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

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Abstract

As the recent example of Robert Mugabe in Zimbabwe shows, transitions within dictatorship remain frequent. 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 wealth inequality is high and wealth is overall low.

1. Introduction

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 but wealth levels are low, competing elite factions seek to overthrow one another from government in order to capture new income through the state. 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.[1] To this day, the politics of authoritarian replacement remain significantly undertheorized.[2]

Attention has generally focused on transitions from authoritarian rule to democracy and democratic breakdown[3] or on institutional and economic factors that improve dictatorial stability.[4] Recently, a new wave of research has focused on coups within authoritarian regimes, yielding important insights into the role of dictator-elite relations,[5] the coordination capacity of the plotters,[6] and how coups unfold and the role of information diffusion in the days of the coup.[7] 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. What factors lead different elite groups to overthrow each other?

Consider the Dominican Republic at the turn of the twentieth century: In the fifteen 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 their office after brief tenures, and one was assassinated. The instability resulted from quarrels between two groups, *Horacistas* and *Jimenistas*, for government

control. Wealth at the time was low, but the sugar trade was booming. Greater tax revenue increased incentives for corruption in government. Moreover, a majority of sugar mills were in the hands of US and Canadian investors by the mid-1910s, generating income streams in the form of government contracts, licenses and concessions.[8] Governing, even for a short period of time, was profitable, and the wealth owned by elite groups was low enough to justify the risk of taking over the state.

Economic theory and empirics predicting regime transition have until now mostly focused on authoritarian to democratic transitions and the mechanism of income inequality.[9] 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.[10] 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.

I make two key distinctions in this paper. The first one is between wealth inequality and levels of absolute wealth. Wealth inequality, a concept that has gained importance of late, refers to the structure of wealth in the economy at a given point in time, that is, the division of national output between capital and labor; or, in simpler terms, to differences in the ownership of capital and its profits among different classes.[11] Wealth can be more or less concentrated in the hands of a few. Wealth levels, on the other hand, refer to the total amount of wealth owned in society at any given point in time. The second distinction is between wealth and income. Wealth is a stock and income, a flow. Wealth, or capital, represents the total assets owned at any point in time, which have been saved or accumulated.[12] Income is the net influx of assets within a defined period of time, usually a year. Individuals need large amounts of income to transform into savings, which then become their wealth stock.

My theory predicts that, at high levels of wealth inequality, social actors have an incentive to capture the state in order to increase their short-term income, with their goal set at maximizing their long-run wealth. This effect for authoritarian replacement, I argue, is moderated by the level of wealth in the economy: when wealth is low overall, the incentives to capture the state and increase the flow of income are much greater, since they have relatively little wealth. As wealth levels increase, the incentive to capture the state decreases even in the face of relatively high inequality.[13] A paradigmatic example of such conflict occurred on Peru during the *guano era*, from the 1840s until the 1870s: different elite factions replaced each other in power often in order to enrich themselves by capturing *guano* income through contracts with British companies.[14] 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. Inequalities in wealth among these groups were high, and the wealth they owned relatively low, which incentivized them to seek to control the state and redistribute income toward themselves.

In this article, I model and measure authoritarian replacement.[15] 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.[16] 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 GWF transitions dataset.[17]

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.[18] 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,[19] moving away from the 'elite-vs-poor' logic that has dominated the political development debate for well over a decade.[20] Lastly, it expands on extant work showing that new dictators expropriate competing elites to signal their exclusive reliance on the group that supports them.[21]

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

2. Theory

High levels of wealth inequality lead to authoritarian replacement. In what follows I provide an elite-conflict logic for my argument: in dictatorship, conflict over resources increases when wealth

inequality is high. Disadvantaged economic and social groups can reverse their fortunes by reaching political power and appropriating resources. However, the effect of this wealth inequality gap on authoritarian replacement is mediated by the level of wealth these elite groups already own. When elite factions have low levels of wealth, they will seek to capture the state in order to appropriate income – as happened in Peru during the *guano* era or in the Dominican Republic at the turn of the twentieth century amidst a booming sugar trade. As wealth levels increase, incentives to secure wealth become more pressing than incentives to increase income. The need for stronger property rights, in turn, reduces incentives for authoritarian replacement.

