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***The Redistributive Threat: State Power and
the Effect of Inequality on Democracy***

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Abstract

Several prominent recent works in comparative politics explore the relationship between democracy and economic inequality, centring on the expectation by economic elites that democratisation will lead to the redistribution of elite wealth. But, in practice, state extractive capacity is necessary for redistribution. Where extractive capacity is lacking, rational economic elites should not fear that the loss of political power would lead to effective redistribution. Thus, the effect of inequality on regime outcomes is conditional on state capacity. This prediction is confirmed through replication and extension of the analysis in Boix (2003), with the addition of the presence of a regularly implemented national census as a proxy for state extractive capacity. In strong states, the negative effect of inequality on regime change is confirmed. But, where the state is weak, inequality is shown to have no effect on regime change. This finding has empirical and methodological implications for the cross-national analysis of political change.

Keywords: Democratisation, Regime change, Inequality, State capacity, Scope conditions

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An emerging conventional wisdom in comparative politics, most prominently represented in the works of Carles Boix (2003) and Daron Acemoglu and James Robinson (2000, 2001, 2006), claims that the origins of democracy and dictatorship are fundamentally economic; that the emergence and stability of democratic and authoritarian regimes are shaped by the calculations of social actors about the implications of regimes for the redistribution of assets. Both Boix and Acemoglu and Robinson claim that democracy poses a threat to economic elites that grows with increased inequality, because the median voter will adopt policies that redistribute their wealth¹ (Meltzer and Richard, 1981). This argument, then, takes redistribution to be a fundamentally *political* process, assuming that the preferences of political leaders (or the median voter) are automatically translated into policy outcomes. But the translation of preferences into policy outcomes cannot be assumed: a better theory of the economic origins of democracy must account for the limits on the ability of political leaders to implement policies.

This ability to translate policy choices into outcomes is precisely what Michael Mann (1984) defined as the infrastructural power of the state.² Where the state does not possess significant levels of infrastructural power, it cannot effectively carry out many kinds of policy, including those redistributing wealth, which are said to be at the heart of determinations of regime outcomes. Where the state is weak, we should expect that economic elites have little to fear (and the masses little to gain) from the expansion of suffrage and the institution of democracy. In this context, the economic calculations of social actors should not be affected by regime type. Both elites and masses, in other words, should be indifferent (in terms of their economic calculations) about regime type. Where the state is weak, this mechanism linking inequality to regime preferences cannot operate; the origins of democracy and dictatorship cannot be economic. Statistical analysis below shows that the relationship between inequality and democracy is *conditional on the strength of the state*: where the state is strong, inequality shapes the emergence and stability of democratic and authoritarian regimes in ways consonant with our theories. But where the state is weak, the relationship between inequality and democracy deviates from the predictions of formal models that assume that policies can be enforced.

The fact that the strength of the state poses a scope condition on economic theories of democracy calls into question the search for universal theories of regime dynamics. Indeed, as the conclusion to the paper argues, many of our cross-national theories about

¹ On the failure of these theories to distinguish between the divergent effects of income and land inequality, see Ansell and Samuels (2008).

² This paper uses the terms state 'strength' and state 'capacity' to capture this ability of the state to penetrate society and implement the decisions of its leaders. On the various dimensions of state strength, see Goodwin (2001, Chapter 2) and Soifer and vom Hau (2008).

institutional outcomes implicitly assume that state strength is ubiquitous. This paper focuses on the implications of state strength for theories of regime outcomes, yet the potential exists for similar findings from a re-examination of other theories which are cornerstones of the cross-national study of political institutions.

I begin in Part 1 by reviewing the literature on inequality and the prospects of democracy, drawing out the central mechanisms by which economic conditions shape preferences about political institutions. In Part 2, I explore the nature of redistribution. Focusing on taxation as the most important and salient means of redistribution of wealth, I show that the systematic redistribution of wealth can only be carried out by powerful states. Thus, the threat of redistribution that democracy poses for economic elites should only affect preferences about regime outcomes where the state is powerful. Part 3 tests this prediction statistically. Using the institution of a national census as a simple measure of state power, I show that the effects of inequality on regime outcomes are contingent on the power of state: the central finding is that inequality affects regime outcomes where a census is regularly instituted, but inequality has no effect on regime outcomes where a census is absent. Based on the findings of this analysis, I conclude the paper in Part 4, by suggesting some directions for future research that integrate state power into preference-based models of institutional origins and change.

1. Democracy and redistribution

Robert Dahl's (1971) classic account of the strategic choices underlying the emergence of democracy rests on the comparison of the relative costs to elites of tolerating and suppressing democracy. The prospects of democracy are shaped by variation in the factors that determine these costs. Dahl recognised that one factor shaping the costs of toleration and suppression was economic inequality, writing that 'in a country with a hegemonic regime, extreme inequalities in the distribution of key values reduce the chances that a stable system of public contestation will develop' (103). Subsequent scholars have built on Dahl's framework in constructing a systematic account of how inequality shapes the costs of toleration and suppression.³

The costs of tolerating democracy are determined by the possibility of losing an election, and by the economic losses inflicted by winners on losers. Economic inequality shapes the extent of losses that winners can inflict on the losers. Where inequality is higher, the

³ Lipset (1959: 51) also claimed that increased inequality reduced the prospects for democracy, but the mechanism linking the two in his argument is attitudinal rather than based on the relative costs of tolerating and suppressing democracy. As inequality increases, Lipset argues that elites see political rights for the lower classes as 'absurd and immoral'. Thus Dahl, rather than Lipset, is an appropriate point of departure for recent scholarship on the economic origins of democracy.

wealthy have more to lose in economic terms from electoral defeat and the redistribution of wealth that will follow.⁴ This dynamic underlies a long line of scholarship about the threat democracy poses to economic elites, and policy proposals about the ways to assuage the fears of elites about democracy (O'Donnell and Schmitter, 1986). Building on this primarily case-based scholarship, Boix (2003) and Acemoglu and Robinson (2006) have built formal models that emphasise the pivotal role of inequality in shaping regime outcomes.

Boix (2003) finds that inequality and capital mobility affect the 'redistributive impact of democracy' (3). Where inequality is low, elites have little to fear from redistribution. Thus, holding all else equal, the costs of tolerating democracy are lower when economic inequality is low. Where inequality is high, the threat of redistribution depends on the extent of elite asset mobility. Where assets are mobile, elites are more able to evade taxation, and 'as the ease with which capitalists can escape taxation goes up, their support for an authoritarian solution declines' (13). Thus, redistribution and democracy are linked in a relationship shaped by both the *will* and the *capacity* of governments to tax elites.⁵ The findings of my analysis echo Boix, but I show that where the state is weak, elites can escape taxation even if their assets are not mobile.

Acemoglu and Robinson (2006) (henceforth A&R) see the redistribution of wealth as the core of political conflict. They focus on the economic costs to elites of political opening, and on its benefits for the poor majority. Unlike Boix, they problematise the emergence of lower class pressures for democracy, arguing that these will only exist where the potential benefits outweigh the costs of fighting to force democratisation. For A&R, the benefits of redistribution for the majority rise with inequality, and thus where wealth is distributed relatively equally, democratising pressures from below will not emerge. When inequality exists, so too will democratising pressures from the poor majority, but elites' decisions about whether to accept democracy or to repress these movements are shaped by the extent of the costs that democracy will inflict on them. These costs to elites are also shaped by inequality. As they compare the costs of toleration and suppression, elite calculations are shaped by the fact that greater inequality increases the tax burden they will face with democracy. Thus, elite resistance, like lower class pressures, rises with inequality. Combining the effects of inequality on the relative costs

⁴ As will be discussed in more detail below, redistribution is used broadly to refer to the wide range of policies that affect the distribution of assets in society, ranging from confiscation of wealth to social welfare policies, and including primary education and – most prominently in terms of its salience and its effects – progressive taxation. This broad conception of redistribution is based on Meltzer and Richard (1981).

⁵ The language of the *will* and *capacity* of governments to redistribute is drawn from Bellin (2004), who argues that authoritarianism is stable where governments are willing and able to repress opponents.

and benefits of democracy and authoritarianism to elites and the lower classes, A&R find that democracy will emerge at medium levels of inequality, but will be precluded by lack of interest in political reform in economically equal societies, and by elite resistance in highly unequal societies.⁶

Thus, in two influential recent framings of the economic origins of regime outcomes, the expectations of elites about the willingness and ability of governments to redistribute their wealth determine their willingness to tolerate democratic opening. A&R also find that the ability of democratic governments to redistribute wealth affects the extent to which the lower classes seek regime change. In both of these 'economic' theories of regime dynamics, rational actors take into account the likelihood that the regimes they choose will redistribute wealth. But the account of the willingness of governments to redistribute, determined by the preferences of the median voter and thus by the breadth of suffrage, is much more deeply and convincingly theorised than the account of the ability of the government to do so, which is said to be shaped only by the mobility of elites' assets.⁷ Yet, in actuality, the ability of governments to redistribute wealth is shaped by a broader range of factors than asset mobility. Central to the prospects for redistribution is state capacity, which is the focus of the next section.

2. The power to tax

The 'economic theories' of democracy and dictatorship centre on how these two types of regimes diverge in their desire to redistribute wealth. But the preferences of the median voter in either regime context are constrained in their implementation by the ability of the government to redistribute wealth. A certain level of state extractive capacity is a *necessary condition* for the systematic redistribution of wealth.⁸ Extractive capacity is

⁶ A&R offer no statistical test of these predictions, relying instead on narratives from four cases. For a critique of these narratives, see Smith (2008). Because Boix offers a statistical analysis, his simpler model is the subject of investigation in the empirical portion of this paper.

