Democracy and the Threat of Redistribution in Latin America

Michael Albertus
PhD Candidate
Department of Political Science, Stanford University
E-mail: albertus@stanford.edu

Abstract. The assumption that the majority of enfranchised voters in a democracy will vote to redistribute wealth from the rich to the poor, and that this will stymie or undercut democracy in societies with high economic inequality, has played a significant role in a number of influential studies on the causes of democratic transition and duration. Yet the histories of many countries in which democracy and acute inequality coexist, most prominently those in Latin America, frequently violate this assumption and provide cause to doubt its validity. A new data set on land reform in Latin America from 1951-90 demonstrates that authoritarian regimes are not only historically more likely to implement heavy redistribution, but have also varied in their redistribution policies more than democracies. The fact that authoritarianism is uncertain both in its effects and duration has been a major factor supporting a democratic equilibrium in many of these states. The elite generally prefer to support democracy when the outcome under an authoritarian alternative is sufficiently difficult to divine, and this uncertainty may simultaneously induce moderation in redistribution under democratic regimes, enabling both inequality and democracy to survive.

What accounts for the variation in the onset and duration of political regimes, and what effects do such regimes have on the distribution of assets among members of a state? While there is a rich and diverse literature focusing on these questions, one important part of the current received wisdom is that inequality is a major factor in determining regime type (e.g. Acemoglu and Robinson 2006, Boix 2003). In states where inequality is high, extension of the franchise to a poor majority makes democracy dangerous for the elite due to the threat of redistribution, often resulting in elite repression of the masses and the maintenance of authoritarianism. Yet empirical evidence presented here demonstrates that in a number of states, most notably those of Latin America, authoritarian rule has often been more dangerous to the interests of the landed elite than democracy. Redistribution in Latin America has been greatest during periods of military rule. Studies that fail to consider the effects of authoritarian rule that is antithetical to elite interest (e.g. Acemoglu and Robinson 2001) risk missing an important contributing factor in the establishment and maintenance of political regimes.

Although militaries in Latin America have often been the guarantors of the status quo, at times they have also acted as the most potent reformers. This uncertainty is consequential for the critical actors in deciding whether to support a given regime. I argue that the outcomes expected by actors under different regimes lead them to form preferences and provide support for the regime they believe will act most consistently with their interests. Elites will prefer to support democracy when expected redistribution policies under authoritarian rule are sufficiently uncertain. Greater variance in redistribution under authoritarian regimes serves as an indicator of uncertainty. Moreover, this uncertainty can induce moderation in democratic electorates, causing them to limit redistribution so that the elite do not risk switching their allegiance to an authoritarian alternative that may yield them a better outcome. As a result, democracy may become a self-enforcing equilibrium. The existence of such an equilibrium undermines a key assumption that received theories rely on, namely that the rate of redistribution will increase as the wealth of the decisive median voter in a democracy declines relative to the mean (Meltzer and Richard 1981), and also provides an explanation for the persistence of

inequality in the region. Transition and consolidation of democracy despite high economic inequality become less surprising when viewed in this way.

In order to measure redistribution, country-year level data were collected on land reform in Latin America. Since colonization, land has been a key component of net wealth and a major economic foundation of political power and social prestige for the ruling elite. The data span all Latin American states during the time period 1951-90, and redistribution is measured as the area of private landholdings expropriated in a given country-year. Roughly 140 million hectares of land were expropriated during this period, with significant variation both across and within states.

In the first section of the article I frame the problem in the context of Latin America with the aim of demonstrating that the relationship between inequality and political transitions does not hold as existing theory would expect. Here it is shown that these states have systematically transitioned to democracy under conditions of high inequality, and that the relationship between regime type and inequality in most states is weak. The literature review in the second section is followed by a discussion of the research design and data in the third. An empirical analysis of redistribution by regime type is presented in the fourth section, and the theoretical implications of the empirical results are discussed in the fifth. The existence of a modestly redistributive democratic equilibrium that maintains high inequality in a state is demonstrated in this section, driven by uncertainty in the expected redistribution policies of an alternative authoritarian regime. The causal mechanisms of the argument are laid out in detail as the case of Peru is discussed in the sixth section, followed by the conclusion.

1. The Puzzle

Many Latin American states seem anomalous under current theory that stresses the importance of relative equality in the transition to and consolidation of democracy. It is frequently argued that a wealthy elite will attempt to block democratization in highly unequal societies, for fear that the newly enfranchised poor will vote to redistribute their wealth (Acemoglu and Robinson 2006, Boix 2003).

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Yet most of the states in Latin America that have transitioned to democracy also had highly unequal societies at the time of democratization, as shown in Figure 1.[1] The measure of inequality used here is the amount of land held in family farms as a proportion of total cultivated land. In developing states, more land held in family farms indicates a more egalitarian distribution of wealth, and a more politically autonomous peasantry that may vote and act independently of any landowner that they may otherwise be indebted to or dependent upon.[2] While there is a secular trend toward greater equality, the dominant regime type in the region has varied significantly over time. Of the 49 transitions to democracy that took place between 1951 and 1990, 25 of those were in Latin America. The first wave of democratic transitions in the late 1950s took place under conditions of high inequality. Democracy was inaugurated in Guatemala, Honduras, Argentina, Colombia, Peru, and Venezuela. But it was not to last long, and most of the region was authoritarian from the mid-1960s until the mid-1980s. Inequality declined significantly during this period, largely due to the efforts of authoritarian leaders in states such as Bolivia, Mexico, Nicaragua and Peru. Yet in most Latin American states, as today, inequality remained acute, and it was under these conditions that the more recent wave of democratization was ushered in during the late 1970s and 1980s in Bolivia, Brazil, El Salvador, Guatemala, Honduras, Nicaragua, Argentina, Peru and Uruguay.

[Figure 1 about here]

The conclusions drawn from the aggregate data in Figure 1 is further supported by individual state-level data at the time of democratization. Figure 2 shows how Latin America fits in the worldwide distribution of inequality when democracy was initiated.[3] Democratic transitions often occur despite an inegalitarian distribution of assets, and this trend is most visible in the history of Latin

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[1] The term Latin America as used here includes Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela.
[2] For a more complete discussion of family farms as an indicator for inequality in developing states, and the political importance of such an indicator, see Vanhanen 1997, 47-50.
[3] Although the data is sparser, this trend is the same when using Gini data or the ratio of the income of the top quartile to that of the bottom quartile, as do Przeworski et al. (2000).

America. The average proportion of cultivated land in plots larger than family size in this region was .78 at the time of democratization, compared to the average .56 that characterized states outside the region. This means that the proportion of family farms in Latin American states was on average half that of states outside the region during transition. In addition, no state in the region had family farms that accounted for more than .38 of total cultivated holdings during transition.[4]

[Figure 2 about here]

But did the transitions in the Latin American states occur at times when inequality was low relative to the past? That is, despite high inequality, was there a trend toward egalitarianism sufficient enough to ease the transition and the concerns of the elite? The empirical record does not demonstrate that this is the case. In fact, inequality not only is a poor predictor of democratization in the region, but it also tracks poorly with regime type over time for most states, with an average correlation of .02. Of the four states in which inequality and regime tracked well, lower inequality was associated with autocracy rather than democracy in three.[5] Although democracy has a slight association with lower inequality, inequality has declined more under periods of autocratic rule. The poor predictive power of inequality on democratization is not unique to this case. In fact, the interesting aspect of this case and others is that democratization occurred at all given the severe disparities in wealth and the close proximity of those that are extremely wealthy and those that live in relative squalor. Still more interesting is the lack of significant redistribution under democracy in unequal societies, an assumption that drives predictions in a number of influential recent models about democratization and democratic consolidation. Although inequalities in this region continue to decline, they remain acute in comparison to most other regions of the world.[6]

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[4] The non-Latin American states that transitioned to democracy with the highest inequality were Bulgaria, Hungary, and Suriname.
[5] These three are Chile with a correlation between inequality and autocracy of -0.86, El Salvador at -0.90, and Nicaragua at -0.81. The correlation in the Dominican Republic was 0.85.
[6] This long-term trend toward equality coupled with the trend toward democracy in the region is likely the reason why empirical findings tend to associate declining inequality with democracy. In addition, Latin America does

The question then becomes, what has enabled these states to transition to democracy despite high levels of inequality, and how have elites been able to protect their assets in these new regimes? Contrary to conventional wisdom, and despite the rhetoric, democracies in the region generally have a poor record of implementing redistribution to affect an increase in egalitarianism. Why have democracies failed in this respect? As shall be demonstrated, the solution to this puzzle will also provide insight into what has enabled states in the region to democratize and persist as democracies despite severe inequality. In short, the elite will support democracy when the outcome under an alternative military option is too uncertain a prospect, and expectations of what may occur under authoritarian rule may simultaneously induce moderation in the democratic regime.

