



Et Tu, Brute? Wealth Inequality and the Political Economy of Authoritarian Replacement

Joan C. Timoneda¹

Accepted: 24 October 2022

© The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2023

Abstract

What motivates elite factions to seek to replace an authoritarian incumbent? In this article, I provide a political economy theory of authoritarian replacement. I argue that high wealth inequality fosters authoritarian replacement, but that the effect is conditional on overall wealth being low. At low wealth, elite factions have an incentive to control the state to appropriate income. As wealth grows, elites shift their focus toward securing their wealth and thus prioritize finding credible commitments and stability within authoritarianism. I test these hypotheses using data from 1960 to 2008 and employ multistate survival analysis. A case study of Trujillo's rise in the Dominican Republic illustrates the mechanisms of the theory. The evidence supports the main theoretical expectation that replacement is more likely when the level of wealth is low but wealth inequality is high.

Keywords Authoritarianism · Wealth · Inequality · Dominican Republic

Introduction

Consider the Dominican Republic at the turn of the twentieth century: In the 15-year period between 1899 and 1915, eleven different presidents were sworn into office. Three of them fell victim to a coup d'état, five of them resigned their office after brief tenures, and one was assassinated — Ramón Cáceres was ambushed and killed in his car in 1911. Looking more closely, we see that two elite factions kept replacing each other in power more or less violently. *Horacistas* and *Jimenistas* vied for political power to take control of the state, which meant unrestrained access to rents. In a country with low levels of wealth and high inequality, this income made up for low

✉ Joan C. Timoneda
timoneda@purdue.edu

¹ Department of Political Science, Purdue University, 230 Beering Hall, 100 University St, West Lafayette, IN 47907, USA

productivity and shrunk the gap between those who owned the few precious resources in the country and those who did not.

What motivates elite factions to seek to replace an authoritarian incumbent? In this article, I provide a theory of wealth inequality to explain authoritarian replacement. When wealth inequality is high and wealth *levels* are low, competing elite factions seek to overthrow one another from government in order to capture state rents. As their wealth increases, they become progressively more concerned with securing their wealth, and authoritarian replacement decreases. I define authoritarian replacement as a transition from an authoritarian regime to another, which can occur as a result of a coup, a change in leadership accompanied by a substantial change in the rules of the regime, a popular uprising, a revolutionary movement followed by a civil war and subsequent new leadership, or electoral loss within autocracy (Geddes et al. 2014). To this day, the politics of authoritarian replacement remain significantly undertheorized (Wright and Bak 2016).

Attention has generally focused on transitions from authoritarian rule to democracy and democratic breakdown (Acemoglu and Robinson 2001; 2006; Ansell and Samuels 2014; Boix 2003; O'Donnell and Schmitter 1986; Przeworski et al. 2000) or on institutional and economic factors that improve dictatorial stability (Brownlee 2007; Gandhi 2008; Slater 2010; Wright and Escriba-Folch 2012). Recently, a new wave of research has focused on coups within authoritarian regimes, yielding important insights into the role of dictator-elite relations (Svolik 2009, 2012; (Timoneda 2020)), the coordination capacity of the plotters (Little 2017), and how coups unfold and the role of information diffusion in the days of the coup (Singh 2014). A lot less is still known about the motivations of different elite factions to replace each other, and why they appear to be more common and pernicious in certain contexts and not others.

For their part, economic theory and empirics predicting regime transition have until now mostly focused on authoritarian to democratic transitions and the mechanism of income inequality (Acemoglu and Robinson 2006; Ansell and Samuels 2014; Boix 2003). The literature has paid much less attention to transitions from one authoritarian regime to another and to alternative economic mechanisms that may explain transitions within authoritarianism (Houle 2016; Przeworski 2005). In political transitions, conflicts for power usually involve a small and relatively affluent elite, whose factions compete over power and wealth. I provide a novel political economy theory of authoritarian replacement based on the role of *wealth*, which is the main driver, I argue, of elite competition.

My theory relies on the interaction between two closely related concepts, which require careful explanation. One is *wealth inequality*; the other is the overall *level of wealth*. Neither is sufficient on its own to systematically increase the likelihood of authoritarian replacement. Yet together they do. Wealth inequality here refers to the extent to which wealth is concentrated in the hands of a few individuals. The underlying logic for why inequality matters in my theory, and this is clear in the case of the Dominican Republic, is that when some sectors within the elite have much less wealth than others, they are motivated to replace whomever is in power to capture state rents. The economic mechanism underlying this argument is the assumption that wealth increases exponentially over time, making tomorrow's payoff much worse for

elites who are left behind today. That is, if inequality remains high, the wealth gap between elites will increase over time.¹

Overall *levels* of wealth, on the other hand, refer to how rich elite groups are at any given point in time — or the total amount of assets they own. Since there are diminishing marginal returns to wealth, groups that own little wealth take greater risks to obtain new wealth than those that are wealthier. This is true in absolute terms: Having sufficient wealth to buy a large house and one or two expensive cars provides greater utility than buying twenty large houses and fifty expensive cars. For groups that find themselves at the steepest part of a diminishing returns curve, every gain in wealth provides a steep increase in utility. These are the groups that have an incentive to capture the state and obtain rents.

The logic of the interaction resides in the idea that these two factors cannot on their own motivate elite groups sufficiently to generate replacement in a systematic way. On the one hand, the relativistic grievances derived from high inequality put a lot less pressure on groups that own less resources if they are still very well-off. Conversely, low inequality also alleviates the pressure to generate new profits in the short run when wealth is low — that is, the marginal returns curve is less steep at low inequality. It is a high inequality and low wealth, therefore, that authoritarian replacement becomes systematically more likely.

I use the case of the Dominican Republic to illustrate my theory, but other paradigmatic examples exist. Indeed, I believe my argument helps explain some of the similar processes of political instability we observe in autocracies with large amounts of natural resource rents and enclave economies. At low overall wealth, the abundance of rents creates an incentive to generate income through state capture. This has been a common occurrence in countries that suddenly discover oil or in enclave economies such as Peru during the “guano era” from the 1840s until the 1870s: different elite factions replaced each other in power often to capture guano income from contracts with British extraction companies (Bonilla 1984). Governing was not a medium- or long-term stable exercise but an expedient and fleeting affair intended to benefit the members of each leader’s coalition. In general, natural resource discoveries have tended to create much less disruption in countries with low levels of inequality — even in those where wealth was low.

Conversely, at high wealth, autocratic regimes are much more stable and capable of managing natural resource income. The Gulf region is a paradigmatic example of this: when oil and gas were discovered, monarchies in Saudi Arabia, Kuwait, and other states were accustomed to spreading their wealth among the different branches of the royal family and its associates. Even though the monarch and his immediate entourage retained a lot more wealth than anyone else, inequality among different groups was relatively low. When the first drop of oil saw the light of day, monarchs were quick to spread out oil wealth among the elite without major imbalances while retaining a large chunk of the profits only for the monarch and his immediate family.

¹I am indeed aware that the most accurate conceptual concept would be “intra-elite” inequality, as the struggle for power is among elite groups, not the poor versus the rich. But I make the assumption that “intra-elite” and “class” inequality, while being theoretically different, closely mirror each other in practice. I develop on these arguments further in the theory section.

Initially, inequality and wealth were low, and even if inequality grew thereafter, so did overall levels of wealth, which placated some of the potential negative effects of greater inequality. Oil-rich monarchies in region have remained stable throughout their affair with natural resource rents.

In this article, I model and measure authoritarian replacement.² I define and operationalize the concept here as replacements of authoritarian incumbents by an entirely different set of elites. I contrast this type of transition with leadership replacement from within the same coalition, which often does not shift resources or generate more elite redistribution (see Geddes et al. 2014; Wright and Bak 2016). If current elites stay in power in their majority, economic relations will remain the same — as was the case, for instance, under the *Partido Revolucionario Institucional* in Mexico from 1920 until 2000. Here, the interest is in authoritarian replacement between opposed elite factions, and that is why I use the Geddes, Wright and Frantz transitions dataset (Geddes et al. 2014).

This argument makes important contributions to current debates. First, it helps explain key dynamics of authoritarian replacement, a topic that has been significantly undertheorized. Transitions to democracy have long been at the forefront of comparative politics research, but the recent trend toward democratic erosion and breakdown is forcing scholars to study authoritarian politics more intimately. Indeed, the share of democracies has plateaued in the last decade — 108 democracies existed in 2008, and 108 democracies existed in 2016 (Boix et al. 2013).³ The number of nondemocracies has not risen either — 75 in 2008 and 75 today, but a notorious breakdown in Turkey in 2016 and a worrisome trend toward reversal in countries such as Poland or Hungary foreshadow the potential for a first wave of democratic breakdowns. These events, coupled with recent transitions within authoritarianism, such as Mugabe's ouster in Zimbabwe, underscore the importance of understanding authoritarian politics at a deeper level and from new perspectives.

