

## **Democracy and Redistribution, 1880-1930: Reassessing the Evidence**

Ben Ansell  
Assistant Professor  
University of Minnesota  
[ansell@umn.edu](mailto:ansell@umn.edu)

David Samuels  
Benjamin E. Lippincott Professor  
University of Minnesota  
[dsamuels@umn.edu](mailto:dsamuels@umn.edu)

Prepared for the 2010 Meeting of the American Political Science Association, Washington DC. This paper is part of a book-length project; see Ben Ansell and David Samuels, "Inequality and Democratization: A Contractarian Approach," *Comparative Political Studies* (forthcoming, December 2010). We thank Kevin Lucas for research assistance.

## Introduction

The gospel of political economy preaches that extending the franchise leads to greater government redistribution. This belief is rooted in an obvious contrast: autocracies restrict participation to an elite few, while democracies allow the poor greater voice. Logically, because there are always more poor people than rich people, franchise expansion lowers the income of the average voter, and raises the demand for redistribution of wealth. By the beginning of the 19<sup>th</sup> century, politicians and political philosophers across the political spectrum believed universal suffrage would lead to the equalization of property.

This syllogism--between political and economic equality--has dominated the fears and the hopes attached to democracy ever since in the inception of representative government (Przeworski 2009, 301). Democracy may only mandate political equality, but since the late 1700s those on the right feared that political equality would threaten property—and likewise, those on the left believed that acquisition of *political* rights would not satisfy those on the bottom of the *economic* ladder. By Marx's time, the idea had spread that “democracy in the political realm must naturally lead to social and economic equality” (ibid, 303).<sup>1</sup>

Despite the persistence of vast socioeconomic inequalities in democracies around the world, belief that democracy and property are in tension remains rock-solid. In 1981, Meltzer and Richard helped formalize the “redistributive” model of democratic politics. They noted that not only does universal suffrage mean that a majority of voters earn less than average income, but also that pressures for redistribution will vary with economic inequality. The formalization of the redistributive model sparked an avalanche of research seeking to explain cross-national variation in patterns of government spending--both within democracies as well as between

---

<sup>1</sup> Given the consensus opinion that political equality would threaten property, Przeworski (2007, 6) notes that the contractarian logic of North and Weingast and Olson “would bewilder nineteenth century observers.”

democracies and dictatorships. To scholars' surprise, results of this research have consistently questioned the gospel truth that democracies redistribute more than autocracies and that inequality is correlated with pressures for redistribution. Scholars have repeatedly found that democracies redistribute far less than they "should"—a puzzle that pushed some to add epicycles to the original model in an effort to salvage their faith that a tension between democracy and property truly exists. Scholars have proven unwilling to give up on the Meltzer-Richard model, leading Adam Przeworski (2010, 85) to sardonically call it "political economists' favorite toy."

Models that explain a lot using only a little are rare gems—things of beauty, at least to social scientists. Simplicity is seductive, and models with great explanatory power often become the conventional wisdom. Yet simplicity is not always a virtue, because Ockham's razor can sometimes shave off essential information. Sometimes the simplest model is not the best model. The shaky empirical results in support of the redistributive model call into question its utility for explaining variation in government spending. Yet despite weak results, faith in the syllogism that equates democracy and redistribution remains unshaken—so much so that even though Meltzer and Richard did not devise their model to explain regime change, Acemoglu and Robinson (2000, 2006), Boix (2003) and related "redistributivist" models have applied a rational expectations logic derived from the Meltzer-Richard (MR) model to explain transitions to democracy. The logic is as follows: "Everyone—from the incumbent dictator down to the lowliest of peasants--knows that under democracy the poor will soak the rich. So, incumbent elites will be reluctant to democratize to begin with, but their reluctance depends fundamentally on what kind of assets there are (fixed or mobile) and how those assets are distributed within society. All else equal, the distribution of wealth impacts the likelihood of regime change."

The utility of these redistributivist models of regime change depends crucially on the descriptive and predictive accuracy of this core assumption. One approach to assessing the model is to test its direct implication that regime change is at least partly a function of inequality. Elsewhere (Ansell and Samuels, 2010) we show that both Boix's (2003) and Acemoglu and Robinson's (2006) arguments do not accurately predict regime transitions.<sup>2</sup> Another approach to assessing the utility of the redistributivist model of regime change is to assess its indirect implications by testing the Meltzer-Richard hypothesis that inequality and democracy impact government redistributive spending. This is precisely what Boix sought to do in Chapter Five of his book (2003)--to bolster his argument about regime change by showing that the redistributivist model helps explain patterns of government redistributive spending.

In this paper we subject the redistributivist model of democratization to one such indirect test, exploring new data from an earlier historical period. We find that the redistributivist approach to democratization fails on three dimensions: (a) democracy has no positive effect on redistributive spending; (b) income inequality has no positive effect on redistributive spending; and (c) the interaction between democracy and income inequality has no positive effect on redistributive spending—in fact, its effect is robustly *negative*. We find this effect consistently in both our historical analysis of the 1880-1930 period as well as for the more recent era. This is not merely another wishy-washy null finding for the redistributivist argument, but rather a direct disconfirmation of the entire theory.

The utility of redistributive models of democratization depends on the relative truth-value of the underlying theoretical assumption about actors' preferences, and on that model's accuracy in predicting levels of redistributive government spending. To the extent that the Meltzer-

---

<sup>2</sup> For another argument, see Houle (2009).

Richard model holds up to empirical scrutiny, we gain confidence that the underlying assumption is useful for thinking about actors' preferences in cases of regime transition. To the extent that it does not, then we have good reason to question the assumption that fear of the poor drives elites' strategies in cases of regime change. In the next section we summarize the reasons why democracies redistribute "less than they should." This review situates our empirical analysis, which builds on research by Peter Lindert (1994, 2004) on the historical roots of welfare-state spending. Like Lindert, we agree that going back in history is a better strategy for deriving inferences about actors' relative fear of the consequences of democratization. However, our results cast doubt on the theoretical utility and validity of such an assumption, because we find no evidence that social spending increases as a function of expansion of suffrage or inequality.

### **Why Do Democracies Distribute Less than They 'Should?'**

Although some research finds that democracy and redistribution run hand in hand,<sup>3</sup> the weight of evidence calls the redistributivist model's tenets into question. One hardly needs to quibble about model specification, estimation techniques, or data quality; the *prima facie* plausibility of the redistributivist model is wanting for the simple reason that democracy has been and remains perfectly compatible with considerable (and rising) inequality. Significant expropriation of wealth does not follow from universal suffrage; elites do not suffer great economic losses, despite their self-serving stated fears. It also merits pointing out that the MR model fails to explain why social-welfare spending increased fastest in wealthy democracies

---

<sup>3</sup> See e.g. Meltzer and Richard (1983); Acemoglu and Robinson (2006); Boix (2001, 2003); Bueno de Mesquita et al. (2003); Ghorbarah, Huth, and Russett (2004); McGuire and Olson (1996); Niskanen (1997); Peters (1991); Alesina and Rodrik (1994); Tabellini (1992); Persson and Tabellini (1994); Milanovic (2000); Husted and Kenny (1997), and Lindert (1994, 2004). Compare Kenworthy and Pontusson (2005) to Kenworthy and McCall (2008).

decades *after* the advent of universal suffrage--and after leftist parties' and labor unions' strength had peaked: after the 1960s (Lindert 2004, 5).

Despite nearly 30 years of research, which has arguably brought better measures of democracy, inequality and redistribution and the accumulation of much more cross-national data, it is fair to say that scholars have found no consistent and clear cross-national relationship between democracy, inequality, and redistributive spending.<sup>4</sup> Some scholars have even found a *negative* relationship between inequality and redistributive spending, contradicting the redistributivist model entirely (e.g. Moene and Wallerstein 2001, 2003; Shelton 2007).

