# Inequality and Democratic Survival

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#### Abstract

Conventional wisdom holds that democracy endures in rich countries but is unstable in poor ones. Building on Ansell and Samuels (2014), we suggest that the sources of democratic stability lie not just with a country's aggregate level of wealth, but also with its distribution. However, we conceive of inequality and its political impact differently from previous work, which has focused on the median voter's demand for redistribution. In our democratic durability depends on contestation between competing economic elites, not between a unified elite and the relatively poor median voter. This leads to novel implications: Land inequality is associated with democratic collapse, but income inequality has no such effect. Empirical results support this "elite-competition" model of democratic survivability, providing novel insight: Countries that democratize with low *or* high income inequality are likely to break down - but not solely because there is less pressure for redistribution, but because different patterns of land inequality tend to be associated with different levels of development.

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### **1** Introduction

Why do some democracies endure, while others revert to authoritarianism? What social groups are relatively more or less important in sustaining or undermining democracy? Debate about these questions continues, and despite its spread in the 2nd half of the 20th century, deep concern over democracy's fate remains. And with good reason: Several democracies have collapsed in recent years, and its quality and stability appear to be eroding in many new and long-established regimes Diamond (2015).

Idiosyncratic factors may shape democratic survival in different countries, but the key variables said to foster democratic durability include parliamentary institutions; a supportive international environment; and - most importantly - economic wealth, growth, and equality (Boix 2011; Houle 2009; Przeworski et al. 2000; Svolik 2008). The best-known claim about the sources of democratic durability comes from Adam Przeworski and his colleagues, who argued that although the *emergence* of democracy is not endogenous to the process of aggregate economic growth, democratic *survival* is. Calling the claim a "startling fact" 2005, 253, Przeworski famously stated that wealthy democracies are invulnerable: they never collapse back into autocracy, no matter how much battering they take. In contrast, poor democracies are fragile, prone to collapse in the mildest tempest. Przeworski even put a dollar figure on the level above which democracies never collapse - about US\$6000 in 1975 dollars (Limongi Neto et al. 1996, 41).

This claim is part of the larger ongoing debate about modernization theory, which seeks to understand the political consequences of economic change. Recent scholarship, however, has shifted away from the question of the effect of aggregate growth on regime stability and turned toward the impact of the distributional consequences of growth. Such research ranges beyond the question of regime change, of course. For example, Thomas Piketty's best-seller (2014) offers a prominent version of the argument that inequality erodes the *quality* of democracy, tilting the playing field in favor of moneyed interests and making a mockery of universal suffrage. Still, in terms of its effects on regime change, works by Boix (2003) and Acemoglu and Robinson (2006) in particular shifted scholarly attention to the impact of inequality on regime change.

Our concern here is with the survival and/or collapse of democracy, not its emergence. Like Przeworski, Boix and others, we adopt a "minimalist" definition of democracy. And following Schedler 1998, we also define durability minimally, as simply the persistence of democratic participation and multiparty contestation over time. Given this, democratic durability or "consolidation" simply means that a democracy faces essentially no risk of reversion to authoritarianism.

We argue and demonstrate empirically that the relationship between per capita income, inequality, and democratic survival does not follow established expectations. Our theoretical model adopts a standard economistic approach: economic elites assess the relative costs and benefits from government spending under autocracy and democracy, observe the result of an election, and decide whether or not to comply with its outcome or attempt a coup. However, we add that actors' decisions depend not only on the size of the economic pie but also on the size of their own slice, as well as the perceived costs of a coup.

Democratic durability lies not only with economic development, but with the combination of development and the way that the fruits of development are distributed. We show that rural inequality is associated with democratic collapse because it proxies for the relative strength of landed elites, who avoided taxes and accrued all rents under autocracy and fear potential increases in land taxation and rural labor mobility under democracy.

In contrast, income inequality is - counterintuitively for median-voter models - not associated with democratic collapse. This is because under universal suffrage income inequality has countervailing effects on key actors' incentives. Historically, income inequality is correlated not with poverty but with the emergence of urban groups such as a bourgeoisie and working class. These groups have no desire to pay for universalistic redistribution, but they are willing to accept taxes (on themselves and others) that pay for programs that serve their own interests - and that would not likely exist under autocracy - such as public works and education (see Ansell and Samuels (2014)).

Both the fear of higher universalistic taxes and the acceptance of taxes to pay for club goods increase as income inequality increases. For this reason, as we explain below, income inequality has no clear theoretical effect on democracy's survival.

If median-voter models of democratic survival were true, both land and income inequality would have the same theoretical and empirical effect. However, we argue and demonstrate below that this is not the case. We agree that democratic survival depends on the relative strength of key political groups at different levels of development. However, aggregate country-wealth does not pick up all the useful information in this regard. A rich country with high rural inequality (a strong landed elite) is less likely to survive than a poor country with high income inequality (a strong bourgeoisie and working class). It is true that such situations are historically unlikely, because the relative economic and political power of landed and urban economic groups often move in opposite directions with the onset of economic development Kuznets (1955). Historically more common situations include poor countries with high rural inequality and low income inequality, and rich countries with low rural inequality but high income inequality. Below we show that the famous result about an income threshold beyond which democracy 'does not die', shown in Przeworski and Limongi (1997), obscures the fact that this threshold is in fact far lower for countries with low rural inequality.

These findings have important implications for understanding the conditions that foster democracy's survival historically as well as in the contemporary world. Our argument supports the view that democracy is unlikely to both emerge and survive in countries with strong landed elites (high rural inequality). Countries that somehow democratized with such social structures have been the most likely to revert back to autocracy. This result should be relatively unsurprising, but existing models of regime collapse fail to account for the systematic effects of different social structures and thus different forms of economic inequality - on democratic regime survival.

#### 2 The Redistributivist Theory of Democracy Stability

In this section we review what we call "redistributivist" theories of democratic survival. These approaches all formalize Dahl's (1971) intuition that democracy survives when the costs of repression exceed the costs of toleration. To do so they focus on whether the elite will defend or seek to destroy democracy, given different levels of national income and different levels of economic inequality.

Redistributivist models make the following assumptions: the incumbent elite pay no taxes under autocracy, but the median voter sets the tax rate under democracy. Given this the key issue for democracy's viability is where the tax burden falls and who benefits from redistribution. Przeworski offered a redistributivist explanation for why, all else equal, democracy should be unstable in poor countries but impregnable in wealthy ones. He starts with Lipset's (1963, 51) offhand comment that, "If there is enough wealth in the country so that it does make too much difference whether some redistribution takes place, it is easier to accept the idea that it does not matter greatly which side is in power. But if loss of office means serious losses for major groups, they will seek to retain office by any means available."

Formalizing this argument, Przeworski assumes that democratic electoral competition occurs between two parties - Right and Left, representing rich and poor - and that following Meltzer and Richard (1981), redistribution involves a proportional tax on everyone's income and a uniform redistributive transfer to all voters. This logically means that under democracy the rich pay more in taxes than they receive in return.

While Party R would prefer to pay no taxes, it must offer some redistribution to win over the median voter in a free and fair election. Party L prefers a higher tax rate than R, but cannot propose one so high that it would win the election but then spark a coup against the regime by R. The key question concerns the feasible set of redistributive schemes under which both L and R would respect the results of the election. Since democracy imposes redistributive costs on the elite, this boils down to the question of whether those costs are greater than the risks of attempting a coup. After all, coups can destroy lives and property - and they can fail, which might result in even greater loss of position and power to R. Likewise, the poor know that imposing high taxes risks pushing the elite into a situation where democracy seems more costly than the potential losses of a coup, and so temper their demands.

