

Institutional determinants of democratic survival*

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Abstract

How institutions influence the survival of democracies? In this paper, I consider a model of democracy that incorporates institutional features in the classical income redistribution models. The article starts with a moderator analysis that shows a strong influence of institutions on the income-democracy relationship. In the theoretical model I consider three components that moderate the distribution tensions: first, redistributive inefficiencies, such as leakage in taxation, income misreporting, corruption, or dead-weight losses. Second, the possibility of electoral manipulation, such as frauds, political violence, party bans, and legal restrictions to political participation. Lastly, binding judicial limitations on the redistributive capability, such as the existence of an independent judiciary that oversees the government decisions. I show that inefficiencies and electoral manipulation increase the chances of a democratic breakdown while some levels of institutional checks and balances may be beneficial for democratic survival. This paper has implications for understanding the recent democratic backsliding in developing democracies around the world.

Keywords: Democratic survival; autocracy; efficiency; redistribution; party politics

1 Introduction

Commitment with income redistribution and service provision are determinant factors for the decision to extend the franchise (Acemoglu and Robinson 2000; Lizzeri and Persico 2004; Acemoglu and Robinson 2006, 2013). Democracies are considerably more efficient in fight poverty (Acemoglu et al. 2013), promote economic growth (Acemoglu et al. 2014) and optimal allocation of talents (Acemoglu 1995), provide public goods for voters (Bueno de Mesquita et al. 2002), and above some minimum democratic cutoff, ensure that basic human rights are met (Bueno de Mesquita et al. 2005). These decisions are usually undertaken by

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redistributing a fraction of the income, in situations where parties dispute with each other the control of the government, the amount, and form of the redistribution.

However, democracy is presently at its lowest esteem since the beginning of the third wave of democratization in 1975, despite all these qualities. Recent events in Latin America [Thaler \(2017\)](#) and in Eastern Europe ([Przybylski 2018](#); [Krekó and Enyedi 2018](#)), coupled with the election of populist authoritarian leaders in Western Democracies, raised concerns regarding a backsliding in democracies around the world ([Bermeo 2016](#); [Foa and Mounk 2017](#); [Mechkova et al. 2017](#)). This puts a puzzle to the democratic stability theory: why are we witnessing this backsliding when per capita income, which is the strongest predictor of democratic success, is rising steadily? ([Przeworski et al. 2000](#); [Przeworski 2005](#))

In this paper, I show that we can enhance the classical theory of survival by adding a few institutional features that moderate the impact of per capita income on democratic survival. First, I run a linear model on a panel of 107 countries from 1975 to 2015 showing that government inefficiencies, party bans, and the existence of constitutional courts and judiciary independence considerably moderates the extent through which capita income predicts democracy. In most of the empirical models, the correlation between per capita income and democracy becomes equal to zero, suggesting a strong moderation effect of these selected institutional features.¹ Then, I propose a model that extends the classical [Przeworski \(2005\)](#) formulation to add these three estimated features. Consistently with the empirical assessment, I show that increasing inefficiency and manipulating electoral chances decrease the democratic survival and having an independent judiciary, that can contain the executive capacity to implement her preferred policies, increase the chances of democratic survival.²

The results of this paper contribute to three strands of the literature. First, I contribute

¹A moderator effect is a variable that at certain levels change the effect of a given relationship. For instance, suppose the following hypothetical relationship between three variables: $Democracy = Income + Inefficiency - 2Income \times Inefficiency$. Then, the impact of $Income$ on $Democracy$ is $\frac{\partial Democracy}{\partial Income} = 1 - 2Inefficiency$. Therefore, when $Inefficiency = 0$, $Income$ has a positive impact on democracy. However, $Inefficiency = 1$, $Income$ has a negative impact on $Democracy$.