The lack of consistent support for the redistributivist model has caused endless scholarly head-scratching, and generated its own cottage industry of research seeking to explain why virtually everyone's predictions—Madison, Tocqueville, Marx, and Mill, not to mention Meltzer and Richard—turned out to be wrong. Democracy and redistribution do not run together. Why is formal political equality no barrier to massive economic inequality? Why is the model incapable of explaining even broad patterns in the data? Apart from the lack of consistent empirical support, it is no longer satisfactory to retort that all else equal, in equilibrium elites will fear the median voter--because there are good theoretical reasons to believe that this is simply untrue.

Most efforts to resolve the puzzles the redistributivist model leaves unexplained do not take issue with the median-voter logic of the MR model. Indeed, most explanations attempt to salvage the redistributive model by implying that “the logic is true but other factors *dilute its effect*.” For example, critics of democracy have long argued that although the median voter might want redistribution, formal equality is no match for the informal power of the rich, who possess

---

<sup>4</sup> See Cutright (1965); Jackman (1975); Tullock (1983); Pampel and Williamson (1989); Rodrigues (1999); Bénabou (1996); Easterly and Rebelo (1993), Shelton (2007), Perotti 1996; Banerjee and Duflo 2003; Aidt et al 2006; Aidt et al 2009; Aidt and Jensen (2009); Putterman (1997); Cheibub (1998); Lott (1999); Scheve and Stasavage (2010), Dincecco and Prado (2010); Kenworthy and McCall (2008). Reviews of the literature include Mueller (2003); Roemer (1998), (2009); and Harms and Zink (2003).

considerable mobilizational advantages over the poor in terms of money, organizational resources, and social networks that bring them close to those who hold power. This argument has been around for at least a century—one can trace it from Pareto through Mosca, Michels, Mills and Schattschneider. More recently, political economists have tossed out the conspiratorial facets of the approach yet have maintained the core of the argument (e.g. Bénabou 1996, 2000; Bénabou and Ok 2001; Grossman and Helpman 2002) as part of an effort to formalize the explanation for why so much government spending—even on public goods—favors the relatively wealthy (e.g. Stigler 1970; Justman and Gradstein 1999; Lizzeri and Persico 2004; Ross 2006).

Other critics of democracy focus less on the material than the ideational resources of the wealthy, suggesting that the rich might endeavor to create “false consciousness” on the part of the poor through ideological domination, particularly via their ownership of the mass media. One need not be an acolyte of Gramsci to appreciate this point; utilitarianism’s avatar John Stuart Mill suggested that political equality *per se* would never drive public spending because most voters lacked the necessary self-understanding to cast a vote in their own interest. Either ideological domination or lack of ideological self-awareness could dilute the median-voter effect.

A third explanation for why democracies do not redistribute wealth takes issue with the redistributivist model’s assumption that politics occurs along a single left-right dimension. Politics is often fought across multiple dimensions; as the relative salience of non-economic dimensions increases, the demand for redistribution will decline. Scholars have found good empirical support for this point.<sup>5</sup>

Przeworski and Wallerstein (1988) offer a different explanation for the lack of redistribution under democracy: the structural dependence of the state on capital. The prospect of

---

<sup>5</sup> See Roemer (1998; 2005); Roemer and Lee (2004); Gilens (1999); Alesina and Glaeser (2004); Huber and Stanig (2009); Grossman (2003).

redistribution reduces investment, imposing a limit on redistribution even for governments that want to equalize incomes. According to Przeworski and Wallerstein, Social-Democratic and Socialist parties understood this logic by the early 20<sup>th</sup> century.

These arguments all explain the weak connection between democracy and redistribution by implying that redistribution would happen if only some other things weren't true. Other scholars suggest that redistribution would not occur even nothing "diluted" the tension between democracy and property. For example, it is possible that voters understand that there would be negative consequences to expropriating the rich, and so prefer policies that equalize opportunity but not outcomes. Similarly, Bénabou and Ok (2001) consider the "possibility of upward mobility" (POUM) hypothesis: poor voters oppose taxation in the present because they expect their (or their children's) income to increase in the future (see also Alesina and La Ferrara 2005). Finally, it is possible that most individuals simply do not believe that structural constraints shape their life chances or that the wealthy conspire against them. Instead, they believe that although individuals are born with different abilities to transform assets into incomes and that luck plays an important role in one's life chances, people generally get what they deserve in life and shouldn't ask for a handout.

The 20<sup>th</sup> century saw explosive growth of taxes, government spending *and* per capita income in the world's wealthiest democracies. Lindert (2004) has suggested that the lack of an obvious tradeoff between higher taxation and economic growth suggests that the welfare state is evidence of the existence of the mythical free lunch. Even so, despite the growth of redistributive spending, inequality remains markedly persistent, changing only in situations of deep national calamity such as war or global economic crises (Li *et al* 1997; Scheve and Stasavage 2010). No consensus exists as to why democracies redistribute less than they are "supposed to," but the



point remains: empirical support for the redistributive theory of democracy is weak, meaning that we have good theoretical reason to believe that in most circumstances (all except situations ripe for social revolutions, which are very rare (Skocpol 1979; Tilly 1993) elites have relatively little to fear from the poor and rationally extend the franchise in their own economic interests (Justman and Gradstein 1999; Lizzeri and Persico 2004; Ansell and Samuels 2010).

A final explanation for why democracy is not robustly associated with redistribution actually comes from Boix (2003, Chapter Five) in his examination of the relationship between democracy, inequality and public spending from 1970 to 1999. Boix argues that his theory of endogenous democratization helps explain why democracies are not heavy spenders, despite the Meltzer-Richard logic that underlies his model of regime change. He reasons that if regime type is endogenous to pre-existing inequality, and if democracies only emerge under low levels of inequality, then redistribution should be low in actually existing democracies, since such states have fairly equal income distributions to begin with, which implies relatively low demand for redistribution.

The logic of this claim is rather neat but it presents three major problems. First, the redistributivist argument about regime change depends on the assumption that autocratic elites believe that democracy causes undesired levels of redistribution. Yet if no actually existing democracy exhibits this pattern, the model requires members of the elite to judge potential future regimes on characteristics that *never* occur. In other words, what happens *off the equilibrium path* becomes crucial for Boix's argument about elite motivations. Second, this argument presumes a rather deterministic world in which democratization *only* occurs under conditions of low inequality and hence we never see redistribution. This argument is rather knife-edge. If, democratization is at least partly "exogenous" rather than endogenous (Przeworski *et al.* 2000),

regime change can occur under conditions of moderate *or* high inequality, and we would expect to see at least some variation in government spending as a function of levels of inequality. Third—as we argue elsewhere (Ansell and Samuels, 2010) --Boix’s empirical analysis of regime change is problematic. In fact, democracies *do* often emerge under conditions of relatively high inequality. In such cases, the redistributivist model would expect relatively high levels of redistribution to follow. Yet as we shall demonstrate, there is no evidence that such a dynamic exists.

### **Democracy and Redistribution: Reexamining the Evidence**

Many scholars are unwilling to set aside the logic of the redistributivist model, despite the weak evidence in its favor. We recognize that the logic is seductive, and that perhaps even repeated null findings will never fully convince adherents that their faith is misguided. Regardless, the debate about the utility of the redistributivist approach to democratization depends on consistent empirical evidence both of the impact of inequality on democratization and of inequality on redistributive spending.

In this section we test the redistributive hypothesis on redistributive spending in a crucial, early historical time-period. We agree with Lindert (2004), who suggested that the reason most tests of the redistributive hypothesis are inconclusive is because they rely on data from the post-war era. By the 1950s, the bureaucratic machinery enabling taxing and spending had existed for several decades in Europe. Wagner’s Law predicts government spending will increase as the technological and bureaucratic capacity for taxing and spending is put into place, regardless of regime-type. And indeed, social spending increased rapidly across all wealthy democracies after

World War II. Because of high correlations between them, studies relying on post-war data will have trouble disentangling the causal effects of key independent variables.

To avoid this problem, Lindert argues that the era in which welfare-state policies first emerged—1880 to 1930--offers a much stronger test of competing theories of redistributive spending. Prior to 1880, too few countries were democracies, and too few countries spent anything on social welfare. To the extent that the redistributive logic explains patterns in redistributive spending, we should see evidence that it can distinguish countries that were among the first to expand the franchise from countries that delayed democratization until later. Even within Europe, considerable variation existed prior to 1930 on key independent variables such as democracy, inequality, demography, and per capita income—as well as on the dependent variable. The earlier historical era reduces the potential endogeneity of key independent variables and allows for more precise insights into the causal effect of democracy and inequality.

