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ABSTRACT

Voters often dismantle constitutional checks and balances on the executive. If such checks and balances limit presidential abuses of power and rents, why do voters support their removal? We argue that by reducing politician rents, checks and balances also make it cheaper to bribe or influence politicians through non-electoral means. In weakly-institutionalized polities where such non-electoral influences, particularly by the better organized elite, are a major concern, voters may prefer a political system without checks and balances as a way of insulating politicians from these influences. When they do so, they are effectively accepting a certain amount of politician (presidential) rents in return for redistribution. We show that checks and balances are less likely to emerge when the elite is better organized and is more likely to be able to influence or bribe politicians, and when inequality and potential taxes are high (which makes redistribution more valuable to the majority). We also provide case study evidence from Bolivia, Ecuador and Venezuela and econometric evidence on voter attitudes from a Latin American survey consistent with the model.

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1 Introduction

A central paradigm in political economy, introduced in Barro's and Ferejohn's seminal work, emphasizes the role of elections and constitutional checks in controlling elected politicians. According to this paradigm, politicians are the agents of citizens (voters) to whom various policy decisions have been delegated, and elections are used to ensure that politicians carry out the citizens' wishes, minimize their rents, and limit the policies that they pursue for their own self-interest or ideological agendas. It is also well recognized that elections by themselves may be insufficient to ensure effective control of politicians and citizens may wish to rely on other political institutions, such as various forms of checks and balances and separation of powers which further constrain the behavior of politicians and are complementary to elections. This view of politics and the role of constitutional checks was clearly articulated by James Madison in the Federalist Papers, where he wrote:

“In framing a government which is to be administered by men over men, the great difficulty lies in this: you must first enable the government to control the governed; and in the next place oblige it to control itself. A dependence on the people is, no doubt, the primary control on the government; but experience has taught mankind the necessity of auxiliary precautions.” (Federalist Papers, # 51, 1788).

Madison's 'auxiliary precautions' include the separation of powers between the executive and a bicameral legislature, indirect election of senators, and an electoral college for determining the president. A version of these ideas has been formalized by Persson, Roland and Tabellini (1997, 2000) who show how a set of political institutions which separates decision-making power over spending and taxation reduces the amount of rents that politicians can extract.

According to Madison and the formal literature building on his insights, voters should be in favor of such checks and balances. Yet, in several cases in Latin America, voters have willingly, sometimes enthusiastically, removed checks and balances designed to limit the ability of politicians (in particular presidents) to pursue their own policy agendas or capture rents.¹ For example, after his first election in 1998 President Hugo Chávez organized a constitutional assembly which re-wrote the constitution moving to a unicameral legislature, reallocating legislative powers to the president particularly in the economic and financial spheres. The new constitution was ratified by 72% of the people who voted in a plebiscite in December 1999. In 2000 President Chávez obtained the right to rule by decree for a year without having to get the approval of the legislature. In 2007 this power was renewed and extended to 18 months. It was renewed again in December 2010 for another 18 months. Most of these constitutions and decrees have been approved in referenda, in many cases with large majorities. Corrales and Penfold (2011, pp. 1-2) characterize the situation as one where “freedom exists and the opposition is allowed

¹See Carey, Neto and Shugart (1997) for an overview of different presidential powers in Latin America, and Carey and Shugart (1998) for a comparative perspective on presidential decree power.

to compete in elections, but the system of checks and balances becomes inoperative,” and this outcome has “occurred in the context of significant electoral support. Venezuela under Chávez has conducted plenty of elections ... and *chavista* forces have prevailed in all but one.”

On September 28, 2008, 64% of Ecuadorian voters enacted a new constitution also with unicameral legislature and increased the powers for president Rafael Correa, who took control of monetary policy back from the central bank and gained the power to suspend the legislature. He was also allowed to run for two more consecutive terms. On January 25, 2009, 61% of Bolivian voters approved a similar new constitution significantly increasing Evo Morales’s powers. Like Chávez and Correa before him, Morales also managed to remove the one-term limit on his presidency, which is commonly interpreted as a significant strengthening of presidential powers (see Carey, 2003).²

These recent constitutional changes strengthening presidential power followed on the coattails of similar changes throughout Latin America. The 1979 Constitutions of Ecuador and Peru, the 1988 Constitution of Brazil and the 1992 Constitution of Paraguay all gave presidents the ability to invoke urgency bills that must be voted on within a time limit, significantly increasing their legislative powers. A growing number of constitutions, including the 1988 Constitution of Brazil, the 1993 Constitution of Peru and the 1994 amendment to the Constitution of Argentina, all strengthened the powers of the executive to legislate by enacting decrees.

These salient events highlight two important points. Firstly, the extent of checks and balances in democratic political systems should be thought of as an equilibrium outcome rather than as a historically or exogenously given, immutable institutional characteristic. Secondly and more importantly, the most widely used paradigm for understanding checks and balances is, by itself, insufficient for thinking about why the majority of voters may wish to remove such checks, since it would suggest that the majority of the citizens should support maximal checks on presidents.

In this paper, we provide a simple theory of equilibrium checks and balances, highlighting why, under certain circumstances, voters may prefer less rather than more checks and balances. At the center of our theory is the following observation: in weakly-institutionalized polities, checks and balances, by reducing politician rents, make them “cheaper to buy” or easier to influence by an organized rich elite through bribing, lobbying or other non-electoral means.³ This makes checks and balances a double-edged sword: what makes them valuable to voters—limiting politician rents—also makes them potentially dangerous to the majority.

We consider a society consisting of rich and poor individuals. The poor form the majority and will be able to elect the president, and will also be decisive in a referendum on checks and balances. Politicians are self-interested, but also put some weight on the utility of citizens from their own group, so presidents from the poor group (or more generally from parties representing

²But unlike Chávez and Correa, Morales did not have sufficient power in the constitutional assembly to get everything that he wanted. His party, Movement Towards Socialism, did not have the 2/3 majority required to unilaterally determine constitutional provisions. He was thus unable to get many of the clauses he wanted, such as a unicameral legislature and perpetual presidential re-election.

³Alternative explanations for this pattern could be developed along the lines of the model in Aghion, Alesina and Trebbi (2004), which we discuss in detail below and explain why we prefer our explanation.

the poor) will not only use their power to capture rents, but will also redistribute income to the poor. In weakly-institutionalized polities, the rich elite, because it is better organized, wealthier or better connected, often has a greater role in politics than its sheer number would suggest. We model these general non-electoral influences by assuming that, with some probability, the elite is able to bribe or lobby politicians in order to induce policies that it prefers, and in particular, to reduce the extent of redistribution. A president not subject to checks and balances can obtain his “political bliss point” by both redistributing to the poor and also capturing rents for himself. This implies that the rich elite is relatively powerless against such a president. In contrast, under checks and balances, the president receives few rents, and the rich elite can more easily capture politics by lobbying or bribing the president. Consequently, when the likelihood that the rich elite will be able to bribe the politician is low, the majority of the voters prefer checks and balances as suggested by Madison and several previous political-economic analyses. In contrast, when the likelihood that the rich elite will be able to bribe the politician is high, poor voters are happy to put up with the rents that the politician will capture (or certain idiosyncratic policies that they wish to adopt, for example, as in the case of Hugo Chávez) in return for the guarantee that the politician will not be bought by the rich elite.

There are several natural comparative statics that result from this framework. Equilibrium checks and balances are more likely to emerge when the likelihood that the rich elite will be able to organize, solve their collective action problem and bribe politicians is low, and when the potential for taxation of incomes is limited (because when the potential for taxation is high, the extent of redistribution will be high unless the president is bribed). Using a simple extension of the model, we also show that equilibrium checks and balances are more likely to emerge when income inequality is low (because in this case the value of redistributive taxation to the poor majority is more limited).

To communicate the main ideas of the paper in the clearest possible fashion, we adopt a simple model of checks and balances as separation of powers whereby the president chooses the level of taxes and transfers, while the legislature can affect the allocation of rents (for example, between projects that the president or the legislature prefers). This modeling approach ensures that when there are checks and balances, the equilibrium level of rents is zero. Though extreme, this approach sharply captures the main impact of checks and balances—to reduce politician rents. We show in an online appendix that the main insights do not depend on this modeling approach by demonstrating that the same results hold under different assumptions on the form of separation of powers. In particular, we derive similar results using a model in which the extent of checks and balances is captured with the presence (and number) of veto players along the lines of Diermeier and Myerson (1999) and Tsebelis (2002). We also show that identical results apply when separation of powers is modeled as the separation of taxation and spending decisions (between the president and legislature, respectively) as in Persson, Roland and Tabellini (1997,

2000).⁴ We also show that our general results are robust to different forms of utility functions for politicians and study the role of legislative institutions that give greater voice to “political minorities” (e.g., including representatives of minority groups, here the elite, in the legislature).

We also present some evidence supporting the ideas we develop. First, we discuss the reasoning articulated by key players and the interpretation of experts in the dismantling the legislative checks on presidential power in Bolivia, Ecuador and Venezuela. In each case, there is a fair bit of evidence that the argument for these reforms was the excessive control that the ‘oligarchy’ exercised, particularly because of separation of powers or because of their control of the legislature (though, perhaps not surprisingly, the idea that checks and balances make presidents “cheaper to buy” does not explicitly appear in these presidents’ speeches). Second, we analyze survey data from 18 Latin American countries to provide some support for the notion that voters dismantle checks and balances when they are afraid that the rich elite will be able to use them to control politics. In particular, we focus on data for the year 2008 from the Latin American Public Opinion Project, which includes a question on support for the president closing the congress as well as information on income and questions on attitudes towards inequality and whether the individual views the elite (dominant class or oligarchy) as the biggest obstacle to progress. We identify countries where the elite is more likely to have captured the political system in one of three ways: as those where citizens view the elite as the major roadblock against progress in the survey, or as those where there have been referenda or other reforms to increase presidential powers (which, according to our theory, are exactly those that are so captured), or those where, according to commonly used measures, democracy is weaker, bureaucratic corruption is more rampant, there is greater political instability or oil is more important in the economy (as a source of rents encouraging such capture). We then report evidence suggesting that in more captured democracies individuals with lower incomes and with more pro-redistribution views are more likely to support the president closing down the congress compared to countries with stronger democracies. We interpret this evidence as broadly supportive of the mechanism proposed in this paper.

Our paper is related to several literatures. First, it is closely related to the literature on the separation of powers. In addition to Persson, Roland and Tabellini (1997, 2000), which we have already discussed, a large political science literature studies the implications of different democratic political institutions on policies and politicians rents (e.g., Lijphart, 1992, Shugart and Carey, 1992, Huber, 1996, Baron, 1998, Diermeier and Myerson, 1999, Tsebelis, 2002). Second, our paper is also related to other studies emphasizing the potential failure of electoral and institutional controls on politicians (e.g., Acemoglu, Robinson and Verdier, 2004, La Ferrara and Bates, 2001, Bueno de Mesquita et al., 2003, Padro-i-Miquel, 2007, Lizzeri and Persico, 2004,

⁴In practice, the interactions between the president and the legislature are more complex than these models allow. Even under the most extreme separation of powers, the president can obtain some policy concessions and rents, and he or she is far from powerless in influencing how tax revenues are spent, for example, by using the presidential veto power. Equally, the legislature is, more often than not, involved in tax decisions as much as in spending. We do not wish to argue that any of these models is the “right” approach to the separation of powers. Instead, our purpose is to show that our main results hold under different models of separation of powers.

Robinson and Verdier, 2012) and to models of elite capture of democratic politics, for example, Grossman and Helpman (2001), Acemoglu and Robinson (2008) and Acemoglu, Ticchi and Vindigni (2011).

Finally, a number of authors develop different but complementary ideas to our paper. Aghion and Bolton (2003) and Aghion, Alesina and Trebbi (2004) develop normative approaches with the implication that ex-post citizens may wish to delegate different amounts of powers to a politician depending on how aligned their interests are. There is no redistributive conflict or the possibility that a rich elite may bribe politicians away from the wishes of the majority. Thus the results and the underlying economic mechanism are very different, and we find the mechanism we propose both richer from a theoretical point of view but more importantly also more relevant for understanding Latin American politics where powerful leaders have recently played an important role. Acemoglu, Egorov and Sonin (2011) develop a model of populism based on the idea that in weakly-institutionalized democracies politicians may choose platforms to the left of the median voter as a way of signaling that they are not (secretly) to the right of the median or that they are not secretly corrupted by the elite. None of these papers develops a model of equilibrium checks and balances or notes the main intuition of our paper, that checks and balances make politicians cheaper to bribe or influence through non-electoral means.

The rest of the paper is organized as follows. In Section 2 we set up a simple model of checks and balances to present our main argument as transparently as possible. We also extend this simple model to allow for an independent judiciary. Section 3 provides case study evidence and econometric evidence from Latin American survey data to document a significant link between concerns about elite control of politics and willingness to increase presidential powers against other branches of government. In the online appendix we discuss a number of extensions, in particular modeling checks and balances with veto players, considering an alternative modeling of the separation of powers, allowing minority groups in the legislature who have disproportionate power, and alternative utility functions for the politicians. Although these extensions and changes introduce new and interesting effects, the basic intuition from the simple model in Section 2 still remains valid. Section 4 concludes.

2 Basic Model

In this section, we use a simple formalization of the workings of politics under “checks and balances” (or separation of powers) to communicate the basic ideas in our paper. We assume that the president is able to implement his favorite policies without checks and balances, while with checks and balances, some elements of his policy agenda can be modified by the legislature.

2.1 Demographics and Preferences

We consider a static economy populated by a continuum of agents, with measure normalized to 1. A proportion $1 - \delta > 1/2$ of the population are “poor” with pre-tax income $y^p > 0$, while

the remaining δ are “rich” and have pre-tax income $y^r > y^p$. Throughout we use superscript $i \in \{p, r\}$ to denote whether an individual is from the poor or the rich income group. The utility of individual j is given by

$$U^j = c^j, \quad (1)$$

where $c^j \geq 0$ denotes her consumption. With a slight abuse of notation, we use U^j to denote the utility of individual j and U^i , for $i \in \{p, r\}$, to represent the utility of a typical poor or rich agent (in equilibrium agents within an income group will all have the same utility).

For future reference, we define average income in the society as

$$\bar{y} \equiv (1 - \delta)y^p + \delta y^r,$$

and we also define $\theta \in (0, 1)$ as the share of total income accruing to rich agents, i.e.,

$$y^r \equiv \frac{\theta}{\delta}\bar{y},$$

and naturally $y^p \equiv (1 - \theta)\bar{y}/(1 - \delta)$. This formulation implies that θ is a measure of inequality in the society: greater θ corresponds to greater inequality.

2.2 Policies, Politicians and the Constitution

The government, consisting of the president and the legislature, will determine taxes and transfers. We assume that the only tax instrument is a proportional tax rate denoted by $\tau \in [0, 1]$, and tax revenues can be redistributed to the poor as a lumpsum transfer denoted by $T^p \geq 0$, and to the rich using the lumpsum transfer $T^r \geq 0$.⁵ In addition, tax revenues also finance rents for politicians. We assume that there is a maximum tax rate $\bar{\tau} < 1$, so that $\tau \in [0, \bar{\tau}]$. This may result from the ability of each individual to hide their incomes if taxes are too high.⁶ Thus there is a political conflict between the rich and the poor on how much income redistribution there should be, although the interpretation of our mechanisms may also include political conflicts other than those based on differences in income.

