LANDOWNERS AND DEMOCRACY
The Social Origins of
Democracy Reconsidered

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T HERE is considerable consensus that among the major social ac-
tors, large landowners are often the least likely group to support
democracy. The reasons offered in the literature for why wealthy land-
owners should be systematically antidemocratic are legion. By holding
fixed assets that cannot easily be shielded from taxation, landowners
are apprehensive that majority rule in unequal societies will result in
expropriation of those assets.[1] Landowners fear that the secret ballot
and freedom of the press will undermine their ability to pressure or
otherwise influence their workers to support candidates favorable to
landlords.[2] At the same time, the repressive instruments that supply
nonwage or servile labor to landlords by coercive means are far less
readily available under democracy, and that threatens the profits, social
status, and way of life of the most labor-repressive landowners.[3]

There is substantial evidence that wealthy landowners have in many
cases blocked the arrival of democracy or worked to overturn it. The
evidence is particularly strong prior to the third wave of democracy,
especially in cases where labor-dependent landowners—those who rely
on a large supply of labor rather than on capital for agricultural produc-
tion, but who do not necessarily employ labor repression—dominate
the countryside. Landowning interests in Prussia pushed legislators
to maintain restrictions on the franchise in the late nineteenth cen-
tury.[4] Labor-repressive landowners effectively sidelined democracy in

[1] Acemoglu and Robinson 2006; Ansell and Samuels 2014; Boix 2003; Wood 2000; Ziblatt 2008.
[2] Baland and Robinson 2008; Mahoney 2001; Mares 2015; Ziblatt 2009.
[3] Gerschenkron 1943; Moore 1966; Rueschemeyer, Stephens, and Stephens 1992.
[4] Ziblatt 2008.

interwar Austria, whereas their relative weakness in Northern Europe enabled democracy to take root.[5] Labor-dependent landowners were key players in the creation of fascism in interwar Europe.[6] Powerful landowners in El Salvador and South Africa long sought to suppress peasant and other popular movements that favored democracy.[7] The same was true in Guatemala.[8] The absence of powerful landed elite, in contrast, helped pave the way for early democracy in Costa Rica.[9] More indirectly, concentrated landownership in many developing countries blocked the arrival of democracy and undermined it where already established.[10]

Yet many third-wave cases and a range of first- and second-wave cases are troubling for arguments that uniformly tie landowners to support for autocracy. Democracy in Britain was established despite the presence—indeed, ultimately, with the support—of a powerful land-owning class in England.[11] The persistence of labor-repressive agriculture in the American South well after the Civil War also ultimately failed to derail democracy.[12] In Prussia, large landowners facing labor scarcity suffered higher costs from electoral intimidation of their workers than landowners facing labor abundance, and they were more likely to support electoral secrecy.[13] More recently, powerful landed elites in countries such as Colombia, Pakistan, Thailand, and Venezuela have supported moves toward democracy.

More important from a theoretical perspective, in recent decades several factors have tilted in favor of even some labor-dependent landowners supporting democracy. First, the financial integration of economies and the attendant influx of foreign investment in land have enabled landowners to acquire more liquid assets in foreign markets, reducing their incentives to oppose democracy as well as their collective action capacity to do so.[14] Second, the spread of land reform under dictatorship has caused landowners to fear for the stability of their property rights under relatively unconstrained forms of autocratic rule.[15] Third,

[5] Rueschemeyer, Stephens, and Stephens 1992.
[6] Gerschenkron 1943; Stephens 1989.
[7] Wood 2000.
[8] Mahoney 2001; Yashar 1997. Yashar demonstrates that landowners' monopolization of economic power and lack of accountability were particularly pernicious for democracy.
[9] Paige 1997. Yashar 1997, however, argues that this was not so straightforward: the state's role in organizing production and the development of civil society were key to ultimate Costa Rican democracy.
[10] Boix 2003.
[11] Skocpol 1973; Stephens 1989.
[12] Wiener 1978.
[13] Mares 2015, chap. 7.
[14] Freeman and Quinn 2012.
[15] Albertus 2015.

the increased prevalence of civil conflict in rural areas beginning in the 1960s and 1970s forced once-unyielding elites who faced mobilization to recognize that in some cases a stubborn popular insurgency could impose significant costs on them, making a democratic compromise preferable to doubling down on repression. In other cases, conflict broadened military recruitment among social classes and led landowners to support democracy as a way of taming military autonomy.

Disconfirming cases along with important political and economic developments that have affected landowners in recent decades call for a broad empirical test of the link between landowners and democracy. Despite the wide influence of the idea that landowners are antidemocratic, there has never been a direct, large-N empirical test of this proposition. The important existing empirical tests are either careful case studies or subnational analyses,[16] or medium-N studies or meta-analyses.[17] The most comprehensive cross-national statistical analyses are perhaps those of Carles Boix, and Ben Ansell and David Samuels, who do not directly measure the presence of landed elites or labor-dependent agriculture; rather, they measure the concentration of land or more precisely, the share of farms held in family-size plots.[18]

This article offers the broadest cross-national empirical test to date of the relationship between landowners and democracy. I focus on what is argued to be the most robust finding in the literature: that a powerful labor-dependent landowning class is inimical to democracy. To examine this hypothesis I construct an original, continuous measure of labor-dependent agriculture dating back to 1930 by calculating the percentage of the population that works in agriculture and relies upon employers or landlords for access to rural land for farming. Labor-dependent agriculture has historically skewed labor markets in favor of large landowners, eroding rural wages and trapping a surplus of rural workers in the countryside where they are employed by large landowners. It has also impeded investments in mechanization. I then merge data on labor-dependent agriculture with a host of covariates and examine its impact on the likelihood of democratic transition and democratic breakdown, as well as on key electoral and institutional dimensions of democracy.

Consistent with the literature highlighting the nefarious impact of labor-dependent landowners on democracy, I find that labor-dependent

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[16] Mahoney 2001; Mares 2015; Moore 1966; Paige 1997; Skocpol 1973; Wood 2000; Yashar 1997; Ziblatt 2008; Ziblatt 2009.

[17] E.g., Huber and Stephens 1995; Mahoney 2003; Rueschemeyer, Stephens, and Stephens 1992; Stephens 1989.

[18] Boix 2003; Ansell and Samuels 2014. Ansell and Samuels divide this figure by rural population size, creating a more nuanced measure of rural land inequality.

agriculture is not tied to democratization and is negatively associated with democratic persistence, at least from the late interwar period, when data become available, until the third wave of democracy. But contrary to conventional wisdom, labor-dependent agriculture has not been uniformly harmful to democracy: its negative influence on democracy started to turn positive in many countries around the time of the onset of democracy's third wave in the 1970s. I test several potential explanations for this surprising shift and find that factors that evoke fear on the part of landowners and can prompt them to act, especially neighboring land reform and civil conflict, have greater explanatory power than the alleviating salve of financial integration.

Labor-dependent landowners who get on board with democracy, however, support it mainly as a defense mechanism to guard stability. Labor-dependent agriculture under democracy is tied to holdover autocratic constitutions from previous episodes of dictatorship that hamstring the median voter, to electoral institutions that deprive localities of electoral tools that could be used to contest local landowner power, and to strong legal protections for property rights. These findings are consistent with landowner agency in shaping democracy's institutional architecture in their favor. Indeed, selected cases provide at least suggestive support for this interpretation.

LANDOWNERS AND DEMOCRACY

Important scholarship connecting landowners with political development has a long pedigree. Broadly speaking, this scholarship can be divided into works that emphasize the labor relations between large landowners and agricultural workers and those that simply emphasize the presence of landowning elite.

Several early and influential contributions examined the impact of preindustrial social formations on the subsequent politics of industrial societies. Alexis de Tocqueville's study of the benefits of smallholding to democracy in the United States and Max Weber's analysis of the pernicious influence of East Prussian Junkers on national political dynamics set the stage for a vibrant and transformational debate on the role of large landowners in inhibiting democracy. Barrington Moore invigorated this debate, arguing that large landowners engaged in labor-repressive forms of agriculture that rely on servile social relations are incompatible with democracy.[19] Repressive labor relations

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[19] Moore 1966.

reinforce hierarchical and paternalistic social relations in which dominant landowners tower over agricultural laborers in terms of wealth, social prestige, and power. Furthermore, Moore argued, they can use these resources to block democracy when they are sufficiently strong relative to other social actors, such as the bourgeoisie. The reliance of labor-repressive landowners on coercion by the state leads to a tight alliance between landed and political elites, with landowners supporting authoritarian political arrangements that uphold extraeconomic coercion of labor in such forms as slavery, coercive workplace practices that repress labor organizing, and restrictions on mobility via serfdom, debt peonage, criminal vagrancy laws, and strict migration laws.

A host of scholars has long debated Moore's claims about the antidemocratic role of labor-repressive landowners in political development. Although Moore largely sought to explain political dynamics in early- to mid-twentieth-century Western Europe by drawing on lessons of transitions from preindustrial societies in Europe, the United States, and Asia, his work contained a broader argument that has resonated in diverse settings. Scholars have thus attempted to extend and test Moore's claims well beyond his original cases. Evidence that labor-repressive landowners blocked democracy has been found in cases such as Austria,[20] Brazil,[21] El Salvador,[22] Guatemala,[23] and South Africa.[24] In contrast, the relatively weak position of labor-repressive landed elites vis-à-vis other social actors was supportive of democracy in several Northern and Central European countries such as Belgium, Denmark, the Netherlands, Norway, Sweden, and Switzerland,[25] as well as in Costa Rica.[26]

Yet scholars have also presented a host of disconfirming cases and challenged some of the confirming ones, as well. Labor-repressive landowners contributed to democratization in Chile and Uruguay in the late 1800s and the first half of the twentieth century.[27] They sat out authoritarian coalitions in Ecuador, Mexico, and Paraguay.[28] And select labor-repressive landowners facing labor shortages supported early reforms protecting electoral secrecy in Prussia.[29] Assessing the broad sweep of

[20] Stephens 1989.
[21] Huber and Stephens 1995.
[22] Mahoney 2001; Wood 2000.
[23] Mahoney 2001.
[24] Wood 2000.
[25] Stephens 1989; Rueschemeyer, Stephens, and Stephens 1992.
[26] Paige 1997; Mahoney 2001.
[27] Huber and Stephens 1995, 190–91, 200–202.
[28] Huber and Stephens 1995, 187–89, 195–200.
[29] Mares 2015, chap. 7.

research testing Moore's hypothesis, James Mahoney concludes that "new evidence is sufficient to falsify" Moore's contention that labor-repressive landowners systematically block democracy.[30]

Recent scholarship has therefore shifted primarily to refining and adding nuance to Moore's central claims. In a sweeping and comprehensive study, Dietrich Rueschemeyer, Evelyne Huber Stephens, and John Stephens examine a range of advanced capitalist and Latin American countries and hypothesize that landed elites dependent upon a large supply of cheap agricultural labor, though not necessarily labor-repressive landlords, will be the most consistently antidemocratic social force.[31] This modification of Moore's concept of labor-repressive agriculture captures a broader degree of landlord reliance on the political control of labor, even if not necessarily on outright coercion.

Huber and Stephens echo this conceptual shift in yet another wide-ranging analysis of landowners and democracy in Latin America and beyond. They focus on the reliance of agriculture on labor for production rather than on capital or technology as the source of the authoritarian nature of some landowners. While they therefore concur with Moore that "traditional large landowners are antidemocratic," they conclude that "among the landlords who did need a large labor force, the use of actual restrictions on labor mobility, the classical case of politically backed labor coercion in Moore's sense, was not widespread."[32] Labor-dependent landowners instead relied upon a rural labor market heavily biased in their favor to support their economic and social power. Other scholars have likewise modified Moore's claims.[33]

In evaluating these new arguments, Mahoney concludes, "We now have solid evidence that the power of labor-dependent landed elites—if not labor-repressive landed elites, as Moore hypothesized—is negatively correlated with the establishment and persistence of democracy."[34] I build on this shift in the literature with my focus on labor-dependent, rather than strictly labor-repressive, agriculture.