This earlier historical era offers a crucial laboratory for extending research on the potential connections between democracy and redistribution. Let us explain how we plan to test these links. At its simplest, the redistributive model entails the following predictive logic: individuals, endowed with particular sets of economic assets, vote for a tax rate to finance the level of government redistributive programs. The tax rate should correspond to the preferences of the median voter, based on his or her pretax income. In turn, the median voter bases his or her decision on the difference between his or her income and the average income. As inequality increases, demand for redistribution also increases--and increased redistributive spending should follow.

The main theoretically relevant variables used to test this hypothesis fall into three categories: political, economic, and demographic. The most important political variable is

regime-type: Most broadly, the redistributivist logic suggests that democracy should have an independent effect on redistributive spending, since voice is open to all yet the median voter earns less than average income. More narrowly, the “degree” of democracy, in particular the extent of the franchise, should have a direct effect on redistributive spending.

Several scholars have also suggested that in addition to regime type, the level of electoral participation *in democracies* should impact redistributive spending. This is because differences turnout change the relative position of the median voter: When turnout is high, the median voter is relatively poorer, increasing demand for redistribution.

Turning to economic variables, the most important is the level economic development, typically measured as per capita income. Since Wagner, scholars have held that economic development will spur government intervention in the economy. For example, industrialization creates an urban working class that experiences job turnover and job-related injuries relatively more frequently. This generates increased demand for unemployment compensation, disability payments, public health care, etc. As development proceeds, the economy also becomes more complex, necessitating government intervention in a host of new areas. Finally, improvements in medical technology and infant healthcare also lead to increased pressure for public healthcare.

The redistributive model also highlights the importance of economic inequality. Boix suggests that, “The presence of sharp income differentials generates strong redistributive pressures that should lead to very high taxes and transfers” (173), but notes that we should observe this effect only in democracies. This means that the key mechanism in the redistributive model is the *interaction* between democracy and inequality, because inequality should not impact government spending in autocracies. Only in democratic regimes should inequality lead to higher redistributive spending.

A third economic variable is globalization, typically operationalized as openness to international trade. Much recent scholarship has illuminated the connection between a country's exposure to trade and its government's reliance on redistributive spending (e.g. Alesina and Rodrik 1994): greater exposure leads governments to construct a deeper and wider safety net for citizens harmed by international competition.

The last group of important variables focuses on demography. First, many suggest that ethnic and/or religious diversity tends to reduce redistributive spending. Second, partly as a result of economic development, as the average age of the population increases, demands for social spending such as public pensions and medical care will increase. Lindert (2004, 183) notes that this effect has been observed ever since life expectancy began to accelerate in the late 19<sup>th</sup> century. He also notes that the effect of an aging population appears across all types of social-welfare spending (not just old-age pensions), although the precise mechanism driving this effect remains unclear.

At present we are only able to collect a full range of these variables for the postwar era, consequently our analysis of the 1880-1930 period is limited to basic political and economic factors. Our 1961 to 1999 dataset does, however, include a broad specification along the lines suggested above.

## **Data and Variables**

### *1) Sample*

Lindert critiqued several statistical tests of the redistributivist model for relying on biased samples, even for the post-war era. Because data are most readily available for high-spending

OECD democracies but the incidence of regime-type and per capita income is not random among missing cases, Lindert suggested that results are often biased towards confirming a relationship between democracy and redistribution. We noted this to be the case for Boix's results that link democracy and inequality (Ansell and Samuels, 2010), and here suggest that the same problem applies to Lindert's own analysis of the 1880-1930 period.

Lindert (2004, following Lindert 1994) gathered data for 30 countries for 1880-1930, although most countries in his dataset are not covered for the full period. POLITY IV counts 53 independent states in 1880, and 68 by 1930. While we are not yet able to find government spending data for all 53 countries, we have been able to expand Lindert's sample by a third, up to 40 cases. This has important implications for the composition of our sample vis-à-vis Lindert's. For example, in 1880 the countries in Lindert's dataset had an average Polity2 score of 0.90, whereas our cases in that year have an average score of 0.20. The average for the 53 countries in the Polity dataset in 1880 was -1.15, suggesting that it remains for us to locate data for a number of autocracies. Similarly, for 1930 the average Polity2 score for the countries in Lindert's sample was 4.80, while the average for the 37 countries in our dataset was 2.80; the average in the Polity database was 0.00. In general, our sample more closely reflects the actual distribution of independent states during this period than Lindert's, suggesting that our results are less likely to be biased.

## *2) Dependent Variables*

We hew as closely as possible to Lindert's measures, which closely echo contemporary OECD definitions of social expenditures. Thus we gathered information on spending as a percentage of GDP of four types of government programs: 1) welfare and unemployment

compensation; 2) pension subsidies; 3) health subsidies; and 4) housing subsidies. Separating social spending into these four categories is important for testing the redistributive model of politics because each category has different redistributive implications. The four categories are listed from most to least progressive (Lindert 2004, 3); by implication, the redistributive model of politics should have the *most* impact on welfare and unemployment compensation, and the *least* impact on pension subsidies. Put differently, the former is intra-generational redistribution from rich to poor, whereas the latter is inter-generational redistribution and--during the 1880-1930 period--was often limited to individuals in certain middle-class professions (including the government bureaucracy). If the effects of democracy on redistributive spending are less than crystal-clear on types of spending that are most obviously redistributive, then the model loses explanatory power.

To gather historical data on social-welfare spending as a percentage of GDP, we start with Lindert's data (2001, 2002).<sup>6</sup> Lindert relied on a detailed International Labour Organization (ILO) survey, *International Survey of Social Services* (ILO 1933, 1936). To add additional cases we relied on the same ILO source as well as different countries' official national statistical yearbooks. (The full database for this paper and the 65-page statistical appendix are available on request from the authors.) Our efforts resulted in a decade-by-decade view of social spending that builds considerably on Lindert's analysis.

### 3) *Independent Variables*

For ease of presentation and to maximize the number of observations on the social-spending data, in this paper we limit the number of independent variables we explore to include

---

<sup>6</sup> We thank Peter Lindert for providing the core databases for *Growing Public*.

different measures of democracy, per capita income, and various types of inequality.<sup>7</sup> For democracy, we explore both dichotomous and continuous measures. Specifically, we use Boix and Rosato's (2003) extension of Przeworski et al's (2000) dummy for democracy, which extends back to the 19<sup>th</sup> century, and the Polity index.<sup>8</sup> Since we run a variety of statistical specifications, some of our analyses below examine cross-sectional differences in the level of democracy across countries, others examine within-country changes in regime type, and still others examine the change in the "level" of democracy. Given our use of both types of democracy measures and this variety of specifications, we believe we are covering the various and several ways in which democracy might impact public spending.

In terms of economic variables, our analysis employs three key measures: per capita income, income inequality, and land inequality. The former is taken from Maddison's (2006) well-known estimates of GDP per capita. We do not explicitly use an income growth variable along with this level variable, but we do test specifications that examine ten-year changes in per capita income, meaning we are able to pick up growth effects in these models.

The income inequality variable (a gini coefficient) comes from Bourguignon and Morrisson (2001), while the land inequality variable is adapted from Vanhanen's 'family farms' and 'rural population' variables. The income inequality data is the only existing compilation of estimates for the 19<sup>th</sup> century, one that we have employed elsewhere (Ansell and Samuels 2010). The original data--while heavily cited--has many caveats attached, which we discuss in the aforementioned paper. Given these caveats, we run our estimates both with and without the

---

<sup>7</sup> We intend to collect the remaining control variables used by Lindert (turnout, trade exposure, and age demographics) for the final version of this project.

<sup>8</sup> We also tested the subcomponents of the Polity index to try to pick up which aspects of democracy seem most, or least, important in explaining public spending – these results are not shown but we discuss them briefly in the following section.



inequality variables. We also employ a more reliable measure of income inequality for our postwar analysis.