We denote the president by P . We also simplify the analysis by assuming that the legislature consists of a single agent, and we denote the legislator by L .⁷ With this notation, we denote the rents captured by the president by $R^P \geq 0$, and the rents captured by the legislator by $R^L \geq 0$. The government budget constraint then requires total spending, on transfers and the rents to politicians, to be less than total tax revenues, given by $\tau\bar{y}$, i.e.,

$$(1 - \delta)T^p + \delta T^r + R^L + R^P \leq \tau\bar{y}. \quad (2)$$

Given this specification, policy can be represented by a vector $\{\tau, T^p, T^r, R^L, R^P\}$ (such that (2) holds and all elements of this vector are nonnegative, which is presumed throughout the rest of the analysis without stating this explicitly).

⁵ T^p and T^r can alternatively be interpreted as group-specific public goods.

⁶For example, we could suppose that each individual could hide their entire income in the informal sector and receive $(1 - \bar{\tau})y^j$. This specification implies that taxes greater than $\bar{\tau}$ would never be set.

⁷The case of multi-member legislature is discussed in the online appendix.

The exact policy-making procedure depends on the constitution, which takes one of two forms:

1. The constitution may specify *checks and balances*, denoted by $\gamma = 1$, in which case the president and the legislator will jointly set policies. In particular, in this section we assume that the president announces a policy vector with tax rate, transfers and rents, $\{\tau, T^p, T^r, R^L, R^P\}$ and the legislator can only change the allocation of rents $\{R^L, R^P\}$ (i.e., he is unable to change τ, T^p and T^r).⁸
2. The constitution may specify *no checks and balances*, $\gamma = 0$, in which case all decision-making power is vested in the president. The president then determines the entire policy vector $\{\tau, T^p, T^r, R^L, R^P\}$.

Observe that under both types of constitutions, policies are decided by politicians. This implies, in particular, that there is no commitment to policies at the time of elections or any time before implementation of the policies. We assume that citizens in this society first vote in a referendum over the formal constitution, in particular on whether it should include checks and balances, and then vote in the election of the president and the legislator. We describe the timing of events in greater detail below.

Politicians belong to one of the two income groups, and they care about the utility of their income group and about their own rents and bribes. We view the feature that politicians care about their social group's income as both a realistic assumption (in particular, given that politicians from a specific social group will often have their and their families' economic fortunes tied to the rest of the group) and also a reduced-form way of capturing the impact of the party of the politician, his ideology or his concern about his longer-term political career on his behavior. More specifically, a politician j from income group $i \in \{p, r\}$ has utility given by

$$V^{j,i} = \alpha v(R^j + b^j) + (1 - \alpha) U^i, \quad (3)$$

where $\alpha \in (0, 1)$, $b^j \geq 0$ denotes the bribes for politician j , and v is a strictly increasing, strictly concave and continuously differentiable function describing the utility for politicians from rents and bribes. We also assume that this function satisfies the *Inada-type conditions*: $\lim_{R+b \rightarrow 0} v'(R+b) = \infty$ and $\lim_{R+b \rightarrow \bar{y}} v'(R+b) = 0$, and we normalize $v(0) = 0$. The convenient feature implied by (3) is that because the utility function of the politicians is quasi-linear in U^i , the amount of rents a politician will choose is independent of the level of utility of his group.⁹ In what follows, we use $V^{l,i}$ to denote the utility of a politician of income group $i \in \{p, r\}$ holding office $l \in \{L, P\}$.

⁸In the online appendix, we extend the model by following Persson, Roland and Tabellini (2000), in assuming that under checks and balances the president decides the tax rate while the legislature decides the spending vector.

⁹The important feature for our results is that the politician should choose an intermediate level of rents for himself and that when they are lower, he should be more willing to sacrifice the utility of his constituency for increasing these rents. Quasi-linear preferences yield this feature in a simple way. Below and also in the online appendix, we show that the same results can be obtained without quasi-linearity. Note also that if the politicians only cared about rents (i.e., $\alpha = 1$), then, as will be clear below, the poor would never want to remove checks

We also assume that for both the office of the presidency and the legislature, there are two candidates, each randomly elected from one of the income groups. Thus there will be one rich and one poor candidate for presidency, and one rich and one poor candidate for the legislature. This assumption simply ensures that voting is over two candidates. None of our results are affected if there are more than two candidates and voting takes place with transferable votes. Moreover, we assume that the quality of politicians is exogenous.¹⁰

Since $1 - \delta > 1/2$, the poor form the majority and have an electoral advantage. To counteract this, we assume that the rich are better organized and are sometimes able to exert additional influence by bribing (or lobbying) politicians. This is possible when the rich are able to solve their collective action problem and can organize to bribe politicians. How this collective action problem is solved is not essential for our analysis, and we assume that they are able to do so with probability $q \in [0, 1]$. When the rich are able to solve their collective action problem, we denote this by $\kappa = 1$, with $\kappa = 0$ denoting the converse.

When the rich are able to do so, they can pay a bribe $b^P \geq 0$ to the president and/or $b^L \geq 0$ to the legislature. We follow the lobbying literature, for example, Grossman and Helpman (1994), by assuming that bribes are paid conditional on the delivery of a certain policy. Thus a bribe offer to politician j is a vector $\{\hat{b}^j, \hat{\tau}, \hat{T}^p, \hat{T}^r, \hat{R}^L, \hat{R}^P\}$ such that if the politician implements $\{\hat{\tau}, \hat{T}^p, \hat{T}^r, \hat{R}^L, \hat{R}^P\}$, he receives \hat{b}^j , and zero otherwise. In fact, in what follows we can, without loss of any generality, restrict the bribe offers to depend only on the policy components that the politician in question directly controls, and thus under no checks and balances, we simply focus on $\{\hat{b}^P, \hat{\tau}, \hat{T}^p, \hat{T}^r, \hat{R}^L, \hat{R}^P\}$ as the bribe offer for the president, and under checks and balances, we can focus on $\{\hat{b}^P, \hat{\tau}, \hat{T}^p, \hat{T}^r\}$ for the president and $\{\hat{b}^L, \hat{R}^L, \hat{R}^P\}$ for the legislator.

If the rich pay a total bribe of $B = b^L + b^P$, each rich agent contributes equally, i.e., an amount B/δ . Consequently, given a policy vector $\{\tau, T^p, T^r, R^L, R^P\}$, the utilities of poor and rich agents can be written as

$$U^P = (1 - \tau)y^p + T^p, \quad (4)$$

and

$$U^r = (1 - \tau)y^r + T^r - \frac{b^L + b^P}{\delta}. \quad (5)$$

2.3 Timing of Events and Equilibrium Concept

To summarize, the timing of events is as follows.

1. There is a referendum on whether the constitution should include checks and balances,

and balances. If politicians did not care about rents (i.e., $\alpha = 0$), then the equilibrium would be the same with or without checks and balances. Finally, if utility were linear in its arguments, then either a politician would use all revenues as transfers or use all revenues as rents; in either case there would not be a tradeoff in the model.

¹⁰As pointed out by Caselli and Morelli (2004), allowing politicians higher utility may result in a higher quality of agents selected into politics. Such selection effects would provide another reason for the voters to prefer the removal of checks and balances, this time to increase the utility of the president and improve the quality of politicians.

i.e., there is a vote between $\gamma = 0$ and $\gamma = 1$. Whichever constitution receives an absolute majority is implemented.

2. Elections are held simultaneously for the office of the president and for the legislature. Whichever candidate receives an absolute majority in each post is elected.
3. All uncertainty is revealed. In particular, it becomes common knowledge whether the rich will be able to solve their collective action problem.
4. If the rich are able to solve their collective action problem, then they make bribe offers to the president and the legislator.
5. If the constitution does not include checks and balances, then the president decides the entire policy vector $\{\tau, T^p, T^r, R^L, R^P\}$.

If the constitution includes checks and balances, then the president proposes a policy vector $\{\tau, T^p, T^r, R^L, R^P\}$. After observing this policy vector, the legislator decides whether to change the allocation of rents $\{R^L, R^P\}$.

6. Policies are implemented, bribes are paid, and all payoffs are realized.

A strategy for poor agents simply determines their votes in the referendum and in the election for the presidency and the legislature. A strategy for rich agents determines their votes in the referendum and for the presidency and the legislature, and given the realization of uncertainty about the collective action problem, it also determines their bribe offers. A strategy for a politician determines policies as a function of the bribe offer of the rich lobby. A subgame perfect equilibrium (SPE) is defined, as usual, as a strategy profile in which all actions are best responses to other strategies in all histories. Since individuals take part in (multiple rounds of) voting, the set of SPE includes unreasonable equilibria in which all individuals use weakly dominated strategies (voting in favor of politicians that give them strictly lower utility because everybody else is doing so). We therefore focus on SPE in undominated strategies, and we refer to these simply as *equilibrium* throughout.¹¹

We next characterize the equilibria of the economy described so far by backward induction. We start with a given constitution, a given election outcome, and given types of politicians. We then characterize policy choices for different bribe offers (if any) from the rich lobby. After this characterization, we go to the earlier stages of the game, where we determine voting over politicians and voting in the referendum between constitutions with and without checks and balances. A full characterization of equilibrium would specify policies for any combination of

¹¹A further technical detail is that because voting is dynamic (first in the referendum and then for politicians), a slightly stronger notion than elimination of weakly dominated strategies is necessary. Acemoglu, Egorov and Sonin (2009) propose sequentially eliminating weakly dominated strategies or the slightly stronger concept of Markov Trembling Hand Perfect Equilibrium for this class of games and show that either equilibrium notion eliminates all “unreasonable equilibria” and exists in finite games with agenda-setting structure. All of the equilibria studied here are Markov Trembling Hand Perfect. In fact, here, it is simply sufficient to eliminate equilibria where individuals vote for constitution/politicians that give them (strictly) lower utility.

politicians (rich president versus poor legislator, etc.). However, we show below that even taking into account the possibility of bribes, the poor always prefer to elect presidents and legislators from their own group. For this reason, we limit attention (without loss of any generality) to situations in which all politicians are from the poor income group.¹²

2.4 Equilibrium without Checks and Balances

Suppose that the referendum has led to a constitution *without checks and balances*, i.e., $\gamma = 0$. In this case, all policies are decided by the president, and we can ignore the legislator.

Consider first the case in which $\kappa = 0$ so that the rich are not able to solve their collective action problem and will not make a bribe offer. Then, in the policy-making subgame, the president will solve the program

$$V^{P,p}[\gamma = 0, \kappa = 0] \equiv \max_{\{\tau, T^p, T^r, R^L, R^P\}} \alpha v(R^P) + (1 - \alpha)((1 - \tau)y^p + T^p),$$

subject to the government budget constraint (2) (where, as usual, all of the elements of the vector $\{\tau, T^p, T^r, R^L, R^P\}$ are implicitly taken to be nonnegative) and the constraint that $\tau \leq \bar{\tau}$. This expression also defines $V^{P,p}[\gamma = 0, \kappa = 0]$ as the value of the maximized program, i.e., the value of the president under no checks and balances and when the rich are not able to solve the collective action problem to bribe him. In view of the strict concavity of v , this problem has a unique solution. Moreover, the solution will involve all incomes being taxed at the maximum rate, $\bar{\tau}$, with all the proceeds spent on rents to the president and transfers to the poor (so that government budget constraint (2) holds as equality). The rents to the president are given by R^* such that

$$\alpha v'(R^*) = \frac{1 - \alpha}{1 - \delta}. \quad (6)$$

The Inada-type conditions we imposed on v ensure that R^* is feasible given the government budget constraint, i.e., $R^* < \bar{\tau}\bar{y}$. Then the transfer is given by $T^p = (\bar{\tau}\bar{y} - R^*)/(1 - \delta)$. Note for future reference that in this case the utility of poor agents is given by

$$U^p[\gamma = 0, \kappa = 0] = \frac{(1 - \theta + \bar{\tau}\theta)\bar{y} - R^*}{1 - \delta}. \quad (7)$$

Next, suppose that $\kappa = 1$. In this case, the rich lobby can make a bribe offer, $\{\hat{b}^P, \hat{\tau}, \hat{T}^p, \hat{T}^r, \hat{R}^P\}$ to the president. Let the utility that the president derives from accepting this offer and implementing the specified policy vector be $V^{P,p}(\hat{b}^P, \hat{\tau}, \hat{T}^p, \hat{T}^r, \hat{R}^P)$. By turning down this offer, the president can always obtain $V^{P,p}[\gamma = 0, \kappa = 0]$. Therefore, the bribe offer by the rich lobby must satisfy the president's participation constraint

$$\begin{aligned} V^{P,p}(\hat{b}^P, \hat{\tau}, \hat{T}^p, \hat{T}^r, \hat{R}^P) &\geq V^{P,p}[\gamma = 0, \kappa = 0] \\ &\equiv \alpha v(R^*) + (1 - \alpha) \frac{(1 - \theta + \bar{\tau}\theta)\bar{y} - R^*}{1 - \delta}, \end{aligned} \quad (8)$$

¹²We relax this assumption when we study multi-member legislatures in the online appendix.

where the second relation uses (7). Imposing that there will be no bribes for the legislature in this case, the problem of the rich lobby can be written as

$$U^r \left(\hat{b}^P, \hat{\tau}, \hat{T}^p, \hat{T}^r, \hat{R}^P \right) \equiv \max_{\{\hat{b}^P, \hat{T}^p, \hat{T}^r, \hat{R}^P, \hat{\tau}\}} (1 - \hat{\tau}) y^r + \hat{T}^r - \frac{\hat{b}^P}{\delta},$$

subject to (2), (8) and $\hat{\tau} \leq \bar{\tau}$. If the solution to this program gives the rich a utility level no greater than $U^r [\gamma = 0, \kappa = 0]$, then they prefer not to offer bribes (which is equivalent to making an offer identical to what the president would have chosen by himself together with $\hat{b}^P = 0$).

We show in Appendix A that the rich lobby can never get strictly higher utility by offering a bribe to the president. The president decides all policy variables. Consequently, no offer from the rich lobby that increases their own utility is acceptable to the politician (because the politician is already at his bliss point and does not wish to reduce the income of himself or the poor). Formally, we show that all offers $\{\hat{b}^P, \hat{\tau}, \hat{T}^p, \hat{T}^r, \hat{R}^P\}$ the rich lobby can make that would be accepted by the president would have to give at least as much income to the poor and rents (plus bribes) to the president, and thus cannot make the rich better off. Given this, without loss of any generality, in what follows we suppose that there is no bribery, i.e., $\hat{b}^P = 0$. In fact, this result also implies that with a small cost of bribery (which is plausible), the unique solution to the rich lobby's maximization problem would be zero bribes. Finally, it also follows that the utility of the poor is the same regardless of whether the rich lobby being organized or not, i.e., $U^p [\gamma = 0, \kappa = 0] = U^p [\gamma = 0, \kappa = 1] = U^p [\gamma = 0]$.

The intuition for this result, though simple, is worth emphasizing. Because the president is politically powerful under a constitution that does not feature checks and balances, he obtains a high level of utility; in fact, here the president is able to obtain his *political bliss point*. Importantly, this makes him *expensive* to bribe and thus unprofitable for the rich lobby to influence policy.

The following proposition summarizes the results discussed in this subsection (proof in the text).