⁷ Like Boix, A&R incorporate the mobility of elite assets into their model. They argue (293ff) that landed elites face a greater economic threat from democracy than owners of capital, since land can more easily be seized and redistributed without economic distortions. The issue of land reform is addressed in more detail below.

⁸ Redistribution entails both the extraction of resources from their holders and the allocation of those resources to other social actors – and the state's ability to extract and to allocate may not co-vary. I thank Daniel Gingerich for clarifying this point. In this preliminary examination of the effect of state power on regime outcomes, I focus only on the power to extract (which may be more salient in the calculation of social actors, since it represents a cost directly imposed by the government) and set the issue of allocation (which is moot where the state cannot extract) aside. Thus, allocation of wealth – whether through distribution of assets or through pro-poor spending – is not considered in the following discussion. O'Neil (2007) shows that allocation of wealth is a real challenge for the state in her discussion of the crisis of Chile's privatised pension system. As a result of the privatisation of pensions, the Chilean state no longer has accurate measures of

therefore a scope condition for the economic theories of democracy. The ability of governments to carry out the redistribution of wealth depends on the extent to which the state can assess, enforce and collect taxes.⁹ To study the economic determinants of regime outcomes without attention to the state is to focus on the government's willingness to redistribute wealth without exploring its capacity to do so.

The extractive capacity of the state varies significantly across countries and over time. Thus, we should expect that the strength of the relationship between inequality and regime outcomes should also vary accordingly. This relationship should be strongest where state extractive capacity places no limits on what governments can do. But where government preferences cannot effectively be implemented, due to the limited extractive capacity of the state, the economic threat of democracy to elites (and the expected economic gains for the lower classes) should be low. Where state extractive capacity falls below some minimum threshold, we should see no significant relationship between inequality and democracy.

This section develops the argument that the redistribution of wealth via taxation requires a certain level of extractive capacity. Where extractive capacity is limited, governments cannot effectively implement progressive taxes; the sorts of taxes that effectively redistribute wealth can only be effectively imposed by powerful states. This means that, in terms of their desire for or fear of redistribution, social actors will be indifferent between democracy and dictatorship where the state is weak – a claim supported by the statistical analysis in the following section.

Taking taxation as the most salient and significant means by which wealth is redistributed, one can array a range of types of taxes in terms of the challenges they pose to states. Taxes vary in the challenges of finding assets, indentifying their owners, assessing value, and collecting payment – what Lieberman (2003: 51ff) describes as registering taxpayers, and calculating and collecting liabilities. Distinct tax types, therefore, require different levels of state extractive capacity. The variation in the ability of state officials to effectively collect taxes – in the extractive capacity of the state – is a function of its reach across territory, and its ability to penetrate society to implement its policies.

pension holders, and it therefore faces significant infrastructural challenges in its efforts to provide the legally mandated minimum pension to many retired workers.

⁹ Taxation is, of course, only one way in which wealth is redistributed. However, as discussed further below, more direct redistribution of wealth by means such as effective land reform or nationalisation of assets may require even greater extractive capacity than taxation.

Table 1 below shows a list of a variety of types of taxes, arrayed in terms of the territorial reach and intensity of penetration needed for their collection.¹⁰ This variation in the difficulty of collecting taxes of various types becomes relevant to the relationship between democracy and redistribution when the redistributive implications of these types of taxes are taken into account. Taxes on wealth and income, which have particularly high requirements in terms of extractive capacity, are the only types of taxes that tend to be progressive. The less capacity-intensive taxes listed higher in the table tend to be more regressive. Thus, a government that can only effectively generate revenue from consumption taxes, tribute, rents and indirect taxes – as do many governments in relatively ineffective states – will not be able to use taxation as a means of redistributing wealth. Where state infrastructural power is low, regime change does not permit newly democratic governments to carry out their intended policies of redistributing wealth.

The state's capacity to collect taxes places a constraint on the extent to which the willingness of a government to redistribute wealth can be translated into actual changes in inequality. When states are not powerful enough to collect the taxes listed in the bottom rows of Table 1, governments cannot effectively redistribute wealth via taxation. Thus, democracy should not be a threat to economic elites in these contexts, because redistribution via taxation is beyond the capacity of the state. And, without a strong state, democracy offers no benefits from redistribution to the poor, meaning that they have little reason to seek it. Where the state is weak, the implications of regime type for redistribution are muted, and thus the economic stakes of regime type are much smaller.

If most of the world's states could effectively redistribute wealth, this scope condition would not pose a significant challenge to the arguments for the economic origins of political institutions. In fact, however, many states, particularly historically but also in the contemporary world, are too weak to effectively redistribute wealth.¹¹ Many states fall closer to the skeletal ideal type defined by Lieberman as those states in which 'there is little to no bureaucracy, and the state is largely unable to tax those with significant resources' (Lieberman, 2003: 55). Statistical evidence below shows that where the

¹⁰ I make no claims that this is an exhaustive list of types of taxes, but it covers a wide range of the revenue sources of many states. This list is drawn from my broader research on the historical development of taxation in Latin America, and represents a complete list of major revenue sources of governments in that region.

¹¹ If the power of the state has grown steadily over time, as claimed by scholars ranging from Weber (1958) to Mann (1993) and Tilly (1992), then the test of the relationship between inequality and democracy on data from contemporary states is evaluating the theory in a set of cases where it is most likely to hold, because state capacity is particularly high. Care should be taken not to make unjustified generalisations to earlier periods in history where states were much weaker. This is a separate problem from that of oversampling developed countries (where state capacity is higher) in cross-national studies, and generalising to all countries in the world – an issue addressed in more detail below.

Table 1: State power required for collection of various revenue sources

Tax type	Requirements for assessment and collection	Intensity of state penetration	Territorial reach of state
Customs duties – imports	Customs inspection At port of entry; anti-smuggling measures	Low	Low
Customs duties – exports	Inspection at production site or port of exit; anti-smuggling measures	Low	Low
Monopoly production	Control of distribution to wholesalers; anti-smuggling measures	Low	Medium
Consumption taxes	Control of distribution to wholesalers; anti-smuggling measures	Low	Medium
Tolls and internal duties	Inspection sites on roads and rivers; anti-smuggling measures	Low	Medium
Sales taxes	Audit of bills of sale	Medium	Medium
Head taxes	Population census	Medium	High
Land area taxes*	Land survey	Medium	High
Income taxes*	Income data collection	High	High
Land value taxes*	Detailed land census	High	High
Tax on non-land wealth*	Detailed property census	High	High

*: progressive tax

state's capacity falls below a minimal threshold – when it lacks the territorial reach and societal penetration to assess and collect direct taxes effectively – the relationship between inequality and democracy diverges from the predictions derived by Boix and A&R under the assumption that government preferences can automatically be translated into policy outcomes. Before proceeding to the empirical evidence, two potential objections to the analysis must be addressed.

Is state capacity exogenous in the short run?

One might object that elites would still fear democracy, because they would expect that democrats would undertake to build the capacity to extract their wealth. Yet scholarship about the origins of state capacity shows that extractive capacity can be taken to be

exogenous, since it grows very slowly.¹² Particularly striking efforts to strengthen state power have occurred in the contexts of revolutions, yet even these have faced severe limitations (Colburn and Rahmato, 1992; Eckstein, 1988; Skocpol, 1979). These limits certainly exist in times of normal politics as well. Thus, we can assume that state capacity is invariant in the short run, and that the fears and hopes of redistribution that shape the preferences of social actors for democracy and dictatorship are mediated by their evaluation of the current strength of the state.¹³ Because the state's capacity cannot be increased overnight, actors rank their preferences for democracy and dictatorship and act accordingly, assuming that state strength will remain constant.

Prospects for direct redistribution – the case of land reform

States need not rely on taxes to redistribute wealth. The direct confiscation and redistribution of assets is another option available to governments seeking to reduce inequality. Land is a particularly propitious asset for redistribution. As both Boix (216) and A&R (303) argue, land is an immobile asset, and it can be redistributed with minimal economic distortion. Thus, in agrarian societies, it would appear that redistribution is a viable option, even when the state lacks the infrastructural power to effectively impose progressive taxation. Both Boix and A&R thus explain why landowners fear democracy more than industrial elites.

But for land reform, like taxation, to have an appreciable impact on inequality, it must be carried out by an effective state. Most efforts at land reform by governments representing the poor majority have failed to effectively redistribute the wealth of agrarian elites, or to benefit the poor majority. On this latter point, many studies show that land distribution tends to benefit better off segments of the peasant population while excluding the poorest of the rural poor. While political obstacles – such as the over-representation of landed elites in territorial legislatures, the corruption of bureaucrats, or the watering down of reform laws between passage and implementation – constrain the implementation of land reform, the historical record shows that land reforms enacted rarely achieve significant results. This is due, at least in part, to the weakness of the state: its inability to surmount the infrastructural obstacles to assessing the value of land, extracting it according to land reform law, and redistributing it. Additionally, for land reform to be effective, it must consist of more than the distribution of plots: programmes include seed distribution, credit provision, improvement of market access, and a variety of other elements that require the deployment of an effective infrastructure throughout

¹² Among many arguments to this effect, see the essays by Rueschemeyer and Evans in Lange and Rueschemeyer (2005).

¹³ The assumption here is that in deriving their preferences about regime types based on the prospects for redistribution, all social actors possess full information about the strength of the state. This assumption might be relaxed to complicate the account provided here.

the national territory. Finally, the state must have the coercive capacity to prevent local elites from suborning the reform process in their communities (Herring, 1979; O'Donnell, 1993).

