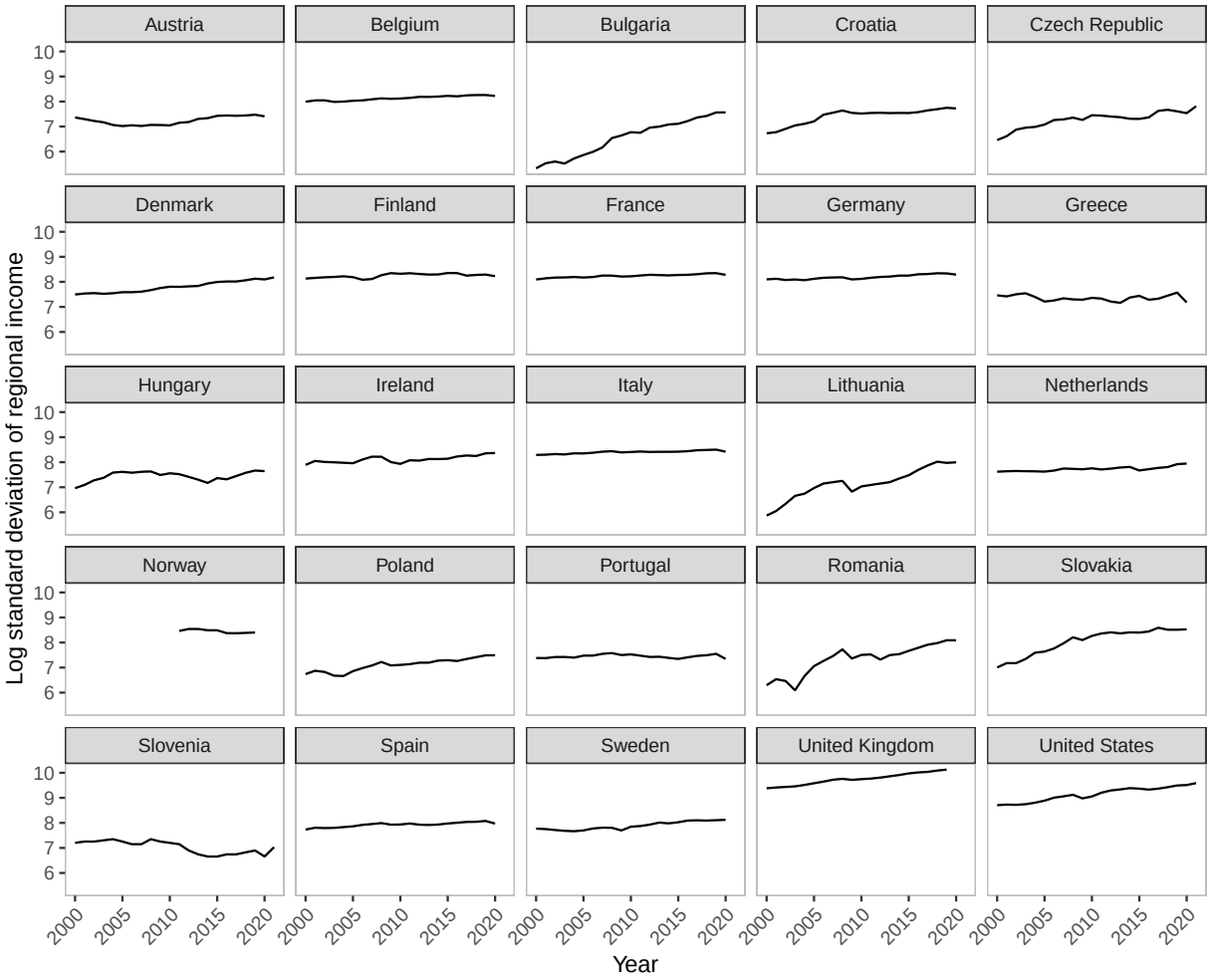
[4] Data available at `https://ec.europa.eu/eurostat/web/products-datasets/-/tgs00026`.

[5] Data available at `https://www.ons.gov.uk/economy/regionalaccounts/grossdisposablehouseholdincome/datasets/regionalgrossdisposablehouseholdincomegdhi`.

[6] Data available at: `https://www.bea.gov/data/income-saving/personal-income-county-metro-and-other-areas`.