Finally, although we currently lack extensive data on demographic structure, trade exposure, and electoral turnout (where appropriate) and hence omit these variables at present, we are able to mitigate some of these omitted variable problems by including a full series of regional or country controls (depending on the specification) and year dummies.

### **Findings: 1880-1930**

We begin by analyzing data from the 1880 to 1930 period. Table One presents a series of estimations of the determinants of public spending using the Boix-Rosato democracy dummy as an independent variable. Models 1 and 2 are pooled analyses with robust standard errors. We present two simple specifications. Model 1 includes only democracy and GDP per capita, whereas Model 2 adds income and rural inequality. Both models also contain a full set of region dummies and year dummies. In neither case is the coefficient on democracy statistically significant at conventional levels. There is some evidence in Model 1 that higher income countries have higher levels of public spending but the inclusion of the two inequality variables in Model 2 shows that this effect is not robust. Instead rural inequality is strongly negatively associated with public spending.

#### **Table One Here**

A similar pattern can be observed in Models 3 and 4, which include country fixed effects and thus measure only *within-country* differences. In neither case is the democracy dummy robust and as before GDP per capita is only robustly related to public spending when inequality is not controlled for. As opposed to Model 2, in Model 4 it is income inequality that is robustly

related to public spending. However, in sharp contrast with the expectations of the Meltzer-Richard model, increases in income inequality are *negatively* related to public spending.

The same pattern is reflected in Models 5 and 6, which use ten-year changes in variables in place of levels. Again the ten-year change in democracy is unrelated to ten-year changes in public spending. Moreover, as in Models 3 and 4, changes in GDP per capita are only associated with changes in public spending when inequality is not controlled for. Changes in inequality in these models again have a *negative* effect on public spending. Overall, Table One provides absolutely no support for the Meltzer-Richard redistributivist logic. Regime change does not increase public spending, nor does increases in inequality. The relative income of the median voter does not appear to matter for public spending.

Finally, Models 7 through 9 show another interpretation of democracy's impact on public spending – one we shall return to in our analysis of the post-1950 period and one that again undermines the Meltzer-Richard rationale. In these models we introduce interaction terms between the democracy dummy and the Gini index. That is, we are testing to see whether inequality has an effect on public spending conditional on regime type (and vice versa). The Meltzer-Richard model suggests that the purported positive effects of democracy on public spending should increase with inequality, since this increases the distance between the income of the median voter and the voter with mean income. Symmetrically, inequality should have a stronger positive effect on public spending as the franchise expands from the richest to poorest.

Models 7 through 9 show no such pattern. In fact, Model 7--the pooled analysis--shows precisely the opposite, a robust *negative* interaction between the democracy dummy and the Gini coefficient. Combined with a positive coefficient for the Polity score variable and a (less robust) positive coefficient for the Gini variable, this implies the following: at low levels of inequality,

more democratic states have *higher* levels of public spending but at high levels of inequality more democratic states have *lower* levels of public spending. In Models 8 and 9, the directionality is similar but the coefficients are not robust. These models are testing a slightly different hypothesis, however. Whereas the pooled model asks whether unequal democracies are different to more equal democracies (and their autocratic counterparts), Models 8 and 9 examine within country changes and ask whether a particular country that is becoming both more democratic and more unequal sees higher or lower public spending. There is no robust evidence for either case here (although as we shall see there is in the 1960-1999 data) but the coefficients point in the direction of the latter case, again counteracting the Meltzer-Richard expectation.

Perhaps the dummy operationalization of democracy is too blunt an instrument to effectively proxy for political determinants of public spending. In Table Two, we replace the dichotomous variable with the Polity index. As before, in the pooled Models 1 and 2 changes in the Polity score towards democracy have no effect on public spending, and we see the same pattern of GDP per capita only having an effect when inequality is not included.

### **Table Two Here**

In Models 3 and 4 we do find robust positive effects of democracy on public spending: a ten-point increase in the Polity score increases public spending by about a quarter of a point of GDP. Models 5 and 6 show a similar pattern, albeit without a robust effect in Model 5. Two points are worth noting about these results. First, the magnitude of the effect of democracy is tiny in absolute terms--hardly enough to credibly threaten the economic position of the rich. Even though public spending was very low in general during this era, a shift of a quarter point of GDP still amounts to less than a third of a standard deviation in public spending.

Second, the effects of the Polity score come from its subcomponents that reflect executive recruitment, and not the extension of the franchise: in separate regressions (not shown) we find the only Polity subcomponent that produces a robust positive effect in the fixed effects analysis is “XRCOMP”--the competitiveness of executive recruitment. This component essentially reflects a transition from hereditary to competitive executive recruitment, that is, the move from absolute monarchy to parliamentary constitutionalism. This is not an unimportant result, but it is noteworthy that the Polity subcomponents that reflect the extension of the franchise to the masses have no measurable effect on public spending.

Models 7 through 9 again test the interactive effects of democracy and inequality and as in Table One, we obtain a robust negative relationship for the pooled model. This pattern, which again completely contradicts the implications of the MR model but which echoes results several scholars have found (Moene and Wallerstein 2001, 2003; Shelton 2007), can be seen in Figure One, which plots the estimated effect on public spending of a one point shift in the Polity index at various levels of inequality. At low levels of inequality, a robust positive effect of an increase in the Polity index on public spending exists. However, once the Gini index passes its median in the sample – 0.48 – this effect turns robustly negative. The estimated size of the effect at the 10<sup>th</sup> and 90<sup>th</sup> percentiles of inequality (0.42 and 0.53) is that a one point shift in the Polity index will increase or decrease public spending by just under 0.1 percent of GDP. Hence a ten point shift in the Polity index is associated with a full percent point of GDP change in public spending – much larger than the estimated effects drawn from Models 3 and 4, and in clear contradiction to the expectations of the redistributivist argument. When we turn to Models 8 and 9 that examine only

within country changes, the interactive effect maintains the same directionality but is not statistically robust.<sup>9</sup>

### **Figure One Here**

Table Three provides a check on the potential impact of democracy and inequality on public spending by breaking down the dependent variable into its various subcategories: welfare and unemployment; pensions; healthcare; and housing. For each category of spending we examine both pooled and fixed effects models as well as models with and without the democracy/inequality interaction term. The basic message of this analysis is that only in one case do we see a direct positive effect of democracy on public spending – pensions – arguably the *least* redistributive of all four categories. The area of social spending most closely related to redistribution – welfare and unemployment – sees no direct positive effect of democracy. However, when we turn to the interactive effect of inequality and democracy we see the same negative effect of inequality on spending in democracy as noted above most robustly for welfare and unemployment, a finding that holds across both pooled and fixed effects models. Thus, in the area of social spending most clearly “redistributive,” we see strong evidence that government in unequal democracies engaged in *less* redistributive social spending during the 1880-1930 period.

### **Table Three Here**

#### **Findings: 1961-1999**

To check our surprising contradictory result, we now compare the effect of inequality and democracy on redistribution in more recent decades. This is the era that Boix and nearly all other

---

<sup>9</sup> Separate fixed-effects regressions for countries with below or above median inequality show that the positive effects of the Polity index only appear in the more equal group. Similarly, dividing the sample by a Polity score below or above zero we find no effect of inequality on public spending in dictatorships and a robust *negative* effect of inequality in democracies.

research explored. However, we find remarkably similar results to those from 1880 to 1930: Neither democracy nor inequality exerts a direct positive effect on public spending. Instead, once again we observe an interactive effect such that democracy is associated with higher public spending at low levels of inequality and lower levels of public spending at higher levels of inequality – the precise opposite of the redistributivist logic. Thus in all three formulations: democracy, inequality, and their interaction, we find no support for the redistributivist model in postwar data.