Second, the political development literature has focused primarily on the effects of income inequality on regime transitions. I argue in favor of shifting the focus away from income inequality and toward the concept of wealth, which is better suited to explain structural political outcomes through the lens of intra-elite conflict. Third, this article places a renewed focus on intra-elite bargaining and conflict (Geddes 1999; O'Donnell and Schmitter 1986; Przeworski 1991), moving away from the “elite-vs-poor” logic that has dominated the political development debate for well over a decade (Acemoglu and Robinson 2006; Boix 2003). Lastly, it expands on extant work showing that new dictators expropriate competing elites to signal their exclusive reliance on the group that supports them (Albertus and Menaldo 2012).

I use multistate survival analysis to model transitions within authoritarianism and interact wealth inequality and wealth levels. The dataset includes 144 countries from

²In my tests, democracy and democratic breakdown are included to account for the full scope of transitions that countries can experience. This conforms with the multistate survival model used in the empirical section of this paper. Including all transitions reduces coefficient bias. However, no theoretical contribution is offered in this paper for democratization or democratic breakdown. This will be explained in more detail in the methods section.

³An updated version of the dataset to 2015 is available at Harvard Dataverse.

1961 to 2008. I also provide a case study of the Dominican Republic between 1900 and the fall of Trujillo in 1961 to illustrate the mechanisms of my theory.

Authoritarian Replacement and the Role of Elites

Authoritarian replacement refers to leadership transitions within dictatorship. It can take two forms. First, leaders can be replaced from within the senior ranks of the state apparatus in a coordinated, periodic fashion, as has occurred in China for decades. Similar leadership transitions also fit this mold, such as those in the Soviet Union, the most recent one in Cuba, as well as dynastic and semi-dynastic (North Korea) power transfers. Perhaps the paradigm of stable senior transitions resides with Mexico's Partido Revolucionario Institucional (PRI) during the twentieth century, where leaders alternated in power periodically and without major squabbles (Magaloni 2006). The South American military juntas of the 1970s and 1980s are also examples of this. In both of these cases, leadership change amounts to a simple reshuffling of the executive and the group that holds power is the same.

The second type of authoritarian transitions is more seismic, as they alter both the group that holds power as well as the distribution of resources among groups. The examples of Iran and Nicaragua in 1979 — the advent of the current clerical regime and Somoza respectively — are instances of leadership change that alter the composition of the elite (Wright and Bak 2016). While these cases are visible and notorious, other instances are more subtle. Examples are Ecuador in 1972, where Rodríguez Lara ousted Velasco Ibarra in a bloodless coup (Acosta 1998); in the Central African Republic in 1981, where André Kolingba removed David Dacko (Ghura and Mercereau 2004); and in the Dominican Republic in 1930, with Rafael Trujillo toppling Horacio Vasquez (Turits 2003). While these transitions were, in effect, coups both from junior and senior officers, these leaders reshuffled the composition of the elite and redistributed resources heavily once in power.

These examples differ from the cases of the PRI in Mexico or the military juntas in Argentina and Brazil in the 1970s and 1980s in one fundamental aspect. The new leader represented interests that differed from the president he ousted, and elite composition as well as economic resources were reshuffled substantively. The case of Trujillo is exemplary: while he was the power player in the coup against Vasquez by virtue of controlling the military apparatus, he struck a secret pact with an opposition faction led by Estrella Ureña and the urban, nationalist elite that sought to remove Vasquez (Crassweller 1966). He shifted resources from an old aristocratic elite toward a new oligarchy deeply dependent on him (Hall 2000). Thus, Trujillo's rise was a clear example of authoritarian replacement as conceptualized in this article, even if he was, admittedly, Vasquez's second in command and a large majority of the army remained under his control. In the case of Kolingba, he was also Dacko's Army Chief of Staff. Once in power, he built his regime partly along ethnic lines by appointing Yokamas, his coethnics, to key positions. Yokamas, a small minority in the Central African Republic, also represented over two-thirds of the army by the end of his rule (Ghura and Mercereau 2004).

Before delving deeper into the central argument of the paper, which revolves around the role of wealth inequality and accumulation in the process of authoritarian replacement, we must clarify who are the agents that promote or prevent transitions within dictatorship. I take the view that any candidate for dictator must assemble a coalition that can support him both during the bid and in power, in line with previous literature (Albertus and Menaldo 2012; Myerson 2008; Gandhi 2008). In turn, a coalition is only possible if sufficient members of the elite have incentives to replace the current leader.

Economic elites are defined here as individuals within a given society who, by virtue of their access to wealth, have decisive influence on a state's executive and legislative powers. They are usually in the top one-thousandth of the wealth distribution and tend to organize themselves in groups that represent various economic interests, political beliefs, or nepotism networks. These groups also can be nested — for instance, oil producers may have a small association within a staunchly conservative block that advocates for a strong currency. Participation in these groups is often fluid, and the total set of elites expands as the economy grows. If they do not themselves nominate a member for political office, these economic elites sponsor a set of political leaders and entrepreneurs to represent them.

The reason why distinguishing economic elites from dictators themselves is relevant in this article is that these elites are most often what makes or breaks a dictatorial candidacy. By shifting the paradigm to studying what motivates elites, rather than what motivates dictators or dictatorial candidates, we can gain new and interesting insights in the dynamics of authoritarian replacement. Indeed, the first issue that emerges when the focus is placed squarely on elites is *wealth*. I ground my argument on a simple assumption, namely, that elites seek to maximize wealth in the long run. This is not to say that wealth is the only factor driving elite coalitions, as they may form around other dimensions such as ideology, ethnicity, or ties to similar professional organizations such as the armed forces. Rather, the assumption is that the motivation of elite groups to replace authoritarian incumbents is to protect and expand their wealth, which is the source of their influence. These other dimensions aid the process of coalition-building by reducing coordination problems.

In dictatorship, elites face two main threats: a competing elite group appropriating their wealth and a revolution from below. The literature has recently echoed the importance of these two existential threats. Elites may democratize if their position in authoritarianism becomes weak but would otherwise be strong in democracy (Slater and Wong 2013) or if they have the opportunity to game democracy (Albertus and Menaldo 2014; Albertus 2015). They can also stay within authoritarianism if they act as a unitary actor and pact (Slater 2010, see also ; Magaloni 2006). The existential threat of revolution from below, on the other hand, has been noted in a majority of the social conflict literature (Acemoglu and Robinson 2000, 2001, 2006; Boix 2003). I proceed to explain why wealth, in its key dimensions — inequality and accumulation — is at the heart of authoritarian replacement.

The Two Dimensions of Wealth: Inequality and Accumulation

Wealth can be conceptualized in two distinct ways. One is structural and refers to wealth ownership among social groups or classes, i.e., *wealth inequality*. By studying patterns of capital ownership, we can better understand the relationships that develop over time between the haves and the have-nots. The other corresponds to absolute *levels of wealth*, that is, how much wealth exists in an economy that elites can access (see Piketty 2014). The two concepts are related but not deterministically. Cuba, for instance, had low levels wealth inequality and absolute wealth before 1990, while many Central American nations had exceedingly high levels of inequality with low levels of wealth in the second half of the past century. Developed European nations, for their part, tend to have lower levels of inequality and high levels of wealth. Inequality, therefore, need not be associated with particular level of wealth in an economy or within the elite. This idea is foundational to my theory, as I contend that responses to inequality by elites will depend on the level of wealth they own.

Wealth Accumulation and Inequality

The following simple accounting identity reflects the wealth function of any given elite at any point in time:

$$W_{t+1} = (1 + r_t)W_t + \Lambda_t - T_t - c_t.$$

Wealth in period $t + 1$ is a function of all accumulated wealth in the past, W_t , multiplied by $1 +$ the rate of return r_t . To this, net income during period Λ_t is added, while taxes T_t and consumption c_t are subtracted. This calculation produces the net level of wealth of a member of the elite at any given point in time.⁴

An elite's total wealth can increase in two ways: by increasing income (Λ_t), or by obtaining a better rate of return on capital that grows the current wealth stock ($r_t * W_t$). Individuals have control over their level of consumption. Taxation, on the other hand, can make a dent in an elite's overall level of wealth, mostly when we take a broader view of taxation to include expropriation and all net outflows of capital from an individual to the state. I will develop on the effects of taxation later. For now, I assume that everyone starts with a positive level of assets W_t , which can be low, medium, or high.

From here, we see that the wealth function produces two incentives that underpin elites' drive to take over control of the state. First are diminishing marginal returns to wealth. The utility of wealth naturally grows at an increasing logarithmic rate, with the largest marginal returns to increases in wealth occurring when wealth is low. From this, we can establish that elites have a greater incentive to generate new wealth when they do not own large amounts of it, as opposed to when they are wealthier.

Generating new wealth, however, presents various complications when the available capital stock is low. One way to do it is by investing, which increases the rate

⁴I do not introduce a formal model explicitly; the formula below will be useful only as an analytical tool to describe how wealth grows in the long run.

of return obtained on current wealth. However, if W_t is low, increasing wealth by improving the rate of return is slow, considering that it is reasonable to assume a long-run average rate of return on capital of around 5% (Piketty 2014). Thus, elites who find themselves with lower levels of wealth can only obtain limited returns in the short and medium run, which deepens their weak position relative to wealthier elites. Another alternative is to partake in illicit activities and trade, but this alternative tends to produce few winners and many losers, leads to violence, risks judicial action, and exacerbates elite inequalities by producing a few powerful and wealthy kingpins. A third option, forming a winning coalition and capturing the state, becomes more appealing.