²There are many other political institutions that can be explored in this paper. I selected these three because first, they intuitively correlate with the income and redistribution levels; second because there are good measurements instruments available for empirical analysis. In the modeling stage, I show that these features can be easily incorporated and taken into account without the necessity of a complex modeling strategy.

with the literature on the income determinants of the democratic survival (Lipset 1959; Przeworski et al. 2000; Acemoglu et al. 2001; Lizzeri and Persico 2004; Acemoglu and Robinson 2006, 2013; Boix 2015). This paper is one of the few that incorporates institutional features with income and redistribution (Alemán and Yang 2011). Second, this paper contributes to the recent literature on democratic backsliding (Bermeo 2016; Foa and Mounk 2017; Mechkova et al. 2017; Norris 2017; Thaler 2017; Przybylski 2018; Krekó and Enyedi 2018). The results here support a less extreme view, such as the proposed by Mechkova et al. (2017); Norris (2017) in which the democratic backsliding is present in countries that already presented considerable low levels of democracy. Finally, this paper contributes to the literature on institutional correlates of democratic survival (Acemoglu and Robinson 2000; Acemoglu et al. 2001; Alemán and Yang 2011) by providing a micro-foundation account for when democratic institutions are influenced by income vis-a-vis institutions. This paper brings back to center the institutional effects that are often neglect, without overlook the key classical income-democracy mechanism.

This paper is structured as follows. Section 2 discusses how institutions may influence the democratic survival, and present some correlates of the moderation effect exerted by institutions on the income-democracy relationship. Section 3 presents the main model, solving for the equilibrium. Section 4 introduces the institutional features that moderate the relation between income democracy studied here: government inefficiencies, electoral equilibrium, and institutional checks and balances. The last section concludes the paper, discussing current democratic backsliding on the light of the institutional moderation features discussed in this paper.³

2 The correlates of democratic survival

Income and regime survival are strongly correlated (Przeworski et al. 2000). Since Lipset (1959), scholars showed that democracy and welfare are linked, and the most comprehensive study so far showed that beyond the US\$ 6,057.00 threshold of per capita income, we are yet

³The paper is also comprised of an online companion where I derive the proofs in greater detail and present the robustness checks for the empirical models.

to observe transitions from democracy to autocracy (Przeworski et al. 2000).

As in a democracy the median voter sets the redistribution levels, and as the median voter is usually either poor or middle class, democratic societies tend to present considerable redistributive tensions. For instance, Przeworski (2005) presents a model that formalizes the Przeworski et al. (2000) results, showing that poor democracies tend to be more sensitive to redistribution than richer ones.

However, since 1975 the average per capita income of democracies rose from US\$ 9,106.33 to US\$ 18,115.55 in 2014 and the poverty in democracies decreased sharply. This should have represented that democracies would be safer and become less affected by distributive tensions, but there is a consensus that the third wave of democratization, stated in 1975, has come to an end. Presently, the average Polity IV score of democracies around the world decreased from 7.53 to 7.37 since 2005. The recent events in the United States and Europe, in addition of authoritarian movements in the Eastern Europe and Latin America, makes authors such as Ferguson (2014) and Levitsky and Ziblatt (2018) to consider that we may be experiencing a shrinkage of democracy worldwide. This presents in a puzzle for the comparative democratic theory: why are countries becoming less democratic (or at least not increasing their democracy levels), when all conditions that make them prone to a healthier democracy are being met?

In order to solve this puzzle, I propose that the classic theories of democratic survival, such as Przeworski (2005), need to consider a few institutional moderators. In this paper I propose a simple refinement on the current theories, considering a few institutions that potentiate the effects of income on democratic survival.

To empirically access these moderators, I estimated the correlates of democracy, for a panel of 107 countries from 1975 to 2015. Figure 1 show the estimates for three different democracy classifications and six different institutional features.⁴

⁴I estimate a panel linear model with the following specification:

$$Dem_{it} = \beta_1 PcInc_{it-1} + \beta_2 Inst_{it-1} + \beta_3 PcInc_{it-1} \times Inst_{it-1} + f_i + f_t + \varepsilon_{it}$$

Where Dem_{it} indicates democracy, $PcInc_{it-1}$ indicates per capita income, $Inst_{it-1}$ indicates the institutional arrangement, f_i and f_t captures the fixed effects of country and time, respectively. I lagged all the variables but the fixed effects for country and year. In the Figure 1 I plot the coefficient variation (equivalent to the partial derivative on per capita income), showing how the institutional features change the effect of per capita income on democracy. The full specification, using Panel Corrected Standard Error, follows in the Appendix. Also in