2. Literature Review: Regimes, Inequality, and Redistribution

Major studies of the factors that contribute to the creation and maintenance of democracy have focused on the relative strength of democracy in the presence of economic development (Lipset 1959, Przeworski et al. 2000), the role of cross-class coalitions in the establishment of representative government (Luebbert 1991, Moore 1966), coordination among citizens to create self-enforcing limits on the state (Weingast 1997), and the importance of relative economic equality in the citizenry or high asset mobility among the elite (Boix 2003). While these explanations have accounted for variation in regime onset and duration in a large number of cases, many of the Latin American cases still seem to pose a challenge to scholars of democratization and democratic consolidation. These cases undermine an assumption critical to a number of theories, namely that the majority of enfranchised voters in a democracy will vote to redistribute wealth from the rich to the poor, and that therefore when a "society is acutely unequal, no constitutional rule can sustain democracy" (Boix 2003, 15).[7]

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not factor heavily into large-sample studies of democratization and democratic duration due to data availability problems, effectively creating significant sample bias problems for these studies.
[7] A similar prediction is implicit in Moore (1966) if this inequality implies the lack of a strong bourgoiesie, and also in Weingast (1997) in which the expected outcome is one that entails the sovereign violating the rights of

This assumption is prevalent in the literature, and casts a shadow on a number of analyses of the relationship between economic inequality and regimes. In a recent encompassing study of the origins of regimes, Acemoglu and Robinson derive models of political interaction between the elite and the poor, and argue that in societies where inequality is high, "the median voter, who becomes poorer relative to the mean, prefers greater tax rates and more redistribution" (Acemoglu and Robinson 2006, 104). Similarly, Meltzer and Richard (1981, 916) argue in an influential article that "any voting rule that concentrates votes below the mean provides an incentive for redistribution…" While this is a seemingly benign assumption, some hesitance may be prudent in accepting the quick corollary that "greater inequality…induces a higher tax rate" or greater redistribution (Acemoglu and Robinson 2006, 105). This may have been true in the motivating cases of Western Europe and North America for Meltzer and Richard, but the empirical record suggests that it is not the case more generally.

Mixed findings on the relationship between economic inequality and regime type are cause for a deeper look at these assumptions. While there are a number of different hypotheses regarding the relationship between inequality and regime type, they may be usefully grouped into three main questions. First, what is the effect of democracy on equality among citizens over time? That is, are democratic regimes able to effectively implement policies of redistribution that reduce inequalities in the state? This is the main question I shall address here, although its answer is pertinent to the other questions as well. The typical hypothesis under contention here is that in democratic states where the majority rules, the median voter is the decisive voter, and therefore redistribution policies will favor the majority over the elite as the extension of the franchise includes more voters below mean income and pulls the median voter below the mean. The result is that "voters with income below the income of the decisive voter choose candidates who favor higher taxes and more redistribution…When the mean income rises relative to the income of the decisive voter, taxes rise, and vice versa" (Meltzer and

one group of citizens with the support of the other. Przeworski et al. (2000), despite using data that renders testing "almost impossible," also find that democracy is less stable in societies that are more unequal.

Richard 1981, 924). Most recent studies simply assume this, and use this assumption to generate predictions about democratization and democratic stability (Acemoglu and Robinson 2006, Boix 2003). But if in fact there are serious impediments to redistribution under democracy that may inhibit these policies, the causal logic of these theories as well as their results may be questioned.

The second question is whether relative economic equality is a necessary condition for the establishment of a democratic regime. An egalitarian distribution of wealth may be indicative of a large bourgeoisie, which often plays an important role in democratization (Moore 1966). But under conditions of high inequality, "democracy starts to become threatening for the elites because they will face highly adverse policies such as punitive rates of redistribution if they democratize" (Acemoglu and Robinson 2006, 219). The result is often elite repression of the masses, which if given an attempt to vote would attempt to scatter their assets throughout the land among the newly enfranchised poor (Boix 2003). As a result, democratization under these conditions is quite unlikely. Instead the wealthy use their economic clout to advance their interests in the political sphere, in an attempt to prevent the extension of political rights to the rest of society (Dahl 1971). Yet other studies have found no relationship between democratization and inequality (Bollen and Jackman 1985, Muller 1988, Przeworski et al. 2000). While earlier non-findings were more severely hampered by data availability problems, they are nonetheless instructive for thinking about a particular set of cases, and what these cases may suggest about the causal mechanisms linking economic inequality to democratization. In a sample of states that democratized between 1945 and 1961, five of the seven most inegalitarian states that democratized, including Peru, Brazil, Costa Rica, Guatemala, and Panama, were in Latin America, and these states registered as some of the most inegalitarian in the entire sample (Muller 1988, table 5). How were these states able to transition to democracy despite high inequality?

Latin American scholars are also quick to mention social and economic inequality in the context of regimes, with the implication that these represent poor soil in which to sow the seeds of democracy because of the restrictions they impose on potential transition pacts. Transition to

democracy in the region has often come in the form of elite-brokered pacts that emerge between hard-liners of the ruling elite and moderate opposition forces (O'Donnell and Schmitter 1986).[8] Although the property rights of the elite are frequently restricted from the agenda of change as a condition to their willingness to bargain, a key aspect of such transitions is the uncertainty that defines not only the process itself, but also its long-term consequences.[9] If elite property rights are to be upheld under a new democratic regime, elites need to be able to credibly commit to topple it in the case of a consequential violation. But it is implausible to believe that often factious militaries, even if they are able to coordinate on a pact with the elite during transition, will maintain unity in defense of the result *ex post* (Geddes 1999).[10]

An organized popular sector may change the bargaining dynamics, but it also increases the risk of "authoritarian cancellation" during the transition and in the short-term aftermath because of the threat its demands pose to the elite. More frequently, the military has allied with the elite to block a move to democracy, under which it is suspected that the electorate will institute reform to expropriate the assets of the elite and exert greater civilian control over the military. Indeed, this has led to the "stereotypical view of the military as committed to the preservation of the status quo through repression" (Einaudi 1973, 72). Explanations of elite acceptance of limited reform in this context is attributed to a realization that the pressure for change is so persistent that unless they yield a little they risk losing everything in a revolution or radical military regime (Thiesenhusen 1989, 5). But these explanations seem only to complicate the puzzle because they belie the crucial empirical fact that it is

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[8] This is not the only way in which transition can occur. Karl (1990) outlines four modes of transition: pacts, imposition, reform, or revolution. These stem from the combination of actor strategy between compromise and force, and the relative strength of elites vs. mass actors. Exclusion of mass actors is seen as an important aspect of a stable transition, although Collier (1999) refutes this point in an analysis of the role of labor movements in the process of democratization as does Wood (2000) in her analysis of the transitions in South Africa and El Salvador.

[9] O'Donnell and Schmitter (1986) argue that during the transition process, "the property rights of the bourgeoisie are inviolable." Similarly, Huntington (1991) argues that those opposition groups included in the democratic bargain have often had to agree to existing economic institutions such as private property.

[10] This is even more so the case if the officer corps is likely to follow the first movers in a coup attempt, as is often the case (Nordlinger 1977).

not democracy that is so unstable in Latin America, as is frequently argued, but rather dictatorship (Przeworski et al. 2000, 87). Considering all states within the Latin American income range per capita ($971 to $8,233) between 1950 and 1990, democracy was more likely in this region than in others.

Finally, what effect does inequality have on the ability of a democratic regime to sustain itself over time? That is, given that a state is democratic to begin with, does inequality have a negative impact on the likelihood of its maintenance? Inequality may destroy a democratic system by fueling popular frustrations and eroding the legitimacy of the regime, which makes support for nondemocratic alternatives more likely (Dahl 1971). Elite support for a democracy characterized by an inegalitarian distribution of wealth may also be low if they do not have the institutional ability to block reforms that would lead to a redistribution of their assets. In this case, the majority cannot credibly promise not to implement policies that would be antithetical to the interests of the elite, which may lead the elite to support a coup to topple the democratic regime (Acemoglu and Robinson 2006, Boix 2003). Empirical support for these claims exists in limited form (Boix 2003, Muller 1988, 1995, Przeworski et al. 2000).[11] So is it the case that when democracy is instituted in a highly inegalitarian state, "the only way to break out of this vicious circle is for a strong political party with redistributive goals to develop during the early years of democracy and then hold office for a sufficiently long period of time to implement policies that significantly reduce income inequality" (Muller 1988, 66)? There is a popular perception that the left has accomplished this in Latin America (Lapp 2004). But the ability of any party to act as such is not estimated to be high according to the logic above, and indeed the empirical record of this is quite poor. Many of these states appear to be relatively stable and consolidating democracies despite high economic inequalities that are stubbornly persistent, resulting in a situation of nearly no redistribution despite representation.

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[11] Data problems here are massive. For example, Przeworski et al. (2000, 120) reach their conclusions based on 6 observations.

3. Research Design and Data

I contend that the motivating puzzle about the weak relationship between inequality and regime transition and duration can be solved by questioning conventional wisdom on the redistribution of wealth under different regimes. The first step is to measure redistribution by regime type in order to understand when regimes have implemented successful policies of redistribution. I show that authoritarian regimes in Latin America exhibit greater variance than democracies in the level of redistribution that they implement. One important theoretical implication of this variance is its role as a source of uncertainty in the mind of the elite, making them more likely to support predictable democratic regimes that will institute relatively weak or ineffectual programs of redistribution. Although hotly debated, redistribution in this context has received very little cross-country empirical scrutiny, in part because of lack of good data. But while a demonstration of higher variance in redistribution among authoritarian regimes is necessary to support the theoretical argument that follows, it is not sufficient. I must also show that there has been variation in redistribution *within* individual country cases.

As mentioned previously, the causal role of inequality in the likelihood of transition to and duration of democracy in the literature rests on the assumption that the poor, which are numerous relative to the elite, will vote to redistribute the society's wealth in their favor. Fundamentally, this conflict is about the distribution of assets within the state. While redefinition of income streams through taxes may be one way to implement redistribution, other more radical methods of expropriation, such as land reform in the case of Latin America, may also occur. Methods of redistribution such as this represent the most severe and immediate threat to the elite. That the argument is concerned with asset distribution makes the use of income Gini coefficients to measure inequality theoretically questionable.