A new wave of political economy research has also recently, and separately, resurrected the debate on landholding elites and democracy, focusing not on labor relations, but simply on the very existence of powerful large landowners as an obstacle to democracy. Boix, and Daron Acemoglu and James Robinson are prominent in this regard. They argue

[30] Mahoney 2003, 145.

[31] Rueschemeyer, Stephens, and Stephens 1992.

[32] Huber and Stephens 1995, 218.

[33] For instance, Yashar 1997 powerfully argues that weak landlords may be successful at preventing democracy if subordinate classes are unable to form political coalitions.

[34] Mahoney 2003, 147.

that landholding is relevant for political regime outcomes because democracy has strong redistributive implications; the immobile nature of land as an asset therefore sparks fierce resistance to democracy by landowners when land is concentrated.[35] Building on Allan Meltzer and Scott Richard's median voter model, these authors argue that because the wealth of the median voter declines relative to the mean with the extension of the franchise, newly empowered voters will attempt to soak the rich through expropriation. Landowners are particularly vulnerable since they have nowhere to run. Societies with high landholding inequality, indicating the presence of large landowners and a yawning gap between them and the land poor, will therefore experience severe redistributive tensions during regime transitions.

Acemoglu and Robinson and Boix nonetheless have somewhat different theoretical predictions. Acemoglu and Robinson argue that the probability of democratization is nonmonotonic, resembling an inverse U-shape in aggregate economic inequality. At the same time, they argue that inequality undercuts democratic persistence in a monotonic fashion. Boix, in contrast, argues that the probability of both democratization and democratic consolidation declines monotonically with inequality. Landholding further reduces the prospects for democracy: "The absence of landlordism constitutes a necessary precondition for the triumph of democracy."[36] Boix conducts an ambitious cross-national test of these hypotheses using data from Tatu Vanhanen[37] on the percentage of landholdings held as family farms as a proxy for landholding inequality.

Important subsequent work builds on these seminal contributions. Daniel Ziblatt demonstrates that landholding inequality suppressed support for extending the franchise in pre–World War I Prussia.[38] Ansell and Samuels argue that landholding inequality blocks democratization, but for contractarian reasons, egalitarian smallholders prefer democracy as a way to protect their property rights from autocratic elites.[39] Ansell and Samuels use Vanhanen's family farms measure while adjusting for the rural population and find that consistent with their own predictions and with Boix's but not with those of Acemoglu and Robinson, a dearth of family farms decreases the probability of democratization in a linear fashion.

[35] Boix 2003; Acemoglu and Robinson 2006.
[36] Boix 2003, 40, n. 3.
[37] Vanhanen 1997.
[38] Ziblatt 2008.
[39] Ansell and Samuels 2014, chaps. 3–4.

BREAKING NEW GROUND: LABOR-DEPENDENT AGRICULTURE AND DEMOCRACY

In what follows, I focus on the role of labor-dependent landowners in democracy. There are theoretical and empirical reasons for this choice. From a theoretical perspective, a focus on landowners rather than on land inequality unites the comparative historical analysis and political economy studies outlined above. The notion that large landowners, and even more so those who are labor dependent, should obstruct democracy is at the heart of both of these literatures.

Furthermore, the hypothesis that labor-dependent landowners should be implacable opponents of democracy is one of the strongest and most robust claims in the literature. While few scholars would dispute this hypothesis, several strands of literature have long suggested that large landowners per se should not be stalwart enemies of democracy. First, literature on modernization and urbanization indicates that these trends lead landowners to capitalize and commercialize their enterprises, leaving fewer rural workers in the countryside who demand access to land. This alleviates the "peasant question" and erodes traditional antidemocratic social hierarchies.[40] It also generates incentives for landowners to undertake early investments in banking, industry, manufacturing, and transportation,[41] making their net assets more liquid and thereby reducing their intransigence toward democracy. Second, as the property rights literature convincingly demonstrates, a lack of formal institutions and commitment mechanisms in autocracies—factors that are essential for a credible commitment to protecting property rights—facilitates expropriation in these regimes.[42] Insecure property rights can be a mortal threat to landowners. Democracy, by contrast, typically embeds checks and balances that tie the hands of leaders. Indeed, redistributive land reform is more likely under dictatorship than democracy,[43] providing strong incentives at times for landed elites to cast their lot with democracy.

From an empirical perspective, scholars to date have not created indicators for the prevalence of labor-dependent agriculture that would enable broad cross-national empirical tests. This approach can therefore advance our existing understanding of landowners and democracy from a new empirical perspective.

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[40] de Janvry 1981; Rueschemeyer, Stephens, and Stephens 1992.
[41] See, e.g., Gilbert 1977.
[42] E.g., Albertus 2015; Olson 1993; North 1990.
[43] Albertus 2015.

Additionally, and in contrast to selected subnational data, the relative paucity of high-quality, historical cross-national data on landholding inequality complicates the ability to shed further light on land concentration or on the share of land held by large landowners as a general obstacle to democracy. Early agricultural censuses in many countries did not record sufficiently detailed data across the spectrum of landholding sizes to enable the construction of high-fidelity and comparable inequality data. Vanhanen's family farms indicator, the most commonly used empirical measure because of its broad coverage, captures smallholding, but not the presence of a landowning elite or even inequality per se. It also does not incorporate information on the land area held in family-size landholdings. Consequently, Vanhanen's measure may indicate widespread family farming even if large landowners still hold the overwhelming majority of land.[44] Furthermore, Vanhanen's measure tends to capture only private family holdings and fails to accurately code widespread communal, cooperative, collective, or state ownership in countries where de facto family farming is far more common than private family farming.[45]

RETHINKING THE ROLE OF LABOR-DEPENDENT AGRICULTURE IN DEMOCRACY

Scholars who highlight the pernicious effects of labor-dependent agriculture would not be surprised that landed elites in general can at times be supportive of democracy.[46] More surprising, and therefore of particular interest theoretically and empirically in this article, is that there are reasons to believe that key changes in recent decades have even tipped some, though hardly all, labor-dependent landed elites in favor of democracy.

There are three principal reasons why some labor-dependent landowners may have shifted their loyalties in favor of democracy beginning around the onset of democracy's third wave. The first is financial integration. John Freeman and Dennis Quinn argue that the wave of capital account liberalization beginning in the early 1970s altered the political regime preferences of powerful landlords in liberalized economies by enabling the sale of property rights to foreigners and the attendant

[44] Consider countries with a bimodal landholding pattern such as Brazil. Circa 1980, 37 percent of landholdings in Brazil were smaller than five hectares. Although seemingly egalitarian, these landholdings constituted only 1.3 percent of total land area. Indeed, Brazil's landholding Gini was 0.86, making its land concentration one of the highest in the world.

[45] See Vanhanen 1997, 49–50. Examples include many communist and socialist cases, much of sub-Saharan Africa, and numerous countries in Latin America and Asia.

[46] See, e.g., Huber and Stephens 1995; Rueschemeyer, Stephens, and Stephens 1992.

acquisition of more liquid assets in foreign markets.[47] This effectively reduces the specificity of land, and with it landowners' fear of both expropriation of their property and the imposition of restrictions on their labor inputs under democracy. Simultaneously, this portfolio diversification decreases the concentration of assets held by native landowners in their home economy, and that complicates their ability to engage in collective action to repress democracy and control tax rates. This is especially so among labor-dependent landowners, who are otherwise most capable of solving their collective action problem due to shared interests in maintaining cheap rural labor. This yields the clear prediction that labor-dependent landowners in financially integrated economies under autocracy should be less likely to oppose democracy than labor-dependent landowners in financially closed autocracies.

A second factor that may coax labor-dependent landowners to support democracy comes from the literature on land reform. Redistributive land reform typically occurs under autocratic rule where institutional constraints are low.[48] As land reform and the prevalence of coups spread in the developing world, particularly from the 1950s to the 1970s, landowners began to fear for the stability of their property rights under dictatorship. Land reform and collectivization destroyed landed elites in countries such as Bulgaria, China, Mongolia, the Soviet Union, and Yugoslavia. Landed elites were also destroyed in several situations where collectivization either was not implemented or failed, such as Poland, and where communism never took root, such as South Korea. In numerous other countries, large landowners were severely weakened by land reform.[49] Major land reforms took on an especially threatening significance at the height of the Cold War: from the 1960s through the early 1970s landowners were destroyed in electrifying fashion in Cuba, Peru, and Vietnam, in spite of strong resistance on the part of the United States.

Labor-dependent landowners faced hostile resident workforces and could be stripped of their land when governments assigned ownership to tenants and sharecroppers or converted their land into cooperatives of former wage laborers. Land reform also tended to cluster regionally according to both prevailing land tenure structures and domestic political and economic circumstances. Strong labor-dependent landowners could counter this threat by solving their collective action problem and pushing for a more predictable democratic regime with greater

[47] Freeman and Quinn 2012.
[48] Albertus 2015.
[49] See Albertus 2015, chap. 8.

horizontal constraints that would protect property rights.[50] By defensively moving to address the spillover threats of land reform head-on, they could position themselves to construct favorable democratic institutions. In contrast to the financial integration mechanism whereby landowner fears of expropriation are alleviated and they lose the capacity and interest in controlling politics under democracy, this mechanism implies that landowners facing the threat of land reform organized to spearhead democracy or allied themselves with other social actors who shared this goal, and had strong incentives to ensure that democratic institutions would protect them.

A third factor that could explain why some labor-dependent landowners came to support democracy lies in domestic threats to their property rights and therefore has more in common with the land reform mechanism than it does with financial integration. Guerrilla movements and civil wars, many of which were based in rural areas and fueled by the Cold War, became much more prevalent beginning in the late 1960s and early 1970s.[51] A number of authors, beginning at least with Russett, tied some of this instability to unequal land tenure structures, including the landowners' commanding control of access to most cultivable land.[52] Landowners facing rural rebellions in a polarized international environment began to turn away from repressive dictatorship as a mechanism for protecting their property rights.

There are two distinct reasons for this. First, as Elisabeth Wood argues, in the case of long-running civil conflicts where contending social forces were economically interdependent, such as with labor-dependent landowners and peasants, the accumulating costs of insurgency and the attendant counterinsurgency measures "transformed the core interests of economic elites, eventually convincing substantial segments that their interests could be more successfully pursued by democratizing compromise than by continued recalcitrance."[53] Economic elites pushed incumbent political elites to negotiate in situations where domestic and international circumstances threatened to fuel lengthy and costly conflict, thus shifting the balance in favor of democratic compromise. In return for accepting electoral competition and the political inclusion of insurgents, economic elites were able to win constitutional protections for the status quo distribution of wealth, as well as institutional tools to water down and block serious land redistribution efforts. El Salvador,

[50] Democracy is a particularly attractive option for economic elites as policies under dictatorship become more uncertain in the context of dictator cycling; see Albertus and Gay 2016.
[51] See, e.g., Fearon and Laitin 2003.
[52] Russett 1964.
[53] Wood 2000, 6.

Guatemala, and South Africa—all of which had strong labor-dependent landowners who feared for their property rights—are canonical cases.

A second reason is that some civil conflicts required the broadening of military recruitment and expansion of military funding to fight insurgents. These actions often brought middle-class and lower-middle-class officers into the military ranks. The interests of these officers diverged from those of powerful landowners, and their presence exacerbated the threat of autonomous and unpredictable militaries that could launch modernizing military coups.[54] Labor-dependent landowners at times reacted to this threat by supporting a more attractive democratic option that they helped design and that was intended to yield civilian control of the military. Chile in the late 1920s and early 1930s is an illustrative example.