Since data availability is much greater for the postwar era than for 1880-1930, we are able to include a much broader array of control variables. For the dependent variable, here we use government consumption as a percentage of GDP.<sup>10</sup> This variable has been used in a number of studies of government spending, including Boix (2003), Rodrik (2000) and Shelton (2007). In terms of independent variables we use measures of GDP, GDP per capita, and population (all logged) and the percentage of the population either under fifteen or over sixty-five, from the World Development Indicators. We retain the same rural inequality variable drawn from Vanhanen as before but replace the Bourguignon and Morrisson income inequality data with more reliable and broadly available Gini data from Babones and Alvarez-Rivadulla (2007), as used in Ansell and Samuels (2010). We use a measure of trade openness (imports plus exports over GDP) drawn from the Penn World Tables, and three measures of social heterogeneity drawn from Alesina et al (2003): ethnic heterogeneity, linguistic diversity, and religious diversity, as well as a measure of the proportion of the population identifying as Muslim. In a number of models we also use a further series of controls that reduce the sample size considerably but are also used in Boix's (2003) analysis: turnout in legislative elections drawn

---

<sup>10</sup> We intend to expand the range of dependent variables under analysis considerably – examining in particular the breakdown of various forms of redistributive spending along the lines used in our 1880 to 1930 analysis.

from the IDEA dataset (and its interaction with the Gini coefficient) and agricultural value-added as a percentage of GDP.<sup>11</sup> We also employ a series of country or year dummies depending on the specification.

An important distinction between our data analyses and those of Boix is the much greater sample size: Boix's largest sample containing the Gini coefficient is 763 cases, whereas we are able to triple that figure in many of our models. We point to this fact because Boix's sample of gini coefficients was heavily biased towards wealthy, equal democracies, suggesting that his results may have been biased.

Table Four contains eight models, employing various statistical estimations, some with random effects (pooled models) and others with fixed effects (within-country models). Each model uses an AR1 error term specification to capture temporal dependency.<sup>12</sup> Models 1 and 2, respectively using random and fixed effects, show no direct effect of democracy or either type of inequality on public spending. Per capita income is positively related to government consumption – the Wagner's Law effect – and population is negatively related to government consumption – an economies of scale effect. In the pooled analysis but not the fixed effects model, the size of dependent populations also has a positive effect on spending.

#### **Table Four Here**

Models 3 and 4 demonstrate that while there may not be evidence of direct effects of these democracy and inequality on government consumption, there is a robust conditional effect – once more with democracy producing *higher* public spending only where inequality is low and lower spending where inequality is high. That this pattern emerges for an entirely different

---

<sup>11</sup> Boix does not clearly describe what he uses for turnout data. We define turnout for each year as its value at the last relevant legislative election; this seems most theoretically appropriate given the redistributivist logic.

<sup>12</sup> Lagged dependent variables are problematic in fixed effects models and in studies of public consumption, because they tend to 'absorb' effects on the regression and because of possible unit root problems.

sample from Table Two is intriguing and suggests that this conditional relationship may be an important but, as yet, unexplored aspect of government spending and redistribution and one that lies in sharp contrast to the redistributivist consensus. Figure Two graphs this conditional effect, using Model 3's estimates, and is constructed in the same manner as Figure One.

### **Figure Two Here**

Again we see the estimated effect of democracy flips at around the median level of inequality, which in this sample is 0.45. At the tenth percentile of inequality (0.36) the effect of a one-point increase in the Polity index is estimated to increase government consumption of just under 0.1% of GDP - strikingly similar to the effect found in Figure One. At the ninetieth percentile of inequality (0.58) the effect of a one-point increase in the Polity index is a *decrease* in public consumption of just over 0.1 of national income.

Models 5 through 8 add turnout and agricultural value added variables to match Boix's specifications. We do not find any conditional effect of turnout or inequality. (In models not reported, we find no direct effect of turnout.)

An irony of this analysis is that Boix finds precisely the same negative interaction between democracy and inequality in his empirical analyses of public spending (see Boix 2003, Tables 5.1 and 5.2). However, Boix argues that this finding should not count as a strike against his argument, since in his estimation the "very high coefficient of democratic regime... compensates for the negative coefficient of the interactive term." In fact, the level of inequality at which we estimate democracy has a negative impact on public spending is only slightly above average—a gini of .49. While Boix's analysis was limited to a pooled sample, we have shown in this section that the interactive pattern appears also to apply to *within-country* changes.



## Conclusion

In this paper we subjected the redistributivist model of democratization to an indirect test, exploring new social-welfare spending data from an earlier historical era. We find that the key hypotheses derived from the redistributivist logic fail to predict government redistributive spending: Democracy has no positive effect, income inequality has no positive effect, and the interaction between democracy and income inequality has no effect—in fact, its effect is robustly *negative*.

Our finding, that neither inequality nor democracy has the robust positive effect on redistributive spending is ironically supported by many of the empirical findings of authors who seek to find evidence in support of the MR model, including Boix and Lindert. Boix's conclusion to Chapter 5 essentially admits that the redistributive logic upon which his book is based has little effect on government spending, because the main engine driving growth in public redistributive spending is demography: "As the median voter ages, the pressure for intergenerational transfers increases sharply" (200). Lindert agrees, suggesting that the most important variables driving the rise of redistributive spending in the 1880-1930 era are economic and demographic--per capita income and average age of the population—not democracy and inequality.

Regardless, social-welfare spending remained quite low until long after the 1880-1930 period despite many democratizations in this era; the biggest growth in welfare-state spending didn't occur until the 1960s and 1970s, long after democratization. Lindert suggests that the reason there was so little soaking of the rich prior to WWII was because "the kinds of voters sympathetic to progressive taxation and transfer payments were still less integrated into the political process than in the postwar era" (1994, 21). This finding cuts the redistributive

argument off at the knees, since it acknowledges that democracy *per se* is not causing anything, and even implies that turnout is not a cause but an *effect* of something more fundamental – societal change and education, itself caused by economic development. Lindert’s conclusion raises the question of “Exactly how long should it take after democratization for people to be integrated ‘enough’ to demand redistribution?” Despite his best efforts, his results illustrate that even the best-case scenario *under*-predicts redistribution as a function of democracy.

Our extension of both Boix’s and Lindert’s research further undermines the redistributivist claim: we find no evidence that on their own, democracy and inequality impact public spending. Our most intriguing finding, one that others have encountered but sometimes treated as a nuisance or ignored, is the robust negative conditional relationship between inequality, democracy and social-welfare spending. We found this effect using two distinct samples from two separate historical eras. This is not merely a “null” finding for the Meltzer-Richard model, it is a direct contradiction of the theory’s core premise. Unequal democracies, far from increasing spending, actually appear to reduce it.

We recognize that we have provided no explanation for this result in this paper. A provisional explanation is as follows: Our argument (Ansell and Samuels, 2010) suggests that democratization--particularly partial democratization--is especially likely under conditions of high income inequality, controlling for rural inequality, as this typically emerges as new economic actors without political representation grow in income and demand commensurate political status. To the degree then that we see democratization under conditions of economic inequality, this heralds bourgeois liberalization rather than the revolution of the masses. Newly-empowered yet relatively wealthy economic actors are unlikely to demand high levels of

government redistribution. Indeed, they may even cut the size of government, particularly if autocracy had been associated with state expropriation of private property by the existing elite.

In contrast, democratization under conditions of relative equality marks the case where the masses are *relatively* wealthier compared to the above case. We have argued elsewhere (Ansell and Samuels, 2010) that a relatively wealthier mass population may force the bourgeoisie to engage in joint rebellion rather than taking on the pre-existing elites alone. A joint rebellion presumably means a stronger post-rebellion political position for the masses, and presuming their interest in public spending and redistribution is greater than that for the bourgeoisie, we might expect higher public spending under these conditions. In other words, democratization is a function of different coalitions that emerge as a function of pre-existing levels of inequality. Somewhat paradoxically, when inequality is relatively low, regime change involves the masses but should thus be followed by higher government redistributive spending. However, democratization is likelier under conditions of high inequality, when those pushing for regime change--the bourgeoisie—are unlikely to push for redistribution to the poor.