Low wealth alone, however, is not sufficient to convince elite groups to wrestle control of the state away from another group. Wealth inequality must be high, as well. To understand my position, let us imagine a country with low wealth but low levels of wealth inequality — say, for instance, Cuba from 1994 onward. While low overall wealth still means that small increases in capital produce large jumps in the marginal utility of wealth, low inequality nullifies the incentives to capture the state. To see this, I introduce my second mechanism, this one related to wealth inequality: the exponential growth of wealth. Capital grows exponentially in the long run, provided the rate of return is positive on average. Consider the formula above with a fixed rate of return r of 5% in all time periods t . If wealth is, for instance, 100 in the first period, in period 5 wealth will be 127.615 instead of 125. This is akin to compound interest.

What the exponential growth of capital does, in practice, is alter the future outlook of elites *vis-à-vis other elites*. The higher the level of wealth inequality, the larger the future gap is expected to be. Groups that own more capital in the present time will own a larger amount in the future, and the inequalities are only likely to increase. Further falling behind other elites in this race for wealth reduces the ability and resources of the group to take over the state successfully, forcing them to move to control it sooner.

The most efficient route to capture rents is through controlling state assets. Indeed, perverse manifestations of state capture at low wealth and high inequality are many. In predatory states, rulers use their position of power to prey on the citizens and extract resources through taxation or expropriation (Evans 1995). Control of state assets is even more attractive if natural resources are abundant. For instance, in rentier states, natural resource abundance often leads to the appropriation and misallocation of profits and anemic industrial, agricultural and service sectors — commonly known as Dutch Disease (Karl 1997). Or, as in the case of Peru in the nineteenth century, enclave economies can become unstable and see high levels of replacement as a result of elites fighting each other for political power as they try to profit from contracts with foreign companies (Cotler 1979). My political economy theory of authoritarian replacement complements these existing debates and helps explain some, if certainly not all, of the common dynamics identified in them.

I contend that in situations such as the Dominican Republic in the early twentieth century, enclave economies, resource-rich countries with high inequality and low wealth, and the like, the interaction between high inequality and low levels of wealth produces authoritarian replacement. At low levels of wealth, elites have an incentive to generate new capital because of diminishing returns to wealth. However, if

inequality is low, groups need not enter a race for riches with other elites who have similar amounts of resources. It is high levels of inequality that forces groups to confront each other for greater wealth, as less well-off elites seek to remedy the wealth gap by taking over state rents.

Why Take the Risk?

I have argued that an effective mechanism for elites to conquer new income is by capturing the state. This is particularly true for elites with low wealth in contexts of high inequality. The state can provide capital from other elites obtained through expropriation, natural resources, or other forms of revenue that have not yet been tapped (Karl 1997, see Ross 2001, Smith 2008). Moreover, once in power, ruling elites can restructure the economy so that their coalition profits directly from domestic sectors such as utilities or telecommunications. In all, that ruling is profitable is difficult to deny.

Still, one question remains unanswered: why would elites fight over wealth and state control when the stakes are so high? Indeed, in many cases, the costs of attempting a takeover are abnormally high, as failed attempts often have serious consequences such as death or exile. This question is especially relevant considering that economic elites are often considered risk-avoidant. The answer lies in the fact that at low wealth and high wealth inequality, an agreement for moderate wealth sharing over fighting is unfeasible. There are three arguments for this. First, in contexts of low wealth and high wealth inequality, an agreement over wealth sharing is not credible. The wealthiest elites find redistribution too costly in contexts of high inequality, and the least wealthy elites will grow less wealthy over time compared to others even if they agree to wealth sharing—they will therefore have an incentive to renege on the pact and seek political power at some point in the future. In other words, less wealthy elites see their position (and wealth) threatened in the long run and become more risk-taking when inequality is high, as wealth grows exponentially. Second, taking over the state ensures a shift in resources in favor of the winning group and away from all other groups. This idea is grounded on Albertus and Menaldo's finding that dictators consolidate power by signaling loyalty to the coalition that launched them into power. They do so by expropriating the preexisting elite (Albertus and Menaldo 2012). This would indicate that newly installed autocrats and their coalitions are less interested in wealth sharing than on entrenching themselves and maximizing their economic and political clout. Observing this, other elite factions believe that their wealth will be expropriated should *another* group triumph in taking over the state, as the new dictator they install will expropriate other elites to signal exclusive reliance on his own coalition.

Additionally, a majority of failed attempts do not have catastrophic consequences for the entirety of the coalition that launches them. Thus, while it is true that my argument only holds when the costs of a failed attempt are lower than the gains from a takeover, the reality is that this condition is more attainable in reality than it may appear. On the one hand, informational asymmetries generate uncertainty over the outcome of the cost itself. Some members of the challenging coalition may not be ultimately recognized as such — and, indeed, the larger the coalition, the lower the

likelihood that a triumphant incumbent identifies all the plotters and uses extreme forms of punishment on them. On the other hand, the inequality will depend in large part on the probability that elites assign to winning control of the state. The higher this probability is, the more likely that elites gain greater utility from launching a takeover attempt.

Indeed, not all groups take power in the same way. In certain instances of replacement, one elite has been removed and expropriated completely, and then forced to flee the country or stay at risk for their own lives — as in the aforementioned examples of Iran or Nicaragua (Wright and Bak 2016). Others are less violent, as in guano era Peru, where elite factions simply focused on controlling guano contracts and reining in the profits when they took office (Bonilla 1984). As in the Dominican Republic at the turn of the twentieth century, elites in Peru replaced each other but repression once a new ruler was installed was relatively low.⁵ Most prominent figures survived the period of instability and replacement, and gains in periods of state control outweighed losses when others controlled the flow of rents.

A mechanism that further accentuates authoritarian replacement is the expectation that new factions that take control of the state will invest some of the windfall on the security apparatus to protect themselves. Therefore, we might expect the state's coercive capacity to increase after replacement, and it might be argued that this increase may inhibit rather than promote authoritarian replacement. However, three factors make increases in coercive capacity unlikely to prevent authoritarian replacement. First, when wealth is generally low, elites do not have the resources to invest in security to an extent that their coercive capacity overpowers every other faction. This dynamic was key in the Dominican Republic between 1898 and 1916 when new factions could not spend money from captured state resources fast enough to modernize the army and overpower other elites who could depose them. Second, using the logic of coup-proofing, elites that take over power must be careful not to invest in security in a way that may empower other factions down the line. Horacio Vasquez, for instance, did exactly this after 1924, and a slightly stronger military empowered Rafael Trujillo, who coalesced with a different faction led by Estrella Ureña and deposed Vasquez in 1930 (see Crassweller 1966). Third, other elite groups know that elites in power will seek to entrench themselves by increasing their wealth and military might if given enough time in power. This produces *higher* incentives for replacement and lower incentives for compromise. These three factors together make it less likely that new factions in power can prevent others from replacing them.

When Replacement Ends

A final puzzle to address is why elites stop replacing each other in power when wealth increases. Central to my argument is the idea that as elites grow wealthier, their concern shifts from generating new income flows to securing the wealth they have accumulated. Two main factors are behind this shift. First, given diminishing returns,

⁵Note that, in the case of the Dominican Republic, lower levels of repression after 1905 were aided by the USA taking over the country's customs that year and by the signing of the American-Dominican convention in 1907. A more peaceful environment was beneficial to both countries.

elites obtain lower utility from new wealth when they own higher levels of wealth. Incentives to accumulate new wealth, therefore, are lower at high levels, which in turn reduces the need to capture the state and use it to obtain rents. Second, the composition of income and wealth changes as wealth increases. A richer elite's income stems primarily from their wealth in the form of interest on bonds or deposits, stock market gains, profit from enterprises in which they invest, and others. Since elites can take full advantage of the rapid multiplication of a well-managed and diversified portfolio of wealth investments, they no longer need to generate non-capital income through capturing the state.⁶

While the state may no longer be regarded as a tool to generate new income, an authoritarian ruler can still decide to expropriate wealth at a moment's notice. If uncertainty is high, elites may be better off trying to replace the leader again to reach political power and thus prevent the expropriation of their wealth. I argue, however, that elites prefer a better and more stable alternative to conflict when their wealth is high. Since attempting to take over the state is risky, and the utility they obtain from ruling is lower at high levels of wealth, elites are less often better off by launching a takeover attempt. Knowing this, incumbents moderate their behavior and expropriate only to the extent that they know competing elites will accept the status quo. At high wealth, even if inequality remains relatively high, elites reach a stable equilibrium in which they can take advantage of the exponential growth of wealth with greater certainty regarding how much they will be expropriated.