Proposition 1 *Suppose the constitution involves no checks and balances (i.e., $\gamma = 0$). Then, regardless of whether $\kappa = 0$ or $\kappa = 1$, the equilibrium policy involves $\tau = \bar{\tau}$, $R^P = R^*$ (as given by (6)), $R^L = 0$, $b^P = 0$, $b^L = 0$, $T^r = 0$, and $T^p = (\bar{\tau}\bar{y} - R^*) / (1 - \delta)$. The utility of poor agents in this case is given by (7).*

2.5 Equilibrium under Checks and Balances

Suppose now that the referendum has led to a constitution $\gamma = 1$ with checks and balances. In this case the president proposes the policy vector $\{\tau, T^p, T^r, R^L, R^P\}$. Given this policy vector, the legislator can decide to change the allocation of rents, i.e., he effectively decides $\{R^L, R^P\}$ given $\{\tau, T^p, T^r\}$.

When $\kappa = 0$ the rich are not able to solve their collective action problem and will not make a bribe offer. In the policy-making subgame, the legislator will take $\{\tau, T^p, T^r\}$ as given and

solve the program

$$V^{L,p}[\tau, T^p, T^r, \gamma = 1, \kappa = 0] \equiv \max_{\{R^L, R^P\}} \alpha v(R^L) + (1 - \alpha)((1 - \tau)y^p + T^p),$$

subject to the government budget constraint (2) and the policy vector $\{\tau, T^p, T^r\}$ decided by the president. The solution to this problem involves $R^P = 0$ and

$$R^L = \tau \bar{y} - (1 - \delta)T^p - \delta T^r. \quad (9)$$

Given this, in the prior subgame the president sets the tax rate and transfers so as to maximize

$$V^{P,p}[\gamma = 1, \kappa = 0] \equiv \max_{\{\tau, T^p, T^r\}} \alpha v(R^P) + (1 - \alpha)((1 - \tau)y^p + T^p),$$

subject to the government budget constraint (2), the constraint that $\tau \leq \bar{\tau}$, and the best response of the legislator, i.e., $R^P = 0$ and R^L given by (9). Substituting for R^P , this implies that $\{\tau, T^p, T^r\}$ will be chosen to maximize

$$\alpha v(0) + (1 - \alpha)((1 - \tau)y^p + T^p) = (1 - \alpha)U^p,$$

i.e., to maximize the utility of poor citizens. Intuitively, with checks and balances, the legislator will not allow the president to obtain any rents (instead grabbing all the rents himself). This then induces the president to set zero rents for all politicians, which maximizes the utility of the poor (recall that, so far, there is no bribing from the rich lobby). Consequently, in this case, the utility of poor agents is maximized and is equal to

$$U^p[\gamma = 1, \kappa = 0] = \frac{(1 - \theta + \bar{\tau}\theta)\bar{y}}{1 - \delta} > U^p[\gamma = 0, \kappa = \cdot]. \quad (10)$$

But the utility of the president is now lower than in the case without checks and balances, i.e.,

$$V^{P,p}[\gamma = 1, \kappa = 0] = (1 - \alpha) \frac{(1 - \theta + \bar{\tau}\theta)\bar{y}}{1 - \delta} < V^{P,p}[\gamma = 0, \kappa = \cdot],$$

which implies that the president is strictly worse off because of the presence of checks and balances in the constitution.

Crucially, this advantage of checks and balances in terms of controlling the president is a double-edged sword, because it also makes the president *cheaper to buy* as we will now see by considering the case in which the rich lobby is organized. In particular, suppose now that $\kappa = 1$ (as well as $\gamma = 1$). Then the rich lobby will make bribe offers $\{\hat{b}^L, \hat{R}^L, \hat{R}^P\}$ and $\{\hat{b}^P, \hat{\tau}, \hat{T}^p, \hat{T}^r\}$ to the legislator and the president, respectively. For the politicians to accept these bribe offers, they must satisfy the participation constraints

$$V^{L,p}(\hat{b}^L, \hat{\tau}, \hat{T}^p, \hat{T}^r, \hat{R}^L, \hat{R}^P) \geq V^{L,p}[\gamma = 1, \kappa = 0],$$

and

$$V^{P,p}(\hat{b}^P, \hat{\tau}, \hat{T}^p, \hat{T}^r, \hat{R}^L, \hat{R}^P) \geq V^{P,p}[\gamma = 1, \kappa = 0].$$

Consider first the bribing of the legislator. Since none of the politicians get rents, the rich has nothing to gain by bribing the legislator to change the allocation of rents. Thus $\hat{b}^L = 0$.

Consider next bribes from the rich lobby to the president. As noted above, under checks and balances, the president does not receive any rents and is thus relatively cheap to bribe. In particular, the rich lobby can offer bribes to the president in exchange for less income redistribution to the poor. Since when $R^P = 0$ the marginal utility of rents (and thus of bribes) is greater than the president's marginal utility of transfers to the poor, it is beneficial for the rich lobby to pay a positive bribe to the president in return for less redistribution to the poor. As in the case without checks and balances, without loss of any generality, let us focus on offers that have the minimal bribes from the rich lobby, which means that (among equivalent ones) we are focusing on those solutions with $\hat{T}^r = 0$. Taking this and the fact that $R^P = 0$ into account, the problem of the rich lobby can be written as

$$\begin{aligned} & \max_{\{\hat{b}^P, \hat{T}^P, \hat{\tau}\}} (1 - \hat{\tau}) y^r - \frac{\hat{b}^P}{\delta} + \frac{\hat{\tau} \bar{y} - (1 - \delta) \hat{T}^P}{\delta} \text{ subject to} & (11) \\ & \alpha v(\hat{b}^P) + (1 - \alpha) \left((1 - \hat{\tau}) y^p + \hat{T}^P \right) \geq (1 - \alpha) \left((1 - \bar{\tau}) y^p + \frac{\bar{\tau} \bar{y}}{1 - \delta} \right) \\ & \hat{T}^P \geq 0 \\ & \bar{\tau} \geq \hat{\tau}. \end{aligned}$$

Analyzing the solution to this maximization problem enables us to establish the next proposition, which characterizes equilibrium bribes, policies and utility levels under checks and balances.

Proposition 2 *Suppose that the constitution involves checks and balances (i.e., $\gamma = 1$). Then:*

1. *When $\kappa = 0$ so that the rich lobby is not organized and there is no bribing, the equilibrium involves $\tau = \bar{\tau}$, $R^P = 0$, $R^L = 0$, $T^r = 0$, and $T^p = \bar{\tau} \bar{y} / (1 - \delta)$, and the utility of poor agents is given by (10).*
2. *When $\kappa = 1$ so that the rich lobby is organized and there is bribing, then there exists $\alpha^* \in (0, 1)$ such that:*

- (a) *If $\alpha > \alpha^*$, then $\tau = \bar{\tau}$, $R^P = 0$, $R^L = 0$, $b^P > 0$, $b^L = 0$, $T^p = 0$, $T^r > 0$, and the utility of poor agents is given by (20).*
- (b) *If $\alpha < \alpha^*$, then $\tau < \bar{\tau}$, $R^P = 0$, $R^L = 0$, $b^P > 0$, $b^L = 0$, $T^p > 0$, $T^r \geq 0$, and the utility of poor agents is given by (23).*

Taking into account that the probability the rich can solve their collective action problem and bribe politicians is q , we have that:

If $\alpha > \alpha^$, then the expected utility of the poor is given by*

$$U^p[\gamma = 1] = \frac{(1 - \theta + \bar{\tau} \theta) \bar{y} - q \bar{\tau} \bar{y}}{1 - \delta}. \quad (12)$$

If $\alpha < \alpha^*$, then the expected utility of the poor is given by

$$U^p[\gamma = 1] = \frac{(1 - \theta + \bar{\tau}\theta)\bar{y} - q\frac{v(R^*)}{v'(R^*)}}{1 - \delta}. \quad (13)$$

Proof. Substituting for $y^p \equiv (1 - \theta)\bar{y}/(1 - \delta)$ and $y^r \equiv \theta\bar{y}/\delta$, (11) can be rewritten as

$$\max_{\{\hat{b}^P, \hat{T}^p, \hat{\tau}\}} \frac{(1 - \hat{\tau})\theta\bar{y}}{\delta} - \frac{\hat{b}^P}{\delta} + \frac{\hat{\tau}\bar{y} - (1 - \delta)\hat{T}^p}{\delta}$$

subject to

$$\alpha v(\hat{b}^P) + (1 - \alpha) \left(\frac{(1 - \hat{\tau})(1 - \theta)\bar{y}}{1 - \delta} + \hat{T}^p \right) \geq (1 - \alpha) \left(\frac{(1 - \theta + \bar{\tau}\theta)\bar{y}}{1 - \delta} \right), \quad (14)$$

$\hat{T}^p \geq 0$, and $\bar{\tau} \geq \hat{\tau}$, where (14) is the participation constraint of the president, ensuring that he receives greater utility with bribery than he would do without. Denoting the multiplier on (14) by λ_1 , on the constraint that $\hat{T}^p \geq 0$ by λ_2 , and on the constraint that $\bar{\tau} \geq \hat{\tau}$ by λ_3 , the first-order conditions are that the derivatives of the maximization problem with respect to \hat{b}^P , \hat{T}^p and $\hat{\tau}$ must satisfy:

$$-\frac{1}{\delta} + \lambda_1 \alpha v'(\hat{b}^P) = 0, \quad (15)$$

$$-\frac{1 - \delta}{\delta} + \lambda_1(1 - \alpha) + \lambda_2 = 0, \quad (16)$$

and

$$-\frac{\theta\bar{y}}{\delta} + \frac{\bar{y}}{\delta} - \lambda_1(1 - \alpha) \frac{(1 - \theta)\bar{y}}{1 - \delta} - \lambda_3 = 0. \quad (17)$$

From (15) it follows that $\lambda_1 > 0$, implying that the participation constraint of the president, (14), binds. From (17), and then (16), we get

$$\lambda_3 = \frac{(1 - \theta)\bar{y}}{1 - \delta} \left(\frac{1 - \delta}{\delta} - \lambda_1(1 - \alpha) \right) = \frac{(1 - \theta)\bar{y}}{1 - \delta} \lambda_2$$

Thus we have two cases to consider. Either $\lambda_2, \lambda_3 > 0$ or $\lambda_2 = \lambda_3 = 0$. Now using (15) to eliminate λ_1 from (16), we find that if

$$\frac{\alpha}{1 - \alpha} v'(\hat{b}^P) > \frac{1}{1 - \delta}, \quad (18)$$

then $\lambda_2, \lambda_3 > 0$, which also implies $\hat{T}^p = 0$ and $\hat{\tau} = \bar{\tau}$. Conversely, if (18) does not hold, then $\lambda_2 = \lambda_3 = 0$ and $\hat{T}^p > 0$, $\hat{\tau} < \bar{\tau}$.

Next, if $\hat{T}^p = 0$ and $\hat{\tau} = \bar{\tau}$, then from constraint (14) holding as equality, the equilibrium bribe from the rich lobby, \hat{b}^P , is decreasing in α , i.e., $\hat{b}^P = \hat{b}^P(\alpha)$ with $\hat{b}^{P'}(\alpha) < 0$. This implies that the left-hand side of (18) is increasing in α while the right-hand side does not depend on α . So a unique value of α , $\alpha^* \in (0, 1)$, is (implicitly) defined such that

$$\frac{\alpha^*}{1 - \alpha^*} v'(\hat{b}^P(\alpha^*)) = \frac{1}{1 - \delta}. \quad (19)$$

If $\alpha > \alpha^*$ so that politicians care sufficiently about rents and not much about the utility of the poor, then we have $\hat{T}^p = 0$ and $\hat{\tau} = \bar{\tau}$. The utility of poor agents in this case is given by

$$U^p[\gamma = 1, \kappa = 1] = \frac{(1 - \theta)(1 - \bar{\tau})\bar{y}}{1 - \delta}. \quad (20)$$

If, in contrast, $\alpha < \alpha^*$ so that politicians care more about the utility of their group, then $\hat{T}^p > 0$ and $\hat{\tau} < \bar{\tau}$. In this case, equilibrium bribe is $\hat{b}^P = b^*$ such that

$$v'(b^*) = \frac{1 - \alpha}{\alpha(1 - \delta)}, \quad (21)$$

which in turn implies from (6) that $b^* = R^*$. From the participation constraint of the president, (14), we obtain the equilibrium transfer to the poor as

$$\hat{T}^p = \frac{\bar{y}}{1 - \delta} (\hat{\tau}(1 - \theta) + \bar{\tau}\theta) - \frac{\alpha}{(1 - \alpha)} v(R^*) = \frac{\bar{y}}{1 - \delta} (\hat{\tau}(1 - \theta) + \bar{\tau}\theta) - \frac{v(R^*)}{v'(R^*)(1 - \delta)}, \quad (22)$$

where the last equality follows from (6). Inserting for the transfers in the expression for the income of the poor, the utility of poor agents in this case is given by

$$U^p[\gamma = 1, \kappa = 1] = \frac{(1 - \theta + \bar{\tau}\theta)\bar{y} - \frac{v(R^*)}{v'(R^*)}}{1 - \delta}. \quad (23)$$

It is also straightforward to verify that in both regimes, the rich are strictly better off when paying bribes (which intuitively follows from the fact that the president is as well off and the poor are worse off). Formally: when $\alpha > \alpha^*$, the rich lobby is strictly better off if $\bar{\tau}\bar{y} > \hat{b}^P$, which is satisfied with (strict inequality) as $\hat{b}^P < R^* < \bar{\tau}\bar{y}$. Next consider the case where $\alpha < \alpha^*$. In this case the net increase in the income of the rich relative to the case without bribing is $-\hat{b}^P + (\hat{\tau}(1 - \theta) + \bar{\tau}\theta)\bar{y} - (1 - \delta)\hat{T}^p > 0$. Using (22) this reduces to $v(R^*) - v'(R^*)\hat{b}^P > 0$, and since $\hat{b}^P = R^*$ and v is strictly concave, this is always satisfied, completing the proof. ■

The economic content of this proposition is simple. Checks and balances limit the possibility that politicians divert public resources for personal rents. All else equal, this increases the utility of poor voters. In particular, if the rich lobby is not organized and cannot bribe the president, then the utility of poor agents is given by (10), which is the highest feasible utility that they can obtain given the policy instruments. However, checks and balances also make the president relatively “cheap to bribe”. Thus when the rich lobby is organized, it can effectively bribe the president to limit redistribution to the poor, reducing the utility of poor voters (both (20) and (23) are necessarily less than (10)).

2.6 Elections

With no checks and balances in the constitution a president from the poor will always set the tax rate at the maximum, offering redistribution to the poor. Given the politician utility function in (3), a president from the rich group would set the same tax rate as a president from the poor, but would not redistribute to the poor. Therefore, the poor strictly prefer to vote for the

poor candidate. In this case, as the legislature has no political power, the utility of the poor is independent of from which income group the legislator originates. Thus without checks and balances voting for a poor politician in the presidential election is a weakly dominant strategy for poor citizens.