## References

- Acemoglu, Daron and James Robinson. 2000. "Why Did the West Extend the Franchise? Democracy, Inequality and Growth in Historical Perspective." *Quarterly Journal of Economics* 115: 1167-1199.
- Acemoglu, Daron and James Robinson. 2006. *Economic Origins of Dictatorship and Democracy*. New York: Cambridge University Press.
- Aidt, Toke *et al.* 2006. "Democracy Comes to Europe: Franchise Extension and Fiscal Outcomes, 1830-1938." *European Economic Review* 50(2): 249-283.
- Aidt, Toke and Peter Jensen. 2009. "Taxation and the extension of the voting franchise in western Europe, 1860-1938." *International Tax and Public Finance*, vol. 16, pp. 362-394.
- Aidt, Toke *et al.* 2009. "The Retrenchment Hypothesis and the Extension of the Franchise in England and Wales." Unpublished, University of Cambridge.
- Alesina, Alberto and Dani Rodrik. 1994. "Distribution, Politics and Economic Growth." *Quarterly Journal of Economics* 109(2): 465-490.
- Alesina, Alberto and Edward Glaeser. 2004. *Fighting Poverty in the US and Europe: A World of Difference*. New York: Oxford University Press.
- Alesina, Alberto and Eliana La Ferrara. 2005. "Preferences for redistribution in the land of opportunities." *Journal of Public Economics* 89(5-6): 897-931.
- Ansell, Ben and David Samuels. 2010. "Inequality and Democratization: A Contractarian Approach." Forthcoming (December), *Comparative Political Studies*.
- Banerjee, Abhijit and Esther Duflo. 2003. "Inequality and Growth: What Can the Data Say?" *Journal of Economic Growth* 8: 267-299.
- Bénabou, Roland. 1996. "Inequality and growth." In B. S. Bernanke and J. J. Rotemberg (eds.), *NBER Macroeconomics Annual* 11: 11-74. Cambridge, MA: MIT Press.
- Bénabou, Roland. 2000. "Unequal Societies: Income Distribution and the Social Contract." *American Economic Review* 90: 96-129.
- Bénabou, Roland and Efe A. Ok. 2001. "Social Mobility and the Demand for Redistribution: The POUM Hypothesis." *The Quarterly Journal of Economics*, Vol. 116(2): 447-487.
- Boix, Carles 2001. "Democracy, Development and the Public Sector." *American Journal of Political Science* 45:1-17.
- Boix, Carles. 2003. *Democracy and Redistribution*. New York: Cambridge University Press.
- Bueno de Mesquita, Bruce *et al.* 2003. *The Logic of Political Survival*. Cambridge: MIT Press.
- Cheibub, José Antonio. 1998. "Political Regimes and the Extractive Capacity of Governments: Taxation in Democracies and Dictatorships." *World Politics* 50(3): 349-376.
- Cutright, Phillips 1965. "Political Structure, Economic Development and National Social Security Programs." *American Journal of Sociology* 70(5): 537-550.
- Dinecco, Mark and Mauricio Prado. 2010. "War, Democracy and Government Size over the Long Run: A Structural Breaks Analysis." Unpublished, IMT Luca Institute for Advanced Studies.
- Easterly, William and Sergio Rebelo. 1993. "Fiscal Policy and Economic Growth." *Journal of Monetary Economics* 32: 417-458.
- Ghorbarah, H.A. *et al.* 2004. "Comparative Public Health: The Political Economy of Human Misery and Well-Being." *International Studies Quarterly* 48(1): 73-94.

- Gilens, Martin. 1999. *Why Americans Hate Welfare: Race, Media, and the Politics of Anti-Poverty Policy*. Chicago: University of Chicago Press.
- Gouveia, M and N.A. Masia. 1998. "Does the Median Voter Model Explain the Size of Government?" *Public Choice* 97(1-2): 159-77.
- Grossman, Volker. 2003. "Income Inequality, voting over the size of public consumption, and growth." *European Journal of Political Economy* 19:265-287
- Grossman and Helpman 2002. *Special Interest Politics*. Cambridge: MIT Press.
- Harms, Philipp and Stefan Zink. 2003. "Limits to redistribution in a democracy: a survey." *European Journal of Political Economy* 19: 651–668.
- Husted, T.A. and Kenny, L.W. 1997. "The effect of the expansion of the voting franchise on the size and scope of government." *Journal of Political Economy* 105: 54-82.
- Huber, John and Piero Stanig, 2009. "Individual income and voting for redistribution across democracies." Unpublished, Columbia University.
- Jackman, Robert. 1975. *Politics and Social Inequality: A Comparative Analysis*. New York: John Wiley and Sons.
- Justman, Moshe, and Mark Gradstein. 1999. "The Industrial Revolution, Political Transition, and the Subsequent Decline in Inequality in 19th Century Britain." *Explorations in Economic History* 36: 109-127.
- Kenworthy, Lane and Jonas Pontusson. 2005. "Rising Inequality and the Politics of Redistribution in Affluent Countries." *Perspectives on Politics* 3(3): 449-471.
- Kenworthy, Lane and Leslie McCall. 2008. "Inequality, Public Opinion and Redistribution." *Socio-Economic Review* 6:35-68.
- Lee, Woojin, and John E. Roemer. 1998. "Income distribution, redistributive politics and economic growth." *Journal of Economic Growth* 3:217-240.
- Lee, Woojin. 2003. "Is democracy more expropriative than dictatorship? The Tocquevillian wisdom revisited." *Journal of Development Economics* 71:155-198.
- Li, Hongyi, Lyn Squire and Heng-fu Zou. 1997. "Explaining International and Inter-temporal Variations in Income Inequality." *Economic Journal* 108: 1-17.
- Lindert, Peter 1992. "The Rise of Social Spending, 1880-1930, Appendices A and B." Working Paper Series #68, Agricultural History Center, UC-Davis.
- Lindert, Peter. 1994. "The Rise of Social Spending, 1880-1930." *Explorations in Economic History* 33(1): 1-34.
- Lindert, Peter. 2001 "Revised Data Set, "The Rise of Social Spending, 1880-1930." Microsoft Excel spreadsheet. On file with authors.
- Lindert, Peter. 2002. "Banks Data Set, Trimmed, 1860-1937." Microsoft Excel Spreadsheet. On file with authors.
- Lindert, Peter. 2004. *Growing Public: Social Spending and Economic Growth Since the 18<sup>th</sup> Century*. New York: Cambridge.
- Lizzeri, Alessandro, and Nicola Persico. 2004. "Why did the elites extend the suffrage? Democracy and the scope of the government, with an application to Britain's Age of Reform." *Quarterly Journal of Economics* 118: 707-765.
- Lott, John. 1999. "How Dramatically Did Women's Suffrage Change the Size and Scope of Government?" *Journal of Political Economy* 107(6):1163-1198.
- Maddison, Angus. 2006. *The World Economy: A Millennial Perspective. Volume II, Historical Statistics*. Paris: OECD. Data available on-line at <http://www.ggdc.net/maddison/>