Thus, wealthy elites require a solution to the incumbent's commitment problem. Following my logic, agreements exist in dictatorship that help maintain the equilibrium. They take the form of constitutional rules that guarantee and respect property rights, and institutions such as political parties and legislatures help enforce them (Gehlbach and Keefer 2011; Wright 2008). If the ruler reneges on his promises, the affected members will sense uncertainty and seek to depose him. Note, therefore, that authoritarian leaders are bound by certain commitments, and even more so when they preside over an economy with wealthy elite groups that can credibly challenge their rule.

Notice that a perfect credible commitment to other elites is not required. Rather, rulers can maintain credibility in their commitments by acting in such a way that any rival faction becomes indifferent between mounting a challenge or acquiescing. That is, his credibility is a function of how much liberty he has to renege on commitments. At higher levels of wealth, elite groups pose a more credible threat to a dictator, and his power is thus curbed. At the same time, they have a weaker incentive to challenge the incumbent's rule so long as private wealth continues to grow at a rapid pace. The higher the level of wealth, the more likely it is that elites force a credible commitment from the dictator to protect their property, thus reducing authoritarian replacement (Przeworski and Limongi 1993).

My argument is, in some ways, similar to Przeworski (2005). His argument is that democracies are more stable when the stakes are high for a majority of players, who are too invested to revert to authoritarianism. As he puts it, "the stakes are too

⁶A similar and related argument is that as the economy grows wealthier, elites find that alternatives to generate wealth emerge that do not require state capture.

high to risk losing the income guaranteed under democracy” (Przeworski 2005, p. 265). In democracy, therefore, the costs of regime change are large, but are lower in authoritarianism. The argument can be extrapolated to countries where elites own relatively little wealth versus others where elites own a lot. When wealth levels are high, regime change is costly, as actors are too invested in the current regime. When wealth is low, on the other hand, regime change is cheaper. Not because elites are less risk averse, but because the promise of a windfall from taking control of government eclipses the utility of holding on to little wealth.

Empirics

My theory predicts that the effect of inequality on authoritarian replacement is conditional on low levels of wealth. The empirical strategy is to model nondemocratic transitions as events of authoritarian failure and calculate the probability that a regime falls in any given year. The alternative is to consider each authoritarian spell as a separate state, that is, assign each spell its own numerical value and compute the likelihood of being on one state or another. However, this is conceptually problematic, these regimes do not transition out of dictatorship. Thus, survival analysis fits the event-based logic of this paper, but its application poses a number of challenges. First, survival analysis can yield biased estimates if one models only one of the transitions within the full set of changes a subject may experience at some point (Metzger and Jones 2016; Putter et al. 2007). Here, any authoritarian regime is at some risk of experiencing democratization, and democracies are then at risk of backsliding. The challenge is to model the full set of potential transitions within a survival framework. Another challenge is truncation, since some authoritarian spells enter the sample some time after becoming at risk for a transition — left truncated — or our data ends before we observe the final outcome — right truncated (see Box-Steffensmeier and Jones 2004).

To address the first challenge, use multistate survival analysis to capture the full process of political transitions that countries can experience. Figure 1 shows the multistate process including all possible transitions conceptually relevant to our theory. A authoritarian state is at risk of transitioning to another authoritarian state or to democracy, while a democracy is only at risk of reverting to authoritarianism. While democratization or democratic breakdown may not be central to the theory, they indeed matter empirically. Competing risk models can only capture parts of the process (Metzger and Jones 2016); in this case, a multinomial logistic model would be limited to the competing risk of authoritarian failure and democratization within each spell.⁷

The literature has often used the dynamic probit to model political transitions (Przeworski et al. 2000; Boix 2003; Houle 2009). However, the dynamic probit can only model two transitions between *states*, not events, and it is usually limited to two states since the dependent variable is dichotomous. Moreover, multistate models do

⁷The results obtain if a simple multinomial logistic model is used. Tests are available from the author.

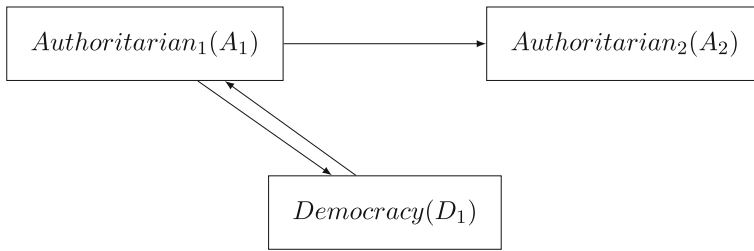


Fig. 1 All possible and recursive transitions

not assume, as pooled models do, that the data generating process (DGP) is equal for all possible transitions. If we made such assumption, the covariate's effects would be the same for all transitions. This is why pooled models of transition produce biased estimates.⁸ Lastly, by using a multistate survival model, we can better incorporate the effect of time in transitions, which has been missing from other studies of political transitions (Boix 2003; Ansell and Samuels 2010, among others). The methodological contribution of this article is to incorporate multistate survival models into the political economy literature on transitions.⁹

In the Appendix, I provide a series of robustness checks. To remove unobservable heterogeneity and, therefore, potential confounders, I run a series of fixed effects models using the linear probability model and logistic regression. I also attempt to capture the inevitable time trend resulting from the natural increase of wealth over time and the decrease of authoritarian replacement in the data. These results are reported in Table A2 in the Appendix.

Data

The unit of analysis in this article is the country-year. The dataset has 3452 unique observations and covers 137 countries between 1968 and 2008. This is, to my knowledge, the first test of long-run wealth accumulation on structural political events such as regime transitions. As required by the multistate model, the data is duplicated for these observations that are at risk of both democratization and authoritarian replacement. This process leads to a total sample size of 5146.

Failure, the dependent variable, is coded as 0 for those country-year observations in which no transition occurs; 1 for those in which the authoritarian regime is replaced by another; 2 for those that experience democratization; and 3 for those that saw democracy fall. Substantively, the regime failure variable is constructed using a

⁸The choice to use the multistate survival model is predicated on the fact that it can account for all possible transitions rather than focus on only one of the potential outcomes. As Metzger and Jones (2016) argue, not including all possible transitions in the analysis can lead to biased estimates. Using the multistate survival model reduces potential biases when analyzing relationships that are part of a broader set of potential outcomes.

⁹The multistate model is estimated using a discrete-time stratified Cox procedure. I provide a description of the particulars of the model and the dataset structure in the Appendix.

combination of the Geddes, Wright, and Frantz (GWF) dataset and the Democracy and Dictatorship (DD) dataset (Cheibub et al. 2010; Geddes et al. 2014). GWF code *authoritarian* regime failure as 1 for a country in a given year if (1) the autocratic regime is unseated via election and the new government is allowed to take office; (2) the regime is ousted by a coup, invasion, popular uprising, rebellion or other violent means; and (3) the ruling group substantially changes the rules for selecting the leader and for adopting key policies. The variable is coded 0 otherwise. I use the DD dataset to code democratic failure. There are a net total of 116 authoritarian failures that end in replacement, 75 in democracy, and 39 in democratic breakdown.¹⁰

I measure economic inequality as the share of output that accrues to labor (wage share — WS), which captures cross-class differences between capital holders and labor. This variable is more fitting to theories that focus on inter-group inequality and class cleavages (Boix 2003; Acemoglu and Robinson 2006; Houle 2009). The higher the share of output that accrues to wages, the more *equal* the society. The measure is taken from the INDSTAT2 dataset produced by the United Nations International Development Organization (see Knutsen 2015).¹¹ For the results to be intuitive, the WS variable has been inverted. Now, the greater the variable's values, the higher the level of inequality. It captures the share of output that accrues to capital holders, a concept similar to the one used by Houle (2009, 2016). The data are available for 163 countries from 1963 to 2008. The advantages of our measure are the large number of observed data points and its sensitivity. Another widely used measure of inequality is the Gini coefficient, which captures the distance between the largest and smallest individual incomes in society. However, the Gini coefficient does not measure differences across groups or classes. Houle provides a good account of this distinction (Houle 2009).

No yearly cross-national variable exists, to the author's knowledge, that measures elite wealth accumulation. Ideally, the measure should capture the total amount of asset stock owned by the economic elite.¹² One option is to obtain the total amount of wealth in an economy and multiply it by the share that belongs to the top centile. The closest approximation to this variable can be obtained from Piketty's data (WID) by multiplying his measure of total private wealth by the share of wealth owned by the top decile or centile (Alvaredo et al. 2017). Unfortunately, the sample of countries in the WID data is small and dominated by countries that have not experienced any recent transitions to democracy.

I construct a new measure using widely available data from the World Bank and contrasting a subsample with the WID data. First, I take yearly cross-national gross fixed capital formation (GFCF) in current dollars from the World Bank to estimate the total new wealth generated by capital each year.¹³ This variable captures a

¹⁰Regime change in GWF includes reshuffling coups, which could be argued to not lead to a coalition change behind the dictator. I have included additional tests in the Appendix (see Tables A3 and A4) using data from the CHISOLS project (Mattes et al. 2016), which captures changes in the source of leader support in democracy and autocracy.

¹¹The dataset can be found at <https://stat.unido.org>.

¹²The economic elite is broadly defined as top centile of an economy.

