

Redistribution and the Quality of Government: Evidence from Central and Eastern Europe

Abstract

The welfare state literature has largely ignored the impact of a country's quality of government on its levels of redistribution. Using cross-sectional time-series analysis of twenty one Central and Eastern European countries, I show that environments characterized by higher levels of corruption, rampant bureaucratic inefficiency, and ineffective enforcement of the rule of law are associated with lower levels of redistribution. Poor government directly affects the supply side of the redistribution process by hindering countries' ability to allocate funds to redistribution and deliver them to their beneficiaries. Contrary to existing demand-oriented perspectives, the proposed causal mechanism does not blame lower redistribution on the lack of public support for the welfare state. Rather, it focuses on the capacity of states to adopt and implement inequality-reducing policies. The results are robust to numerous extensions and model specifications.

On June 22nd, 2017, the Appeals Court in Varna, Bulgaria found a former senior accountant at the local Social Protection Agency in Vulchi Dol guilty of the expropriation of 390,102 BGN (\$222,559) allotted to social benefits for low-income citizens. Every month for more than a decade, the defendant would steal 3500 BGN – approximately \$1996 or 7.5 times the minimum monthly salary – from the state by duplicating existing claims on the system. A similar crime typically carries a prison sentence of between 10 and 20 years. Nevertheless, the senior accountant, the granddaughter of a former local police director, was found not guilty by the Regional Court in Varna. It was only after the Appeals Court heard the case that she was sentenced to 6 years and 8 months in prison.

Two years earlier, two towns in the poorest region in Romania – Iasi and Tibana – suspended social benefits payments for three months. An investigation by the Court of Auditors had discovered pervasive fraud. In order to qualify for minimum guaranteed income benefits and energy subsidies, recipients must reside in Romania and earn less than a stipulated amount. More than a quarter of the beneficiaries in Tibana, however, received state support although they had left the country to work abroad or had seen their income exceed the legally determined threshold. After a string of signals, a 2018 Court of Auditors Report estimated that Agency for Payments and Social Inspection (AJPIS) branches in 17 cities across Romania had paid close to \$5.2 million in family allowance and childcare benefits to recipients who were not legally entitled to social assistance in 2017.

These cases raise important questions about Bulgaria and Romania’s ability to monitor their bureaucracy, ensure the proper use of their scarce resources, and enforce the rule of law. Such problems are pervasive across the developing world in general, and the universe of post-communist societies in particular. Indeed, many of these countries suffer from endemic corruption, low government effectiveness, and weak enforcement of the rule of law.¹ Existing research has shown that these problems have serious implications for economic growth, economic development, foreign direct investment, public participation, and economic in-

¹Holmes 2006, Kornai and Rose-Ackerman 2004

equality.² The anecdotes above indicate that bad government can also hurt the ability of the state to effectively redistribute income and alleviate economic inequality. Yet, this effect has received less and, arguably, insufficient attention. This paper fills this gap by examining the relationship between redistribution and the quality of government.

I argue that the quality of government powerfully shapes the supply of economic redistribution. Defined in terms of the corruptness of the state apparatus, the enforcement of the rule of law, and the competence and efficiency of the civil service,³ the quality of government affects the availability of resources allocated to social protection and the effective targeting of social benefits recipients. Poor government can divert state resources meant for low-income citizens if the state bureaucracy regularly expropriates funds from the system. This decreases the real amount of spending that goes toward social benefits for the poor. The same effect occurs when the civil service is not sufficiently competent to reach citizens eligible for social transfers. In the absence of an effective and transparent legal system that punishes offenses, malpractices persist. The state therefore fails to effectively alleviate income inequality.

The argument outlined above rests on several insights derived from the literature on comparative welfare states and state capacity but proposes a new causal mechanism that has so far remained neglected by existing scholarship. Existing work has found that clientelism, inefficiency, and corruption delegitimize national authorities,⁴ decrease mobilization in support of the welfare state,⁵ and prompt citizens to turn to the private market for social services.⁶ Research has also established that, by satisfying basic needs, such practices serve as substitutes for the formal state infrastructure and perpetuate an underperforming social protection regime.⁷ In either case, the quality of government meaningfully affects the development of social policy, either by shaping individual preferences for social protection or by

²Bubbico et al. 2017, Rothstein 2011, Rothstein et al. 2012, Valeriani and Peluso 2011

³Rothstein et al. 2012

⁴Seligson 2002, Gilley 2006

⁵Rothstein et al. 2012

⁶Skocpol 1992

⁷Levitsky 2003, Murillo and Calvo 2004

altering political actors' calculations about the costs and benefits of social sector reforms. Neither of these arguments, however, focuses exclusively on the actual capacity of states to properly implement redistribution. Both of them are centered on demand for the welfare state and rely on the mediation of public perceptions. While such an emphasis is important, ignoring the direct effect of the quality of government on the supply of redistribution neglects a meaningful alternative causal mechanism.

In order to evaluate this mechanism, I examine the relationship between redistribution and the quality of government in the context of Central and Eastern Europe. Partly due to the historical legacy of socialism, post-communist countries show higher aggregate levels of support for state-sponsored redistribution.⁸ The post-war years witnessed the expansion of access to education, health care, and public services, the elimination of unemployment, and the artificial suppression of income differentials.⁹ As a result, tolerance for economic inequality is lower in the region, and Eastern Europeans generally expect the state to meet the socioeconomic needs of its citizens and alleviate income differences.¹⁰ This expectation allows me to adjudicate between the demand-based argument formulated by existing scholarship on the welfare state and the supply-based theory that I propose here.

The quality of government hypothesis has not yet been systematically tested. This paper is therefore the first to assess this argument. Although its scope is limited to the post-communist world, the argument is broadly applicable to states beset by rampant corruption, lower bureaucratic quality, and ineffective enforcement of the rule of law. These problems are not confined to Eastern Europe; rather, they affect a wide range of developing countries in Asia, Africa, and Latin America. Indeed, a rich literature on social policy in Latin America has demonstrated that the implementation of social policy reforms is not always smooth and effective.¹¹ Existing research on Africa has detailed the region's struggles with public sector

⁸Tucker and Pop-Eleches 2017

⁹Orenstein 2008

¹⁰Tucker and Pop-Eleches 2017, Haggard and Kaufman 2008

¹¹Aramburu 2010

corruption and low state capacity.¹² The quality of government might thus have equally important implications for redistribution in these regions.

This paper is structured as follows. The next section presents a brief overview of the existing literature on the welfare state. I proceed to develop a theory about the effect of low-quality government on redistribution in a region characterized by high levels of support for an active role of the state in social provision. The argument highlights the pernicious impact of low-level corruption, administrative incompetence and an unevenly applied rule of law on the allocation and effectiveness of state resources. To test this argument, I employ cross-sectional time-series analysis of twenty-one Central and Eastern European countries between 1996 and 2013. This is the first systematic quantitative study that examines the determinants of economic redistribution in this region. The results support my argument. The fifth section addresses endogeneity concerns. The paper concludes with a discussion of its possible implications for future research.

1 Determinants of Redistribution

A rich literature in political science explores the determinants of redistribution, or the reduction in income inequality attributable to government taxes and transfers.¹³ Scholars have focused on the specific factors that motivate voters' demand for redistribution as well as on the conditions that shape political elites' ability to deliver social policies. These demand- and supply-oriented arguments are not mutually exclusive. Rather, as Huber and Stephens (2012) and Garay (2017) have shown, they often complement and reinforce each other.

Existing work has emphasized the role of regime type and partisanship, predicting that democracies and leftist governments pursue a more egalitarian agenda.¹⁴ Political competition makes ruling elites responsive to a larger constituency and facilitates the formulation

¹²Levy and Kpundeh 2004

¹³Lupu and Pontunsson 2011, Iversen and Soskice 2011

¹⁴Metzer and Richard 1981, Muller 1988, Boix 2003, Stephens 1979, Korpi 1983, Huber and Stephens 2001 and 2012

of demands for higher redistribution.¹⁵ Simultaneously, labor unions and left-wing parties represent the interests of low-income constituencies. While these perspectives have found empirical support in Latin America and the advanced industrialized world,¹⁶ the literature on Eastern Europe has been less conclusive. Although Rueschemeyer et al. (1999) and Lipsmeyer (2002) indicate that communist successor parties in the region have resisted the tightening of financing and eligibility criteria, Tavits and Letki (2009) have shown that leftist cabinets have not raised general government, health, and education spending.

An extensive strand of research has instead highlighted the emergence of new forms of risk related to the processes of industrialization, deindustrialization, and globalization.¹⁷ These transformations alter the traditional employment structure and generate demands for greater social protection.¹⁸ Faced with the political incentive to compensate losers, national governments are expected to increase redistribution.¹⁹ Such increases, however, might be limited or impossible in the context of intensifying globalization where investors have an exit option and a more generous welfare state undermines the domestic economy's competitiveness.²⁰ Indeed, research on Central and Eastern Europe has revealed that higher levels of FDI and trade integration have led to cuts in social spending while competition for capital has kept taxes low.²¹

A different economic explanation of redistribution revolves around inequality. Building on Meltzer and Richard (1981), the literature has predicted that more unequal societies will alleviate income differentials more than relatively egalitarian states.²² This is because the difference between the average and the median voter's income is greater when inequality is high. Empirical work, however, has yielded mixed results, leading scholars to shift their

¹⁵Bueno de Mesquita 2003, Haggard and Kaufman 2008, Grzymala-Busse 2002

¹⁶Huber and Stephens 2012, Esping-Andersen 1990

¹⁷Wilensky 1974, Iversen and Cusack 2000, Van Kersbergen and Vis 2013

¹⁸Garrett 1998, Adser and Boix 2002

¹⁹Rodrik 1996, Mosley 2003

²⁰Rudra 2008, Boix 2003, Mueller 1998, Simmons et al. 1999

²¹Mahutga and Bandeji 2008, Cerami and Vanhuyse 2009, Appel and Orenstein 2018

²²Kenworthy and Pontusson 2005, Jaeger 2013

focus to labor market segmentation and the specific structure of inequality.²³ Lupu and Pontusson (2011) argue that a greater distance between the poor and the middle classes undermines social affinity, ultimately hindering redistribution.

Most traditional theoretical frameworks thus focus on the conditions that put redistribution on the political agenda, assuming that states can effortlessly implement inequality-alleviating policies. This assumption, however, is not always correct. Partly acknowledging this, Rothstein et al. (2012) predict a positive relationship between social spending and the quality of government. Transparent, competent, and impartial public institutions induce citizens to embrace a more active role for the state in economic and redistributive affairs. Svallfors (2013) provides further evidence for this microfoundational argument, establishing that people who trust public institutions are inclined to support higher taxes and extensive welfare policies. In contrast, when the masses doubt the transparency and qualifications of the state apparatus, they perceive national authorities as illegitimate and resist the expansion of the welfare state²⁴ even though they see economic inequality as unacceptable.²⁵ Political mobilization for redistribution is therefore linked to the efficiency of public institutions.

Although this argument incorporates the state apparatus, the hypothesized causal link neglects the direct effect that government has on redistribution. This omission raises questions about the applicability of this theory to environments where deeply entrenched policy legacies motivate people to expect the state to actively participate in social provision. Where public support for the welfare state is extensive, the relationship between redistribution and the quality of government is more likely to be driven by supply-side factors. Although poor government might weaken citizens' support for redistribution, this effect might take time to crystallize. In contrast, the inefficiency and corruption of the institutional framework does not allow inequality-reducing social programs to reach their potential in the short run. This direct effect remains unexplored and under-theorized by the welfare state

²³Alesina and Glaeser 2004, Dallinger 2010

²⁴Skocpol 1992, Seligson 2002, Gilley 2006

²⁵Loveless and Whitefield (2011)

literature.

The perspective developed here contributes to a large literature exploring the impact of the quality of government on different political and socioeconomic outcomes. Kaufmann et al. (2009), Kaufman (2004), and Acemoglu et al. (2001 and 2003) report that better government leads to higher economic growth and per capita income. Better institutional quality and law enforcement are also associated with lower poverty, mortality, and inequality²⁶ and higher life expectancy, well-being, and social trust.²⁷ Citizens living in better governed states and regions are more politically engaged²⁸ and exhibit higher support for and satisfaction with democracy.²⁹ Existing work has therefore established that the quality of government has important implications for a variety of different political and economic outcomes. I seek to explore its direct effect on economic redistribution.

2 Redistribution and the Quality of Government

Building on Rothstein et al.'s work (2012), the premise of this paper is that the quality of government, broadly defined in terms of the corruptness of the public administration, the enforcement of the rule of law, and the effectiveness of the state apparatus, shapes states' capacity to successfully implement redistribution. Effectively decreasing inequality requires well-functioning institutions. Although existing work on the welfare state often takes them for granted, such institutions are frequently absent outside of advanced democracies. In fact, weak administrative capacity and limited enforcement are the norm in many developing countries.³⁰ Thus, even when they exist, institutions do not always work the way they are supposed to.³¹ The quality of government, which reflects the extent to which institutions function smoothly, therefore has the potential to meaningfully affect redistribution.

²⁶Chong and Calderon 2000, Holmberg et al. 2009 and 2011, Holmberg and Rothstein 2011

²⁷Gilley 2006, Holmberg et al. 2011, Helliwell and Huang 2008, Rothstein and Teorell 2008

²⁸Sundstrom and Stockemer 2013

²⁹Clarke et al. 2004, Dahlberg et al. 2015, Magalhaes 2014, Wagner et al. 2009

³⁰Holland 2016

³¹Helmke and Levitsky 2004

The absence of transparent institutions, competent civil servants, and a rigorously enforced legal framework facilitates redistributive leakage. Redistribution can thus remain low even when governments adopt generous social policies and increase social spending in an attempt to alleviate income inequality. The presence of a redistributive framework does not guarantee that resources go toward social programs. As the story of the Bulgarian accountant shows, low-level corruption and embezzlement might divert funds away from their designated use. Instead of helping low-income households, social spending might thus go to self-interested bureaucrats or people who have privileged access to the state. In these circumstances, it loses its potential to reduce income differentials and exacerbates economic inequality.

A legal case from Romania illustrates this point. Back in 2014, the police in Bucharest apprehended four people accused of influence peddling. The suspects had used their access to public servants from the City Hall of Bucharest Sector 5 to obtain social benefits for citizens who did not qualify for economic assistance. Public funds were thus re-directed to higher-income individuals who had bribed civil servants to be included on the list of approved recipients. Abuse of office in the public administration means that social spending might enrich relatively well-off individuals

Low government effectiveness can have a similar effect. If the civil service is comprised of officials who lack the necessary training and qualifications, it might fail to accurately assess the economic circumstances of potential beneficiaries and to properly apply social programs' eligibility criteria. Citizens entitled to benefits and services can therefore remain outside of the reach of schemes designed to help them even if these schemes exist with the goal of alleviating income inequality. In contrast, individuals who do not qualify for social assistance might receive it. Consequently, social policies will not improve the socioeconomic condition of underprivileged communities and redistribution will remain low.

Several recent events from Eastern Europe exemplify these dynamics. In late June 2018, the leader of Romania's ruling party, Liviu Dragnea, was sentenced to three and a half

years in prison for abuse of office. He was found guilty of intervening to keep two women, who were actually working for his party, on the payroll of a child protection agency. Political appointments of this nature raise questions about the competence of the civil servants responsible for the implementation of social policy. When welfare agencies are staffed with bureaucrats who do not perform their duties and who are hired because of their political connections instead of their qualifications, social policy might be ineffective.

Two cases from Slovakia and Poland further illustrate this point. In 2012, police officers accidentally found the remains of a young girl. Lucia had been dead for three years but Bratislava's municipal authorities had not noticed her absence from school. Her mother continued to collect child benefits despite her failure to file a legally required school attendance certificate. Slovakia's Labor Minister at the time, Jan Richter, explained that this was likely due to the increasing shortage of qualified social workers (and the accompanying excessively high case loads) in the country.

Similarly, a 2007 BBC investigation found that some Polish workers in Britain are illegally claiming child benefits in both the United Kingdom and Poland. Under EU law, migrants can receive benefits either in their home country or in their country of residence, but not in both. Officials from several Polish regions revealed that up to half the applications that they process are fraudulent. Many of these cases remain undetected, granting recipients access to funds that they are not entitled to. This inability to properly apply eligibility criteria puts a financial strain on the Polish social protection system and might widen income differentials instead of reducing them.

Such misallocation of funds is also likely if the civil service is not effectively insulated from political pressures. Politically dependent bureaucrats can alter the eligibility criteria of social programs to include people who do not qualify for assistance in order to promote the political goals of the parties or public figures that they work for. Local and national-level political agents might demand the inclusion of certain groups for electoral purposes and might use their position to force the public administration to comply with these demands.

Such clientelistic forms of behavior see the diversion of funds from those with real needs to beneficiaries who do not necessarily fall in this group. Even if it is legally designed to be progressive, social spending thus becomes ineffective at alleviating income inequality.

In the absence of adequate monitoring mechanisms and a properly enforced legal framework, such malpractices persist, creating a vicious cycle of abuse of power. If criminal acts do not meet with the necessary legal response, perpetrators have few incentives to respect the law and properly implement redistributive legislation. Furthermore, citizens have few channels to report theft and demand accountability. A failure to properly apply the rule of law will therefore exacerbate the problem of fund misallocation.

This conclusion is in line with the expectation that enforcement has distributional consequences but differs from recent work showing that noncompliance can alleviate inequality.³² According to Holland (2017, p.13), politicians practice forbearance, or the “intentional and revocable government leniency toward violations of the law,” when they depend on poor voters to win office. Lacking institutional ways to meet the poor’s distributive demands but eager to signal responsiveness to their needs, politicians refuse to implement laws which can hurt low-income citizens. When exclusively targeting the underprivileged, this decision can have progressive consequences. In contrast, my argument expects noncompliance to have a regressive impact. This is because I focus on redistribution rather than on market income inequality. I am primarily interested in the implementation of redistributive legislation once policies have been adopted, not in settings characterized by highly segmented welfare states. Furthermore, unlike Holland, who examines the strategic behavior of elected politicians, my theory centers on the behavior of the state bureaucracy.

The quality of government therefore affects the extent to which the state is capable of reducing inequality through taxes and transfers. Poorly governed societies have difficulties properly allocating resources to inequality-alleviating programs and reaching those most in need of assistance. This implies that countries characterized by relatively low quality of

³²Holland 2017

government have lower levels of redistribution than better governed states.

3 Data, Measurement, and Models

To test this argument, this paper employs cross-sectional time series analysis of twenty-one Central and Eastern European countries. Azerbaijan, Armenia, Belarus, Bulgaria, Czechia, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Slovakia, Slovenia, Tajikistan, Turkmenistan, Uzbekistan and Ukraine all formed part of the former Communist Bloc. As a result, they witnessed the establishment of comprehensive social protection systems during the post-war period. Combined with the communist economic model, these welfare states kept income inequality low.³³ Because of this legacy, support for state-sponsored redistribution has been historically high in the region. Public opinion polls indicate that a large majority of post-communist citizens considers inequality to be too high and supports state-sponsored welfare programs.³⁴ ³⁵ Furthermore, former socialist countries typically exhibit higher levels of corruption and lower compliance with the rule of law than their Western European neighbors.³⁶ These societies are more likely to have state apparatuses captured by corrupt networks,³⁷ dysfunctional judicial systems perpetuating irregular practices,³⁸ and bloated, incompetent bureaucracies.³⁹ Focusing on this region thus allows me to assess the impact of the quality of government on economic redistribution in a context where the demobilizational mechanism proposed by Rothstein et al. (2012) is less likely.

A subsequent set of analyses focuses more carefully on the 10 countries which joined

³³At least among non-party members.

³⁴Mason et al. 2000, Rose and Makkai 1995, Loveless and Whitefield 2011

³⁵According to the 1992 Post-Communist Publics Survey, more than 90% of the respondents believe that it is the government's responsibility to provide health care for the sick and a decent standard of living for the old.