Although many studies use income as a proxy for assets, the validity of this assumption has begun to be questioned as its measure is frequently associated with large errors (e.g. Deininger and

Squire 1998). [12] It is also empirically unappealing given data that are of "doubtful quality" comparatively, and very sparse in the developing world. Less than 10% of yearly observations in Latin America from 1951-90 have available Gini data of acceptable quality (Deininger and Squire 1996). Eight of the 19 states in the analysis have either none or one observation, effectively dropping them from the analysis. Of those observations that remain, most have large gaps between them, making meaningful interpolation very difficult. Furthermore, the states dropped from the analysis due to lack of data are not a random sample of the states being observed; there are factors that make collection of Gini data more likely in some states than others, and these factors may also effect the likelihood of redistribution. As a result, and as used elsewhere (e.g. Alesina and Rodrik 1994, Deininger and Squire 1998), I use inequality of land ownership as a proxy for asset inequality.[13] Land is also an asset that is highly immobile, which exacerbates the difficulties of transition when the distribution of ownership is highly unequal (Boix 2003). The degree to which land redistribution tracks with other forms of redistribution remains a topic for future research. [14]

I focus on land reform to measure politically important redistribution between social and economic classes for a few important reasons. First, land has been not only an economic basis for the political power of the ruling elite, but also the primary means of subsistence and wealth accumulation in rural areas, the vehicle for wealth transfer between generations, and even a means to escape poverty

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[12] An analysis of U.S. family-level data from the Panel Study of Income Dynamics also demonstrates that the correlation between total income and wealth (including home equity) in this case was only 0.39 for 2003 data, and 0.48 for 2005 data. The concentration of wealth in the U.S. is much more unequal than that of income. The correlation between income and wealth in developing states is probably even lower, but this is a hypothesis that awaits empirical scrutiny before it should be employed. See http://psidonline.isr.umich.edu/ for data.

[13] The Gini coefficient for Peru, for example, declined from 55 in the early 1970s to 49.3 in the early 1980s with the major land redistributions of Velasco and Morales, suggesting some conformity between these measures. Nonetheless, Gini data are too sparse to make any solid conclusions. See Deininger and Squire (1996) for Gini data.

[14] Other possible ways to measure redistribution might be to analyze social insurance schemes or tax rates for different income groups or net asset value brackets. Michael Best (1976) has demonstrated that in the case of Central America, elites have successfully used their political power within the state to keep tax rates low among the wealthy.

(Besley and Burgess 2000, Deininger and Binswanger 1999). Although Latin America has urbanized rapidly in the last 60 years, only Brazil (from 1988) and Chile (from 1980) had more urban inhabitants than rural ones from 1951-90.[15] In addition to the historical economic importance of land, "agrarian institutions are one of the best outward manifestations of social class: they reflect status within society, they reflect privilege, they reflect power" (Thiesenhusen 1989, 31). As a result of the role land has traditionally played in social construction and economic power in Latin America, land reform represents an economically important and politically charged type of redistribution that amounts to a "reordering of basic social relationships" (Huntington 1968, 299).[16] Second, and equally important, is the fact that although there are many nuances to land reform policies, they are ultimately quantifiable.[17] One can measure the distribution and use of land in a state, often with more accuracy than income. Furthermore, inequality in land distribution is likely to be "highly correlated with inequality in the distribution of accumulating assets" (Alesina and Rodrik 1994, 480). Even in modernizing states, most of the elite have some landed interest as a component of their net assets.

Using studies of land reform on all Latin American states, I have coded land redistribution by regime type for the time period 1951-90. Redistribution is measured as the physical area of private landholdings expropriated in a given year.[18] This is not always how agrarian reforms are quantified. Studies of agrarian reform often consider colonization of state-owned land, land titling programs to those who work their land but have no formal property ownership, the generation of markets to buy and sell land, and donations to the state in addition to the expropriation of private holdings. I make the

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[15] See the Correlates of War Project at http://www.correlatesofwar.org/ for data. Average urbanization in the region was 0.15 in 1951, 0.35 in 1990, and 0.38 by 2000.
[16] Whether land reform achieves this is a function not only of redistribution, but also of government decisions regarding tenure rights and the provision of land and credit. This is most clear in Mexico, where the PRI used land reform to construct a complex dependency on the state among benefactors, trapping them in poverty in the process.
[17] As with income or any other proxy for assets, the measure of land distribution is also problematic in some ways. For example, it does not account for soil quality or infrastructure.
[18] Data were not found for a total of 63 country years, or 8% of observations. Missing observations were interpolated where possible (15 country years). Remaining missing observations, all of which were in the last few years of the period, were extended to the end of the period based on the last observation. In no case was the magnitude of redistribution in these missing years under question.

distinction, and only include the last, because it is the only component of land reform projects that captures the causal mechanism I propose here. Since different countries have different sizes and geographical topographies, and therefore different endowments of land that may be used for agricultural purposes, redistribution is normalized by total cultivable land in order to generate comparable cross-country data.

Descriptive Statistics

From 1951 to 1990, there were roughly 140 million hectares, or 1.4 million km^2, of land expropriated in Latin America. This represents an area equivalent in size to that of Spain, France, and Germany combined. Mexico implemented the greatest redistribution in terms of physical land area at 54 million hectares. Cuba's land redistribution program was the largest relative to country size, expropriating a full 73% of the total land area in the country. Argentina, Paraguay, Uruguay, and Venezuela all experienced a redistribution of less than 1% of total land area, and less than 5% of cultivable land area. There is significant variation in the timing and pace of redistribution of land in the region as well. Early efforts began with the Bolivian revolution of 1952 which was followed by an agrarian reform, as well as in Guatemala under Arbenz in 1953 and the subsequent reversal by Castillo Armas. The Cuban revolution and massive expropriation, as well as the adoption of communism, led John F. Kennedy to initiate the Alliance for Progress in 1961, which among other things provided U.S. aid to "attack archaic tax and land-tenure structures." Expropriation of Trujillo's extensive holdings in the Dominican Republic in 1961 was followed by increasing reformism in Chile, Mexico, and Peru in the late 1960s. Bolivia, Chile, Mexico, Peru, and Panama experienced large reforms in the 1970s, a decade which ended with the overthrow and expropriation of the Somoza regime in Nicaragua in 1979. This was the largest instance of redistribution in the region, with a total of 63% of the state's cultivable land expropriated in a single year. A 1979 coup in El Salvador led to an agrarian reform program in the early 1980s that started strong but quickly fizzled, while Nicaragua implemented an agrarian reform,

and Brazil, despite its comparatively low level of redistribution, experienced a slight increase under Sarney only to see it plummet under Collor's first year of tenure in 1990.

There were a total of 359 country-years of democracy and 401 country-years of autocracy in Latin America.[19] There was at least some land redistribution in 370 of the total country-years. The average yearly redistribution was 1.4% of total cultivable land for the region as a whole, with democracies having a yearly mean of .9% and autocracies 1.9%. The two most significant land reforms implemented by democratic regimes, those of Arbenz in Guatemala and the program carried out by Frei and Allende in Chile, were both interrupted by military coups that returned much of the expropriated property back to the original owners.[20] The legacy of reform in these states for the remainder of the period was extremely limited. The remainder of major land reforms were implemented by autocratic regimes.

4. Empirical Analysis

There are two main parts to the analysis. First, variation in redistribution by regime type is explored both across and within states to demonstrate that redistribution varies more, and therefore generates greater uncertainty, during periods of autocratic rule. Average redistribution is higher under autocracy as well. I then present the results of several multivariate analyses of the determinants of extreme redistribution. Episodes of severe redistribution that are most devastating to elite interests occur most frequently during autocratic rule. This consequence of autocratic policy variance has important effects on elite choices of the regime they will support. Although the empirical focus is on Latin America, the theoretical argument that follows is more general; whether the empirical trends discovered here are similar to other regions remains a question for further research.

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[19] Although Cuba is not coded due to the particular coding rule employed by Przeworski et al. (2000), I classify it as democracy under Carlos Prío Socarrás in 1951 and autocracy for the remainder of the period.
[20] These cases are included as episodes of redistribution in the analysis, but they account for only two onset observations of extreme redistribution in the logit analyses. Excluding them does not materially change results.

Redistribution Across Regimes

Given the high inequality in Latin America, existing theory predicts that there should be significantly greater redistribution under democracy. The data suggest the opposite. Average yearly redistribution under democracy was .9% of cultivable land compared to a 1.9% yearly average in autocracy. Redistribution variance was greater during autocratic rule as well. Variance in yearly redistribution was 29% of cultivable land under autocracy and 19% under democracy. The policy variance in the pool of autocrats is greater than that in the pool of democrats. Nonetheless, these basic mean and variance statistics ignore country-specific differences. To determine whether the source of variance lies in the state or the regime, it is important to look within the state.

An analysis of redistribution within states yields similar trends. A within-country t-test for a difference of means in redistribution between autocratic and democratic periods suggests that redistribution is greater under autocracy. The hypothesis cannot be tested within Costa Rica, Cuba, Mexico, and Paraguay due to lack of variation in regime type during the period of analysis. However, the average yearly redistribution in Costa Rica was below the group mean for democracy, and average redistribution in Cuba and Mexico was above the group mean for autocracy. Of the remaining 15 states, Bolivia, Brazil, Ecuador, and Peru demonstrate a significant difference in redistribution across regime types at the .05 level. In all four of these cases, more redistribution took place under autocracy than under democracy. In no state was there statistically significantly more redistribution under democracy. This result is all the more surprising due to the low within-country sample size of 40, and the fact that autocratic regimes experienced a high variance in redistribution, which inflates the estimated standard error of the means.