RESEARCH DESIGN AND DATA

DEPENDENT VARIABLES: DEMOCRATIC TRANSITION, DEMOCRATIC SURVIVAL, AND LEVEL OF DEMOCRACY

To test the main hypotheses in the literature regarding labor-dependent agriculture and democracy, I principally employ *democratic transition* and *democratic duration* as the dependent variables. Data on regime types are taken from José Cheibub, Jennifer Gandhi, and James Vreeland, who extend the Adam Przeworski and associates' data set.[55] Regimes are coded as either democracies or dictatorships. Democracies are regimes in which (1) the chief executive is elected; (2) the legislature is elected; (3) there is more than one political party; and (4) an incumbent has lost power and transferred it peacefully to a new leader. Regimes that do not meet these criteria are coded as authoritarian. A *democratic transition* is recorded for country-years in which there is a switch from authoritarian rule to democratic rule. *Democratic duration* indicates country-years during which democracy persists.

Although the *democratic transition* and *democratic duration* variables enable an examination of the most dramatic shifts in regime type, I also investigate whether labor-dependent agriculture affects other dimensions of democracy aside from contestation. First, I examine a country's level of democracy using the *polity score*. I scale a country's Polity IV index score to range from 0 (least democratic) to 100 (most democratic).

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[54] Huntington 1968, chap. 4.
[55] Cheibub, Gandhi, and Vreeland 2010; Przeworski et al. 2000.

The Polity index incorporates information about executive recruitment, political participation, and the political role of the military that is not embedded in Przeworski and colleagues' dichotomous regime-type measure.

Second, I examine levels of suffrage, the power of parliament vis-à-vis the executive, and the degree to which a country has free and fair elections. It has long been hypothesized that labor-dependent landowners push for franchise restrictions, undermine unfavorable legislatures, and manipulate the rural vote.[56] *Suffrage level* captures the percentage of adult citizens (as defined by statute) that has the legal right to vote in national elections, with data from the v-Dem data set. The variable ranges from 0 to 100. *Power of parliament* captures the level of checks on executive policy-making and is composed of the number of independent branches of government, as well as party alignment across branches and preference heterogeneity within each branch. Data are from Witold Henisz.[57] This variable ranges from 0 to 0.72, with a mean of 0.27 and a standard deviation of 0.22 for the sample in which data on labor-dependent agriculture are available. *Free and fair elections* captures the extent to which elections occur absent registration fraud, systematic irregularities, government intimidation of the opposition, vote buying, and election violence. It is an index from the v-Dem data set formed by taking the point estimates from a Bayesian factor analysis model of indicators for the subcomponents. *Free and fair elections* varies between 0 and 1 and has a mean of 0.55 and a standard deviation of 0.38. Higher values indicate cleaner elections.

KEY INDEPENDENT VARIABLE: LABOR-DEPENDENT AGRICULTURE

The key independent variable in the analyses is *labor-dependent agriculture*. I focus on labor-dependent rather than labor-repressive agriculture because scholarship following Moore has generally settled on this conceptualization as both more flexible and more robustly tied to opposition to democracy.[58] While a host of studies has operationalized labor-dependent agriculture to qualitatively test variants of Moore's hypothesis,[59] the hypothesis has never been subject to large-N empirical tests.

There are several related, but distinct, characteristics of rural labor

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[56] E.g., Baland and Robinson 2008; Huber and Stephens 1995; Ziblatt 2008.
[57] Henisz 2002. This is the PolConIII indicator, with updated data.
[58] E.g, Huber and Stephens 1995; Mahoney 2003; Rueschemeyer, Stephens, and Stephens 1992.
[59] E.g., Huber and Stephens 1995; Paige 1997; Rueschemeyer, Stephens, and Stephens 1992.

markets and production that help to define labor-dependent agriculture conceptually. At its core, Huber and Stephens argue that labor-dependent agriculture is that which relies heavily on labor rather than on capital or technology for production.[60] The most obvious and egregious type of labor-dependent agriculture under this conceptualization is the classic labor-repressive agriculture based on slavery or feudal relationships that was widespread until late in the nineteenth century. Many other mechanisms (for example, debt peonage and limits on labor recruitment) similarly supported unfree labor well into the twentieth century and in some cases into the twenty-first century. Importantly, however, politically backed labor coercion need not operate to generate labor dependence, according to Huber and Stephens; a rural labor market heavily skewed in favor of landowners is sufficient.

Relatedly, Mahoney and Rueschemeyer, Stephens, and Stephens conceptualize labor dependence as landowner reliance on a large supply of cheap labor.[61] This definition includes, but again is not limited to, outright coercion of labor. Theoretically, it is conceivable that agricultural production can rely principally on labor, rather than on capital, despite a relative lack of cheap labor. Coffee harvests in contemporary Colombia, for instance, rely on laborers to pick coffee beans by hand, because of the short harvesting window and the steep slopes on which coffee is grown. These harvesters can therefore command high wages at harvesting times.[62] Nonetheless, in the overwhelming majority of cases that Rueschemeyer, Stephens, and Stephens, and Mahoney analyze, landowners who rely on a large supply of cheap labor for production tend to do so instead of investing in capital that would substitute for labor. Furthermore, a larger supply of cheap labor provides greater incentives, ceteris paribus, for landowners to exploit labor over capital for production.[63]

Finally, Rueschemeyer, Stephens, and Stephens at times emphasize labor intensity in agriculture as supportive of labor dependence.[64] For instance, rubber extraction in the jungle or peasant sharecropping of labor-intensive crops for which mechanization is difficult lead landowners to use labor over capital. This often requires elaborate systems of labor control: "Even where labour is apparently abundant in the physical sense that there are potentially lots of 'bodies' available to undertake

[60] Huber and Stephens 1995, 218.
[61] Mahoney 2003; Rueschemeyer, Stephens, and Stephens 1992.
[62] Ortíz 1999. This labor, however, remains cheaper than mechanization.
[63] Griffin, Khan, and Ickowitz 2002.
[64] Rueschemeyer, Stephens, and Stephens 1992.

work, large landowners encounter a natural resistance from people to engage in arduous work when most of the fruits of their efforts will accrue to the landowner."[65]

Operationalizing the extent to which agriculture relies on labor rather than capital across countries and over time poses empirical obstacles. Most fundamentally, systematic and reliable historical data on the use of labor and capital in agricultural production are not widely available. A large literature suggests, however, that land access and land tenure are closely linked with labor dependence in agriculture. Consider Huber and Stephens: "The key to keeping rural labor abundant and cheap was the closing off of alternatives to estate labor, most prominently access to land and water, and the prevention of rural organization."[66] Relatedly, in the literature on landlessness Roy Prosterman and Jeffrey Riedinger prominently point to inadequate land tenure as the root of rural labor market biases that favor landowners. These authors cite insecure land tenure among "tenants, sharecroppers, peons, *colones*, permanent and temporary hired laborers, or in other classifications of those who cultivate land without having ownership or ownership-like rights in that land" as a fundamental characteristic of labor dependence in agriculture.[67]

Why include tenants and sharecroppers in the definition of labor-dependent agriculture? As Prosterman and Riedinger argue, tenants and sharecroppers do not generally have effectively defensible property rights in most countries, and their tenure insecurity renders them subject to threats of eviction, heavy exactions of rent or crops, and indebtedness.[68] This echoes the conclusions of the World Bank during the heyday of land reform. While

> renting and sharecropping are widespread in all the major regions of the world . . . [a] widespread characteristic is the absence of written registered agreements governing the conditions of tenancy and the rights of tenants. . . . Tenants and sharecroppers typically operate under conditions of great insecurity and are in a weak bargaining position vis-à-vis the landlord.[69]

Landowners use tenure insecurity to prevent rural organization, limit access to higher quality resources, constrain labor mobility and

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[65] Griffin, Khan, and Ickowitz 2002, 287.

[66] Huber and Stephens 1995, 218.

[67] Prosterman and Riedinger 1987, 10.

[68] Prosterman and Riedinger 1987. Exceptions of effectively protected tenancy include many developed countries after 1950 or, in some cases, from the 1960s or 1970s (see, e.g., Swinnen 2002). The share of the population involved in agricultural production, however, is also very low in these countries during this time period.

[69] World Bank 1975, 60–61.

urbanization, suppress rural wages and access to credit, and manipulate the rural vote. When land ownership is concentrated in the context of fragmented local labor markets, it gives "large landowners a high degree of monopsony power in the labour markets in which they operate. That is, most rural people either work for the local landowner or they work for no one. This monopsony power, in turn, lies at the root of 'surplus labour.'"[70] This problem was reflected in the widespread feudal and semifeudal agrarian institutions in Europe and Russia prior to industrialization[71] and subsequently in the high rates of land leasing by farmers relative to ownership.[72]

Lopsided tenure relations not only underpin labor reliance in agriculture, but also hinder investments in mechanization. They

> seriously impede mechanized operations even when on a very small scale. In other cases, the contractual share arrangement is such that neither the landlord nor tenant are able to introduce new technology because, on the one hand, the landlord cannot capture a profitable share of the return on his investment, and on the other, the tenant cannot find the capital for investment or lacks the security of tenure that would guarantee a return from it.[73]

Consider how large landowners enforced labor dependence among tenants in South Korea on the eve of World War II: "49 percent of farmers were pure tenants and 35 percent were part tenants. Rents were 50–60 percent of the crop, leases were oral and insecure and evictions were common. Tenants were responsible for all costs of cultivation. . . . Purchases of land by tenants were virtually impossible."[74] Very high rates of tenancy at exorbitant rental rates similarly supported a small landlord class at this time in China, Japan, Taiwan, and Vietnam, leading the World Bank to label these "feudalistic landlord-tenant systems" in practice. The picture was largely similar—and endured substantially longer—in Southeast Asia in countries such as Malaysia, the Philippines, Thailand, and Vietnam, as well as in much of Latin America. High rates of tenancy with high rental prices alongside absentee landlordism and sharecropping also prevailed in much of the Middle East and North Africa until at least the mid- to late-twentieth century.[75]

Building from these insights, Prosterman and Riedinger define a measure based on the percentage of the population with insecure tenure

[70] Griffin, Khan, and Ickowitz 2002, 288.
[71] Tuma 1965.
[72] Swinnen 2002.
[73] World Bank 1975, 20.
[74] Griffin, Khan, and Ickowitz 2002, 305.
[75] El-Ghonemy 1990.
[76] Prosterman and Riedinger 1987.

and use it as a proxy for the likelihood of revolutionary upheavals.[76] Their data cover thirteen countries in prerevolutionary moments and another seventy-eight countries circa the 1970s.

By contrast, I build from the Prosterman and Riedinger indicator, but focus on what it most immediately proxies for: the prevalence of agriculture laborers who are dependent economically or socially on landlords and large landowners for their livelihood. This skews labor markets in favor of large landowners, driving down rural wages and trapping a surplus of rural workers in the countryside. To be sure, this indicator is not perfect; there could be cases of owner-occupied and owner-operated farms that depend principally on capital rather than on labor for production even when tenure insecurity is prevalent. At the same time, tenancy may be relatively secure in some cases, rendering tenants more independent from landowners. In Britain in the late 1800s, for instance, tenancy rates were higher than nearly anywhere else in Western Europe, yet the terms of tenancy were often longer, contributing to greater, though hardly perfect, tenant security.[77] Nonetheless, given the historical tendencies outlined above for rural labor abundance to track with reliance on labor rather than on capital or technology for agricultural production, such circumstances are exceptions rather than the rule.