³⁶Earle 2000, Vachudova 2009

³⁷Hellman 1998, Ganev 2007

³⁸Kornai and Rose-Ackerman 2004, Spendzharova 2008

³⁹Karklins 2002, Grzymala-Busse 2007

the European Union during the 2004 and the 2007 accession waves.⁴⁰ Although this reduced sample exhibits smaller variation on redistribution and quality of government levels, limiting my analysis allows me to more rigorously test my hypotheses. First, it enables me to explore dynamics related to public support for redistribution, partisan ideology, revenues, and social spending. Public opinion, partisan ideology, and expenditures data over time are only available for the 10 countries listed above. Second, it addresses a potential source of endogeneity; namely, that membership in the European Union largely shaped the quality of government in Central and Eastern Europe. All ten countries in the smaller sample initiated the accession process in the 1990s, which largely determined the broader type of economic, political, and judicial reforms that they pursued during the transition.⁴¹ This reform path could have affected the quality of government by requiring measures that penalized corruption, strengthened bureaucratic capacity, and improved efficiency. In this sense, carrying out the statistical analysis on this subset of cases enables me to assess the relationship between redistribution and the quality of government in a more homogenous context.

The dependent variable, the level of relative redistribution, constitutes the difference between the market and the net GINI coefficients expressed as a percent of the market GINI value. While the market GINI coefficient captures the overall level of inequality before taxes and transfers, the net value reflects this level after them. The difference between the two reveals the generosity of a country's welfare state and the progressivity of its tax system. The variable is measured annually for the period between 1990 and 2012.⁴² Data are available through the Standardized World Income Inequality Database,⁴³ which standardizes data from various sources⁴⁴ to facilitate cross-country comparability.⁴⁵

⁴⁰These states include Bulgaria, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia.

⁴¹Vachudova 2005

⁴²For the CIS states, the analysis starts in 1992, which marks the disintegration of the Soviet Union.

⁴³Solt 2014

⁴⁴Such as the Luxembourg Income Survey (LIS) and the World Institute for Development Economics Research at the United Nations University.

⁴⁵The fifth version of the dataset contains 100 separate time series imputations for each country-year. Since the standard errors of the estimates are very small for the states included in this analysis, the dependent variable used here is the mean of the 100 imputed series. I also estimated the models using the median of

As illustrated by the figure below (Figure 1), although redistribution does not change by much from year to year, it does fluctuate over time. Furthermore, the extent to which different states engage in redistribution varies across the region. While some countries, such as Czechia, Hungary, and Slovakia, attain relatively high levels of redistribution, reaching and sometimes exceeding a 40-percent reduction in income inequality, others, like Bulgaria, Romania, Kazakhstan, and Tajikistan, tend to redistribute significantly less. The dependent variable thus presents interesting patterns across time and space.

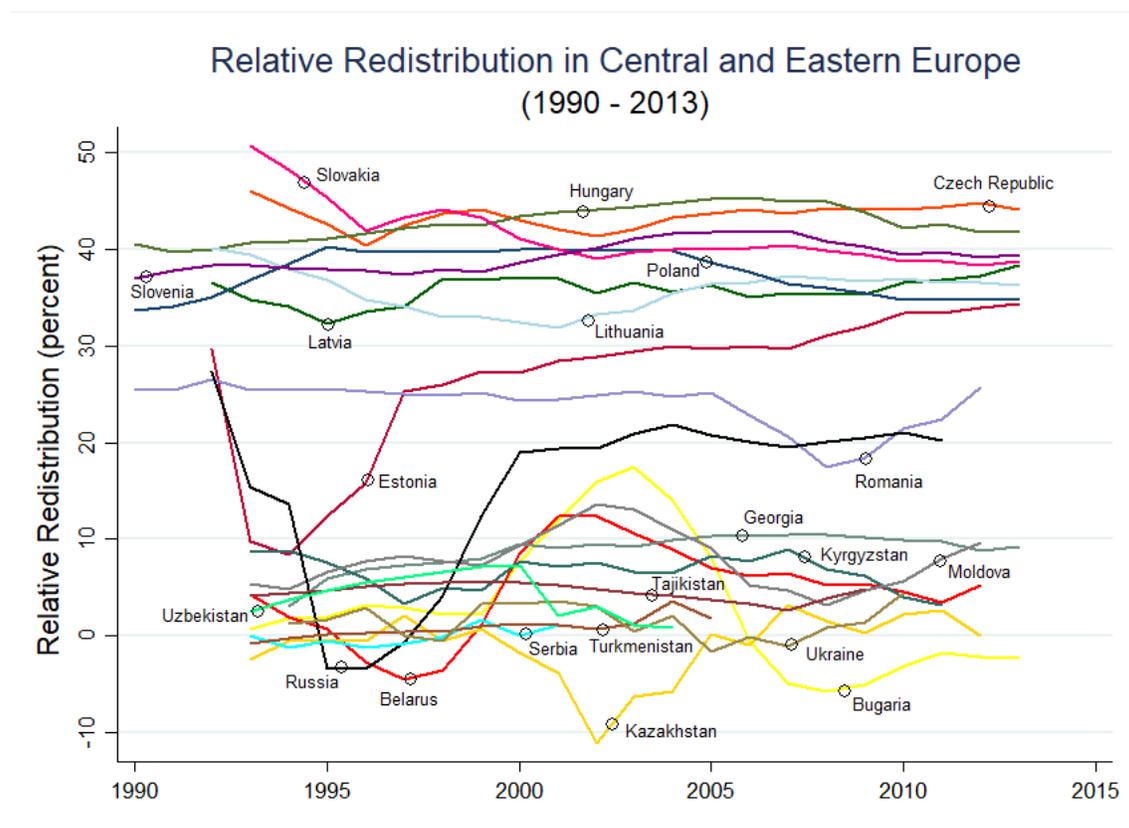


Figure 1: Redistribution in Central and Eastern Europe (1990-2013)

The main explanatory variable is the quality of government, which is an index incorporating three of the World Bank's Worldwide Governance Indicators (WGI).⁴⁶ The WGIs pool data from different surveys to create indicators that seek to provide a comprehensive

the 100 imputations. The results remained largely unchanged.

⁴⁶World Bank 2015

evaluation of each country's political system. The Control of Corruption measure tests for the direct impact of corruption on redistribution. The index reflects "the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests."⁴⁷ The Government Effectiveness indicator combines responses about the quality of the bureaucracy, the competence of civil servants, the independence of the civil service from political pressures, and the quality of policy formulation and implementation. Lastly, the Rule of Law indicator captures the extent to which agents have confidence in and abide by the rules of society. It reflects their perceptions of the incidence of crime, the effectiveness and predictability of the judiciary, and the enforceability of contracts. The composite index sums and averages these three measures. In addition, I run models with each of these indicators in order to disentangle and assess their separate impact on redistribution. The variables are measured annually since 1996.⁴⁸ Higher values indicate better government.⁴⁹ To test the robustness of my findings, I rerun my analysis with the International Country Risk Guide's quality of government index, which closely resembles the WGI index. The results are discussed in the appendix.

Preliminary evidence from correlation analysis offers initial support for my argument. Figure 2 plots relative redistribution against the quality of government index for all 21 countries in my sample in 2000. Better government is associated with higher redistribution. Additional cross-tab analyses (included in the appendix) confirm this positive relationship.

⁴⁷Kaufman et al. 2009

⁴⁸I interpolate the values for 1997, 1999, and 2001 for which the indices were not calculated.

⁴⁹It is important to note that the survey questions used to calculate the indicators do not suggest that judgments about redistribution affect respondents' assessment of the quality of government. Most surveys are not concerned with inequality or redistribution.

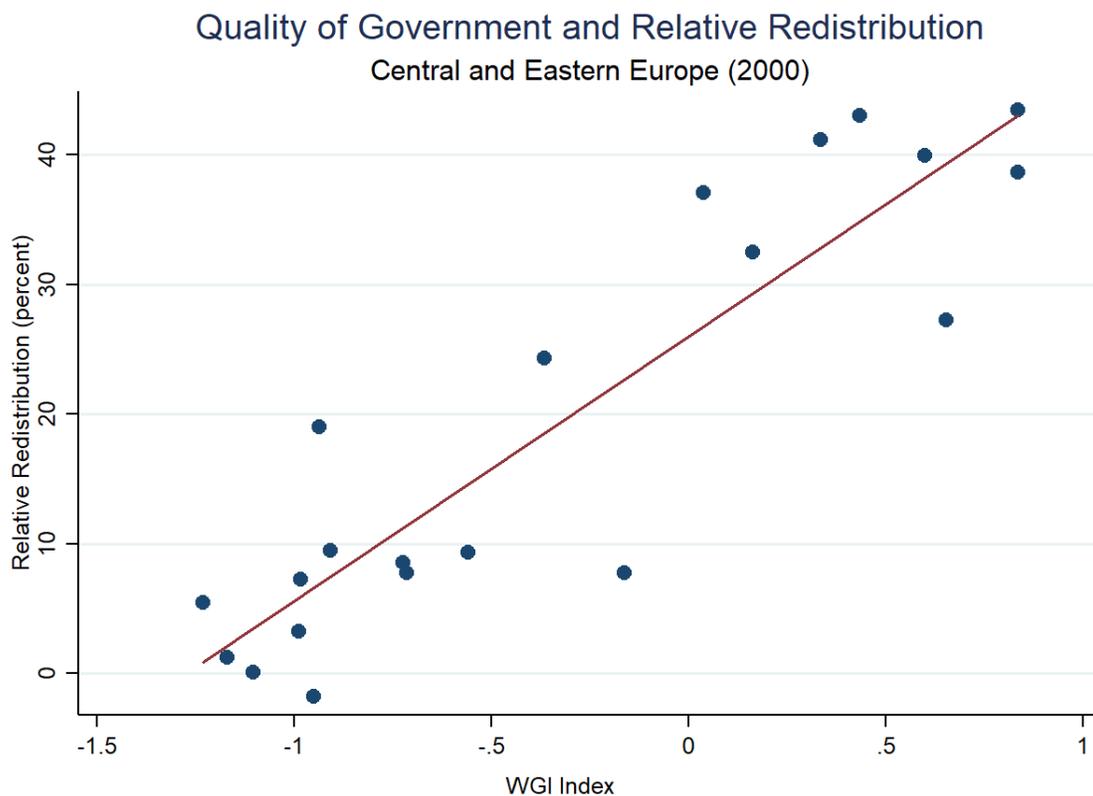


Figure 2: Correlation between Quality of Government and Redistribution in Central and Eastern Europe (2000)

To illustrate my proposed causal mechanisms, I run a set of models with data from the Varieties of Democracy Project (V-DEM).⁵⁰ Public sector embezzlement captures “how often [...] public sector employees steal, embezzle, or misappropriate public funds or other state resources for personal or family use.”⁵¹ It thus reflects the existence of public servants like the Bulgarian accountant mentioned in the introduction. Higher values indicate less pervasive malpractices. Public sector corruption is an index calculated by adding a measure of “how often [...] public sector employees grant favors in exchange for bribes, kickbacks, or other material inducements”⁵² to the embezzlement indicator. In this case, the direc-

⁵⁰V-DEM covers 177 countries between 1900 and 2016. It relies on factual information and expert assessments on a broad range of political topics.

⁵¹V-DEM 2016, p. 172

⁵²V-DEM 2016, p. 67

tionality of the index goes from lower to higher corruption. Finally, a separate indicator captures the rigor and impartiality of the public administration. Higher values indicate higher impartiality.

A set of variables accounts for the effect of alternative explanations. Economic growth rates, economic development, inflation, debt levels, and budget deficits control for unfavorable economic conditions that might limit governments' capacity to expand spending on transfers. The unemployment rate, the dependency ratio, and the industry's value added to national GDP reflect demand for benefits. FDI inflows, openness to trade, and capital account openness capture the compensation and the race-to-the-bottom hypotheses.⁵³ Pre-tax-and-transfer inequality levels account for the possibility that more unequal societies might redistribute more. Lastly, I include a measure of democracy (operationalized through each country's Polity score), ethnic fractionalization, voter turnout, female labor force participation, checks and balances, and European Union membership.

The reduced sample models allow me to assess the partisan ideology hypothesis by controlling for the percentage of parliamentary seats occupied by left-wing parties in government, weighted by the number of days in office in a given year.⁵⁴ These models also enable me to test the main alternative mechanism proposed by Rothstein et al. (2012). To do so, I add a measure of public support for redistribution, which is the proportion of European Social Survey respondents who agree that “[t]he government should take measures to reduce differences in income levels.”⁵⁵

Pooling data for cross-sectional time-series analysis presents several challenges that make the standard application of Ordinary Least Square (OLS) regression inappropriate.⁵⁶

⁵³While the inclusion of some of these covariates raises concerns about multicollinearity, their omission might bias the results. I therefore control for them. I argue that the quality of government has a direct effect on redistribution and my main goal is to test for that effect. Nevertheless, good or poor government can also influence the welfare state indirectly, through its impact on other economic indicators. My model specification is therefore rather conservative.

⁵⁴Data come from Klaus Armingeon's Comparative Political Dataset III (Armingeon et al. 2015).

⁵⁵Because data are only available between 2002 and 2012, my analysis focuses on the post-2002 period. I interpolate values for the years between adjacent waves of the survey.

⁵⁶Hicks 1994

Crucially, they produce temporally autoregressive and cross-sectionally correlated error terms, which result in biased and inconsistent parameter estimates.⁵⁷ To address this concern, I estimate Prais-Winsten models, which combine panel-corrected standard errors with ar(1) corrections. This strategy corrects for first-order autoregressiveness.⁵⁸ I refrain from directly including a lagged value of the dependent variable on the right side of the regression equation because, as Achen (2001) has shown, this inappropriately suppresses the explanatory power of other covariates. It also eliminates cross-sectional variation. Prais-Winsten regressions, which accomplish the same effect as lagged values without the above-mentioned limitations, are therefore more suitable for the purposes of this analysis. Lastly, my model specification assumes that disturbances are heteroskedastic across panels.⁵⁹ This assessment of the relationship between the quality of government and redistribution is therefore quite conservative. As a robustness check, I run error correction models, which yield similar results. The output from these regressions is included in the appendix.

4 Results

Table 1 presents the results from six Prais-Winsten regressions examining the determinants of redistribution in 21 post-communist countries. Model 1 regresses redistribution on the WGI index. Model 2 adds a number of essential controls. Model 3 shows the full specification. Models 4, 5, and 6 test for the individual impact of the three dimensions of the WGI index – control of corruption, government effectiveness, and rule of law. The R^2 values associated with the models indicate that the quality of government indicators explain a meaningful proportion of the variation in redistribution.⁶⁰

The WGI coefficients in models 1 through 6 suggest that the quality of government has a positive and statistically significant impact on redistribution. On average and holding

⁵⁷Hicks 1994; Huber, Huo, and Stephens 2017

⁵⁸Beck and Katz 2014

⁵⁹It imposes a common rho for all cross sections and thus further inflates standard errors.

⁶⁰The addition of the WGI index improves the explanatory power of model 3 by 10 percentage points.

Table 1: Redistribution and the Quality of Government: Extended Sample

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	b/se	b/se	b/se	b/se	b/se	b/se
WGI Index	12.953*** (1.43)	9.061*** (1.41)	12.421*** (1.29)			
WGI Corruption				7.236*** (1.15)		
WGI Gov effectiveness					10.731*** (1.30)	
WGI Rule of law						12.341*** (1.29)
Inequality		0.728*** (0.08)	0.885*** (0.09)	0.950*** (0.11)	0.865*** (0.09)	0.920*** (0.09)
GDP per capita		0.230** (0.09)	-0.032 (0.15)	0.047 (0.17)	0.094 (0.16)	-0.160 (0.14)
GDP per capita growth			-0.034 (0.04)	-0.040 (0.05)	-0.055 (0.05)	-0.023 (0.05)
Unemployment		0.048 (0.07)	0.108 (0.09)	0.075 (0.11)	0.022 (0.10)	0.194* (0.09)
Debt			0.012 (0.03)	0.003 (0.03)	0.006 (0.03)	0.004 (0.03)
Deficit			-0.083 (0.09)	-0.200 (0.10)	-0.122 (0.11)	-0.006 (0.10)
Inflation			-0.000 (0.00)	-0.000 (0.00)	-0.001 (0.00)	-0.001 (0.00)
Trade openness			0.020 (0.02)	0.037* (0.02)	0.035 (0.02)	0.019 (0.02)
FDI inflows			-0.018 (0.03)	-0.020 (0.03)	-0.010 (0.03)	-0.028 (0.03)
Capital account openness		-0.710* (0.32)	-0.326 (0.48)	0.033 (0.52)	-0.259 (0.49)	-0.490 (0.48)
Dependency ratio		-0.092 (0.07)	-0.146 (0.17)	-0.034 (0.18)	-0.048 (0.16)	-0.150 (0.17)
Democracy		0.442** (0.14)	-0.067 (0.21)	0.323 (0.21)	0.099 (0.22)	-0.253 (0.23)
Industry			0.387** (0.12)	0.365** (0.14)	0.394** (0.12)	0.402*** (0.12)
Ethnic fragmentation			-11.689 (7.10)	-17.835* (7.69)	-14.426* (7.04)	-15.065* (6.92)
Turnout			0.108** (0.04)	0.118** (0.04)	0.146*** (0.04)	0.083* (0.04)
Female labor force participation			-0.237* (0.11)	-0.128 (0.13)	-0.238* (0.11)	-0.247* (0.10)
Checks and balances			0.344 (0.32)	0.490 (0.34)	0.500 (0.35)	0.346 (0.31)
EU membership			-1.079 (0.83)	-0.860 (0.96)	-1.164 (0.99)	-1.357 (0.82)
Constant	21.502*** (1.05)	-8.937 (5.00)	-10.775 (12.27)	-27.790 (14.60)	-20.740 (11.89)	-6.965 (11.88)
R-squared	0.413	0.619	0.777	0.726	0.773	0.789
N	333	316	197	197	197	197

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

the effect of all other variables constant, better governed societies tend to redistribute income more than their poorly governed counterparts. This impact is substantively meaningful: a two-standard-deviation change in the composite WGI index results in a 17.1 percentage-point-change in redistribution (in model 3). In the case of the control of corruption, the rule of law, and the government effectiveness measures, this change is 9.9, 20.7, and 16.6 percentage points, respectively. Thus, countries with stronger bureaucratic apparatuses, lower corruption, and more effective enforcement of the law attain higher levels of redistribution. This result is not driven by any specific country, as the jackknife models in the appendix indicate.

The models above yield several noteworthy findings. Interestingly, and contrary to studies conducted in the advanced industrialized world and Latin America,⁶¹ the results fit the Meltzer-Richards model: redistribution and inequality are positively correlated, suggesting that more inegalitarian societies tend to alleviate inequality more than more equal countries or that rising market income inequality leads to more concentrated efforts to redistribute over time. This might be because public pressures for better social safety nets are indeed heeded by politicians in Central and Eastern Europe or because political elites in the region are sensitive to growing inequality and attempt to address it in anticipation of public backlash. This strategic choice might be explained with the perceived costs of not undertaking measures to limit inequality in an environment marked by a legacy of (at least apparent) egalitarianism. The relationship between inequality and redistribution might also be positive because the countries that carried out comprehensive economic reforms and thus experienced the largest increases in inequality invested more in the development of effective welfare states. In this sense, the implementation of these reforms required higher redistribution. As Figures 10 and 11 in the appendix show, the market GINI coefficient rose steadily in the states which adopted market-based reforms the fastest. Meanwhile, the CIS countries, Bulgaria, and Romania experienced slower and smaller increases in income differences. As

⁶¹Huber and Stephens 2001 and 2012

a result, they might have faced a weaker urgency to redistribute.

The positive coefficient of the turnout variable offers partial support for the demand-related interpretation. Higher levels of electoral participation are associated with higher relative redistribution, *ceteris paribus*. This is consistent with a situation in which governing elites fear being penalized for not taking action against inequality. Similarly, a larger industrial sector translates into higher redistribution. This might be because industrial workers are better organized and therefore more capable of mobilizing in demand for redistribution. In contrast, higher ethnic fragmentation and female labor force participation appear to inhibit redistribution. The other economic controls fail to reach statistical significance.