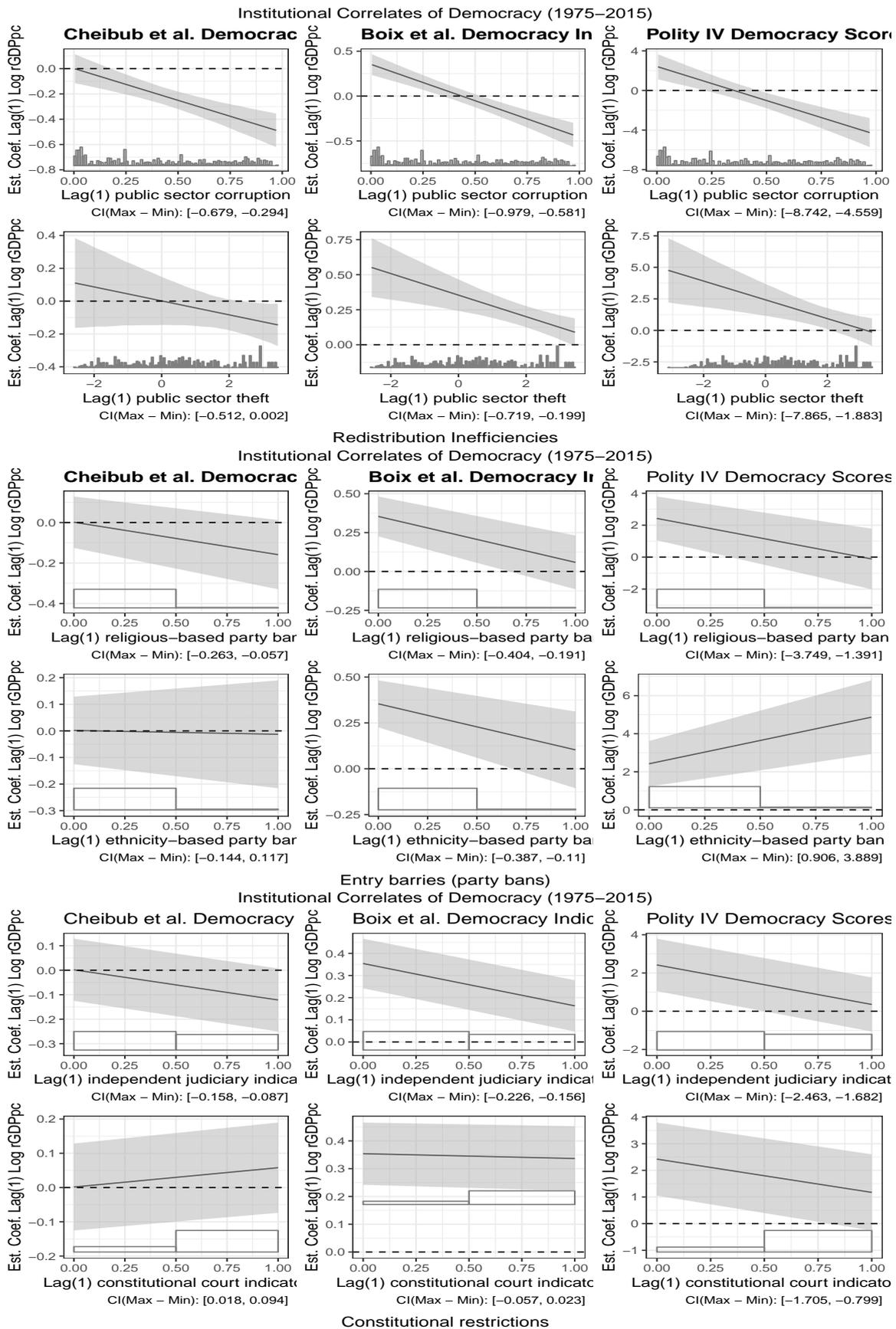


Figure 1: Interaction plot for institutional features moderators of per capita income

the Appendix, I compute several robustness tests, such as running a Cox proportional-hazard survival model using as the state variable the democracy binary indicators, I also run a logit and probit models for the binary outcomes, and robustness checks to specification and to sample characteristics. All results in the Appendix concur with the findings here.

The columns represent the three different democracy indicators: the [Cheibub et al. \(2010\)](#) binary democracy indicator in the left, the [Boix et al. \(2013\)](#) binary democracy indicator in the center, and the [Marshall and Jaggers \(2002\)](#) polity IV score in the right. The rows indicate six different institutional features analyzed: the first two study the bureaucratic efficiency using the indicators proposed by [Coppedge et al. \(2017\)](#), the center two studies religiously and ethnically motivated party bans measured by [Wig et al. \(2015\)](#), the last two studies judicial independence using the variables [Henisz \(2004\)](#) and [Wig et al. \(2015\)](#).