This mutual wariness limits the potential extent of distribution under democracy. Przeworski (2008) reasons that democratic survival is therefore a function of the set of feasible redistribution schemes, which grows with national per capita income (2005, 260).<sup>1</sup> Following Lipset, in poor societies the consequence of redistributive conflict is more severe for the elite, simply because there is so little to fight over–that is, any loss is a severe loss (Przeworski 2008). In poor societies the elite are therefore more likely to risk a coup, since democracy may impose higher costs than even a failed coup attempt (Gould and Maggio 2007; Przeworski 2006).

In contrast, in a rich society the wealthy are more willing to tolerate democracy because the stakes are lower. As country-wealth increases, the poor demand less redistribution (relative to aggregate country wealth), meaning the elite would retain their economic status even given a relatively higher tax rate, and given the potentially high costs of a failed coup. In a wealthier society, elites can reconcile themselves to democracy and the redistribution that comes with it.

How does inequality come into play in the redistributivist understanding of democratic survival? After all, average country-wealth can mask vast inequalities. It may be true that conflict over redistribution is more intense where there is less wealth to spread around - but such conflict should also vary depending on the *distribution* of such wealth.<sup>2</sup> The notion that inequality - and not just poverty - weakens democracy is ancient. Since at least the time of Aristotle, democratic

<sup>&</sup>lt;sup>1</sup>This argument must accept the assumption that both L and R parties are equally capable and willing to pay the cost of violence, and also that individuals across income levels have equal aversions to physical insecurity–they enjoy consumption less when they are threatened with oppression.

<sup>&</sup>lt;sup>2</sup>Somewhat surprisingly, we know of no "unified redistributivist model" of democratic survival that integrates Przeworski's insights about level of development with his and other scholars' arguments about the political impact of variation in inequality at different levels of development. What follows is our extension of the median voter logic to theories of democratic survival and collapse.

theorists have feared political participation by the poor. Redistributivist theories' understanding of inequality's impact follows from their interpretation of scholars' primary empirical indicator of inequality, the Gini coefficient: where it is low they assume that differences between rich and poor are narrow and the middle class is relatively large, and where it is high, the gap between rich and poor is larger and the middle class is relatively small.

Given this core assumption, redistributivist models derive the conventional median-voter hypothesis (Meltzer and Richard 1981), which is a modern incantation of the ancient "fear of the poor" bugbear: inequality should destabilize democracy because it means greater redistributive pressure on the elite. An extension of Przeworski's argument to include inequality is straightforward. Ceteris paribus, in an equal society there is relatively little conflict over the division of the pie, so elites should have relatively little to fear from losing political power. If they are forced to democratize, they will make peace with the new system. Yet where inequality is high, the median-voter logic suggests that the elite would suffer greater losses as the poor would vote to impose a higher tax rate, seeking greater redistribution. In such circumstances elites may believe that the risks associated with a failed coup are low relative to the potential benefit of a return to autocracy.

Both Boix (2003) and Acemoglu and Robinson (2006) accept that democracy is more likely to collapse under high inequality, no matter what form inequality takes. As Acemoglu and Robinson (2006, 222) put it, "in democracy, the elites are unhappy because of the high degree of redistribution and, in consequence, may undertake coups against the democratic regime."<sup>3</sup>

Redistributivist approaches imply that (should it emerge in such an environment) democracy would be most likely collapse in a poor and unequal society because the elite would be most likely to reject any redistribution scheme the poor propose (Przeworski 2006, 10). In contrast, democracy should be most stable in a wealthy and equal society, with the widest range of feasible redistribution schemes but lowest demand for redistribution. By this logic wealthy and unequal societies should be somewhat less stable, but still relatively more stable than a poor and unequal society. Yet even

<sup>&</sup>lt;sup>3</sup>Acemoglu and Robinson (2001) come to a similar conclusion.

a poor and equal democracy should be relatively less stable than a wealthy and unequal one, since the scope of feasible redistribution schemes is more limited in the first situation.

In sum, redistributivist models of regime stability suggest that because the pie is small in poor societies, losing power could mean losing everything. In rich societies the pie is large, so losing power lets the elite maintain their wealth and status, even if they must part with a small share of the spoils. Wealthy democracies are stable democracies. Likewise, in equal societies demands for redistribution are low, so democracy should be more stable. Only where demands for redistribution are high–in this approach, where inequality is high–is democracy fragile.

The logic of redistributivist models of regime change is compelling. However, empirical support for the approach is at best ambiguous. On the one hand, Przeworski and his colleagues (Limongi Neto et al. 1996) established the famous result that wealthy democracies never collapse, apparently confirming the relationship between per capita income and regime stability. However, Acemoglu and Robinson (2008) argued that the relationship between per capita income and regime and regime change–for both transitions to and from democracy–is spurious.

Results on inequality are even more ambiguous. Some claim to have confirmed the medianvoter logic that high-inequality democracies break down more often (Dutt and Mitra 2008; Houle 2009; Muller 1988, 1995; Reenock, Bernhard, and Sobek 2007). Przeworski and his colleagues (2000, 121) have also suggested that an increase in inequality heightens the chance of democratic breakdown. Yet on the other hand Teorell (2010) and Gassebner, Lamla, and Vreeland (2013) found no overall relationship between inequality and regime collapse.

Critically examining yet working within the redistributivist framework, Haggard and Kaufman (2012) suggest that these ambiguous results may result because redistributive conflict between rich and poor does not drive many reversions. We make the same argument about the sources of democratization in Ansell and Samuels (2014), but from a very different theoretical starting point. Extending our argument about the emergence of democracy to its potential demise, in the next section we explain that redistributivist models are misguided in their emphasis on fear of the

poor and also misinterpret the relationship between inequality and the social forces working to strengthen or undermine democracy.

## 3 Democracy's Survival: Elite Co-Existence, Not Fear of Poor

We agree that one can understand democratic stability primarily through the lens of different groups' relative gains and losses under different political regimes. However, our theoretical understanding of the relationship between per capita income, inequality, and democratic survivability differs in three key ways from redistributivist arguments: (1) in terms of which social actors sustain or undermine democracy and why; (2) in terms of the nature of economic inequality and 3) in how we understand relationship between per capita income and different forms of inequality.

First, redistributivist arguments assume that democratic stability can be understood as a function of contestation between the relatively poor masses (the median voter and everyone below him or her) and a unified wealthy economic elite. Given a country's wealth and its aggregate level of inequality, whether a coup to reestablish autocracy occurs depends on former autocratic elites' evaluation of their expected losses from redistribution to the poor under democracy versus the expected gains of a return to autocracy, minus the expected costs of a coup.

In our view this focus on redistribution to the poor masks more important political contestation, which occurs between relative economic elites, near the top of the income distribution. In particular, democracy is likely to persist to the extent that landed elites' power is declining, because for them the costs of democracy almost always exceed its benefits. For their part, urban economic interests have countervailing incentives: the benefits of democracy often exceed its costs. The costs and benefits of *both* democracy and dictatorship tend to be concentrated near the top of the income distribution - but they are distributed differently under each regime. Given this, the crucial dynamic for understanding democratic survival is therefore competition *between* economic elites

over who pays taxes and who benefits from government spending, not between "the" elite and the relatively poor median voter.

Our understanding of which actors sustain democracy is rooted in classical questions from political philosophy - in particular, the conditions under which groups can obtain protection from arbitrary government expropriation of their property. When one socio-economic group controls the state, it can predate on all others - rich *and* poor. Autocracy is, by definition, a system that denies some citizens their rights to life, liberty and property, without legal recourse. Pertinently, as Mancur Olson (1993, 572) noted, "History provides not a single example of a long and uninterrupted sequence of absolute rulers who continuously respected the property rights of their subjects."