¹³Data accessed in February 2022. It can be found at <https://data.worldbank.org/indicator/NE.GDI.FTOT.CD>

country's yearly total domestic investment in fixed assets. It includes land improvements, machinery purchases, private infrastructure construction (i.e., residential, commercial, and industrial buildings), and the net acquisition of valuables.¹⁴

For each country, I obtain the cumulative sum of new wealth for all years in the sample. This gives us the amount of wealth generated in a given country-year from the time the country is first observed. It does not capture total wealth accumulation, as we cannot estimate an initial value for wealth. GDP or some similar proxy of national wealth could be added as the initial value, but that would introduce noise and generate its own set of issues, such as lumping in population.¹⁵ To avoid these identification issues, I simply capture the pattern of elite wealth accumulation within countries since the moment they are observed, rather than estimating some initial value of wealth. If elite wealth grows rapidly, elites are more likely to cash in and transition to democracy. If it does not, elites have an incentive to remain in the status quo.

I make two substantive improvements to the cumulative sum of wealth described above. First, rather than dealing with gross numbers of wealth that are abstract and do not truly represent the total amount of wealth available, we create a ratio: I divide each year's cumulative wealth by the amount of wealth the country produced the first year. Generating a ratio of wealth allows us to capture precisely within-country elite wealth accumulation and minimize the effects that cross-national variation may have in generating the variable. The reason for this is simple: elites in one country are unlikely to compare themselves with elites in other countries when deciding whether to transition to democracy. Wealth is not the same in every country, given differences in prices and in pressures on consumption and savings. It is more useful to net out these differences for the logic we advance in this paper.

Second, I adjust the cumulative sum of wealth for depreciation and state investment. I subtract 10% from each year's wealth to account for depreciation (Piketty 2014) — note that the original measure is already adjusted downward by 15% to account for the share of total investment by the government. The share of wealth that belongs to the non-elites cannot be netted out, but this is a small part of the measure. New wealth is largely generated by capital holding elites. To make sure these assumptions are substantiated, I run a series of stress tests on our final variable. I compare WID's data on total private wealth and elite wealth with a subsample from our dataset.¹⁶ A high correlation with these known measures should provide some external validity for our proxy.

¹⁴An in-depth description of the variable is included in Appendix A1, including the World Bank's own detailed definition.

¹⁵I use the GDP measure to ensure that countries in the authoritarian replacement sample are by and large at the lower end of the GDP per capita distribution, and are thus not wealthy at the beginning of the measure.

¹⁶Our variable cannot capture all forms of wealth that elites may have, such as financial assets, stocks, and savings. Neither does it account for foreign ownership of assets. However, I contend that these omissions do not harm the validity of our measure. The level and growth of these assets tend to be highly correlated with the ones in the measure, and foreign ownership, while important, appears to have a small impact on our measure overall. I provide as evidence of our logic the correlations with Piketty's private wealth data for a subsample of countries. These are all above 0.9 and are detailed below.

The WID's *net private wealth* variable captures the total level of wealth owned by private citizens in a country-year. The correlation between this measure and our proxy is $r = 0.949$ on a subsample of 770 observations from 21 countries.¹⁷ I then multiply the WID's net private wealth variable by the share of wealth owned by the top 5, 1, and 0.1%. These measures directly capture the wealth owned by different sets of elites. The correlation is high for all three measures. We obtain $r = 0.913$ for the total wealth of the top 5%, $r = 0.925$ for the 1%, and $r = 0.946$ for the 0.1%. These correlations include 389 observations for 11 countries.¹⁸ These high r values are indicative of the strength of the new variable in measuring elite wealth accumulation.

Results

I begin by showing the relationship between the two main variables of interest and authoritarian replacement descriptively. Figure 2 plots the observed probability of replacement at different levels of wealth and wealth inequality. This is obtained by dividing the number of observed instances of replacement by the total number of observations that fall within 20 different quantiles of both independent variables. Authoritarian replacement is more frequent at very low levels of wealth. It then experiences a sharp decline before reaching more or less the median, with the relationship largely flat at high levels. The effect of wealth inequality is more ambiguous. Replacement seems, on the one hand, more likely at low levels of wealth inequality, but the variability is also much higher as shown in the scatterplot. After a low point at middle levels of inequality, the relationship appears to be again stronger at higher levels. The difficulty in assessing the potential effect of inequality on replacement further suggests an interactive effect. Moreover, the descriptives for both variables show complex and non-linear relationships. This may complicate the interpretation of the interaction coefficients in the survival models, but plotting the survival curves and the joint effect of the two covariates should reveal how and when they are statistically and substantively significant.¹⁹

Table 1 reports the main results of this paper. Models 1 through 3 estimate the effect of the independent variables on each possible type of transition: authoritarian replacement ($A_1 \rightarrow A_2$), democratization ($A_1 \rightarrow D$), and democratic breakdown ($D \rightarrow A_1$) without controls, whereas Models 4 through 6 include all controls and decade dummies. Each set of three models is estimated jointly in a single Cox stratified model, in which each strata represents a transition. The model displays the

¹⁷These are the USA, Canada, China, Russia, the UK, Australia, Czech Republic, Japan, Mexico, South Africa, Netherlands, South Korea, Denmark, Germany, France, Greece, Italy, Spain, Norway, Finland, and Sweden. Within-correlation scores are stable across groups, with the exception of South Africa and, to a lesser extent, Greece. The correlation stays high if each or both countries are excluded from the test.

¹⁸The USA, Canada, Australia, Japan, Netherlands, South Korea, France, Germany, Italy, Spain, and Sweden. Within-correlation scores are stable across all groups.

¹⁹I do not include multiple interactions with square or cubic splines, which overly constrain the data.

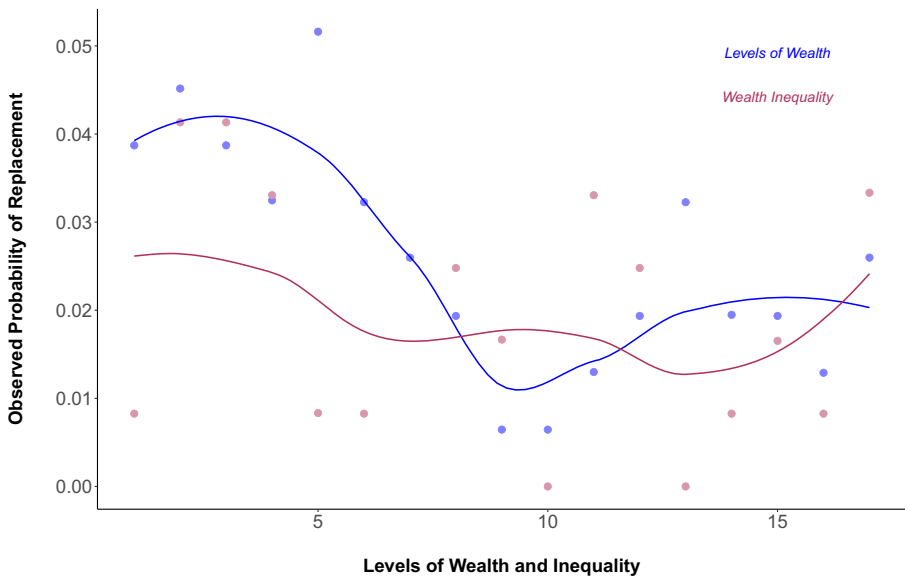


Fig. 2 Observed probability in the data of replacement at different levels of wealth

coefficients and not the hazard ratios. Note that our theoretical interest lies in authoritarian replacement (Models 1 and 4), and not in the other two types of transitions. I thus report the full set of results from the main multistate survival model as recommended by Metzger and Jones (2016), but I focus the analysis solely on the coefficients for authoritarian replacement.

In all models, capital share (inequality) is interacted with wealth, which is *inverted* here. The reason for inverting the variable is that it is easier to interpret the sign of the interaction in an intuitive way that fits the main hypothesis if wealth is inverted, i.e., the effect on authoritarian replacement as wealth levels become lower or decrease, while inequality increases. As shown in Models 1 and 4, the sign of the interaction is positive, as predicted. As wealth decreases, increases in inequality lead to a higher probability of replacement; or, conversely, as inequality increases, lower levels of wealth make authoritarian replacement more likely — increasing the log-odds by 1.067 for every one-unit change, a relatively large effect in the log-odds scale. For complex continuous interactions, statistical significance can only be ascertained by plotting the joint effect. This is because the interaction coefficient itself may not be statistically significant at conventional levels — i.e., we cannot reject the null hypothesis that the effect of wealth inequality and levels is not systematically different from zero — but the joint effect may be. For instance, as I show below, the marginal effect of increases in wealth on the probability of replacement is significant only *at high levels of inequality*, but not at low levels.

Figure 3a shows precisely this. Since wealth is inverted, it displays the marginal effect of *decreases* in absolute wealth on authoritarian replacement at various levels of wealth inequality. As expected, at higher levels of inequality, a decrease in wealth will have a statistically significant positive effect on the probability of replacement.