As the Figure shows, increasing the bureaucratic inefficiency decreases significantly the influence of income on democracy. This because a country with a very inefficient bureaucracy is not capable to implement a given redistribution and this makes loser parties more prone to rebel against the system. On the other hand, religiously and ethnically motivated party bans decrease the influence of income, as it alters the expected values that parties attach to keep the rules of the game.⁵ Finally, the last two rows show that for most models having independent judiciary reduces the influence of income.

Therefore, the correlates suggest a strong moderation effect of institutions on the relationship between income and democracy. The next sections develop the theoretical foundations for these correlates, showing that the redistribution tensions are heavily mediated by institutions that alter their effectiveness in equilibrium.

3 Model

This paper starts with a model of democracy, building upon the formulations presented by [Przeworski \(2005\)](#). Consider a society with a continuum of individuals, divided into three groups: rich (R), middle-class (M) and poor (P). Each group's proportion is given by $\pi_i < 0.5$. The median voter belongs to the middle-class, which means that $\pi_P + \pi_M \geq 0.5$.

The society has two parties: a left-wing party (L) that represents the poor, and a right-wing party (R) representing the rich.⁶ Each party member has an utility function that takes

⁵However, notice that the democracy score for ethnic party ban increases. This could represent that sometimes party ban can improve democracy, especially if the party banned is against the system.

⁶I use a bipartisan system as it produces the highest amount of disagreement possible, with no possibility of consensual democracy. A multi-party system would in most cases have a similar effect, but with an extra

values from a proposed redistribution level, $\tau \in [0, 1]$, to the real line $U_j : [0, 1] \rightarrow \mathbb{R}$. For simplicity, I assume that U_j is continuous and differentiable, with U_L strictly increasing in τ , and U_R strictly decreasing in τ . This represents that leftist partisans prefer more redistribution while right-wing partisans prefer less redistribution.⁷

There are two political regimes: $S_P = \{D, A\}$, where D stands for democracy and A for autocracy.⁸ A democracy is characterized by regular elections where parties offer redistribution platforms and voters select their preferred alternative. In a democracy, each party at the election proposes the median voter's preferred redistribution, and the median voter decides randomly. Then, upon observing the electoral result, the loser party can either accept the result or start a rebellion. If the loser party chooses to accept the electoral outcome, the winner party implements her preferred redistribution. However, if the losing party refuses to accept the electoral results, democracy fails: a civil war unfolds and the party that wins the contest becomes the autocratic ruler. In the Autocracy, the ruler imposes her preferred redistribution, regardless of the opposition's preferences.⁹

As the *Autocracy* is an absorbing state, the ruling party will impose its preferred redistribution forever. In an Autocracy ruled by party $j \in \{L, R\}$, this party has a value of:

$$V_j(A) = \sum_{t=0}^{\infty} \beta^t U_j(\tau)$$

Where $\beta \in (0, 1)$ is the discounting factor (time preference), and τ , in an Autocracy, is either 0 or 1, depending on the ruler be the rightist or the leftist party, respectively. Considering p as the probability of the right winning a military contest against the left. The value of autocracy for a party j is:

step of aggregating the results into two groups: government and opposition. This would abstract us away from the main aspects of the strategic interaction, complicating the model, without adding many insights for our results.

⁷Therefore, $U_R(1) < U_R(0)$ while $U_L(0) < U_L(1)$.

⁸Empirically there are many types of regimes, meaning that they are mostly a continuum from perfect democracies to totalitarian autocracies (Geddes et al. 2014; Coppedge et al. 2017). However, consider this richness would not add much to our results in terms of qualitative insights.

⁹I model autocracy as an absorbing state in this model. This means that once an autocracy, a country cannot transit back to democracy. The assumption is helpful because having the possibility to switch back to democracy would make the model considerably complicated without adding much insight to the results find here. For a model closer to mine but with the possibility of going back and forth from democracy to autocracy, see ?.

$$V_j(A) = p \sum_{t=0}^{\infty} \beta^t U_j(0) + (1-p) \sum_{t=0}^{\infty} \beta^t U_j(1) = \left(\frac{1}{1-\beta} \right) (pU_j(0) + (1-p)U_j(1))$$

Note that I characterize autocracy as a continuous redistribution effort over time. This may sound debatable, but captures the idea that income is produced by talent, or other ingrained features, and one-shot redistribution does not end the redistribution tensions. Moreover, if features such as racial and religious discrimination motivate the income inequality, one-shot redistribution may ease but will not solve the problem.¹⁰

In the case of a democracy, let us consider the following timeline:

1. Both parties choose τ^M , which is the redistribution that maximizes the utility of the middle-class, $\arg \max_{\tau} U_M(\tau)$.
2. The election takes place and the winner is announced.
3. The loser observes the redistribution carried out and can *accept* the results and go to the next round, or she can *rebel*, and once the rebellion takes place there is some probability of winning and imposing the most preferred redistribution, without caring about any other party.