Our argument thus builds on Douglas North's (1990) notion that democracy is fundamentally about efforts to "eliminate the capricious capacity of a ruler to confiscate wealth." Under both autocracy and democracy, reining in the state's grabbing hand depends on a relative balance in actors' bargaining strength Knight (1992). Put most simply, democracy survives when rising economic groups' new wealth improves their ability to successfully negotiate a balanced distribution of the tax burden across all relatively wealthy groups. The poor, who pay little in taxes, are largely irrelevant to this game because they possess so little that can be taxed. The former autocratic elite - who escaped taxation under the previous regime - are typically those who stand to lose the most.

This approach is fundamentally at odds with redistributivist arguments' theoretical singlemindedness about whether the poor can soak the rich. Here, democratic survival is about relative balance of power among economic elites. Rising economic groups are certainly concerned about taxes, but they will also defend democracy when they have more to lose under autocracy, where their property rights cannot be secured.

Second, our approach differs from redistributivist accounts in terms of how we conceptualize inequality and its impact. Redistributivist accounts treat inequality homogeneously, in that they do not differentiate the political impact of land and income inequality. In Ansell and Samuels (2014) we argued that land and income inequality have distinct political effects on regime *change*, because

they serve as proxy measures for the relative political strength of distinct socio-economic forces under autocracy - landed versus rising urban industrial elites.

Ceteris paribus, we suggest that rural inequality (the level of land inequality controlling for the relative proportion of the population living in rural areas) negatively impacts the likelihood of democracy's survival, just as it does to democracy's emergence. The reason is because rural inequality proxies for the relative political and economic strength of landed elites, regarded consensually as historically the most anti-democratic social class Mahoney (2003); Rueschemeyer, Stephens, and Stephens (1992). High rural inequality signifies that a relatively small and cohesive elite controls agricultural policy and rural labor mobility. They prefer autocracy because they depend on control of the state's coercive authority to repress rural labor's wage demands and keep rural workers on the land Ziblatt (2008).

In contrast, relative equality of land indicates a weaker and less political cohesive landed elite, and a greater proportion of smallholders. In such a situation the key issues are not the relatively lower redistributive threat from landless peasants, but the relatively higher likelihood of divisions within agricultural producers, the relatively weaker position of large landholders in terms of their control over agricultural policy, and the lower need for coercive dominance of rural labor.

As per Ansell and Samuels (2014), we expect few democracies to emerge under conditions of high rural inequality, all else equal. But to the extent that democracy emerges when rural inequality is high, landed elites are likely to exert antidemocratic pressures, as examples such as American plantation owners, Latin American latifundistas, and Prussian junkers suggest. In contrast, when rural inequality is low smallholding dominates and landed elites are relatively weak. In such contexts there is relatively low resistance to (or even support for) widespread suffrage in the agricultural sector. There is little need for control of rural labor because there is relatively little need for rural labor—the smallholders *are* the rural laborers.

The reason for landed elites' preferences under democracy has little to do with fear of the median voter (who often votes conservatively in any case), and more to do with elite competition:

fear of the growing political power of other economic elites, who often have interests in expanding provision of government services and infrastructure, which requires higher taxation. Coups are a function of expected costs versus benefits. Sometimes economic elites can agree to share power, but sometimes democracy persists because elites do not believe the benefits of attempting to accrue power to themselves sufficiently outweigh the costs of a coup attempt. The absence of a coup attempt under democracy does not mean that former autocratic elites are content, just that they don't want to risk even greater losses.

As for income inequality, as we showed in Ansell and Samuels (2014), redistributivists' assumptions about the relationship between Gini coefficients and social class structure are quite simply wrong. High Ginis do not, as redistributivist theories have it, imply that the middle class is relatively small. Historically, the opposite is frequently the case: as Kuznets (1955) argued decades ago, income inequality often *increases* as countries experience economic development, precisely because the working and bourgeois classes–who derive income from the non-agricultural sectors–are growing while demand for labor in agriculture is declining.

Gini coefficients measure aggregate relative differences in inter-group inequality, not merely the distance between rich and poor. The example from Ansell and Samuels (2014) is instructive: China in 1880 versus the UK in 1867. China in 1880 was both poor and had little inter-group inequality: 98% of the population earned almost nothing, and the top 2% was relatively wealthy. This inegalitarian situation - which characterizes most preindustrial societies - nonetheless results in a very *low* Gini coefficient. Meanwhile, in the UK around the same time, industrialization had proceeded. The wealthy landed elites were joined near the top by not only an industrial bourgeoisie, but a growing white-collar middle class, as well as the expanding ranks of the urban working classes, who earned more than their rural counterparts. As a result of this rapidly growing intergroup income inequality, the Victorian-era UK had a comparatively high Gini coefficient.

In many developing countries (historically, most of which have been dictatorships), Gini coefficients of income inequality proxy for the relative strength of the rising middle and working classes. Income inequality is, in developing autocracies, a useful proxy for class structure, at least in non-agricultural sectors. Given this, inequality will be positively associated with democratization. However, it is well known that the correlation between income inequality and class structure dissipates in wealthier countries: both Denmark (with a low Gini coefficient) and the USA (with a high one) have large middle classes, but even in the US, the poor are on average much "wealthier" than someone with well above-average income in say Mozambique.

Historically, when democracy has emerged under conditions of high income inequality, the forces supporting it are relatively strong. However, its survival depends largely on the relative value of rural inequality, which indicates the strength of anti-democratic forces. The same holds when democracy has emerged under conditions of low income inequality: the forces supporting it may be relatively weaker, but democratic stability depends more importantly on the relative strength of forces determined to overturn the regime.

If the redistributivist account were true, land and income inequality would have the same effect on democratic survival, as they would on democratization. However, they have distinct effects on both democratization and democracy's persistence. High values of rural and income inequality do not imply similar social structures. These two variables are not highly correlated, and not conceptually interchangeable. Income inequality will be positively related to regime stability, while rural inequality should have the opposite effect.

Like our argument about the relationship between income inequality and democratization, we recognize that the expected correlation between income inequality and democratic survival has upsetting normative implications, given existing research. However, that does not change the fact that historically, the onset of sustained economic development has been associated with a decline in the agricultural sector and the growing economic and political importance of the nonagricultural sectors. Economic development frequently means that new groups are growing in size and wealth–groups that that have relatively more to lose and that desire the safeguards of contracts and property rights that democracy provides.

#### **4** An Informal Model of Consolidation

Drawing together the insights of our earlier work with Przeworski's model of democratic consolidation, we now develop an elite-competition theory of democratic survival. Our argument draws on the redistributivist insight about the range of feasible redistribution schemes. However, as suggested above, the important "action" for the question of democratic durability does not occur between elites and masses, and is not a function only of average per capita income, but the distribution of the tax burdens among those who will pay the lion's share of all taxes under democracy: economic elites from land and industry. This argument departs from the implicit notion in Lipset's quote above–and made explicit in Przeworski's and others' formal models–that what matters most for the fate of democracy is the degree of redistributive pressure from the relatively poor median voter. What matters more is *elite consensus* that democracy is preferable to autocracy.