Table 2 re-runs models 1 through 6 for the smaller sample of countries adding controls for public support for redistribution, partisanship, and electoral disproportionality. Despite the significantly lower number of observations, the results remain substantively unchanged. All WGI indicators are positively signed and statistically significant. As in the larger sample, their impact is not negligible. A two-standard-deviation increase in the composite index, control for corruption, government effectiveness, and rule of law translates into a 18.9, a 13.8, a 14.9, and a 20.2 percentage-point rise in redistribution, respectively. Indeed, the quality of government remains an important predictor of redistribution even in these more conservative models.

Like in the previous models, higher market inequality and a larger industrial sector are related to higher redistribution. Interestingly, ethnic fragmentation and voter turnout are no longer statistically significant. In contrast, government debt and the dependency ratio emerge as statistically significant determinants of redistribution. Surprisingly, higher government debt is positively correlated with inequality-reducing efforts, suggesting that spending more on redistribution might put a strain on government budgets. While the negative coefficient carried by the dependency ratio seems counterintuitive, it might be explained with the introduction of private pension schemes and the cuts in education and pension transfers during the transition period. Lastly, membership in the European Union

Table 2: Redistribution and the Quality of Government: Reduced Sample

	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
	b/se	b/se	b/se	b/se	b/se	b/se
WGI Index	8.456*** (1.85)	6.822*** (1.72)	23.251*** (3.54)			
WGI Corruption				16.001*** (3.07)		
WGI Gov effectiveness					17.142*** (3.47)	
WGI Rule of law						24.238*** (3.21)
Inequality		0.687*** (0.11)	1.189*** (0.24)	1.497*** (0.24)	1.523*** (0.26)	1.160*** (0.24)
Opinion			12.768 (10.88)	6.219 (13.12)	23.285* (11.50)	22.001* (9.62)
Partisanship			0.047 (0.03)	0.062 (0.03)	0.020 (0.03)	0.063** (0.02)
GDP per capita		-0.104 (0.11)	-0.270 (0.22)	-0.253 (0.26)	-0.132 (0.26)	-0.356 (0.21)
GDP per capita growth			-0.100 (0.10)	-0.171 (0.11)	-0.138 (0.12)	-0.159* (0.08)
Unemployment		0.028 (0.07)	0.286 (0.18)	0.155 (0.19)	0.089 (0.19)	0.384* (0.16)
Capital account openness		-1.473** (0.47)	1.632 (1.22)	1.643 (1.40)	2.650 (1.45)	0.350 (1.02)
Deficit			0.201 (0.17)	0.096 (0.19)	0.274 (0.20)	0.509** (0.16)
Government debt			0.236*** (0.07)	0.287*** (0.07)	0.296*** (0.07)	0.109* (0.05)
Inflation			0.250 (0.13)	0.203 (0.15)	0.078 (0.14)	0.111 (0.12)
Trade openness			-0.016 (0.03)	0.012 (0.03)	-0.024 (0.04)	-0.001 (0.03)
FDI inflows			-0.040 (0.04)	-0.051 (0.05)	-0.033 (0.04)	-0.070 (0.04)
Dependency ratio		-0.306 (0.17)	-1.380*** (0.28)	-1.491*** (0.34)	-0.970** (0.33)	-1.535*** (0.26)
Democracy		0.277 (0.41)	-2.636* (1.05)	-3.554* (1.43)	-1.895 (1.22)	-1.555 (0.88)
Industry			1.145*** (0.32)	1.415*** (0.35)	1.777*** (0.35)	1.132*** (0.30)
Ethnic fragmentation			-5.295 (16.42)	-5.839 (15.77)	-5.414 (18.79)	-9.810 (14.71)
Turnout			-0.068 (0.09)	0.028 (0.10)	-0.039 (0.10)	0.012 (0.08)
Female labor force participation			0.178 (0.24)	0.554* (0.22)	0.567* (0.27)	-0.051 (0.27)
Checks and balances			0.107 (0.39)	-0.095 (0.41)	0.037 (0.49)	0.236 (0.37)
Disproportionality			-0.245 (0.24)	-0.237 (0.30)	-0.840** (0.26)	-0.151 (0.25)
EU membership			-4.590** (1.78)	-6.827*** (1.93)	-6.368** (2.12)	-3.451 (1.82)
Constant	29.034*** (1.50)	13.160 (9.47)	-6.281 (39.61)	-33.552 (45.40)	-95.239* (37.90)	-1.876 (34.95)
R-squared	0.583	0.692	0.958	0.949	0.946	0.967
N	179	170	69	69	69	69

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

is negatively related to redistribution. This might be due to the fiscal constraints imposed by the EU, especially in the aftermath of the global economic crisis.

Surprisingly, public support for redistribution yields inconclusive results. Its positive coefficient is consistent with Rothstein et al.'s argument, indicating that a public expecting the state to intervene and alleviate inequality is conducive to higher redistribution. Nevertheless, the variable's lack of statistical significance in two out of four models casts doubt on the demand-side mechanism proposed by the authors. If the quality of government acted on redistribution solely by decreasing public support for the welfare state, the WGI index would not have been significant. This points to an alternative mechanism directly linking redistribution and the quality of government.

5 Causal Mechanism Tests

This mechanism might be better illustrated by looking at the interaction between the quality of government and social spending or state revenues. Scholarship on the welfare state has established that revenues and social spending typically play an important role in redistribution as they determine the amount a state can and does spend on social transfers and benefits.⁶² The argument developed here, however, posits that social spending and state revenues are not effective at reducing market income inequality in poorly governed countries. In such environments, resources allocated to redistribution do not necessarily reach their beneficiaries. The quality of government thus modifies the redistributive effect of social spending.

To test this proposition, table 3 interacts the WGI Index with social spending and state revenues as a percent of national GDP. The models include all of the controls featured in tables 1 and 2 but I only present the statistically significant coefficients. The full specification, as well as the interaction terms between the different components of the WGI index and social spending and state revenues can be found in the appendix. The interaction terms are

⁶²Huber and Stephens 2001

positively signed and statistically significant, lending support to the idea that the quality of government mediates the effect of social spending or state revenues on redistribution.

Table 3: Social Spending and Revenues Models

	Model 13	Model 14
	b/se	b/se
WGI Index	7.689 (4.57)	-9.236 (6.73)
Social spending	1.570*** (0.42)	
WGI Index \times Soc Spend	0.820* (0.34)	
Revenues		0.499** (0.16)
WGI Index \times revenues		0.763*** (0.18)
Opinion	36.267** (11.67)	34.326** (10.45)
Inequality	1.278*** (0.22)	1.096*** (0.19)
Partisanship	0.059** (0.02)	0.110*** (0.03)
GDP per capita	0.479* (0.21)	0.479* (0.24)
Government debt	0.154** (0.06)	0.146** (0.05)
Dependency ratio	-0.961*** (0.24)	-1.773*** (0.26)
Industry	1.367*** (0.31)	1.444*** (0.32)
Democracy	-1.054 (1.00)	-4.620*** (1.09)
Ethnic fragmentation	44.132* (17.32)	33.291* (14.31)
Constant	-88.455* (40.57)	-22.103 (39.72)
R-squared	0.971	0.972
N	69	69

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

Figures 4 and 5 show the marginal effect of social protection spending and state revenues over the range of the WGI index. The plot reveals that the impact of spending / revenues on redistribution consistently increases as the quality of government improves. In fact, this effect switches from negative to positive in the case of revenues. Higher state revenues do not increase redistribution in poorly governed societies. On the contrary, they have a regressive effect on income inequality at very low levels of the WGI index. However,

in contexts where corruption is limited, the bureaucracy is competent, and the rule of law is upheld, social protection spending and state revenues have a positive impact on redistribution. A dollar raised and spent on social assistance schemes is therefore much more effective at reducing inequality in better governed societies. The Bulgarian, Polish, Slovakia, and Romanian cases of fraud would not exist in such an environment.

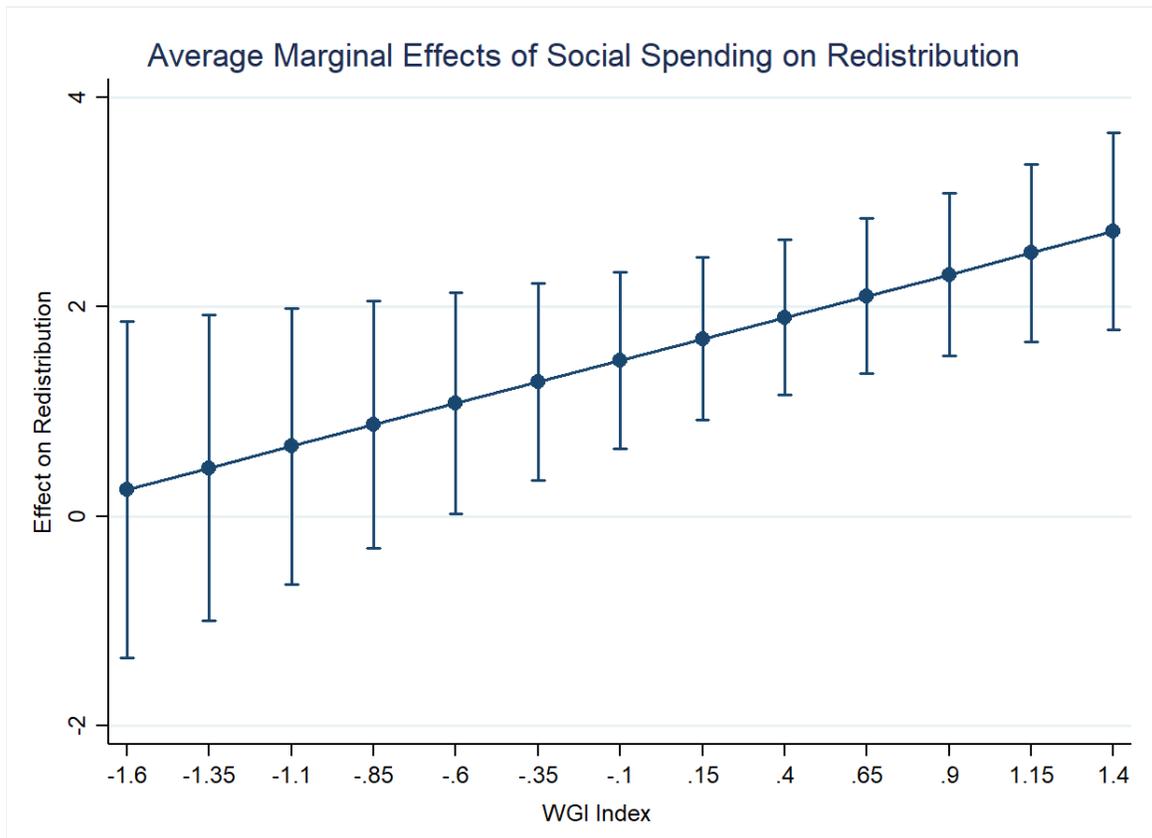


Figure 3: Interaction Term between Social Protection Spending and the Quality of Government Index

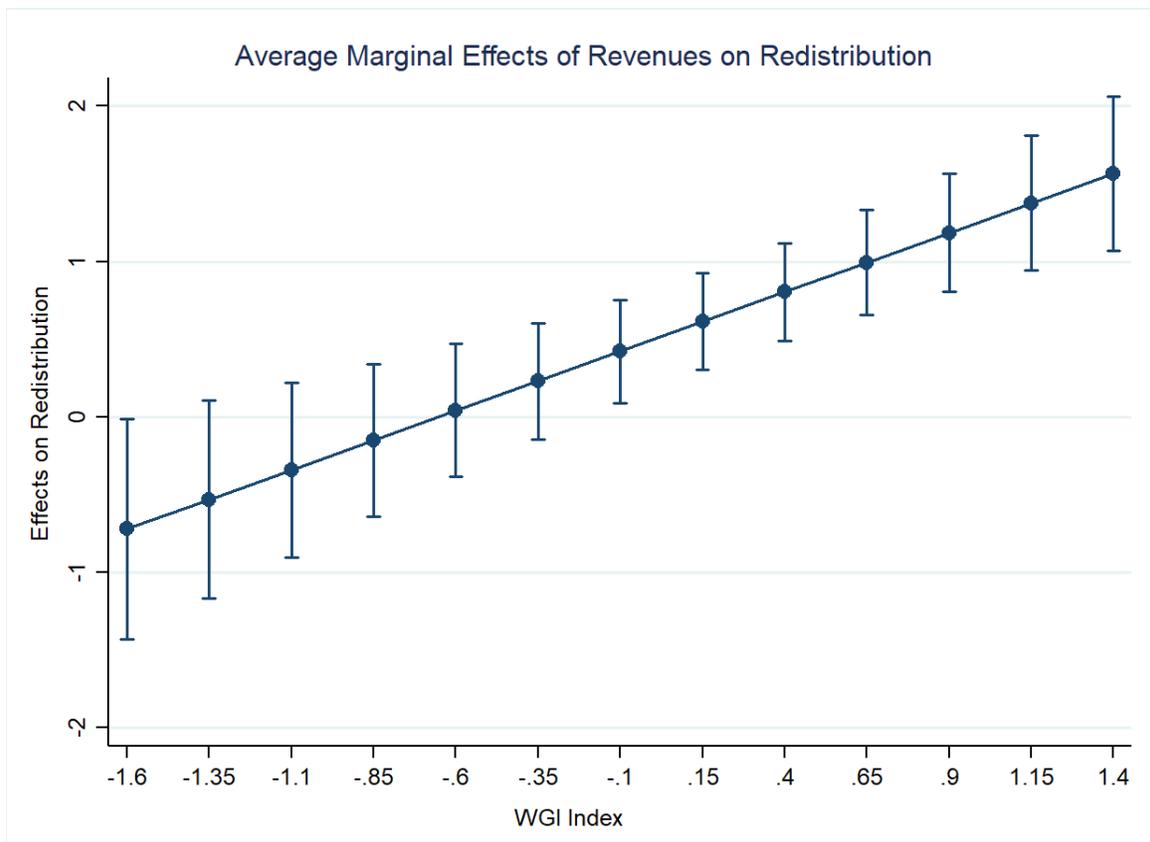


Figure 4: Interaction Term between Revenues and the Quality of Government Index

While empirically assessing these dynamics is difficult, it is possible to begin to explore them using data from V-DEM. The regressions below test for the direct impact of public sector embezzlement, public sector corruption, and the rigor and impartiality of the public administration on economic redistribution. The first three models are run against the extended sample while the last three apply to the reduced sample. The appendix includes models which interact these variables with social spending and state revenues and introduce fixed effects.

Consistent with my argument, public sector corruption comes out as negative and statistically significant. This suggests that bureaucratic malpractices suppress the ability of the state to reduce inequality. If the public service regularly steals from the state and or abuses its office, it acts against the goal of social policies to help those in need, grant

Table 4: Public Sector Corruption and Embezzlement Models

	Extended b/se	Extended b/se	Extended b/se	Reduced b/se	Reduced b/se	Reduced b/se
Public sector corruption index	-19.296*** (4.42)			-37.017*** (6.24)		
Public sector embezzlement		2.854** (0.87)			5.073*** (1.53)	
Rigorous and impartial public administration			3.606*** (0.73)			3.573* (1.64)
Inequality	1.060*** (0.11)	1.096*** (0.12)	0.911*** (0.12)	1.372*** (0.29)	1.613*** (0.29)	1.973*** (0.27)
GDP per capita	-0.075 (0.16)	0.119 (0.16)	0.055 (0.19)	-0.349 (0.34)	0.009 (0.37)	-0.198 (0.36)
GDP per capita growth	-0.084 (0.06)	-0.080 (0.07)	-0.029 (0.05)	-0.250* (0.10)	-0.289* (0.12)	-0.234 (0.13)
Deficit	0.043 (0.17)	-0.037 (0.17)	-0.196 (0.11)	0.383* (0.17)	0.425* (0.20)	0.417 (0.22)
Government debt	0.101 (0.05)	0.113* (0.06)	0.005 (0.03)	0.256*** (0.06)	0.306*** (0.07)	0.325*** (0.07)
Unemployment	-0.036 (0.13)	-0.075 (0.14)	0.068 (0.11)	0.174 (0.15)	0.091 (0.16)	0.011 (0.18)
Inflation	-0.005 (0.00)	-0.006 (0.01)	-0.002 (0.00)	-0.020 (0.16)	-0.126 (0.18)	-0.235 (0.16)
Trade openness	0.019 (0.02)	0.030 (0.02)	0.041* (0.02)	-0.014 (0.03)	-0.001 (0.04)	0.007 (0.04)
FDI inflows	-0.008 (0.04)	-0.021 (0.04)	-0.035 (0.03)	-0.070 (0.06)	-0.101 (0.07)	-0.070 (0.07)
Capital account openness	-1.122 (0.63)	-1.104 (0.64)	0.145 (0.52)	2.336 (1.22)	2.364 (1.40)	2.114 (1.49)
Dependency ratio	-0.994*** (0.21)	-0.980*** (0.23)	-0.055 (0.19)	-0.787* (0.34)	-0.868* (0.39)	-1.189** (0.43)
Industry	0.791*** (0.17)	0.836*** (0.18)	0.391** (0.14)	2.174*** (0.29)	2.616*** (0.33)	2.539*** (0.37)
Democracy	0.650 (0.61)	0.942 (0.59)	0.236 (0.24)	-0.407 (1.19)	-0.451 (1.37)	-1.881 (1.58)
Ethnic fragmentation	5.610 (8.67)	9.497 (9.12)	-24.124** (7.80)	-11.622 (20.02)	-0.843 (22.30)	-9.445 (20.48)
Turnout	0.233*** (0.06)	0.260*** (0.06)	0.079 (0.05)	0.096 (0.12)	0.183 (0.13)	0.130 (0.15)
Female labor force participation	0.086 (0.14)	0.192 (0.14)	-0.017 (0.12)	0.694** (0.25)	0.996*** (0.24)	1.230*** (0.25)
Checks and balances	0.616 (0.36)	0.702 (0.39)	0.682 (0.35)	0.589 (0.46)	0.445 (0.46)	0.109 (0.47)
EU membership	-2.597** (0.96)	-3.058** (1.04)	-0.993 (1.04)	-6.767*** (1.98)	-7.819*** (2.24)	-9.350*** (2.33)
Public opinion				-0.700 (13.94)	11.953 (13.34)	22.613 (13.99)
Partisanship				-0.011 (0.03)	0.015 (0.03)	0.030 (0.03)
Disproportionality				-0.258 (0.31)	-0.541 (0.35)	-0.969** (0.32)
Constant	-20.673 (18.58)	-47.724* (19.46)	-32.846* (13.58)	-97.708** (34.96)	-173.268*** (38.77)	-171.513*** (43.21)
R-squared	0.806	0.794	0.710	0.957	0.945	0.932
N	143	143	198	69	69	69

low-income households access to services and increase their income. Thus, building on the previous models, which indicate that an incompetent bureaucracy hinders redistribution, these regressions show that resource embezzlement and public sector corruption also obstruct the capacity of the state to reduce economic inequality.⁶³

6 Endogeneity

A potential cause for concern might be the presence of endogeneity. The primary endogeneity problem that could undermine the findings is the possibility that some background factor directly and simultaneously influences redistribution and the quality of government. While it is difficult to completely reject the possibility of endogeneity bias, there are reasonably strong grounds to expect that this bias has been reduced as much as possible. The primary variable that is likely to negatively affect both redistribution and the quality of government is market income inequality. A highly unequal social structure can skew the legislative process in favor of the rich and lead to underinvestment in the state apparatus. Nevertheless, my regression analysis shows that the market GINI coefficient is positively correlated with redistribution.