The left and the right wing parties have the following continuation values, depending on which party wins the election:

¹⁰A model to capture this should consider the income as some random variable $Inc_t = \theta$ and $\theta \sim U[0, 1]$, and then the income is the remainder of the income after taxes. We could even add wealth, and then a one-shot large redistribution would have a considerable impact: $Inc_t = \theta + W_t$, where W_t represents the person's accumulated wealth at time t . Regardless of the formulation, the utility is monotone on taxes for both the rich and the poor. This is the simpler formulation needed to generate the results, with the advantage of still carrying the essential characteristics of my modeling strategy. In the Appendix, I consider a model that imposes redistribution costs and asymmetric redistribution implementation. The results are consistent with the model presented here.

$$\begin{aligned}
V_R^R(D) &= U_R(\underline{\tau}) + \beta [\gamma V_R^L(D) + (1 - \gamma)V_R^R(D)] \\
V_R^L(D) &= U_R(\bar{\tau}) + \beta [\gamma V_R^L(D) + (1 - \gamma)V_R^R(D)] \\
V_L^L(D) &= U_L(\bar{\tau}) + \beta [\gamma V_L^L(D) + (1 - \gamma)V_L^R(D)] \\
V_L^R(D) &= U_L(\underline{\tau}) + \beta [\gamma V_L^L(D) + (1 - \gamma)V_L^R(D)]
\end{aligned}$$

Where the subscripts represent the party and the superscripts represent the electoral winner. $\gamma \in [0, 1]$ denotes the chance that the left wing party wins the elections.¹¹ Solving the game for stationary subgame perfect equilibrium makes evident the most important values are the continuation values for the right when the left wins (V_R^L) and the continuation values of the left when right wins (V_L^R). In order to democracy endures it is necessary that both parties prefer to accept the elections instead of the rebel. This occurs for the right when:

$$U_R(\bar{\tau}) + V_R(D) \geq V(A)$$

And for the left when:

$$U_L(\underline{\tau}) + V_L(D) \geq V(A)$$

Rewriting these equations yields to:

$$V_R^L(D) - V_R(A) = (1 - \beta(1 - \gamma))U_R(\bar{\tau}) + \beta(1 - \gamma)U_R(\underline{\tau}) - pU_R(0) - (1 - p)U_R(1) \geq 0 \quad (1)$$

$$V_L^R(D) - V_L(A) = (1 - \beta\gamma)U_L(\underline{\tau}) + \beta\gamma U_L(\bar{\tau}) - pU_L(0) - (1 - p)U_L(1) \geq 0 \quad (2)$$

Therefore, these inequalities will determine the redistribution limits that parties accept and still prefer to keep the democratic system. Equation 1 shows the highest redistribu-

¹¹As parties set their redistribution levels equal to τ^M , I assume that $\gamma = 0.5$ (Persson and Tabellini 2000).

tion that the left can implement and the right would accept ($\bar{\tau}$). Equation 2 presents the conversely: the smallest redistribution that would be accepted by the leftist party under democracy ($\underline{\tau}$). Note that democracy breaks up when the median voter preferred redistribution τ^M is either greater than the maximum redistribution accepted by the rightist party or lower than the minimum redistribution accepted by the leftist party. In this sense, any change that increases the distance between $\underline{\tau}$ and $\bar{\tau}$ strengthen the democracy by making the feasible redistribution set larger.¹²

In the Appendix, I prove the existence of these two redistribution limits. The objective of this paper is not to derive the stable democracy subset, but to study how institutional features alter the two redistribution limits, impacting the democratic survival.