Table 1 Effects of wealth inequality on all transitions conditional on levels of wealth

	Multistate survival model (MSSM)			MSSM (with controls)		
	1	2	3	4	5	6
	$A_1 \rightarrow A_2$	$A_1 \rightarrow D$	$D \rightarrow A_1$	$A_1 \rightarrow A_2$	$A_1 \rightarrow D$	$D \rightarrow A_1$
Wealth (Inv.) _{<i>t</i>-1}	-0.355 (0.336)	-0.034 (0.300)	0.566 (0.952)	-0.225 (0.436)	-0.218 (0.448)	0.828 (0.773)
Inequality (CS) _{<i>t</i>-1}	-5.624 (3.578)	-0.876 (2.618)	13.860 (8.768)	-5.017 (4.585)	-2.408 (4.456)	17.375 (6.341)
Wealth (Inv.) _{<i>t</i>-1}	1.024 (0.671)	0.251 (0.525)	-1.305 (1.668)	1.067 (0.903)	0.634 (0.892)	-2.272 (1.350)
x Inequality (CS) _{<i>t</i>-1}				0.008 (0.351)	0.948 (0.348)	-1.277 (0.461)
GDPpc _{<i>t</i>-1}				-0.033 (0.025)	-0.042 (0.032)	-0.097 (0.121)
Growth _{<i>t</i>-1}				-0.082 (0.082)	-0.150 (0.094)	0.440 (0.181)
Oil _{<i>t</i>-1}				0.001 (0.007)	-0.001 (0.008)	-0.026 (0.016)
Ethnic Frac. _{<i>t</i>-1}				-0.002 (0.004)	-0.015 (0.005)	-0.007 (0.015)
Trade Open. _{<i>t</i>-1}				0.658 (0.134)	0.327 (0.153)	0.220 (0.665)
Previous Fail. _{<i>t</i>-1}				-0.070 (0.084)	0.002 (0.046)	-0.190 (0.253)
Polity _{<i>t</i>-1}				-0.003 (0.011)	-0.016 (0.010)	-0.056 (0.023)
Polity Sq. _{<i>t</i>-1}				0.001 (0.052)	0.033 (0.084)	0.159 (0.114)
Time trend				-0.674 (0.904)	0.050 (0.999)	-4.827 (2.099)
1980s				-0.088 (1.140)	0.113 (2.017)	-5.208 (2.551)
1990s				0.126 (1.359)	-1.301 (2.610)	-6.559 (2.666)
2000s						
Observations	5592			5146		
Pseudo R^2	0.028			0.207		
Log-Lik.	-350.30			-274.281		

$A_1 \rightarrow A_2$, authoritarian replacement; $A_1 \rightarrow D$, democratization; $D \rightarrow A_2$, democratic breakdown model; stratified Cox with 3 strata, one for each of the transitions above. SEs in parentheses

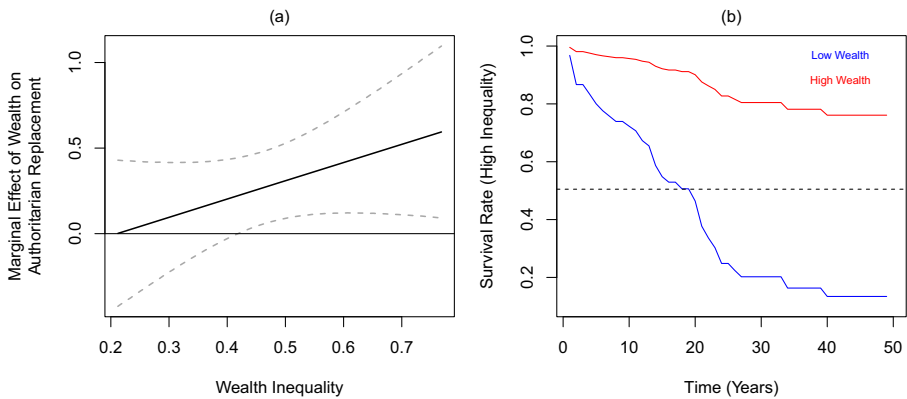


Fig. 3 **a** Joint effect of wealth and inequality on authoritarian replacement. **b** Survival curves at high levels of inequality

The lower bound of the 95% confidence interval crosses zero when inequality is at 0.43 in the capital share score, which is close to its mean of 0.47. For instance, at high levels of inequality (0.69), a change of 0.516 in the log-odds of replacement means that countries with 14% less wealth will be 70% more likely to experience replacement.²⁰ Or, for instance, countries with 28% less wealth are almost two and a half times more likely to see an authoritarian incumbent replaced by a competing faction at high levels of inequality. This is because the wealth variable ranges between 0 and 7, so a 1 unit change represents around a 14% difference.

The results are strongly significant in substantive terms. To show this with more clarity, Fig. 3b displays the survival curve for regimes with low wealth and high inequality versus all others.²¹ An authoritarian incumbent presiding over a country with low levels of wealth and high inequality can expect his reign to be relatively short-lived. Within 5 years, one in five regimes have already been replaced — the survival rate drops to 80%. In 7 years, the survival rate tumbles further to 75%, and within 15 years regimes have reached toss-up levels, with only 54% probability of survival. Conversely, all other regime types take a full 20 years to drop to a survival rate of 75%, and never reach toss-up levels.

Robustness Checks

The following robustness checks have been performed and are included in the Appendix unless otherwise stated. First, note that the main model includes a time trend, which is important because wealth tends to grow naturally in time. Second, the reason why I report the naïve model with no controls in Table 1 is to show that adding the controls and the time trend does not generate spurious significance. I include the

²⁰The results of the Cox proportional hazards model are presented in log-odds, not hazard ratios.

²¹The curve for all other regimes is a weighted average. No CIs are shown as statistical significance has been defined in Fig. 3a; survival curves are sufficient to show substantive significance.

equivalent of Fig. 3a using the model without controls in the Appendix (Fig. A1), and the results are unchanged. Third, to ensure that the results are not a function of the statistical model used in this paper, I perform tests with the following alternative models and include the results in the Appendix: (1) OLS and logistic regression with random effects and (2) a more traditional logistic regression with clustered standard errors and without random or fixed effects. I develop on the reasoning for these models further in the Appendix. The results were obtained with these alternative specifications.

The Rise of Trujillo in the Dominican Republic

The Dominican Republic before and after the rise of Rafael Trujillo illustrates the relevant mechanisms and intuitions underpinning my theory. Before the benefactor, internecine conflict ravaged political stability in the Caribbean nation. Factions often replaced each other in power, with eleven presidents sworn into office in a period of 15 years. Trujillo's coup in 1930 ushered in an era of authoritarian stability, which meant high levels of political repression but large increases in private wealth. I now describe these two periods of Dominican history to illustrate the political economy theory of authoritarian replacement.

Wealth inequality was high in the Dominican Republic between the turn of the twentieth century and 1930, the year of Trujillo's coup. The country ranked within the top quartile or tercile in all of Boix's historical measures on family farms, knowledge distribution, and diversification (Boix 2003, from Vanhanen 1997). Data on levels of wealth at the time is not available, but given the country's lack of development after independence in 1844, its low GDP, and its incipient institutions, it is fair to assume that wealth among the elite was low (Turits 2003). Quarreling elite factions around this time were primarily rural, so cleavages did not form around factors of production. Rather, they reflected different regional interests within the landowning class, divisions which resulted in caudillo power struggles between the *Horacistas* and the *Jimenistas*, each named after their respective leader. In the 15-year period between 1899 and 1914, eleven different presidents were sworn in. Three of them fell victim to a coup d'état, five of them "resigned" the office after brief tenures, and one of them was assassinated — Ramón Cáceres in 1911. American intervention between 1914 and 1924 provided a hiatus, and Horacio Vasquez then ruled from 1924 until Trujillo deposed him in 1930 (Turits 2003).

One important aspect of my theory is that elite groups seek to control the state to gain short-term income when their wealth is low. This is precisely what we see in the Dominican Republic during this time. The *Jimenistas* represented the heritage of Ulises Heureaux, president until his assassination in 1899. The *Horacistas*, on the other hand, were the more liberal wing of the elite and initially emerged as opposition to Heureaux. Important figures within these two groups replaced each other in power during the tumultuous 1899–1914 period, even if they were all rural elites with

common economic interests. Their vehicle to greater wealth was the sugar trade and government corruption. Sugar exports expanded rapidly between 1900 and the start of the World War II, reaching 5% annual growth on average between 1913 and 1928 (Bulmer-Thomas 2003). Domestic wealth was low and highly concentrated among rural landowners, with the peasantry increasingly destitute. Rural elites benefitted from the windfall and, in this context, controlling the state ensured direct profits from a booming sugar trade (Turits 2003).