In Przeworski's theory of democratic consolidation there are two parties, representing two economic classes. Elections are held with parties proposing different tax / redistribution rates. Following the election (where votes depend on these tax policy proposals) the parties can choose whether to rebel or not. If one group rebels and wins, then the democratic regime collapses into a dictatorship run by the insurgents, in which revenues are redistributed to the victor's benefit and the (diminishing marginal) utility of consumption is systematically lower for everyone (due to a distaste for the physical insecurity created by dictatorship).

This setup has some sharp consequences. Parties (and the social forces supporting them) must moderate their redistributive policies if they wish to avoid rebellion - that is, the rich cannot set taxes too low and the poor cannot set them too high. This creates a zone of feasible redistributions. Przeworski's core claim is that this zone widens as overall income rises, which follows from the assumption of diminishing marginal returns to income. Przeworski (2005) notes that this outcome could reflect one of two dynamics. To quote at length:

The dependence on income in this story originates both from the aversion to physi-

cal insecurity, more precisely from the assumption that people enjoy any amount of consumption less when they face the possibility of physical oppression, and from risk aversion. As income increases, the gap between the well-being of electoral losers and of people oppressed by a dictatorship becomes large. The stakes are too high to risk losing the income guaranteed under democracy. Yet dependence on income, and all the other results, would also hold if we were to assume that people have a preference for democracy, independently of income. The interpretation of the results would then be that as the marginal utility of consumption declines, the preference for democracy (or against dictatorship) overwhelms the eventual consumption gain from becoming a dictator. I cannot distinguish these two interpretations. (Przeworski 2005, p.265)

This is Przeworski's core theoretical statement for why democratic durability is "endogenous" to per capita income. One of the "other" results he alludes to relates to inequality between rich and poor. While he does not solve the effect of inequality on the range of permissible redistribution schedules analytically, in simulations he shows that as inequality increases this range narrows, producing the standard redistributivist hypothesis that inequality harms democratic consolidation.

The question we address is how might these results change if we consider a set-up along the lines of Ansell and Samuels (2014), with three political salient groups (a landed elite, subscripted E; an industrial bourgeoisie, subscripted B, and the masses, subscripted M) and where overall societal inequality might emerge from inequality within the rural sector of the economy, the industrial sector, or from intersectoral inequality (that is, from when the industrial sector grows more rapidly than the agricultural sector).

We borrow four assumptions from the model in our book. First, overall societal income inequality often reflects the rise of *intersectoral inequality* produced by economic development that is the industrial sector is growing more rapidly than the agricultural sector. Inequality mainly arises because of the emergence of a wealthy bourgeoisie and urban middle class.

Second, the likelihood of victory in a struggle between any two classes is proportional to their relative income. Third, autocracies run by the landed elite engage in regressive taxation / expropriation and a return to autocracy run by the landed elite will produce the same outcome. Fourth, democracies are less redistributive than the Meltzer-Richard framework assumes, because redistri-

bution favors the wealthy as inequality increases (see Ansell and Samuels 2014, chapter 7).

What happens to the Przeworski model if we introduce these assumptions? We should note that we do not spell this out explicitly in a formal model in here (a later draft will do so). Nonetheless, some general claims follow from the logic of the two models.

- 1. First, and most striking, the broad claim of our elite-competition argument is that (following Kuznets) economic development often produces higher levels of income inequality as a by-product of industrialization and the relative stagnation of the rural sector. This means that under some conditions, inequality and development may run together and to the extent that rising economic sectors (such as a bourgeoisie) are excluded from power and threatened with expropriation under autocracy, such forces will favor democratization and democracy's survival. In the redistributivist understanding of the dynamics of democratic survival, *all* wealthy people are losers under democracy, and winners under autocracy. In our view, elite competition means some economic elites may be losers under autocracy. Somewhat ironically then, higher income inequality could be associated with democratic consolidation for the same reason Przeworski suggests applies for higher per capita income: if some economic elites they are political winners under democracy but losers under autocracy, they have more to lose under a return to autocracy. Hence there are likely some positive effects of income inequality on democratic consolidation through this development channel.
- 2. Second, when we think about democratic consolidation in a three group model we have to think about who exactly is likely to rebel against whom and how their relative income affects the likelihood of successful rebellion. The Ansell-Samuels model of regime change produces predictions for regime change to both partial democracy (run by the bourgeoise) and full democracy (run by the masses).

The former autocratic elite have powerful incentives to rebel against both forms of democracy. Under autocracy, the landed elite engage in regressive taxation, which produces losses for all other groups. Under any form of democracy, for the former autocratic rulers the cost of taxes exceeds their benefits. However, as rural inequality increases, the landed elite grow wealthier. This has two implications. First, it raises the optimal tax rate that other groups will impose - under either partial or full democracy - on the landed elites. Second, however, it increases the relative wealth of the landed elite vis-à-vis other groups, making them more likely to prevail in a rebellion. Hence rural inequality increases both the landed elites' incentives to rebel against democracy, and their likelihood of victory.

Under autocracy, income inequality has an interesting implication: a wealthier bourgeoisie provide a juicier target for the autocratic elite to expropriate. As per Ansell and Samuels (2014), this encourages the bourgeoisie to push for democracy and greater property-rights protection. Yet for the same reason, under democracy income inequality encourages the landed elite to rebel, in an effort to restore the autocratic regime. In this way income inequality has a negative effect on democratic consolidation - not because the newly enriched bourgeoisie wish to prevent high taxation by the masses (as per redistributivist models) but because the landed elite wish to expropriate them in a newly revived autocracy.

As for the bourgeoisie, they have no incentives to rebel against partial democracy, but may, under certain conditions, be ambivalent about full democracy. Under partial democracy the bourgeoisie have no incentives to raise taxes for *universalistic* redistributive spending, since they do not depend on those poorer than themselves to retain power - contestation occurs only between relative economic elites. Instead, they tend to target public spending away from the poor and towards themselves, in the form of club goods government programs. This effect is magnified as the power of the bourgeoisie grows relative to other groups - that is, as income inequality increases. (Note that this is the complete opposite effect of what the Meltzer-Richard median-voter model predicts.) This actually suggests that in partial democracies, income inequality generates incentives for the bourgeoisie to protect the system. (This is of course offset by the similar increase in the landed elite's incentives to try to undermine the

regime.

Under full democracy this regressive effect of taxation and public spending may be mitigated to some extent, generating ambivalence on the part of the bourgeoisie about that regime. On the one hand, universal suffrage does tend to generate a Meltzer-Richard type effect, in that the masses have relatively greater influence than under partial democracy. As inequality increases, the potential losses from democracy increase not only for the former autocratic elite, but for the bourgeoisie as well.

On the other hand, even under universal suffrage, political influence follows economic influence. A natural extension of our model is that economic elites have disproportionally large impact over policy not only during regime change but after it as well, leveraging resources to influence the nature and extent of government spending. As we showed in Ansell and Samuels (2014, ch. 7), even under universal suffrage, higher income inequality still produces *lower* universalistic social-welfare spending, because the informal power of wealthy economic elites overwhelms the formal power of the masses to set the tax and spending rate. Income inequality thus has countervailing influence under full democracy. Universal suffrage empowers the masses. And the higher the income inequality, the more that the masses can benefit from raising taxes. This would give the bourgeoisie some incentive to rebel. Higher income inequality also makes a coup by the landed elite more attractive, since a richer bourgeoisie is a juicier expropriative target. So for these two reasons there are some negative implications of income inequality for democratic consolidation.