I create the continuous variable *labor-dependent agriculture* by using several different data sets. Data on the total number of agricultural holdings and the number of holdings that are owned or held in ownerlike possession are taken from the World Censuses of Agriculture (WCA), which have been coordinated by the UN's Food and Agriculture Organization in decadal intervals since 1930.[78] The most recent wave that has been made public is the 2000 wave, consisting of censuses conducted between 1996 and 2005. The WCA data also contain information on the number of holdings with ownership or ownershiplike rights. The temporal scope of the data prevents any conclusions about the role of labor-dependent agriculture in the first wave of democracy or in the first half of the interwar period.

Demographic data on household sizes are calculated using the number of households gathered from volumes of the *UN Compendium of Social Statistics* and the *UN Demographic Yearbook*. Some of these volumes also include the number of households in the rural sector. I then use UN data on total population and population in the rural sector to

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[77] Swinnen 2002.

[78] I restrict the analysis to countries with populations greater than one million. This eliminates microstates to which theories of landowners and regime type do not apply, given that agriculture is essentially nonexistent (e.g., Bahrain, Djibouti).

estimate the number of total families and the number of rural families. I use these data in conjunction with data from Vanhanen on the percentage of the economically active population involved in agriculture to calculate the number of families that were economically active in the agricultural sector.[79]

I then construct a measure of nonowner families engaged in agricultural labor by calculating the difference between the number of families dedicated to agriculture and the number of individually operated agricultural holdings with owner or ownerlike possession. This number is divided by the total number of families in the population to generate *labor-dependent agriculture*, an indicator of the percentage of families in a country that are engaged in agricultural labor, but lack ownership or ownershiplike rights.[80] By capturing the prevalence of labor-dependent agriculture, this indicator implicitly accounts for the importance—and relational power—of landowners in society.

Labor-dependent agriculture varies from 0.1 percent of the population, corresponding to the United States in the early 2000s, to 73.2 percent of the population, which corresponds to Iraq in the early 1950s. It has a mean of 21.6 percent and a standard deviation of 15.3 percent. Other countries that score very low on *labor-dependent agriculture* include much of Western and Northern Europe in the last several decades. Countries that score particularly high on the measure include Venezuela in the 1930s, Honduras prior to 1960, and Pakistan before 1970.

The *labor-dependent agriculture* measure corresponds closely with country case studies and common findings detailed in existing literature. Take Latin America. Figure 1 depicts trends in labor-dependent agriculture in several Latin American countries. Consistent with Jeffery Paige and Huber and Frank Safford,[81] the measure I construct indicates much lower historical rates of labor-dependent agriculture in Argentina and Uruguay (a) than in more historically labor-dependent countries like Guatemala and Honduras (c). Countries such as Colombia and Ecuador (b) score between these two sets of countries. Furthermore, as expected, the prevalence of labor-dependent agriculture in most countries has declined substantially in recent decades. This adds confidence in the fidelity of this measure for tapping labor-dependent agriculture across space and time.
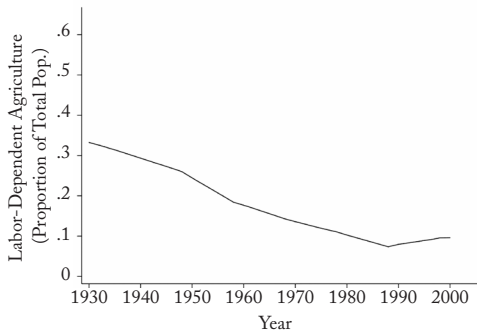
[79] Vanhanen 2009.
[80] To the extent that smallholders with extremely small plots have to supplement their income with wage labor, this should bias the estimate of labor-dependent agriculture downward.
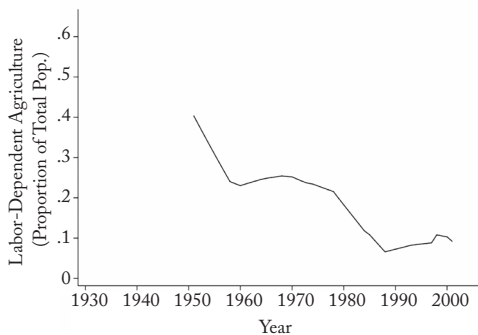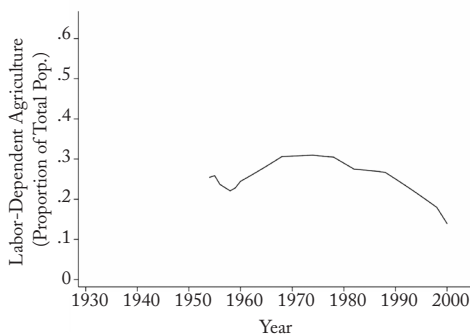[81] Paige 1997; Huber and Safford 1995.
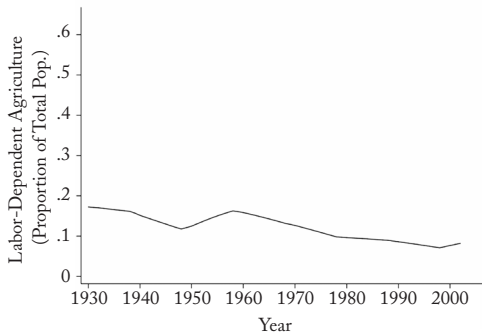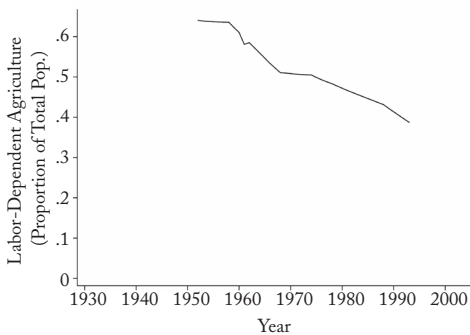
FIGURE 1

TRENDS IN LABOR-DEPENDENT AGRICULTURE IN SELECTED LATIN AMERICAN
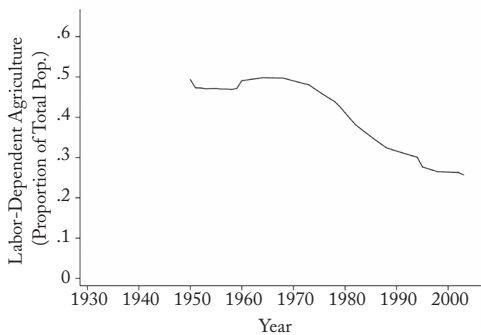COUNTRIES, 1930–2003

CONTROL VARIABLES

I also include controls for several additional variables that are commonly theorized to affect democracy. Following modernization theory,[82] I control for *log* (*per capita income*) in 2000 international dollars, which I construct primarily using the Penn World Tables with missing data filled in from Maddison Historical Statistics and the World Bank Development Indicators. Because stable economic growth during autocracy may inhibit democracy[83] and growth under democracy may support regime duration,[84] I control for the *growth rate* (of *per capita income*) in percent. Following the resource curse literature, which predicts a negative relationship between natural resources and democracy,[85] I control for *oil income per capita* in thousands of 2000 US dollars, with data from Stephen Haber and Victor Menaldo.[86] I also control for previous experience with democratic rule by controlling for the *number of previous transitions to autocracy*, with data from Cheibub, Gandhi, and Vreeland, which has been found to positively influence the odds of democratization.[87] Because the international political context affects the likelihood of a country being a democracy, I control for the *percent of democracies in the world*.[88]

To ensure that *labor-dependent agriculture* is not simply picking up how agriculturally dependent or how modern economies are, I also include a variable for the percentage of the population that is urban. Data are from the Correlates of War Project. *Percent urban* not only captures the economic importance of agriculture, but it also serves as a proxy for industrialization. Finally, I include a control for *ethnolinguistic fractionalization* (ELF), with data from James Fearon and David Laitin.[89] I add this control because *labor-dependent agriculture* may underestimate ownerlike possession in countries where customary ownership systems are widespread and chiefs and other neotraditional authorities exercise de jure control over access to land. Although data on customary ownership are sparse, these countries—including Papua New Guinea, the Solomon Islands, and many states in sub-Saharan Africa—tend to be ethnically diverse and trace customary ownership through chiefs,

[82] E.g., Lipset 1959; Przeworski et al. 2000; Epstein et al. 2006.
[83] E.g., Przeworski et al. 2000.
[84] E.g., Svolik 2008.
[85] E.g., Ross 2001.
[86] Haber and Menaldo 2011.
[87] E.g., Epstein et al. 2006; Houle 2009; Przeworski et al. 2000.
[88] See, e.g., Epstein et al. 2006; Houle 2009; Przeworski et al. 2000.
[89] Fearon and Laitin 2003.

elders, and lineage heads.[90] Moreover, ethnic fractionalization may be harmful for democracy.

Additional controls are discussed below.

EMPIRICAL RESULTS

This section provides an empirical examination of the role of labor-dependent agriculture in democracy. I first estimate a series of dynamic probit models. These models allow one to distinguish the effects of a set of independent variables on the likelihood of both democratization and democratic duration, as well as to obtain separate estimates for each of these outcomes. Dynamic probit models have been widely used in the regime transitions literature.[91] I then examine the impact of labor-dependent agriculture on a country's level of democracy, suffrage level, power of parliament, and election quality. I estimate ordinary least squares (OLS) models with country fixed effects on this second set of dependent variables, given that they are continuous. I next document the changing role of labor-dependent agriculture on democracy over time and identify mechanisms driving this shift. Finally, this section examines the impact of labor-dependent agriculture on democratic institutional design.

LABOR-DEPENDENT AGRICULTURE AND DEMOCRACY

Table 1 first presents a series of dynamic probit models that estimate the impact of labor-dependent agriculture on both the likelihood of democratic transition and the likelihood of democratic persistence. The first set of models presents estimates of democratization and the second set presents estimates of democratic breakdown. Because dynamic probit models estimate both outcomes simultaneously, the models are labeled (a) and (b) to indicate where results are estimated by the same regressions but reported separately for each dependent variable. Standard errors are clustered by country to address heteroskedasticity and serial correlation.

Model 1(a) is a baseline bivariate regression where the dependent variable is *democratic transition*. *Labor-dependent agriculture* is negative but not statistically significantly linked to *democratic transition*. Model 2(a) adds a series of control variables. *Labor-dependent agriculture* is again statistically insignificant. Meanwhile, the coefficients for the controls

[90] Boone 2014.
[91] See, e.g., Boix 2003; Dunning 2008; Houle 2009; Przeworski et al. 2000.