The sugar economy also became increasingly foreign dominated. Indeed, ingenios were largely owned by US, Canadian, Cuban, and Spanish interests in the first decade of the twentieth century. These companies quickly controlled most plantations in the Eastern provinces. By the mid-1910s, most sugar mills were in the hands of US and Canadian investors after Cuban and Spanish companies sold their stakes (Hall 2000). The expansion of foreign-owned plantations and the booming trade of the commodity created an income stream particular to enclave economies. Governing was not only profitable because revenue from the sugar trade could find its way to the pockets of elites in power, but also because the management of foreign contracts, licenses, and concessions became a large source of income for the ruling class.²² This is similar to what happened in Peru during the guano era, where foreign contracts to extract the resource generated large amounts of revenue for elites in power. In turn, these profits create incentives for different elite groups to take over government (Bonilla 1984; Cotler 1979).

The rise of Trujillo after direct American intervention (1914–1924) and Vasquez's relatively peaceful tenure (1924–1930) also illustrates precisely the type of elite struggles that I describe in my theory and how they unfold. Trujillo was, since 1927, the chief of the Dominican armed forces, the highest military position, and effectively Vasquez's second in command. His meteoric rise forebode his ambition to take the presidency for himself, but he needed a coalition for a coup to stand on firm ground. Coincidentally, a rift began to develop again among the rural elite. Vasquez was an old politician — he was first president in 1899 — and became associated with foreign interests and US control. New nationalist elites, led by Rafael Estrella Ureña and his Republican Party, disapproved of foreign domination in the economy and the President's attempt to extend his term limit (Turits 2003). They launched a revolt that, according to Crassweller, would have gone nowhere had it not been for Trujillo's cunning move to allow Estrella's forces to march into the palace unopposed (Crassweller 1966). Trujillo, who as Chief of the Armed Forces controlled the country's scant military defenses, struck a pact with Estrella beforehand, allowing Estrella to become president first while Trujillo retained *de facto* power. Whomever took power

²²In fact, since the USA controlled the DR customs since 1905 and most of the government's tax revenue came from tariffs, taxing firms to extract rents was barely possible. Hence, contracts, licenses, and concessions were the only way to extract rents profitably.

eventually (Trujillo) matters less than the fact that elite factions struggled to control the state and increase their income, and that such conflict bred a staggering number of authoritarian replacements up until that point. Estrella Ureña's faction wanted to take control of the state to wrestle power away from foreign interests and an old and entrenched ruling elite who appropriated the income generated from the sugar trade. They sought to capture the existing corruption streams linked to the government, and redirect policy to benefit Dominican landowners such as Estrella himself. Trujillo, initially his ally, consolidated power on himself and replaced Estrella after 1 year — a presidency that was symbolic at most (Turits 2003).

A potential explanation for Trujillo's abnormal longevity in the Dominican context is his efficiency as dictator. He quickly built a political party to support him, propped up the army, and created an efficient and ruthless secret police. He was subject to at least three known coup attempts in the first 10 years of his rule, which he swiftly repelled. Yet his survival was not solely due to skill. Challenges to his rule were much less frequent after this initial period, and an important reason is that overall wealth had skyrocketed among a majority of sectors within the elite (Crassweller 1966). No one was richer or owned more businesses than Trujillo himself, but the dictator was deft at distributing riches among elites. Rural elites continued to reap large profits from the sugar trade, even if now Trujillo owned a majority of the assets used in its production. High-level urban supporters either obtain large sums for their political support in public office, such as senators, or for helping run the businesses he expropriated. Everyone depended on the benefactor, and everyone profited from the dependence. To get an idea of the levels of wealth involved for a relatively underdeveloped Caribbean island, Trujillo's own fortune is indicative. By the time of his assassination, Trujillo amassed the seventh largest fortune *in the world* by some calculations (Crassweller 1966; Turits 2003). His son Ramfis was the ostentatious sidekick to many a Hollywood star, and drove — and ruined — multiple Ferraris in Madrid, Paris, and the USA. By co-opting a large majority of elites, he diminished resentment and increased his overall level of support. Other elites were not better off replacing Trujillo, and the small minority that may have benefitted were powerless to attempt any uprising due to lack of sufficient support.

Implications and Concluding Remarks

In this article, I have advanced a new theory of wealth inequality and authoritarian replacement. I find that the probability of authoritarian replacement increases at high levels of wealth inequality, but the effect is conditional on overall wealth being low. When inequality is high and wealth is low, elites have an incentive to capture the state to appropriate income. Consequently, authoritarian replacement is more likely. As the level of wealth increases, elites become more concerned with securing their wealth, seeking greater guarantees for property rights. In turn, replacement decreases.

This article makes an important contribution to the literature on authoritarian transitions by providing a new theory of authoritarian replacement based on

wealth inequality and elite conflict. Transitions within authoritarianism that involve groups replacing each other from power and significantly altering the distribution of resources remain understudied. With the recent trend toward democratic backsliding, a deeper understanding dynamics within authoritarian regimes is increasingly important. It also complements recent efforts to explain authoritarian transitions (Wright and Bak 2016) and the economic relationship between the leader and the elite that supports him (Albertus and Menaldo 2012).

Methodologically, this article is the first one, to my knowledge, to use multistate survival analysis in long-term structural political outcomes such as regime transitions. This method can help us model the entire set of transitions that countries may experience and, as has been shown, obtain more accurate estimates (Metzger and Jones 2016; Putter et al. 2007). Also, I find a new proxy for private wealth accumulation that correlates highly with Piketty's measure and is built on theoretically consistent grounds using World Bank data on gross capital formation per country-year (Piketty 2014).

Lastly, I also contribute to the political development literature by making an explicit distinction between *wealth*, which is the total accumulated capital stock at any given point in time, and *income*, which is the flow of new assets every fiscal period. So far, the broader debate has mostly revolved around the effects of income inequality on regime transitions (Przeworski et al. 2000; Boix 2003; Acemoglu and Robinson 2006; Houle 2009; Ansell and Samuels 2010; 2014; Haggard and Kaufman 2012; 2016). Wealth and income have been used synonymously, which has made it difficult to unveil certain important dynamics during political transitions. A shared argument, for instance, in Boix and Acemoglu and Robinson is that transitions to democracy are less likely at high levels of income inequality, since the redistribution cost of democracy for elites will be high if the poor get to set the tax rate (Acemoglu and Robinson 2006; Boix 2003). However, if we consider this situation in terms of wealth maximization rather than income maximization, we realize that elite preferences related to inequality and transitions will differ according to how much wealth they own. Indeed, if they own a lot of wealth, individuals are likely to be at least as concerned with securing this wealth as with expanding it. Thus, democracy could be a very attractive — if expensive — system, since it places emphasis on property rights and separation of powers. I contend that wealth is a more expansive concept that helps us model elite preferences and intra-elite conflict in transitions better (O'Donnell and Schmitter 1986; Przeworski 1991).

Understanding the dynamics of authoritarian regimes is more pressing today than at any point since the end of the Cold War. Some authoritarian regimes are surviving modernization pressures better than many scholars expected, and replacement within dictatorship remains common, as the recent case of Mugabe in Zimbabwe shows. Most importantly, however, recent democratic backsliding and breakdowns in Poland, Turkey, and Venezuela, among others, urge us to demand better knowledge of authoritarian politics that expands on and goes beyond issues such as formal institutions, power, economic growth, and trade. This paper aims to provide some fresh answers to the problem of authoritarian replacement, but new work is urgently required to explain the sharp downturn in the expansion of democracy and the revival of dictatorship.

Appendix

Table 2

	<i>SOLS change</i>	
	(a)	(b)
Wealth (Inv.) $t-1$	- 0.088 (0.070)	- 0.130 (0.091)
Wealth Ineq. (Piketty) $t-1$	- 1.148 (0.937)	
Wealth (Inv.) $t-1$ $\times$ Wealth Ineq. (Piketty) $t-1$	0.258 (0.170)	
Share of 99th percentile $t-1$		- 1.275 (1.037)
Wealth (Inv.) $t-1$ $\times$ Share of 99th percentile $t-1$		0.287 (0.190)
GDPpc (log) $t-1$	- 0.228* (0.124)	- 0.230* (0.124)
Growth $t-1$	0.001 (0.002)	0.001 (0.002)
Oil (log) $t-1$	- 0.000 (0.016)	- 0.000 (0.016)
Trade Openness $t-1$	0.000 (0.001)	0.000 (0.001)
Polity $t-1$	- 0.030*** (0.007)	- 0.030*** (0.007)
Polity Sq. $t-1$	- 0.001 (0.001)	- 0.001 (0.001)
Previous Coalition Change	0.590*** (0.040)	0.590*** (0.040)
Time Trend	0.008*** (0.002)	0.008*** (0.002)
Constant	- 0.486 (0.561)	- 0.296 (0.662)
Country Fixed Effects	Yes	Yes
Year Fixed Effects	Yes	Yes
Observations	263	263
Within R^2	0.595	0.595

Table 3

	<i>SOLS change</i>	
Wealth (Inv.) $t-1$	– 0.908*** (0.283)	
Capital Share $t-1$	– 0.132 (0.153)	
Wealth (Inv.) $t-1 \times$ Capital Share $t-1$	0.546 (0.335)	
GDPpc (log) $t-1$	0.029 (0.027)	
Growth $t-1$	– 0.002*** (0.001)	
Oil (log) $t-1$	0.002 (0.006)	
Trade Openness $t-1$	0.000 (0.000)	
Polity $t-1$	0.014*** (0.002)	
Polity Sq. $t-1$	– 0.000 (0.000)	
Previous Coalition Change	0.139*** (0.011)	
Time Trend	0.007*** (0.001)	
Constant	0.493*** (0.185)	
Country Fixed Effects	Yes	Yes
Year Fixed Effects	Yes	Yes
Observations	2415	
Within R^2	0.122	

Acknowledgements I would like to thank Ernesto Calvo, Sebastián Vallejo Vera, Mark Lichbach, Pablo Beramendi, Erik Wibbels, Diego Romero, Jeremy Springman, Shawna Metzger, and participants at MPSA and APSA panels for their helpful comments and suggestions. I would also like to thank the editor and three anonymous reviewers, whose suggestions greatly improved the article.