The Peruvian experience of the 1960s illustrates this point particularly starkly, as two successive governments (one democratic and one authoritarian) sought and failed to redistribute wealth.¹⁴ The democratic Belaúnde government (1963–68) faced both political and infrastructural obstacles to the redistribution of wealth. Of the land defined as eligible under the land reform law passed by Congress, only three percent was redistributed. (Seligmann, 1995: 57) The government lacked the cadastral maps or land surveys that would generate the comprehensive title information necessary to assess the eligibility of particular swathes of land, and measurements of the size of landholdings.¹⁵ Thus, it was unable to implement even the limited reform that was pushed through Congress.

A striking accident of Peruvian history is that this failure brought to power an authoritarian government that sought to redistribute wealth.¹⁶ General Velasco led a coalition of military officers that seized power in 1968 with the explicit goal of overcoming the political obstacles that had hindered reforms under the previous democratic government. (McClintock and Lowenthal, 1983) Yet this regime too failed at land reform, stymied by the infrastructural obstacles that a weak state was unable to overcome. Land was distributed only to a small fraction of the highland peasants, excluding the poorest of the rural poor, and land concentration and inequality remained extremely high.

Rather than being an outlier, the Peruvian case is typical in demonstrating the high infrastructural obstacles to land reform. The same obstacles that limit the ability of the government to effectively tax wealth also prevent redistribution through other means. As Boix (216) points out, land reforms (whether following revolutions, or carried out by reformist governments) rarely result in significant redistribution of wealth. The few exceptions to this include South Korea, Indonesia and Taiwan, which had notably strong states in comparison to other developing countries, and the Indian state of Kerala, which

¹⁴ In the Babones (2008) inequality data used below, the maximum value for the Gini coefficient in the entire dataset is Peru 1960.

¹⁵ On the history of cadastral mapping and its uses for the delineation and valuation of property holdings, see Kain and Baigent (1992)

¹⁶ Note that the attempt by an authoritarian ruler to redistribute wealth is an event that neither Boix nor A&R would predict (Slater and Smith, 2008). However, the record in Latin America shows that authoritarians have redistributed more land than democratic governments (Albertus 2008).

has long been noted as an outlier, due to its redistributive policies.¹⁷ In general, then, land reform is not an effective means for the redistribution of wealth. Like direct taxation, it can only be effectively implemented where state capacity is sufficiently high.

Other forms of redistribution

In analytical terms, we can see that a wide range of government policies inflict even costs on societal actors. The wide array of policy instruments that redistribute wealth ranges from banking regulation to inflation (Meltzer and Richard, 1981). This suggests that, even where the state cannot effectively collect direct taxes on wealth and income nor expropriate assets, governments can still redistribute wealth. However, these other means of redistribution are less relevant to the story at hand, for two reasons.

First, taxation and asset expropriation are more direct means for the large-scale allocation of wealth. While other policies may have differential effects across the wealth distribution of the population, they do not in most cases have a significant impact on the distribution of wealth. Thus, the stakes of education spending are lower than over progressive taxation or land reform, because the potential costs and benefits are smaller.

Second, taxation and asset expropriation have a direct impact on wealth. Their salience is particularly high, which makes them a political issue, while the less transparent distributional consequences of other policies limits their political salience.¹⁸ Thus, fears and hopes about the impact of taxation are more likely to shape preferences about regime type than fears and hopes about nearly any other aspect of policy. The remainder of this paper, therefore, focuses on the state's extractive capacity as a scope condition for the effect of inequality and democracy.

¹⁷ Powelson and Stock (1990) claim that peasants benefited from land reform in only six of the 27 cases they studied. In addition to the four cited above, peasants gained from land reform in Paraguay and Bolivia. Yet neither case represented the effective redistribution of assets by the state. In Paraguay, peasants received vacant state land on the country's northern frontier rather than redistribution of land from agrarian elites. In Bolivia, land reform was less a state policy than the result of massive land invasions on the part of peasants during a moment of severe state crisis in the 1952 Revolution (Kohl, 1978).

¹⁸ Salience refers not to the effects of a policy, but to the visibility of those effects to voters (Pierson and Hacker 2005). The salience of redistributive efforts is taken for granted in the literature linking inequality and democracy. The effects on these models of incorporating variation in policy salience remains an area for future research.

3. Testing the relationship between inequality, democracy and state capacity

The argument elaborated thus far suggests that the effect of inequality on regime type should be conditional on state capacity. If this conditional relationship holds, the relationship between inequality and democracy should match the predictions of other scholars where the state's capacity is high. In contrast, where the state is weak, there should be no relationship between inequality and democracy. To test this prediction, I replicate one part of the analysis in Boix (2003), assessing the impact of inequality and asset mobility (along with a series of economic, social and cultural control variables) on regime outcome for a broad range of countries between 1950 and 1990, adding a measure of the power of the state. The predictions are summarised in Table 2.

Table 2: Predicted effects of state power and inequality on probability of democracy

	Weak state	Strong state
Low inequality	P (dem) unaffected by inequality	P (dem) high
High inequality		P (dem) low

Measuring state power

Although data on the types of taxes collected gives an assessment of the cross-national variation in the power of the state, this information cannot be used in studying the relationship between democracy and redistribution, because it also reflects the policy preferences of governments. In other words, the mix of tax types a government collects is endogenous to many characteristics of both the regime and the state. To avoid this problem of endogeneity, an exogenous measure of state power – one that is not affected by the type of regime – is needed.¹⁹ I use the national census as an independent measure of the ability of the state to collect complex information from the society within its borders. I expect that inequality will shape regime outcomes only where states regularly carry out a national census.

The census represents the ability of a state to collect detailed information from the residents of a national territory. As Centeno (2002: 10) writes, the execution of a census implies that 'government representatives not only have authority to ask sometimes difficult questions, but can also be protected from random violence while performing their tasks'. The census provides the state with the information necessary for the construction of tax registers, conscription rolls, and other forms of systematisation on the part of the

¹⁹ Measures of the difficulty of terrain are certainly exogenous from political dynamics, and are therefore at first glance appealing as proxies for state power. However, they are time-invariant, which contrasts with the fact that state power does change over time, if slowly. The relative merits of various measures of state power are discussed in Soifer (2008).

state. Put simply, the state that can carry out an effective census has the potential to impose taxes on its population.²⁰ Where a state can carry out such a census, the economic stakes of regime change are high. Where an effective census is not possible, redistribution is a more remote threat. As Jean Bodin wrote, the census 'provides for the just grievances of the poor against the rich' (cited in Alterman, 1969: 60).

Early efforts at a census, both in Europe and in newly independent former colonies, were often based on the aggregation of records in clerical registers over which the state had little oversight. They contained little information beyond the number of births and deaths per parish (Alterman, 1969; Ventresca, 1995). These were replaced (where census institutions developed) by the construction and deployment of a counting bureaucracy through the national territory (Desrosières, 1998). The infrastructural power needed to assess and collect taxes on wealth resulted from the introduction of a regular census along with cadastral maps that carried out an analogous process of data collection on land ownership (Kain and Baigent, 1992; Scott 1998).

This analysis uses the census as a proxy for the state's power to extract.²¹ Although the construction of cadastral maps might more accurately reflect the ability of the state to collect information about land and property wealth, systematic cross-national data on their construction is not available. Information on the census, however, is available. The United States Census Bureau has compiled information on every census conducted in the world from 1945 to 2005.²² Providing the year and the type of each census for nearly every country in the world, this dataset can be used to compile a measure of the effective reach of the state. To do so, I proceed as follows: first, I exclude every census described as 'urban', 'administrative', or 'sample', as well as all those described only as 'scheduled', since these censuses do not provide the government with systematic information about its population. This leaves two types of censuses in the sample: the standard census, as carried out in the United States and many other countries, and the rolling census, carried out on an annual basis for a portion of the population in a small set of countries, including Iceland, Sweden and Denmark.

²⁰ The ability to tax was one of the eight benefits of the census offered by medieval state theorist Jean Bodin. Others included the ability to ensure the defence of the country and population of its colonies, clarification of the legal status of individuals, and knowledge of the occupations and social ranks they held (Alterman, 1969: 60).

²¹ The case of Brazil, where, despite an effective and thorough census, the government's ability to collect taxes is limited, shows the imperfections of the use of the census as a measure of state extractive capacity. Nevertheless, the census provides a systematic, if imperfect, assessment of the ability of the state to collect costly information from society. I thank Zachary Elkins for bringing the example of Brazil to my attention.

²² This data is available at <http://www.census.gov/ipc/www/cendates> [accessed 24 April 1009].

Including only these two types of censuses, I build a list of every qualifying census event from 1945 to 2005, and use that list to construct a binary index for each country year that takes a value of '1' if a census has been carried out in the previous ten years, and '0' otherwise. This dummy variable, called *C10*, provides a simple indicator of whether the state's capacity exceeds some minimum threshold.²³ Information on the presence or absence of a census in the last ten years is available for every country-year in the dataset, which covers 7,495 country-years. Eighty percent of country-years in the sample are coded '1' for *C10*, meaning that there has been a census in that country in the previous decade.

The implementation of a census can be highly contested, particularly in countries where ethnic diversity makes census information politically sensitive. This concern is supported by the correlation of -0.1786 between *C10* and the measure of ethnic diversity included as a control variable. This is consonant with the finding of Alesina et al. (1999) that diversity has a negative effect on state capacity. Including various measures of ethnic and religious diversity in the analysis, however, controls for their impact.