With checks and balances and no bribing, a president from the poor will set policy so as to maximize the utility of the poor. If, on the other hand, there are bribes from the rich lobby, it can be easily verified that a president from the rich group will again offer no redistribution to the poor, whereas the president from the poor group, as we have seen in Proposition 2, sometimes does. Moreover, the legislator will prevent the president from getting rents whichever income group the legislator originates from. Thus with checks and balances as well, voting for a poor politician in the presidential election is a weakly dominant strategy for poor citizens. In the rest of this section, we also adopt the convention that they vote for poor candidates in the legislative elections, though this has no bearing on the results.

2.7 Referendum and Equilibrium Checks and Balances

The more interesting voting stage in our model is the referendum on whether the constitution should include checks and balances. This will depend on whether the expected utility of a poor agent (before knowing whether the rich lobby is organized) is greater without checks and balances as in Proposition 1 or with checks and balances as in Proposition 2. The next proposition answers this question:

Proposition 3 1. Suppose that $\alpha > \alpha^*$. Then the constitution will involve no checks and balances, i.e., $\gamma = 0$, if

$$q > \frac{R^*}{\bar{\tau}\bar{y}}, \quad (24)$$

and it will involve checks and balances if the converse inequality holds.

2. Suppose that $\alpha < \alpha^*$. Then the constitution will involve no checks and balances, i.e., $\gamma = 1$, if

$$q > \frac{v'(R^*)R^*}{v(R^*)}, \quad (25)$$

and it will involve checks and balances if the converse inequality holds.

In both cases, a greater q (a greater likelihood of the rich lobby being organized) makes a constitution without checks and balances more likely (in the sense that the set of parameters for which the constitution does not involve checks and balances is larger).

Proof. An individual from the poor income group (strictly) prefers a constitution without checks and balances when $U^p[\gamma = 0] > U^p[\gamma = 1]$, and given our focus on voting using weakly undominated strategies, the referendum will lead to the outcome preferred by the poor majority. Using (7) and (12), we then obtain part 1. Using (7) and (13), we obtain part 2. The last part of the proposition directly follows from parts 1 and 2. ■

This proposition is the main result of the paper. First, it shows that voters may rationally choose no checks and balances. They realize that checks and balances imply lower politician rents (in fact, in our simple model no rents). However, they also understand that this makes politicians “cheaper to buy” for the rich lobby. Thus when they expect it to be likely that the rich lobby can bribe the president, they may prefer a constitution without checks and balances as a way of making the president too expensive for the rich lobby to buy. We believe that this result, in a stylized way, captures the main reason why, in many weakly-institutionalized polities (where the rich lobby can successfully bribe politicians or influence policies using non-electoral means), voters are willing to put up with strong leaders pursuing their own agendas, provided that they are also expected to adopt redistributive policies. In fact, in many such cases they are even willing to remove several constitutional checks on such politicians.

Second, for this same intuitive reasons, the proposition also shows that when the probability q that the rich lobby will be organized to bribe and influence politicians is greater, a constitution without checks and balances is more likely to be preferred by the poor majority. In fact, a first corollary to Proposition 3 is that:

Corollary 1 *When $q = 1$, so that the rich are always able to bribe politicians, then the constitution will never include checks and balances.*

Proof. This follows by noting that both (24) and (25) hold when $q = 1$ (since $R^* < \bar{\tau}\bar{y}$ because of the Inada conditions we imposed, and $v'(R^*)R^* < v(R^*)$ due to the strict concavity of v). ■

The next corollary to Proposition 3 emphasizes that the only reason why poor voters may support a constitution without checks and balances is political corruption.

Corollary 2 *If $q = 0$, so that the rich are never able to bribe politicians, then the constitution will always include checks and balances.*

Proof. This immediately follows by noting that neither (24) nor (25) will hold when $q = 0$. ■

The reasoning of Proposition 3 highlights that voters are willing to put up with politician rents (resulting from the lack of checks and balances) in return for redistribution. The next corollary formalizes this notion by showing that (when $\alpha > \alpha^*$) a constitution without checks and balances is more likely when potential taxes are higher.

Corollary 3 *Suppose $q \in (0, 1)$. When $\alpha > \alpha^*$, a constitution without checks and balances is more likely when $\bar{\tau}$ is higher (when potential taxes are higher). (When $\alpha < \alpha^*$, $\bar{\tau}$ has no effect on the choice of checks and balances in the constitution).*

Proof. This result directly follows by noting when $\alpha > \alpha^*$ the right-hand side of (24) is decreasing in $\bar{\tau}$ (and when $\alpha < \alpha^*$ (25) does not contain $\bar{\tau}$). ■

One application of this corollary is to natural resource abundant weakly-institutionalized countries. Natural resource abundance makes it easier to impose higher taxes (or nationalize production). In consequence, it may be voters in resource-abundant countries, such as many Latin American ones, that find it particularly attractive to remove checks and balances from the constitution.

When $\alpha < \alpha^*$ (which implies that politicians put sufficiently large weight on the utility of the poor), the comparison of constitutions with and without checks and balances is independent of potential taxes. This is because of the quasi-linear utility function in (3), which implies that the equilibrium level of bribes is independent of the level of potential taxes when $\alpha < \alpha^*$.

Proposition 3 also shows that when $\alpha > \alpha^*$ a constitution without checks and balances is more likely when (equilibrium) politician rents given by R^* are low. Even though R^* is an endogenous object in this economy, it is simply determined by the v function and α (as shown by equation (6)).¹³ (When $\alpha < \alpha^*$, lower rents R^* have an ambiguous effect on the choice of constitution, the reason being that lower rents increases the utility of the poor both in the case where the constitution contains checks and balances and in the case where it does not).

It is also useful to note that the value of q that is relevant both for Proposition 3 and these corollaries is the probability of the rich lobby being organized when there is checks and balances, since the lobby is ineffective without checks and balances. This also means that all of our results apply without any modification if the probability of the lobby being organized was greater, say $\hat{q} > q$, without checks and balances, and thus the assumption that the same probability applies in both regimes is simply adopted to reduce notation.

The political power of the rich lobby rests on its ability to overcome the collective action problem of its members so as to be able to influence policy through non-electoral means. The next corollary shows, perhaps somewhat paradoxically, that a better ability to overcome the collective action problem may in fact reduce the political power and utility of the rich. To see this, define q^* as the value of q that solves (24) with equality when $\alpha > \alpha^*$ and as the q that solves (25) with equality when $\alpha < \alpha^*$.

Corollary 4 *The expected utility of the rich as a function of q is increasing in q for $q \in [0, q^*]$; jumps down in q at $q = q^*$; and is constant in q for $q \in [q^*, 1]$.*

Proof. For $q < q^*$, it follows from (24) and (25) that the constitution will always involve checks and balances. The expected utility of the rich when the constitution includes checks and balances is given by

$$\begin{aligned} U^r [\gamma = 1] &= (1 - q) \frac{(1 - \bar{\tau}) \theta \bar{y}}{\delta} + q \left(\frac{(1 - \hat{\tau}) \theta \bar{y}}{\delta} - \frac{\hat{b}^P}{\delta} + \frac{\hat{\tau} \bar{y} - (1 - \delta) \hat{T}^P}{\delta} \right) \\ &= \frac{(1 - \bar{\tau}) \theta \bar{y}}{\delta} + \frac{q \hat{b}^P}{\delta} \left(\frac{(1 - \delta) \alpha v(\hat{b}^P)}{(1 - \alpha) \hat{b}^P} - 1 \right), \end{aligned}$$

¹³Another interesting implication of this kind of reasoning is that voters may find it in their own interest to elect wealthy individuals as politicians, as these may be more difficult to influence by bribing.

where the second line follows by inserting for \hat{T}^P from (14) always holding as equality.

When $\alpha > \alpha^*$ we use (19) to obtain

$$U^r [\gamma = 1] = \frac{(1 - \bar{\tau}) \theta \bar{y}}{\delta} + \frac{q \hat{b}^P}{\delta} \left(\frac{\alpha(1 - \alpha^*)v(\hat{b}^P)}{\alpha^*(1 - \alpha)v'(\hat{b}^P(\alpha^*))\hat{b}^P} - 1 \right),$$

which is increasing in q for $\alpha > \alpha^*$ (since in this case $\hat{b}^P \leq \hat{b}^P(\alpha^*)$ which implies that $v(\hat{b}^P) > v'(\hat{b}^P(\alpha^*))\hat{b}^P$).

When $\alpha < \alpha^*$ we use (21) to obtain

$$U^r [\gamma = 1] = \frac{(1 - \bar{\tau}) \theta \bar{y}}{\delta} + \frac{qR^*}{\delta} \left(\frac{v(R^*)}{v'(R^*)R^*} - 1 \right),$$

which is also increasing in q .

For $q > q^*$, it follows from (24) and (25) that the constitution will never involve checks and balances, in which case the utility of the rich is given by

$$U^r [\gamma = 0] = \frac{(1 - \bar{\tau}) \theta \bar{y}}{\delta},$$

which is independent of q . Comparing $U^r [\gamma = 0]$ with $U^r [\gamma = 1]$ we see that the latter always exceeds the former, and the corollary follows. ■

Intuitively, with checks and balances, the utility of the rich (lobby) is monotone increasing in q —their ability to bribe politicians. But when q exceeds q^* , this triggers the lifting of the checks and balances, increasing redistribution and presidential rents, and making the rich worse off.

In sum, our baseline model shows that poor voters, who make up the majority and would like to see income redistribution, may prefer a constitution without checks and balances because checks and balances, by reducing politician rents, make them “cheaper to buy” for the rich lobby. Our analysis also shows that a constitution without checks and balances is more likely when the rich are more likely to solve the collective action problem and successfully bribe politicians, and when potential taxes are higher, making redistribution more valuable to the poor.

2.8 The Judiciary

We now extend the model so that under checks and balances there is an independent judiciary and show that this does not affect the main insights presented so far, but the quality of the judiciary increases the likelihood that checks and balances will emerge in equilibrium.¹⁴

Checks and balances typically gives the judiciary an independent role, and thus the judiciary may prevent illegal bribing. In particular, we assume that when it becomes common knowledge whether the rich are able to solve their collective action problem and make bribe offers, it also

¹⁴The model in this subsection can be viewed as an example of a framework with multiple veto players along the lines of Diermeier and Myerson (1999). This class of models is discussed in greater detail in the online appendix.

becomes common knowledge whether the judiciary will be able to discover such bribing. We assume that the judiciary is able to do so with probability $s \in [0, 1]$. When the judiciary can clamp down on bribing, we assume that it is too costly for the rich to undertake it (given that the judiciary cannot be bribed).

Consider first the case where the judiciary is incorruptible. The only situation that differs from the model above is when $\gamma = 1$ and $\kappa = 1$, i.e. when there is checks and balances and the rich are able to affect policy through bribing. Now this is no longer a sufficient condition for bribing to take place, since there is a probability s we are in a case where bribing is prevented by the judiciary. It immediately follows that the probability of bribing, which was q in the previous model, is now reduced to $(1 - s)q$. This case can thus be summarized in the following proposition (proof in text).

Proposition 4 *Suppose the judiciary is incorruptible. Then all of the results in Proposition 3 and the subsequent corollaries hold in the current model (with $(1 - s)q$ replacing q).*

The main noteworthy implication of this proposition is that low quality of judicial institutions (low s) makes checks and balances less likely. Thus when the judicial institutions are weak voters do not see it in their own interest to have a constitution that places constraints on politicians. Judicial institutions that provide weak control of the behavior of the rich lobby then encourage the emergence of political institutions that impose only weak controls on the president.

From this proposition it is also clear that if the judicial system were perfect in the sense that it always discovered bribing ($s = 1$) and were also incorruptible, then voters would always prefer a constitution with checks and balances (because the rich lobby would never be able to influence policy under such a constitution). When the judiciary can also be bribed, however, the picture is different. To see this consider the case where bribing will always be discovered but where the rich (when they solve their collective action problem) can also bribe the judiciary. We assume that the appointed judiciary J is from the poor and we denote the bribe to the judiciary by $b^J \geq 0$.¹⁵ In contrast to the case in the basic model, the rich will now need to bribe both the president and the judiciary. Thus the problem of the rich lobby can be written as

$$\begin{aligned} & \max_{\{\hat{b}^P, \hat{b}^J, \hat{T}^p, \hat{\tau}\}} \frac{(1 - \hat{\tau})\theta\bar{y}}{\delta} - \frac{\hat{b}^P + \hat{b}^J}{\delta} + \frac{\hat{\tau}\bar{y} - (1 - \delta)\hat{T}^p}{\delta} \text{ subject to} & (26) \\ & \alpha v(\hat{b}^P) + (1 - \alpha) \left(\frac{(1 - \hat{\tau})(1 - \theta)\bar{y}}{1 - \delta} + \hat{T}^p \right) \geq (1 - \alpha) \left(\frac{(1 - \theta + \bar{\tau}\theta)\bar{y}}{1 - \delta} \right), \\ & \alpha v(\hat{b}^J) + (1 - \alpha) \left(\frac{(1 - \hat{\tau})(1 - \theta)\bar{y}}{1 - \delta} + \hat{T}^p \right) \geq (1 - \alpha) \left(\frac{(1 - \theta + \bar{\tau}\theta)\bar{y}}{1 - \delta} \right), \end{aligned}$$

$\hat{T}^p \geq 0$, and $\bar{\tau} \geq \hat{\tau}$. Characterizing the solution to the maximization problem leads to the following proposition:

¹⁵If the judiciary is from the rich we are back in exactly the same model as without an independent judiciary. The reason for this is that under checks and balances the rich get a higher utility with bribing than without, and thus the judiciary will have a higher utility not clamping down on bribing. In other words, when the rich can bribe the participation constraint of the judiciary is thus fulfilled even with $\hat{b}^J = 0$.

Proposition 5 *Consider the case where bribing will always be discovered by the judiciary and the judiciary can be bribed. Then there exists $\alpha^{**} > \alpha^*$ such that all of the results in Proposition 3 hold in the current model, except that α^{**} replaces α^* .*

Proof. Denoting the multipliers on the four constraints in (26) by $\lambda_1, \lambda_2, \lambda_3$ and λ_4 , the first-order conditions with respect to $\hat{b}^P, \hat{b}^J, \hat{T}^p$ and $\hat{\tau}$ are:

$$-\frac{1}{\delta} + \lambda_1 \alpha v'(\hat{b}^P) = 0, \quad (27)$$

$$-\frac{1}{\delta} + \lambda_2 \alpha v'(\hat{b}^J) = 0, \quad (28)$$

$$-\frac{(1-\delta)}{\delta} + (\lambda_1 + \lambda_2)(1-\alpha) + \lambda_3 = 0, \quad (29)$$

and

$$-\frac{\theta \bar{y}}{\delta} + \frac{\bar{y}}{\delta} - (\lambda_1 + \lambda_2)(1-\alpha) \frac{(1-\theta)\bar{y}}{1-\delta} - \lambda_4 = 0. \quad (30)$$

From (27) and (28) it follows that the participation constraints of the president and judiciary hold with equality. Moreover, both participation constraints holding as equality implies that $\hat{b}^L = \hat{b}^J$, and this in turn implies $\lambda_1 = \lambda_2$. From (29) and (30) we then get $\lambda_4 = \lambda_3(1-\theta)\bar{y}/(1-\delta)$. Solving for λ_1 from (27) and inserting in (29), we find that $\lambda_3, \lambda_4 > 0$ and thus $\hat{T}^p = 0$ and $\hat{\tau} = \bar{\tau}$ if

$$\frac{\alpha}{1-\alpha} v'(\hat{b}^P) > \frac{2}{1-\delta}. \quad (31)$$

The participation constraint of the president also implies that when $\hat{T}^p = 0$ and $\hat{\tau} = \bar{\tau}$, \hat{b}^P must be decreasing in α , i.e., $\hat{b}^P = \hat{b}^P(\alpha)$ with $\hat{b}^{P'}(\alpha) < 0$. Thus the left-hand side of (31) is increasing in α , while the right-hand side does not depend on α . The following equation thus implicitly defines a unique value of α , α^{**} , such that

$$\frac{\alpha^{**}}{1-\alpha^{**}} v'(\hat{b}^P(\alpha^{**})) = \frac{2}{1-\delta}. \quad (32)$$

Note from (32) that the only change from equation (19) in the basic model is that the right-hand side of (32) is twice the right-hand side of (19). This immediately implies $\alpha^{**} > \alpha^*$.