Yet higher income inequality also tends to tilt the playing field in favor of wealthy interests, making the bourgeoise more likely to prevail in a struggle against both the landed elite and the masses, resulting in either a partial democracy or a "bourgeois dictatorship" (which would exclude the landed elite as well as the masses). It also means any given public spending in democracy is likely to be targeted towards 'club goods' that benefit the bourgeoisie. Finally, where higher economic growth produces greater income inequality, we may see the positive effects of development suggested by Przeworski accompanied by rising income inequality. These three forces have positive implications of income inequality for democratic consolidation. Putting these negative and positive forces together, income inequality should have no clear empirical effect on democratic survival. <sup>4</sup>

The claims above produce differing implications for rural inequality and income inequality. The effects of rural inequality on democratic consolidation are largely negative: higher rural inequality increases the probability of successful rebellion by the landed elite and makes democracy less tolerable.

Income inequality by contrast has mixed effects. On the one hand it increases the probability of regime durability in that it makes the bourgeoisie more likely to prevail if a coup is launched by the landed elite. However, there are also negative effects of income inequality on consolidation. It increases the temptation for landed elites to rebel against (either partial or full) democracy, and slightly increases the bourgeoisie's ambivalence about full democracy. Thus while we have a preponderance of mechanisms suggesting rural inequality harms consolidation, there is no clear picture for income inequality given these countervailing mechanisms. We test these varied hypotheses in the next section.

#### 5 Empirical Evidence

In Ansell and Samuels (2014) our theoretical and empirical concern was with identifying the conditions under which countries experience political liberalization. Accordingly our statistical models focused on transitions from autocracy to (partial and/or full) democracy. However, many of the statistical models we used in that book - in particular, the dynamic probit models also used by

<sup>&</sup>lt;sup>4</sup>We ignore the case where the masses might rebel against a partial democracy, to demand a full democracy, since this is not a democratic "reversal." The worst outcome for the masses in such a situation is a continuation of a partial democracy.

Przeworski et al. (2000) and Boix (2003) - not only provide the estimated effects of variables on transition to democracy but also transitions *from* democracy.

To be precise, dynamic probit models have a particular structure in terms of the specification of the independent variables. Each (lagged) independent variable is entered on its own into the regression along with its product with the lagged dependent variable. Since the lagged dependent variable measures whether the country was a democracy or not in the previous period, this means that for countries that were autocracies in the previous period this product equals zero. Hence for countries that were autocracies, the effects of the independent variables such as income inequality on the probability of being a democracy in the current period can be read off the coefficient on the independent variable alone. For countries that were democracies, the effects of independent variables are the sum of the independent variable and its product with the lagged dependent variable. Calculating the estimated point value of this joint coefficient is simple since it is the sum. Of course, calculating the standard error of the sum of these coefficients is more complex - it is not simply the standard error of either variable nor the sum of the standard errors, a common mistake pointed out in Epstein et al. (2006). We calculate the standard error of the combined coefficients using simulations in order to estimate the effect of independent variable such as income inequality on the probability of a democracy remaining democratic.

We do so to replicate several models from Ansell and Samuels (2014) (Tables 5.1 and 5.5) in order to examine how income inequality and rural inequality affect democratic consolidation. Our variables are the same as those used in the book. For our measure of democracy we take the binary measure developed by Boix, Miller, and Rosato (2012), and for income inequality we use two Gini measures, one historical measure with excellent time coverage (1820-1992) but considerable measurement error (Bourguignon and Morrisson 2002) and a more accurate but time-limited measure for 1955-2004 (Babones and Alvarez-Rivàdulla 2007). For rural inequality we use our adaptation of Boix's measure, which uses the proportion of land area covered by "family farms" (Boix's measure) but adjusts for the density of agricultural population by dividing by the relative

population outside of cities.<sup>5</sup>

	(1)	(2)	(3)	(4)
	Democratisation	Consolidation	Democratisation	Consolidation
BM Gini	0.287**	-0.018		
	(0.137)	(0.076)		
Rural Inequality			-0.148***	-0.094
			(0.047)	(0.064)
N	4769	4769	4769	4769

Table 1: Democratic	Transition an	d Consolidation	1820-1992
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Standard errors in parentheses

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table 1, examining the 1820-1992 period, omits the control variables (GDP per capita, proportion of students and time trends) and demonstrates in turn the effects on democratic transition and consolidation of income inequality (Bourguignon and Morrisson) and rural inequality (both variables are included in the same specification but are analyzed in turn for ease of interpretation). The point estimates demonstrate the marginal effect of the independent variables on the probability of transition or consolidation. Since the Gini is measured on a 0 to 1 scale a simple interpretation of the coefficient is to divide it by ten to get an estimate of a 0.1 change in the Gini coefficient. (For example the estimated effect on the annual probability of democratic transition for a state moving from 0.4 to 0.5 on the Gini is 2.9 percent points, approximately ten percent of the estimated marginal effect of 28.7 percent points.) The gap between Model 1 - the effects of income inequality on democratic transition - and Model 2 - the effects of income inequality on democratic consolidation - is fairly stark. There is a large positive effect of income inequality on transition but essentially zero effect on consolidation, conforming to our expectation that income inequality could have countervailing effects on democratic survival, even as it has a clear positive effect on

<sup>&</sup>lt;sup>5</sup>To be precise this variable, *Rural Inequality*, equals (1- Family Farms) / (1- Urbanization) with these two latter variables drawn from Vanhanen (2000).

transitions to democracy.

With rural inequality, however, there is evidence of a negative effect on consolidation. The negative effect on transitions to democracy in Model 3 is large and tightly estimated, but there is evidence that rural inequality also harms consolidation. Model 4 shows a negative marginal effect that is significant only at the p < 0.15 level. However, if we examine predicted effects of changes at different points along the continuum of rural inequality we see more robust effects.<sup>6</sup> Specifically, in democracies, a move from the 5th to the 50th percentile of rural inequality is associated with a decline in the probability of consolidation (or symmetrically an increase in the annual probability of democratic breakdown) of around one percent point with p < 0.001. By contrast a change from the median percentile of rural inequality to the 95th percentile (for democracies) is associated with a larger drop (around 3 percent points) but estimated less precisely (p < 0.10). These findings suggest a negative impact of rural inequality on democratic consolidation but one where the data only allow us to identify it cleanly starting from relatively lower levels. This result reflects the relative scarcity of democracies with high levels of rural inequality to begin with. Figure 1, displays both marginal effects of rural inequality along the continuum and the distribution of that variable, demonstrating that only changes in the top quartile of cases (with relatively few examples) produces wide error bands.

We see a similar pattern in Table 2 when we examine a more contemporary dataset and replace the Bourguignon-Morrisson Gini measure with that developed by Babones and Álvarez-Rivádulla (BAR).<sup>7</sup> Models 1 and 2 show the estimated effect of the BAR income inequality variable - as before we see a positive effect for transition and a null effect for consolidation. With rural inequality by contrast we again see negative estimated marginal effects on both transition and consolidation this time significant at the p < 0.1 level for consolidation.

<sup>&</sup>lt;sup>6</sup>As is often the case with discrete dependent variables and interactions, raw coefficients and standard errors may provide misleading information about the magnitude and statistical significance of changes in the independent variables, dependent on (a) the levels of the independent variables being analyzed, and (b) the levels of the control variables.

<sup>&</sup>lt;sup>7</sup>Again we omit our range of controls - we replicate Model 4 of Table 5.5 in Ansell and Samuels (2014).