The findings can still suffer from endogeneity bias if a factor different from market income inequality shapes both the quality of government and the redistributive efforts of post-communist governments. This section discusses four potential confounders. I examine the theoretical underpinnings of these background conditions and explain why they do not challenge my argument. Table 5 presents results from models which control for them. To save space, I only present the coefficients for the WGI index and the additional controls. The full specification can be found in the appendix.

a) Economic Structure

The structure of the economy might simultaneously affect redistribution and the quality of government. More rural countries are likely to have insufficiently developed bureaucratic

⁶³Higher values on public sector embezzlement indicate less pervasive theft.

and law-enforcing systems. Simultaneously, research on the welfare state has shown that industrialization is associated with greater redistribution.⁶⁴ To account for this possibility, I add a control for the proportion of the population that lives in rural areas. The variable is insignificant in the extended sample models but comes out statistically significant in the reduced sample. Contrary to expectations, its effect is positive, suggesting that more rural countries tend to redistribute more than urban economies. This might be because the European Union places an emphasis on regional development.⁶⁵

b) Political Competition

The level of political competition might also be a confounder. Uncompetitive party systems can reduce representation and accountability, promote state capture, and facilitate exploitation of the state apparatus.⁶⁶ They can also suppress redistribution as political elites with undisputed power refuse to increase social spending or raise taxes. To control for political competition, I add a variable capturing the effective number of parties in the national legislature.⁶⁷ Its coefficient fails to reach statistical significance, implying that a political system characterized by the presence of more parties does not induce higher levels of redistribution. As an additional robustness test, I used V-Dem's index of political competition, which captures the institutionalization of competition and government restrictions on political competition. The variable is positively signed and statistically significant in the reduced sample, lending support to the idea that political elites might fear the electoral consequences of rising inequality in countries with a more egalitarian historical legacy.

c) Type of Communist Regime

Third, Kitschelt et al. (1999) have argued that communism took different shapes in Central and Eastern Europe. Different countries experienced different levels of repression, clientelism, bureaucratic capacity, and reform. These legacies might have contributed to subsequent lev-

⁶⁴Wilensky 1975

⁶⁵The structure of the economy itself might be affected by membership in the EU as many manufacturing enterprises relocated to Eastern Europe in the 1990s and the 2000s (Bohle and Greskovits 2012). Thus, economic makeup might be endogenous to dynamics that I already control for.

⁶⁶Hellman 1998; Vachudova 2004; O'Dwyer 2006

⁶⁷The analysis is limited to the reduced sample due to data limitations.

els of redistribution and government quality. To test for this, I add a dummy variable that assumes a value of 1 for the former members of the Soviet Union, 2 for the bureaucratic authoritarian countries (the Czech Republic and Slovakia), 3 for the national accommodative regimes (Hungary, Poland, Slovenia, and the three Baltic republics), and 4 for the patrimonial states (Bulgaria and Romania). Communist legacy is significant and negatively signed in the reduced sample models: a transition from a bureaucratic authoritarian to national accommodative or patrimonial order is associated with a decrease in the levels of redistribution. Despite that, the WGI indices remain statistically significant.

d) EU Funds

Lastly, the amount of EU funds that Eastern European countries receive might alleviate budget constraints, facilitating higher redistribution and investment in bureaucratic institutions. To evaluate this possibility, I include a control for EU funds as a percent of GDP. The variable fails to reach statistical significance.⁶⁸ This suggests the economic assistance that the region receives from the European Union does not allow it to engage in higher redistribution.

The analysis below thus demonstrates that the quality of government is an important determinant of redistribution. I do not argue that this variable is entirely exogenous to historical legacies, economic development, or political competition. Existing research has shown that state capacity may be influenced by these factors. Rather, my argument is that regardless of its own determinants, the quality of government has a strong and independent effect on redistribution. The statistical results corroborate this hypothesis.

7 Conclusion

This paper argues that there is a meaningful relationship between a country's level of redistribution and its quality of government. This association remains understudied by

⁶⁸This remains the case even when the EU member dummy and the WGI index are excluded from the analysis.

Table 5: Endogeneity Checks

	Extended b/se	Reduced b/se	Extended b/se	Reduced b/se
WGI Index	12.226*** (1.41)	6.556*** (1.88)	12.557*** (1.37)	7.720*** (1.67)
Rural population	0.049 (0.06)	0.826*** (0.07)	0.049 (0.06)	0.803*** (0.06)
Effective number of parties		0.312 (0.61)		
Communist regime	0.319 (0.87)	-17.061*** (1.98)	0.335 (0.84)	-12.485*** (2.08)
EU funds		14.242 (25.93)		-16.027 (24.33)
Political competition index			0.625 (0.64)	9.294*** (2.18)
R-squared	0.777	0.987	0.789	0.990
N	197	69	197	69

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

the welfare state literature. Only recently have scholars begun to explore the impact of corruption, bureaucratic incompetence, and the ineffective enforcement of the rule of law on the capacity of the state to reduce income inequality through taxes and transfers.⁶⁹ Most existing work has so far been limited to the developed world, where poor government supposedly delegitimizes the state.

This analysis strives to expand the scope of these studies beyond advanced democracies, where the quality of government is high enough to prevent substantial redistributive leakage. Less developed countries often suffer from higher corruption and lower government effectiveness. These government problems directly affect the supply of redistribution by diverting resources from their designated uses. Public funds thus end up in the pockets of public officials or recipients who do not qualify for them. Legitimate beneficiaries, by contrast, either do not receive the benefits for which they are eligible or get a much smaller fraction of overall social spending than they are entitled to by law. An incompetent and politically dependent bureaucracy further exacerbates this problem as civil servants prove incapable of reaching those most in need. In a context where the primacy of the law is not respected, malpractices remain unpunished and persist.

⁶⁹Rothstein et al. 2012

Although this argument is applicable to all countries suffering from corruption, government ineffectiveness, and the uneven application of the rule of law, I test it in the context of a region whose particular historical trajectory allows me to adjudicate between existing theories linking redistribution to the quality of government and my proposition. The experience of communism in Central and Eastern Europe conditioned people's perceptions about the role of the state in social provision. Eastern European citizens are thus generally more supportive of a greater participation of the state in redistributive matters.⁷⁰ As a result, the region provides an ideal context in which the supply-based argument can be tested. I expect this theory to be generalizable to other regions, such as Africa, Latin America, and Asia, but, because welfare states in these areas are still underdeveloped and public support for redistribution cannot always be effectively measured, I evaluate it in post-Communist Europe.

To be clear, my argument is not that poor government cannot undermine trust in state institutions and decrease popular support for state-sponsored redistribution, as Rothstein et al. (2012) posit. In fact, the demand- and the supply-based effects are tightly linked. They can occur sequentially and reinforce each other. Noticing the corrupt behavior of civil servants and the inability of social provision schemes to reduce inequality, people might grow disillusioned with the state and may ultimately prefer a less generous system of social protection. Individual attitudes, however, are likely to respond to observations about the redistributive potential of the welfare state and are generally more lasting. Consequently, the mechanism that I propose should precede the withdrawal of support for the welfare state that Rothstein et al. (2012) predict.

Future research should extend the analysis to other regions. The quality of government might have equally important implications for redistribution and the design of the welfare state there. Indeed, recent work by Holland (2016, 2017) has shown that forbearance, or the selective enforcement of the rule of law, plays a crucial role in shaping distributive

⁷⁰Pop-Eleches and Tucker 2017

outcomes in Latin America. While the focus of this paper is on the effectiveness of the existing social protection framework at alleviating inequality rather than on the ability of the state to affect market income through the selective application of its laws, my argument could also apply to that context given the generally higher levels of corruption, government inefficiency, and failure to enact the rule of law in Latin America. Exploring whether forbearance perpetuates the persistence of ineffective social protection institutions is another research question worth pursuing.

Additional research is also required to further elucidate the ways in which individual preferences and structural characteristics interact to shape the redistributive capacity of the welfare state. Consistent with Rothstein et al. (2012), we would expect to see corruption and inefficiency decrease support for redistribution. Is this relationship similar in different contexts? Or does the existing structure of the welfare state mediate the impact that the quality of government has on citizens' support for state-sponsored redistribution? The answer to this question can shed light on the factors shaping the modern welfare state around the world.

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9 Appendix

9.1 Descriptive Statistics

Countries in the main analysis:

Bulgaria	Lituania
Czech Republic	Poland
Estonia	Romania
Hungary	Slovak Republic
Latvia	Slovenia

Countries included in the extended sample⁷¹:

Belarus	Serbia and Montenegro
Georgia	Tajikistan
Kazakhstan	Turkmenistan
Kyrgyz Republic	Ukraine
Moldova	Uzbekistan
Russian Federation	

⁷¹Georgia, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan are excluded from the regression models using the ICRG index as a main explanatory variable because the PRS Group does not calculate the index for these countries. They are, however, included into the models using the World Bank's World Government Indicators.

Table 6: Summary Statistics for the Extended Sample

Variable	Obs	Mean	Std. Dev.	Min	Max
Relative Redistribution	411	20.536	16.971	-11.13	50.783
Median Redistribution	411	20.911	16.624	-10.076	50.737
Absolute Redistribution	411	9.409	7.912	-3.109	23.84
WGI Index	333	-.148	.751	-1.546	1.101
WGI Control for Corruption	333	-.243	.682	-1.43	1.32
WGI Government Effectiveness	333	-.046	.774	-1.68	1.19
WGI Rule of Law	333	-.157	.838	-1.69	1.22
Public Sector Corruption	407	.509	.316	.054	.958
Public Sector Theft	407	-.165	1.382	-2.586	2.732
Rigorous Public Administration	449	.523	1.329	-1.94	3.111
ICRG Index	261	.58	.136	.306	.944
ICRG Corruption	270	2.774	1.026	1	5
ICRG Bureaucratic Quality	270	2.204	.863	.75	4
ICRG Law and Order	270	4.306	.748	.67	6
Market Inequality	411	41.141	7.808	24.15	57.332
GDP per capita	400	10.207	4.346	6.947	27.505
GDP per capita Growth	395	2.6	6.884	-31.178	15.083
Deficit	259	-1.945	3.125	-14.847	9.883
Government Debt	182	35.967	22.994	6.6	108.3
Unemployment	407	10.057	3.577	3.7	21.4
Inflation	385	64.522	224.951	-1.146	2221.017
Trade	396	101.135	34.183	23.216	199.675
FDI Inflows	393	4.427	5.196	-16.154	50.968
Capital Account Openness	336	.245	1.569	-1.875	2.422
Dependency Ratio	411	50.612	10.674	37.806	92.926
Industry	383	32.8	7.446	10.29	68.822
Polity Score	410	4.739	6.35	-9	10
Ethnic Fragmentation	401	.39	.16	.047	.679
Turnout	390	66.485	12.591	38.16	100
Female Labor Force Participation	411	61.855	6.098	43.1	74.7
Checks and Balances	388	3.363	1.761	1	8

Table 7: Summary Statistics for the Reduced Sample

Variable	Obs	Mean	Std. Dev.	Min	Max
Relative Redistribution	224	33.2	12.061	-5.735	50.783
Median Redistribution	224	33.326	11.864	-5.894	50.737
Absolute Redistribution	224	15.137	6.009	-1.519	23.84
WGI Index	179	.457	.408	-.72	1.101
WGI Corruption	179	.283	.433	-.9	1.32
WGI Government Effectiveness	179	.557	.437	-1.13	1.19
WGI Rule of Law	179	.531	.417	-.46	1.22
Public Sector Corruption	220	.288	.212	.054	.842
Public Sector Theft	220	.728	.992	-1.637	2.732
Rigorous Public Administration	221	1.581	.82	-.24	3.111
ICRG Index	185	.636	.119	.412	.944
ICRG Corruption	185	3.13	.953	2	5
ICRG Bureaucratic Quality	185	2.572	.74	.75	4
ICRG Law and Order	185	4.457	.728	2.5	6
Social Spending	196	14.73	3.39	7.9	25.7
Public Support for Redistribution	77	.787	.091	.52	.9
Market Inequality	224	44.091	7.08	28.142	56.889
Partisanship	208	23.905	23.855	0	100
GDP per capita	215	11.652	5.49	8.961	27.505
GDP Growth per capita	211	3.048	5.769	-31.178	13.267
Deficit	159	-2.484	2.994	-14.847	3.571
Debt	182	35.967	22.994	6.6	108.3
Unemployment	220	10.438	4.064	3.7	21.4
Inflation	216	26.71	91.773	-1.146	1058.374
Trade	211	104.746	32.863	39.135	181.369
FDI Inflows	213	4.734	6.246	-16.154	50.968
Capital Account Openness	190	.916	1.547	-1.875	2.422
Dependency Ratio	224	46.431	3.728	37.806	54.256
Industry	198	32.832	5.078	20.649	49.943
Polity	223	8.96	1.257	5	10
Ethnic Fragmentation	223	.311	.146	.047	.585
Turnout	222	63.338	11.475	38.16	91.18
Female Labor Force Participation	224	62.457	4.936	49.2	72.5
Checks and Balances	217	4.212	1.522	1	8
Disproportionality	219	6.717	3.506	.797	17.819

9.2 Additional Visuals

Figure 3 splits the countries in my two samples into two groups depending on their quality of government. The states whose quality of government is higher than the mean of their respective sample (WGI index = -0.329 for the extended sample and WGI index = 0.336 for the reduced sample) reach an average level of redistribution of approximately 34.5% (for the extended sample) and 38.5% (for the reduced sample) in 2000. These values greatly exceed the redistribution levels attained by the poorly governed societies, whose WGI index levels lie below their respective sample's mean. On average, these states reduced their market GINI by 7.5% (in the case of the extended sample) and 28.6% in 2000. The difference in the performance of both groups in terms of their ability to alleviate inequality is therefore substantively big. This analysis supports my theoretical expectation that better governed countries would attain higher levels of redistribution.

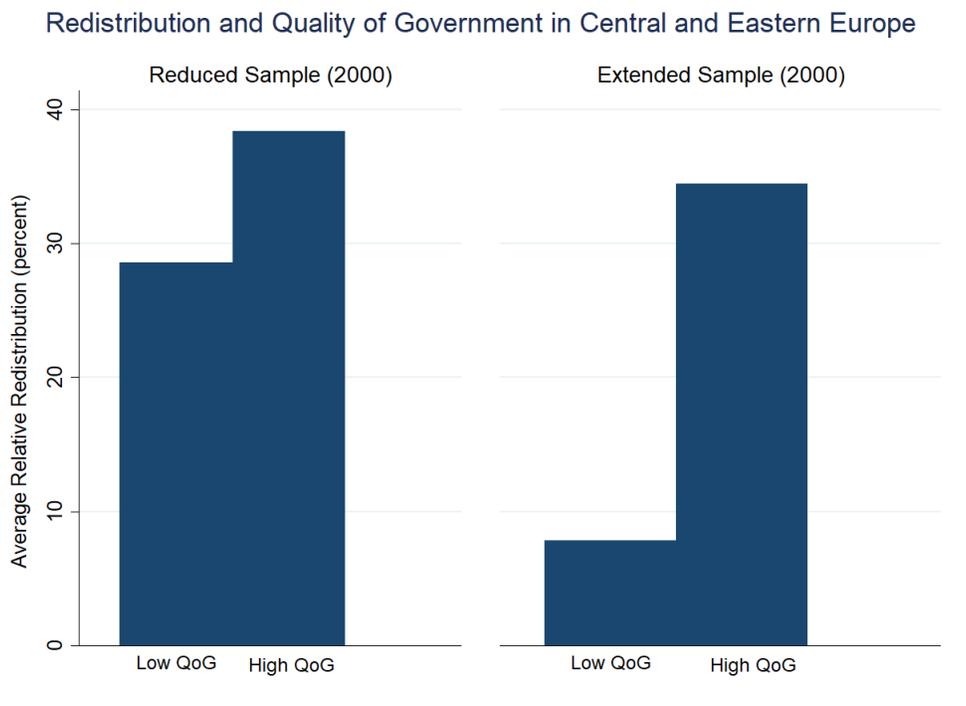
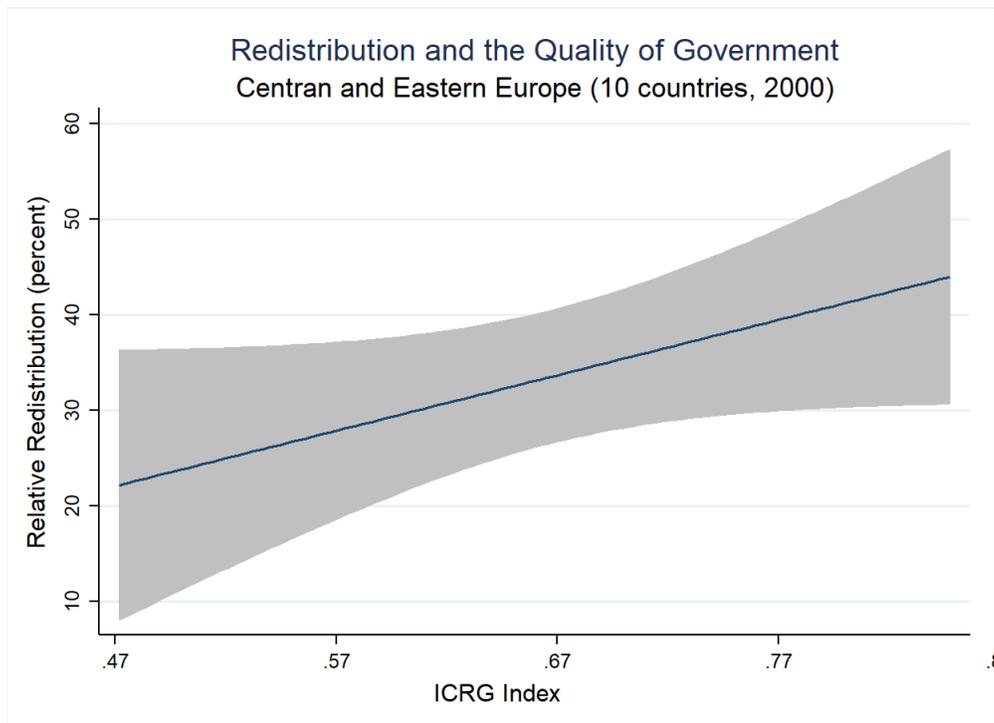
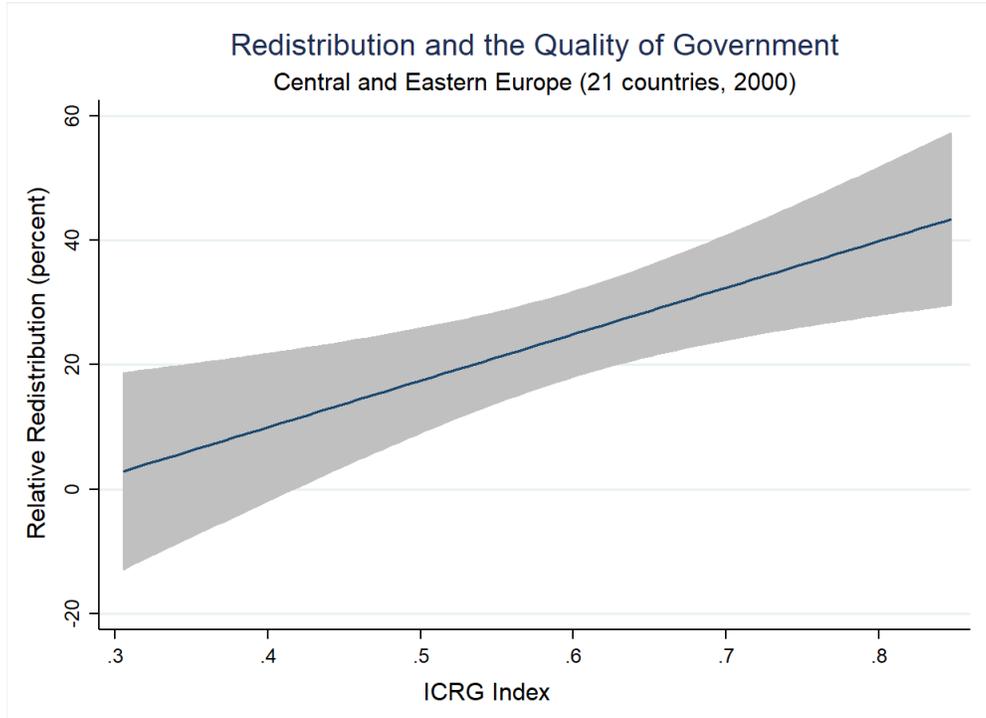


Figure 5: Quality of Government and Redistribution in Central and Eastern Europe (2000)