It is then straightforward to see that when $\alpha > \alpha^{**}$ the condition for the poor to prefer no checks and balances is identical to the case where $\alpha > \alpha^*$ above. When $\alpha < \alpha^{**}$ the condition is also the same as when $\alpha < \alpha^*$ above, but with b^* replaced by $b^{**} < b^*$ such that

$$v'(b^{**}) = \frac{2(1-\alpha)}{\alpha(1-\delta)}. \quad (33)$$

■

Note also that, with the exception of Corollary 1, all of the corollaries above hold. The reason Corollary 1 need not hold is because when $\alpha < \alpha^{**}$ the condition for no checks and balances in the constitution is given by $q > v'(b^{**})R^*/v(b^{**})$ (where b^{**} is given by (33) in the proof of Proposition 5), which in contrast to the case above need not hold when $q = 1$. The intuition for this is that the bribing solution is now more favorable for the poor compared to in the case above, as the solution involves more income redistribution and lower bribes.

2.9 Income inequality

In the above model income inequality did not affect the choice of the poor to remove checks and balances from the constitution or not. This is a result of our simple utility function. We now explore the solution of the basic model when the utility function of politicians is no longer quasi-linear. In particular, suppose that the utility function of a politician j from income group $i \in \{p, r\}$ is given by

$$V^{j,i} = (R^j + b^j + r)^\beta (U^i)^{1-\beta}, \quad (34)$$

where $\beta \in (0, 1)$, and $r > 0$ denotes the ego rents of becoming an elected politician. These ego rents may also be interpreted as the wage of a politician. With $r > 0$ the utility function is defined and well behaved also in cases where $R^j + b^j = 0$.

To facilitate comparison with the model above that does not include ego rents, we simplify by focusing on the case where $r \rightarrow 0$, so that for simplicity the ego rent term vanishes. Nevertheless, the presence of this vanishing term implies that even when $R^j = b^j = 0$ the utility function has standard properties. We show the solution in this case and also in the slightly more complicated case when r can take any value in the online appendix.

We there reach the following proposition:

Proposition 6 *Let $\beta^H \equiv \frac{\bar{\tau}}{1-\theta+\bar{\tau}\theta}$ and suppose that $r \rightarrow 0$. Then:*

1. *When $\beta > \beta^H$ the constitution will always involve checks and balances.*
2. *When $\beta < \beta^H$ then the constitution will involve no checks and balances if*

$$q > \frac{\beta(1-\theta+\bar{\tau}\theta)}{\bar{\tau}}, \quad (35)$$

and it will involve checks and balances if the converse inequality holds.

Proof. See the online appendix. ■

As in the basic model a higher q and a higher $\bar{\tau}$ makes it more likely that checks and balances are removed from the constitution. But importantly, we can also see that because the right-hand side of (35) is decreasing in θ , checks and balances are more likely with greater inequality, which is stated in the next corollary.

Corollary 5 *A constitution without checks and balances is more likely when θ is greater (when income inequality is higher).*

Intuitively, without checks and balances the president now appropriates greater rents when inequality is higher (with quasi-linearity these rents did not depend on inequality). The more general utility function considered here then implies that the extent of redistribution increases with inequality, and this raises the cost to the poor of bribes by the rich lobby, and thus encourages the removal of checks and balances when there is more inequality.

2.10 Robustness

The main insight we have emphasized so far is that checks and balances may be costly for the poor majority because, by reducing the president's rents, they make him more amenable to lobbying and bribery by an organized rich lobby. In the online appendix, we show that this main insight is robust under a variety of different modeling assumptions. We first consider another model of separation of powers, along the lines of Diermeier and Myerson (1999) and Tsebelis (2002), where checks and balances give the legislature veto power over all dimensions of policy. We show that all of the results from our baseline model apply for this model as well.

We also study an alternative model of separation of powers along the lines of Persson, Roland and Tabellini's (1997, 2000) approach, which assumes that, under separation of powers, the president decides the tax rate and the legislature makes the spending decisions. We again show that all of our main results generalize to this case. In addition, we show that now, even with quasi-linear utility function, checks and balances are more likely to be removed when income inequality is high. This is because in this model, even with checks and balances, there are equilibrium rents, now captured by the legislator, and as a consequence, the president may choose a tax rate less than the maximum. When the rich lobby is organized, the president may respond to bribes by choosing redistribution away from the poor to the rich rather than the other way around. As a result, redistribution towards the poor without checks and balances becomes more valuable to the poor when inequality is high, and this encourages the removal of checks and balances with high inequality.

Finally, we also use this alternative model of separation of powers to study how including political minorities (representatives of the rich) in the legislature affects the results. The main result is the following paradoxical finding: greater power sharing in the legislature can backfire and lead to an equilibrium with fewer checks on the president. Thus when the rich are politically powerful in parliament their power may end up being stripped off through changes in the constitution.

3 Some Evidence

In this section we provide case study and econometric evidence to support the ideas proposed in this paper. Neither type of evidence precisely pinpoints the mechanism underlying the dismantling of checks and balances and support for 'strongman' politicians in Latin America, but they all paint a picture where popular support for such measures comes from a widespread view that politics is dominated by a traditional elite or 'oligarchy,' a phenomenon made possible by this elite's control over the legislature and sometimes over the presidents. Notably, and perhaps at first paradoxically, the solution to this is viewed by the protagonists as strengthening the state and the presidency, exactly as in our model (though of course without the formal reasoning in our model). The econometric evidence also shows that these concerns and the resulting political reactions tend to be stronger in countries with weaker democracies.

A related question is why this backlash favoring presidential power has taken place in Latin America and starting in the late 1990s and coming to a head in the 2000s. Though we do not have a precise answer to this question, we suspect it is related (1) to the reality that politics in many Latin American countries has been dominated by traditional elites through corruption and other non-electoral means, underpinning the very high levels of economic inequality in much of the region, and (2) to the collapse of these non- or quasi-democratic regimes in several countries in the 1990s, opening the way to electoral competition with stronger appeals to the fundamental concerns of the majority of voters in these countries.¹⁶

3.1 Case Study Evidence

The mechanisms that underlay our results can be supported by examining what the protagonists themselves say as well as the conventional wisdom in the secondary academic literature on Latin American politics, particularly on ‘populism’. In this subsection we provide an overview of the academic literature focusing on Ecuador, Venezuela and Bolivia, three countries that exemplify the mechanism we propose and that have undergone referenda on dismantling checks on presidential power from the legislature.¹⁷ In each case, there is considerable evidence that the rhetoric of the presidents seeking greater powers and the support they ultimately received was based on the perception that the ‘oligarchy’ was wielding disproportionate political power, largely because of its ability to control and buy politicians at all levels of government. In all three cases, the ‘politics of betrayal’ (or fear of such betrayal) was crucial to these dynamics as previous presidents brought to power to change politics-as-usual either backtracked or where unsuccessful.

The academic literature depicts the changes we have been analyzing as part of Latin American populism. Though there is no convention about the exact definition of populism, existing studies all portray populism in very similar ways. For example, Levitsky and Roberts (2011, p. 6) define it as “the top-down political mobilization of mass constituencies by personalistic

¹⁶For example, though Ecuador came out of military rule in 1979 and for the first time illiterate citizens could also vote, politics was at the time still controlled by the traditional elite, especially via the clientelistic party system. It took time for the previously disenfranchised to organize with their first success being the election of Abdalá Bucaram in 1996. But as we explain below, it did not lead to significant changes in policy, fueling concerns of the ‘politics of betrayal’ and setting the scene for Correa’s presidency as we explain below. The political history of Bolivia is similar with the military leaving even later, in 1982. In Venezuela, the military left in 1958 but were replaced by a two-party ‘partyarchy’. The political barriers to entry that the system posed were eroded only in the 1980s as a result of economic crisis and mounting corruption scandals.

¹⁷The other two countries that have experienced similar major removals of congressional checks against presidential powers since the late 1980s are Peru and Nicaragua. In Peru, President Alberto Fujimori suspended the sitting congress by issuing Decree 25418 in 1992, and oversaw new elections in which his supporters gained a majority in the congress. They proceeded to rewrite the constitution moving from a bicameral to a unicameral legislature, weakening the congress and judicial independence, and strengthening presidential powers. These changes were popularly approved by a referendum (Mauceri, 2006). In Nicaragua, the process started with the 1987 Sandinista constitution, which strengthened presidential powers, for example by moving from bicameral to unicameral legislature. The constitution was amended again in 1995 during the Violeta Chamorra government to strengthen the power of the legislature, for instance, allowing it to over-ride presidential decrees by a simple majority. Presidential powers were increased again under Daniel Ortega, in 2009, allowing him to run again for presidency in 2011.

leaders who challenge established political or economic elites on behalf of an ill-defined pueblo, or ‘the people’ ”. Similarly De la Torre (2010, p. viii) argues “Populist leaders have constructed politics as a ... confrontation ... between the people and the oligarchy” and “populism is a ... worldview ... that perceives history as a Manichean struggle between ... [the] common interest of the citizens ... [and] a conspiring elite. Wholesale institutional change ... is required in order to restore the will of the people” (Hawkins, 2010, p. 5). This literature notes the correlation between the rise of populist leaders such as Chávez in Venezuela, Correa in Ecuador, and Morales in Bolivia, but it has not proposed any precise mechanism linking populism as a political strategy to the dismantling of checks and balances, and it does not clarify why citizens who vote for populist leaders would not be equally interested in using checks and balances to stop them extracting rents than any other type of leader.

The survey evidence we present in the next subsection also shows that a majority of citizens in many Latin American societies believe that elite control of politics is a major obstacle to progress in their country.

Ecuador Democracy returned to Ecuador in 1979 after the withdrawal of the military from politics. The following period degenerated into political instability with a pattern emerging of presidents running for power on redistributive ‘populist’ platforms, from which they deviated after assuming power, only to be thrown from power by popular uprisings which were then ratified in some way. The most recent episodes feature the election of Abdalá Bucaram in 1996 on a redistributive platform aimed at reversing ‘Washington consensus’ type policies. Once in power Bucaram abandoned the policies and imposed fiscal retrenchment and was forced from office within one year by street demonstrations. He was followed by Jamil Mahuad, elected in 1998 and forced from office by a joint civilian-military coup in 2000, partially in response to the dollarization of the economy and the bailing out of the banking system which “from the point of view of ordinary citizens ... looked like a generous bailout of predatory financiers” (Conaghan, 2012, p. 263). Next was Lino Gutiérrez, who took part in the coup and was elected as president on a left-wing platform, only to be forced from power by a popular uprising in 2005 after also reneging on his agenda. In the transitional government that replaced Gutiérrez, a young economist, Rafael Correa, got the job as minister of finance. He used his position as a platform to attack the ‘neoliberal’ economic policies of his predecessors and launched a bid for the presidential election in 2006. Correa’s campaign focused on

“two overarching, interrelated themes: (1) the degeneration of state institutions and the moral bankruptcy of the political class and (2) the disintegration of the nation/homeland (*patria*) as a result of the elite-imposed economic policies that sacrificed the public interest in favor of private gain. In Correa’s imagery, Ecuador was a country “kidnapped”, a nation held hostage by political and economic elites ... the state was an edifice of domination controlled by the traditional parties, the *partidocracia* (the “partyarchy”)” (Conaghan, 2012, p. 265).

Correa's vision based on the control of the political system by the 'partidocracia', the elite, or the 'oligarchy' was crucial to his broader rhetoric. So he advised supporters:

"Let's not be naive ... We won the elections, but not power. Power is controlled by economic interests, the banks, the partidocracia, and the media connected to the banks." (Conaghan, 2008, p. 47)

During the campaign Correa gambled on his power to re-write the constitution. His party Movimiento Patria Activa y Soberana (Proud and Sovereign Fatherland Movement—PAIS) did not run any candidates for congress. Nevertheless after taking office in January 2007 by April, he forced through a referendum on whether to hold a constitutional convention. 82% of people voted in favor. In elections held that September his party took 80 of the 130 seats in the convention, and its first action was to dissolve the sitting congress, a hotbed of opposition. The convention sat until July 2008, and "Not surprisingly, the institutional design of the new constitution strengthened the executive branch. It provided the president with various pathways to manage Ecuador's chronic problem of executive-legislative stalemate. For example, the president can convoke referenda on virtually any issue, thus trumping legislative opponents. Another weapon ... is the power to dissolve the legislative and call new elections once during his term of office. The constitution also stripped the legislative assembly of powers with respect to appointments in the judicial and executive branch ... The capstone of presidential power in the new constitution is the provision allowing the president to run for an additional consecutive terms of four years: this reversed Ecuador's previous practice" (Conaghan, 2012, p. 271). The new constitution was approved by 64% of the voters in September 2008.

What were the consequences of this rebalancing of political power? A significant one for this paper is described by Conaghan (2012, p. 274): "the Correa administration took actions to eliminate or significantly eclipse the influence of interest groups. In some cases this involved reasserting central government control over public entities that had been controlled by interest groups or rejigging the composition of their boards". But overall, the entire project was driven by the notion that Ecuadorian politics was controlled by the elite or the 'oligarchy' whose power had to be broken. As Conaghan and de la Torre (2008, p. 278) put it, his view was that

"political opponents are not simply wrong-headed, misguided, or misinformed; they are corrupt and immortal representatives of the privileged, *la oligarquia*".

To understand the motivation behind the dismantling of checks and balances and strengthening of presidential powers, it is perhaps even more instructive to study the speeches of Rafael Correa since he assumed power in Ecuador. No doubt his speeches contain large amounts of rhetoric, yet presumably this rhetoric strikes a chord with the Ecuadorian voters which is why he uses it. The way he analyzes the problems of Ecuadorian politics in these speeches is very consistent and uses a recurrent set of concepts and images. For example, on February 28 2007 he made a significant speech, proposing a referendum for a constitutional assembly. He began:

“We said we were going to transform the fatherland in the citizen’s revolution, democratic, constitutional ... but revolutionary, without getting entangled in the old structures, without falling into the hands of those with the traditional power, without accepting that the fatherland has particular owners. The fatherland is for everyone without lies with absolute transparency” (Correa, 2007a, p. 2)

The speech argues that the motivation for the new constitution is to break the capture by elites over political institutions, including, most notably, the presidency. He continues, now referring to the same elite as the ‘mafias,’ and clearly articulating the notion that the objective is to strengthen the (his) presidency in order to reduce the de facto power of the elite:

“a new constitution is required ... to extract the country from the economic, political and social blockade, to which the mafias who have always dominated, have condemned this country... of course today there are still other de facto powers and we are seeing them, these are powers that believe that they are owners of regions and the country, owners of truth, owners of the president of the republic.” (Correa, 2007a, p. 5)

On March 15, 2007, Correa addressed congress on the topic of the functioning of the electoral system. He used this as a further opportunity to advance his diagnosis of the political problems of the country and the need for constitutional change. He rejected the notion that the country had become ungovernable because of the extent of popular participation and emphasized that the government was not going to be bribed into abandoning its principles, in the process, clearly articulating the idea that the threat was for the elite to use its financial power to bribe all level governments and politicians:

“this government is not submissive, it’s not for sale and it doesn’t know, as someone said a long time ago “the geometry of the bent knee”,¹⁸... Maybe that’s why they don’t understand who we are. They try to find the man with the bag ... in the figure ... of the vicepresident of the republic; they judge that way because there is a saying “each criminal judges based on their own condition”¹⁹ (Correa, 2007b, p. 11).