- McGuire, Martin and Mancur Olson. 1996. "The Economics of Autocracy and Majority Rule: The Invisible Hand and the Use of Force." *Journal of Economic Literature* 34(1): 72-96.
- Meltzer, Alan and Scott Richard. 1981. "A Rational Theory of the Size of Government." *Journal of Political Economy* 89(5): 914-27.
- Meltzer, Alan and Scott Richard. 1983. "Tests of a rational theory of the size of government." *Public Choice* 41:403-418.
- Milanovic, Branko. 2000. "Do more unequal countries redistribute more? Does the median voter hypothesis hold?" *European Journal of Political Economy* 16:367-410.
- Moene, Karl and Michael Wallerstein. 2001. "Inequality, Social Insurance and Redistribution." *American Political Science Review* 95: 859-874.
- Moene, Karl. and Michael Wallerstein. 2003. "Earnings inequality and welfare spending: a Disaggregated Analysis." *World Politics* 55(4): 485-516.
- Mueller, John. 2003. *Public Choice III*. New York: Cambridge.
- Mulligan, Casey *et al.* 2004. "Do Democracies Have Different Public Policies than Nondemocracies?" *Journal of Economic Perspectives* 18(1): 51-74.
- Niskanen, W. A 1997. "Autocratic, Democratic and Optimal Government." *Economic Inquiry* 35(3):464-79.
- Pampel, Fred and John Williamson. 1989. *Age, Class, Politics and the Welfare State*. New York: Cambridge University Press.
- Perotti, Robert. 1996. "Growth, income distribution and democracy: what the data say." *Journal of Economic Growth* 1: 149-188
- Persson, Torsten and Guido Tabellini. 1994. "Is Inequality Harmful for Growth?" *American Economic Review* 84(3): 600-621.
- Peters, B. Guy. 1991. *The Politics of Taxation: A Comparative Perspective*. Cambridge, MA: Blackwell.
- Przeworski, Adam. 2007. "Political Rights, Property Rights, and Development." Working paper, NYU Department of Politics.
- Przeworski, Adam. 2009, "Democracy, Equality, and Redistribution." In Richard Bourke and Raymond Geuss (eds.), *Political Judgement: Essays in Honour of John Dunn*. Cambridge: Cambridge University Press, pp. 281-312.
- Przeworski, Adam. 2010. *Democracy and the Limits of Self-Government*. New York: Cambridge University Press.
- Przeworski, Adam and Michael Wallerstein. 1988. "Structural Dependence of the State on Capital." *American Political Science Review* 83(1):11-29.
- Przeworski, Adam *et al.* 2000. *Democracy and Development*. New York: Cambridge University Press.
- Putterman, R., 1997. Why have the rabble not redistributed the wealth? On the stability of democracy and unequal property. In: Roemer, J. (Ed.), *Property Relations, Incentives, and Welfare*. Macmillan, London, pp. 359-389.
- Rodrigues, Francisco. 1999. "Does distributional skewness lead to redistribution? Evidence from the United States." *Economics and Politics* 11:171-199.
- Roemer, John. 1998. "Why the poor do not expropriate the rich: an old argument in new garb." *Journal of Public Economics* 70:399-424.
- Roemer, John. 2005. "Will Democracy Engender Equality?" *Economic Theory* 25: 217-234.
- Ross, Michael. 2006. "Is Democracy Good for the Poor?" *American Journal of Political Science* 50(4): 860-874.

- Scheve, Kenneth and David Stasavage. 2009. "Institutions, Partisanship and Inequality in the Long Run." *World Politics* 61:215:253.
- Shelton, Cameron. 2007. "The Size and Composition of Government Expenditure." *J Public Economics* 91: 2230-2260.
- Skocpol, Theda. 1979. *States and Social Revolutions*. New York: Cambridge University Press.
- Stigler, G.J., 1970. "Director's Law of public income distribution." *Journal of Law and Economics* 13, 1-10.
- Tilly, Charles. 1993. *European Revolutions 1492-1992*. Oxford: Basil Blackwell.
- Tullock, Gordon. 1983. "Further Tests of a rational theory of the size of government." *Public Choice* 41: 419-421.

**Table One: 1880 to 1930 Public Spending using Boix-Rosato Dummy**

	(1) POOLED	(2) POOLED	(3) WITHIN	(4) WITHIN	(5) 10 YR Δ	(6) 10 YRΔ	(7) POOLED	(8) WITHIN	(9) 10 YR Δ
Democracy	0.225 (0.145)	0.098 (0.155)	0.126 (0.127)	0.073 (0.097)			7.862*** (1.525)	0.998 (1.830)	
GDP per cap	0.172*** (0.054)	0.090 (0.066)	0.369** (0.142)	0.144 (0.118)			0.047 (0.064)	0.137 (0.122)	
BM Gini		1.431 (1.770)		-9.833*** (3.233)			6.306*** (1.519)	-8.415** (3.853)	
Rural Inequality		-1.343*** (0.348)		-1.010 (0.785)			-1.667*** (0.305)	-0.978 (0.782)	
Democracy*GINI							-16.412*** (3.182)	-1.930 (3.871)	
Democracy Δ10					-0.050 (0.060)	-0.081 (0.057)			2.399 (1.603)
GDP per cap Δ10					0.296** (0.129)	0.110 (0.108)			0.086 (0.103)
BM Gini Δ10						-8.726** (3.676)			-4.957 (3.605)
Rural Ineq. Δ10						-0.333 (0.672)			-0.219 (0.647)
Dem*Gini Δ10									-0.219 (0.647)
Constant	0.612** (0.268)	-0.244 (0.987)	-0.322 (0.444)	3.757* (2.188)	0.248*** (0.087)	0.172** (0.082)	-1.346 (0.890)	4.725** (1.824)	0.211** (0.083)
Observations	150	134	150	134	108	97	134	134	97
Countries	40	35	40	35	34	27	35	35	27
Year Dummies	Y	Y	Y	Y	Y	Y	Y	Y	Y
Region Dummies	Y	Y	N	N	N	N	Y	N	N
R-squared	0.499	0.552	0.483	0.592	0.220	0.291	0.633	0.594	0.312

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1



**Table Two: 1880 to 1930 Public Spending using Polity Index**

	(1) POOLED	(2) POOLED	(3) WITHIN	(4) WITHIN	(5) 10 YR Δ	(6) 10 YRΔ	(7) POOLED	(8) WITHIN	(9) 10 YR Δ
Polity	0.009 (0.010)	0.001 (0.011)	0.025** (0.011)	0.022** (0.010)			0.485*** (0.091)	0.116 (0.108)	
GDP per cap	0.199*** (0.050)	0.099 (0.063)	0.355** (0.134)	0.150 (0.111)			0.057 (0.061)	0.140 (0.115)	
BM Gini		1.546 (1.703)		-8.079** (2.984)			2.566* (1.454)	-6.656** (2.729)	
Rural Inequality		-1.459*** (0.344)		-0.979 (0.706)			-1.809*** (0.298)	-0.898 (0.691)	
Polity Δ10					0.010 (0.008)	0.012** (0.006)			0.116 (0.084)
GDP per cap Δ10					0.300** (0.126)	0.133 (0.105)			0.120 (0.103)
BM Gini Δ10						-7.606** (3.511)			-6.041* (3.395)
Rural Ineq. Δ10						-0.240 (0.643)			-0.141 (0.645)
Gini X Polity							-1.006*** (0.184)	-0.198 (0.230)	
Gini X Polity Δ10									-0.218 (0.172)
Constant	0.200 (0.137)	1.199 (0.996)	-0.293 (0.405)	4.534*** (1.595)	0.252*** (0.087)	0.196** (0.083)	0.575 (0.889)	3.841** (1.408)	0.226** (0.088)
Year Dummies	Y	Y	Y	Y	Y	Y	Y	Y	Y
Region Dummies	Y	Y	N	N	N	N	Y	N	N
Observations	151	135	151	135	110	99	135	135	99
Countries	40	35	40	35	34	27	35	35	27
R-squared	0.492	0.552	0.514	0.624	0.230	0.303	0.628	0.628	0.314

Standard errors in parentheses\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