Extending this reasoning about obstacles to census administration to the economic realm, we might think that, like policy choices about taxation, the choice to implement a census might be endogenous to the level of inequality. Specifically, we might expect that, as inequality increases, a census is less likely to be implemented. This is true, but the bivariate correlation is extremely weak: -0.05. Thus, there is little reason to be concerned with the possibility that the choice to administer a census is shaped by the level of inequality.²⁴

In examining the data on census administration by country in detail, we find several modal patterns. First, some countries, mainly but not exclusively in the developed world, have a value of one for *C10* for every year. A second, much smaller, group of countries has a value for every year, meaning that a census was never implemented in the period 1945–90. Many other countries introduce their first census midway through this period,

²³ Given the vagaries of census administration, this index contains some surprising variation. For example, the gap between 1970 and 1981 in census administration in Belgium leads the year 1980 to be coded a '0', while all other years between 1961 and 1990 are coded '1'. To smooth the data and capture a longer-term sense of the power of the state, I build a second measure, which assesses whether there have been at least two qualifying census events in the previous 25 years. Using this second measure does not change any of the substantive findings, but it covers nearly 2300 fewer country-years. All results discussed in the remainder of the paper use the ten-year measure. Results for the 25-year measure are available from the author.

²⁴ The fact that domestic factors have a muted impact on the implementation of the census are consonant with the findings of Ventresca (1995) that international factors are central in explaining the dynamics of census administration.

and then continue to carry out a census relatively effectively thereafter. Only in rare cases do countries display long periods of ineffective administration in between censuses.²⁵ Thus, only a small number of countries (Bolivia, for example) switch back and forth between being coded as strong and weak states. This is consonant with the claim (defended above) that state strength changes relatively slowly.

Data and method

The empirical approach taken in this paper is as follows: I begin by replicating one set of the results in Boix (2003), Table 1, which show his basic finding that inequality shapes regime outcomes, controlling for a variety of cultural and economic factors.²⁶ The dependent variable in this analysis is a dichotomous measure of regime type, where a value of '1' is given to democracies and '0' to non-democracies. Democracies are those cases that satisfy Przeworski' et al.'s (2000) definition: where multiparty elections for the legislature and (directly or indirectly) for the executive are held, and where at least 50 percent of adult males have the right to vote.

Two measures of inequality are used in the analysis. The first, used in Boix (2003), is based on Deininger and Squire (1996). Following Boix, I use a five-year moving average of the *Adjusted Gini* coefficient in the analysis to increase the number of observations to 1,272. More than 20 annual observations are available for 27 countries, while 38 countries have data for six to 19 years. Nineteen countries have five or fewer observations, and the remainder of countries have no data whatsoever in the adjusted Deininger and Squire measure.

A second measure of inequality is drawn from SIDD-3, the Standardised Income Distribution Database (Babones and Alvarez-Rivadulla, 2007).²⁷ The advantage of this measure (referred to below as *SIDD*) is its broader coverage: data is available for 5,559 country-years between 1950 and 1990. Full coverage of all years is provided for 112 countries, and of these the data for 49 countries display variance in inequality during the time period. The mean of *SIDD* is 45.1265, while the mean of the *Adjusted Gini* is 41.1858. The correlation between the two measures of inequality is 0.865, and the

²⁵ Of course, in many cases a gap larger than ten years appears between census iterations, for example when a census is delayed, as was nearly the case in the United States in 2000 (Hillygus et al., 2006). Rarer, however, are cases in which two consecutive census iterations are implemented and followed by several decades without a census.

²⁶ I thank Carles Boix for generously providing his dataset for replication.

²⁷ The dataset is available for download from <http://salvatorebabones.com> [accessed 24 April 2009]. I use the 'suggested best fit' measure in the analysis below.

standard deviation, minimum, and maximum of the two datasets is very similar, suggesting that the distributions of the two measures of inequality take a broadly similar shape (see Table 3).

In addition to the core variables in the analysis (inequality, state strength and regime outcomes), a series of control variables is also included. Table 3 shows the descriptive statistics for each of these variables. These include:

- (1) The share of GDP derived from agriculture, which Boix uses as a proxy for asset specificity. This measure is derived from World Bank data, and covers the period 1970–90.
- (2) Religious variables: the percentage of the population of each country that are Catholic, Protestant and Muslim, and a Hirsch-Herfindahl index of fractionalisation of religious affiliation. The original data are drawn from La Porta et al. (1998) and are time-invariant.
- (3) A measure of ethnic fractionalisation, drawn from La Porta et al. (1998) as well, and also time-invariant.
- (4) A lagged measure of GDP growth.

To test whether inequality's effect on regime outcomes is conditional on state power, I proceed in several steps. I begin by replicating the broadest, simplest analysis of the relationship between inequality and regime outcomes in Boix (2003). I then add the census variable that captures the minimal level of state power, and perform three types of analyses to test whether it conditions the underlying relationship between inequality and state power:

- (1) an analysis of the interaction between inequality and state power;
- (2) an alternate specification (binary time-series cross-sectional analysis) designed to account in a different way for the time dependence inherent in analysis of regime dynamics; and
- (3) a split sample analysis that looks for different relationships between inequality and regime outcomes in strong and weak states.

In performing each of these analyses, I employ both the Deininger and Squire (1996) data, and the SID3 data.

The functional form used in the analysis is the dynamic probit model (also known as a Markov probit regression), which has become the standard technique for studying the determinants of regime change since it was applied to this question by Przeworski et al. (2000). The advantage of the dynamic probit is that it allows independent variables to

Table 3: Variables, sources and descriptive statistics

Concept	Variable name	Source	N	Mean	Standard deviation	Min	Max
Regime type	Reg	Boix and Rosato (2001)	5740	0.301	0.459	0	1
Inequality	Gini	Deiningner and Squire (1996)	1272	41.186	9.75	19.69	66.43
	SIDD	Babones (2008)	5559	45.127	9.341	17.06	65.68
Religious affiliation	Cath	La Porta et al. (1998)	7300	33.71	36.10	0	97.3
	Prot		7300	14.77	22.19	0	97.8
	Musl		7300	22.6	35.73	0	99.8
	Relfract		7300	0.665	0.240	0.263	0.996
Ethnic diversity	Ethdiv	La Porta et al. (1998)	6900	0.352	0.307	0	1
Economic growth	Growth	Boix (2003)	4579	0.022	0.071	-0.474	1.897
State strength	C10	US Census Bureau	7495	0.800	0.400	0	1

affect both the pre-existing regime outcome and the probability of transition in any given year. For example, the extent of inequality is allowed to shape the probability that democracy exists, as well as the probability that it will persist or collapse in a given year. The dynamic probit does so by generating two sets of coefficients for each independent variable. The beta coefficient is the effect of the variable on the probability of transition, and the alpha variable, generated by lagging both independent and dependent variables by a year, is the effect of the independent variable on the probability of democracy existing in the previous year. As Boix (81) writes, the sum of the alpha and beta coefficients indicates the probability that an already democratic regime will not break down.²⁸

Results

Table 4 (below) shows Boix's results in the left two columns, and my replication in the middle two columns. The first thing to note in comparing the two analyses is that mine has 29 more cases included – about four percent. Although all of the coefficients (and

²⁸ To determine whether the summed coefficient is significantly different from zero, a Wald test of the hypothesis [$\alpha + \beta = 0$] must be performed. See Epstein et al. (2006).

the relative size of the standard errors) are strikingly similar, the beta values for the constant and for inequality fall slightly below the $P < .05$ threshold in my replication, whereas they surpass the five percent threshold in the original analysis.²⁹ In both analyses, inequality has a significant and negative effect on the probability of democratic transition, and is more conducive to authoritarian coups. The former result is apparent from the negative beta coefficient on inequality, and is replicated, though with slightly

Table 4: Replication of Boix, and re-analysis with SIDD data.

Variable	Boix results		Boix replicated		SIDD replication	
	Beta	Alpha	Beta	Alpha	Beta	Alpha
Constant	-2.526** (1.238)	-16.628* (9.911)	-2.395* (1.255)	-15.875* (8.706)	-1.341** (0.654)	3.271** (1.09)
Gini	-0.035** (0.017)	-0.223 (0.18)	-0.038 (0.022)	-0.223 (0.15)		
SIDD					-0.037** (0.0998)	0.037* (0.021)
Agriculture as % of GDP	0.000 (0.014)	-0.351** (0.141)	0.003 (0.012)	-0.344** (0.130)	-0.005 (0.006)	-0.015 (0.013)
Catholic % of population	0.007 (0.005)	0.066* (0.039)	0.007 (0.005)	0.065* (0.033)	0.0061* (0.0032)	-0.008 (0.006)
Protestant % of population	0.026 (0.034)	1.025 (0.808)	0.024 (0.032)	1.048 (0.797)	0.001 (0.0013)	0.009 (0.015)
Muslim % of population	0.002 (0.005)	1.530** (0.716)	0.003 (0.005)	1.489** (0.746)	-0.002 (0.004)	-0.006 (0.007)
Religious fractionalisation	2.251* (1.337)	35.820** (16.918)	2.167** (1.071)	34.876** (15.891)	1.344** (0.567)	-0.436 (0.908)
Ethnic division	0.518 (0.678)	-2.740 (4.984)	0.492 (0.807)	-2.771 (5.228)	0.391 (0.366)	-0.943 (0.654)
Growth rate (lag)	0.045 (0.046)	-0.015 (0.090)	-2.739 (2.079)	2.750 (7.228)	-1.879 (1.208)	8.136** (2.026)
Log-likelihood	-53.441		-53.820		-174.606	
P>chi square	0.0000		0.0000		0.0000	
Pseudo R sq.	0.8923		0.8967		0.8522	
# obs.	733		762		1748	

*: $p < .10$

** : $p < .05$

Dynamic probit model, robust standard errors.