Here “the bag”, in Spanish “el maletín”, refers to a bag of money used to bribe politicians. Contrary to the old system of political institutions, Correa is arguing that they will not be bought by the elite. Instead the new constitution is going to help change the state of affairs, which again very much echoes some of the ideas in our model: “We are going to disassemble the mafia apparatus, we are going to disassemble institutionalized corruption, we are going to

¹⁸By this last phrase (“la geometría de la rodilla doblada”), he means the government will not be begging on your knees to the elites.

¹⁹In Spanish “cada ladrón juzga por su condición” —meaning that criminals expect everyone else to behave like they do.

finish the delusion of power of the same people that have condemned to misery our people. We are going to end the concessions that the oligarchy has given to their friends at the expense of millions of human beings... We are going to disassemble the apparatus with which they are opposing the emergency health plan maybe because they don't see in it the opportunity to steal the money of the state." (Correa, 2007b, p. 13)

Correa continually relates the capture of institutions by the elite to the pre-existing structure of institutions, particularly the constitution of 1998. On July 25, 2008, Correa addressed the closing session of the Constitutional Assembly noting: "Let's not forget that the 98 constitution was never never brought forward for the consideration of the people, and that the ones who dominated that constitution are now the ones leading the campaign for the no" (Correa, 2008a, p. 21). The new constitution was different and was going to be democratically ratified, but it nevertheless dismantled checks and balances. In a very telling passage of the same speech on July 25, Correa noted "This is the constitution of the 21st century ... the title of supreme has been eliminated from the different institutions, the Supreme Court of justice, here the only one which is supreme is the Ecuadorian people, on it depends all the decisions" (Correa, 2008a, p. 23-23). No court was to be 'Supreme' anymore or to block the will of the people working through the president.

After the new constitution had been proposed, it had to be ratified by a plebiscite. Correa campaigned vigorously for a yes vote, arguing: "We didn't make concessions with the 'partidocracia'. We summoned a constitutional assembly in our first act of government and now we have a new political charter for the country, which totally breaks with the regime of perks and privileges consecrated in the 1998 Constitution." Correa goes on to emphasize that the new constitution is not authoritarian or one of "hyper-presidentialism," but one which attempts to make the state (and in particular, the president) stronger and which gives it the capacity to implement policies for the development of the nation (Correa, 2008b, p. 10). Confronting this project are "powerful enemies, groups who, as we have seen, have in a stubborn and shameless way lied without scruples ... so they don't lose their privileges, their spaces ... We have confronted the big media power which is now taking the place of the ruined partidocracia, this is the direct voice of the powerful the instrument in the service of the bastard's interest" (p. 13)

So according to Correa what was necessary was:

"a new social model, based on principles of solidarity, justice and welfare for everyone; or more of the same, more of the same thing that we have had until very recently, meaning: the law of "everything for me, nothing for the rest", of the corruption, the law of the strongest, the law of the connected, the predominance of the power groups who have controlled everything, the dominance of the owners of this country; of the vanity of the caciques, the abuse, justice only for the ones with the poncho;²⁰ of the dominance of the corrupt bankers." (Correa, 2008b, p. 15)

²⁰Here the "ones with the poncho" are the patrimonial rural elites with the poncho signifying the attire of a landed gentry.

Summing up the importance of ratifying the constitution, Correa articulated the notion that the dominant elite in Ecuador was able to control politics by its control of all levels of governments, including the presidency and the legislature, and demanded greater powers for the state and the president in order to change things, ideas that echo the key components of our model. The picture that emerges both from Correa's own political platform and his explanation for it and the analysis of political scientists and students of Ecuadorian politics is thus fairly close to the mechanisms which are central to our model, even though, to the best of our knowledge, nobody has articulated it as exactly in our model.

Venezuela The roots of the rise to power of Hugo Chávez after 1999 have many similarities with the Ecuadorian case. The first is an oligarchic party system in the case of the 'punto fijo system' in Venezuela, named after the pact of 1958 between the two major parties, AD (Acción Democrática) and COPEI (Comité de Organización Política Electoral Independiente) to share and rotate power. Behind the elites of the political parties were a group of economic elites known as the 'twelve apostles' (Di John, 2009, p. 212). Coppedge (1994) refers to the system as a 'partyarchy' noting that Venezuelans themselves called it a *partidocracia*, exactly the same word used so pejoratively in Ecuador by Correa (see also Crisp, 2000). The second is the experience of new forces coming to power with alternative platforms and then changing their minds once in power. In Venezuela this process was manifested in the presidency of Carlos Andrés Pérez who implemented free market reforms after being elected on a completely different platform. In 1992 he faced a military coup masterminded by Chávez and a group of military officers under the banner of the *Movimiento Bolivariano Revolucionario 200*. Though the coup failed, the officers were released from prison by Pérez's successor Rafael Caldera.

Chávez was first elected president in 1998 and thereafter, like Correa, he focused on the process of getting the constitution re-written. We noted some of the important changes away from checks and balances in Venezuela in the Introduction. In addition, there was also a movement away from the use of super-majorities (also common in all cases) so that, for example, future constitutional changes can be approved by a simple majority of the legislature. Also significant was the fact that the legislature could grant by a majority almost unlimited decree powers to the president, a feature which has seen heavy use. These powers turned out to be significant in many ways. For example in 2004 the National Assembly passed a law expanding the size of the Supreme Court from 20 to 32 members and making it possible to ratify the appointment of new judges with a simple majority. 5 justices resigned in protest allowing Chávez to nominate 17 new justices (Castaldi, 2006).

The rhetoric which Chávez used to argue in favor of the constitutional reform was very similar to that used by Correa. As he himself put it the problem was:²¹

“how to break with the past, how to overcome this type of democracy that only

²¹See also Hawkins (2010, Chapter 3) for many similar examples.

responds to the interests of the oligarchical sectors; how to get rid of the corruption”
(quoted in Wilpert, 2003)

Chávez’s arguments were persuasive because ordinary people viewed the Venezuelan elite as “a corrupt cogollo (big wigs) that had privatized the state, looted the nation’s wealth and abused the people ... The people have been betrayed by their leaders and democracy has become a façade behind which an elite had used the state for its own advantage” Coronil (1997, p. 378).

Unlike the much sparser academic literature on either Ecuador or Bolivia, that on Venezuela has developed more explicit hypotheses about the rise of Chávez and the political success of his movement (see Hawkins, 2010 Chapter 5 and Seawright, 2012 Chapter 1). The main ideas in this literature are that Chávez triumphed because of (1) economic decline (the so-called ‘economic voting hypothesis’); (2) a rise in oil prices which facilitated his redistributive platform; (3) the corruption of the pre-existing political parties, the hypothesis favored by both Hawkins and Seawright. Hawkins (2010, p. 6), for example, sums up his argument on the importance of corruption of pre-existing political parties by stating “populist movements become successful when there is a widespread failure of government to implement rights of citizenship, particularly the rule of law, that allows citizens to characterize their governments as corrupt”. Though this latter idea is in the spirit of our analysis, neither scholar provides a specific mechanism as to why concern for corruption with pre-existing political elites would induce voters to support the removal of checks and balances. Indeed the conventional wisdom in political economy would suggest the opposite course of action.

Though political scientists have attempted to develop rational theories of Chavismo, there are many who remain baffled by the whole phenomenon. For example Krauze (2009, p. 10) concludes “Chávez does not act like the president of Venezuela; he acts like its owner. He is the proprietor of his public office, the CEO of state enterprises that answer to no laws of transparency and accountability, the big and indiscriminate spender of oil revenues (between 1999 and 2008 he spent, on average, \$122 million per day), the supreme leader of a Legislative Assembly and Tribunal of Justice that is supposed to serve as a check and a balance”. The model of this paper can help explain why the majority of voters in Venezuela are prepared to support such a situation. The fact that Chávez acts as the ‘owner’ of Venezuela and engages in a foreign policy which does little for most Venezuelans corresponds to a form of (significant) rents conceded by voters to Chávez in order to get the policies they want in other dimensions.

Bolivia The final case we briefly discuss, which also highlights several ideas developed in our model, is Bolivia. An important aspect of Bolivian politics over the last decade, left out of our model, is the rise of indigenous politics. Evo Morales, the leader of the MAS party (Movimiento Al Socialismo — Movement Towards Socialism) was elected president for the first time in December 2005. His government was elected “to put into practice what other governments had decided or accepted ... The political failure to put these pacts into practice led to a loss of legitimacy among the parties ... such as Poder Democrático Social (Podemos...). For a large

section of voters, Podemos came to personify the traditional political party-game in which a series of formations take turns at being in power and sharing out posts: the so-called ‘democracy by agreement’ ” (Aguirre and Moreno, 2006). Thus, as discussed above, Bolivia also shares the important legacy of ‘politics of betrayal’ with Ecuador and Venezuela, having also seen a president promising change entirely fail at delivering it. Moreover, like these other cases popular revolt forced presidents—in the Bolivian case, Gonzalo Sánchez de Lozada in 2003—from power in the period leading up to the dismantling of checks and balances.

Like Correa and Chávez, Morales came to power set on re-writing the constitution and creating a constitutional assembly was also one of his first acts. In this assembly MAS had a majority but not the 2/3 representation required to completely dominate the process (a difference with the other cases). The re-writing the constitution was justified by Morales in similar ways to that of Correa and Chávez. De la Torre (2010, p. 119) notes that the perception that democracy in Bolivia had been captured by white elites could be seen by the fact that “Aymara leaders refer to Bolivia’s representative democracy as q’aracracia, a term that “combines q’ara (‘plucked,’ ‘bare’ or ‘hairless’ in Aymara and Quechua, meaning ‘white person’) with ‘democracia’”. The new constitution, ratified by a plebiscite in January 2009, “brought about sweeping changes to the Bolivian state that strengthened executive authority and undermined horizontal accountability” (Madrid, 2012, p. 252). In addition to the change in the presidential term limit to allow for two terms (MAS wanted permanent re-election but could not get it into the constitution), these changes included getting rid of supermajorities on the confirmation of government appointees such as ombudsman, comptroller general and the National Election Court. The changes enshrined in the constitution soon led to further reductions in checks and balances; for instance in early 2010 a law was passed authorizing Morales to appoint 5 Supreme Court justices, 10 Constitutional Tribunal judges and 3 members of the Judicial Council, none of which would have been possible under the old constitution. Madrid concludes his analysis (2012, pp. 239-240) “Although the MAS has helped boost political participation and increase mass satisfaction with democracy ... it has ... undermined democratic checks and balances”.

The evidence suggests that these changes have strengthened people’s confidence in democracy rather than undermined them. In the Latinobarómetro surveys the proportion of people who were satisfied or very satisfied with democracy in Bolivia rose from 24% in 2005 to 41% in 2007 and 50% in 2009. The raw data from the Latin American Public Opinion Project, the basis for our econometric analysis in the next section, shows a similar pattern (see Madrid, 2012, p. 254, for discussion). Thus the Bolivian case further highlights not only the popularity of the removal of checks on presidential power but also that this strengthened people’s belief in democracy. In our model, this is because removing checks and balances helps people to get a policy closer to the one they want.

Summing up the commonalities of the political transitions which have occurred in Ecuador, Venezuela and Bolivia, Ellner (2012, p.98-99) argues that a distinguishing feature “is their defense of radical democracy ... and rejection of many of the precepts of liberal democracy

... [which] with its central concern for the rights and prerogatives of minorities (which is often synonymous with “elites”), places a premium on the system of checks and balances and the diffusion of authority.” Our model formalizes precisely why citizens in these countries would wish to move from “liberal” to “radical” democracy.

3.2 Econometric Evidence

Data Description and Empirical Strategy

We use the Latin America Public Opinion Project (LAPOP) conducted by Vanderbilt University. LAPOP is a biannual survey covering over 25 countries from the Americas since 2006. Our sample comprises 18 Latin American countries for which we have complete data.²²

The main question we focus on is: “*Do you think that sometimes there can be sufficient grounds for the president to shut down the congress or do you think there can never be sufficient grounds to do so?*”. The possible answers are yes, no or do not know. We coded those who answered yes with 1, answers of no with 0 and treat do not know as missing values. This implies that this variable captures the share of people who believe the president may have enough grounds to close the congress.

We use two other questions related to people’s beliefs and perceptions. The first is a question we refer to as “elite” worded as: “*The biggest obstacle to progress in our country is the dominant class or oligarchy that takes advantage of the people. How much do you agree or disagree with that view?*”. The second is a question we refer to as “inequality”: “*The government should implement firm policies to reduce income inequality between the rich and the poor. To what extent do you agree or disagree with this statement?*”. Both variables are reported on a 1 to 7 scale and to simplify the interpretation of the results we normalize them between 0 and 1, with 1 corresponding to the strongest agreement with the statement. The 2008 survey is the only one that includes all three questions (as well as income).²³

We also use information on individual’s household income and on the following demographics: gender, marital status, age, number of children, education, race, size of municipality, and rural municipality. Monthly household income is reported in one of ten brackets constructed for each country based on its currency and income distribution in each country. We group these income brackets in five groups into five quintiles, encompassing approximately a fifth of the sample (approximate not exact because the income variable is bracketed). Quintile 1 corresponds to

²²These are Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela. The remaining countries in the survey are three Caribbean countries with the required data (the Dominican Republic, Haiti and Jamaica) and four other countries, Canada, Guyana, Trinidad and the United States, with one or more of the closing the congress, elite and inequality variables missing.

We exclude the Caribbean countries, since the political dynamics emphasized in this paper seem less relevant for them, with the exception of the Dominican Republic. In any case, our results are essentially the same when these three countries are included (in which case the Dominican Republic can be included in the reform group of countries, which also makes little difference to the results).