4 Institutional components of the democratic survival

In this section I consider three institutional features, similar to the ones studied in the empirical models. First, I study the effect of bureaucratic inefficiency on the democratic survival, showing that inefficient governments increase the chances of democratic failure, as redistributions are subject to corruption and malfeasance. Second, I study the party electoral chances showing that changing the party chances favoring one or another party may affect their likelihood of accepting democracy. This suggests that party bans can be harmful for democracy as they change the electoral equilibrium. Finally, I study the effects of restricting the feasible redistributions, either by limit the redistribution capacity, or by increase the judicial oversight, showing that limits on the feasible redistribution depend on how they impact the feasible redistribution region.¹³

4.1 Changing the government efficiency

Each and every redistribution imposes a cost upon the economy and these costs impact the feasible redistribution set (?). To illustrate the point, consider two democracies. In the first

¹²I assume a general functional form for the utility functions to make the results more general.

¹³Note that taking the derivative of $V_R(D)$ with respect to $\underline{\tau}$ and of $V_L(D)$ with respect to $\bar{\tau}$, it is straightforward to see that the value of democracy increases for both parties when we approximate their preferred redistributions ($\partial V_R(D)/\partial \underline{\tau} < 0$ and $\partial V_L(D)/\partial \bar{\tau} > 0$).

democracy, the government is efficient, and parties can implement their proposed redistribution, with a small level of corruption and waste. In the second democracy, the government is inefficient, and the proposed redistribution is largely wasted by high levels of corruption and wastefulness of public resources. Even if the per capita income is the same, the second democracy will have a lower survival chance in equilibrium, as there is a large distance between the proposed and the actually implemented redistribution levels.

Proposition 1 (Government inefficiency). *Let $c \in \mathbb{R}^+$ the parameter capturing the government inefficiency. An increase in government inefficiency (c) decreases the redistribution threshold accepted by the left-wing party and increases the redistribution threshold accepted by the right-wing party. This lowers the survival chances of the democracy.*

Proof. Let $U_j : [0, 1] \times \mathbb{R}^+ \rightarrow \mathbb{R}$ the utility function for the supporters of party $j \in \{L, R\}$ and assume that less inefficiency is better, as there is less waste of resources ($\partial U_j / \partial c < 0$). Starting with the right-wing party, taking the derivative of $\bar{\tau}$ with respect to c yields to:

$$(1 - \beta(1 - \gamma)) \left[\frac{\partial U_R}{\partial \bar{\tau}} \frac{\partial \bar{\tau}}{\partial c} + \frac{\partial U_R}{\partial c} \right] + \beta(1 - \gamma) \frac{\partial U_R}{\partial c} = 0$$

And rearranging:

$$\frac{\partial \bar{\tau}}{\partial c} = - \frac{\partial U_R / \partial c}{(1 - \beta(1 - \gamma)) \partial U_R / \partial \bar{\tau}}$$

As the $\partial U_R / \partial c < 0$ and $\partial U_R / \partial \bar{\tau} < 0$, then $\partial \bar{\tau} / \partial c < 0$, which means that we lower the upper limit of redistribution. Doing the same for the left-wing party limiting redistribution yields:

$$(1 - \beta\gamma) \left[\frac{\partial U_L}{\partial \underline{\tau}} \frac{\partial \underline{\tau}}{\partial c} + \frac{\partial U_L}{\partial c} \right] + \beta\gamma \frac{\partial U_L}{\partial c} = 0$$

Rearranging:

$$\frac{\partial \underline{\tau}}{\partial c} = - \frac{\partial U_L / \partial c}{(1 - \beta\gamma) \partial U_L / \partial \underline{\tau}}$$

And as $\partial U_L / \partial c < 0$ and $\partial U_L / \partial \underline{\tau} > 0$, then $\partial \underline{\tau} / \partial c > 0$. This means that a higher government inefficiency increases the minimum right wing redistribution accept by the left-wing party

(τ). Both results yield to a lower democratic survival chance. □

This result provides an important insight for the relation between redistribution and democracy: in countries plagued by bureaucratic inefficiency and corruption, democracy will suffer, as the redistribution required to please parties will always be partially wasted/pocketed by the bureaucracy. Left-wing (right-wing) parties will be discontents with right-wing (left-wing) redistributions, but the redistribution proposed will be higher (lower) than the redistribution received. This summarizes the idea of inefficiency, representing that some amount gets lost in the redistributive process.

4.2 Changing the electoral equilibrium

The median voter theorem states that in a bipartisan system, parties will take the same position and they will split votes in half. In this sense, the winner is decided randomly as a coin flip. However, in real-world elections, many features that can be manipulated in order to disbalance the electoral results. For instance, the electoral rules can restrict the eligibility of contestants, the campaign resources used by candidates, can ban parties or candidates from the election, restrict the number of terms in office, and so on. These changes will alter the electoral rewards for each party, making them less prone to accept the democratic rule when they are being impaired by it.