²⁹ Additionally, in my replication, the beta coefficient for religious fractionalisation surpasses the 5percent threshold, while it is only significant at the 10 percent level for Boix.

less significance, in my analysis. The second finding – the effect of inequality on the probability of authoritarian coups – is determined by summing the alpha and beta coefficients and carrying out a Wald test on the hypothesis of whether this sum is significantly different from zero. In both Boix's original analysis and my replication, higher levels of inequality make democratic regimes significantly more likely to fall victim to authoritarian coups.

Replication with SIDD data

Before considering how state strength conditions the effect of inequality on democracy, one limitation of the Boix analysis must be considered. While many of the other independent variables provide very full coverage of the range of country/years in the dataset, the Deininger and Squire (1996) inequality data on which his analysis draws do not. As a result, of the 5,740 observations covered by the dependent variable, the analysis conducted by Boix only includes 1,272. This would not be a concern if the listwise deletion of missing cases was random. But instead of random listwise deletion, the Deininger and Squire inequality data is far more likely to cover cases where the state has a minimum level of strength.³⁰ While 80 percent of the country/years in the full dataset are coded '1' for having had a census in the past ten years, 94 percent of the cases in Boix's analysis are drawn from that group. In other words, the results above are based on an oversampling of cases where the state exercises some minimal level of power, and a tendency to exclude cases where the state is weak. This would be acceptable were the conclusions drawn from the analysis qualified in the breadth of their applicability, but Boix (like many other scholars of cross-national political economy) instead makes general claims from data that oversamples strong states.

To correct this, I first draw on new inequality data – the *SIDD* data described above – that have much broader coverage. The results of replicating Boix's analysis with this new data show that we should be cautious about expecting causal homogeneity across strong and weak states: only some of the central findings of the analysis replicated above hold up when a broader sample of states is considered. Boix (2003: 76, footnote 9) dismisses an earlier version of this data, claiming that it includes few data points based on studies of the full population that are not already included in the Deininger and Squire (1996) data he uses. Babones and Alvarez-Rivadulla (2007), however, describe the SIDD data as a vast improvement over the dataset to which Boix refers. The results of all the analyses below are robust to both specifications of inequality, but the vast increase in coverage, particularly of cases with weak states, justifies the use of the SIDD data.

The rightmost two columns of Table 4 (above) show the replication of Boix's analysis with the SIDD data. The new measure of inequality has striking effects on the results,

³⁰ As Herrera and Kapur (2007) show, this pattern is not unique to this particular dataset.

most likely because it increases the number of observations by nearly 1,000. Many of the results of Boix's analysis, which were successfully replicated in my study, are changed with the new inequality data. Most notably, the alpha coefficient on inequality is positive and significant in the SIDD analysis. This means that while inequality has (as in Boix) a negative and significant effect on the probability of transition to democracy, it has a positive and significant (at the 90 percent level) effect on the probability that a given country/year starts with a democratic regime. The effect of inequality on the probability of an authoritarian coup, calculated from a Wald test of the sum the alpha and beta coefficients on inequality, is not significantly different from zero. This is a sharp difference from Boix's finding, and suggests that adding nearly 1,000 cases, most of which are countries in the developing world, affects the relationship between inequality and regime type.

State strength, inequality and regime dynamics

The theoretical discussion above suggested that state strength should be expected to condition the effect of inequality on regime dynamics. Only where the state is powerful enough to put into effect the median voter's redistributive preferences should we find that inequality will make democratic transition less likely and democracy less stable. Perhaps the fact that the SIDD data added many countries with weak states to the analysis explains why the results changed so sharply. To confirm this possibility, the next step in the analysis is to add *C10*, the variable for state strength. In addition to this binary proxy for state strength, I add a variable interacting each measure of inequality with the binary census variable. Because of the full coverage of the census variable, the number of cases does not change.³¹

The results for the analyses that incorporate state strength are shown in Table 5, below. The left two columns show the results using Boix's measure of inequality; the right two columns the results with the SIDD inequality measure.

The first thing to note is in the comparison of Tables 4 and 5: adding the variables intended to capture state power minimally changes any of the other results in the analysis. The interaction of census and inequality has a negative and significant effect on the probability of transition to democracy. But to assess the relationship between inequality and democratic transition, we cannot draw any conclusions from these regression results. As Braumoeller (2004) shows, the coefficients cannot be interpreted directly. Instead, it is more useful to graph the effect of inequality on the probability of transition in the presence and absence of the census.

³¹ To properly model the interaction, the census variable itself must be added to the regression, as well as the interaction of census and lagged regime (which must be added because inequality is interacted with the lagged regime variable). The latter interaction is included in the results as the alpha value for the census.

Table 5: State strength, inequality and regime dynamics

Variable	With Boix data		With SIDD data	
	Beta	Alpha	Beta	Alpha
Constant	-13.001** (4.398)	-38.020* (19.528)	-3.333** (1.501)	3.020** (1.206)
Gini	0.162** (0.078)	-0.254* (0.132)	0.006 (0.278)	0.036* (0.021)
Agriculture as % of GDP	-0.002 (0.115)	-0.411** (0.140)	-0.004 (0.007)	-0.013 (0.013)
Catholic % of population	0.007 (0.005)	0.123* (0.066)	0.0057* (0.0032)	-0.006 (0.006)
Protestant % of population	0.020 (0.032)	1.526** (0.656)	-0.001 (0.012)	0.011 (0.015)
Muslim % of population	0.004 (0.005)	2.541** (1.219)	-0.003 (0.004)	-0.004 (0.007)
Religious fractionalisation	2.066* (1.107)	54.406** (24.900)	1.361** (0.572)	-0.830 (0.880)
Ethnic division	0.586 (0.879)	-10.875 (7.608)	0.405 (0.374)	-0.969 (0.660)
Growth rate (lag)	-4.079* (2.440)	1.710 (9.232)	-2.070* (1.259)	7.432** (1.840)
Census	11.191** (4.309)	5.256** (2.281)	2.246 (1.398)	0.483 (0.450)
Census*Gini	-0.210** (0.082)	----		
Census*SIDD			-0.048* (0.029)	
Log-likelihood	-49.711		-171.476	
P>chi square	0.0000		0.0000	
Pseudo R sq.	0.9046		0.8548	
# obs.	762		1748	

*: p<.10

**: p<.05

Dynamic probit model, robust standard errors.

Figure 1 shows that state strength conditions the relationship between the Gini coefficient and democracy. With 90 percent confidence intervals around the estimates, we see that where the state is strong, Boix's predicted result holds up: inequality has a negative effect on the probability of democratic transition. Where there is no census, however, the effect of inequality on the probability of democratic transition is – surprisingly – positive and significant. Where the state is weak, inequality seems to make

democratic transition more likely.³² This effect would be more compelling if the number of cases without a census were larger, but data on other independent variables, including the Gini measure, is only available for a limited number of country/years. Indeed, with the larger samples below, this positive relationship is not robust.

Figure 1:

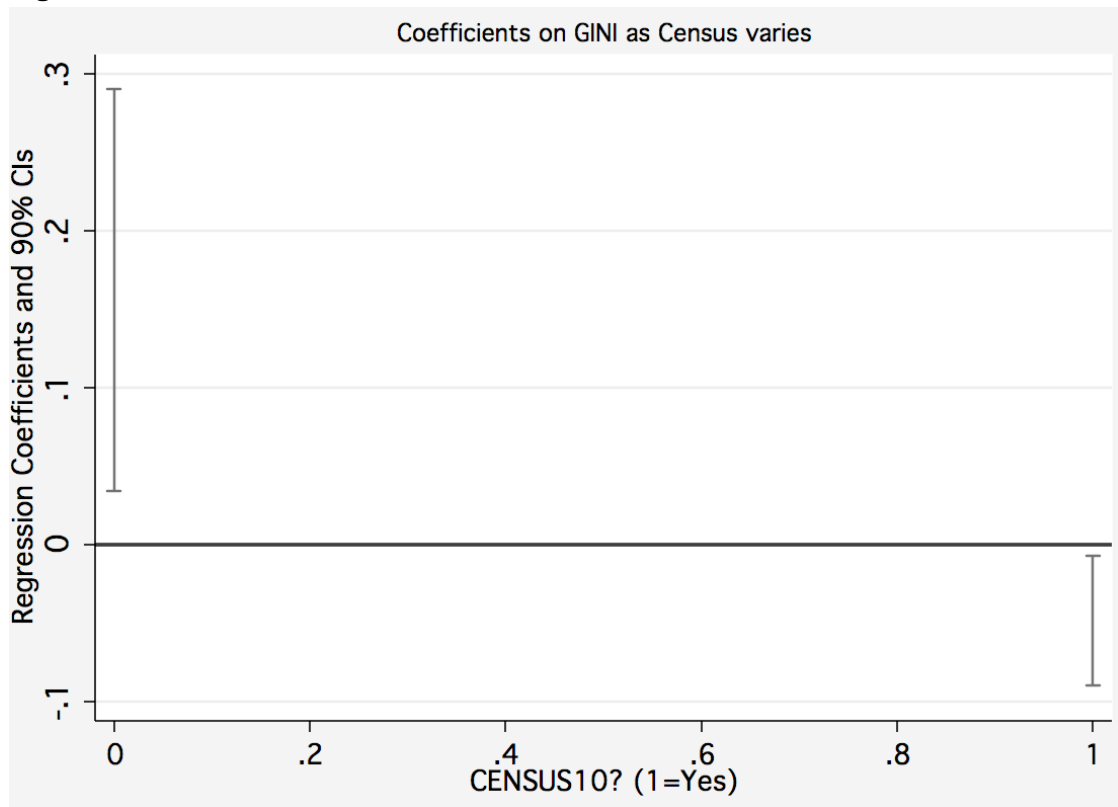
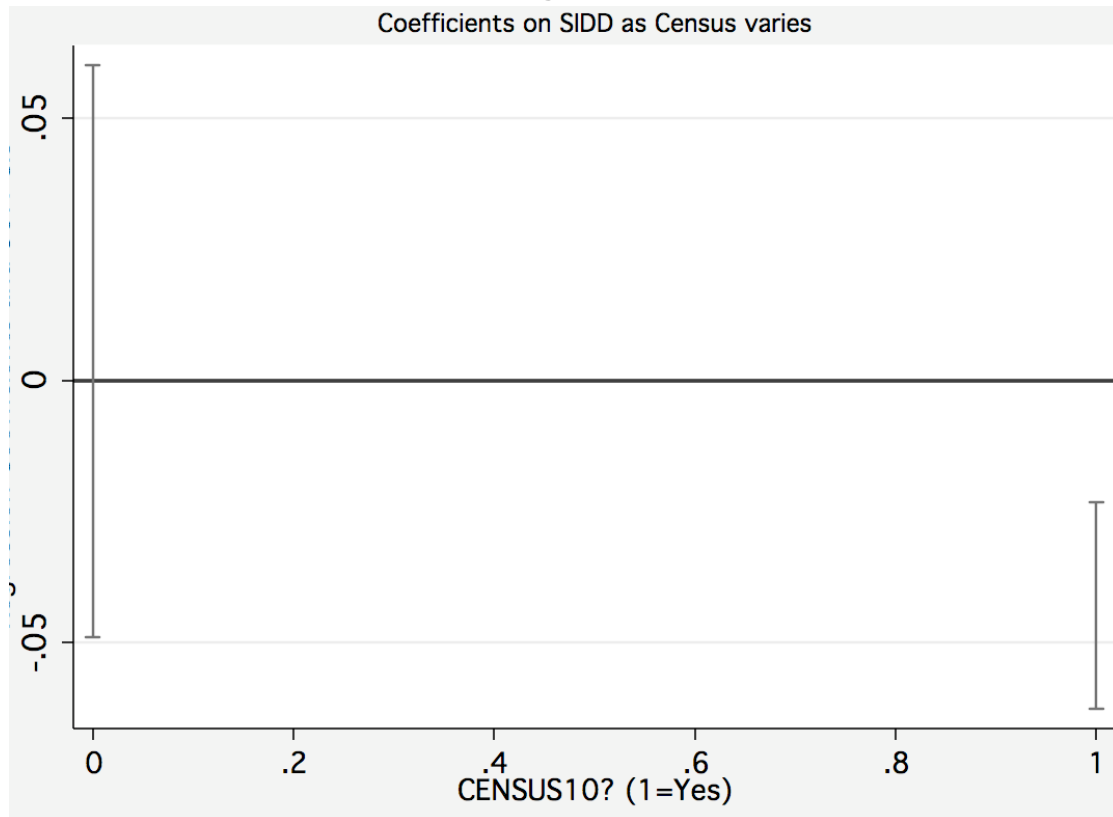


Figure 2 below shows the results generated from the regression in the rightmost columns of Table 5; the analysis with the SIDD data. Here we have a much larger number of cases with weak states included, and the results match my predictions. On the right, we see that where the state is strong, inequality has a negative and significant effect on the probability of democratic transition, as Boix found. On the left side, however, we see that inequality has no effect on the probability of democratic transition where the state is weak.

³² This relationship is also significant with 95 percent confidence intervals, but at that level, the relationship between inequality and democratic transition cannot be confirmed to be different from zero.

Figure 2

Coefficients on SIDD as Census varies



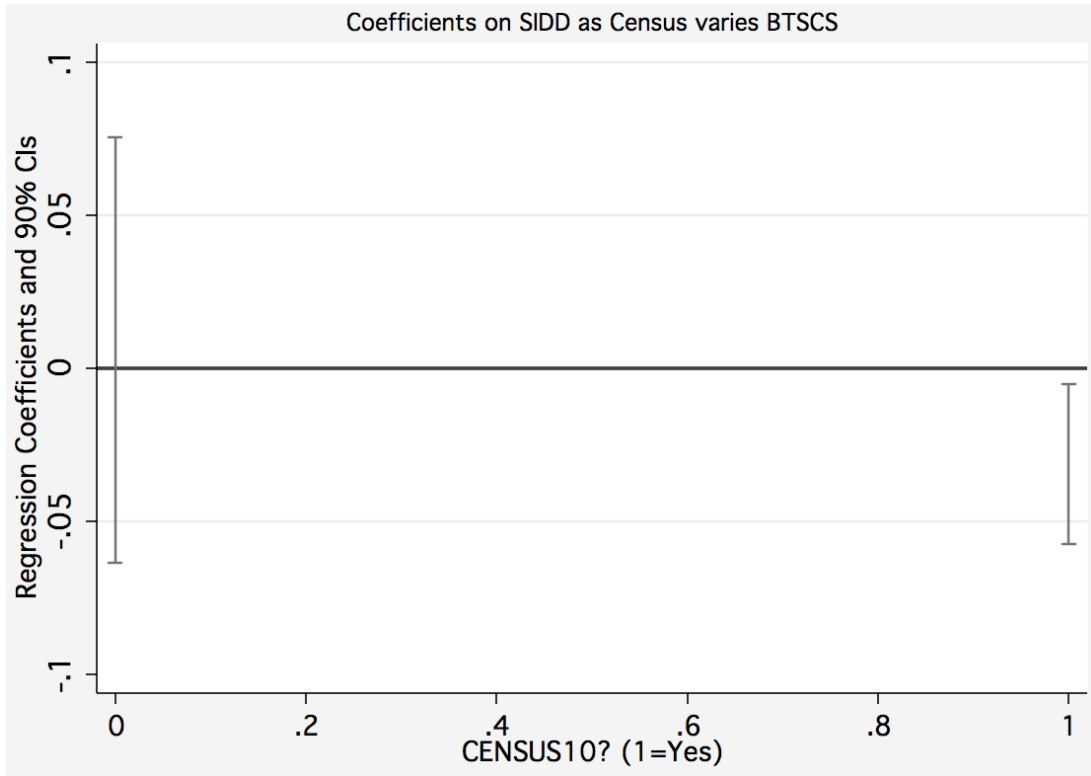
Thus, using both measures of inequality, I find that the relationship between inequality and democracy is conditioned by the presence or absence of a census. Where the census is present – where the state has a minimum degree of capacity – inequality has the expected negative effect on the probability of democratic transition. But where the state is weak, the relationship between inequality and democracy diverges from what Boix predicts.

Alternative model specification

To confirm these findings, I repeated the analysis using the Beck, Katz and Tucker (1998) approach to time-dependent binary TSCS data. Examining the effect of the census on the relationship between inequality and democracy in this approach, I once again find results that challenge the generalisability of Boix's claims (see Table 6). In the cases coded as strong states, the Gini coefficient has a negative effect on the probability of democratic transition, but in the absence of a census, it has no significant effect (see Figure 3). To get a sense of the size of the effects where the state is strong, a decrease in inequality from its maximum to the mean increases the probability of democratic transition by 26 percent (with a standard error of 12 percent). In the sample of weak states, the same decrease in inequality has an insignificant effect on the probability of

democratic transition, increasing it by seven percent with a standard error of 39 percent.³³

Figure 3



A final analysis was conducted by splitting the sample into strong and weak states. Using the SIDD data for inequality, sufficient cases were available to make this analysis possible. The results are shown in Table 7, below. The left two columns contain the data for country-years where *C10* is coded as zero; the right columns where the state has a minimum level of strength. We see that the coefficients on inequality are only significant on the right; where the state is minimally strong. Where the state is weak, inequality has no effect on regime change or regime stability. The economic origins of democracy and dictatorship are limited to cases where the state is minimally strong.

³³ These results were obtained using CLARIFY for Stata (Tomz et al., 2001; King et al., 2000). Attempts to generate predicted values from the dynamic probit model were complicated by the multiple interaction terms that the model contains, rendering extremely small predicted effects of inequality under both strong and weak states. These results refer to analyses run with the Adjusted Gini measure of inequality. Table 6 also shows the results with the SIDD measure of inequality. In both cases, the finding is that that the negative impact of inequality on the prospects of democratic transition is limited to cases where the state is strong. This effect is nearly identical in size to that of asset mobility.

Table 6: Predicted values, BTSCS analysis: Effect of inequality on democracy

	Weak state	Strong state
Boix inequality dData	P (dem) unaffected by inequality – as inequality increases from its mean to the maximum value, P(dem) falls by seven percent with a standard error of 39%.	P (dem) falls with inequality – as inequality increases from its mean to the maximum value, P(dem) falls by 26% with a standard error of 12%.
SIDD data	P (dem) unaffected by inequality – as inequality increases from its mean to the maximum value, P(dem) falls by 20.7% with a standard error of 18.8%.	P (dem) falls with inequality - as inequality increases from its mean to the maximum value, P(dem) falls by 15.4% with a standard error of 4.3%.