D.2 Distribution of Regional Inequality

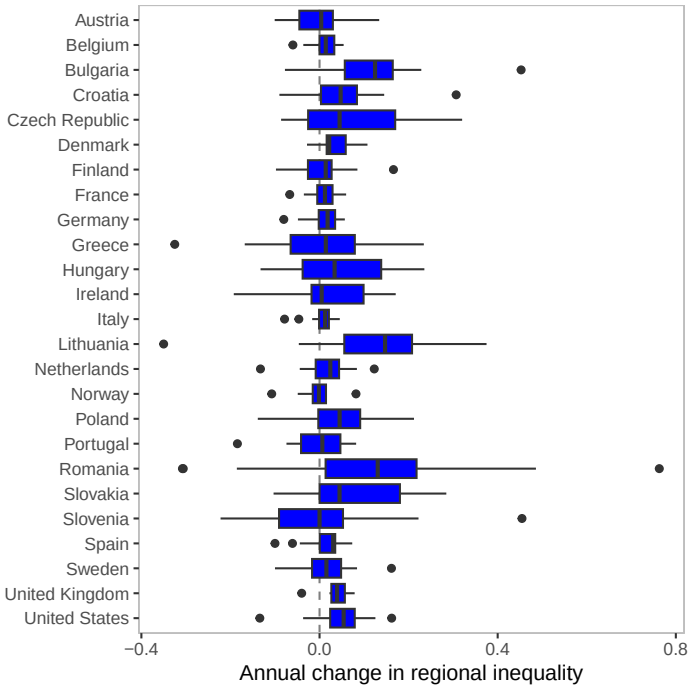
Figure D.1: Regional Inequality Across Countries



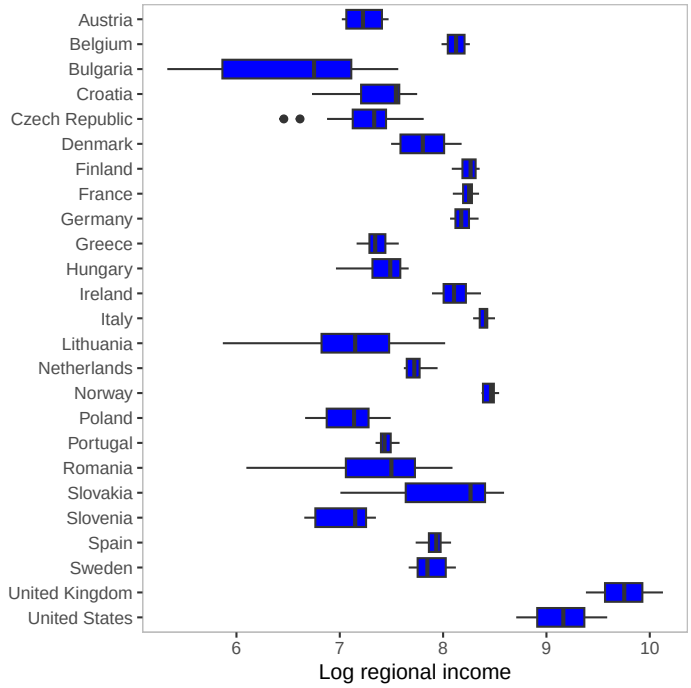
Notes: Regional inequality is measured as the standard deviation of a country's regional incomes.

Figure D.2: Regional Inequality Across Countries

(a) Variation in Regional Incomes



(b) Annual Change in Regional Inequality



Notes: Regional inequality is measured as the standard deviation of a country's regional incomes.

E Supporting Information for Party Manifesto Analysis

E.1 Definition of Policy Position and Electoral Regime Coding

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: CMP (Volkens et al. 2020.)

Electoral regime coding for sample period 2000-2018:

- *PR rule:* Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Finland, Germany, Greece, Hungary (until 2011), Ireland, Italy (since 2005), Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden

- *Plurality rule:* France, Hungary (since 2012), Italy (2000-2004), Lithuania, United Kingdom, and United States

E.2 Summary Statistics

Table E.1: Summary Statistics

Variable	Mean	Std. Dev.	Min	Max
Party level				
Welfare position	14.12	7.58	0.00	45.54
Party vote share	0.15	0.13	0.00	0.68
Party seat share	0.16	0.15	0.00	0.68
Country level				
SD regional income	3014.72	3182.91	252.98	22864.32
Election turnout	0.69	0.12	0.38	0.92
Legislative fractionalization index	0.74	0.10	0.48	0.88
GDP (log)	27.02	1.72	23.32	31.37
Unemployment rate	0.09	0.05	0.03	0.25

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 and the unemployment rate come from the World Bank. The Legislative Fractionalization Index comes from CPDS.