Proposition 2 (Changes in the electoral equilibrium). *Let γ be the chance that the left-wing party wins the election when proposing τ^M . Increasing the chance of winning the election unilaterally decreases the maximum redistribution accepted by the right-wing party and increases the minimum redistribution accepted by the left-wing party.*

Proof. Starting with the right-wing threshold, let us take the derivative of $\bar{\tau}$ with respect to γ in the Equation 1:

$$\beta U_R(\bar{\tau}) + (1 - \beta(1 - \gamma)) \dot{U}_R(\bar{\tau}) \frac{\partial \bar{\tau}}{\partial \gamma} - \beta U_R(\underline{\tau}) = 0$$

Rearranging:

$$\frac{\partial \bar{\tau}}{\partial \gamma} = \frac{\beta[U_R(\underline{\tau}) - U_R(\bar{\tau})]}{(1 - \beta(1 - \gamma))\dot{U}_R(\bar{\tau})}$$

As $\beta \in (0, 1)$, $\gamma \in (0, 1)$, $U_R(\underline{\tau}) - U_R(\bar{\tau}) > 0$ and $\dot{U}_R(\bar{\tau}) < 0$, $\partial \bar{\tau} / \partial \gamma < 0$, confirming that an increase in the left-wing party electoral chances decrease the maximum accepted redistribution. For the left-wing threshold, I compute the derivative of the Equation 2 with respect to $\underline{\tau}$:

$$-\beta U_L(\underline{\tau}) + (1 - \beta\gamma)\dot{U}_L(\underline{\tau})\frac{\partial \underline{\tau}}{\partial \gamma} + \beta U_L(\underline{\tau}) = 0$$

And rearranging:

$$\frac{\partial \underline{\tau}}{\partial \gamma} = \frac{\beta[U_L(\underline{\tau}) - U_L(\bar{\tau})]}{(1 - \beta\gamma)\dot{U}_L(\underline{\tau})}$$

As $\beta \in (0, 1)$, $\gamma \in (0, 1)$, $U_L(\underline{\tau}) - U_L(\bar{\tau}) < 0$ and $\dot{U}_L(\underline{\tau}) < 0$, then $\partial \underline{\tau} / \partial \gamma > 0$. Therefore, increasing the left-wing party chances result in higher minimum level accepted redistribution.

These two results together imply a lower chance of survival for the democracy. \square

It is hard to see how democracies could change the electoral chances of one party without altering the entire equilibrium, and then the other party respond. However, there are many instances where electoral rules influence the party chances: in Russia, the most credible opposition candidate Alexei Navalny has been banished from elections by questionable electoral court resolutions. In Brazil, the former president Da Silva was also convicted by a judicial trial that is also considered by many partisans as a mistrial. Moreover, in the Brazilian case, the Car Wash operation funded expensive campaigns giving a hedge for parties and candidates that would have been electoral underdogs otherwise (Mello and Spektor 2018).

4.3 Restricting the feasible redistribution set

Suppose that an institutional device restricts the amount of redistribution that parties may enact. For instance, a constitutional restriction may limit the amount of feasible redistri-

bution by imposing limits on taxation and on transfers, or even mandatory minimum expenditures with services such as education and healthcare. Also, the requirement of legislative approval of a budget works in practice like a redistribution restriction, especially in countries such as the United States, that for the most of the time is governed by divided executive-legislative governments.

What is the effect of restricted institutional redistribution on the democratic survival? Consider $Q = [\underline{\tau}, \bar{\tau}]$ the survival set for a given country. Then, there are five possible restrictions to the feasible government redistributions.

First, if the restricted set $X = [\underline{\tau}', \bar{\tau}']$ has property that $\bar{\tau}' < \underline{\tau}$, then the democracy cannot be sustained: the maximum redistribution that can be institutionally enacted is less than the minimum that the left-wing party accepts. As an example, this would represent that the law mandates a ceiling of 10% of redistribution but for less than 15% of the left-wing party rebels. In this situation, democracy fails.