TABLE 1

LABOR-DEPENDENT AGRICULTURE AND DEMOCRACY[a]

Specification	Dynamic Probit								OLS			
	Democratic Transition				Democratic Duration				Polity Score	Suffrage Level	Power of Parliament	Free & Fair Elections
	Model 1(a)	Model 2(a)	Model 3(a)	Model 4(a)	Model 1(b)	Model 2(b)	Model 3(b)	Model 4(b)	Model 5	Model 6	Model 7	Model 8
Labor-dependent agriculture	−0.03 (0.560)	0.724 (0.624)	1.317* (0.793)	1.536* (0.869)	−2.869*** (0.404)	−2.058*** (0.514)	−1.927*** (0.630)	−1.712*** (0.633)	−51.052*** (8.739)	−20.536*** (5.646)	−0.176*** (0.066)	−0.360*** (0.067)
log(per capita income)		0.199 (0.159)	0.025 (0.241)	0.074 (0.260)		0.405*** (0.096)	0.103 (0.187)	0.326 (0.235)	−1.198 (2.058)	0.540 (1.251)	0.019 (0.013)	0.069*** (0.022)
Growth rate		−4.631*** (1.525)	−5.574*** (1.970)	−5.662*** (2.083)		2.271 (2.083)	3.725** (1.714)	4.067** (1.823)	4.072 (9.336)	−4.120 (5.297)	0.126** (0.058)	0.033 (0.077)
Oil income per capita		−0.375 (0.341)	−0.288 (0.302)	−0.204 (0.313)		0.064 (0.066)	0.195 (0.118)	0.923*** (0.347)	0.598* (0.309)	0.153 (0.378)	0.004** (0.002)	−0.003 (0.044)
Number of previous transitions		0.336*** (0.059)	0.352*** (0.074)	0.335*** (0.071)		−0.163** (0.081)	−0.255*** (0.074)	−0.285*** (0.079)	−0.074 (2.388)	5.408*** (0.893)	−0.019 (0.017)	−0.029 (0.024)
Percent urban		−0.007 (0.007)	−0.008 (0.008)	−0.010 (0.007)		−0.005 (0.004)	−0.003 (0.005)	−0.013 (0.008)	0.052 (0.067)	0.093*** (0.033)	0.000 (0.000)	0.001 (0.001)
ELF		0.088 (0.337)	−0.111 (0.387)	0.060 (0.381)		0.010 (0.408)	0.062 (0.500)	−0.024 (0.548)				
Percent democracies in world		1.954***				2.760***						
Percent democracies in region			0.234 (0.906)	0.400 (0.611)			0.253 (1.004)	0.284 (0.673)	24.112*** (0.736)	0.168 (5.559)	0.124*** (2.754)	0.359*** (0.041)
(0.046)												
Inequality				−0.082 (0.107)				0.069 (0.107)				
Inequality squared				0.001 (0.001)				−0.001 (0.001)				
Year dummies	no	no	yes	yes	no	no	yes	yes	yes	yes	yes	yes
Region fixed effects	no	no	yes	yes	no	no	yes	yes	no	no	no	no
Country fixed effects	no	no	no	no	no	no	no	no	yes	yes	yes	yes
Observations	3214	2666	2638	2294	3214	2666	2638	2294	3143	3115	3121	3139

*p < 0.10; **p < 0.05; ***p < 0.01 (two-tailed)

[a] All independent variables are lagged one period. Models 1–4 are dynamic probit models with standard errors clustered by country in parentheses. Models 5–8 are OLS models with Driscoll-Kraay robust standard errors with a Newey West correction for serial correlation in parentheses. Year dummies, region fixed effects, and country fixed effects are estimated where indicated, but are not reported.

are generally as expected. *Per capita income* has a positive sign, but is short of statistical significance. Higher economic growth under dictatorship makes democratization significantly less likely, and increased oil reliance also points in this direction. *Number of previous transitions* and *percent of democracies in the world* are both positively linked to democratization and strongly statistically significant, as expected.

Model 3(a) adds year dummies and region fixed effects.[92] Following the literature, I do not control for country fixed effects in these models because only 42 percent of countries in the data set have experienced a switch to democracy, which would restrict the analysis to only these countries if a conditional logit model were employed. I substitute *percent of democracies in the region* for the *percent of democracies in the world* because the latter is perfectly collinear with the year dummies. Year dummies therefore implicitly control for the international political context (for example, the Cold War) that may commonly influence transitions. *Labor-dependent agriculture* is now positively linked to *democratic transition* in model 3(a), although the substantive effect is weak and the p-value is 0.097. A two standard deviation increase in *labor-dependent agriculture* increases the likelihood of democratization by an estimated 10 percent. The control variables maintain their signs and statistical significance.

Model 4(a) includes *inequality* and *inequality squared* to account for the possibility that inequality impacts the adoption or persistence of democracy in a linear[93] or quadratic fashion.[94] Inequality data are taken from the Standardized Income Distribution Database.[95] The results for *labor-dependent agriculture* hold, although the analysis is limited to 1955–2005 given data availability on the inequality variables. The inequality variables are far from statistically significant. Results are also similar when Vanhanen's share of family farms measure is introduced to measure inequality. The family farms measure enters as statistically insignificant for both democratic transition and duration.

Contrary to expectations, labor-dependent agriculture is not systematically inimical to the establishment of democracy, at least when this broad time period is considered concurrently and the effects are assumed constant over time. Interestingly, the coefficient on *labor-dependent agriculture* becomes more positively linked to democratic transition when the data sample truncates observations that date further back in time, a point examined in detail in Table 2 below.

[92] See Albertus 2017 for a definition of regions.
[93] E.g., Boix 2003; Houle 2009.
[94] Acemoglu and Robinson 2006.
[95] Babones and Alvarez-Rivadulla. 2007.

The findings in models 3(a) and 4(a) do not imply, however, that labor-dependent agriculture is uniformly beneficial for democracy. Indeed, a more complicated picture emerges when examining the impact of labor-dependent agriculture on democratic duration. Models 1(b)–4(b) turn to *democratic duration* as the dependent variable. These results stem from the same models that produced the estimates for models 1(a)–4(a). Positive coefficients indicate that the associated variables increase the probability that a democracy will survive rather than break down.

Model 1(b) finds that labor-dependent agriculture is robustly negatively tied to democratic duration. A two standard deviation increase in *labor-dependent agriculture* increases the likelihood of democratic breakdown by an estimated 24 percent. The same is true in model 2(b), which introduces controls. Consistent with much of the literature, *log(per capita income)* is positive and supportive of democratic persistence in model 2(b), as is *percent of democracies in the world*. The *number of previous transitions* is negative, consistent with Christian Houle,[96] but here enters as statistically significant. Regime cyclers such as Argentina, Peru, and Turkey tend to exhibit persistence in political instability.

Model 3(b) includes year dummies and region fixed effects. The main results from models 1(b) and 2(b) hold, although *growth rate* now gains statistical significance and remains positive, consistent with Przeworski and associates and Milan Svolik.[97] The main results again hold when including control variables for inequality in model 4(b). The findings in models 1(b)–4(b) are more consistent with the literature that documents the negative influence of labor-dependent agriculture on democracy.

Models 1–4 are also similar—the findings for democratic duration generally strengthen while *labor-dependent agriculture* is not positively linked to democratic transition—when restricting the analysis to a subset of country-years where the agricultural population is greater than 30 percent (or 40 percent or 50 percent) of the total population. This captures more agrarian economies where landed elites should be stronger vis-à-vis other economic elites and state actors.[98]

LABOR-DEPENDENT AGRICULTURE AND DEMOCRACY IN LEVELS

Model 5 shifts the dependent variable to *polity score*. This serves to test the robustness of models 1–4 to an alternative regime measure and

[96] Houle 2009.
[97] Przeworski et al. 2000; Svolik 2008.
[98] See Albertus 2017 for results.

also to investigate whether labor-dependent agriculture affects additional dimensions of democracy beyond contestation. Furthermore, measuring a country's level of democracy in a continuous fashion enables the introduction of country fixed effects while retaining data from countries that have not experienced regime switching. This helps reject the possibility that the dynamic probit results are an artifact of unobserved country-specific and time-invariant heterogeneity, such as geography or factor endowments that may jointly influence the extent of labor-dependent agriculture and a country's propensity to experience democratic transition or breakdown. Model 5 is estimated via OLS and employs the same set of basic controls as model 3. Heteroskedasticity, contemporaneous correlation, and serial correlation are addressed using Driscoll-Kraay standard errors with a Newey West adjustment with a one-order lag length.

Labor-dependent agriculture is strongly negatively associated with a country's *polity score*. A two standard deviation increase in *labor-dependent agriculture* is tied to an estimated twenty-two point decrease in a country's *polity score*. This supports the dynamic probit results in models 1(b)–4(b).[99] Additional robustness tests reported in the supplementary material also suggest that the results are robust to potential endogeneity running from regime type to the prevalence of labor-dependent agriculture.[100]

SUFFRAGE, THE POWER OF PARLIAMENT, AND FREE AND FAIR ELECTIONS

Models 6–8 directly examine the impact of labor-dependent agriculture on several specific, critical dimensions of democracy: suffrage, the power of parliament, and free and fair elections. I again estimate OLS models with country fixed effects, given the continuous nature of the dependent variables. The models are otherwise specified similarly to model 5.

Labor-dependent agriculture is negatively and statistically significantly tied to each of these dimensions of democracy. Its substantive impact, however, is strongest for suffrage and election quality. A two standard deviation increase in *labor-dependent agriculture* yields an estimated 8.9 percentage point decrease in the adult population that can exercise suffrage and a 0.16 point decline in the measure of free and fair elections. This translates into just shy of half a standard deviation decline in each of these dependent variables. In contrast, a two

[99] Further supporting the results in models 1–4, *labor-dependent agriculture* is more negatively related to *polity score* among democracies (see Albertus 2017 for results).
[100] Albertus 2017.

standard deviation increase in *labor-dependent agriculture* is linked to an estimated 0.08 point decrease in the power of parliament, which is roughly one-third of a standard deviation of this variable. Labor-dependent landowners appear to be especially pernicious for the electoral components of democracy. This is perhaps unsurprising given the geographically dispersed nature of landowners and their well-documented capacity to use their power to suppress and manipulate the rural vote.[101]

The Changing Role of Labor-Dependent Agriculture in Democracy

Whereas models 1(b)–4(b) and models 5–8 of Table 1 support an important body of work indicating that labor-dependent landowners play a negative role in democracy, the broader findings from models 1–4 raise a puzzle. Models 3(a)–4(a) of Table 1 contradict the substantial literature that argues that labor-dependent landowners should have incentives to block the arrival of democracy. Why would labor-dependent landowners seemingly be tied to democratic transition (even if weakly) and also to democratic backsliding? Model 5 of Table 1 adds a potential twist to the findings. If labor-dependent agriculture is associated with democratic transition but generally lower polity scores, it is possible that countries with significant labor-dependent agriculture democratize at the low end of the Polity cutoff for democracy and that breakdowns yield substantial Polity declines. To address these issues, the remaining analyses unpack heterogeneity in the effects of labor-dependent agriculture on democracy and examine trends in the institutional architecture of democracy in the presence of labor-dependent agriculture.

Table 2 begins by exploring whether the findings in models 1–4 of Table 1 are an artifact of heterogeneous effects of labor-dependent agriculture on democracy over time. As discussed in the theory section above, the literatures on financial globalization, land reform, and guerrilla and civil war suggest that key changes in recent decades have altered the role of labor-dependent landowners in democratic transition and duration. All of these factors had begun to operate by the time the third wave of democracy began with Portugal's Carnation Revolution in 1974, and some had been operating even before.

Models 1 and 2 in Table 2 therefore split the sample into the time period before 1974 and the period after 1974, respectively. These models are otherwise specified similarly to model 3 of Table 1, which includes a full set of controls along with year dummies and region fixed

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[101] E.g., Baland and Robinson 2008; Ziblatt 2009.

TABLE 2
THE SHIFTING ROLE OF LABOR-DEPENDENT AGRICULTURE IN DEMOCRACY[a]

Dependent Variable	Democratic Transition		Democratic Duration	
	Before 1974	After 1974	Before 1974	After 1974
Sample	Model 1(a)	Model 2(a)	Model 1(b)	Model 2(b)
Labor-dependent agriculture	0.432	1.202*	−3.350**	−0.158
	(1.451)	(0.707)	(1.550)	(0.947)
log(per capita income)	−0.276	−0.174	−0.154	0.014
	(0.390)	(0.272)	(0.354)	(0.432)
Growth rate	−14.769***	−3.481*	3.512	4.315**
	(4.751)	(1.987)	(3.532)	(2.110)
Oil income per capita	0.099	−0.825	0.205	0.523*
	(0.232)	(1.022)	(0.244)	(0.312)
Number of previous transitions	0.893***	0.237***	−0.458**	−0.228*
	(0.294)	(0.091)	(0.193)	(0.123)
Percent urban	−0.016	−0.011	−0.005	0.000
	(0.023)	(0.007)	(0.007)	(0.011)
ELF	−0.269	0.267	−0.298	1.173
	(0.845)	(0.571)	(0.906)	(0.834)
Percent democracies in region	−1.368	0.424	−0.092	0.097
	(1.099)	(0.987)	(0.924)	(0.958)
Year dummies	yes	yes	yes	yes
Region fixed effects	yes	yes	yes	yes
Observations	1085	1465	1085	1465

*p < 0.10; **p < 0.05; ***p < 0.01 (two-tailed)

[a] All models are estimated via dynamic probit specifications. Standard errors clustered by country in parentheses. All independent variables are lagged one period. Year dummies and region fixed effects are estimated, but are not reported.

effects. Table 2, model 1(a) indicates that labor-dependent agriculture is *not* tied to democratic transition before 1974. In contrast, model 2(a) indicates that labor-dependent agriculture is *positively* tied to democratization after 1974. The positive effect after the 1974 onset of the third wave postdates much of the early, influential literature on landowners and democracy. Early authors such as Alexander Gerschenkron and Moore could not have known that labor-dependent landowners would subsequently become a positive force for democracy in much of the third wave.