In this section, I will first survey the concept of authoritarian replacement and potential alternative explanations. I will then define wealth, elites and go on to introduce the main mechanisms of my political economy theory of authoritarian replacement. I will show that controlling the state is crucial for elites to achieve their economic goals when wealth inequality is high and wealth levels are low.

2.1. Authoritarian Replacement

Authoritarian replacement refers to elite groups replacing one another in power, and requires a change in the group that actually holds power and a shift in the distribution of resources between groups.[22] I do not attempt to explain regular leadership transitions from within the same coalition – I reflect this distinction in the operationalization of the concept. Wright and Bak make this concise distinction and use the examples of Iran and Nicaragua in 1979 – the advent of the current clerical regime and Somoza respectively – as instances of leadership change that both the composition of the elite and the distribution of resources among elites.[23] They contrast these two cases with Mexico under the Partido Revolucionario Institucional (PRI), where leaders alternated in power in an effort to aid authoritarian survival but the coalition remained the same,[24] and with the case of

the Argentine military juntas of the early 1980s. In both of these cases, leadership change amounts to a simple reshuffling of the executive and the group that holds power is the same. In this paper, my argument and logic apply to the former set of cases – and none of the transitions under the PRI are considered as instances of replacement in the data.

The cases of Iran, Nicaragua are obvious examples of authoritarian replacement, since they shifted resources in a dramatic fashion between clearly differentiated factions. Other cases may be less clear-cut. Indeed, some replacements in my data set occur as the result of military coups, in which it may difficult to judge the extent to which a successor and his coalition differ from his predecessor and the elites that supported him. This was the case, for instance, in Ecuador in 1972, where Rodríguez Lara ousted Velasco Ibarra in a bloodless coup;[25] in the Central African Republic in 1981, where André Kolingba removed David Dacko;[26] and in the Dominican Republic in 1930, when Rafael Trujillo toppled Horacio Vasquez, among others.[27]

Yet all these examples differ from the cases of the PRI in Mexico or the military juntas in Argentina and Brazil in the 1970s and 80s in one fundamental aspect, namely, that the new leader, while part of the old coalition, represented interests that differed from the President he ousted. 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.[28] He shifted resources from an old aristocratic elite toward a new oligarchy deeply dependent on him.[29] Thus, Trujillo's rise as 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.[30]

It is important to note that the boundaries between the leader's coalition and competing elite factions are often blurry. This is because, as is well known, dictators try to co-opt such rival elites to improve their own chances of survival, which can indeed be a successful tactic.[31] Yet problems remain for the dictator. Primarily, rival factions are fluid and constantly forming, which means that he may often not know precisely how to co-opt every potential faction that develops or becomes discontented. This problem is more acute when the leader's resources are limited and he cannot accede to the growing demands of rival co-opted factions. The literature has tended, I would argue, to see co-optation as a rigid process, but it is in fact fluid. Indeed, co-optation requires periodic renewals of the terms of agreement, as well as the right balance in the benefits offered to co-opted factions. For the dictator, this process is difficult and dangerous, even more so when some rival factions own less wealth than other factions.

One particularly perverse manifestation of state capture at low wealth and high inequality are predatory states, where rulers use their position of power to prey on the citizens and extract resources through taxation or expropriation.[32] Others may take the form of rentier states, where natural resource abundance often leads to the appropriation and misallocation of profits and anemic industrial, agricultural and service sectors –commonly known as Dutch Disease.[33] 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.[34] 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.

2.2. Elites

How do wealth inequality and wealth levels affect how different economic elite factions decide to replace an authoritarian leader? Economic elites are defined here as individuals within a given society who, by virtue of their access to wealth, may exercise political power and 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 group of political elites to represent them and often strong-arm them into doing their bidding.

I begin with a simple assumption: elites seek to maximize wealth in the long run. In dictatorship, they face two main threats: another 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[35] or if they have the opportunity to game democracy.[36] They can also stay within authoritarianism if they act as a unitary actor and pact.[37] The existential threat of revolution from below, on the other hand, has been noted in a majority of the social conflict literature.[38]

2.3. Wealth

Wealth can be conceptualized in two distinct ways. One is structural: who owns wealth and who does not, and what are the relationships that develop over time between the haves and the have-nots.

This is the idea behind wealth inequality in society. The other corresponds to the absolute level, or stock, of wealth available in an economy, i.e. how much wealth there is.[39] The two concepts may be related but it need not be so: 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, on their part, tend to have lower levels of inequality and high levels of wealth. China also broadly fits this category.