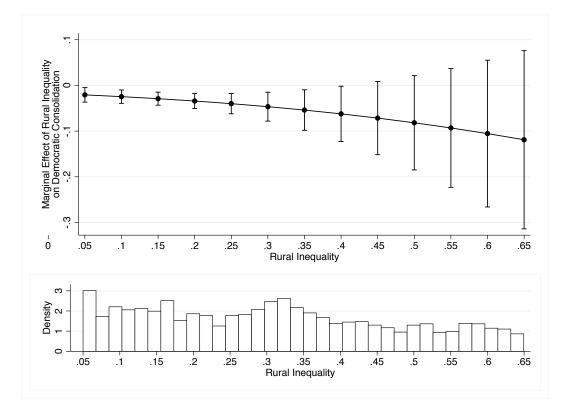


Figure 1: Estimated Marginal Effects of Rural Inequality on Consolidation: 1820-1992

Table 2: Democratic Transition and Consolidation 1950-2004

	(1)	(2)	(3)	(4)
	Democratisation	Consolidation	Democratisation	Consolidation
BAR Gini	0.212*	0.093		
	(0.119)	(0.148)		
Rural Inequality			-0.098**	-0.231*
			(0.050)	(0.125)
N	3157	3157	3157	3157

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

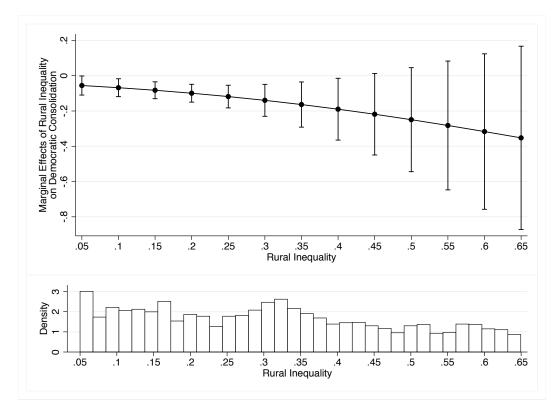


Figure 2: Estimated Marginal Effects of Rural Inequality on Consolidation: 1955-2004

Once again, when we look at discrete changes along the rural inequality continuum we find that this effect is smaller but more tightly estimated at lower levels of rural inequality. A shift from the 5th to the 50th percentile of rural inequality is associated with a 3.7 percent point decline in the probability of consolidation, significant at the p<0.01 level but a shift from the 50th to 95th percentile of rural inequality is associated with a larger decline of around eight percent points in the probability of consolidation, significant at the p<0.05 level. Figure 2 demonstrates the relative effect of rural inequality on consolidation across its distribution. As above, the estimates are less precisely estimated towards the top of the scale because relatively few democracies with high levels of rural inequality emergen in the first place - if there were more, they would be relatively more likely to break down.

The results in this section have then provided some support for our theoretical argument, that

while income inequality has no apparent net effect on democratic consolidation, but rural inequality has a negative effect. Countries with lower levels of rural inequality are more likely to consolidate than those with higher levels, although the relatively small number of democracies with high levels of rural inequality means we cannot estimate this effect very precisely.

These findings change the conventional understanding of the relationship between levels of per capita GDP and democratic consolidation. Przeworski and Limongi (1997) famously concluded that above a certain income, democracies never collapse. The question we raise is how much this finding depends on prevailing levels of rural inequality. We have argued above that rural inequality threatens democratic consolidation, in the sense that it indicates the relative economic and political power of the former autocratic elites. How much of Przeworski and Limongi's finding reflects the distribution of rural inequality across regimes, particularly since that variable is negatively associated with per capita income?

We follow the same logic as Przeworski and Limongi in breaking democracies by income group and then examining what the average rate of breakdown is among that group (that is, what proportion of democracies become an autocracy the following year).<sup>8</sup> We then divide the sample by rural inequality, using the median among democracies (around 0.25). Three things are immediately obvious. First, richer countries tend to have lower rural inequality, strongly suggesting that the answer to the question of "why democracies endure" is partly due to low rural inequality rather than higher per capita income. Second, in almost every income group (save between \$3,000 and \$5,000) democracies with above median rural inequality are more likely to break down than those with below median rural inequality. Finally and particularly strikingly given Przeworski and Limongi's famous claim about income levels beyond which democracies never die, the "immortality" income threshold is far lower for democracies with low rural inequality (\$5,000) than for those with higher rural inequality (\$9,000). This pattern suggests that a focus on per capita income alone as an endogenous source of democracie consolidation is misleading.

<sup>&</sup>lt;sup>8</sup>We use Maddison's GDP per capita estimates, as in Ansell and Samuels (2014).

Income per cap in US\$	All Countries	Low Rural Inequality	High Rural Inequality
<1,000	.07	0	.08
	(142)	(19)	(123)
1,000-2,000	.05	.03	.05
	(369)	(38)	(331)
2,000-3,000	.03	0	.03
	(456)	(51)	(405)
3,000-4,000	.01	.03	.01
, ,	(449)	(67)	(382)
4,000-5,000	.02	.03	.01
, ,	(352)	(117)	(235)
5,000-6,000	.01	0	.03
	(251)	(143)	(108)
6,000-7,000	.01	0	.05
	(144)	(124)	(20)
7,000-8,000	0	0	0
	(120)	(97)	(23)
8,000-9,000	.01	0	.04
	(115)	(91)	(24)
9,000-10,000	0	0	0
, , , , , , , , , , , , , , , , , , , ,	(114)	(82)	(32)
>10,000	0	0	0
/ 20,000	(652)	(612)	(40)

Table 3: Probability of Democratic Breakdown Split by Rural Inequality

Number of observations in parentheses.

#### 6 Coups and Democratic Reversals - extending Svolik

We now shift away from replicating the Ansell-Samuels analysis of regime transition to examine Svolik's analysis of coups and democratic reversals (Svolik 2008). The data structure in this analysis is not enormously different from the last section since Svolik also uses the Boix and Rosato's coding for democracy. However, his approach differs from our earlier analysis in two ways: first, he structures the data as democratic spells and examines how long they endure in the spirit of a classic hazard model of duration; and second, he develops his own maximum likelihood estimation procedure to split apart the underlying (constant) factors that make a country more likely to consolidate from the dynamic factors during a democracy that affect duration. Essentially, in Svolik's conception, some democracies are simply never at risk of reversal: these are so-called 'consolidated democracies'. Hence his model attempts to separate out forces that make a country more likely to be a 'consolidated democracy' no longer at risk of reversal from the the forces that may bolster or undermine so-called 'transitional democracies' that are not yet (if ever) truly consolidated.

Svolik's main interest is in the effects of development (GDP per capita level and growth), regime type / background (parliamentarism versus presidentialism and whether the regime previously had civilian, monarchical, or military rulers) and he does not analyze income or rural inequality. Hence, it is interesting to examine how the introduction of these factors affects the conclusions one can draw from Svolik's work. We begin with a simple hazard model that conflates 'consolidated and 'transitional' democracies but otherwise uses the same specification of control variables and coding of the dependent variable as Svolik does.