²³The question on closing the congress is also included in the 2010 survey, which, however, does not contain the elite question.

the poorest 1/5.²⁴

The key to our empirical strategy is to investigate whether the support for the closing of congress is greater among the poor and those wishing to further reduce inequality when they believe the elite dominates and controls politics — in terms of our model, the variable q (in particular, Proposition 3 and Corollaries 1 and 2). We use three strategies to proxy for q . First, we classify countries where there have been referenda to remove checks on presidential powers, especially vis-à-vis the legislature, and/or countries where there have been any reforms increasing presidential powers as high q (and the rest as low q). We view this as the most theory-driven way of dividing countries in our sample into high q and low q ; according to our model, in countries with q greater than a certain threshold, there will be popular support for dismantling checks and balances and in consequence, a referendum for such dismantling, while in countries with q lower than this threshold, there will not be such referenda. The group of countries where there have been removal of congressional checks on presidential powers since the late 1980s, which we designate as the “removal” countries, includes Bolivia, Ecuador, Nicaragua, Peru and Venezuela. The group of countries where there have been any such reforms, designated as the “reform” countries, comprises Argentina, Bolivia, Colombia, Ecuador, Honduras, Nicaragua, Peru and Venezuela.²⁵

Our second strategy, instead, uses recent data on various institutional and economic characteristics. The first is an index of political rights from the Freedom House data, providing a continuous measure of the quality of democracy. Higher quality democracies naturally correspond to those with low q . We also look at the control of corruption index from the World Bank, which captures general bureaucratic and political corruption in the economy. It is natural to expect countries where corruption is endemic to have a greater likelihood of the capture of politicians by powerful interest groups, and thus high q . Our third measure is an index of political stability from the World Bank, which represents the likelihood that the government will be destabilized or overthrown via unconstitutional means and thus also captures another dimension of the strength of democracy. Our final measure is oil production to GDP ratio (again from the World Bank) based on the idea that the possibility that countries with more resources that are easily taxed should increase the likelihood of support for increasing presidential powers (e.g., Corollary 3). In each case, we take the average of these indices between 1996 and 2006 to capture the quality of institutions in the years preceding the survey.²⁶

Our third strategy is to directly use individual perceptions captured by the elite variable. In particular, it is natural to expect that individuals who respond that the elite is the biggest

²⁴We have experimented with different ways of constructing income brackets, with very similar results. In particular, creating the quintiles on the basis of the income distribution for the entire Latin American sample (rather than separately for each country) gives almost identical results.

²⁵Information on the removal of checks and balances in Bolivia, Ecuador and Venezuela is provided in the previous subsection and on Nicaragua and Peru in footnote 17. In addition, in Argentina, President Carlos Menem ran for office again in 1994 by changing the constitution to relax term limits. In Columbia, President Álvaro Uribe did the same in 2004. In Honduras, President Manuel Zelaya attempted to start a process of constitutional change in 2009, which was stopped by a coup.

²⁶Changing this window has little effect on the results we report below.

obstacle to progress believe that q is high and thus, according to our mechanism, should support the closing of congress (particularly when they also think inequality should be reduced and when they are in the low income groups).

Table 1 presents summary statistics for our sample and also separately for the subsamples that have experienced referenda for increasing presidential powers against the legislature and the rest. It also shows the main descriptive statistics for individuals sorted into two groups, those in the bottom four income quintiles and those at the top (richest) income quintile.²⁷ The number of observations at the bottom of the table shows that the high income group, corresponding to top income quintile, makes up about 1/5 of the sample for each country.

TABLE 1 HERE

A non-trivial fraction of the population in our sample (25%) think that it is justifiable to close the congress. Notably, this is higher in countries in the ‘removal’ category (Bolivia, Ecuador, Nicaragua and Venezuela) that have undergone a referendum on this issue than in the rest. More interestingly, those in the top income quintile are less likely to think so in the ‘removal’ countries (34% in the top quintile vs. 36% in the bottom four quintiles), while in the remaining countries they are actually more likely to think so.

A significant fraction of the population in all countries and all income groups agrees with the statement that the elite is the biggest obstacle to progress across countries and supports redistribution to reduce inequality. Perhaps surprisingly, these are higher in the rest of the countries than in the ‘removal’ countries. Finally, years of education are clearly higher among those in the top quintile, and there is a slight educational advantage to individuals in the ‘removal’ countries.

Results

Table 2 reports our main results. We pool the data across all countries in our sample, and run a regression of the dummy for the support of the president to close the congress on a country dummy, the survey responses to the elite and inequality questions, four quintiles of income (the richest, quintile 5 being the omitted group), and the following controls: marital status, a quartic in age, educational achievement dummies, race dummies, number of children, sex, size of municipality and a dummy for urban area.²⁸ In addition, we include interactions between the elite and inequality, elite and poor (a dummy for individual being in the income quintiles 1-4), and poor and inequality variables, and interactions between various institutional variables (entered in different columns) and the poor, inequality and elite variables. Throughout, the main effects are evaluated at the sample mean values for the elite and inequality variables and at the highest values of the institutional variables (so that they correspond to the main effects

²⁷The survey suggests that Bolivian, Ecuadorian and Chilean data should be weighted with the sample weights, and the rest should not be (in fact, provides no sample weights). We follow this in all the results we report.

²⁸Our results are essentially identical with probit regressions.

for a country with the best institutions). The standard errors are robust and allow for clustering at the municipality level.²⁹

We expect the interactions between the elite and inequality and the elite and poor variables to be positive — to capture the notion that those wishing to see greater redistribution and those with low income, when they believe q is high, should be in support of closing the congress. We also expect interactions of the variables for inequality and poor with our various institutional variables (the dummies for removal and reform as well as political rights, control of corruption, political instability and oil to GDP ratio) to be significant. With the same reasoning, we may further expect the interactions between these institutions and the elite variables to be significant as well, since those seeing the elite as a major obstacle to progress need not support closing of the congress unless they also believe that political corruption is widespread; it is the combination of lack of trust in institutions and suspicion of the elite that should fuel the mechanisms proposed in this paper (and our results in fact support this interpretation as we will see below).

TABLE 2 HERE

Column 1 shows the basic correlations without any of the interaction variables. We see that those who believe the elite is a major obstacle to progress are more likely to support the closing of the congress. The effects are quantitatively significant but small. Moving from 0 to 1 in the question (from the lowest to highest) increases the likelihood that individual supports the closing of the congress by about 3.4 percentage points. Those wishing to see greater redistribution and those in the lower four income quintiles are also more likely to support such an action, but these effects are not statistically significant.

Column 2 includes interactions between elite and inequality, elite and poor and inequality and poor. The last two are never significant, but the interaction between elite and inequality variables is now (marginally) statistically significant, and quantitatively large: an individual who strongly agrees with the statement that inequality should be reduced further is 6.8 percentage points more likely to support the closing of the congress.

Column 3 adds the interactions with the removal dummy. Three things are noteworthy here. First, once this is done, the main effects of the elite and inequality variables, which were statistically significant in column 2, are no longer significant, suggesting that in countries that do not undergo referenda for removing checks on presidents, those viewing the elite as the main obstacle to progress and those wishing to see greater redistribution are *not* more likely to support the closing of the congress — as hinted at above, the main effects were instead driven by the attitudes of such individuals in countries that did undergo referenda. Second, the interaction between inequality and elite variables increases in magnitude to 7.9 percentage points (and is now significant at 5%). Third, the interactions of the removal dummy with the poor, elite and

²⁹Costa Rica is the only country for which the number of clusters may be low. It only has 29 clusters, while the rest of countries have 51 or more. However, clustering at a lower disaggregation level for Costa Rica, or not clustering at all does not change the results.

inequality variables are all statistically significant (at 5%). In each case, the quantitative effects are sizable. For example, those who believe that the government should reduce inequality are 11.9 percentage points more likely to support the closing of the congress in the removal countries than the rest, while those in the bottom four quintiles of income are 6.3 percentage points more likely to do so than those in the top quintile. This pattern, which largely anticipates that in the subsequent columns, suggests that the support for the closing of the congress is generally higher among those who simultaneously are in a society where elite capture of political institutions is a significant concern and who are also in favor of greater redistribution, generally poorer, and view the elite as a major obstacle to progress in society.

Column 4 shows a similar pattern, but now with the reform dummy as a proxy for q . The results are very similar to those in column 3, with the only difference that the interaction between the reform dummy and the inequality variable is no longer statistically significant.

Column 5 shows the same results using the political rights variables that proxy for q . The overall pattern is again similar, but now only the interaction between this institutional variable and the inequality variable is statistically significant (and the interaction between the elite and inequality variables continues to be significant). Recalling that now low values of the institutional variable corresponds to high q , we see that the quantitative magnitude of the relevant effect is still sizable: an individual who strongly agrees that inequality should be reduced further is 19.8 percentage points more likely to support the closing of the congress in a society with the worst political rights index (as compared to the best).

Column 6 repeats the same exercise with the control of corruption index. The overall pattern is again similar, but now only the interaction with the poor (the individual being in one of the lowest for quintiles of income) is significant (again at 5%). Column 7 uses the political stability variable, and now the interaction of this institutional variable and the elite and inequality questions are statistically significant, in each case at 5%.

Finally, column 8 is for the oil to GDP ratio, and shows that interactions with the poor and inequality variables are now statistically significant. This suggests that those in the lower income quintiles and those wishing to see greater redistribution to reduce inequality are more likely to support a closing of the congress in an economy with significant oil production than one without.

Overall, we interpret this evidence as broadly supportive of the main ideas emphasized in this paper. It is particularly encouraging that it is individuals who wish to increase government redistribution to reduce inequality and those who are poorer that support the closing of the congress and especially when they also think that the elite is a major obstacle to progress and/or when they are in a society in which institutions are weak, as witnessed by attempts to increase presidential powers (our theory-driven measure of q) or as measured by the standard institutional indices.

4 Conclusion

In many weakly-institutionalized democracies, particularly in Latin America, voters have recently dismantled constitutional checks and balances that are commonly thought to limit presidential rents and abuses of power. In this paper, we develop an equilibrium model of checks and balances in which voters may vote for the removal of such constraints on presidential power. Our main argument is simple: checks and balances are indeed effective (at least partially) in reducing presidential discretion and prevent policies that are not in line with the interests of the majority of the citizens. This naturally reduces presidential rents, which is however a double-edged sword. By reducing presidential rents, checks and balances make it cheaper to bribe or influence politicians through non-electoral means such as lobbying and bribes. In weakly-institutionalized polities where such non-electoral influences, particularly by the better organized elite, are a major concern, voters may prefer a political system without checks and balances as a way of insulating politicians from these influences. In consequence, voters may dismantle checks and balances, implicitly accepting a certain amount of politician rent or politicians' pet policies that they do not like, in order to ensure redistribution when they believe that the rich elite can influence politics through non-electoral means.

Though simple, our model leads to a number of interesting comparative statics. In particular, we show that checks and balances are less likely to emerge when politician rents are low in equilibrium; when the elite is better organized and are more likely to be able to influence or bribe politicians; and when inequality and potential taxes are high (which makes redistribution more valuable to the majority).

To illustrate the main insight in this paper, that checks and balances by reducing politician rents also make them easier to bribe by the better organized rich elite, we set up a very simple model of checks and balances in which the legislature can control the distribution of rents between itself and the president, forcing the president to choose zero rents and use all tax revenues for redistribution. We show in the online appendix that the same insights apply with different models of checks and balances. In particular, we analyze both a model in which the presence of checks and balances implies veto power by the president and the legislature related to the view in Diermeier and Myerson (1999) and a variant of the model proposed by Persson, Roland and Tabellini (1997, 2000), where separation of powers (checks and balances) corresponds to the separation of taxation and spending decisions. With both alternatives, it continues to be the case that checks and balances, again by making politicians cheaper to bribe, are potentially costly to the majority, is valid under different ways of modeling the form of checks and balances. We also show how providing representation to political minorities (here the rich elite) in the legislature, paradoxically, may make the rich worse off because it encourages dismantlement of checks and balances.

We have also provided case study and empirical evidence that in weak Latin American democracies — measured according to standard indices, or measured according to individuals'

perceptions, or where presidents have sought to reduce checks and balances — there is support from those wishing to increase redistribution and from poorer citizens to reduce checks on presidential power.

We view our paper as only one facet of the paradoxes of democratic politics under weak institutions. The more general message is that in such environments, political conflict can lead to the opposite of the results that we are used to from environments with strong institutions. Thus while voters always prefer checks and balances under strong institutions, they may prefer the absence of checks and balances under weak institutions. Similarly, perhaps, under weak institutions, voters may vote for incumbents that have chosen policies that are not in line with their preferences because this may be viewed as a signal that politicians are independent (as argued in Acemoglu, Egorov and Sonin, 2011). Furthermore, under weak institutions political competition can lead to a situation in which the group currently holding power may fear a power switch and as a result, entirely fail to monitor its leaders (e.g., Padro-i-Miquel, 2007) and a leveling of the democratic playing field may sometimes lead to worse outcomes because of the reactions from the elite that this engenders (e.g., Acemoglu and Robinson, 2008). We believe that further analysis of how, under weak institutions, political competition works and may get distorted, and perhaps how it can be designed so that it does not, is a fruitful area of future research.

Appendix A

In this appendix we show that without checks and balances there does not exist a bribing proposal that gives the rich strictly higher utility, and also that all bribing proposals are payoff equivalent for all agents. The problem for the rich lobby to solve is

$$\begin{aligned} & \max_{\{\hat{b}^P, \hat{T}^p, \hat{T}^r, \hat{R}^P, \hat{\tau}\}} \frac{(1 - \hat{\tau})\theta\bar{y}}{\delta} + \hat{T}^r - \frac{\hat{b}^P}{\delta} \text{ subject to} \\ & \alpha v(\hat{b}^P + \hat{R}^P) + (1 - \alpha) \left(\frac{(1 - \hat{\tau})(1 - \theta)\bar{y}}{1 - \delta} + \hat{T}^p \right) \geq \alpha v(R^*) + (1 - \alpha) \left(\frac{(1 - \theta + \bar{\tau}\theta)\bar{y} - R^*}{1 - \delta} \right) \\ & \hat{\tau}\bar{y} \geq (1 - \delta)\hat{T}^p + \delta\hat{T}^r + \hat{R}^P. \end{aligned}$$

Denoting the multipliers on the two constraints by λ_1 and λ_2 , the first-order conditions with respect to \hat{b}^P , \hat{T}^p , \hat{T}^r , \hat{R}^P and $\hat{\tau}$ are:

$$-\frac{1}{\delta} + \lambda_1 \alpha v'(\hat{b}^P + \hat{R}^P) = 0, \quad (\text{A-1})$$

$$\lambda_1(1 - \alpha) - \lambda_2(1 - \delta) = 0, \quad (\text{A-2})$$

$$1 - \lambda_2\delta = 0, \quad (\text{A-3})$$

$$\lambda_1 \alpha v'(\hat{b}^P + \hat{R}^P) - \lambda_2 = 0, \quad (\text{A-4})$$

and

$$-\frac{\theta}{\delta} - \lambda_1 \frac{(1 - \alpha)(1 - \theta)}{1 - \delta} + \lambda_2 = 0. \quad (\text{A-5})$$

From (A-1) it follows that $\lambda_1 > 0$ and from (A-3) that $\lambda_2 > 0$, establishing that the participation constraint of the president and the budget constraint both hold with equality. Substituting for λ_1 and λ_2 in (A-2) we find

$$\alpha v'(\hat{b}^P + \hat{R}^P) = \frac{1 - \alpha}{1 - \delta}, \quad (\text{A-6})$$

which implies, from (6), that $\hat{b}^P + \hat{R}^P = R^*$. From the participation constraint of the president holding with equality, the income of poor agents must be unchanged compared to the case without bribing. Substituting for \hat{T}^P from the budget constraint in the participation constraint of the president we then find the tax rate as

$$\hat{\tau} = \bar{\tau} - \frac{\hat{b}^P - \delta \hat{T}^r}{\theta \bar{y}}.$$

Substituting this in the maximand of the rich we find

$$\frac{(1 - \hat{\tau}) \theta \bar{y}}{\delta} + \hat{T}^r - \frac{\hat{b}^P}{\delta} = \frac{(1 - \bar{\tau}) \theta \bar{y}}{\delta},$$

which shows that any bribing proposal leaves the rich with the same income as if they do not bribe. Thus any lower tax rate or higher transfer to the rich must be compensated by the exact same amount in bribes, leaving all agents with the exact same utility as if there is no bribing. (Also, note that (A-5) is redundant as inserting from λ_1 and λ_2 this reduces to (A-6)). Thus without loss of any generality we consider the case where $\hat{b}^P = 0$.