I define wealth at the individual level as the value of the productive capital owned by a person at any point in time. It is important to distinguish wealth from income. Income is earned in the form of salary and bonuses over a given period time, usually a year —it is, therefore, a flow. Wealth, on the other hand, is a stock that holds intrinsic value and has the potential to generate capital income. Wealth includes all productive assets that yield a rate of return but excludes human capital.[40]

I contend that the distinction between wealth and income is central to understanding authoritarian replacement and, more generally, regime change. This idea differs from current work that has emphasized the importance of income inequality in political transitions.[41] Income may come in the form or of a salary or a payment from another person or entity, or it may be generated by capital. In both cases, income inequality may be high, but the political implications of inequality differ if personal wealth is the main source of income. I argue that if elites own little wealth, they will seek to control the state and appropriate new income. As their wealth increases and generates a majority of their income, they will become more concerned with protecting their wealth and instituting guarantees for property rights and political stability. Without being more precise about the concepts of income inequality and wealth inequality, we may miss important dynamics tied to income and wealth separately.

Two final considerations regarding wealth. Human capital cannot be owned by a different person

or group of people and cannot be traded in the open market;[42] hence it is excluded from this theory. Also, while land remains an important theoretical mechanism in many recent works,[43] I focus on all forms of capital here without making distinctions by capital type explicit. While type certainly matters, and I do hope to extend the logic advanced here to particular cases and types of economies, I leave these considerations as implicit in the certainty that my general conclusions hold across types of capital.

2.4. Wealth Inequality, Wealth Levels and Authoritarian Replacement

To show how replacement is most likely when wealth inequality is high and wealth levels are low, I introduce the following simple accounting identity, which 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.[44]

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 ($r_t * W_t$). I assume that everyone starts with a positive level of assets W_t. If W_t is low, increasing wealth by obtaining a return on capital will prove to be especially slow, considering that it is reasonable to assume a long-run average rate of return on capital of around 5 percent.[45] Thus, elites who find themselves with lower levels of wealth can only obtain so much in terms of returns to that wealth, and their weak position relative to wealthier elites is likely to endure in time. The persistence of this weakness

is even starker when we consider that capital increases *multiplicatively* in the long run, provided the rate of return is positive on average. The greater the level of W_t, the greater the income from capital, and the faster the gap between the wealthiest and least wealthy elites grows.

Disadvantaged elites are faced with a dilemma: do they prefer to remain in a weaker position, or strive to regain their dominant position as one of the wealthiest – and thus more influential – groups? Two central factors go into this calculus. First, if wealth is too low, elites must increase their discrete income – and fast. Second, they need to calculate how important it is to them to hold on to the little they already own, which is never safe in dictatorship.

2.5. Why Take the Risk?

The most effective mechanism for elites to conquer new income is by capturing the state. They can use it to capture capital from other elites through expropriation and obtain natural resources or other forms of revenue that have not yet been tapped.[46] Ruling elites can also restructure the economy in such a way that their coalition profits directly from domestic sectors such as utilities or telecommunications. Ruling is, indeed, profitable.

Yet 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.[47] 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.[48] However, all these transitions, as Wright and Bak argue, have one thing in common: a substantial redistribution of resources from one group to another.[49]

This shift in resources explains one important part of our central puzzle, i.e. why elites seek to replace each other and not accept the status quo and cooperate with the rulers. Given the formula

above, it pays off to seek to overthrow the government if the potential income from ruling is higher than the value attached to an elite's current wealth. Since the income from takeover will always be quite high everywhere, lower levels of wealth will lead to increases in the probability of authoritarian replacement.

The only case in which this conclusion would not hold is if an individual elite was so risk averse that no level of promised income in government could be higher than its value for its current wealth. Such individual may exist, but it cannot be modal because there are no guarantees on wealth in dictatorship. One individual may find himself at the wrong end of selective purges, or without key assets should they become particularly interesting for the dictator to own or redistribute. Thus, even for the most risk averse elite member, it pays off to join a plot to overthrow the current leadership if the probability of winning is greater than the probability that he manages to keep his assets.

2.6. When Replacement Ends

As elites grow wealthier, their concern shifts from generating new income flows to securing the wealth they have accumulated. Their income now stems entirely 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.