Of states that implemented land reform programs that resulted in at least 1% of cultivable land redistributed in any single year during the period 1951-90 and had at least two years of both autocratic and democratic rule, eight of the ten experienced higher variation in redistribution during periods of autocratic rule. These states are Bolivia, the Dominican Republic, El Salvador, Guatemala, Honduras,

Nicaragua, Panama, and Peru. Brazil and Chile had greater variation during democratic rule. Figure 3 shows the mean and variance in redistribution by regime type within these states.[21] The arrows show the change in the characteristics of redistribution from periods of democracy to those of autocracy. Existing theory predicts that they should be leftward-pointing, and remains silent on the vertical direction. According to the argument presented here, the arrows should be pointing upward in the vertical direction, and generally rightward in the horizontal direction.[22] This figure helps to put these cases in comparative perspective. Chile, often used as the paradigmatic case for redistribution under democracy, is a clear outlier as the only downward, left-pointing arrow. It is also important to recall that the redistribution program that reached a crescendo under Allende was cut short by the Pinochet coup, and much of the land expropriated under Frei and Allende was returned to its original owners. In Brazil, variation in redistribution under democracy is only slightly higher than that under autocracy, and given the comparatively small redistribution programs this is more a testament of the failings of early democratic regimes rather than the quite limited success of more recent ones. Cuba is well above the average redistribution variance for autocracies, and Costa Rica is well below the average for democracies. In Argentina, Costa Rica, Uruguay, and Venezuela, the variance in redistribution under democracy is negligibly small, which is a reflection of the very low rates of land redistribution in these states.

[Figure 3 about here]

Multivariate Analysis of Extreme Redistribution

The analysis above demonstrates that autocratic regimes tend to redistribute wealth more than their democratic counterparts on average, and that the variance in redistribution is greater. But in order to determine the political effects of this variation, it is important to learn when a

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[21] Honduras, in which both the mean and variance in redistribution were higher during autocracy than in periods of democracy, is excluded from Figure 3 due to its comparatively small amount of redistribution.

[22] The argument presented here is engaged more with the variance in redistribution (vertical direction) than in the mean (horizontal direction). But to the extent that the variance is higher under autocracy, and that redistribution is generally low under democracy, there should be generally higher means as well.

government will implement the most consequential policies of redistribution: those that are severely redistributive from one class to another. The likelihood of a highly redistributive government is the most important factor in the mind of the elite when choosing whether to support democracy or an authoritarian alternative. As a result, a series of binary time-series cross-section models were constructed with the aim of finding the determinants of extreme instances of redistribution. If the argument about greater redistribution variance under autocracy is correct, there should be fatter tails in the distribution of expropriation either in favor of the status quo or against the existing elite under periods of autocracy. Extreme redistribution should occur most often during autocratic rule.

A set of logit models was estimated using *extreme redistribution* as the dependent variable and a series of covariates as independent variables.[23] The main focus here is on *regime type*, which is a dichotomous indicator taken from Przeworski et al. (2000), with "0" representing democracy and "1" autocracy. Regime type is also measured by *democracy* using the Polity IV index in a robustness check. Real per capita income is measured in constant U.S. dollars in 2000, and population is measured in thousands. Both are taken from Penn World Table 6.2. Value added agriculture and aid are taken from the 2005 World Development Indicators. The former is measured in constant 2000 U.S. dollars, and the latter as a percentage of gross national income. Measures for oil dependency, civil war, and instability are taken from Fearon and Laitin (2003). Oil is a dichotomous indicator of whether at least one-third of a state's export revenues come from fossil fuels. Civil war, of which there are 105 country years during the period of focus, is also a binary indicator. Instability is a dummy variable for whether a state experienced a change of three or more points on the Polity IV index in any of the previous three years. Transition periods and interruptions are also classified as instability. Revolution is a dichotomous measure for whether there is a group that seeks control of the central state and is able to

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[23] Running OLS on a time-series cross-section model with panel-corrected standard errors and redistribution as a percentage of cultivable land as the dependent variable yields similar results. Autocratic regimes are associated with greater redistribution. But preference here is given to the binary dependent variable of extreme redistribution since the focus is on redistributive events associated with high policy variance.

attract large-scale participation among citizens outside the ruling regime. The group must achieve basic political change, even if that change is temporary.

The results are found in Table 1. The dependent variable was coded "1" for country years in which a period of extreme redistribution began and "0" in others.[24] Redistribution in a given country year is considered "extreme" if at least 3% of total cultivable land in the state was expropriated during that year. Data on cultivable land area is taken from the Food and Agriculture Organization. Other indicators are detailed in the section in which they are discussed for Table 1.

[Table 1 about here]

Regime Type. The main findings are those related to the effect of regime type on the likelihood of extreme redistribution. The coefficient associated with this variable is both statistically and substantively significant. Contrary to what is expected under existing theory but consistent with the argument presented here, there is a strong positive relationship between autocracy and the likelihood of large-scale expropriation. A change in regime from democracy to autocracy increases the odds of extreme redistribution in a given year by about 400%. If other real-valued variables are set to their mean and dummy variables to their median, a democracy has a 6% probability of implementing a program of extreme redistribution during a five year period, compared to a 24% chance for an autocracy. Latin American populism, contrary to conventional wisdom, has been more notable for its failures than for its successes in the case of land reform.

Per Capita Income. There is a positive association between per capita *income* and redistribution, but it is neither strongly statistically significant nor practically significant in comparison to others such as

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[24] Any first instance of extreme redistribution under a particular leader or government is considered a case of onset, with leadership data taken from www.rulers.org. As noted by Beck et al. (1998), binary time-series cross-section data such as this are grouped duration data, and therefore one must consider the possibility of temporal dependence between observations. Unless otherwise noted, the dummy variables in each model for time since the previous onset were jointly insignificant.

population or agricultural value added.[25] A higher income level in this context may be a proxy for the capacity of a state to implement land redistribution. Without the bureaucratic and coercive apparatus to apply reform projects, little will be accomplished. Greater income also implies that a state has the resources to better finance expropriation and thereby reduce resistance to reform. But if a state has enough money, it may alternatively finance colonization projects on state land or buy large private tracts from landholders at market value.

Population. The process of modernization often leads to violence and the threat of political disorder as groups mobilize politically to advance their interests (Huntington 1968). In Latin America, this has often come from the countryside in the form of land invasions and strikes. Although concessions may be granted on an individual basis in some cases, failure to address reform demands at a broader level may lead to civil conflict and the formation of insurgent groups. A large population is more difficult to control and monitor, and increases the potential supply of recruits to an insurgency (Fearon and Laitin 2003). It also increases the pool of those possibly willing to join protests and land invasions. Governments may try to ameliorate these threats with agrarian reform programs, and if they fail, the military may try to take the reins of the state to stave off revolution. A large population is associated with a greater likelihood of redistribution, and the coefficient is statistically significant. Holding other real-valued variables at their mean and dummy variables at their median, the probability of a country undertaking an extreme redistribution increases from 1% for those with a population equal to the lower quartile to 18% for those at the upper quartile of population.

Agricultural value. An underperforming agricultural sector, especially one in which there is a large amount of underutilized land, has often been cited as a reason for reform both to ameliorate rural poverty and to lower urban food prices by increasing supply (Thiesenhusen 1995). The provision of cheap food in cities has often been used as a mechanism for the diffusion of urban unrest (Bates 1981).

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[25] The only missing observations were those of Cuba from 1951-69. These were calculated using the regional growth rates in per capita income in these years to extend the series back to 1951.

Arguments in favor of reforming unproductive agriculture often invoke the inverse relationship between farm size and production per hectare (Dorner and Kanel 1971). But to the extent that the elite own profitable, high-output agribusinesses that form a significant component of their wealth, these arguments tend to fall flat. The greatest opposition to land reform is from an elite that relies on land ownership not simply for status or personal reasons, but for profit. The value of agriculture in a state is strongly negatively associated with extreme redistribution, and this finding is statistically significant and stable across all models.[26] Setting other real-valued variables at their mean and dummy variables at their median, the probability of a country undertaking an extreme redistribution decreases from 23% for those at the lower quartile of agricultural production to 1% for those at the upper quartile.

Oil. Through a mechanism known as the rentier effect, a government may use resource revenue to mitigate popular political demands by spending resource wealth on patronage networks or preventing the formation of social groups independent of the state (Jones Luong and Weinthal 2006). Oil wealth may also be used to strengthen the military and police in order to repress pressure for political and social change (Ross 2001). Land reform demands can also be met by the development and distribution of state-owned lands for colonization, funded by a boom in state revenue from resources. Indeed, such a strategy has often been used as an "escape valve" from the alternative of expropriation. On the other hand, a boon from oil could be used to finance large-scale expropriation and manage the resultant resistance. Although the coefficient for *oil* is generally negative, it is not statistically significant in any of the models.

Civil War. Civil wars tend to occur in weak, unstable states with rough terrain (Fearon and Laitin 2003). These conditions, which make the projection of power and implementation of state policy difficult, are typically not conducive to large-scale efforts at redistribution. But large populations are strongly associated both with an increased probability of civil war and with the probability of extreme

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[26] There were a total of 274 missing observations. These values were predicted by regressing the log of agricultural value on the log of population and year, with an R^2 of .92. In essence, this sets a country's value of agriculture to the average of that of countries in the same year with the same population.

redistribution. And *civil war*, while controlling for population, is positively associated with the likelihood of redistribution, although the finding is not statistically significant. The direction of causality is unclear. It is possible that large-scale redistribution may cause sufficient upheaval to result in civil conflict, but as has often been the case, redistribution may occur under a new regime that has taken power in order to remove unequal land ownership as a source of existing conflict.

Instability. Huntington (1968, 358) argues that land reform "frequently requires the disruption of stability." Although violence through land invasions and political protests may be one manifestation of this, another may be a repressive response from the state or a coup attempt by the military with the intent of restoring order. There is no support for this hypothesis found here. Indeed, that the political regime remains fairly stable in the time before redistribution is further support for the notion that it may be difficult to predict when large-scale expropriation may occur.

Revolution. Periods of revolution, especially when the challenging group obtains power in the state, often lead to an overturn of the status quo.[27] If the status quo is characterized by a highly unequal income distribution, then large-scale redistribution may result. Revolutionary states also tend to be autocratic, either because centralized power is deemed necessary to crush a revolt, or in the internecine conflict that follows successful revolution. Although revolution is positively associated with episodes of extreme redistribution, the results are not statistically significant. It is frequently the case that revolutionary movements occur when a state has a weak military apparatus, and the chaos that ensues in successful revolutions often emasculates state capabilities even further. The weak institutions in these states cannot be used to effectively redistribute wealth.