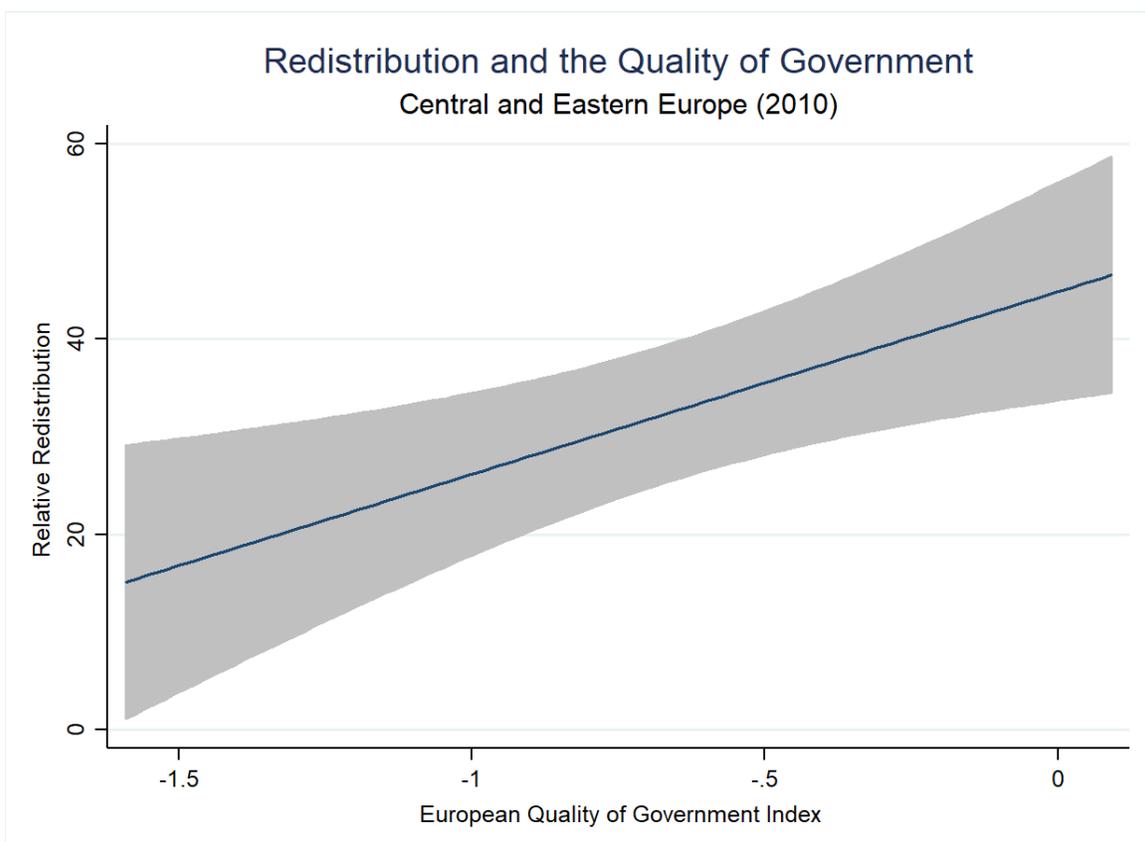
The two graphs below show the relationship between relative redistribution and the International Country Risk Groups quality of government index. The ICRG index is created by the Political Risk Services Group (PRS), a private consultancy specializing in the evaluation of business conditions and political risk. Its experts analyze political, economic, and financial data, and assess the impact of political and social events and conditions on the business climate. The index is calculated as the mean of three separate variables – “corruption”, “law and order”, and “bureaucracy quality” – and varies between 0 and 1, with higher values indicating higher quality of government. It therefore captures the overall performance of state institutions. Its first dimension, corruption, reflects the extent to which excessive patronage, nepotism, job reservations, favor-for-favors, secret party funding, and suspiciously close ties between politics and business permeate the political system. The law and order indicator quantifies the strength and impartiality of the legal system and the popular observance of the law. Lastly, bureaucratic quality captures the expertise of the bureaucratic apparatus, its autonomy from political pressures, as well as the degree to which it has established mechanisms for recruitment and training. In this, the ICRG index closely resembles the WGI index.

As it can be appreciated, a higher quality of government, as measured by the ICRG index, is associated with higher redistribution. The multivariate regressions included in the next section suggest that this relationship is robust.



Another way to measure the quality of government is through the recently developed European Quality of Government Index (EQI). Based on comprehensive surveys with a random sample of individuals aged 18 years and older, the EQI provides an assessment of corruption and government at the regional level within the EU.⁷² It captures "both perceptions and experiences with public sector corruption, along with the extent to which citizens believe various public sector services are impartially allocated and of good quality." Data are available for 172 regions within the European Unions for two time points – 2010 and 2013. To check the robustness of my results to this alternative way to measure the quality of government, I use the country averages calculated by Charron et al..

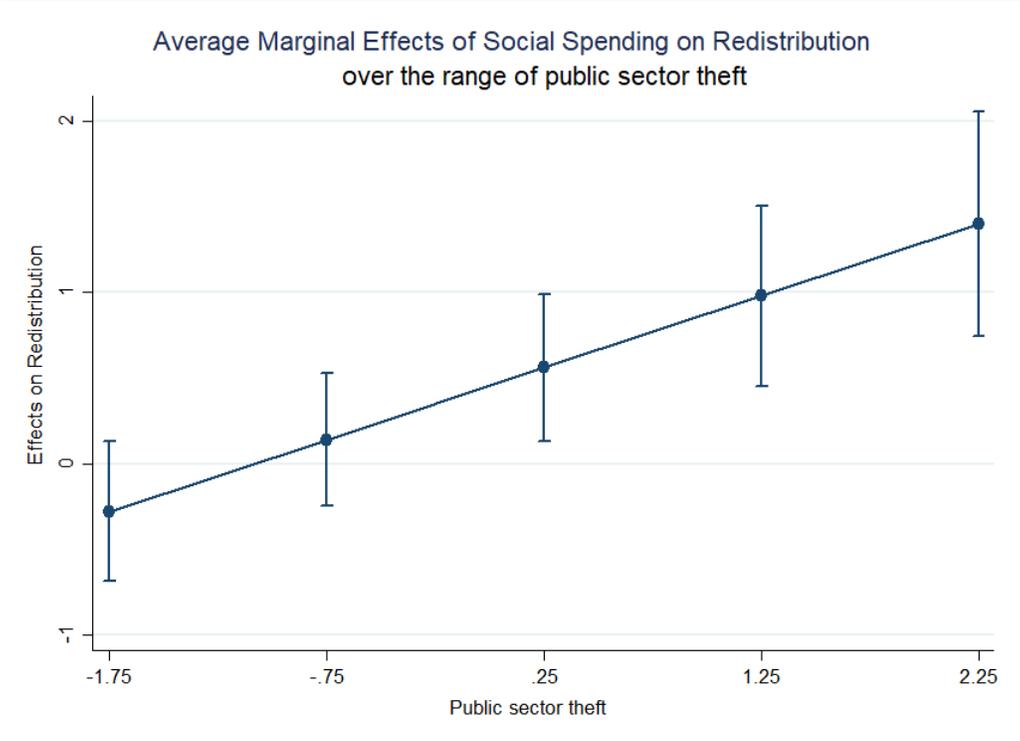
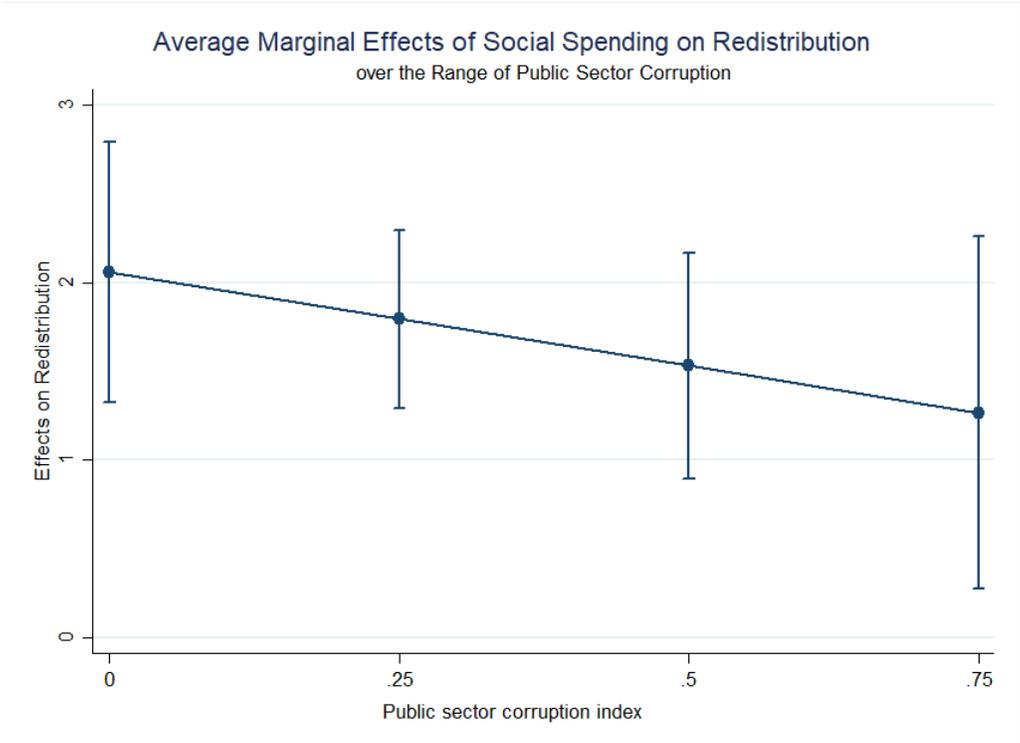
The figure below indicates that, as before, a higher quality of government is associated with higher redistribution.

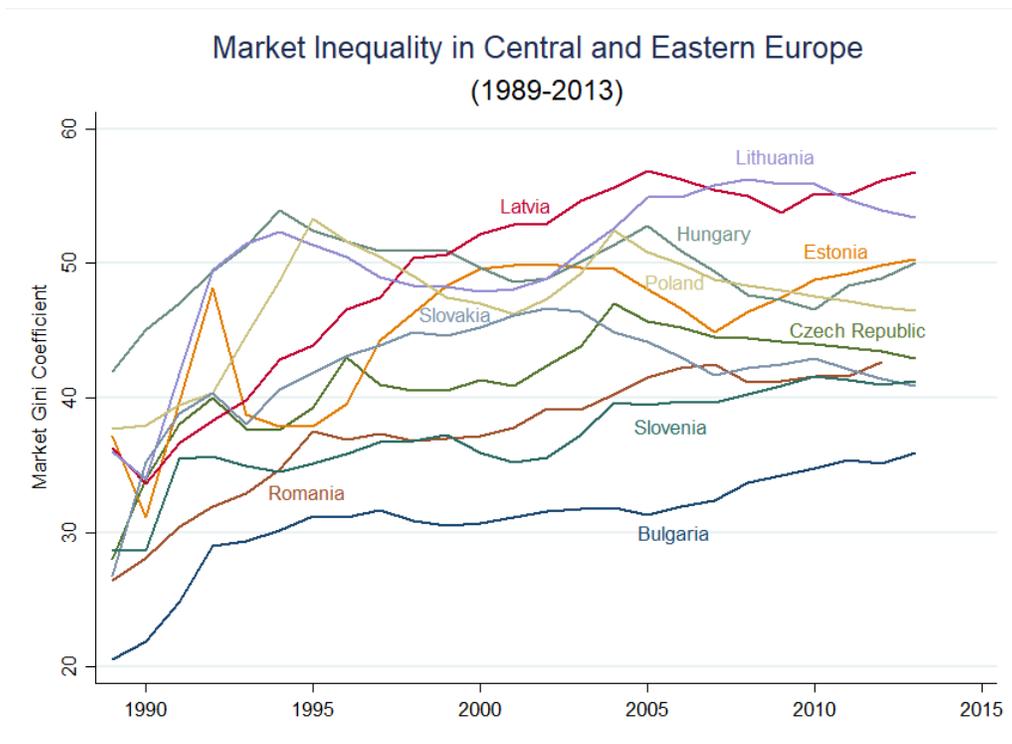
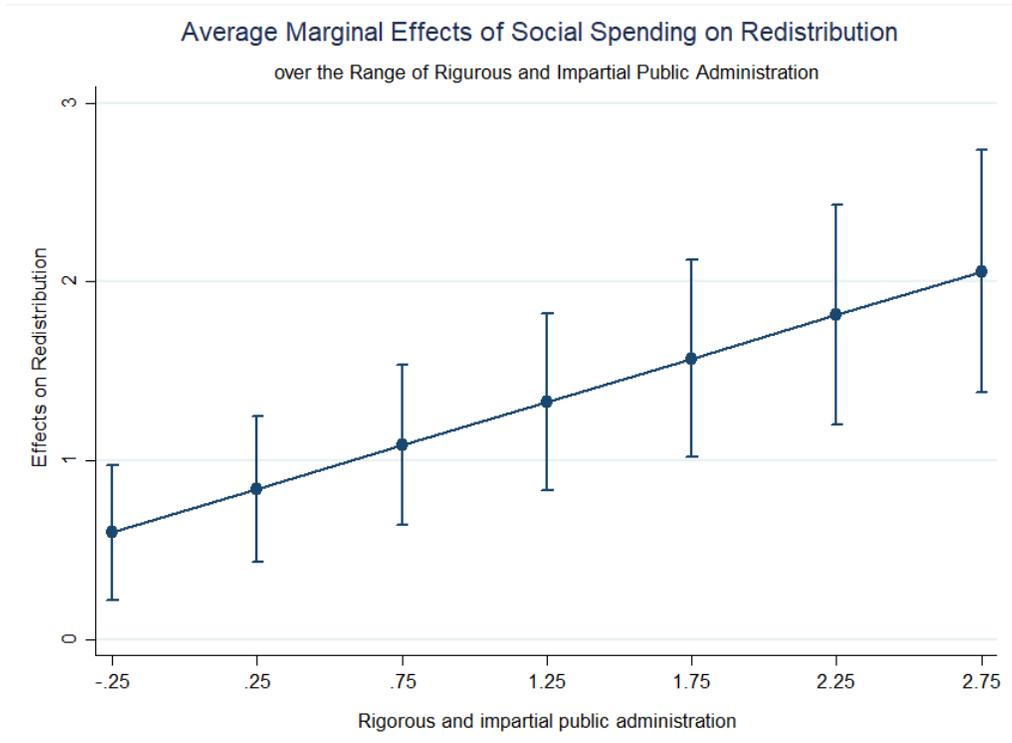


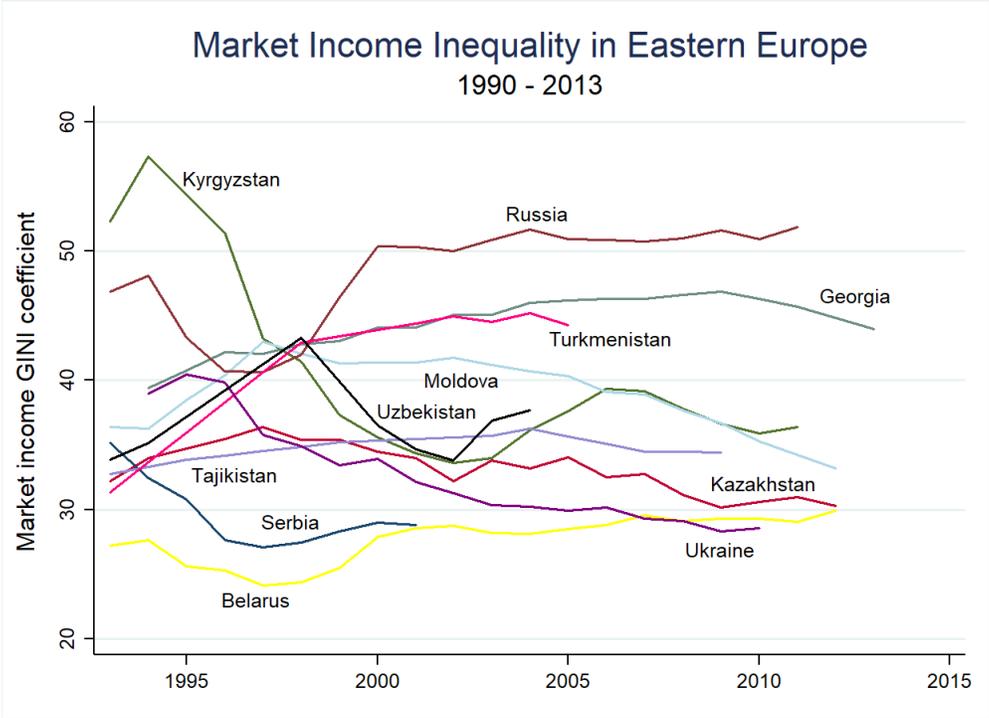
⁷²Charron et al. 2014

To further illustrate the mechanism that I propose, I created interaction terms between social spending and the three V-Dem indicators included in the analysis. The marginal effects plots below are consistent with the WGI plots presented in the paper and provide additional support for the argument developed here.⁷³ Specifically, they reveal that the positive effect of social spending on redistribution decreases as public sector corruption increases. This implies that even if governments spend a lot on social transfers, benefits, and services, if the public sector is corrupt, inequality will not be reduced. Social spending is similarly ineffective at decreasing income differentials when public sector theft is rampant. The anecdote about the Bulgarian accountant corroborates these conclusions. In contrast, when such stealing does not occur, or occurs very rarely, the effect of social spending on redistribution is much more pronounced. Lastly, the presence of a rigorous and impartial public administration enhances the effect of social spending. These interaction plots therefore support my argument.

⁷³The directionality of the three variables matters for the interpretation of the plots. Public sector corruption is measured in such a way that higher values of the index indicate higher corruption. In contrast, higher values of the public sector theft and the rigorous and impartial public administration indicators suggest cleaner and more transparent government.







10 Additional Models

a) Social Spending and Revenues WGI Index Full Models

The table below presents the full output from the models shown in table 3 in the main body of the article.

Table 8: Social Spending and Revenues Models

	Social Spending	Revenues
	b/se	b/se
WGI Index	7.689 (4.57)	-9.236 (6.73)
Social spending	1.570*** (0.42)	
WGI Index \times Soc Spend	0.820* (0.34)	
Revenues		0.499** (0.16)
WGI Index \times Revenues		0.763*** (0.18)
Opinion	36.267** (11.67)	34.326** (10.45)
Inequality	1.278*** (0.22)	1.096*** (0.19)
Partisanship	0.059** (0.02)	0.110*** (0.03)
GDP per capita	0.479* (0.21)	0.479* (0.24)
GDP per capita growth	-0.013 (0.10)	-0.066 (0.09)
Deficit	0.632*** (0.18)	-0.354 (0.19)
Government debt	0.154** (0.06)	0.146** (0.05)
Unemployment	-0.217 (0.17)	0.074 (0.15)
Inflation	0.397** (0.12)	0.213 (0.13)
Trade openness	-0.010 (0.03)	0.045 (0.02)
FDI inflows	-0.054 (0.04)	-0.059 (0.04)
Capital account openness	0.763 (0.95)	0.269 (1.06)
Dependency ratio	-0.961*** (0.24)	-1.773*** (0.26)
Industry	1.367*** (0.31)	1.444*** (0.32)
Democracy	-1.054 (1.00)	-4.620*** (1.09)
Ethnic fragmentation	44.132* (17.32)	33.291* (14.31)
Turnout	-0.027 (0.07)	-0.089 (0.08)
Female labor force participation	-0.160 (0.26)	0.017 (0.21)
Checks and balances	-0.117 (0.34)	-0.443 (0.29)
Disproportionality	0.036 (0.28)	0.213 (0.28)
EU membership	-2.870 (1.70)	-3.830* (1.57)
Constant	55 -88.455* (40.57)	-22.103 (39.72)
R-squared	0.971	0.972
N	69	69

b) Social Spending and Revenues WGI Component Models

The models below create interaction terms between social spending or state revenues and the different components of the WGI index. The interaction terms are positively signed and statistically significant.