The state may no longer be regarded as a tool to generate new income, but 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 and wealth inequality decreases. Attempting to take over the state is risky, and it is difficult for them to ascertain whether it is more risky to replace the leader than to be expropriated by him.

What wealthy elites require is a solution to the leader's commitment problem: can elites formalize a pact by which the leader and the ruling elite credibly commit to not expropriate other wealthy elite's property? The answer is that they can. Such agreements usually take the form of constitutional rules that guarantee and respect property rights, and institutions such as political parties and legislatures help enforce them.[50] If the ruler reneges on his promises, the affected members will know. His failure to fulfill this commitment may thus lead to his downfall, as other elites now 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.

We know that, with a dictator who supposedly has the last word on every issue, it may be difficult for elites to believe he will not renege, no matter how many checks they try to place on his power.[51] Yet, notice that a perfect credible commitment to other elites is not required. Rather, he can maintain credibility in his commitments if he acts 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. The lower the wealth inequality and 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.

My argument is, in some ways, similar to Przeworski.[52] 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 high to risk losing the income guaranteed under democracy".[53] 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.

3. 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 regimes 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.[54] 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).[55]

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 central to the theory, they indeed matter empirically. Competing risk models can only capture parts of the process;[56] in our case, a multinomial logistic model would be limited to the competing risk of authoritarian failure and democratization within each spell.[57]

The literature has often used the dynamic probit to model political transitions.[58] 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 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. Lastly, by using multistate survival model, we can better incorporate the effect of time in transitions, which has been missing from other studies of political transitions.[59] The methodological contribution of this article is to incorporate multistate survival models into the political economy literature on transitions.[60]

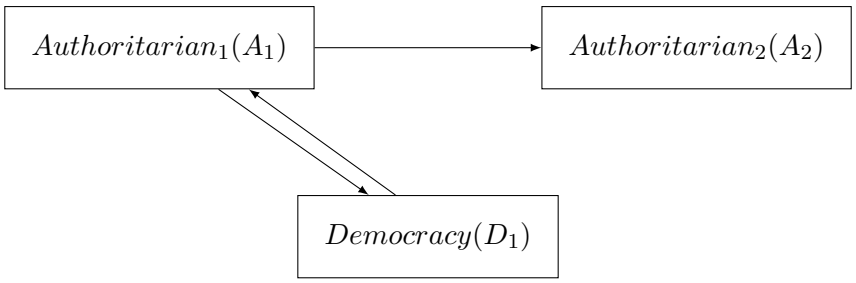

Figure 1: All Possible and Recursive Transitions

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 A3 in the Appendix.

4. Data

The unit of analysis in this article is the country-year. The dataset has 3,452 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 5,146.

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 combination of the Geddes, Wright and Frantz (GWF) dataset and the Democracy and Dictatorship (DD) dataset.[61] 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.

I measure economic inequality as the share of capital 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; AR, 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).[62] 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 (2009) provides a good account of this distinction.

No yearly cross-national variable exists, to the author's knowledge, that measures elite wealth accumulation. Ideally, our measure should capture the total amount of asset stock owned by the economic elite.[63] 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 from Alvaredo et al., 2018) by multiplying his measure of total private wealth by the share of wealth owned by the top decile or centile (Alvaredo et al., 2018). 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.[64] This variable captures a 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.[65]

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. 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 three substantive improvements to the cumulative sum of wealth described above. First, countries generate increasing yet similar amounts of wealth year-to-year. The cumulative sum of GFCF, therefore, experiences rapid growth the first few years and linear growth thereafter.[66] To make wealth increase linearly across time, as in the WID data, I replace each country's first value of accumulated wealth with its fifth.[67]

Second, 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.

Lastly, I adjust the cumulative sum of wealth for depreciation and state investment. I subtract 10 percent from each year's wealth to account for depreciation (Piketty, 2014) and another 15 percent 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.[68] A high correlation with these known measures should provide some external validity for our proxy.

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.[69] I then multiply the WID's net private wealth variable by the share of wealth owned by the top 5, 1 and 0.1 percent. 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 percent, $r = 0.925$ for the 1 percent, and $r = 0.946$ for the 0.1 percent. These correlations include 389 observations for 11 countries.[70] These high r values are indicative of the strength of our variable in measuring our theoretical concept of elite wealth accumulation.