Aid. Reliance on foreign aid may reduce the likelihood that a state will expropriate from investors (Jodice 1980). In a number of Latin American states in this period, foreign businesses played a large role in agriculture and often owned vast tracts of land. Foreign aid may also finance alternatives to

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[27] The results for this variable are similar whether either all years of revolution or only onset years are included, or if the subsequent five years after the last year of revolution are included. The findings are also robust to how revolution is operationalized as a variable.

expropriation, for example by financing inputs that increase productivity or by providing funding for the development of state-owned land. Indeed, altering land tenure while attracting investment was one of the major goals set at the Punta del Este conference in 1961 which created the Alliance for Progress and dramatically increased U.S. aid to Latin America. The coefficient on *aid* in Model 2 is negative, but it is not statistically significant. Average aid in the region between 1960 and 1990 was less than 2% of GNI, hardly a major component of state funding.

Robustness

The main findings are robust to various model specifications and for alternate measures of regime type. The third model in the first set in Table 1 uses the Polity IV scale to measure democracy. Its coefficient is both statistically and substantively significant. Autocratic regimes are associated with a greater likelihood of implementing a program of extreme redistribution than their democratic counterparts. A shift in polity score from 7 to -7 increases the probability of large-scale expropriation in a five year period from 8% under democracy to 22% under autocracy, a result very similar in magnitude to that found using a dummy variable for regime.

The finding for the relationship between regime type and redistribution also holds for various specifications of the dependent variable and for alternate thresholds for what constitutes an episode of extreme redistribution. In the fourth model presented in Table 1, the dependent variable is whether or not there was at least 3% of cultivable land redistributed in a given country year. Regime type, population, and the value of agriculture all maintain their statistical significance and magnitude of practical significance. Although this model accounts for the possibility of temporal dependence among observations by using a set of dummy variables, it employs the questionable assumption that observations of redistribution in a country beyond the first instance are independent of the number and timing of previous instances (Beck, Katz, and Tucker 1998). As a result, in further robustness tests it is replaced by models that consider only redistribution onset. Results also hold for re-specification of the definition of "extreme" in the dependent variable. If the threshold for what constitutes an instance of

extreme redistribution is lowered to 2% or to 1% of cultivable land in a single year, the findings are similar. Although the coefficient for regime declines, it remains statistically significant and substantively important. Other coefficients remain stable as well across these various specifications.[28]

Autocracy and Redistribution

Although the relative lack of reform under democracy is apparent, what might explain the variation in reform under autocracy? A number of hypotheses have been offered to explain variation in military policy, such as the level of military professionalism (Huntington 1964), the level of civilian political participation and the strength of civilian political institutions (Huntington 1968), organizational strength and ideological unity in the context of societal socioeconomic and political conditions (Stepan 1978), and diversity in the preferences and attitudes of military officers (Geddes 1999). Although authoritarian regimes may often cast their lot with the status quo, some of the largest and most tragic development blunders in history, from forest monoculture in eighteenth century Prussia to Soviet collectivization, have been attempted by authoritarian states with the coercive capacity to implement high-modernist ideas (Scott 1998). Outcomes such as these are exactly what democratic regimes, through institutions that necessitate a larger number of diverse actors to agree to change the status quo, are designed to protect against (Madison [1788] 1987, Tsebelis 1995).

Theory to explain variation in redistribution under autocracy remains underdeveloped, but the important point here is not the cause but rather the political effects of these differences in variation. An instructive case is Guatemala, where attempts at land reform under democracy in the early 1950s were cut short and reversed after a military coup, leaving a legacy of caution for subsequent democratic regimes.

> [Newly inaugurated President Marco Vinício] Cerezo refuses to investigate military officers accused of past human rights abuses. He has rejected the idea of a land reform…These actions sit oddly on the shoulders of a reformist leader. But the shadows of Guatemala's violent

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[28] A fixed effects model was also estimated. The fixed effects perfectly predicted extreme redistribution in 9 countries. Using those states remaining in the analysis, fixed effects were found jointly insignificant. If one nonetheless keeps them in the model, the coefficient for regime was 1.11, with a p-value of .054.

history dim hopes for a quick change…[There are political factors] behind Cerezo's reluctance to embark on any serious land reform, even in a country where a small minority controls 70 percent of the cultivable land, while a poverty-stricken peasantry clamors for a few acres. (Thiesenhusen 1989, 5)

Yet democratic politics in states such as Guatemala may actually benefit in some ways from their tumultuous past and the uncertainty that this has introduced in the population about both the duration of the regime, but also what may happen under a regime that replaced it. Although candidates find it easy to appeal to the majority desires for redistribution under conditions of electoral competition, many also realize that this is an implausible goal in the form in which it is often proposed, as evidenced by past failures. One congressman noted that "Nobody in Guatemala dares mention the idea of redistributing wealth…Everybody knows it should be done…to provide more services to the poor. But if you say that too loudly you scare the *finqueros* and the army…The gap between rich and poor remains" (Thiesenhusen 1995, Ch. 4 fn. 5). Not only does this induce moderation in redistribution under democracy, but that moderation also makes it more likely that the elite will support the democratic regime, and that such a regime will last long enough to begin the process of consolidation.

5. Theoretical Implications of the Empirical Results: Democracy, Redistribution, and Inequality

The high degree of authoritarian instability in Latin America has served not as an impediment but rather as a major contributing cause of democratic regime initiation and duration. As Alexander (2002, 25) argues, "differences in expected outcomes under alternative regimes crucially influence the regime preferences that actors form." But the commitment to democracy among the propertied elite need not develop as a *result* of low political risk or political predictability under such a regime. Indeed, this predictability may be induced as a result of the expected behavior of an authoritarian alternative. The elite will prefer democracy when the result of supporting an alternative military option is sufficiently uncertain, and depending on expectations of the outcome under authoritarian rule, this may induce moderation in the democratic regime. This observation also helps to solve another anomaly

under existing theory, which predicts that there will be high levels of redistribution in unequal democratic societies. But often the status quo prevails despite severe inequality, as is the case in the divisive issue of land redistribution in Latin America. Instead of a popular government guiding reform, it is generally the case in Latin America that "land reform has succeeded politically when imposed by revolutionary governments trying to break the power of the landed oligarchy" (Cardoso and Helwege 1992, 255).[29] This is not unique to Latin America; it has often been true in other regions as well, of which Nasser's Egypt and Mugabe's Zimbabwe stand as prominent examples. Ironically, it seems as if "pluralistic politics and parliamentary rule are often incompatible with effective land reforms," effectively serving as the "graveyards of land reform measures" (Huntington 1968, 388-89). Finally, this explanation provides another reason why "[a]grarian reform thus enhances the possibilities for genuine political democracy" (Alexander 1974, 105-6). In addition to the potential for increased political power among the peasants, it also leads the remaining elite to support what may be a less threatening regime under democracy.

Consider a state with high inequality in which a democratic regime is in power and decides the rate of redistribution.[30] A higher level of redistribution from the wealthy to the poor benefits the median voter but is worse for the elite. The elite, learning the rate of redistribution, can choose to live with the status quo or to challenge it by supporting a military intervention. There are two important sources of elite uncertainty that affect the stability of a democratic equilibrium and the rate of redistribution under such a regime. First, if the elite choose to challenge the regime by supporting a coup, they are not certain about what type of military leader will assume power. Although they may

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[29] This is particularly true when expropriation is a primary reform tool. Venezuela is a case in which relatively successful land reform has been implemented largely absent expropriation, from President Bétancourt's 1960 agrarian reform to the present day under Hugo Chávez, although that has begun to change as Chávez consolidates his power. But Venezuela is a unique case due to the large supplemental expenditures on reform that derive from oil profits. During early reforms, and even today, these expenditures have been used to extend credit to new landowners, invest in rural areas, build road and irrigation systems, and provide "very adequate compensation" to former landowners (Alexander 1974, 30-32, 62-64). Another successful mechanism for the implementation of land reform is foreign occupation and imposition, as the U.S. did in Japan and Korea after WWII.

[30] Consult the author for a formal proof of the game.

form a coalition behind a key leader that seeks to seize power, the clandestine environment in which coup plots are prepared typically preclude all actors from knowing all of the other supporters of the plot. This makes it unclear whether the coup leader is using some supporters simply to expand the launching organization and the resources available for the plot, or whether he truly supports their interests.

Even if the elite are able to effectively monitor the coup leader, and if a coup succeeds and the leader supports the interests of the elite, there is still a second source of uncertainty regarding the stability of the regime. That militaries are typically so factious implies that coups and countercoups may change the nature of a military regime that comes into power. A new military regime may uphold the policies of the previous one, but it may also seek to reverse them, posing a serious threat to the elite that had supported the initial coup. And once the military has gained power, it may be difficult for the elite to initiate a return to democracy if military rule is inconsistent with their interests. Therefore, there is an inherent uncertainty about the duration and policies of military rule at the outset of any coup attempt. Even if the elite can form reasonable expectations about what a coup leader they support will do once in office, there is uncertainty about whether the leader will last one year or twenty years, and this is consequential for their initial decision of whether or not to support a coup.

There are also costs associated with a coup attempt. The elite pay a cost to organize in support of a military intervention, and the democratic regime pays a cost in trying to fend it off. This implies that there is a range of redistribution rates under democracy that both the electorate and the elite would prefer to an internecine conflict of attempted coups and redistribution. Within this range democracy can survive, in some cases supporting low levels of redistribution and the maintenance of inequality.