Table 9: Social Spending and Revenues Models

	m3	m4	m5	m6	m7	m8
	b/se	b/se	b/se	b/se	b/se	b/se
Social Spending	1.721*** (0.31)	2.537*** (0.65)	2.579*** (0.49)			
Revenues				0.690*** (0.17)	0.786** (0.27)	0.158 (0.19)
WGI Corruption	-6.275 (5.22)			-20.864* (8.33)		
WGI Gov Effectiveness		28.767** (10.35)			-11.379 (10.56)	
Rule of Law			38.094*** (6.31)			-1.760 (7.92)
Corruption × Spending	1.318*** (0.32)					
Effectiveness × Spending		-1.117 (0.80)				
Rule of Law × Spending			-1.349** (0.43)			
Corruption × Revenues				0.845*** (0.20)		
Gov Effectiveness × Revenues					0.734** (0.28)	
Rule of Law × Revenues						0.614** (0.21)
Opinion	29.164* (13.05)	27.920* (12.18)	32.117*** (9.74)	26.452* (12.52)	53.936*** (10.42)	34.110*** (9.93)
Inequality	1.392*** (0.19)	1.735*** (0.22)	1.333*** (0.22)	1.317*** (0.19)	1.226*** (0.20)	1.155*** (0.21)
Partisanship	0.074** (0.03)	-0.009 (0.03)	0.050** (0.02)	0.121*** (0.03)	0.108*** (0.03)	0.101*** (0.03)
GDP per capita	0.777** (0.26)	-0.431 (0.32)	-0.163 (0.22)	0.591* (0.29)	0.839*** (0.24)	0.095 (0.23)
GDP per capita growth	0.011 (0.10)	-0.086 (0.12)	-0.087 (0.08)	-0.100 (0.10)	-0.073 (0.10)	-0.111 (0.08)
Deficit	0.475* (0.19)	0.712*** (0.19)	0.758*** (0.16)	-0.477* (0.22)	-0.582* (0.24)	0.148 (0.19)
Government debt	0.216*** (0.05)	0.164* (0.07)	0.102 (0.05)	0.201*** (0.05)	0.156** (0.06)	0.069 (0.05)
Unemployment	-0.362* (0.17)	-0.214 (0.17)	-0.049 (0.18)	-0.085 (0.18)	-0.107 (0.15)	0.205 (0.15)
Inflation	0.269 (0.14)	0.576*** (0.14)	0.186 (0.11)	0.074 (0.16)	0.118 (0.12)	0.114 (0.13)
Trade openness	0.024 (0.03)	-0.041 (0.04)	0.008 (0.03)	0.075** (0.03)	0.051 (0.03)	0.029 (0.02)
FDI inflows	-0.059 (0.05)	-0.047 (0.04)	-0.067 (0.04)	-0.075 (0.04)	-0.041 (0.04)	-0.074 (0.04)
Capital account openness	1.222 (0.98)	0.503 (1.34)	0.345 (0.89)	0.235 (1.16)	0.607 (1.17)	-0.473 (1.05)
Dependency ratio	-1.067*** (0.25)	-0.805* (0.33)	-1.054*** (0.24)	-1.789*** (0.28)	-1.605*** (0.27)	-1.774*** (0.25)
Industry	1.520*** (0.29)	1.469*** (0.39)	1.322*** (0.25)	1.670*** (0.31)	1.991*** (0.34)	1.307*** (0.33)
Democracy	-1.856 (1.29)	-1.586 (1.24)	-1.773* (0.86)	-5.383*** (1.38)	-4.812*** (1.14)	-2.824** (1.00)
Ethnic fragmentation	57.375*** (16.45)	4.067 (22.29)	5.430 (17.21)	37.491** (14.55)	49.309** (16.35)	14.574 (14.34)
Turnout	0.067 (0.08)	-0.144 (0.09)	-0.018 (0.05)	0.015 (0.09)	-0.115 (0.09)	-0.005 (0.07)
Female labor force participation	0.005 (0.24)	0.336 (0.21)	-0.015 (0.26)	0.273 (0.21)	0.182 (0.22)	-0.062 (0.25)
Checks and balances	-0.420 (0.33)	0.354 (0.44)	0.303 (0.35)	-0.756* (0.32)	-0.634 (0.36)	-0.032 (0.33)
Disproportionality	0.195 (0.31)	-0.763* (0.35)	-0.529* (0.24)	0.212 (0.29)	-0.073 (0.30)	0.129 (0.30)
EU membership	-4.164** (1.50)	-7.485*** (2.22)	-3.287* (1.64)	-5.385*** (1.53)	-4.725** (1.81)	-3.396* (1.69)
Constant	-103.580** (38.78)	-111.937** (42.21)	-77.314* (31.69)	-50.571 (40.40)	-92.670* (41.22)	-11.416 (39.77)
R-squared	0.964	0.977	0.977	0.966	0.968	0.972
N	69	69	69	69	69	69

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

c) Endogeneity WGI Index Full Models

The table below shows the full output from the models presented at table 5.

Table 10: Endogeneity Checks

	Extended b/se	Reduced b/se
WGI Index	12.226*** (1.41)	6.556*** (1.88)
Inequality	0.903*** (0.08)	1.001*** (0.10)
GDP per capita	-0.041 (0.15)	-0.212 (0.20)
GDP per capita growth	-0.037 (0.04)	0.052 (0.05)
Debt	0.010 (0.03)	0.135** (0.04)
Deficit	-0.079 (0.09)	0.171 (0.11)
Unemployment	0.110 (0.09)	-0.097 (0.09)
Inflation	-0.000 (0.00)	0.125 (0.08)
Trade openness	0.020 (0.02)	-0.060*** (0.02)
FDI inflows	-0.016 (0.03)	0.009 (0.02)
Capital account openness	-0.341 (0.50)	5.310*** (0.94)
Dependency ratio	-0.182 (0.18)	1.011*** (0.23)
Industry	0.396*** (0.12)	0.138 (0.18)
Democracy	-0.108 (0.23)	-1.529 (1.11)
Ethnic fragmentation	-11.872 (7.88)	-43.168*** (9.64)
Turnout	0.110** (0.04)	-0.072 (0.06)
Female labor force participation	-0.212 (0.11)	0.115 (0.17)
Checks and balances	0.317 (0.32)	-1.039** (0.34)
Rural population	0.049 (0.06)	0.826*** (0.07)
Communist regime	0.319 (0.87)	-17.061*** (1.98)
EU membership	-1.173 (0.83)	-3.160*** (0.73)
Public opinion		-9.945 (7.21)
Partisanship		-0.006 (0.02)
Disproportionality		-0.176 (0.20)
Effective number of parties		0.312 (0.61)
Euro funds		14.242 (25.93)
Constant	59 -13.868 (12.22)	-26.650 (20.91)
R-squared	0.777	0.987
N	197	69

d) Endogeneity WGI Component Models

The table below reruns the endogeneity checks from table 5 replacing the WGI index with its individual components.

Table 11: Endogeneity Checks: Extended Sample Models

	WGI Index b/se	WGI Corruption b/se	WGI Gov Ef b/se	WGI Rule of Law b/se
WGI Index	12.226*** (1.41)	6.923*** (1.29)	10.402*** (1.31)	12.414*** (1.42)
Inequality	0.903*** (0.08)	0.984*** (0.10)	0.917*** (0.09)	0.937*** (0.08)
GDP per Capita	-0.041 (0.15)	0.054 (0.16)	0.074 (0.16)	-0.185 (0.13)
GDP per capita growth	-0.037 (0.04)	-0.046 (0.05)	-0.064 (0.05)	-0.027 (0.05)
Debt	0.010 (0.03)	0.009 (0.04)	0.007 (0.03)	-0.002 (0.03)
Deficit	-0.079 (0.09)	-0.193 (0.11)	-0.104 (0.11)	-0.001 (0.10)
Unemployment	0.110 (0.09)	0.065 (0.11)	0.027 (0.10)	0.207* (0.09)
Inflation	-0.000 (0.00)	-0.001 (0.00)	-0.001 (0.00)	-0.000 (0.00)
Trade openness	0.020 (0.02)	0.039* (0.02)	0.037 (0.02)	0.018 (0.02)
FDI inflows	-0.016 (0.03)	-0.018 (0.03)	-0.006 (0.03)	-0.026 (0.03)
Capital account openness	-0.341 (0.50)	-0.099 (0.55)	-0.362 (0.52)	-0.437 (0.50)
Dependency ratio	-0.182 (0.18)	-0.127 (0.19)	-0.167 (0.17)	-0.173 (0.18)
Industry	0.396*** (0.12)	0.382** (0.13)	0.414*** (0.12)	0.419*** (0.11)
Democracy	-0.108 (0.23)	0.217 (0.24)	-0.043 (0.23)	-0.287 (0.24)
Ethnic fragmentation	-11.872 (7.88)	-14.440 (8.10)	-13.088 (7.64)	-17.110* (7.57)
Voter turnout	0.110** (0.04)	0.121** (0.04)	0.148*** (0.04)	0.087* (0.04)
Female labor force participation	-0.212 (0.11)	-0.109 (0.13)	-0.181 (0.11)	-0.210* (0.10)
Checks and balances	0.317 (0.32)	0.484 (0.34)	0.415 (0.34)	0.307 (0.31)
EU membership	-1.173 (0.83)	-1.097 (0.94)	-1.464 (0.98)	-1.424 (0.82)
Rural population	0.049 (0.06)	0.032 (0.08)	0.110 (0.06)	0.084 (0.06)
Communist regime	0.319 (0.87)	1.103 (1.05)	1.102 (0.75)	-0.067 (0.88)
Constant	-13.868 (12.22)	-31.282* (14.63)	-27.351* (11.93)	-11.199 (11.87)
R-squared	0.777	0.729	0.774	0.792
N	197	197	197	197

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

Table 12: Endogeneity Checks: Reduced Sample Models

	WGI Index	WGI Corruption	WGI Gov Ef	WGI Rule of Law
	b/se	b/se	b/se	b/se
WGI Index	6.264*** (1.68)	3.038* (1.20)	3.273* (1.58)	8.571*** (1.74)
Opinion	-10.715 (7.30)	-11.631 (8.10)	-13.526 (7.90)	-7.908 (6.61)
Inequality	1.022*** (0.08)	1.087*** (0.08)	1.107*** (0.09)	0.965*** (0.09)
Partisanship	-0.008 (0.02)	-0.014 (0.02)	-0.015 (0.02)	0.000 (0.02)
GDP per Capita	-0.223 (0.20)	-0.265 (0.20)	-0.200 (0.21)	-0.227 (0.18)
GDP per capita growth	0.044 (0.05)	0.039 (0.05)	0.053 (0.05)	0.029 (0.05)
Deficit	0.178 (0.11)	0.173 (0.11)	0.197 (0.11)	0.240* (0.10)
Government debt	0.140*** (0.04)	0.139*** (0.04)	0.152*** (0.04)	0.105** (0.04)
Unemployment	-0.096 (0.09)	-0.158 (0.09)	-0.174* (0.09)	-0.024 (0.09)
Inflation	0.109 (0.08)	0.097 (0.09)	0.037 (0.08)	0.088 (0.07)
Trade openness	-0.056** (0.02)	-0.056*** (0.02)	-0.059*** (0.02)	-0.048** (0.02)
FDI inflows	0.009 (0.02)	0.009 (0.03)	0.015 (0.03)	-0.002 (0.02)
Capital account openness	5.294*** (0.93)	5.448*** (0.95)	5.776*** (0.97)	4.699*** (0.82)
Dependency ratio	0.990*** (0.23)	1.177*** (0.22)	1.233*** (0.21)	0.772** (0.24)
Industry	0.139 (0.18)	0.132 (0.19)	0.181 (0.19)	0.130 (0.17)
Democracy	-1.581 (1.10)	-1.660 (1.16)	-1.542 (1.19)	-1.194 (1.03)
Ethnic fragmentation	-43.587*** (9.58)	-49.211*** (8.54)	-46.768*** (9.67)	-41.102*** (9.33)
Voter turnout	-0.074 (0.06)	-0.065 (0.06)	-0.059 (0.06)	-0.050 (0.05)
Female labor force participation	0.155 (0.13)	0.273* (0.12)	0.257 (0.13)	0.019 (0.14)
Checks and balances	-1.068*** (0.32)	-1.195*** (0.33)	-1.259*** (0.33)	-0.933** (0.29)
Disproportionality	-0.200 (0.19)	-0.267 (0.20)	-0.306 (0.20)	-0.126 (0.18)
EU membership	-3.219*** (0.71)	-3.571*** (0.74)	-3.591*** (0.75)	-2.704*** (0.70)
Communist regime	-16.889*** (2.02)	-18.786*** (1.80)	-17.745*** (2.07)	-15.566*** (1.96)
Rural population	0.829*** (0.07)	0.869*** (0.08)	0.924*** (0.07)	0.776*** (0.07)
Effective number of parties	0.242 (0.59)	0.127 (0.60)	0.284 (0.63)	0.357 (0.54)
Constant	-10.640 (21.01)	-17.165 (22.85)	-29.025 (22.91)	-2.701 (19.61)
R-squared	0.987	0.987	0.987	0.989
N	69	69	69	69

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

11 Robustness Checks

In this section, I present additional models using a reduced form specification, alternative operationalizations of my dependent and independent variables, jackknife resampling, fixed effects, and moving averages.

a) Reduced form specification

A legitimate concern might be that the statistical significance of the quality of government indicators is a function of my model specification. The four tables below show reduced-form models for my two samples. The first model in each table includes the additive quality of government index, while the remaining models examine the behavior of its components. I add market inequality, GDP per capita, unemployment, capital account openness, the dependency ratio, and democracy to control for the effect of other variables.

The WGI indicators remain positively signed and statistically significant despite the exclusion of the rest of the controls in my original models. In both samples, better government is associated with higher levels of redistribution. Bivariate models removing all controls from the specification yield the same results.

Table 13: Reduced Form Models: Extended Sample

	WGI Index	WGI Corruption	WGI Gov Effect	WGI Law
	b/se	b/se	b/se	b/se
WGI Index	9.061*** (1.41)	5.883*** (1.15)	6.602*** (1.27)	7.621*** (1.33)
Inequality	0.728*** (0.08)	0.790*** (0.08)	0.749*** (0.08)	0.735*** (0.08)
GDP per Capita	0.230** (0.09)	0.331*** (0.09)	0.371*** (0.09)	0.262** (0.09)
Unemployment	0.048 (0.07)	0.040 (0.07)	0.013 (0.07)	0.073 (0.06)
Capital Account Openness	-0.710* (0.32)	-0.457 (0.35)	-0.630 (0.34)	-0.772* (0.32)
Dependency ratio	-0.092 (0.07)	-0.154* (0.06)	-0.097 (0.06)	-0.083 (0.07)
Democracy	0.442** (0.14)	0.619*** (0.13)	0.542*** (0.14)	0.474*** (0.13)
Constant	-8.937 (5.00)	-10.167* (5.01)	-12.253* (4.78)	-10.696 (5.51)
R-squared	0.619	0.608	0.600	0.584
N	316	316	316	316

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

Table 14: Bivariate Models: Extended Sample

	WGI Index	WGI Corruption	WGI Gov Effect	WGI Law
	b/se	b/se	b/se	b/se
WGI Index	12.953*** (1.43)	9.457*** (1.58)	11.440*** (1.45)	12.268*** (1.28)
Constant	21.502*** (1.05)	21.787*** (1.05)	21.518*** (1.02)	20.043*** (0.88)
R-squared	0.413	0.325	0.431	0.402
N	333	333	333	333

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

Table 15: Reduced Form Models: Reduced Sample

	WGI Index	WGI Corruption	WGI Gov Effect	WGI Law
	b/se	b/se	b/se	b/se
WGI Indices	6.822*** (1.72)	3.564*** (1.05)	4.218** (1.39)	7.591*** (2.02)
Inequality	0.687*** (0.11)	0.735*** (0.12)	0.746*** (0.11)	0.697*** (0.11)
GDP per Capita	-0.104 (0.11)	-0.096 (0.10)	-0.081 (0.12)	-0.115 (0.10)
Unemployment	0.028 (0.07)	0.021 (0.07)	-0.005 (0.07)	0.060 (0.07)
Capital Account Openness	-1.473** (0.47)	-1.465** (0.49)	-1.519** (0.48)	-1.566*** (0.47)
Dependency ratio	-0.306 (0.17)	-0.386* (0.16)	-0.380* (0.18)	-0.307 (0.17)
Democracy	0.277 (0.41)	0.322 (0.42)	0.381 (0.42)	0.224 (0.41)
Constant	13.160 (9.47)	16.324 (9.14)	13.842 (9.79)	12.140 (9.79)
R-squared	0.691	0.679	0.681	0.688
N	170	170	170	170

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

Table 16: Bivariate Models: Reduced Sample

	WGI Index	WGI Corruption	WGI Gov Effect	WGI Law
	b/se	b/se	b/se	b/se
WGI Index	8.456*** (1.85)	5.002*** (1.10)	7.376*** (1.68)	8.934*** (2.26)
Constant	29.034*** (1.50)	28.844*** (1.37)	28.082*** (1.95)	31.494*** (0.99)
R-squared	0.583	0.572	0.577	0.568
N	179	179	179	179

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

b) Median Redistribution

A different approach to handling the SWIID data does not change my findings in a meaningful way. I substituted the mean relative redistribution measure with the median of the 100 imputed series in the database. The WGI indices remain statistically significant and positively associated with redistribution.

Table 17: Median Redistribution: Extended Sample

	WGI Index b/se	WGI Corruption b/se	WGI Gov Effect b/se	WGI Law b/se
WGI Index	12.431*** (1.33)	7.204*** (1.17)	10.917*** (1.30)	12.276*** (1.32)
Inequality	0.844*** (0.09)	0.908*** (0.11)	0.826*** (0.09)	0.882*** (0.09)
GDP per Capita	-0.065 (0.15)	0.019 (0.16)	0.061 (0.16)	-0.194 (0.14)
GDP per capita growth	-0.032 (0.05)	-0.039 (0.05)	-0.053 (0.05)	-0.020 (0.05)
Deficit	-0.079 (0.10)	-0.192 (0.10)	-0.120 (0.11)	-0.007 (0.10)
Debt	0.006 (0.03)	-0.003 (0.03)	0.000 (0.03)	-0.001 (0.03)
Unemployment	0.114 (0.09)	0.081 (0.10)	0.026 (0.10)	0.199* (0.09)
Inflation	-0.000 (0.00)	-0.000 (0.00)	-0.001 (0.00)	-0.001 (0.00)
Trade openness	0.012 (0.02)	0.030 (0.02)	0.027 (0.02)	0.010 (0.02)
FDI inflows	-0.016 (0.03)	-0.018 (0.03)	-0.009 (0.03)	-0.028 (0.03)
Capital account openness	-0.447 (0.46)	-0.075 (0.50)	-0.401 (0.47)	-0.629 (0.48)
Dependency ratio	-0.115 (0.16)	-0.007 (0.17)	-0.019 (0.15)	-0.114 (0.17)
Industry	0.379** (0.12)	0.352** (0.13)	0.392** (0.12)	0.402*** (0.11)
Democracy	-0.063 (0.23)	0.328 (0.22)	0.097 (0.22)	-0.237 (0.24)
Ethnic fragmentation	-11.915 (6.69)	-18.284* (7.27)	-14.163* (6.63)	-15.077* (6.49)
Turnout	0.109** (0.04)	0.117** (0.04)	0.150*** (0.04)	0.090* (0.04)
Female labor force participation	-0.244* (0.11)	-0.134 (0.13)	-0.249* (0.11)	-0.252* (0.10)
Checks and balances	0.304 (0.31)	0.429 (0.33)	0.473 (0.34)	0.338 (0.31)
Constant	-8.441 (12.12)	-24.875 (14.37)	-18.592 (11.58)	-5.823 (11.86)
R-squared	0.774	0.719	0.775	0.787
N	197	197	197	197

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

Table 18: Median Redistribution: Reduced Sample

	WGI Index b/se	WGI Corruption b/se	WGI Gov Effect b/se	WGI Law b/se
WGI Index	24.405*** (2.85)	16.383*** (2.65)	19.785*** (3.16)	25.411*** (2.51)
Opinion	3.869 (11.61)	-11.662 (13.67)	13.489 (12.87)	16.429 (10.33)
Inequality	0.854*** (0.17)	1.070*** (0.17)	1.095*** (0.20)	0.870*** (0.17)
Partisanship	0.052* (0.03)	0.063 (0.03)	0.029 (0.03)	0.069** (0.02)
GDP per Capita	-0.300 (0.21)	-0.368 (0.28)	-0.214 (0.25)	-0.363* (0.18)
GDP per capita growth	0.017 (0.10)	0.033 (0.10)	0.012 (0.12)	-0.077 (0.09)
Deficit	0.054 (0.17)	-0.078 (0.18)	0.117 (0.21)	0.347* (0.16)
Debt	0.244** (0.08)	0.309*** (0.08)	0.324*** (0.08)	0.115 (0.06)
Unemployment	0.282 (0.18)	0.147 (0.19)	0.133 (0.21)	0.410** (0.16)
Inflation	0.212 (0.13)	0.162 (0.14)	0.089 (0.13)	0.114 (0.11)
Trade openness	-0.059 (0.04)	-0.051 (0.03)	-0.090* (0.04)	-0.032 (0.03)
FDI inflows	-0.014 (0.03)	-0.018 (0.04)	-0.013 (0.04)	-0.054 (0.04)
Capital account openness	0.496 (1.11)	-0.191 (1.34)	1.331 (1.34)	-0.370 (0.82)
Dependency ratio	-1.026*** (0.30)	-0.947* (0.37)	-0.503 (0.30)	-1.278*** (0.27)
Industry	0.852** (0.30)	0.957** (0.32)	1.480*** (0.37)	0.942** (0.29)
Democracy	-1.617 (1.20)	-1.529 (1.72)	-0.713 (1.27)	-0.892 (0.94)
Ethnic fragmentation	5.508 (18.70)	7.452 (18.78)	7.599 (20.80)	-1.653 (15.18)
Turnout	-0.029 (0.09)	0.103 (0.11)	-0.027 (0.11)	0.036 (0.07)
Female labor force participation	-0.035 (0.19)	0.297 (0.19)	0.309 (0.22)	-0.203 (0.20)
Checks and balances	0.160 (0.44)	0.066 (0.53)	0.025 (0.54)	0.210 (0.38)
Disproportionality	0.036 (0.23)	0.084 (0.30)	-0.527 (0.28)	0.072 (0.22)
Constant	8.087 (36.43)	-18.684 (42.54)	-79.043* (39.29)	8.890 (32.49)
R-squared	0.943	0.921	0.929	0.959
N	69	69	69	69

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

c) Absolute Redistribution

The quality of government indicators retain their statistical significance when the dependent variable is measured as the level of absolute redistribution. Absolute redistribution is the difference between pre- and post-tax-and-transfer income inequality. In contrast to relative redistribution, it is not scaled by market income inequality. The two tables below re-run my original models using absolute redistribution as the dependent variable. The WGI indicators remain statistically significant.