5. 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

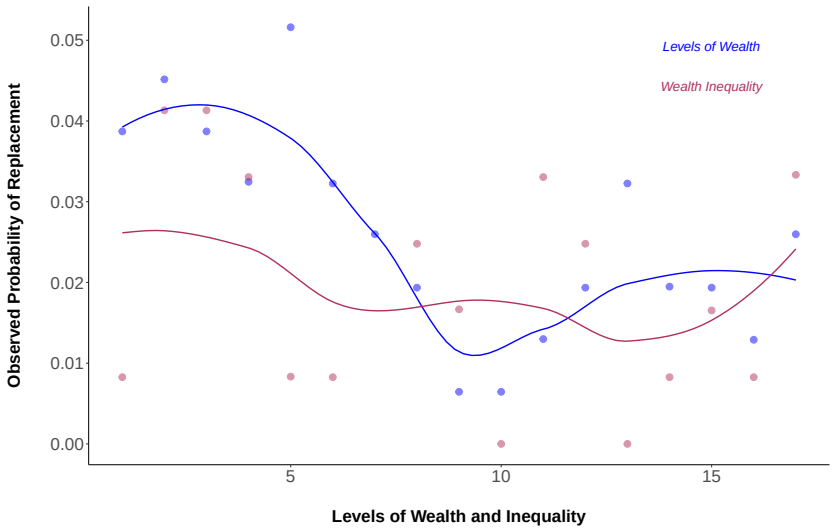

Figure 2: Observed probability in the data of replacement at different levels of wealth

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.[71]

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 coefficients and not the hazard ratios. Our theoretical interest lies in authoritarian replacement (Models 1 and 4).

	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.) $_{t-1}$	−0.355	−0.034	0.566	−0.225	−0.218	0.828
	(0.336)	(0.300)	(0.952)	(0.436)	(0.448)	(0.773)
Inequality (CS) $_{t-1}$	−5.624	−0.876	13.860	−5.017	−2.408	17.375
	(3.578)	(2.618)	(8.768)	(4.585)	(4.456)	(6.341)
Wealth (Inv.) $_{t-1}$	1.024	0.251	−1.305	1.067	0.634	−2.272
x Inequality (CS) $_{t-1}$	(0.671)	(0.525)	(1.668)	(0.903)	(0.892)	(1.350)
GDPpc $_{t-1}$				0.008	0.948	−1.277
				(0.351)	(0.348)	(0.461)
Growth $_{t-1}$				−0.033	−0.042	−0.097
				(0.025)	(0.032)	(0.121)
Oil $_{t-1}$				−0.082	−0.150	0.440
				(0.082)	(0.094)	(0.181)
Ethnic Frac. $_{t-1}$				0.001	−0.001	−0.026
				(0.007)	(0.008)	(0.016)
Trade Open. $_{t-1}$				−0.002	−0.015	−0.007
				(0.004)	(0.005)	(0.015)
Previous Fail. $_{t-1}$				0.658	0.327	0.220
				(0.134)	(0.153)	(0.665)
Polity $_{t-1}$				−0.070	0.002	−0.190
				(0.084)	(0.046)	(0.253)
Polity Sq. $_{t-1}$				−0.003	−0.016	−0.056
				(0.011)	(0.010)	(0.023)
Time Trend				0.001	0.033	0.159
				(0.052)	(0.084)	(0.114)
1980s				−0.674	0.050	−4.827
				(0.904)	(0.999)	(2.099)
1990s				−0.088	0.113	−5.208
				(1.140)	(2.017)	(2.551)
2000s				0.126	−1.301	−6.559
				(1.359)	(2.610)	(2.666)
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

Table 1: Effects of Wealth Inequality on All Transitions Conditional on Levels of Wealth

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.