The elite do not need to have a great deal of certainty about what the military might do in office to be willing to challenge a democracy that implements high redistribution. As the likelihood that a status quo military will maintain power after a coup increases, the maximum level of redistribution that can be sustained under democracy decreases. On the other hand, the elite must be very sure that the

military would support their interests in office to be willing to challenge a democracy that implements a low rate of redistribution. But because there are costs associated with an intervention, the electorate will be able to set some nonzero level of redistribution. The rate of redistribution under democracy increases as the likelihood of reformist military rule supplanting status quo military rule increases.

Similar logic captures how the rate of redistribution varies with uncertainty over reformist military rule. To the extent that a reformist military may be divided or weak, the elite may challenge a democracy even if there is a non-negligible possibility that a reformist military may take power. If the electorate knows this, they will implement a lower rate of redistribution. But as the likelihood of a reformist military regime being in power in any year after a successful coup increases, the maximum sustainable level of redistribution under democracy monotonically increases. As the reformists get stronger, the electorate should be able to push the rate of redistribution higher under democracy. The elite will be less likely to challenge when they are fairly certain that the military will attempt to expropriate their assets. Yet only when the electorate is very sure that a military coup will lead to consistent reformist rule down the road, a situation which is quite rare, will they choose a high level of redistribution without facing a challenge from the elite. More frequently there is some uncertainty about not only whether and what sort of military regime might emerge from a coup, but also about the redistribution policies that they or their successors will implement. This uncertainty can lead the elite to support a mildly redistributive democracy to avoid the small but disastrous chance that a reformist military regime may emerge from a coup they engineer. At the same time, uncertainty over the prospect of having to scrape by under military rule supportive of the elite can lead the electorate to choose relatively low levels of redistribution, with the knowledge that this is better than nothing and the hope that consolidating democratic institutions and bridling the independent strength of the military will lead to future gains. Under such an equilibrium, inequality and low levels of redistribution can survive under democratic rule.

6. Theoretical Implications: The Case of Peru

The history of reform in Peru illustrates a number of the theoretical arguments I put forth, and is consistent with the broader empirical trends in the region. Since WWII, the political landscape in Peru has been dotted with tenuous transitions to democracy followed by repeated military coups. All of these transitions have occurred in the face of severe economic inequality among members of the population. Democratic candidates often campaign on a platform of progress toward equality, with some less specific than others on how this might be accomplished. But despite the rhetoric, democratic governments in Peru have a poor track record on implementing the kind of redistribution necessary to reduce wealth disparities. Military governments have sometimes engaged in supporting the status quo and other times carried out dramatic reform, reducing overall inequality significantly more than their democratic counterparts. Table 2 demonstrates this point in the context of land reform.

[Table 2 about here]

If my argument is correct, democracy in Peru should be in part attributable to elite support of the regime due to fear of the counterfactual circumstance that an authoritarian alternative may be even more antithetical to their interests. As shown in Table 2, there is good reason to believe that the elite in Peru cannot be confident that a military regime would be better for them than a democratic alternative. What explains the variation in the duration of Peru's first ill-fated steps toward democracy, and why were some regimes able to implement significant redistributions of wealth when others failed?

In a discussion of the context of military interventions, Germani and Silvert (1961, 80) note that "[m]ilitary politics inevitably and invariably involve identification with wider social interests and ideologies. The patterning of these identifications depends in important measure on the social origins of the officer corps and the social mobility functions which the military institution may serve." Peru is no exception to the rule. Until the 1960s the military, with a status quo orientation derived from an officer class composed largely of elite, protected the wealth and power of the landowning elite (Lowenthal 1974, 121). When democratically elected President Bustamante came to power in 1945,

his fear of revolution as a result of social inequality led him to embark on a program of economic liberalization and expansion of political participation. He attempted decentralization in order to marginalize the powerful coastal landholders, and expanded participation to undermine the role of the military in political and economic life. Predictably, such a course antagonized these very oligarchs and military men who knew that they had similar social and economic interests. The redistribution rate that the elite were willing to accept before supporting a military intervention was very low due to the certainty in military policy in the case of a coup. As that rate rose, so did elite support of a coup.

An economic and parliamentary crisis led to the regime's overthrow led by General Manuel Odría and the establishment of a conservative status quo. Peru appeared on the cover of Fortune magazine, which lauded its "scrupulous respect for private property" and praised it as a "standard in international economic conduct" (Davenport 1956, 131-32). The democratic successor to Odría's rule established the *Comisión para la Reforma Agraria y Vivienda* in 1956 to create an agrarian reform law, but the proposed law that took four years to design was never passed. Efforts at redistribution were largely stymied by conservative landowners and lawmakers, who were therefore willing to support what amounted to a status quo democracy. Although the industrial bourgeoisie were gaining increasing influence within the broader elite by the 1960s, the coastal oligarchy composed of sugar and cotton growers remained strong even up until the eve of Velasco's rule in the late 1960s (Stepan 1978, 119). It was against this backdrop that the hectic elections of 1962, which raised the prospect of greater leftist influence in the government while putting Odría back in office, were cancelled in a coup and rescheduled for the following year.

The elections led to a return to democracy under Fernando Belaúnde Terry. Although he was able to pass an agrarian reform law through Congress in 1964, those opposed to it successfully added such a large number of modifications that it became so costly and difficult to implement and provided so many exceptions and loopholes as to render it nearly useless. A professionalizing military with increasingly reformist elements enabled democratic leaders to push for more redistribution than before

without provoking elite support of a coup, yet redistribution remained moderate in scope. After four years, only 384,254 hectares had been redistributed to fewer than 15,000 peasants, a total of 4% of the land that could have been transferred by law (Thiesenhusen 1989, 137-38). At the same time, both rural and urban elites began to worry about the potential for revolution as leftist guerrilla activity cropped up in the Andes from 1965-66. Despite this threat, the military completely crushed the rebels and virtually eliminated the leadership of the Movement of the Revolutionary Left (Einaudi 1973). While the rebellions led both the military and the elite to fear recurrent peasant protest and realize the need for social and economic change in order to stave off revolution, the military response sent a signal to the elite that the military supported their interests. Less than three years later with an APRA victory in upcoming elections and the prospect of serious attempts at redistribution a real possibility, the military took control of the government in a coup led by General Juan Velasco Alvarado.

Uncertainty over the type of policies that would be implemented under the new regime was best stated by Velasco himself on the first anniversary of the coup:

> Some people expected very different things and were confident, as had been the custom, that we came to power for the sole purpose of calling elections and returning to them all their privileges. The people who thought that way were and are mistaken. (Velasco 1969, 189)

The policies instituted under Velasco demonstrate the high variance in redistribution policies of which authoritarian regimes are capable. Previously status quo military rule was replaced by highly reformist rule. Velasco's policies also show the devastating potential a reformist military regime may have on the traditional elite class. An agrarian reform law was passed in 1969 shortly after the military came to power. Among other rules, it stipulated that all landholdings above 150 hectares on the Coast and above 15-55 hectares (depending on region) in the Sierra were subject to expropriation. Landowners had to live and work on the land, industries on the expropriated landholdings were to be expropriated, and large post-reform estates were to be owned and worked as cooperatives. Compensation was provided on the basis of the value declared by the landowner for tax purposes, and reimbursement to

the landlord was paid mainly in government bonds (Thiesenhusen 1989, 139-40). Peruvian elites who had derived their power from land were removed in favor of the industrial elite.

Land reform was continued and deepened under Francisco Morales Bermúdez, who took power from Velasco in 1975. By the end of military rule in mid-1980, just short of 8 million hectares, roughly the equivalent of all cultivable land in the state, had been redistributed. But economic crisis in 1976-77 led Morales to vary his policies and dramatically slow redistribution, resulting in widespread protest and calls for democracy to avoid a return to repression and status quo policies of the past (McClintock 1989, 140). The largely atrophied elite also supported a turn to democracy in the face of continually uncertain prospects under military rule. The democratic successors Fernando Belaúnde Terry (1980-85) and Alan García Pérez (1985-90) to these twelve long years of military reform, somewhat emboldened by reformist military rule in the 1970s, granted concessions to the now well-organized left. Yet they tended to tread relatively lightly on redistributionist policies compared to their military predecessors, with tax revenues declining sharply and land redistribution halted. The rise of guerrilla activity by Sendero Luminoso and divergent military opinion on whether the threat should be met by repression and military enforcement of status quo order or by rural economic development meant that the electorate trusted the military as little as the elite. The fact that military spending, though declining, remained very high only strengthened distrust and antipathy for it (McClintock 1989). That the military proved itself to be capable of a return to status quo orientation under Fujimori in the 1990s provides evidence for the sensibility of these popular fears and a rationale for limiting redistribution in an effort to keep the military in the barracks.

Less than six years after Alberto Fujimori surrendered his grip on the state, there have been two successful democratic elections. The most recent has brought to office former President Alan García, a member of the traditionally leftist APRA party who nonetheless was elected on a platform of economic growth through trade and investment over his opponent Ollanta Humala, "an upstart nationalist who

promised to redistribute the country's wealth."[31] Why would the electorate in such an unequal society

not support the candidate who promised more redistribution of wealth? And why, despite support for

Fujimori especially in the early years, has Peru been able to return to and maintain democracy, at least

in the short term? My argument suggests that while there was significant elite support for Fujimori's

authoritarian tactics in the early 1990s, his support waned quickly when the threat to the elite from a

democratic alternative also declined. As the revolutionary threat from Shining Path was brutally

crushed and the economy was stabilized, the primarily industrial elite no longer had much to fear from

democracy, while the authoritarian threat to their assets was increasing as the state grew stronger and

more corrupt. The past willingness of the military to support Fujimori's authoritarian policies has left

them as an "outside option" that the elite may turn to in the case of a significant threat to their

interests.[32] This hangs as an implicit threat over democratic rule, leading to moderation in policy

choice over redistribution.