Models 1(b) and 2(b) examine democratic duration before 1974 and after 1974. Whereas labor-dependent agriculture was conducive to democratic backsliding prior to 1974, it has had no statistically distinguishable effect on democratic breakdown since 1974. These models echo the emerging picture from models 1(a)–2(a); the role of
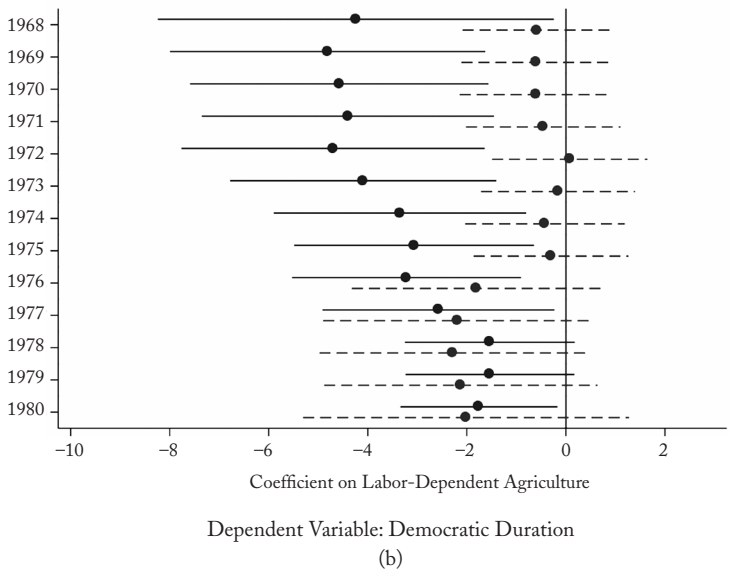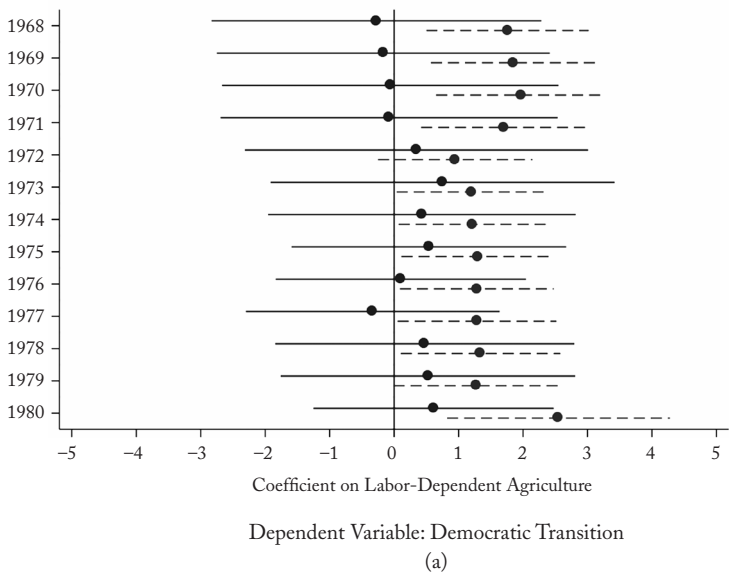
labor-dependent agriculture in democracy has shifted from negative to positive in recent decades.

How sensitive are the findings in Table 2 to the 1974 cut point that marks the start of democracy's third wave? To investigate this question, I estimated a series of regressions with yearly cut points dating from 1968 to 1980. Figure 2 plots the regression coefficients and 90 percent confidence intervals for *labor-dependent agriculture* on both *democratic transition* and *democratic duration* before and after each cut point year during the 1968–80 window. The results are robust throughout this window, indicating that consistent with the theoretical discussion, the shift in landowner support for democracy unfolded over the course of at least a decade. Consider Figure 2(a). The coefficient on *labor-dependent agriculture* for *democratic transition* is consistently statistically insignificant in the period prior to each cut point. By contrast, it is positive and statistically distinguishable from zero in nearly every period after each given cut point. Next consider Figure 2(b). The coefficient on *labor-dependent agriculture* for *democratic duration* is negative and statistically distinguishable from zero in nearly every period prior to each cut point. By contrast, it is consistently statistically insignificant in every period following each given cut point.

Furthermore, the coefficients on *labor-dependent agriculture* generally shift in the expected directions throughout the 1968–80 time period, indicating that landowner support for democracy on the whole also trends more positively throughout the period. As the cut point shifts from 1968 toward 1980, the coefficients for the effect of *labor-dependent agriculture* on *democratic transition* in Figure 2(a) generally shift to the right, becoming more positive. The same is true of the coefficients for the effect of *labor-dependent agriculture* on *democratic duration* in the period prior to each stated cut point in Figure 2(b). Although this shift to the right does not hold for the effect of *labor-dependent agriculture* on *democratic duration* in the periods after each stated cut point beginning in the late 1970s, the increasingly smaller sample in these years renders the point estimates more sensitive and the confidence intervals wider, such that we cannot reject the possibility of a rightward drift. Regardless, these coefficients are statistically insignificant.

FACTORS SHIFTING LABOR-DEPENDENT LANDOWNERS' SUPPORT FOR DEMOCRACY

Table 2 and Figure 2 support previous findings that labor-dependent agriculture has been bad for democracy—at least prior to the third wave of democracy. But what are the mechanisms that have since tipped the balance for some labor-dependent landowners, turning them

Dependent Variable: Democratic Transition

(a)

Dependent Variable: Democratic Duration

(b)

FIGURE 2

ESTIMATED EFFECTS OF LABOR-DEPENDENT AGRICULTURE ON DEMOCRATIC
TRANSITION AND DURATION USING VARIOUS TEMPORAL THRESHOLDS [a]

[a] Figure plots the estimated coefficients and 90 percent confidence intervals for *labor–dependent agriculture* on the probability of democratic transition and democratic duration using the Table 2 model specifications, but varying the cutoff threshold to before (solid lines) and after (dashed lines) the years listed on the y-axes.

into would-be democrats? The theory section outlines three principal mechanisms for why some landowners may have shifted their loyalties in favor of democracy beginning around the 1970s: financial integration, neighboring land reform spillover threats, and threats to domestic property rights from civil wars and associated guerrilla movements.

To test the mechanisms, I interact *labor-dependent agriculture* with a variable tapping each one. This enables me to distinguish in a more nuanced manner circumstances in which labor-dependent landowners in some countries may have incentives to support democracy whereas labor-dependent landowners in other countries do not. Because the mechanisms started to operate at different times in different countries and because the relevant comparison is how labor-dependent agriculture impacts democracy in the presence versus the absence of a given mechanism, I use data from the whole time period rather than only from the post-1974 period.

To test the financial integration mechanism, I employ commonly used data on capital account openness from Menzi Chinn and Hiro Ito.[102] The *capital openness* variable is constructed by tabulating restrictions on cross-border financial transactions reported in the IMF's *Annual Report on Exchange Arrangements and Exchange Restrictions*. This variable ranges between −1.83 and 2.5, with a mean of 0 and a standard deviation of 1.48 for the sample in which data on labor-dependent agriculture are available. Higher values indicate greater openness.

I employ data on land reform from Michael Albertus to test the neighboring land reform hypothesis.[103] Albertus codes all instances of land redistribution, which entail the uncompensated or undercompensated expropriation of land around the world since 1900. *Neighboring land reform* is coded as the percentage of countries engaged in land redistribution in the regional neighborhood surrounding a country over the previous ten years. This variable ranges from 0 to 0.68, with a mean of 0.15 and standard deviation of 0.19.

To operationalize the civil conflict hypothesis, I use data on civil war from Uppsala Conflict Data Program–Peace Research Institute Oslo (UCDP-PRIO).[104] These data pick up fine-grained gradations of civil conflict down to a minimum threshold of twenty-five battle deaths per year and therefore can capture even low-level simmering insurgencies. I code *civil conflict* as a dummy with 0 indicating no civil war and 1 indicating the presence of civil war. I use this low-level battle-death

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[102] Chinn and Ito 2006. Data are updated to the present.
[103] Albertus 2015.
[104] Themnér and Wallensteen 2013.

cutoff rather than a higher cutoff because even low-level conflict can pose a direct threat to landowners' property rights short of the commonly used civil war threshold, and it can also threaten to snowball into large, violent movements seeking wide-scale political and economic change. *Civil conflict* has a mean of 0.14 and a standard deviation of 0.35. The results are also similar substituting *civil conflict* for a measure of guerrilla warfare from Arthur Banks's Cross-National Time-Series data set.

Figure 3 plots the prevalence of capital openness, land reform, and civil conflict over the entire period of analysis for which data are available. This figure reveals that land reform and civil conflict were burgeoning in the 1960s and 1970s, and where threats posed to landowners were palpable, they could have been major factors in shifting landowner support toward democracy. Capital openness, by contrast, spread in force beginning in the 1990s. Figure 3 and much of the literature also indicate that capital openness, land reform, and civil conflict are not tied specifically to the 1974 cut point in Table 2. In some countries these factors operated somewhat before 1974, in other countries they operated after this year, and in yet others they have not operated at all. The subsequent empirical analyses therefore focus on the mechanisms rather than on the year 1974 per se.

Table 3 presents the results of dynamic probit models that examine the impact of labor-dependent agriculture on democratic transition and democratic duration. Model 1 interacts *labor-dependent agriculture* with *capital openness*. The uninteracted coefficient on *labor-dependent agriculture* captures the effect of this variable on the dependent variables when *capital openness* is zero. The uninteracted coefficient on *capital openness* captures the effect of this variable absent labor-dependent agriculture. The interaction between *labor-dependent agriculture* and *capital openness* is statistically insignificant for both *democratic transition* and *democratic duration*.