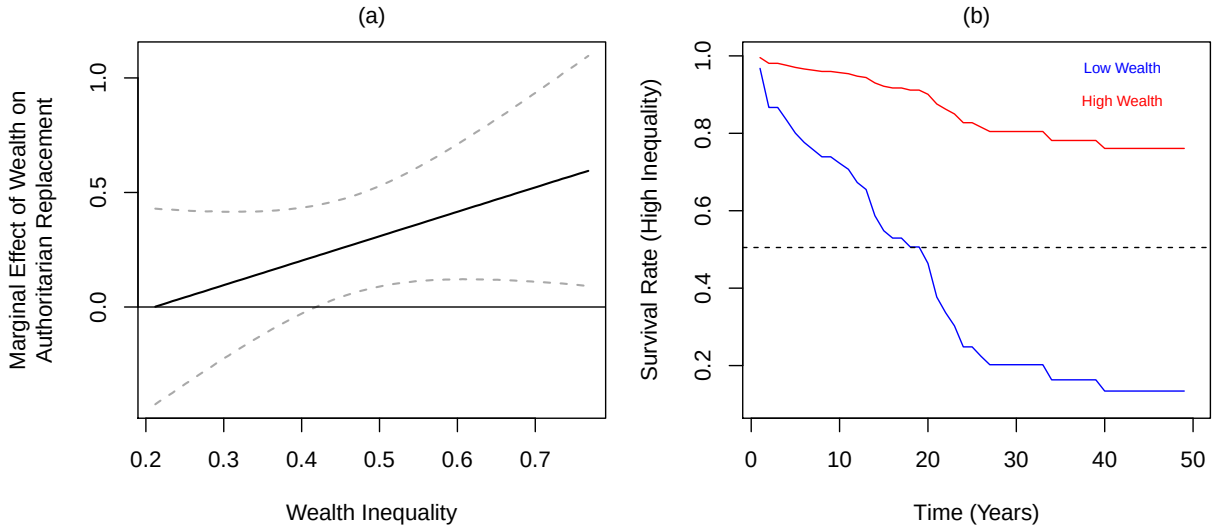

Figure 3: (a) Joint effect of wealth and inequality on authoritarian replacement.
(b) Survival curves at high levels of inequality.

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. The lower bound of the 95 percent confidence

interval crosses zero when inequality is at 0.43 in the capital share scare, 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 percent less wealth will be 70 percent more likely to experience replacement.[72] Or, for instance, countries with 28 percent 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 percent difference.

The results are strongly significant in substantive terms. To show this with more clarity, Figure 3b displays the survival curve for regimes with low wealth and high inequality versus all others.[73] 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 five years, one in five regimes have already been replaced – the survival rate drops to 80 percent. In seven years, the survival rate tumbles further to 75 percent, and within fifteen years regimes have reached toss-up levels, with only 54 percent probability of survival. Conversely, all other regime types take a full 20 years to drop to a survival rate of 75 percent, and never reach toss-up levels.

6. 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 equivalent of Figure 3a using the model without controls in the Appendix (Figure 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 obtain with these alternative specifications.

7. 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 fifteen 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.[74] 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.[75] 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 fifteen 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.[76]

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 un 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 percent annual growth on average between 1913 and 1928.[77] 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.[78]

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.[79] 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. 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.[80]

The rise of Trujillo after direct American intervention (1914-24) and Vasquez's relatively peaceful tenure (1924-30) 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 need 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.[81] 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.[82] 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 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 one year – a presidency that was symbolic at most.[83]

A potential explanation for Trujillo's abnormal longevity in the Dominican context is that he

was a better 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 ten 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.[84] 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.[85] His son Ramfis was the ostentatious sidekick to many a Hollywood star, and drove – and ruined – multiple Ferraris in Madrid, Paris, and the United States. 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.

8. 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[86] and the economic relationship between the leader and the elite that supports him.[87]

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.[88] 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.[89]

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.[90] 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.[91] 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.[92]

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.

Notes

[1]Geddes, Wright and Frantz (GWF) 2014.

[2]Wright and Bak 2016.

[3]Acemoglu and Robinson 2001, 2006; Ansell and Samuels 2014; Boix 2003; O'Donnell and Schmitter 1986; Przeworski et al. 2000.

[4]Brownlee 2007; Gandhi 2008; Slater 2010; Wright and Escribà-Folch 2012.

[5]Svolik 2009, 2012.

[6]Little 2017.

[7]Singh 2014.

[8]Bulmer-Thomas 2003, Hall 2000.

[9]Acemoglu and Robinson 2006; Ansell and Samuels 2014; Boix 2003.

[10]Houle 2016; Przeworski 2005.

[11]Piketty 2014; Saez and Zucman 2016.

[12]I use these two concepts, wealth and capital, interchangeably.

[13]Later I discuss how, at high levels of wealth, elites no longer seek to control the state, since their incentives shift from seeking new income to securing the wealth they already own through guarantees on property rights.

[14]Bonilla 1984.

[15]In 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.

[16]See GWF 2014; Wright and Bak 2016.

[17]GWF 2014.