E.3 Full Regression Results

Table E.2: Effect of Annual Changes in Regional Inequality on Left Party Welfare Position by Electoral Regime

	Dependent variable:			
	Welfare position			
	(1)	(2)	(3)	(4)
Plurality rule	−0.02	−0.06	−0.08*	−0.02
	(0.04)	(0.05)	(0.04)	(0.07)
Plurality rule	−0.40**	−0.46**	−0.43**	−0.31
× Change in regional inequality	(0.17)	(0.19)	(0.19)	(0.26)
Change in regional inequality	0.34***	0.32***	0.34***	0.33***
	(0.11)	(0.11)	(0.11)	(0.11)
GDP (log)		0.06	0.10	0.21
		(0.14)	(0.14)	(0.16)
Unemployment rate		−0.45	−0.58	−0.67
		(0.44)	(0.45)	(0.48)
Party vote share			0.35	0.66
			(0.38)	(0.44)
Party seat share			−0.33	−0.51
			(0.35)	(0.38)
Turnout			−0.21	−0.37
			(0.31)	(0.29)
Legislative fractionalization index			0.28	0.52**
			(0.19)	(0.20)
Mean DV	0.38	0.38	0.38	0.38
Country FE	✓	✓	✓	✓
Election year FE	✓	✓	✓	✓
Party FE	–	–	–	✓
Observations	293	293	293	293
R^2	0.43	0.44	0.45	0.69
Adjusted R^2	0.33	0.33	0.33	0.41

Notes: All models are based on equation 3. *p<0.1; **p<0.05; ***p<0.01.

F Supplemental References

Bartolini, Stefano. 2000. *The Political Mobilization of the European Left, 1860–1980: The Class Cleavage*. Cambridge: Cambridge University Press.

Boix, Carles. 1999. "Setting the Rules of the Game: The Choice of Electoral Systems in Advanced Democracies." *American Political Science Review* 93(3):609–624.

Bosch, Agustí. 2020. *The Spanish Electoral System*. In The Oxford Handbook of Spanish Politics, ed. Diego Muro and Ignacio Lago. Oxford University Press pp. 389–409.

Broz, J. Lawrence, Jeffry Frieden and Stephen Weymouth. 2021. "Populism in Place: The Economic Geography of the Globalization Backlash." *International Organization* 75(2):464–494.

Calvo, Ernesto. 2009. "The Competitive Road to Proportional Representation: Partisan Biases and Electoral Regime Change under Increasing Party Competition." *World Politics* 61(2):254–295.

Colantone, Italo and Piero Stanig. 2018. "The Trade Origins of Economic Nationalism: Import Competition and Voting Behavior in Western Europe." *American Journal of Political Science* 62(4):936–953.

Cox, Gary W., Jon H. Fiva and Daniel M. Smith. 2019. "Parties, Legislators, and the Origins of Proportional Representation." *Comparative Political Studies* 52(1):102–133.

Cusack, Thomas R., Torben Iversen and David Soskice. 2007. "Economic Interests and the Origins of Electoral Systems." *American Political Science Review* 101(3):373–391.

Cusack, Thomas, Torben Iversen and David Soskice. 2010. "Coevolution of Capitalism and Political Representation: The Choice of Electoral Systems." The American Political Science Review104(2):393–403.

Dinas, Elias. 2020. *The Electoral System*. In The Oxford Handbook of Modern Greek Politics, ed. Kevin Featherstone and Dimitri A. Sotiropoulos. Oxford University Press pp. 203–218.

Ganong, Peter and Daniel Shoag. 2017. "Why Has Regional Income Convergence in the U.S.Declined?" *Journal of Urban Economics* 102:76–90.

Le Galès, Patrick and Paul Pierson. 2019. ""Superstar Cities" & The Generation of Durable Inequality." *Daedalus* 148(3):46–72.

Leemann, Lucas and Isabela Mares. 2014. "The Adoption of Proportional Representation." *Journal of Politics* 76(2):461–478.

Nemoto, Kuniaki. 2018. *Electoral Systems in Context: Japan.* In The Oxford Handbook of Electoral Systems, ed. Erik S. Herron, Robert J. Pekkanen and Matthew S. Shugart. Oxford University Press pp. 825–850.

Passarelli, Gianluca. 2018. *Electoral Systems in Context: Italy.* In The Oxford Handbook of Electoral Systems, ed. Erik S. Herron, Robert J. Pekkanen and Matthew S. Shugart. Oxford University Press pp. 851–870.

Paulsen, Tine. 2022. "Does Proportional Representation Increase Redistribution? Evidence from Early 20th Century Norwegian Municipalities." *Electoral Studies* 78:102494.

Persson, Torsten and Guido Enrico Tabellini. 2003. *The Economic Effects Of Constitutions.* Cambridge: MIT Press.

Rodden, Jonathan. 2010. "The Geographic Distribution of Political Preferences." *Annual Review of Political Science* 13(1):321–340.

Rokkan, Stein. 1970. *Citizens, Elections, Parties: Approaches to the Comparative Study of the Processes of Development.* New York: McKay.

Volkens, Andrea, Tobias Burst, Werner Krause, Pola Lehmann, Theres Matthieß, Nicolas Merz, Sven Regel, Bernhard Weßels and Lisa Zehnter. 2020. *The Manifesto Data Collection. Manifesto Project.* Version 2020b.

Winkler, Hernan. 2019. "The Effect of Income Inequality on Political Polarization: Evidence from European Regions, 2002–2014." *Economics & Politics* 31(2):137–162.