References

- Acemoglu, Daron, Robinson, James A. Democratization or repression? *Eur Econ Rev.* 2000;44(4):683–693.
- Acemoglu, Daron, Robinson, James A. A theory of political transitions. *American Economic Review*, 938–963. 2001.

- Acemoglu, Daron, Robinson, James A. *Economic origins of dictatorship and democracy*. Cambridge University Press. 2006.
- Acosta, Alberto. Breve historia económica del Ecuador. Corporación Editora Nacional: Quito; 1998.
- Albertus, Michael. AUTOCRACY AND REDISTRIBUTION. Cambridge University Press. 2015.
- Albertus, Michael, Menaldo, Victor. If you're against them you're with us: the effect of expropriation on autocratic survival. *Comp Pol Stud*. 2012;45(8):973–1003.
- Albertus, Michael, Menaldo, Victor. Gaming democracy: elite dominance during transition and the prospects for redistribution. *British Journal of Political Science*. 2014;44(3):575–603.
- Alvaredo, Facundo, Chancel, Lucas, Piketty, Thomas, Saez, Emmanuel, Zucman, Gabriel. World inequality report 2018. The World Inequality Lab. <http://www.wir2018.wid.world>. 2017.
- Ansell, Ben, Samuels, David. Inequality and democratization: a contractarian approach. *Comp Pol Stud*. 2010;43(12):1543–74.
- Ansell, Ben, Samuels, David. *Inequality and democratization*. Cambridge University Press. 2014.
- Boix, Carles. DEMOCRACY AND REDISTRIBUTION. Cambridge University Press. 2003.
- Boix, Carles, Miller, Michael, Rosato, Sebastian. A complete data set of political regimes, 1800–2007. *Comp Pol Stud*. 2013;46(12):1523–1554.
- Bonilla, Heraclio. Guano y burguesía en el Perú. Instituto de Estudios Peruanos: Lima; 1984.
- Box-Steffensmeier, Janet, Jones, Bradford. Event history modeling: a guide for social scientists. Cambridge University Press. 2004.
- Brownlee, Jason. *Authoritarianism in an age of democratization*. Cambridge University Press. 2007.
- Bulmer-Thomas, Victor. *The economic history of Latin America since independence*. Cambridge University Press. 2003.
- Cheibub, José Antonio, Gandhi, Jennifer, Vreeland, James Raymond. Democracy and dictatorship revisited. *Public Choice*. 2010;143(1–2):67–101.
- Cotler, Julio. State and regime: comparative notes on the Southern Cone and the Enclave Societies. The new authoritarianism in Latin America. In: Collier, David and Cardozo, Fernando Henrique, editors. Princeton University Press; 1979. p. 255282.
- Crassweller, Robert D. *Trujillo: The life and times of a Caribbean dictator*. Macmillan New York. 1966.
- Evans, Peter B. *Embedded autonomy: states and industrial transformation*. Princeton University Press. 1995.
- Gandhi, Jennifer. *Political institutions under dictatorship*. Cambridge University Press. 2008.
- Geddes, Barbara. What do we know about democratization after twenty years? *Annu Rev Polit Sci*. 1999;2(1):115–144.
- Geddes, Barbara, Wright, Joseph, Frantz, Erica. Autocratic breakdown and regime transitions: a new data set. *Perspect Polit*. 2014;12(02):313–331.
- Gehlbach, Scott, Keefer, Philip. Investment without democracy: ruling-party institutionalization and credible commitment in autocracies. *J Comp Econ*. 2011;39(2):123–139.
- Ghura, Mr Dhaneshwar, Mercereau, Benoît. *Political instability and growth: the Central African Republic*. 4–80, International Monetary Fund. 2004.
- Haggard, Stephan, Kaufman, Robert R. Inequality and regime change: democratic transitions and the stability of democratic rule. *American Political Science Review*. 2012;106(03):495–516.
- Haggard, Stephan, Kaufman, Robert R. *Dictators and democrats: masses, elites, and regime change*. Princeton University Press. 2016.
- Hall, Michael R. Sugar and power in the Dominican Republic. Eisenhower, Kennedy, and the Trujillos: Greenwood Press; 2000.
- Houle, Christian. Inequality and democracy: why inequality harms consolidation but does not affect democratization. *World Politics*. 2009;61(04):589–622.
- Houle, Christian. Why class inequality breeds coups but not civil wars. *J Peace Res*. 2016;53(5):680–695.
- Karl, Terry L. *The paradox of plenty: oil booms and petro-states*. University of California Press. 1997.
- Knutsen, Carl Henrik. Reinvestigating the reciprocal relationship between democracy and income inequality. *Review of Economics & Institutions*. 2015;6:2.
- Little, Andrew T. Coordination, learning, and coups. *J Conflict Resolut*. 2017;61(1):204–234.
- Magaloni, Beatriz. *Voting for autocracy: hegemonic party survival and its demise in Mexico*. Cambridge University Press. 2006.
- Mattes, Michaela, Leeds, Brett Ashley, Matsumura, Naoko. Measuring change in source of leader support: the CHISOLS dataset. *J Peace Res*. 2016;53(2):259–267.

- Metzger, Shawna K., Jones, Benjamin T. Surviving phases: introducing multistate survival models. *Polit Anal.* 2016;24(4):457–477.
- Myerson, Roger B. The autocrat's credibility problem and foundations of the constitutional state. *American Political Science Review.* 2008;102(1):125–139.
- O'Donnell, Guillermo A, Schmitter, Philippe C. *Transitions from authoritarian rule: Tentative conclusions about uncertain democracies.* Johns Hopkins University Press. 1986.
- Piketty, Thomas. *Capital in the twenty-first century.* Harvard University Press. 2014.
- Przeworski, Adam. *Democracy and the market: political and economic reforms in Eastern Europe and Latin America.* Cambridge University Press. 1991.
- Przeworski, Adam. Democracy as an equilibrium. *Public Choice.* 2005;123(3):253–273.
- Przeworski, Adam, Limongi, Fernando. Political regimes and economic growth. *Journal of Economic Perspectives.* 1993;7(3):51–69.
- Przeworski, Adam, Alvarez, Michael, Cheibub, Jose, Limongi, Fernando. *Democracy and development: political institutions and well-being in the world, 1950–1990.* Cambridge University Press. 2000.
- Putter, Hein, Fiocco, M., Geskus, R. B. Tutorial in biostatistics: competing risks and multi-state models. *Stat Med.* 2007;26(11):2389–2430.
- Ross, Michael. Does oil hinder democracy? *World Politics.* 2001;53(3):325–361.
- Singh, Naunihal. Seizing power: the strategic logic of military coups. JHU Press. 2014.
- Slater, Dan. *Ordering power: contentious politics and authoritarian leviathans in Southeast Asia.* Cambridge University Press. 2010.
- Slater, Dan, Wong, Joseph. The strength to concede: ruling parties and democratization in developmental Asia. *Perspect Polit.* 2013;11(3):717–733.
- Smith, Alastair. The perils of unearned income. *The Journal of Politics.* 2008;70(3):780–793.
- Svolik, Milan W. Power sharing and leadership dynamics in authoritarian regimes. *American Journal of Political Science.* 2009;53(2):477–494.
- Svolik, Milan W. *The politics of authoritarian rule.* Cambridge University Press. 2012.
- Timoneda, Joan C. Institutions as signals: how dictators consolidate power in times of crisis. *Comp Polit.* 2020;53(1):49–68.
- Turits, Richard Lee. *Foundations of despotism: peasants, the Trujillo regime, and modernity in Dominican history.* Stanford University Press. 2003.
- Vanhanen, Tatu. *Prospects of democracy: a study of 172 countries.* Psychology Press. 1997.
- Wright, Joseph. Do authoritarian institutions constrain? How legislatures affect economic growth and investment. *American Journal of Political Science.* 2008;52(2):322–343.
- Wright, Joseph, Escriba-Folch, Abel. Authoritarian institutions and regime survival: transitions to democracy and subsequent autocracy. *British Journal of Political Science.* 2012;42(02):283–309.
- Wright, Joseph, Bak, Daehee. Measuring autocratic regime stability. *Research & Politics.* 2016;3:1.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Springer Nature or its licensor (e.g. a society or other partner) holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.