Table 7: Split sample analysis

	Boix replication with weak state		Boix replication with minimally strong state	
	Beta	Alpha	Beta	Alpha
Constant	-6.238 (5.174)	13.612 (8.424)	-1.105 (0.692)	3.679** (1.218)
SIDD	0.016 (0.052)	-0.099 (0.116)	-0.045** (0.011)	0.042* (0.023)
Agriculture as % of GDP	-0.011 (0.017)	-0.104 (0.068)	-0.004 (0.007)	-0.005 (0.015)
Catholic %	0.090 (0.063)	-0.575** (0.271)	0.005 (0.003)	-0.006 (0.006)
Protestant %	0.044 (0.047)	-0.075 (0.082)	-0.0009 (0.016)	0.010 (0.017)
Muslim %	0.079 (0.062)	-0.370** (0.188)	-0.003 (0.004)	-0.005 (0.007)
Religious fractionalisation	-4.629* (2.730)	57.596** (25.181)	1.530** (0.631)	-1.336 (0.960)
Ethnic division	-0.316 (0.860)	3.105 (2.187)	0.418 (0.418)	-1.502** (0.741)
Growth rate	0.643 (1.262)	-1.490 (5.669)	-2.578* (1.410)	8.411** (1.973)
Log-likelihood	-20.4204		-145.1634	
P>chi square	0.0000		0.0000	
Pseudo R sq.	0.7847		0.8638	
# obs	189		1559	

4. Discussion and implications

The findings of this paper suggest that the stakes of the regime outcome are much higher when the state is able to enforce and administer the policies chosen by its leaders. On the other hand, where the state is weak, the rules governing access to power – and the policies that those rules produce – have little effect on the distribution of wealth.

To understand this, a framework developed by Guillermo O'Donnell (1993) is useful. O'Donnell has suggested that the national maps of many countries can be coloured depending on the extent to which the state is capable of enforcing the rule of law. Using this rubric, we can identify regions of many countries – and indeed entire countries – in which the formal rules of politics are irrelevant to *de facto* political outcomes. Discussing the impact of the limited reach of the state on democracy, O'Donnell argues that the attention paid to regime change at the national level is only appropriate if the state's reach spreads through the national territory. To focus our attention on changes in the formal rules of politics is to assume that those rules are enforced by a state that reaches through society and territory to implement the policies chosen by its leaders. But where the state is weak – where, for example, it is unable to administer a census – changes in the formal rules of politics may have little or no effect on economic and social inequalities at the local and regional level. Where the state is weak, the rules handed down by new democratic governments are diluted, or simply flouted, by economic elites.

This reality of policymaking in a weak state context might underlie the fact that inequality has no negative effect on the prospects for democracy in weak states. In this view, elites would be willing to tolerate transitions to democracy as a means of defusing opposition, knowing that the laws introduced by the new democratic governments would have little effect on their economic standing.³⁴ In this way, the inability of the state to touch the wealth of elites does not rest on the mobility of their assets, but on the weakness of the state.³⁵ Elite assets in Peru (where the 2005 census was so ineffective that a new iteration was ordered), for example, need not be mobile to be safe from tax collectors. While O'Donnell argued that the *quality* of democracy depends on the strength of the

³⁴ The pressure for democratisation could also, of course, be external. (Huntington, 1991)

³⁵ Hagopian (1990) argues that the ability of regime-associated elites to maintain their hold on political positions after the transition to democracy might also underlie their surprising willingness to accept regime change. This mechanism is distinct from the role of weak enforcement emphasised in this paper.

state, the evidence presented in this paper suggests the possibility that the *emergence* of democracy does as well.³⁶

This discussion provides a plausible logical account in which state weakness makes elites less concerned about the type of regime instituted. But what about the masses? A&R are right to point out that the preferences of the masses about the regime that rules them are shaped by the economic benefits that they hope to obtain from redistribution. The argument presented in this paper would predict that when the state is weak, the poor masses will expect the gains from democratisation to be lower, and be less likely, all else equal, to push for democratisation. Two aspects of broad patterns of political and social conflict support this claim.

First, in a weak state context, rather than seeking political reform as a means of improving their economic conditions, poor sectors of society often resort to direct action. We can see this by looking at patterns of rural social conflict in Latin America. Across the region, inequality of landholding is very high. Yet the rural poor seek to change this pattern using distinct strategies that vary depending on the strength of the state. In countries with relatively effective states, like Chile and Mexico, peasants have organised to play a role in politics and seek to change legislation and pursue its enforcement (Loveman, 1976; Wright, 1982). Most significantly, the expansion of suffrage and political participation in both countries cannot be understood without attention to rural social relations (Knight, 1986; Baland and Robinson, 2006). On the other hand, where the state is weak, as in Peru, Bolivia or Brazil, peasants have relied heavily on direct action, in the form of land invasions. Rather than seeking to change legislation by gaining access to political power, and then seeking to enforce newly acquired rights, peasants take redistribution into their own hands (Hidalgo et al., 2007; Kohl, 1978; Seligmann, 1995). Thus, inequality is more likely to lead to pressures from the poor for political change when the poor expect that political change will lead to economic change. Where the state is weak, inequality is more often redressed through means that do not involve the formal political arena.³⁷

Second, we can consider patterns of revolutionary change. Both Boix and A&R claim that revolutions fit into their framework, arguing that they occur when the economic gains from regime change for the masses are high, and elite resistance is also high. However, most scholarship on revolutions sees grievances as insufficient to produce revolutions. Skocpol (1979) has made this claim most stridently, dismissing any intentional role for the lower classes in the causes of revolutions. While peasant revolts play a role in

³⁶ A related but distinct claim is common in the literature on state formation, where many argue that social actors are only willing to accept increased state capacity if access to political power is offered in return. See for example Tilly (1992) and Levi (1988).

³⁷ On the lack of a relationship between democracy and redistribution in Latin America, see Menaldo (2008).

causing revolutions, she argues (and most subsequent scholarship agrees) that peasants were not seeking change in political institutions. Instead, peasant revolts are intended to change local economic conditions, and only contribute to revolutions where other factors are present – most notably, where state capacity is low. Revolutions, Skocpol argues, are fundamentally determined by political rather than economic factors. Thus, even the most striking examples of political transformation that affect weak states are not shaped by economic factors.

Like the preliminary claims about elites above, these claims require much more investigation. Nevertheless, anecdotal evidence based on broad trends suggests that where the state is weak, elites do not fear democratisation, and the masses do not seek it. This fits with the statistical finding of this paper that the predicted effect of inequality on democracy is only significant where the state is strong. This finding has both empirical and methodological implications, and I close the paper by highlighting these.

An empirical implication of this finding is relevant to recent scholarship that has begun to explore the striking anomaly of Latin America, a region in which the level of democracy is far greater than would be expected, given its economic characteristics, and in particular its level of inequality. Mainwaring and Pérez-Liñan, 2003; Hunter, 2008) Research seeking to explain the high inequality in the region – and its persistence despite the increasing prevalence of democracy – has focused on the weakness of the state as a crucial factor. Hoffman and Centeno (2003: 366) identify the disproportionate wealth of the top decile as what ‘sets Latin America apart’. They link the persistent skewing of wealth distribution to state weakness, arguing that only ‘where political authority and bureaucratic systems have been better established, the capacity of those on the bottom to insist on greater welfare measures will increase’ (Hoffman and Centeno, 2003: 383). Where the state is weak, then, Hoffman and Centeno find that despite democratisation, elites continue to hold onto a disproportionate share of wealth. This finding fits well with the claim of this paper, that with a weak state, democratisation poses no economic threat to elites. More systematic investigation of the politics of redistribution in Latin America will confirm whether the emergence and survival of democracy in the region depends on state weakness.

Beyond the avenues of empirical research opened by relaxing the assumption of state strength, the evidence presented in this paper also has implications for the cross-national study of institutional outcomes. Too often, the generalisability of claims is overstated. Many theories are developed with the assumption that state strength is ubiquitous. But these theories ignore the fact that preferences about institutional choice are shaped by expectations about the extent to which those institutions can shape outcomes. One example of the (rare) research that explicitly explores this issue is Mares (2005), who shows that the strength of state institutions affects the preference of workers for social insurance. Workers in high risk sectors, who will benefit from the introduction of

social insurance, will only support its introduction if they believe that the state can enforce the collection of contributions from the low-risk sectors that are net contributors. In the presence of a weak state, on the other hand, high risk workers are more likely to oppose the introduction of redistributive social policy. Thus, she finds that: 'the impact of external risk on the development of institutions of social protection is conditional on the efficiency of state institutions' (Mares, 2005: 630). The crucial insight here is that workers do not assume that the state will be able to enforce the collection of social insurance from net contributors. Instead, they weigh the chances that the state will be able to do so, in deciding whether or not to support a policy which *de jure* should benefit them. Choices about formal institutions, then, are shown to be shaped by the expectations of societal actors about whether the state can enforce the institutional rules.

The enforcement capability of the state is an unexplored scope condition in much formal institutional analysis, since the preferences and strategic choices of actors, as Mares shows, diverge greatly as state strength varies. Just as this paper has revealed that the relationship between inequality and regime outcomes takes an unexpected form when the state is weak, the potential exists for similar findings from a re-examination of other theories which are cornerstones of the cross-national study of political institutions. The response must be more careful theoretical development, that identifies these scope conditions and develops more bounded theories of the dynamics of political institutions and regimes.