Table 4 shows the results, beginning with a model similar to Svolik's that omits any inequality variables. The coefficients in the table have been exponentiated such that coefficients below zero show a lower hazard of democratic reversal and coefficients above zero show a higher hazard rate. Immediately noticeable is that both GDP level and growth reduce the hazard of democratic break-

	(1)	(2)	(3)	(4)	(5)	(6)
Parliamentary	2.357	0.351*	3.081**	1.928	4.488*	3.042*
	(1.362)	(0.192)	(1.595)	(1.619)	(3.833)	(2.017)
Presidential	1.626	0.182*	0.997	0.620	3.169	1.323
	(0.798)	(0.179)	(0.434)	(0.567)	(2.547)	(0.854)
Previous Military	1.475	0.766	1.903	0.439	2.138	3.793
-	(0.659)	(0.800)	(0.960)	(0.462)	(1.229)	(3.116)
Previous Civilian	0.930	1.707	0.914	0.846	1.244	1.304
	(0.445)	(1.463)	(0.527)	(0.813)	(0.805)	(1.135)
GDP per cap	0.715***	0.659***	0.853**	0.842**	0.711***	0.863*
	(0.048)	(0.071)	(0.064)	(0.068)	(0.056)	(0.077)
GDP Growth	0.964***	0.967	0.949**	0.949	0.964*	0.961
	(0.013)	(0.033)	(0.022)	(0.034)	(0.019)	(0.039)
BM Gini		1.105		1.068		
		(0.075)		(0.074)		
Rural Inequality			1.096***	1.076***		1.105***
÷ •			(0.015)	(0.019)		(0.023)
BAR Gini					0.987	0.982
					(0.019)	(0.021)
N	3402	2075	2938	1998	2169	1845

Table 4: Hazard Analysis of Democratic Reversals: Simple Model

Exponentiated coefficients; Standard errors in parentheses

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

down in this model, with few clear effects from the regime variables. Model 2, which includes the Bourguignon and Morrisson income inequality variable shows a null effect for income inequality, though it is potentially positive. Model 3 includes rural inequality and here we see a strong and significant positive effect of rural inequality on the hazard of democratic breakdown. Likewise, in Model 4, which includes both variables, rural inequality remains a strong predictor of democratic breakdown whereas income inequality's estimated effect is reduced and still insignificant. Model 5 includes the BAR Gini variable which is insignificant. Finally, Model 6 includes both rural inequality and the BAR income inequality variable and again we see a strong positive effect of rural inequality on the hazard of democratic breakdown and a null effect of rural inequality.

In sum, by and large Svolik's income variables remain negatively correlated with the hazard of democratic breakdown, though the magnitude is reduced particularly when rural inequality is accounted for. In general, a simple hazard analysis confirms our findings from the previous section - there is no systematic effect of income inequality on democratic consolidation but rural inequality weakens democracies.

Our final empirical analysis replicates Svolik's more complicated model in Svolik (2008), where the effects of variables on transitory durability and permanent consolidation are separated out. Here, like Svolik we must use both the level of inequality in a given year (for the transitory part of the model) and its long-run average (for the consolidation part). Table 5 begins by replicating Model 1 of Table 2 in Svolik (2008), albeit omitting presentation of the previous executive type variables. The results split into two models: the *lambda* section is Svolik's 'reversal timings' model which measures the effect of variables on the expected duration of the regime (so positive coefficients improve democratic durability), whereas the *immune* section measures the effect of time-invariant variables on whether a regime is 'consolidated' and hence immune to reversal.

Model 1 replicates the results of Svolik (2008) correctly so we move on by adding in, in turn, the Bourguignon and Morrisson Gini, Rural Inequality, and the BAR Gini. We should note that Svolik's MLE model only converges in some cases and in others is unable to provide convergent

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
lambda							
GDP per cap	0.093	-0.035	-0.036	0.073	0.079	0.365***	0.087
1 1	(0.078)	(0.093)	(0.146)	(0.080)	(0.092)	(0.058)	(0.077)
GDP Growth	0.045***	0.026	0.040*	0.037**	0.050***	0.039*	0.052***
	(0.015)	(0.021)	(0.024)	(0.016)	(0.016)	(0.021)	(0.016)
Parliamentary	-0.295	0.283	0.116	0.033	-0.263	0.413	-0.337
j	(0.310)	(0.415)	(0.424)	(0.332)	(0.314)	(0.576)	(0.350)
Presidential	0.389	0.460	0.850**	0.261	0.462	0.504	0.391
	(0.290)	(0.385)	(0.432)	(0.306)	(0.293)	(0.531)	(0.330)
BM Gini	(0) 0)	7.713*	(01102)	(0.000)	(0.270)	(01001)	(0.000)
		(4.136)					
Rural Inequality		(1120)		1.017			
iturui inequality				(0.765)			
BAR Gini				(0.705)		1.916	
Di lit Olili						(1.494)	
cons	2.298***	-1.184	2.151***	1.875***	2.343***	0.488	2.386***
_cons	(0.402)	(1.961)	(0.723)	(0.687)	(0.419)	(0.994)	(0.469)
alpha	(0.402)	(1.901)	(0.723)	(0.007)	(0.41))	(0.774)	(0.+07)
_cons	-0.665***	-0.882***	-0.714***	-0.879***	-0.651***	-0.622***	-0.655**
_cons	(0.109)	(0.154)	(0.147)	(0.116)	(0.110)	(0.135)	(0.112)
immune	(0.109)	(0.134)	(0.147)	(0.110)	(0.110)	(0.155)	(0.112)
GDP average	2.121***	9.623	2.122***	-1.451	3.250	-0.927	2.382***
GDP average				-1.431 (1545.797)			
Course the Assessment	(0.586) -0.014	(.) -8.279	(0.626) -0.004	-5.741	(2.016) 0.173	(0.641) -0.168	(0.711) 0.103
Growth Average	(0.226)		(0.253)	-5.741		-0.168 (0.174)	(0.263)
Devi Assesses	· /	(.) -17.823	· · · ·		(0.358)	. ,	
Parl. Average	2.230		2.058	-3.841	0.489	-9.994*	1.494
	(2.229)	(75.287)	(1.898)	(.)	(2.321)	(5.684)	(2.643)
Pres. Average	-8.309**	-51.934	-6.209	-4.027	-13.177	-6.066	-11.273*
	(3.957)	(388970.916)	(3.900)	(.)	(9.423)	(4.383)	(5.332)
Mean BM Gini			-9.491				
			(14.443)				
Mean Rural Inequality					-18.184		
					(13.152)		
Mean BAR Gini							-14.655
							(10.590)
_cons	-6.144**	-41.145	-0.673	-98.196**	-1.827	8.927	0.381
	(2.646)	(.)	(6.471)	(43.965)	(3.082)	(6.018)	(5.213)
N	3402	2075	2458	2938	3369	2169	3307

Table 5: Analysis of Democratic Reversals: Svolik Conslidation Model

 $\begin{array}{l} \mbox{Standard errors in parentheses} \\ \mbox{"} p < 0.10, \mbox{""} p < 0.05, \mbox{"""} p < 0.01 \end{array}$ 

standard error estimates for variables. In order to display what does emerge, we present the coefficient estimates after 20 iterations of the MLE maximization process, though as can be seen in many cases this means no estimate for standard errors is produced. We must also omit the previous monarchy variable since this prevents convergence.

The results that we do obtain provide limited support for our conjectures. There is some evidence that long-run rural inequality (Model 5) is bad for permanent consolidation, though this is only borderline significant at the  $p \approx 0.16$  level. Perhaps surprisingly, Model 2 also shows some evidence that income inequality might support regime durability in unconsolidated democracies at the expense of GDP growth, which loses significance in that model. If that is the case, this would suggest some support for the hypothesis outlined above that rising income inequality may reflect the unequal spoils of economic development and hence "more to lose" in Przeworski's model. However, since Model 6 shows much weaker support for the BAR Gini and because Model 2 does not fully converge, we cannot be especially confident on this front. Overall then, there is little that suggests that splitting the analysis into transitory versus permanent forms of consolidation reveals a great deal about the effects of either income or rural inequality.