Labor-dependent landowners do not more readily accept democracy in the presence of financial integration. Furthermore, the uninteracted term for *labor-dependent agriculture* is positive and statistically significant as in Table 1, models 3(a)–4(a). This is unsurprising given that data on *capital openness* begin in 1970, limiting the sample to this time period. Labor-dependent agriculture supports democratic transition at around the levels of financial integration exemplified by Thailand from the 1970s through the1990s and by Argentina after its 2001 debt crisis—hardly well-integrated economies. *Capital openness* absent labor-dependent agriculture is not robustly tied to democratic transition or
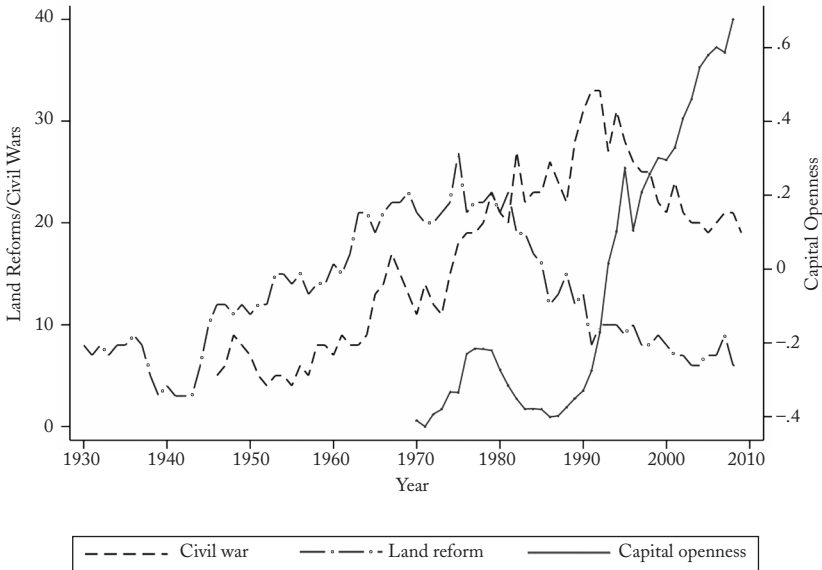
FIGURE 3
POSSIBLE MECHANISMS SHIFTING THE SUPPORT OF LABOR-DEPENDENT
LANDOWNERS FOR DEMOCRACY

duration, although it just misses supporting democratic duration at the
10 percent level.

Of course, it is difficult to meaningfully interpret the marginal effects
of labor-dependent agriculture on democratic transition and duration
simply from the magnitude and significance of the coefficients on the
interaction term and its constituent components. Using the Table 3
estimates, Figure 4 therefore plots, conditional on the variables cap-
turing each of the three mechanisms, the average marginal effects of
labor-dependent agriculture on the likelihood of democratic transition
and democratic duration. The graph in Figure 4(a) confirms the dis-
cussion above: financial integration does not induce labor-dependent
landowners to more readily accept democracy.

Table 3, model 2 interacts *labor-dependent agriculture* with *neighbor-
ing land reform*. This mechanism finds more empirical support. Absent
recent neighboring land reforms, the uninteracted *labor-dependent ag-
riculture* term is not tied to democratization and it also has a negative
impact on democratic persistence. By contrast, Figure 4(b) indicates
that when land reform is active in a country's neighborhood, *labor-
dependent agriculture* is more positively tied to *democratic transition*. It

TABLE 3

MECHANISMS DRIVING THE SHIFTING ROLE OF LABOR-DEPENDENT
AGRICULTURE IN DEMOCRACY [a]

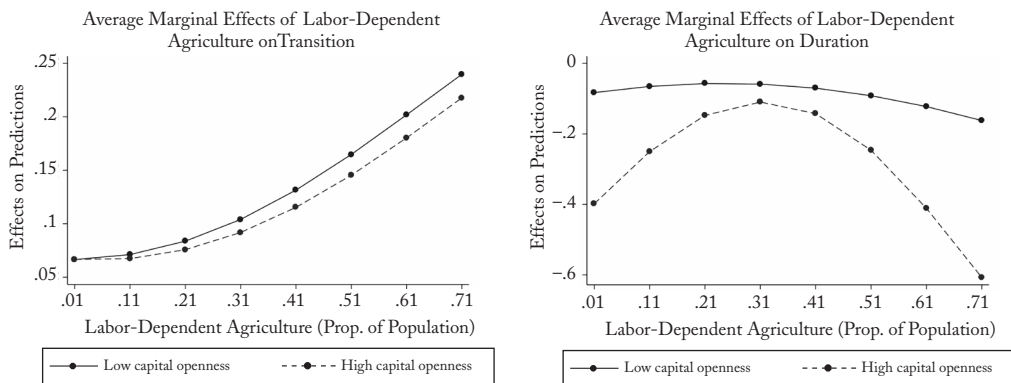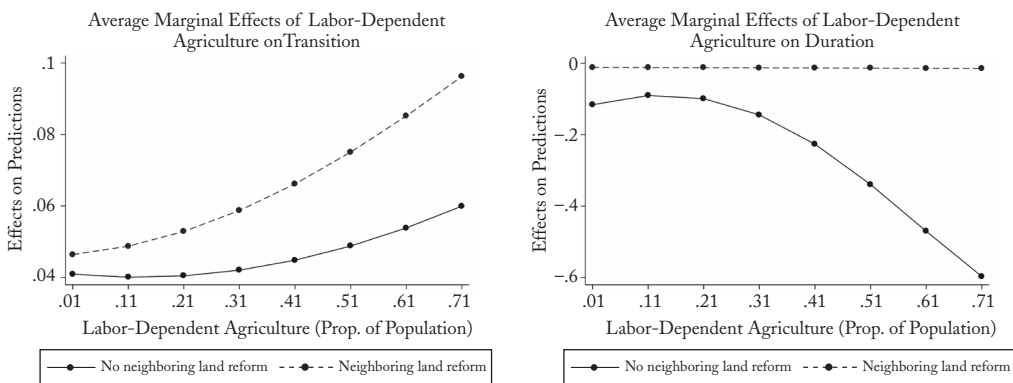| Mechanism	Capital Openness		Neighboring Land Reform		Civil Conflict	
Dependent Variable	Democratic Transition	Democratic Duration	Democratic Transition	Democratic Duration	Democratic Transition	Democratic Duration
	Model 1(a)	Model 1(b)	Model 2(a)	Model 2(b)	Model 3(a)	Model 3(b)
Labor-dependent agriculture	2.586***	−2.861	1.291	−3.990***	0.581	−2.789***
	(0.895)	(1.747)	(1.322)	(1.170)	(0.973)	(0.791)
log(per capita income)	0.027	0.201	0.048	0.094	−0.003	0.075
	(0.262)	(0.410)	(0.243)	(0.213)	(0.250)	(0.190)
Growth rate	−4.519**	4.100**	−5.512***	3.332**	−5.447***	3.320*
	(1.981)	(2.053)	(1.981)	(1.676)	(2.056)	(1.692)
Oil income per capita	−0.649	0.457	−0.292	0.254*	−0.247	0.250*
	(0.891)	(0.398)	(0.308)	(0.135)	(0.319)	(0.139)
Number of previous transitions	0.272***	−0.170	0.341***	−0.221***	0.354***	−0.307***
	(0.100)	(0.113)	(0.075)	(0.080)	(0.069)	(0.065)
Percent urban	−0.010	−0.005	−0.007	−0.002	−0.008	−0.003
	(0.008)	(0.010)	(0.009)	(0.006)	(0.008)	(0.005)
ELF	0.205	0.049	0.046	0.044	−0.072	0.202
	(0.649)	(0.685)	(0.391)	(0.516)	(0.433)	(0.454)
Percent democracies in region	1.170	0.469	0.408	0.259	0.154	0.172
	(0.777)	(0.901)	(0.666)	(0.659)	(0.593)	(0.635)
Capital openness	−0.170	0.781				
	(0.219)	(0.515)				
Labor-dependent agriculture* capital openness	−0.019	−2.007				
	(0.618)	(1.259)				
Neighboring land reform			0.535	−1.475		
			(0.802)	(1.149)		
Labor-dependent agriculture* neighboring land reform			0.374	7.021**		
			(3.373)	(3.429)		
Civil conflict					−1.032*	−0.784
					(0.612)	(0.505)
Labor-dependent agriculture* civil conflict					4.020**	3.013*
					(1.725)	(1.614)
Year dummies	yes	yes	yes	yes	yes	yes
Region fixed effects	yes	yes	yes	yes	yes	yes
Observations	1589	1589	2556	2556	2638	2638

*p < 0.10; **p < 0.05; ***p < 0.01 (two-tailed)

[a] All models are estimated via dynamic probit specifications. Standard errors clustered by country in parentheses. All independent variables are lagged one period. Year dummies and region fixed effects are estimated, but are not reported.
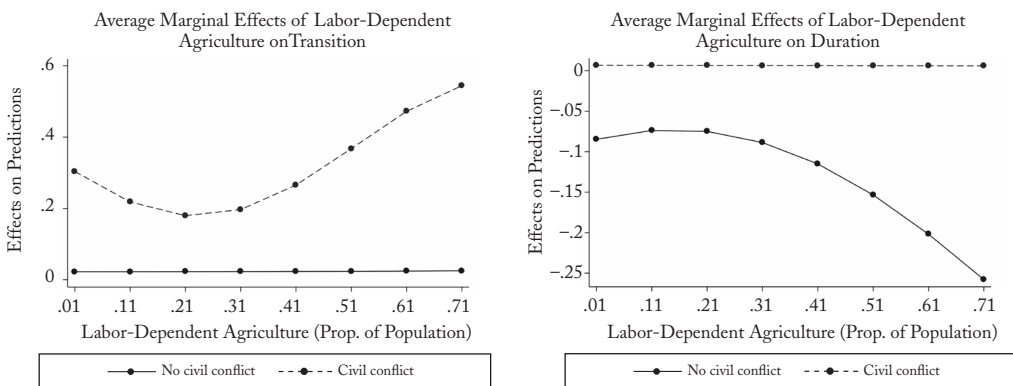
Average Marginal Effects of Labor-Dependent Agriculture onTransition

.25
.2
.15
.1
.05

Effects on Predictions

.01 .11 .21 .31 .41 .51 .61 .71
Labor-Dependent Agriculture (Prop. of Population)

Low capital openness — — High capital openness

Average Marginal Effects of Labor-Dependent Agriculture on Duration

0
-.2
-.4
-.6

Effects on Predictions

.01 .11 .21 .31 .41 .51 .61 .71
Labor-Dependent Agriculture (Prop. of Population)

Low capital openness — — High capital openness

Conditioning on Capital Openness (Model 1)

(a)

Average Marginal Effects of Labor-Dependent Agriculture onTransition

.1
.08
.06
.04

Effects on Predictions

.01 .11 .21 .31 .41 .51 .61 .71
Labor-Dependent Agriculture (Prop. of Population)

No neighboring land reform — — Neighboring land reform

Average Marginal Effects of Labor-Dependent Agriculture on Duration

0
-.2
-.4
-.6

Effects on Predictions

.01 .11 .21 .31 .41 .51 .61 .71
Labor-Dependent Agriculture (Prop. of Population)

No neighboring land reform — — Neighboring land reform

Conditioning on Neighboring Land Reform (Model 2)

(b)

Average Marginal Effects of Labor-Dependent Agriculture onTransition

.6
.4
.2
0

Effects on Predictions

.01 .11 .21 .31 .41 .51 .61 .71
Labor-Dependent Agriculture (Prop. of Population)

No civil conflict — — Civil conflict

Average Marginal Effects of Labor-Dependent Agriculture on Duration

0
-.05
-.1
-.15
-.2
-.25

Effects on Predictions

.01 .11 .21 .31 .41 .51 .61 .71
Labor-Dependent Agriculture (Prop. of Population)

No civil conflict — — Civil conflict

Conditioning on Civil Conflict (Model 3)

(c)

FIGURE 4

MARGINAL EFFECTS OF LABOR-DEPENDENT AGRICULTURE ON DEMOCRATIC TRANSITION AND BREAKDOWN [a]

[a] Figure plots the average marginal effects of *labor–dependent agriculture* on the probability of democratic transition and democratic breakdown using the Table 3 estimates. Low and high capital openness in (a) are taken at the 25th and 75th percentiles, respectively. Neighboring land reform in (b) is taken at 0.5.

does not measurably undermine democratic duration in the presence of active neighboring land reform. Labor-dependent landowners, fearing spillover effects from land reform, support greater policy predictability and institutional constraints under democracy. Labor-dependent landowners who do not face these threats more often work to undermine democracy.