[18]Boix, Miller and Rosato 2013. An updated version of the dataset to 2015 is available at Harvard Dataverse.

[19]Geddes 1999; O'Donnell and Schmitter 1986; Przeworski 1991.

[20]Acemoglu and Robinson 2006; Boix 2003.

[21]Albertus and Menaldo 2012.

[22]Wright and Bak 2016.

[23]Ibid.

[24]Magaloni 2006.

[25]Acosta 2008.

[26]Ghura and Mercereau 2004.

[27]Turits 2003.

[28]Crassweller 1966.

[29]Hall 2000.

[30]Ghura and Mercereau 2004.

[31]Gandhi 2008.

[32]Evans 1995.

[33]Karl 1997.

[34]Cotler 1979.

[35]Slater and Wong 2013.

[36]Albertus and Menaldo 2014; Albertus 2015.

[37]Slater 2010; see also Magaloni 2006.

[38]Acemoglu and Robinson 2000, 2001, 2006; Boix 2003.

[39]see Piketty 2014.

[40]Following Piketty (2014, 72), I use the terms wealth and capital interchangeably.

[41]Acemoglu and Robinson, 2006; Ansell and Samuels 2010, 2014; Boix 2003; Haggard and Kaufman 2012, 2016. It is important to note that these works have indeed considered the importance of wealth, but have not precisely distinguished wealth from income and considered the implications that each may have, separately, on political transitions. Boix did so more explicitly by separating the effects of income income inequality and asset specificity, arguing that elites with fixed assets will be less likely to accept a move to democracy. However, within the concept of income inequality, he still included both wealth and income. Other dynamics between wealth, income and regime transitions, such as the ones I identify in this paper, remained unexplored.

[42]Piketty 2014.

[43]Albertus 2015; Ansell and Samuels 2010, 2014.

[44]I 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.

[45]Piketty 2014.

[46]Karl 1997; see Ross 2001; Smith 2008.

[47]Wright and Bak 2016.

[48]Bonilla 1984.

[49]Wright and Bak 2016.

[50]Gehlbach and Keefer 2011; Wright 2008.

[51]Przeworski and Limongi 1993.

[52]Przeworski 2005.

[53]Ibid, 265.

[54]Metzger and Jones 2016; Putter et al. 2007.

[55]See Box-Steffensmeier and Jones 2004.

[56]Metzger and Jones 2016.

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

[58]Przeworski et al. 2000; Boix 2003; Houle 2009.

[59]Boix 2003; Ansell and Samuels 2010, among others.

[60]The 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.

[61]Cheibub, Gandhi, Vreeland 2010; GWF 2014.

[62]The dataset can be found at https://stat.unido.org.

[63]The economic elite is broadly defined as top centile of an economy.

[64]Data accessed on April 2018. It can be found at: https://data.worldbank.org/indicator/NE.GDI.FTOT.CD

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

[66]Consider a country that creates 100, 110, 120, and 130 units of wealth in four years. The sum will be: 100, 210, 330, and 460 units. Growth from the first period to the second is 110 percent; from the second to the third, 55%; and from the third to the fourth, 35%. After a few years, growth is linear on average both in our data and in the WID measure. I refer to the WID measure sometimes as Piketty's variable for reference.

[67]I chose the fifth value as growth becomes linear in the data on average after the fifth value of wealth.

[68]Our 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.

[69]These are the US, Canada, China, Russia, the United Kingdom, 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.

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

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

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

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

[74]Boix 2003; from Vanhanen 1997.

[75]Turits 2003.

[76]Ibid.

[77]Bulmer-Thomas 2003.

[78]Turits 2003.

[79]Hall 2000.

[80]Bonilla 1984; Cotler 1979.

[81]Turits 2003.

[82]Crassweller 1966.

[83]Turits 2003.

[84]Crassweller 1966.

[85]Crassweller 1966; Turits 2003.

[86]Wright and Bak 2016.

[87]Albertus and Menaldo 2012.

[88]Metzger and Jones 2016; Putter et al. 2007.

[89]Piketty 2014.

[90]Przeworski et al. 2000; Boix 2003; Acemoglu and Robinson 2006; Houle 2009; Ansell and Samuels 2010, 2014; Haggard and Kaufman 2012, 2016.

[91]Acemoglu and Robinson 2006; Boix 2003.

[92]O'Donnell and Schmitter 1986; Przeworski 1991.