#### 7 Conclusion

What makes democracies endure? Is inequality bad for democracy? Are the dynamics of democratic transition the same as those of democratic consolidation? This paper has approached these crucial questions in comparative politics from an elite-competition approach, drawing on the arguments made about inequality and democracy in Ansell and Samuels (2014). To the first question we come to a conclusion that those drawn in Przeworski and Limongi (1997), Przeworski (2005) and Svolik (2008). Consolidation does seem to increase with levels of economic development. However, rural inequality substantially lowers the likelihood consolidation, even controlling for development. Indeed, as we have seen, since rural inequality and development are negatively correlated, scholars may have mistakenly attributed the beneficial effects to the former when the negative effects of the latter have been the crucial force. We suggest that theoretically, rural inequality is a more proximal factor than per capita income, since the former proxies for the relative strength of identifiable organized social forces and is not a general statement about the median voter's average expected utility.

To the second question regarding whether inequality is bad for democracy, it depends on what kind of inequality. We find strong evidence that rural inequality undermines democracy but no evidence that income inequality affects democratic consolidation one way or the other. We have argued this is because income inequality has countervailing effects on consolidation that may cancel one another out. Stronger evidence for this claim would need to come from examining each of these countervailing forces individually and showing that they do indeed net out, which would be an important extension of this paper.

Finally, as to the question about the 'symmetry' of forces driving transitions and consolidation, we find this holds for rural inequality but not for income inequality. In general, we should not be to quick to assume that what ails autocracy supports democracy. For good reason the questions of consolidation and transition have long been held at, if not arm's length, an elbow-width from each other. We concur with that conceptual and empirical distancing.

## References

- Acemoglu, D., S. Johnson, J.A. Robinson, and P. Yared. 2008. "Income and democracy." *The American Economic Review* 98 (3):808–842.
- Acemoglu, D. and J.A. Robinson. 2001. "A theory of political transitions." American Economic Review 91 (4):938–963.

- Acemoglu, Daron and James Robinson. 2006. *Economic Origins of Dictatorship and Democracy*. New York: Cambridge University Press.
- Ansell, B. and D. Samuels. 2014. *Inequality and Democratization: An Elite–Competition Approach*. New York: Cambridge University Press.
- Babones, S.J. and M.J. Alvarez-Rivàdulla. 2007. "Standardized Income Inequality Data for Use in Cross-National Research." *Sociological Inquiry* 77 (1):3–22.

Boix, Carles. 2003. Democracy and Redistribution. New York: Cambridge University Press.

——. 2011. "Democracy, development, and the international system." *American Political Science Review* 105 (4):809–28.

- Boix, Carles, Michael Miller, and Sebastian Rosato. 2012. "A complete data set of political regimes, 1800–2007." *Comparative Political Studies* :0010414012463905.
- Bourguignon, F. and C. Morrisson. 2002. "Inequality among world citizens: 1820-1992." *The American Economic Review* 92 (4):727–744.
- Dahl, Robert. 1971. Polyarchy: Participation and Opposition. New Haven, CT: Yale University Press.
- Diamond, Larry. 2015. "Facing Up to the Democratic recession." *Journal of Democracy* 26 (1):141–155.
- Dutt, Pushan and Devashish Mitra. 2008. "Inequality and the Instability of Polity and Policy\*." *The Economic Journal* 118 (531):1285–1314.
- Epstein, D.L., R. Bates, J. Goldstone, I. Kristensen, and S. O'Halloran. 2006. "Democratic transitions." *American Journal of Political Science* 50 (3):551–569.

- Gassebner, Martin, Michael J Lamla, and James Raymond Vreeland. 2013. "Extreme bounds of democracy." *Journal of Conflict Resolution* 57 (2):171–197.
- Gould, Andrew C and Andrew J Maggio. 2007. "Democracy, Dictatorship, and Economic Development: A Model of Reference-Dependent Choices with Experimental Data." In *Regimes and Democracy in Latin America: Theories and Methods*. New York: Oxford University Press, 231–245.
- Haggard, Stephan and Robert R. Kaufman. 2012. "Inequality and Regime Change: Democratic Transitions and the Stability of Democratic Rule." *American Political Science Review* 106 (03):495–516. URL http://dx.doi.org/10.1017/S0003055412000287.
- Houle, C. 2009. "Inequality and democracy: Why inequality harms consolidation but does not affect democratization." *World Politics* 61 (04):589–622.
- Knight, J. 1992. Institutions and Social Conflict. New York: Cambridge University Press.
- Kuznets, S. 1955. "Economic growth and income inequality." *The American Economic Review* 45 (1):1–28.
- Limongi Neto, Fernando Papaterra, Jose Antonio Cheibub, Michael M Alvarez, and Adam Przeworski. 1996. "What makes democracies endure?" *Journal of democracy* 7 (1):39–55.
- Lipset, Seymour Martin. 1963. *Political man: The social bases of politics*, vol. 330. Doubleday Garden City, NY.
- Mahoney, James. 2003. "Knowledge Accumulation in Comparative Historical Research: The Case of Democracy and Authoritarianism." In *Comparative Historical Analysis in the Social Sciences*, edited by James Mahoney and Dietrich Rueschemeyer. New York: Cambridge University Press, 131–176.

- Meltzer, A.H. and S.F. Richard. 1981. "A rational theory of the size of government." *The Journal of Political Economy* 89 (5):914–927.
- Muller, E.N. 1988. "Democracy, economic development, and income inequality." *American Sociological Review* 53 (1):50–68.
- . 1995. "Economic determinants of democracy." *American Sociological Review* 60 (6):966–982.
- North, D.C. 1990. *Institutions, institutional change, and economic performance*. New York: Cambridge University Press.
- Olson, Mancur. 1993. "Dictatorship, democracy, and development." *The American Political Science Review* 87 (3):567–576.
- Piketty, Thomas. 2014. *Capital in the Twenty-first Century*. Cambridge, MA: Harvard University Press.
- Przeworski, Adam. 2005. "Democracy as an Equilibrium." Public Choice 123 (3-4):253-273.
- ———. 2006. "Self-enforcing democracy." *Handbook of Political Economy, ed. by B. Weingast, and D. Wittman* :312–329.
- ———. 2008. "The poor and the viability of democracy." In *Poverty, Participation and Democracy: A Global Perspective*, edited by Anirudh Krishna. New York: Cambridge University Press, 125–147.
- Przeworski, Adam, Jose A Cheibub, Fernando Limongi, and Michael Alvarez. 2000. Democracy and development: political institutions and material well-being in the world, 1950–1990. New York: Cambridge University Press.

- Przeworski, Adam and Fernando Limongi. 1997. "Modernization: Theories and Facts." *World Politics* 49 (02):155–183. URL http://dx.doi.org/10.1017/S0043887100004536.
- Reenock, Christopher, Michael Bernhard, and David Sobek. 2007. "Regressive socioeconomic distribution and democratic survival." *International Studies Quarterly* 51 (3):677–699.
- Rueschemeyer, D., E.H. Stephens, and J. Stephens. 1992. *Capitalist Development and Democracy*. Chicago: University of Chicago Press.
- Schedler, Andreas. 1998. "What is democratic consolidation?" *Journal of Democracy* 9 (2):91–107.
- Svolik, Milan. 2008. "Authoritarian reversals and democratic consolidation." *American Political Science Review* 102 (02):153–168.
- Teorell, Jan. 2010. Determinants of Democratization: Explaining Regime Change in the World, 1972–2006. New York: Cambridge University Press.
- Vanhanen, T. 2000. "A new dataset for measuring democracy, 1810–1998." *Journal of Peace Research* 37 (2):251.
- Ziblatt, D. 2008. "Does Landholding Inequality Block Democratization?: A Test of the "Bread and Democracy" Thesis and the Case of Prussia." *World Politics* 60 (04):610–641.