To be sure, labor-dependent landowners should be most capable of successfully pushing for democracy when threatened by neighboring land reform in circumstances where they are members or allies of the coalition supporting the current authoritarian regime. This gives them greater political influence over regime change. Furthermore, landowners should be more willing to support democracy when state capacity is higher and could be effectively leveraged to expropriate landowners. Extensions to the empirical analyses in the supplementary material confirm these hypotheses.[105]

Model 3 interacts *labor-dependent agriculture* with *civil conflict*. This mechanism also has empirical support. Absent civil war, the uninteracted term for *labor-dependent agriculture* indicates that labor-dependent agriculture is not supportive of democratization and has a strong negative impact on democratic duration. By contrast, the interaction term and the marginal effects in Figure 4(c) indicate that *labor-dependent agriculture* supports transition and does not undermine democratic duration in the presence of civil war.

Evidence for Democratic Institutional Bias Induced by Labor-Dependent Agriculture

The Table 3 results indicate that factors that spur landowners' fears and can prompt them to act to avoid land reform or stem civil strife have greater explanatory power regarding the positive role of labor-dependent landowners in democracy than factors such as financial integration that merely alleviate landowner fears. This section further tests this hypothesis by elaborating and examining contrasting observable implications that these factors imply for the structure of democracy.

If the neighboring land reform or civil conflict mechanisms indeed explain why labor-dependent landowners sometimes support democracy, then landowners should have strong preferences over the form that democracy takes. Facing existential threats, labor-dependent landowners should support a democracy with institutions designed to protect their interests. Labor-dependent landed elites who are strong and organized

[105] Albertus 2017.

are most capable of successfully imposing on democracy the institutions that favor them. Such circumstances typically, though not exclusively, occur when a sizable portion of the economically active labor force is engaged in agriculture. Examples of powerful landowner organizations and their impacts on politics are plentiful. In Argentina, large landowners long organized through the *Sociedad Rural Argentina,* wielded important political influence over regime change and institutional design. In Brazil, landowners organized the most powerful congressional bloc, the *bancada ruralista*, which during the country's democratic transition effectively lobbied to strengthen private property rights and undermine the reformist capacity of local politicians.[106] These landowner organizations have competed effectively against labor and other elite groups in the context of democratic transitions and beyond.

If instead the financial integration mechanism or another related mechanism explains why labor-dependent landowners sometimes support democracy, then landowners should be less concerned about the form democracy takes. Landowners in financially integrated democracies can simply avoid democracy's consequences, since the mobility of their assets makes the threat of exit credible and thereby tames popular demand for expropriation. According to this explanation, labor-dependent agriculture should consequently not be tied to landowner-biased democratic institutions.

To test whether landowners involved in labor-dependent agriculture are linked to favorable democratic designs, I examine several mechanisms that labor-dependent landowners can exploit to protect their interests under democracy. I test these mechanisms statistically and cannot definitively conclude that landowners intentionally sought these outcomes or that they were the decisive actors who tilted the balance. Nonetheless, selected case evidence is at least suggestive of the agency and intentionality of landowners in helping to design these outcomes, bolstering the causal logic behind the statistical findings.

First, the adoption of holdover constitutions created under previous periods of dictatorship can protect labor-dependent landowners by hamstringing the median voter and tilting institutions in their favor. Autocratic constitutions are often foisted upon new democracies when elites play an important role in democratization, and such constitutions are systematically tied to electoral rules and public policies that favor elites over the median voter.[107]

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[106] For details on these and other landowner organizations, see Albertus 2015, 27–32. On landowner organization in Brazil, see also Albertus, Brambor, and Ceneviva 2016.

[107] Albertus and Menaldo 2014.

For instance, conservative and liberal landowners, including major labor-dependent landowners led by the powerful and prominent Ospinas family, played a key role in Colombia's 1958 transition to democracy under the aegis of a long-standing, late-nineteenth-century constitution that was riddled with illiberal elements.[108] Lower chamber malapportionment that favored rural areas gave landholding interests disproportionate influence over national politics, with the result that the radical left was eliminated from mainstream politics and landholders maintained an effective veto over threatening policies such as redistributive land reform.

Similarly, in South Africa agricultural and mining interests were major players in drafting the 1993 Constitution, which guided the 1994 transition and defined the transitional power-sharing agreement from 1994 to 1999. These powerful groups used the 1993 constitution to carve out selective subnational autonomy, establish institutions to ensure a privileged position in economic policy-making, and enshrine a robust judicial branch as a check on potential executive actions that could undermine property rights.[109]

Second, democracies characterized by a greater share of labor-dependent agriculture should exhibit electoral institutions that make it easier for powerful rural interests to assert control over local politics by depriving localities of electoral voice and autonomy. The geographically dispersed nature of landowners gives them a strong interest in local political control, much more so than business elites, for example, which tend to concentrate in major cities. Again, consider Colombia's 1958 transition: landowners helped ensure administrative centralization that deprived municipalities of electoral voice and any significant fiscal or regulatory powers.

Third, democracies in which labor-dependent agriculture is powerful should have strong property rights institutions protecting the legal rights of individuals to acquire, possess, mortgage, and alienate private property, including land. These rights are safeguards against encroachments on private property by the state and other powerful social actors. Landowners played an important role in institutionally underpinning property rights protection in the context of democratic transitions in cases such as Chile in 1990, Spain in 1977, and Venezuela in 1959.

I construct a country-year data set of democracies using the same coding rules for regime type outlined previously to test these mechanisms.

[108] Kline 2012.
[109] E.g., Inman and Rubinfeld 2012.

To operationalize whether labor-dependent agriculture is associated with constitutions inherited from autocracy, I construct *democratic constitution*, which is coded 1 if a democracy creates a new constitution upon transition, operates according to a prior democratic constitution that was in place before the previous period of dictatorship, or passes a new constitution sometime after democratization. *Democratic constitution* is coded 0 if a democracy operates with a constitution created under dictatorship. I construct *democratic constitution* using data from the Comparative Constitutions Project.[110]

To operationalize local autonomy I use *muni*, which indicates whether municipal governments are locally elected. It is coded 0 if neither the local executive nor the local legislature is directly elected by the local population; 1 if either one is directly elected and the other is indirectly elected or appointed; and 2 if they are both directly and locally elected. I construct *muni* using data from Beck and colleagues with data updated to 2009.[111]

To operationalize property rights institutions, I use *property rights*, which captures "the right to acquire, possess, inherit, and sell private property, including land." I construct *property rights* using data from the V-Dem data set. The unscaled version varies from 0, in which virtually no one has property rights of any kind, to 5, in which virtually all citizens enjoy essentially complete property rights. V-Dem then converts the ordinal scale to an interval scale ranging from 0 to 1 using a Bayesian item response theory measurement model.

Table 4 reports a series of static panel models that use *labor-dependent agriculture* as the key independent variable. Several control variables from Table 3 that may also impact democratic institutional design are included: *log(per capita income)*, *growth rate*, *oil income per capita*, *percent urban*, and ELF.[112] I lag all of these controls by one period. I also follow William Easterly and control for persistent structural inequality using *wheat-sugar ratio*, defined as the log of percent of land suitable for wheat to percent of land suitable for sugar cane, because this is an alternative explanation for elite bias rooted in agriculture.[113] Easterly argues that a history of wheat cultivation on family farms is tied to persistent egalitarian institutions, whereas sugar cane cultivation on large plantations has generated inegalitarian institutions.

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[110] Elkins, Ginsburg, and Melton 2010.
[111] Beck et al. 2001.
[112] For a discussion of how several of these variables impact democratic institutional design, see, e.g., Przeworski et al. 2000.
[113] Easterly 2007. For coding details, see Albertus 2017.

The regressions with a binary or ordinal dependent variable include region fixed effects to control for region-specific and time-invariant heterogeneity that may simultaneously influence both labor-dependent agriculture and political institutions. Since observations may be temporally dependent in these specifications, I follow convention and include a cubic polynomial approximation to the hazard.[114] The regressions on property rights employ a continuous dependent variable with greater time-series variation. I therefore estimate these models using OLS with country fixed effects and Driscoll-Kraay standard errors.

The dependent variable in model 1 is *democratic constitution*. I therefore estimate a probit model. Labor-dependent agriculture is negatively associated with operating with a democratic constitution under democracy. A two standard deviation increase in *labor-dependent agriculture* raises the probability of observing an autocratic constitution in a democracy by 22 percent.[115] The dependent variable in model 2 is *muni*. Model 2 is estimated via ordered logit given the ordinal dependent variable. A two standard deviation increase in *labor-dependent agriculture* raises the probability that either the local executive or local legislature is indirectly elected by 25 percent and lowers the probability that both are directly and locally elected by 51 percent. The dependent variable is *property rights* in model 3. ELF and the *wheat-sugar ratio* drop from this model given the country fixed effects. A two standard deviation increase in *labor-dependent agriculture* increases the property rights variable by half of a within-country standard deviation.

Of course, the institutions highlighted here can also be used in certain countries and times to favor other elite groups. These democratic institutions may favor an alternative section of the former authoritarian elite, such as the military or the clergy, over landowners, especially when landowners are weak. To address this concern, models 4–6 of Table 4 reestimate models 1–3 on a subset of democracy-years in which more than 30 percent of the economically active labor force is involved in agriculture.[116] These are circumstances in which agriculture is a major economic activity and landowners are more likely and able to organize for a strong voice in national politics. Landowners are also more likely to be powerful vis-à-vis other elite groups when they control a substantial portion of the labor force.[117] All of the results hold. Furthermore,

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[114] See Carter and Signorino 2010.
[115] To compute marginal effects from Table 4, the region dummy was set to Latin America and other covariates to their means.

the results for *muni* and *property rights* strengthen in substantive terms, indicating that these institutions are more prevalent in rural settings where landowners are stronger.

<div align="center">CONCLUSION</div>

Social scientists have long laid a laundry list of democratic woes at the feet of large landowners. They are charged with underpinning dictatorship and using it to enable rural labor repression; spoiling democratic transitions, sponsoring coups to topple democracy; and unduly influencing their workers through hierarchical social relationships, clientelism, and even outright repression. Indeed, this is one of the areas of broadest consensus in the literature on democracy.

This article begins from a different, simpler premise. Large landowners seek first and foremost to protect their property rights and maintain their land—the fundamental source of their profits and prestige. In many countries, dictatorship historically protected these rights and consequently garnered landowner support. Indeed, using original data on labor-dependent agriculture in a global sample, I find that it was indeed historically bad for democracy. Interestingly, however, the negative influence of labor-dependent agriculture on democracy started to turn positive around the time of democracy's third wave. The dual threats of land reform and costly rural insurgencies that arose in this era, often with more potent consequences under dictators,[118] threatened to drain landowners' assets or even entirely destroy them. This plausibly prompted landed elites to search for safer haven. In many cases, and consistent with Wood's analysis of El Salvador and South Africa,[119] they found it under democratic regimes characterized by strong horizontal checks and balances that bolstered the rule of law.

But it would be a stretch to call even these labor-dependent landowners unqualified democratic champions. Democracy can merely serve them as a defense mechanism to guard stability, especially when it embeds holdover constitutions from previous episodes of dictatorship that hamstring the median voter, electoral institutions that deprive localities of electoral tools that could be used to challenge local landowner predominance, and robust legal protections for property rights.

These findings are cause for rethinking several influential strands within the existing literature. The positive shift in the role of labor-dependent landowners in democracy, spurred by spreading land reform and domestic civil conflict, is a major untold story of democracy's third wave. It also helps explain why many third-wave democracies have low

institutional quality, as has been widely noted.[120] Labor-dependent agriculture is tied to a host of democratic ills that plague developing democracies and hobble their efforts to consolidate. This has left a "democratic deficit" in these countries that is difficult to circumvent.

Supplementary Material

Supplementary material for this article can be found at https://doi.org/10.1017 /S0043887116000277.

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