Table 19: Absolute Redistribution: Extended Sample

	WGI Index b/se	WGI Corruption b/se	WGI Gov Effect b/se	WGI Law b/se
WGI Index	4.624*** (0.50)	2.485*** (0.44)	4.006*** (0.52)	4.729*** (0.49)
Inequality	0.582*** (0.03)	0.604*** (0.04)	0.579*** (0.04)	0.598*** (0.03)
GDP per capita	-0.031 (0.06)	0.003 (0.06)	0.018 (0.06)	-0.083 (0.05)
GDP per capita growth	-0.010 (0.01)	-0.012 (0.02)	-0.018 (0.02)	-0.006 (0.01)
Deficit	-0.045 (0.04)	-0.082* (0.04)	-0.066 (0.04)	-0.020 (0.04)
Debt	0.003 (0.01)	-0.000 (0.01)	0.001 (0.01)	-0.001 (0.01)
Unemployment	0.052 (0.03)	0.039 (0.04)	0.022 (0.04)	0.084* (0.03)
Inflation	-0.000 (0.00)	-0.000 (0.00)	-0.001 (0.00)	-0.000 (0.00)
Trade openness	0.012 (0.01)	0.018* (0.01)	0.019* (0.01)	0.011 (0.01)
FDI inflows	-0.003 (0.01)	-0.004 (0.01)	-0.000 (0.01)	-0.007 (0.01)
Capital account openness	-0.165 (0.17)	-0.038 (0.18)	-0.143 (0.18)	-0.250 (0.17)
Dependency ratio	-0.009 (0.06)	0.032 (0.06)	0.028 (0.06)	-0.009 (0.06)
Industry	0.122* (0.05)	0.109* (0.05)	0.131** (0.05)	0.132** (0.05)
Democracy	-0.108 (0.08)	0.048 (0.07)	-0.049 (0.08)	-0.191* (0.08)
Ethnic fragmentation	-7.814** (2.66)	-10.465*** (3.01)	-8.677*** (2.58)	-8.780*** (2.58)
Turnout	0.033* (0.01)	0.036* (0.02)	0.048** (0.02)	0.024 (0.01)
Female labor force participation	-0.099* (0.05)	-0.057 (0.05)	-0.099* (0.04)	-0.109* (0.04)
Checks and balances	0.135 (0.11)	0.172 (0.11)	0.213 (0.12)	0.145 (0.11)
Constant	-11.526* (4.98)	-17.450** (5.86)	-16.029** (5.00)	-10.084* (4.86)
R-squared	0.841	0.803	0.839	0.853
N	197	197	197	197

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

Table 20: Absolute Redistribution: Reduced Sample

	WGI Index b/se	WGI Corruption b/se	WGI Gov Effect b/se	WGI Law b/se
WGI Index	8.782*** (1.04)	5.865*** (0.94)	7.288*** (1.13)	9.054*** (0.93)
Opinion	-0.009 (3.58)	-5.747 (4.22)	3.734 (4.21)	4.555 (3.28)
Inequality	0.687*** (0.06)	0.764*** (0.06)	0.773*** (0.07)	0.697*** (0.06)
Partisanship	0.032*** (0.01)	0.035** (0.01)	0.026* (0.01)	0.040*** (0.01)
GDP per capita	-0.193* (0.08)	-0.218* (0.10)	-0.163 (0.09)	-0.217** (0.07)
GDP per capita growth	0.018 (0.03)	0.024 (0.03)	0.016 (0.04)	-0.016 (0.03)
Deficit	0.039 (0.05)	-0.007 (0.06)	0.065 (0.07)	0.146* (0.06)
Government debt	0.084*** (0.02)	0.107*** (0.03)	0.112*** (0.03)	0.038* (0.02)
Unemployment	0.105 (0.07)	0.057 (0.07)	0.057 (0.08)	0.150* (0.06)
Inflation	0.080 (0.04)	0.062 (0.05)	0.040 (0.04)	0.044 (0.04)
Trade openness	-0.014 (0.01)	-0.012 (0.01)	-0.026* (0.01)	-0.005 (0.01)
FDI inflows	-0.002 (0.01)	-0.003 (0.01)	-0.002 (0.01)	-0.017 (0.01)
Capital account openness	0.078 (0.39)	-0.168 (0.49)	0.388 (0.46)	-0.249 (0.27)
Dependency ratio	-0.439*** (0.10)	-0.406** (0.13)	-0.259* (0.10)	-0.532*** (0.09)
Industry	0.187* (0.09)	0.222* (0.10)	0.415*** (0.12)	0.226* (0.10)
Democracy	-1.171** (0.44)	-1.083 (0.64)	-0.933* (0.43)	-0.971** (0.32)
Ethnic fragmentation	-3.807 (6.04)	-3.077 (6.09)	-3.363 (7.03)	-6.577 (4.93)
Turnout	-0.008 (0.03)	0.039 (0.04)	-0.010 (0.04)	0.017 (0.03)
Female labor force participation	-0.032 (0.07)	0.086 (0.07)	0.091 (0.08)	-0.084 (0.07)
Checks and balances	0.017 (0.15)	-0.008 (0.18)	-0.038 (0.18)	0.026 (0.12)
Disproportionality	0.030 (0.07)	0.045 (0.10)	-0.165 (0.09)	0.046 (0.08)
Constant	5.926 (11.46)	-4.010 (13.79)	-24.351 (12.54)	5.932 (10.46)
R-squared	0.969	0.956	0.962	0.977
N	69	69	69	69

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

d) Moving Averages Models

The impact of the quality of government on redistribution might not be immediate or instantaneous. Improvements in control for corruption, government effectiveness, and the application of the rule of law might take time to translate into higher redistribution. The legacy from previous periods might thus continue to affect levels of redistribution even after the status quo has changed.

To account for this possibility, I run moving averages models by replacing each WGI indicator with its mean value for the previous three years. The substantive results do not change. All WGI indicators are positively signed and statistically significant. This implies that previous policy environments indeed affect the ability of the state to alleviate income inequality.

Table 21: Moving Averages Models: Extended Sample

	WGI Index b/se	WGI Corruption b/se	WGI Gov Effect b/se	WGI Law b/se
MA WGI index	15.858*** (1.26)	11.512*** (1.29)	14.442*** (1.35)	15.021*** (1.17)
Inequality	0.846*** (0.09)	0.961*** (0.11)	0.786*** (0.09)	0.860*** (0.08)
GDP per capita	-0.129 (0.14)	-0.047 (0.16)	-0.047 (0.14)	-0.187 (0.13)
GDP per capita growth	0.002 (0.05)	-0.010 (0.05)	-0.011 (0.05)	0.006 (0.05)
Deficit	-0.003 (0.10)	-0.105 (0.11)	-0.074 (0.11)	0.056 (0.09)
Debt	0.020 (0.03)	0.020 (0.03)	0.002 (0.03)	0.026 (0.03)
Unemployment	0.150 (0.09)	0.162 (0.11)	0.114 (0.09)	0.132 (0.09)
Inflation	0.000 (0.00)	0.001 (0.00)	-0.001 (0.00)	-0.001 (0.00)
Trade openness	-0.015 (0.02)	0.012 (0.02)	-0.001 (0.02)	-0.024 (0.02)
FDI inflows	-0.028 (0.03)	-0.040 (0.03)	-0.020 (0.03)	-0.022 (0.03)
Capital account openness	-0.492 (0.47)	-0.138 (0.52)	-0.616 (0.47)	-0.366 (0.46)
Dependency ratio	-0.303* (0.13)	-0.194 (0.13)	-0.203 (0.13)	-0.329* (0.15)
Industry	0.409*** (0.11)	0.446*** (0.12)	0.387*** (0.11)	0.408*** (0.11)
Democracy	-0.164 (0.19)	0.177 (0.19)	0.009 (0.20)	-0.362 (0.20)
Ethnic fragmentation	-4.081 (7.05)	-7.802 (7.52)	-8.632 (6.90)	-6.071 (6.24)
Turnout	0.106** (0.03)	0.114** (0.04)	0.128*** (0.04)	0.102** (0.04)
Female labor force participation	-0.238* (0.11)	-0.159 (0.13)	-0.262* (0.10)	-0.225* (0.10)
Checks and balances	0.097 (0.29)	0.277 (0.34)	0.209 (0.30)	0.218 (0.29)
Constant	0.375 (10.17)	-20.571 (12.25)	-3.644 (9.73)	3.402 (9.88)
R-squared	0.817	0.776	0.802	0.833
N	191	191	191	191

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

Table 22: Moving Averages Models: Reduced Sample

	WGI Index b/se	WGI Corruption b/se	WGI Gov Effect b/se	WGI Law b/se
MA WGI Index	26.782*** (2.27)	22.874*** (2.27)	24.914*** (2.77)	25.865*** (1.98)
Opinion	-10.100 (12.13)	-26.566* (13.38)	-0.426 (13.40)	-0.108 (10.36)
Inequality	0.978*** (0.13)	1.246*** (0.13)	0.974*** (0.18)	0.868*** (0.13)
Partisanship	-0.009 (0.02)	-0.002 (0.03)	-0.029 (0.02)	0.017 (0.02)
GDP per capita	-0.734*** (0.19)	-0.999*** (0.25)	-0.485* (0.23)	-0.607** (0.19)
GDP per capita growth	0.096 (0.07)	0.104 (0.10)	0.095 (0.09)	0.069 (0.05)
Deficit	0.089 (0.15)	0.041 (0.16)	0.117 (0.20)	0.129 (0.12)
Debt	0.227*** (0.07)	0.279*** (0.07)	0.319*** (0.08)	0.121* (0.05)
Unemployment	0.221 (0.14)	0.221 (0.16)	0.241 (0.16)	0.085 (0.12)
Inflation	0.192* (0.09)	0.046 (0.10)	0.340** (0.13)	0.073 (0.08)
Trade openness	-0.105*** (0.03)	-0.096** (0.03)	-0.158*** (0.03)	-0.049* (0.02)
FDI inflows	-0.009 (0.04)	-0.026 (0.04)	-0.011 (0.05)	-0.001 (0.03)
Capital account openness	-1.193 (0.94)	-1.276 (0.98)	0.442 (1.24)	-2.738** (0.93)
Dependency ratio	-1.144*** (0.20)	-1.428*** (0.25)	-0.508 (0.27)	-1.260*** (0.19)
Industry	0.739** (0.27)	0.646* (0.29)	1.391*** (0.35)	0.504* (0.24)
Democracy	-0.662 (0.99)	-1.960 (1.12)	1.235 (1.20)	-0.658 (0.94)
Ethnic fragmentation	-2.431 (15.83)	-11.390 (18.41)	4.541 (17.36)	2.975 (12.60)
Turnout	-0.002 (0.06)	0.055 (0.08)	0.017 (0.08)	0.001 (0.06)
Female labor force participation	0.083 (0.14)	0.323* (0.14)	0.377* (0.17)	-0.218 (0.18)
Checks and balances	-0.021 (0.32)	-0.399 (0.35)	-0.194 (0.42)	0.492 (0.35)
Disproportionality	0.038 (0.22)	0.219 (0.24)	-0.388 (0.28)	0.013 (0.17)
Constant	22.753 (30.59)	43.114 (35.62)	-75.073* (36.27)	46.351 (26.04)
R-squared	0.961	0.954	0.946	0.964
N	69	69	69	69

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

e) Jackknife Resampling

I resort to jackknife resampling in order to check whether my models capture dynamics common to all countries in my sample. Jackknife resampling is a statistical technique that allows researchers to assess the sensitivity of their results to the exclusion of particular cases from their analysis. It does this by deleting an observation from the existing data vector and running the original model on the resulting N different samples.

Because I am interested in the sensitivity of my results to the exclusion of different countries, I apply jackknife resampling by dropping countries, rather than country-years, from my dataset. The models are thus estimated against 21 different combinations of Eastern European states.

The results, reported below, indicate that the quality of government remains statistically significant in 3 out of the 4 models. The control for corruption indicator fails to reach statistical significance but the aggregate index, the rule of law indicator, and the government effectiveness index are robust to the exclusion of different countries. This is noteworthy, especially given the fact that very few of the controls included in my models retain their statistical significance when subjected to jackknife resampling.

Table 23: Jaccknife Resampling: Extended Sample

	WGI Index b/se	WGI Corruption b/se	WGI Gov Effect b/se	WGI Law b/se
WGI Index	12.331*	7.089	10.784*	12.432*
	(5.00)	(4.60)	(4.57)	(4.87)
Inequality	0.871*	0.934*	0.856*	0.909*
	(0.30)	(0.37)	(0.36)	(0.31)
GDP per capita	-0.058	0.026	0.067	-0.191
	(7.33)	(10.81)	(8.16)	(6.56)
GDP per capita growth	-0.029	-0.036	-0.050	-0.016
	(0.06)	(0.06)	(0.07)	(0.07)
Deficit	-0.075	-0.188	-0.118	-0.001
	(0.15)	(0.20)	(0.22)	(0.13)
Debt	0.009	0.000	0.004	0.003
	(0.06)	(0.07)	(0.07)	(0.07)
Unemployment	0.111	0.078	0.024	0.199
	(0.13)	(0.15)	(0.17)	(0.16)
Inflation	-0.000	-0.000	-0.001	-0.001
	(0.01)	(0.01)	(0.01)	(0.01)
Trade openness	0.014	0.032	0.029	0.011
	(0.03)	(0.04)	(0.05)	(0.04)
FDI inflows	-0.020	-0.021	-0.013	-0.032
	(0.09)	(0.10)	(0.11)	(0.08)
Capital account openness	-0.433	-0.062	-0.387	-0.630
	(1.40)	(1.68)	(1.49)	(1.44)
Dependency ratio	-0.114	-0.005	-0.019	-0.123
	(0.49)	(0.66)	(0.50)	(0.49)
Industry	0.371	0.343	0.391	0.403
	(0.28)	(0.37)	(0.32)	(0.33)
Democracy	-0.064	0.327	0.098	-0.254
	(0.46)	(0.48)	(0.80)	(0.41)
Ethnic fragmentation	-12.210	-18.628	-14.323	-14.745
	(28.46)	(37.54)	(30.42)	(27.04)
Turnout	0.113	0.121	0.155*	0.094
	(0.06)	(0.08)	(0.07)	(0.08)
Female labor force participation	-0.246	-0.136	-0.250	-0.258
	(0.25)	(0.35)	(0.30)	(0.25)
Checks and balances	0.332	0.457	0.515	0.375
	(0.43)	(0.50)	(0.53)	(0.40)
Constant	-10.042	-26.456	-20.704	-7.138
	(79.30)	(108.70)	(87.78)	(71.23)
R-squared	0.773	0.720	0.774	0.791
N	197	197	197	197

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

f) ECM Models

Appropriate for both integrated and stationary time-series cross-sectional data, ECMs constitute a category of time series models that estimate the speed at which the response variable returns to equilibrium after a change in the independent covariates. They can capture both short-term and long-term effects by including differences and lags of the explanatory variables.

Consistent with standard approaches, I include a lag of redistribution and difference all of the variables featured in my models. All four Worldwide Governance indices return statistically significant coefficients. The levels of control of corruption, government effectiveness, and law and order are all long-term determinants of redistribution.

The annual changes in these variables are also positively correlated with changes in redistribution, although only two of them reach statistical significance. We can, therefore, conclude that both short-term and long-term trends in the quality of government influence the capacity of the state to alleviate income inequality.