Bibliography

- Acemoglu, D. and Robinson, J.A. (2000). 'Why did the West extend the franchise? Growth, inequality, and democracy in historical perspective'. *Quarterly Journal of Economics* 115, 1167-1199.
- Acemoglu, D. and Robinson, J.A. (2001). 'A theory of political transitions'. *American Economic Review* 91, 938-963.
- Acemoglu, D. and Robinson, J.A. (2006). *Economic Origins of Dictatorship and Democracy*. Cambridge, UK: Cambridge University Press.
- Albertus, M. (2008). 'Democracy and the threat of redistribution in Latin America'. Unpublished paper. Stanford, CA: Stanford University.
- Alesina, A., Baqir, R. and Easterly, W. (1999). 'Public goods and ethnic divisions'. *Quarterly Journal of Economics* 114(4), 1243-1284.
- Alterman, H. (1969). *Counting People: The Census in History*. New York: Harcourt, Brace and World.
- Ansell, B. W. and Samuels, D. (2008). 'Inequality and democratisation'. Paper presented at Midwest Political Science Association, Chicago IL.
- Babones, S. J. (2008). *Standardized Income Distribution Database Version 3*. Available at <http://salvatorebabones.com/> [accessed 11 December 2008].
- Babones, S.J. and Alvarez-Rivadulla, M.J. (2007). 'Standardized income inequality data for use in cross-national research'. *Sociological Inquiry* 77(1), 3-22.
- Baland, J.-M. and Robinson, J. (2006). 'Land and power: Theory and evidence from Chile'. *National Bureau of Economic Research Working Paper 12517*.
- Beck, N., Katz, J.N. and Tucker, R. (1998). 'Taking time seriously: Time series cross section analysis with a binary dependent variable'. *American Journal of Political Science* 42(4), 1260-1288.
- Bellin, E. (2004). 'The robustness of authoritarianism in the Middle East in comparative perspective'. *Comparative Politics* 36(2), 139-157.
- Boix, C. (2003). *Democracy and Redistribution* Cambridge, UK: Cambridge University Press.

Boix, C. and Rosato, S. (2001). 'A complete data set of political regimes, 1800-1999'. Department of Political Science, University of Chicago, Chicago, IL.

Braumoeller, B. (2004). 'Hypothesis testing and multiplicative interaction terms'. *International Organization* 58, 807-820.

Centeno, M.A. (2002). *Blood and Debt: War and the Nation State in Latin America* University Park, PA: Penn State University Press.

Colburn, F.D. and Rahmato, D. (1992). 'Rethinking socialism in the Third World'. *Third World Quarterly* 13(1), 159-172.

Dahl, R. (1971). *Polyarchy: Participation and Opposition* New Haven, CT: Yale University Press.

Deininger, K. and Squire, L. (1996). 'A new data set measuring income inequality'. *The World Bank Economic Review* 10(3), 565-591.

Desrosières, A. (1998). *The Politics of Large Numbers: A History of Statistical Reasoning*. Cambridge, MA: Harvard University Press.

Eckstein, S. (1988). *The Poverty of Revolution: The State and the Urban Poor in Mexico*. Princeton, NJ: Princeton University Press.

Epstein, D.L., Bates, R., Goldstone, J., Kristensen, I., and O'Halloran, S. (2006). 'Democratic transitions'. *American Journal of Political Science* 50(3), 551-569.

Goodwin, J. (2001). *No Other Way Out: States and Revolutionary Movements 1945-1991*. Cambridge: Cambridge University Press.

Hagopian, F. (1990). 'Democracy by undemocratic means?' *Comparative Political Studies* 23(3), 147-170.

Herrera, Y. and Kapur, D. (2007). 'Improving data quality: Actors, incentives and capabilities'. *Political Analysis* 15(4), 365-386.

Herring, R.J. (1979). 'Zulfikar Ali Bhutto and eradication of feudalism in Pakistan' *Comparative Studies in Society and History* 21(4), 519-557.

Hidalgo, F. et. al. (2007). 'Occupational choices: Economic determinants of land invasions'. Unpublished working paper, University of California at Berkeley.

Hillygus, D., Sunshine, N.H., Nie, K.P. and Pals, H. (2006). *The Hard Count: The Political and Social Challenges of Census Mobilization*. New York: Russell Sage Foundation.

Hoffman, K. and Centeno, M.A. (2003). 'The lopsided continent: Inequality in Latin America'. *Annual Review of Sociology* 29, 363-390.

Hunter, W. (2008). 'Contribution to symposium: Big unanswered questions in comparative politics'. *APSA-CP Newsletter* 19(1).

Kain, R.J.P. and Baigent, E. (1992). *The Cadastral Map in the Service of the State: A History of Property Mapping*. Chicago, IL: University of Chicago Press.

Huntington, S. (1991). *The Third Wave: Democratization in the Late 20th Century* Norman, OK: University of Oklahoma Press.

King, G., Tomz, M. and Wittenberg, J. (2000). 'Making the most of statistical analyses: Improving interpretation and presentation'. *American Journal of Political Science* 44(2), 347-361.

Knight, A. (1986). *The Mexican Revolution Vol.1: Porfirians, Liberals, and Peasants*. Lincoln, NE: University of Nebraska Press.

Kohl, J. (1978). 'Peasant and revolution in Bolivia, April 9, 1952 – August 2, 1953'. *Hispanic American Historical Review* 58, 238-259.

La Porta, R., Lopez de Silanes, F., Shleifer, A. and Vishny R. (1998). 'The quality of government'. *NBER Working Paper* 6727.

Lange, M. and Rueschemeyer, D. (2005). *States and Development: Historical Antecedents of Stagnation and Advance*. New York: Palgrave Macmillan.

Levi, M. (1988). *Of Rule and Revenue*. Berkeley, CA: University of California Press.

Lieberman, E. (2003). *Race and Regionalism in the Politics of Taxation in Brazil and South Africa*. Cambridge, UK: Cambridge University Press.

Lipset, S. M. (1959). *Political Man: The Social Bases of Politics*. Baltimore, MD: Johns Hopkins University Press.

Loveman, B. (1976). *Struggle in the Countryside: Politics and Rural Labor in Chile, 1919-1973*. Bloomington, IN: University of Indiana Press.

Mainwaring, S. and Pérez-Liñan, A. (2003). 'Level of development and democracy: Latin American exceptionalism 1945-1996'. *Comparative Political Studies* 36(9),1031-1067.

Mann, M. (1984). 'The autonomous power of the state: Its origins, mechanisms and results'. *Archives Européennes de Sociologie* 25, 185-213.

Mann, M. (1993). *The Sources of Social Power Vol.2*. Cambridge, UK: Cambridge University Press.

Mares, I. (2005). 'Social protection around the world: External insecurity, state capacity and domestic political cleavages'. *Comparative Political Studies* 38(6), 623-651.

McClintock, C. and Lowenthal, A. (Eds.) (1983). *The Peruvian Experiment Reconsidered*. Princeton, NJ: Princeton University Press.

Meltzer, A. H. and Richard, S. F. (1981). 'A rational theory of the size of Government'. *Journal of Political Economy* LXXXIX, 914-927.

Menaldo, V. (2008). 'Banking on redistribution: Financial institutions and fiscal redistribution in Latin American democracies'. Paper presented at American Political Science Association, Boston, MA.

O'Donnell, G. (1993). 'On the state, democratization and some conceptual problems: A Latin American view with some glances at post-communist countries'. *World Development* 21(8), 1355-1369.

O'Donnell, G. and Schmitter, P. (1986). *Transitions from Authoritarian Rule: Tentative Conclusions*. Baltimore, MD: Johns Hopkins University Press.

O'Neil, S.K. (2007). 'Fixing social security in Latin America (again)'. *Americas Quarterly* (Fall).

Pierson, P. and Hacker, J.S. (2005). *Off Center: The Republican Revolution and the Erosion of American Democracy*. New Haven, CT: Yale University Press.

Powelson, J.P. and Stock, R. (1990). *The Peasant Betrayed: Agriculture and Land Reform in the Third World*. Washington, DC: Cato Institute Press.

Przeworski, A., Alvarez, M.E., Cheibub, J. and Limongi, F. (2000). *Democracy and Development*. Cambridge, UK: Cambridge University Press.

Scott, J.C. (1998). *Seeing Like a State*. New Haven, CT: Yale University Press.

Seligmann, L.J. (1995). *Between Reform and Revolution: Political Struggles in the Peruvian Andes, 1969-1991*. Palo Alto, CA: Stanford University Press.

Skocpol, T. (1979). *States and Social Revolutions*. Cambridge, UK: Cambridge University Press.

Slater, D. and Smith B. (2008). 'Economic origins of democratic breakdown? Contrary evidence from Southeast Asia and beyond'. Paper presented at American Political Science Association, Boston, MA.

Smith, B. (2008). 'Rethinking the economic origins of dictatorship and democracy: The continuing value of cases and comparisons'. *APSA-CP Newsletter Winter*, 16-21.

Soifer, H.D. (2008). 'State infrastructural power: Approaches to conceptualization and measurement'. *Studies in Comparative International Development* 43(3/4), 231-251.

Soifer, H.D. and vom Hau, M. (2008). 'Unpacking the strength of the state: The utility of state infrastructural power'. *Studies in Comparative International Development* 43(3/4), 219-230.

Stepan, A. (1978). *The State and Society: Peru in Comparative Perspective*. Princeton, NJ: Princeton University Press.

Tilly, C. (1992). *Coercion, Capital, and European States AD 990-1992*. Cambridge, MA: Blackwell.

Tomz, M., Wittenberg, J. and King, G. (2001). *CLARIFY: Software for Interpreting and Presenting Statistical Results. Version 2.0*. Cambridge, MA: Harvard University. Available at <http://gking.harvard.edu> [accessed 1 June 2008].

Ventresca, M. (1995). 'When states count: Institutional and political dynamics in modern census establishment 1800-1993'. PhD dissertation, Stanford University.

Weber, M. (1958). 'Politics as a vocation', in: Gerth, H.H. and Wright Mills, C. (Eds.), *From Max Weber: Essays in Sociology* (pp.77-128). Oxford, UK: Oxford University Press.

Wright, T.C. (1982). *Landowners and Reform in Chile*. Urbana, IL: University of Illinois Press.

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