Second, suppose that $\underline{\tau}' < \underline{\tau} < \bar{\tau}' < \bar{\tau}$. Then, the left-wing party can only propose redistributions up to $\bar{\tau}'$. This makes it easier for the right-wing party to accept the electoral results, without substantially change things for the left-wing party. This improves the democratic survival partially, as it increases the chances that the right-wing party accepts the electoral results, but unfortunately, it promotes an unfair advantage for the right-wing party.

Third, consider that $X \subset Q$. In this configuration, the democracy thrives, as both parties' redistributions are limited by the institutions to be within the survival thresholds. This means that the maximum (minimum) threshold acceptable by the right-wing (left-wing) party is lower (higher) than the rebellion threshold. Although one party or another can have a slight advantage, limiting the redistributions to X ensures that the opposition accepts the results and wait for the next electoral term.

Fourth, consider that $\underline{\tau} < \underline{\tau}' < \bar{\tau} < \bar{\tau}'$. Then the left-wing party will can at maximum set the redistribution at $\bar{\tau}$ while the right-wing can set the redistribution at only a minimum of $\underline{\tau}'$. In this case, democracy is more prone to survive but the right-wing party faces some disadvantages, as it cannot its preferred redistribution. The left-wing party otherwise is benefited as the minimum redistribution is higher than the minimum accepted redistribution for

the leftists.

Finally, consider again that $X \cap Q = \emptyset$, but $\bar{\tau} < \underline{\tau}'$. Again democracy is unfeasible as the maximum that could be redistributed is lower than the minimum necessary to dissuade parties from a rebellion.

Although the first and the last situation represent a democratic failure, the last three, and especially the third, can considerably improve the democratic survival. The modified thresholds can also work as a commitment device for the electorate: even when the median voter prefers a larger change, parties can only enact the amounts allowed by the institutional arrangements. This decreases the negative impacts of the distributive tensions, improving the democratic stability.

5 Conclusion

This paper presents a few results that help us to complement the relationship between income redistribution and democracy. Instead of an attempt to disprove this relationship, this paper builds upon the income-democracy relation, refining the institutional features that contribute to the democratic survival.

In this paper, I show that the relationship between democracy and per capita income is also influenced by the government efficiency, by the electoral equilibrium, and by the institutional restrictions on redistributive behavior, that is usually presented by the checks and balances institutions. In the empirical correlates, I show that there is a strong moderation effect of these three institutional features on the income redistribution. The model uncovers the mechanism, showing the micro-foundations for the moderation effect of institutions on the income-democracy relationship. This paper demonstrates that institutions provide a better picture of the income-democracy relation, helping us to understand why only considering the current income changes is not sufficient to understand why some democracies seem to be going backward, incorporating back some authoritarian traces (Ferguson 2014; Blauburger and Kelemen 2017; Krekó and Enyedi 2018; Levitsky and Ziblatt 2018; Przybylski 2018).

The main lesson from this paper is that backsliding can happen in wealthy and prosper democracies when there are government inefficiencies, electoral manipulation, or low judicial institutionalization. If we consider these features together, it is easy to understand the criticism provided by [Norris \(2017\)](#) on the democratic backsliding literature: countries that experienced a considerable backsliding were countries such as Brazil, Hungary, Poland, and Venezuela, with endemic corruption, low levels of judicial independence, and electoral malfeasances of all sorts.

For instance, consider the Brazil case. In 2016, the Brazilian president Rousseff was impeached after the judiciary finds hard evidence of a multi-billion dollar scheme involving her party and most of the governing coalition parties at the time ([Mello and Spektor 2018](#)). The country at the moment was going through a harsh economic crisis, but the main motivator of the massive population protests that took place in 2015 and 2016 was the corruption and inefficiencies related with the costs of governing a country that can only be successfully governed by questionable and inefficient government coalitions.

The countries that experienced a consistent backsliding were countries where the theoretical positive characteristics of a democracy met with the established inefficient institutions. Since most of these countries democratized, the presumption that democracy would generate a fair and just system coexisted with high levels of corruption, electoral frauds and manipulations, and weak judiciaries that reinforce the elite capturing of these democracies. As a result, even though countries such as Brazil, Hungary, Poland, and Russia secured gains in per capita income and poverty reduction, the institutions never fulfilled their democratic objectives. When there was a crisis, these countries were the first to backslide away from democratic and free institutions ([Mechkova et al. 2017](#)). This suggests that democracy promoting agencies should take seriously the institutional arrangements, guaranteeing that not only income redistribution is met, but also that institutions are fair and efficient.

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