Table 24: Error Correction Models: Extended Sample

	WGI Index b/se	WGI Corruption b/se	WGI Gov Effect b/se	WGI Law b/se
L.Relative	-0.039 (0.03)	-0.028 (0.02)	-0.036 (0.03)	-0.044 (0.02)
Redistribution	3.713*	1.224	3.381**	2.571
D.WGI Indices	(1.80)	(1.09)	(1.29)	(1.73)
L.WGI Indices	1.283* (0.51)	0.860* (0.41)	1.210* (0.54)	1.366** (0.48)
D.Inequality	0.789*** (0.14)	0.793*** (0.14)	0.798*** (0.14)	0.796*** (0.14)
L.Inequality	0.063 (0.03)	0.062 (0.03)	0.054 (0.03)	0.062 (0.03)
D.GDP per capita	43.253 (58.77)	46.655 (59.78)	30.485 (58.85)	47.837 (58.93)
L.GDP per capita	-0.094* (0.04)	-0.098* (0.04)	-0.076 (0.04)	-0.100* (0.04)
D.GDP per capita growth	-0.423 (0.58)	-0.447 (0.59)	-0.294 (0.58)	-0.464 (0.58)
L.GDP per capita growth	-0.455 (0.58)	-0.467 (0.59)	-0.320 (0.58)	-0.493 (0.58)
D.Deficit	-0.035 (0.08)	-0.059 (0.08)	-0.013 (0.08)	-0.035 (0.08)
L.Deficit	-0.019 (0.07)	-0.046 (0.07)	-0.015 (0.07)	-0.006 (0.07)
D.Unemployment	0.045 (0.10)	0.059 (0.10)	0.039 (0.10)	0.055 (0.10)
L.Unemployment	-0.025 (0.04)	-0.011 (0.04)	-0.049 (0.04)	-0.002 (0.04)
D.Inflation	0.001 (0.00)	0.001 (0.00)	0.001 (0.00)	0.001 (0.00)
L.Inflation	0.001 (0.00)	0.001 (0.00)	0.001 (0.00)	0.002 (0.00)
D.Trade openness	0.001 (0.02)	0.002 (0.02)	0.003 (0.02)	0.001 (0.02)
L.Trade openness	-0.000 (0.01)	-0.000 (0.01)	-0.001 (0.01)	-0.001 (0.01)
D.FDI inflows	-0.030 (0.03)	-0.030 (0.03)	-0.028 (0.02)	-0.032 (0.02)
L.FDI inflows	-0.035 (0.03)	-0.032 (0.03)	-0.037 (0.03)	-0.040 (0.03)
D.Capital account openness	-1.006** (0.35)	-1.014** (0.35)	-0.977** (0.35)	-1.022** (0.35)
L.Capital account openness	-0.389* (0.17)	-0.372* (0.17)	-0.374* (0.17)	-0.375* (0.17)
D.Dependency ratio	0.219 (0.41)	0.352 (0.40)	0.306 (0.42)	0.181 (0.41)
L.Dependency ratio	0.028 (0.04)	0.029 (0.04)	0.032 (0.04)	0.023 (0.04)
D.Industry	0.007 (0.09)	-0.001 (0.09)	-0.018 (0.09)	0.022 (0.09)
L.Industry	0.048 (0.03)	0.042 (0.03)	0.041 (0.03)	0.051 (0.03)
D.Democracy	0.061 (0.25)	0.087 (0.26)	0.072 (0.25)	0.092 (0.26)
L.Democracy	-0.018 (0.06)	0.012 (0.06)	-0.021 (0.06)	-0.029 (0.06)
D.Turnout	0.042 (0.03)	0.039 (0.03)	0.041 (0.03)	0.038 (0.03)
L.Turnout	-0.017 (0.02)	-0.018 (0.02)	-0.015 (0.02)	-0.016 (0.02)
D.Female labor force participation	-0.225 (0.13)	-0.193 (0.13)	-0.258 (0.13)	-0.194 (0.13)
L.Female labor force participation	-0.040 (0.03)	-0.024 (0.03)	-0.046 (0.04)	-0.043 (0.03)
D.Checks and balances	-0.226 (0.22)	-0.251 (0.22)	-0.226 (0.22)	-0.222 (0.22)
L.Checks and balances	-0.036 (0.13)	-0.040 (0.13)	-0.028 (0.13)	-0.071 (0.13)
Constant	1.235 (3.66)	-0.002 (3.62)	1.723 (3.70)	1.778 (3.67)
R-squared	0.333	0.313	0.335	0.331
N	204	204	204	204

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

Table 25: Error Correction Models: Reduced Sample

	WGI Index b/se	WGI Corruption b/se	WGI Gov Effect b/se	WGI Law b/se
L.Relative redistribution	-0.063 (0.03)	-0.042 (0.03)	-0.060 (0.03)	-0.088* (0.03)
D.WGI Index	4.771* (2.23)	2.649 (1.39)	2.589 (1.66)	3.984 (2.26)
L.WGI Index	1.965* (0.85)	0.975 (0.65)	1.715* (0.83)	2.994** (0.94)
D.Inequality	0.434** (0.16)	0.403* (0.17)	0.439* (0.17)	0.418* (0.16)
L.Inequality	0.087 (0.07)	0.084 (0.07)	0.093 (0.07)	0.057 (0.07)
D.Partisanship	0.019 (0.01)	0.018 (0.01)	0.016 (0.01)	0.018 (0.01)
L.Partisanship	0.000 (0.01)	0.001 (0.01)	-0.001 (0.01)	-0.000 (0.01)
D.GDP per capita	15.962 (70.34)	30.008 (71.48)	15.614 (72.35)	15.058 (69.80)
L.GDP per capita	-0.078 (0.05)	-0.071 (0.06)	-0.062 (0.05)	-0.078 (0.05)
D.GDP per capita growth	-0.103 (0.70)	-0.243 (0.72)	-0.104 (0.72)	-0.087 (0.70)
L.GDP per capita growth	-0.104 (0.70)	-0.249 (0.71)	-0.100 (0.72)	-0.083 (0.69)
D.Deficit	0.009 (0.10)	-0.018 (0.11)	0.005 (0.11)	0.016 (0.10)
L.Deficit	-0.159 (0.12)	-0.184 (0.12)	-0.163 (0.12)	-0.161 (0.11)
D.Unemployment	0.109 (0.14)	0.086 (0.14)	0.099 (0.14)	0.123 (0.14)
L.Unemployment	0.050 (0.07)	0.023 (0.07)	0.027 (0.07)	0.088 (0.07)
D.Inflation	-0.002 (0.00)	-0.002 (0.00)	-0.002 (0.00)	-0.002 (0.00)
L.Inflation	-0.003 (0.00)	-0.004 (0.00)	-0.003 (0.00)	-0.003 (0.00)
D.Trade openness	-0.029 (0.02)	-0.029 (0.02)	-0.027 (0.02)	-0.030 (0.02)
L.Trade openness	-0.006 (0.01)	-0.001 (0.01)	-0.008 (0.01)	-0.005 (0.01)
D.FDI inflows	-0.022 (0.02)	-0.024 (0.02)	-0.020 (0.03)	-0.028 (0.02)
L.FDI inflows	-0.026 (0.03)	-0.026 (0.03)	-0.029 (0.03)	-0.036 (0.03)
D.Capital account openness	-1.491*** (0.43)	-1.521*** (0.44)	-1.511*** (0.44)	-1.596*** (0.43)
L.Capital account openness	-0.393 (0.27)	-0.453 (0.27)	-0.444 (0.27)	-0.302 (0.26)
D.Dependency ratio	0.478 (0.66)	0.484 (0.65)	0.572 (0.65)	-0.037 (0.66)
L.Dependency ratio	0.082 (0.09)	0.096 (0.10)	0.135 (0.09)	0.058 (0.09)
D.Industry	-0.004 (0.15)	0.035 (0.15)	0.027 (0.15)	-0.034 (0.15)
L.Industry	0.194** (0.06)	0.186** (0.06)	0.223*** (0.06)	0.169** (0.06)
D.Democracy	-0.119 (0.52)	-0.160 (0.53)	-0.049 (0.52)	-0.169 (0.51)
L.Democracy	-0.571* (0.24)	-0.575* (0.25)	-0.565* (0.24)	-0.598* (0.24)
D.Turnout	0.071 (0.04)	0.077 (0.04)	0.070 (0.04)	0.067 (0.04)
L.Turnout	0.013 (0.03)	0.012 (0.03)	0.020 (0.03)	0.011 (0.03)
D.Female labor force participation	-0.267 (0.16)	-0.217 (0.16)	-0.247 (0.16)	-0.228 (0.16)
L.Female labor force participation	-0.008 (0.05)	0.034 (0.05)	0.001 (0.05)	-0.037 (0.05)
D.Checks and balances	-0.181 (0.23)	-0.263 (0.23)	-0.216 (0.23)	-0.060 (0.24)
L.Checks and balances	-0.277 (0.16)	-0.302 (0.17)	-0.287 (0.17)	-0.239 (0.16)
D.Disproportionality	0.040 (0.11)	0.020 (0.11)	0.022 (0.11)	0.018 (0.11)
L.Disproportionality	-0.003 (0.08)	0.004 (0.09)	-0.045 (0.08)	0.016 (0.08)
Constant	-4.796 (7.52)	-7.742 (7.64)	-8.875 (7.12)	-0.210 (7.75)
R-squared	0.521	0.503	0.508	0.534
N	132	132	132	132

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

g) Fixed Effects Models

Fixed effects models focus on the relationship between predictor and outcome variables within each case included in the analysis. They are substantively designed to study the causes of changes within panels. FEMs control for all time-invariant differences between the cases so the estimated coefficients cannot be biased due to the presence of omitted variables. They also allow the unobserved country-characteristics to freely correlate with time-varying covariates (Bollen and Brand, 2010).

Because they absorb all cross-national differences by introducing FE coefficients into the regression equation, fixed effects models are not appropriate for the analysis of data for which within-cluster variation is minimal. This is the case of the main variables in my analysis. Both redistribution and the quality of government do not vary substantially over time. Nevertheless, a fixed effects model allows me to test whether improvements in the quality of government over time lead to increases in redistribution within panels regardless of the time-invariant country features that I cannot control for due to data availability.

The two tables below report the results from six FE models run against the reduced sample using the Worldwide Governance Indicators. The composite WGI index as well as the measures for corruption and government effectiveness are statistically significant at the conventional 0.1 and 0.01 levels. An increase in these three variables is associated with a rise in redistribution, *ceteris paribus*. Rule of law remains insignificant, which suggests that the impact of the quality of government on redistribution is probably primarily driven by the other two components of the index. Furthermore, higher levels of public sector corruption and theft are associated with lower redistribution. In contrast, a more rigorous and impartial public administration is correlated with higher redistribution. Overall, then, these results imply that a country's capacity to redistribute might improve once it improves its quality of government.

Table 26: Fixed Effects Models: Reduced Sample

	WGI Index	WGI Corruption	WGI Gov Effect	WGI Law
	b/se	b/se	b/se	b/se
WGI Indices	5.837** (2.83)	3.347* (1.85)	5.485*** (1.96)	-1.465 (2.85)
Inequality	0.170 (0.14)	0.169 (0.14)	0.219 (0.14)	0.146 (0.14)
Partisanship	0.034*** (0.01)	0.036*** (0.01)	0.027** (0.01)	0.026** (0.01)
GDP per capita	13.334*** (4.04)	16.071*** (3.63)	18.876*** (4.72)	13.970*** (3.70)
GDP per capita growth	-0.018 (0.06)	-0.022 (0.06)	-0.008 (0.06)	-0.025 (0.06)
Deficit	0.316** (0.14)	0.289** (0.14)	0.281* (0.14)	0.326** (0.14)
Debt	0.047* (0.03)	0.044 (0.03)	0.032 (0.03)	0.044 (0.03)
Unemployment	0.548*** (0.12)	0.578*** (0.12)	0.612*** (0.12)	0.556*** (0.12)
Inflation	-0.002 (0.00)	-0.002 (0.00)	-0.002 (0.00)	-0.001 (0.00)
Trade openness	0.031 (0.02)	0.031 (0.02)	0.018 (0.02)	0.021 (0.02)
FDI inflows	-0.013 (0.04)	-0.020 (0.04)	-0.016 (0.04)	0.002 (0.04)
Capital account openness	-1.545*** (0.46)	-1.712*** (0.43)	-2.207*** (0.47)	-1.687*** (0.40)
Dependency ratio	0.470* (0.28)	0.489* (0.28)	0.461 (0.29)	0.494* (0.28)
Industry	-0.147 (0.16)	-0.136 (0.16)	-0.136 (0.17)	-0.109 (0.16)
Democracy	0.420 (0.43)	0.264 (0.44)	0.339 (0.45)	0.516 (0.43)
Turnout	0.129*** (0.05)	0.130*** (0.05)	0.131*** (0.05)	0.132*** (0.05)
Female labor force participation	-0.859*** (0.19)	-0.888*** (0.19)	-0.824*** (0.19)	-0.822*** (0.18)
Checks and balances	-0.611** (0.28)	-0.678** (0.29)	-0.579** (0.29)	-0.526* (0.28)
Disproportionality	-0.223 (0.14)	-0.252* (0.14)	-0.332** (0.14)	-0.238* (0.13)
Constant	-107.396** (46.29)	-134.197*** (42.46)	-167.147*** (53.23)	-118.382*** (42.30)
R-squared	0.567	0.563	0.551	0.580
N	142	142	142	142

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 27: Fixed Effects Models: Reduced Sample

	Pub Corr b/se	Pub Theft b/se	Pub Admin b/se
Public sector corruption index	-11.904* (4.44)		
Public sector theft		2.102** (0.64)	
Rigorous and impartial public administration			1.495* (0.59)
Inequality	0.080 (0.11)	0.003 (0.10)	-0.005 (0.11)
Opinion	3.828 (6.85)	7.388 (6.31)	9.351 (6.57)
Partisanship	0.005 (0.02)	0.013 (0.01)	0.023 (0.01)
GDP per Capita	-0.710 (3.81)	-1.437 (3.68)	-3.843 (4.12)
GDP per capita growth	-0.090* (0.04)	-0.096* (0.04)	-0.083 (0.04)
Deficit	0.021 (0.09)	-0.002 (0.08)	-0.045 (0.08)
Government debt	-0.109** (0.03)	-0.118*** (0.03)	-0.110** (0.03)
Unemployment	0.230* (0.10)	0.245* (0.09)	0.251* (0.10)
Inflation	-0.023 (0.07)	-0.013 (0.07)	-0.060 (0.07)
Trade openness	0.041 (0.02)	0.050* (0.02)	0.058* (0.02)
FDI inflows	0.000 (0.01)	-0.010 (0.01)	-0.001 (0.02)
Capital Account Openness	0.732 (0.81)	0.555 (0.77)	0.929 (0.82)
Dependency ratio	0.416 (0.27)	0.262 (0.25)	0.190 (0.26)
Industry	0.192 (0.18)	0.185 (0.17)	0.270 (0.17)
Democracy	-0.927 (0.67)	-1.180 (0.59)	-1.846** (0.58)
Turnout	-0.013 (0.04)	-0.014 (0.04)	-0.022 (0.04)
Female labor force participation	-0.187 (0.15)	-0.112 (0.14)	-0.199 (0.15)
Checks and balances	-0.248 (0.18)	-0.205 (0.18)	-0.222 (0.18)
Disproportionality	0.067 (0.13)	0.087 (0.12)	-0.038 (0.12)
Constant	33.853 (49.64)	42.699 (47.88)	82.677 (53.71)
R-squared	0.813	0.827	0.810
N	69	69	69

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

h) ICRG indices

To further check the robustness of my results, I use four alternative indicators for the quality of government. Each of them substitutes for one of the WGI variables. Data come from the Political Risk Services Group (PRS), which is a private consultancy specializing in the evaluation of business conditions and political risk. Its experts analyze political, economic, and financial data, and assess the impact of political and social events and conditions on the business climate. These evaluations, however, are primarily concerned with the performance of the private sector. Since the World Bank relies on a wider range of information and its assessments are more comprehensive, I rely more extensively on the WGI indices.

The International Country Risk Guide's index (ICRG) produced by the PRS resembles the composite WGI measure. It is calculated as the mean of three separate variables - "corruption", "law and order", and "bureaucracy quality" and varies between 0 and 1, with higher values indicating higher quality of government. It therefore captures the overall performance of state institutions. Its first dimension, corruption, reflects the extent to which excessive patronage, nepotism, job reservations, favor-for-favors, secret party funding, and suspiciously close ties between politics and business permeate the political system. The law and order indicator quantifies the strength and impartiality of the legal system and the popular observance of the law. Lastly, bureaucratic quality captures the expertise of the bureaucratic apparatus, its autonomy from political pressures, as well as the degree to which it has established mechanisms for recruitment and training.

The table below reruns my main models using the ICRG measures instead of the WGI indices. The composite ICRG index as well as its components are positively-signed and statistically significant in both the extended and the reduced sample models. These results confirm my findings that better governed societies redistribute more. The controls for corruption indicator returns a slightly higher p-value in the extended sample model, but remains significant at the 10 percent level. The substantive impact of these variables is non-negligible and similar to the effect reported when the WGI variables are used instead.

Table 28: ICRG Models: Extended Sample

	Composite b/se	ICRG Corrupt b/se	ICRG Bur Qual b/se	ICRG Rule b/se
ICRG Indices	41.353*** (7.49)	1.662 (0.89)	7.903*** (1.05)	5.040*** (1.18)
Inequality	0.911*** (0.10)	1.069*** (0.12)	0.849*** (0.10)	0.939*** (0.11)
GDP per Capita	-0.017 (0.17)	0.082 (0.18)	-0.184 (0.17)	-0.014 (0.18)
GDP per capita growth	-0.035 (0.06)	-0.042 (0.06)	-0.024 (0.05)	-0.069 (0.06)
Debt	-0.041 (0.03)	-0.031 (0.04)	-0.046 (0.03)	-0.060 (0.04)
Deficit	-0.190 (0.13)	-0.352* (0.14)	-0.134 (0.11)	-0.276* (0.13)
Unemployment	0.195 (0.11)	0.098 (0.12)	0.165 (0.10)	0.223 (0.13)
Inflation	-0.002 (0.00)	-0.002 (0.01)	-0.001 (0.00)	-0.001 (0.00)
Trade openness	0.047* (0.02)	0.072*** (0.02)	0.017 (0.02)	0.084*** (0.02)
FDI inflows	-0.022 (0.04)	-0.023 (0.03)	-0.013 (0.03)	-0.018 (0.04)
Capital account openness	0.576 (0.57)	0.274 (0.68)	-0.177 (0.51)	0.777 (0.63)
Dependency ratio	-0.511** (0.17)	-0.171 (0.22)	-0.358* (0.16)	-0.007 (0.16)
Industry	0.273* (0.13)	0.328* (0.15)	0.296* (0.13)	0.329* (0.14)
Democracy	0.389 (0.21)	0.697** (0.22)	0.244 (0.20)	0.615** (0.20)
Ethnic fragmentation	-21.486* (9.68)	-27.967** (10.41)	-15.147 (9.06)	-39.356*** (10.31)
Turnout	0.118* (0.05)	0.181*** (0.05)	0.084 (0.04)	0.141** (0.05)
Female labor force participation	0.030 (0.11)	-0.003 (0.11)	-0.086 (0.11)	0.058 (0.12)
Checks and balances	0.362 (0.38)	0.714 (0.47)	0.266 (0.34)	0.530 (0.40)
Constant	-34.266* (14.50)	-45.589** (16.99)	-18.430 (13.72)	-61.275*** (17.61)
R-squared	0.772	0.721	0.765	0.755
N	171	171	171	171

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

Table 29: ICRG Models: Reduced Sample

	Composite b/se	ICRG Corrupt b/se	ICRG Bur Qual b/se	ICRG Rule b/se
ICRG Indices	132.296*** (12.12)	12.294*** (3.33)	13.830*** (2.13)	11.772*** (1.87)
Opinion	21.406* (9.43)	7.824 (15.19)	15.349 (13.05)	-3.229 (11.16)
Inequality	0.999*** (0.14)	1.614*** (0.21)	1.353*** (0.20)	1.121*** (0.17)
Partisanship	0.039 (0.02)	0.138** (0.05)	-0.027 (0.04)	0.044 (0.03)
GDP per capita	-0.263 (0.21)	-0.406 (0.34)	-0.254 (0.27)	-0.382 (0.28)
GDP per capita growth	-0.166 (0.10)	0.025 (0.14)	-0.071 (0.12)	-0.139 (0.10)
Deficit	-0.058 (0.17)	0.087 (0.23)	0.096 (0.24)	-0.040 (0.15)
Government debt	0.070 (0.05)	0.273*** (0.08)	0.360*** (0.07)	0.018 (0.06)
Unemployment	0.711*** (0.17)	0.194 (0.22)	0.360 (0.22)	0.150 (0.16)
Inflation	0.232 (0.13)	-0.050 (0.16)	0.043 (0.16)	-0.213 (0.12)
Trade openness	0.002 (0.02)	-0.066 (0.03)	-0.100** (0.03)	0.093** (0.03)
FDI inflows	-0.005 (0.03)	-0.049 (0.05)	-0.021 (0.05)	-0.018 (0.03)
Capital account openness	2.464* (1.01)	-0.747 (1.51)	3.805* (1.60)	-1.902 (1.13)
Dependency ratio	-0.506* (0.21)	-1.443** (0.49)	-0.093 (0.33)	0.116 (0.26)
Industry	1.406*** (0.32)	1.397** (0.45)	2.544*** (0.46)	0.780* (0.34)
Democracy	-1.915 (1.10)	-4.445 (2.74)	0.883 (1.42)	1.969 (1.41)
Ethnic fragmentation	-8.398 (11.51)	-6.209 (19.11)	16.981 (17.03)	-19.897 (14.04)
Turnout	-0.092 (0.09)	0.197 (0.14)	-0.032 (0.11)	0.267** (0.09)
Female labor force participation	0.361** (0.13)	1.020*** (0.18)	1.029*** (0.17)	0.045 (0.24)
Checks and balances	-0.617 (0.32)	-0.595 (0.64)	-0.213 (0.48)	-0.359 (0.43)
Disproportionality	-0.485* (0.24)	-0.211 (0.41)	-1.381*** (0.34)	-0.265 (0.22)
Constant	-134.565*** (32.05)	-86.657 (55.00)	-229.605*** (44.66)	-126.684*** (35.05)
R-squared	0.968	0.910	0.936	0.935
N	69	69	69	69

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