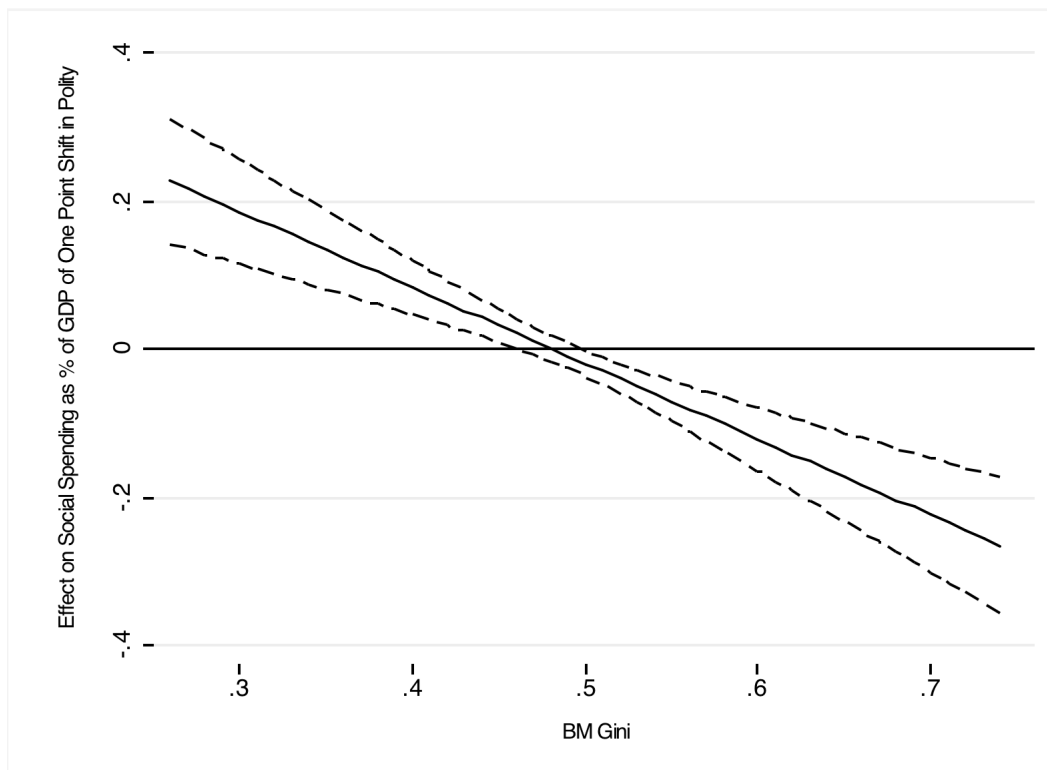
**Table Three: Breaking Down Spending 1880-1930**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Welfare	Pensions	Health	Housing	Welfare	Pensions	Health	Housing
Polity	-0.007 (0.005)	0.005 (0.004)	0.003 (0.004)	0.001 (0.001)	0.002 (0.003)	0.016*** (0.006)	0.004 (0.006)	0.001 (0.001)
GDP per cap	0.016 (0.030)	0.050** (0.024)	0.033 (0.024)	0.012** (0.006)	0.037 (0.037)	0.068 (0.059)	0.044 (0.038)	0.012 (0.014)
BM Gini	1.164 (0.859)	0.276 (0.603)	0.443 (0.557)	-0.036 (0.138)	-1.769 (1.111)	-2.542 (1.506)	-2.130 (1.670)	-1.157 (0.755)
Rural Inequality	-1.219*** (0.189)	-0.013 (0.121)	-0.216* (0.121)	0.034 (0.022)	-0.105 (0.285)	-0.528 (0.425)	-0.287 (0.325)	0.005 (0.078)
Constant	0.081 (0.518)	-0.107 (0.429)	0.434 (0.364)	-0.041 (0.086)	1.091** (0.462)	1.431* (0.786)	1.208 (0.876)	0.522 (0.371)
R-squared	0.494	0.565	0.435	0.222	0.290	0.555	0.360	0.326
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Polity	0.205*** (0.043)	0.194*** (0.038)	0.052 (0.034)	0.027*** (0.008)	0.099** (0.039)	0.074 (0.067)	-0.088 (0.078)	0.025 (0.019)
GDP per cap	-0.003 (0.031)	0.031 (0.023)	0.029 (0.025)	0.010 (0.006)	0.027 (0.037)	0.061 (0.063)	0.054 (0.039)	0.010 (0.015)
BM Gini	1.620** (0.759)	0.605 (0.516)	0.544 (0.522)	0.016 (0.122)	-0.301 (0.814)	-1.693 (1.651)	-3.516 (2.144)	-0.792 (0.478)
Polity X Gini	-0.440*** (0.089)	-0.392*** (0.076)	-0.103 (0.067)	-0.055*** (0.016)	-0.204** (0.082)	-0.122 (0.142)	0.193 (0.159)	-0.051 (0.041)
Rural Inequality	-1.369*** (0.187)	-0.158* (0.093)	-0.252** (0.119)	0.014 (0.024)	-0.021 (0.289)	-0.483 (0.436)	-0.366 (0.330)	0.026 (0.089)
Constant	-0.199 (0.468)	0.063 (0.393)	0.371 (0.350)	0.001 (0.095)	0.376 (0.346)	1.021 (0.840)	1.882* (1.084)	0.344 (0.245)
R-squared	0.555	0.654	0.442	0.281	0.321	0.562	0.386	0.346
Observations	136	133	134	137	136	133	134	137
Countries	35	35	35	35	35	35	35	35
Fixed Effects	N	N	N	N	Y	Y	Y	Y

**Table Four: Postwar Analysis 1960 to 1999**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Polity	-0.024 (0.016)	-0.015 (0.017)	0.326*** (0.094)	0.315*** (0.101)	-0.016 (0.016)	-0.010 (0.017)	0.242** (0.100)	0.276** (0.108)
SB Gini	-2.626 (3.640)	6.452 (7.203)	-1.083 (3.667)	8.124 (7.228)	-2.409 (3.600)	10.057 (7.456)	-3.475 (6.259)	5.363 (8.067)
Rural Inequality	-0.480 (1.475)	3.426 (2.327)	-0.345 (1.476)	3.359 (2.331)	0.674 (1.489)	3.409 (2.267)	-2.805** (1.430)	-2.201 (2.260)
SB Gini X Polity			-0.730*** (0.193)	-0.687*** (0.207)			-0.519** (0.207)	-0.581*** (0.223)
Turnout							-1.066 (3.766)	0.458 (4.055)
Turnout X Polity							1.406 (7.806)	-2.473 (8.389)
Agricultural Sector					-0.022 (0.015)	-0.002 (0.016)	-0.064*** (0.016)	-0.042** (0.017)
Log Population	-0.787*** (0.257)	-1.705** (0.672)	-0.710*** (0.258)	-1.561** (0.674)	-0.897*** (0.250)	-1.481** (0.668)	-0.928*** (0.234)	-1.271* (0.727)
Log GDP per cap	2.309*** (0.434)	2.709*** (0.683)	2.212*** (0.435)	2.522*** (0.685)	1.734*** (0.460)	2.353*** (0.687)	0.990** (0.442)	1.771*** (0.684)
Pop>64	0.726*** (0.147)	0.226 (0.238)	0.697*** (0.148)	0.201 (0.238)	0.622*** (0.149)	-0.047 (0.281)	0.670*** (0.122)	-0.012 (0.210)
Pop<15	0.196*** (0.064)	0.017 (0.076)	0.189*** (0.064)	0.010 (0.077)	0.148** (0.065)	0.008 (0.076)	0.201*** (0.056)	0.137** (0.069)
Openness	0.004 (0.004)	0.002 (0.005)	0.004 (0.004)	0.002 (0.005)	0.003 (0.004)	0.008 (0.005)	0.005 (0.004)	0.016*** (0.005)
Ethnic Division	0.503 (2.124)	0.000 (0.000)	0.701 (2.130)	0.000 (0.000)	-0.125 (2.067)	0.000 (0.000)	-0.952 (1.808)	0.000 (0.000)
Linguistic Division	1.040 (1.861)	0.000 (0.000)	0.562 (1.870)	0.000 (0.000)	0.579 (1.822)	0.000 (0.000)	1.988 (1.604)	0.000 (0.000)
Religious Division	2.455 (1.783)	0.000 (0.000)	2.419 (1.788)	0.000 (0.000)	2.761 (1.716)	0.000 (0.000)	2.106 (1.483)	0.000 (0.000)
Muslim Population	0.046*** (0.014)	0.000 (0.000)	0.048*** (0.014)	0.000 (0.000)	0.043*** (0.013)	0.000 (0.000)	0.023** (0.011)	0.000 (0.000)
Constant	-9.774 (6.199)	2.670*** (0.506)	-10.072 (6.205)	2.332*** (0.504)	-1.263 (6.553)	3.480*** (0.461)	5.501 (6.382)	5.386*** (0.513)
Country Dummies	N	Y	N	Y	N	Y	N	Y
Decade Dummies	N	N	N	N	Y	Y	Y	Y
Observations	2888	2775	2888	2775	2450	2338	1920	1814
Countries	113	93	113	93	112	92	106	87

**Figure One: Effects of Polity Score on Public Spending by Level of Inequality 1880-1930**



**Figure Two: Effects of Polity Score on Public Consumption by Inequality 1960-1999**