Conclusion

Inequalities in Latin America have been vast and vicious in the past, and promise to continue as

such in at least the short to medium term. And how has the progress toward equality that has occurred

to date been accomplished? Often by autocrats rather than democrats. But the redistribution choices of

autocrats are far from predictable. Variance in authoritarian redistribution policies is a source of

uncertainty that can simultaneously encourage elite support of democracy and democratic moderation

in redistribution despite high inequality. One major type of redistribution, land reform, has historically

been a politically divisive means for improving the lot of the poor and decreasing inequality by

redistributing the land of the wealthy. But this was not a movement of the past. Today, as Latin

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[31] Juan Forero, "Failure in '90, Ex-President Wins in Peru In a Comeback," *New York Times*, 5 June 2006, sec. A.

[32] An example of the plausibility of a return to authoritarianism is Fujimori's inglorious return to South America and registration in the 2006 presidential elections. Although he was detained by Chilean authorities and his candidacy rejected, there is debate over the degree of advocacy for his return from some members of the military.

America is experiencing one of its most meaningful shifts to the left under largely democratic regimes, land reform is resurfacing as a prominent item on the agenda. Bolivian President Evo Morales, citing inequality in the distribution of land, has recently promised to redistribute a fifth of the land in Bolivia. Land invasions and related violence continue to pressure democratic governments from Brazil to Paraguay to implement meaningful programs of redistribution. Redistribution has been more successful in Venezuela as President Hugo Chávez has provided incentives for land invasions, but this comes as he further consolidates his grip on the state. Solidly democratic states have had a more difficult time trying to implement redistribution programs.

But if the theory presented here is correct, democracy may have more to offer in the future. As the plausibility of an authoritarian alternative that is appealing to the elite diminishes in these states, the elite will pose less of a threat to the stability of democracy. This could result from diversity in military recruitment or greater civilian control over the military, which erode the coherence of preferences in the military and decrease the likelihood of coup success, effectively making a challenge to democracy more costly. These regimes will then be able to slowly move toward policies of greater redistribution without being destabilized. As a result, there may be more leaders like Michelle Bachelet in Chile or Alan García in Peru, socialists who promise not only moderation but also change.

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TABLE 1. Logit Analyses of Extreme Redistribution, 1951-90

	Model					
	(1)			(2)		
				Redistribution	Redistribution	Redistribution
	Redistribution Onset (3%/yr)			(3%/yr)[c]	Onset (2%/yr)	Onset (1%/yr)
Regime type[a]	1.40**	1.99**	—	1.33**	1.14**	0.729*
	(0.489)	(0.633)		(0.432)	(0.411)	(0.349)
log(per capita income)	0.229	1.03	0.103	0.907*	0.204	0.00922
	(0.506)	(0.752)	(0.493)	(0.454)	(0.454)	(0.414)
log(population)	2.13**	3.06***	2.11**	2.28**	2.78***	2.88***
	(0.756)	(0.913)	(0.731)	(0.853)	(0.676)	(0.621)
log(agricultural value)	-2.03*	-2.91**	-2.02**	-2.01*	-2.56***	-2.74***
	(0.799)	(0.975)	(0.77)	(0.851)	(0.713)	(0.652)
Oil	-0.547	0.125	-0.464	-0.984	-1.68	-1.19
	(0.786)	(0.824)	(0.794)	(0.666)	(1.04)	(0.757)
Civil war	0.672	1.38	0.516	-0.243	0.313	0.0893
	(0.661)	(0.768)	(0.664)	(0.638)	(0.612)	(0.585)
Instability	-0.135	-0.232	-0.114	0.46	-0.30	-0.508
	(0.457)	(0.551)	(0.457)	(0.399)	(0.427)	(0.415)
Revolution	0.804	1.30*	0.945	0.897	0.778	0.68
	(0.621)	(0.656)	(0.611)	(0.641)	(0.596)	(0.575)
Democracy[b]	—	—	-0.0712*	—	—	—
			(0.036)			
Aid (% of GNI)	—	-0.00446	—	—	—	—
		(0.113)				
Constant	17.8	20.6	19.6*	13.8	24.1**	29***
	(9.58)	(11.6)	(9.39)	(10.6)	(8.54)	(7.77)
N	760	545	760	353	760	760

Note: Unless otherwise noted, the dependent variable is coded "1" for country years in which a period of extreme redistribution began and "0" in others. Standard errors are in parentheses. Estimations calculated using R 2.4.0.
[*]$p < 0.05$, [**]$p < 0.01$, [***]$p < 0.001$.
[a] Coded as by Przeworski et al. (2000). Varies between 0 (democracy) and 1 (autocracy).
[b] Polity IV. Varies from -10 (autocracy) to 10 (democracy).
[c] Dependent variable coded "1" for country years in which there was extreme redistribution and "0" in others. Temporal dummy variables in this specification not shown.

TABLE 2. History of Land Redistribution in Peru, 1951-90
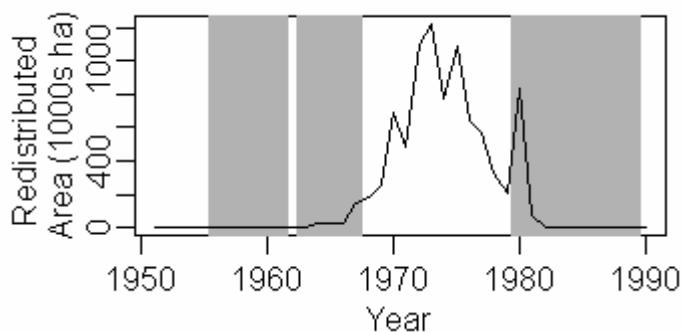
Years	President	Regime Type	Degree of Land Redistribution
1951-56	Manuel Odría	Military Dictatorship	None
1956-62	Manuel Prado y Ugarteche	Democracy	Presidential Commission proposed agrarian reform law, but never passed
1962-63	Ricardo Pérez Godoy	Military Dictatorship	None
1963	Nicolás Lindley	Military Dictatorship	None
1963-68	Fernando Belaúnde Terry	Democracy	380,000 hectares from 1964 to 1968
1968-75	Juan Velasco Alvarado	Military Dictatorship	4.6 million hectares from 1968 to end of 1974
1975-80	Francisco Morales Bermúdez	Military Dictatorship	3.3 million hectares from 1975 to 1980
1980-85	Fernando Belaúnde Terry	Democracy	420,000 hectares under previous laws; passed laws to enable parcellation of collectives but none for redistribution
1985-90	Alan García Pérez	Democracy	Continued parcellation but no redistribution; failed attempt to nationalize banking industry

Source: Alberts 1983; Fernández and Gonzales 1990; Maletta et al 1984; Thiesenhusen 1989.
Note: Shaded regions in graph signify periods of democratic rule.

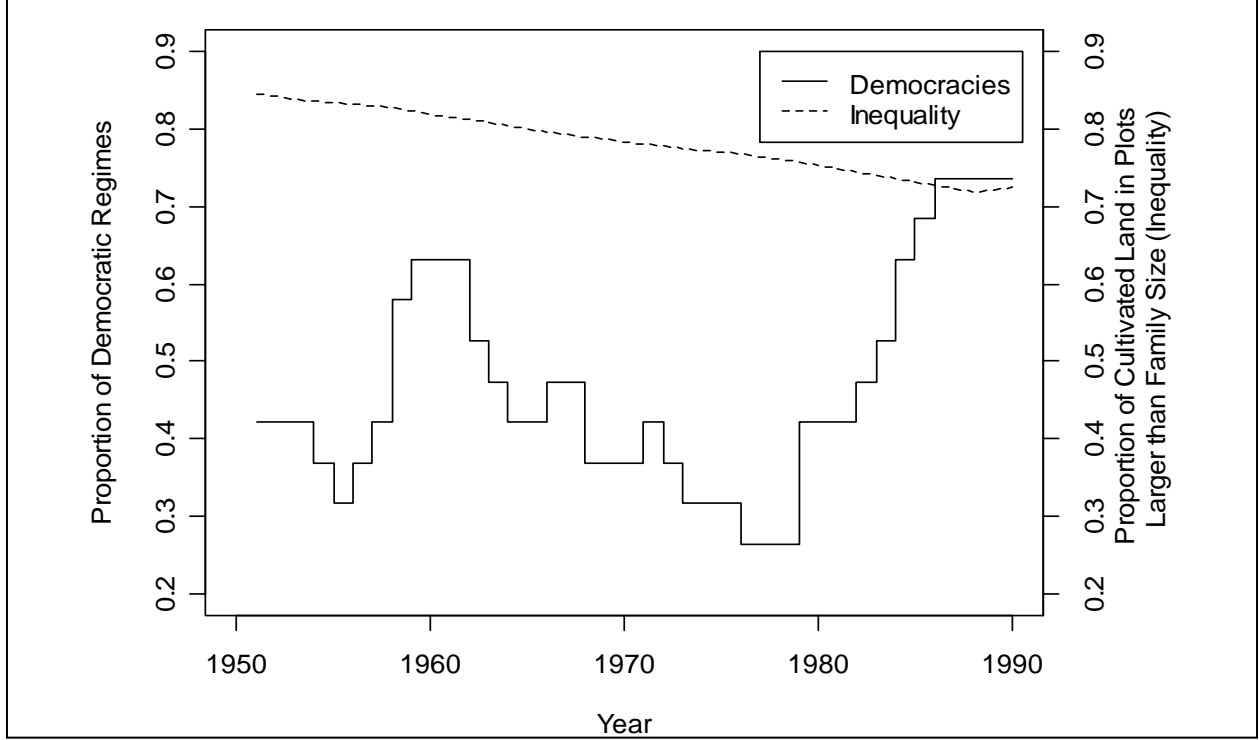**FIGURE 1. Economic Inequality and Regime Type in Latin America, 1951-90**

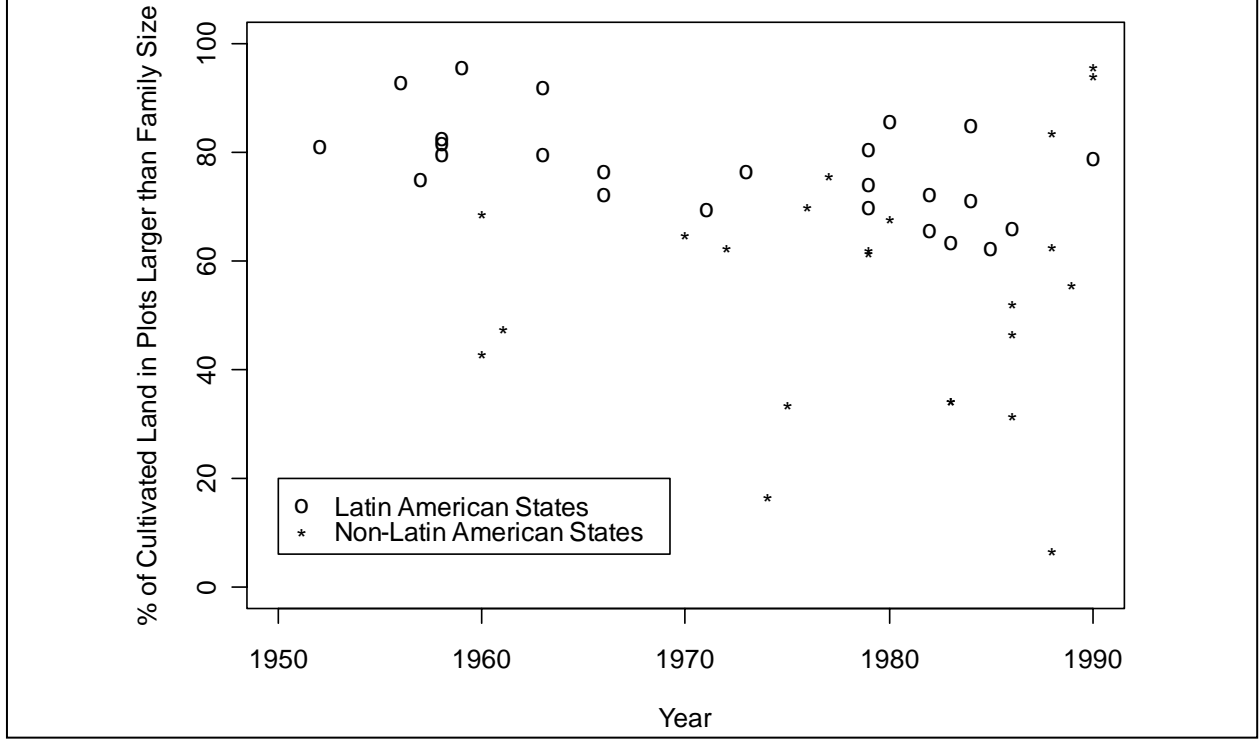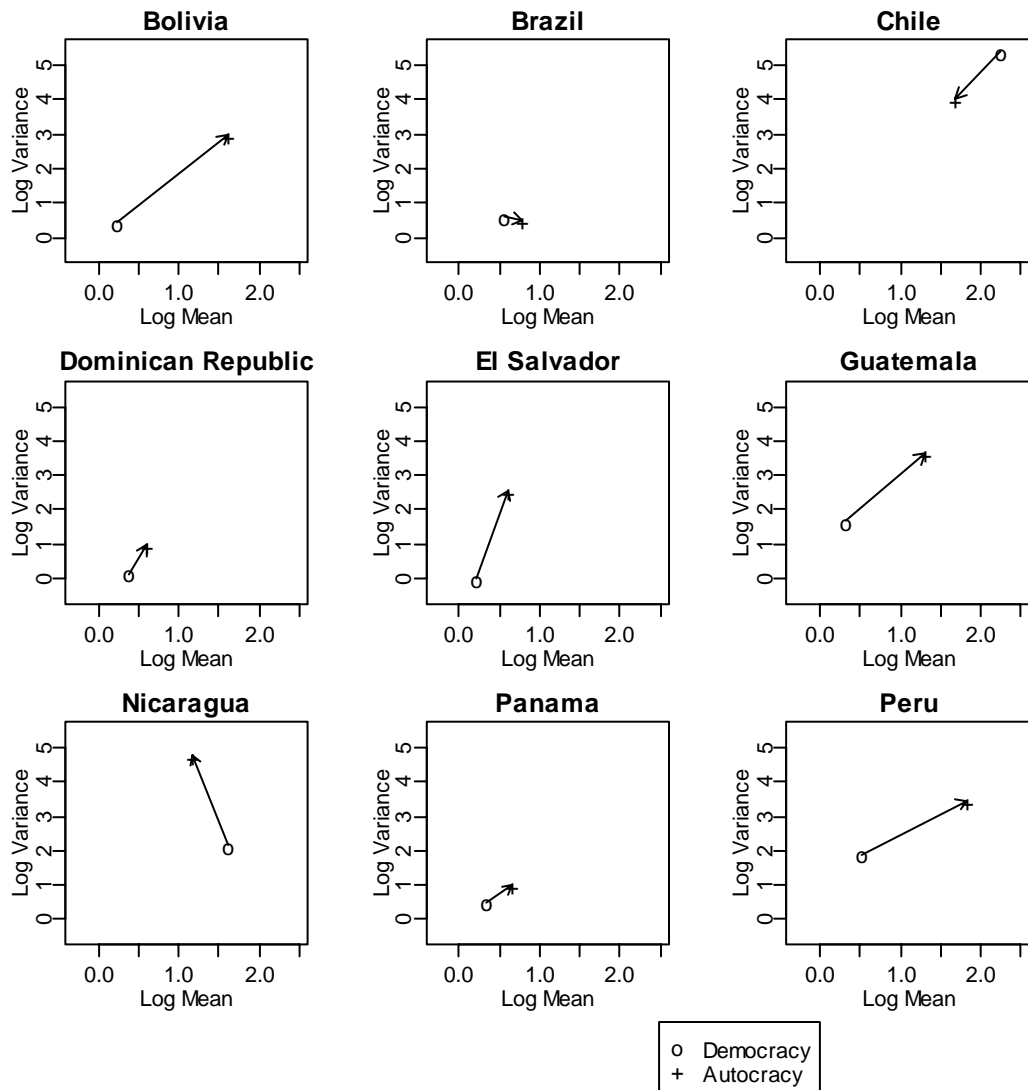**FIGURE 2. Inequality at the Time of Democratization, 1951-90**

FIGURE 3. Mean and Variance in Redistribution by Regime Type

Note: Countries shown are those that experienced at least 2 years of each regime type and 1% of cultivable land redistributed in period 1951-90. Arrows indicate the magnitude and direction of difference in mean and variance between years under democracy and years under autocracy. A one was added to all means and variances to make all numbers positive on the log scale.

Cases of Land Reform in Latin America, 1951-90

Country	Land reform years under democracy	Amount redistributed (ha)	Land reform years under autocracy	Amount redistributed (ha)	Cultivable land area (ha)	Notes
Argentina	1951	50,280	-	-	177 million	Most land transfers 1951-90 through markets
Bolivia	1979, 1982	635,842	1955-78, 1980-81	30,708,452	26 million	Most under Decree 3464 of 1953 (Paz Estenssoro)
Brazil	1979-90	8,959,637	1964-78	9,052,745	49 million	Significant colonization of state-owned land
Chile	1952, 1956, 1959-63, 1965-73	10,658,353	1973-81	2,965,638	5.1 million	Most under Law 16.640 of 1967 (Frei)
Colombia	1963, 1965-84	59,629	-	-	16.2 million	Most land transfers 1951-90 bought by or ceded to government rather than expropriated. Also titling of uncultivated lands.
Costa Rica	1963-66, 1968-90	170,207	-	-	3.4 million	Mostly colonized public land or purchased land 1951-90
Cuba	-	-	1959-63	8,066,507	6.7 million	Most under 1959 Agrarian Reform Law (Castro)
Dominican Republic	1966-90	294,657	1951-64	313,997	2.6 million	Most under Decree 6988 of 1961 (Balaguer) and 1972 Agrarian Laws (Balaguer)
Ecuador	1979-90	428,436	1964-78	467,836	10.5 million	Significant colonization of state-owned land
El Salvador	1984-90	15,884	1980-83	265,508	1 million	Most under 1980 Agrarian Reform Law (Duarte)
Guatemala	1953-4	603,615	1954-5	601,200	2.9 million	Law 900 of 1952 (Arbenz) reversed by Law 31 of 1954 (Castillo Armas)
Honduras	1962,1971, 1982-90	112,021	1963-70, 1972-81	291,003	2.8 million	Most under Decree 8 of 1972 (López)
Mexico	-	-	1951-90	53,743,531	35 million	Greatest intensity under Díaz Ordaz (1964-70)
Nicaragua	1984-90	356,317	1979-83	936,015	1.3 million	Initial expropriations from Somoza and associates 63% of cultivable land.
Panama	1964-7	111,112	1968-90	386,277	1.7 million	
Paraguay	-	-	1963, 1965-6	28,251	24 million	Stroessner distributed some land to military also, but this was small. Massive titling program.
Peru	1964-68, 1980-1	761,829	1968-80	7,889,008	7.6 million	Early efforts by Belaúnde outpaced by 1969 Agrarian Reform Law (Velasco)
Uruguay	1951-56	94,896	-	-	4 million	
Venezuela	1961-83	429,831	-	-	11 million	Most land transferred 1951-90 purchased by state

Note: Land reform here refers only to expropriated private property. Some of the years not included may have witnessed negligibly small expropriations. Data are missing for 63 country years; they are interpolated where possible (15 country years) and extended to the first or last year of the period using the most proximate observation otherwise (43 country years).