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Table 1: Summary Statistics

<i>Country group:</i>	Full Sample	Removal of		Rest of	
		Checks and Balances		Countries in Sample	
<i>Quintile:</i>	All quintiles	Bottom four	Top quintile	Bottom four	Top quintile
Justifiable to close congress	0.25 (0.43)	0.36 (0.48)	0.34 (0.47)	0.20 (0.40)	0.23 (0.42)
Elite	0.62 (0.33)	0.60 (0.33)	0.58 (0.33)	0.64 (0.33)	0.62 (0.34)
Inequality	0.79 (0.27)	0.75 (0.29)	0.73 (0.30)	0.82 (0.26)	0.80 (0.27)
Age	38.74 (15.77)	37.24 (15.25)	36.97 (15.00)	39.60 (16.16)	37.91 (14.65)
Years of education	8.98 (4.53)	9.26 (4.36)	13.00 (3.77)	7.95 (4.24)	12.34 (3.98)
Observations	25929	7760	1502	14059	2608

Notes: Sample averages with standard deviation in parentheses. Data from LAPOP surveys for 18 Latin American countries for the year 2008 (Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela). The removal countries are Bolivia, Ecuador, Nicaragua, Peru and Venezuela, where explicit congressional checks on presidential powers were removed since the late 1980s. “Justifiable to close congress” is a dummy variable taking the value of 1 when the respondent agrees that there could be sufficient grounds to close the congress. “Elite” and “Inequality” variables take values between 0 and 1, and measure perceptions of how bad the elite is for development and how much the government should take actions to reduce inequality, respectively (see text for details). All statistics are weighted using the sample weights provided by LAPOP.

Table 2: Determinants of Support for Closing Congress.

	<i>Interacted Variable:</i>							
	(1)	(2)	Removal Dummy (3)	Reform Dummy (4)	Political Rights (FH) (5)	Control of Corruption (6)	Political Stability (7)	Oil to GDP (8)
Poor	0.010 (0.009)	0.010 (0.009)	-0.009 (0.011)	-0.017 (0.013)	0.003 (0.018)	-0.033 (0.023)	0.002 (0.018)	-0.007 (0.011)
Elite	0.034*** (0.012)	0.031*** (0.012)	0.016 (0.013)	0.009 (0.014)	0.013 (0.019)	-0.000 (0.029)	-0.013 (0.019)	0.026** (0.013)
Inequality	0.016 (0.013)	0.024* (0.014)	-0.013 (0.016)	0.009 (0.018)	-0.021 (0.023)	-0.020 (0.040)	-0.035 (0.025)	0.013 (0.016)
Poor× Elite		-0.016 (0.026)	-0.014 (0.026)	-0.010 (0.026)	-0.016 (0.026)	-0.018 (0.026)	-0.015 (0.026)	-0.011 (0.026)
Elite× Inequality		0.068* (0.037)	0.088** (0.036)	0.079** (0.037)	0.072* (0.037)	0.074** (0.037)	0.082** (0.037)	0.095*** (0.035)
Inequality× Poor		0.030 (0.034)	0.046 (0.034)	0.045 (0.035)	0.032 (0.034)	0.035 (0.034)	0.032 (0.034)	0.054 (0.035)
Interaction with Poor			0.063*** (0.019)	0.054*** (0.018)	-0.029 (0.066)	-0.068** (0.034)	-0.019 (0.038)	0.006*** (0.002)
Interaction with Elite			0.050** (0.025)	0.051** (0.022)	-0.083 (0.076)	-0.050 (0.045)	-0.112** (0.044)	0.003 (0.003)
Interaction with Inequality			0.119*** (0.030)	0.032 (0.028)	-0.198** (0.090)	-0.067 (0.061)	-0.144*** (0.055)	0.004** (0.002)
Observations	20740	20740	20740	20740	20740	20740	20740	20142
R-squared	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09

Notes: Dependent variable: “Justifiable to close congress” from LAPOP 2008. See notes to Table 1 and text for details on this and the other variables. Columns 3 to 8 report the interactions between the variable mentioned at top of the column with the poor, elite and inequality variables. The “Removal Dummy” takes the value of 1 for Bolivia, Ecuador, Nicaragua, Peru and Venezuela, where explicit congressional checks on presidential powers were removed since the late 1980s. The “Reform Dummy” takes the value of 1 for any country that passed laws increasing presidential powers since the late 1980s, comprising of Argentina, Bolivia, Colombia, Ecuador, Honduras, Nicaragua, Peru and Venezuela. In all columns, the main effects are evaluated at the means of the elite, inequality and poor variables. In addition, in columns 3 and 4, the main effects are evaluated for countries where the dummies are zero. Political Rights is averaged between 1996-2006 and normalized between zero (less rights) and one (more rights). The main effects are evaluated at countries with the maximum score of one. Control of Corruption and Political Stability are both averaged between 1996-2006 and normalized between zero and one. The main effects are evaluated for countries in the region with the maximum score of one. The last column presents interactions with oil production relative to GDP (average between 1996 and 2006) with the main effects evaluated at countries with no oil. Other covariates included but not reported in the table are: the size of the city where the person lives and if it is rural or urban, marital status, race, a quartic in age, number of children and educational achievement dummies. Robust standard errors with clustering by municipality are shown in parentheses. The reported coefficients with *** are significant at the 1% level; those with ** are significant at the 5% level; and those with * are significant at the 10% level.

ONLINE APPENDIX:
**Why Do Voters Dismantle Checks and Balances?
Extensions and Robustness**

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Abstract

In this online appendix we extend the basic model in the paper in several directions, discuss the robustness of the results, and moreover what new mechanisms our extensions implies as compared to the ones in the basic model.

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1 Introduction

The main insight in the paper is that checks and balances may be costly for the poor majority because, by reducing the president's rents, they make him more amenable to lobbying and bribery by an organized rich lobby. In this online appendix, we show that this main insight is robust under a variety of different modeling assumptions. We first consider another model of separation of powers, along the lines of Diermeier and Myerson (1999) and Tsebelis (2002), where checks and balances give the legislature veto power over all dimensions of policy. We next show that if instead of our simple model of separation of powers, we adopt the Persson, Roland and Tabellini (1997, 2000) approach of assuming that, under separation of powers, the president decides the tax rate and the legislature makes the spending decisions, all of our results generalize. We next use this framework to discuss how including political minorities (representatives of the rich elite) in the legislature affects the results. Finally, we also show that the same results apply when we relax the quasi-linearity of the utility of politicians.

2 Extensions to the Basic Model

In this section, we extend the basic model in the paper. Some of the more technical parts are collected in the appendix.

2.1 Checks and Balances as Veto Powers

In Section 2 in the paper, we modeled checks and balances as corresponding to a separation of policy decisions between the president and the legislature. A complimentary view of checks and balances relates it to the existence and power of "veto players", for example as in Diermeier and Myerson (1999) and Tsebelis (2002). We now show that the general insights presented so far continue to hold with this alternative but complementary view of checks and balances.

More specifically, we start, again, with the legislature consisting of a single chamber and a single legislator, who again represents the poor (all of these features will be relaxed below). We then adopt the following stylized game as a representation of the process of bargaining and political interactions between the president and the legislature in the presence of checks and balances:

1. The president proposes a tax rate τ . If the legislator agrees, the tax rate is implemented. If the legislator vetoes the tax rate, then the legislator proposes a new tax rate. If the president agrees, the tax rate is implemented. If the president vetoes the tax rate, the status quo tax rate $\tilde{\tau} \leq \bar{\tau}$ is implemented.
2. The president proposes transfers to the poor T^p (limited by the total budget $\tau\bar{y}$). If the legislator agrees, then the transfer is implemented. If the legislator vetoes the transfer, the legislator proposes a new transfer. If the president agrees the transfer is implemented. If the president vetoes the transfer, the status quo transfer \tilde{T}^p is implemented.

3. The president proposes transfers to the rich T^r (limited by the total budget $\tau\bar{y} - (1 - \delta)T^p$). If the legislator agrees, then the transfer is implemented. If the legislator vetoes the transfer, the legislator proposes a new transfer. If the president agrees the transfer is implemented. If the president vetoes the transfer, the status quo transfer \widetilde{T}^r is implemented.
4. The president proposes rents R^P to himself (limited by the available budget $\tau\bar{y} - (1 - \delta)T^p - \delta T^r$). If the legislator agrees the rents are implemented. If the legislator vetoes the rents, the legislator proposes a new rent allocation to the president. If the president agrees, the rents are implemented. If the president vetoes the rents, then the status quo rents \widetilde{R}^P is implemented.
5. The president proposes rents R^L to the legislator (limited by the available budget $\tau\bar{y} - (1 - \delta)T^p - \delta T^r - R^P$). If the legislator agrees, the rents are implemented. If the legislator vetoes, the legislator proposes a new rent allocation. If the president agrees the rents are implemented. If the president vetoes, the status quo rents \widetilde{R}^L is implemented.
6. Any remaining funds on the budget; $\tau\bar{y} - (1 - \delta)T^p - \delta T^r - R^P - R^L$ are distributed lump-sum to citizens.

There are two special features of this game that are worth noting. First, rather than the entire vector of policies and rents being agreed at once, they are being negotiated component by component. Second, the last player to make proposals before the status quo is implemented is always the legislator. Both of these features are adopted to simplify the analysis. Moreover, it will be clear from our analysis that the exact sequencing of policy decisions has no bearing on the results. Finally, let us also simplify the algebra by setting $\widetilde{R}^P = \widetilde{R}^L = 0$. Clearly, greater values of \widetilde{R}^P and \widetilde{R}^L make checks and balances less attractive to voters. Thus the simplifying assumption makes checks and balances more attractive to voters (and so our results that they may elect to remove checks and balances more striking).

As usual we proceed with backwards induction. Consider first the case where $\kappa = 0$ so that the rich are not able to solve their collective action problem and will not make a bribe offer. The president will veto any rents to the legislator, since transferring funds to citizens will provide him with higher utility. Realizing this, the legislator will accept zero rents. Then in equilibrium the president will indeed propose zero rents. In the same way the legislator will veto rents to the president, and realizing this the president proposes zero rents which the legislator accepts. Since there will be no rents in this case, the president proposes to use the whole budget as transfers to the poor, and the legislator will accept this. Realizing that all funds will be used as transfers to the poor, a president from the poor group will then propose the maximum tax rate $\bar{\tau}$, and the legislator will accept this. Thus when $\kappa = 0$ the solution is exactly the same as in the basic model in the paper.

Consider next the case where $\kappa = 1$ so that the rich can influence policy through bribing. The rich will now need to bribe both the president and the legislator. Thus, for exactly the

same reason as in the model with a judiciary that can be bribed, α^* from the basic model needs to be replaced by α^{**} , and b^* by b^{**} , and we have the following proposition.

Proposition B-1 *All of the results in Proposition 3 in the paper and the subsequent corollaries hold in the current model (with α^{**} replacing α^* and b^{**} replacing b^*).*

Multicameral Legislature

In line with Diermeier and Myerson (1999), we now allow the legislature to consist of multiple chambers, each consisting of a single legislator. Each chamber has veto and proposal powers. To highlight the implications of multiple chambers, we continue to assume that all legislators are from the poor group (this will be relaxed in subsection 2.3). In this case the voters elect a president and $h \geq 1$ chambers of the legislature. Each chamber consists of one legislator. Thus when $h = 1$ we have a unicameral legislature as above, when $h = 2$ we have a bicameral legislature, and so on. Note that h in our setting closely maps to the “hurdle factor” in Diermeier and Myerson (1999), which captures, the number of veto players that have to be bribed if policy is to be changed compared to a situation without bribing. As in Diermeier and Myerson (1999) the multicameral legislature is serial. Thus the timing is exactly as above, except that now a policy proposal has to pass through multiple chambers and can be vetoed by each of them in turn.

Consider first the case where $\kappa = 0$ so that the rich are not able to solve their collective action problem. By exactly the same logic as above it is easy to see that policy is still the same as in the basic model in Section 2 of the paper.

Consider next the case where $\kappa = 1$ so that the rich can influence policy through bribing. Compared to the situation with a unicameral legislature the rich now have to bribe the president and h chambers. The maximization problem is analogous to the case with a unicameral legislature, except that now there are $1 + h$ politicians’ participation constraints that have to be satisfied. Going through the same maximization as above we find that the president and all of the legislators receive the same bribe, and that $\hat{T}^p = 0$ and $\hat{\tau} = \bar{\tau}$ if

$$\frac{\alpha}{1 - \alpha} v'(\hat{b}^P) > \frac{1 + h}{1 - \delta},$$

where \hat{b}^P is the solution to the maximization problem in (11) in the text (see the proof of Proposition 2). This in turn implies that, similar to b^* in the text, the critical value of α for $\hat{T}^p = 0$ and $\hat{\tau} = \bar{\tau}$ is given by

$$\frac{\alpha^{***}}{1 - \alpha^{***}} v'(\hat{b}^P(\alpha^{***})) = \frac{1 + h}{1 - \delta}.$$

This equation implies that α^{***} is increasing in the hurdle factor h . Intuitively, when there are more chambers with veto power, there will be more legislators to bribe, and this makes it more likely that the bribing proposal will include some income redistribution (since this enables lower bribes for each legislator). Also, note that except for this modification, the analysis in Section 2

of the paper still carries over to the present case with α^* replaced by α^{***} and $b^{***} < b^*$ replaced by b^{***} , where b^{***} is given by $v'(b^{**}) = (1+h)(1-\alpha)/\alpha(1-\delta)$. Thus we have the following proposition:

Proposition B-2 *Consider the case with a serial multicameral legislature with veto powers. Then all of the results in Proposition 3 and the subsequent corollaries still hold (with α^{***} replacing α^* and b^{***} replacing b^*).*

Thus the model with checks and balances as veto powers leads to similar insights as our basic model presented in Section 2 of the paper. However, the multicameral extension discussed here also implies that a greater h may make checks and balances more likely to emerge in equilibrium. This result, however, depends on the assumption that all chambers contain legislators from the poor income group. In subsection 2.3, we will see that legislative structures that also empower political minorities (here the rich minority) may paradoxically make checks and balances less likely in equilibrium because they may reduce the rents of the president even further and make him even cheaper to buy/influence.

2.2 Separation of Taxation and Spending Decisions

In this subsection, we show that our main insights are also robust to another popular way of modeling checks and balances. In particular, we follow Persson, Roland and Tabellini (1997, 2000) and assume that the presence of checks and balances corresponds to the separation of taxation and spending decisions. More specifically, the president sets the tax rate and the legislator makes all the spending decisions. Recall that the budget constraint is

$$(1-\delta)T^p + \delta T^r + R^L + R^P \leq \tau \bar{y}. \quad (\text{B-1})$$

Recall also that without checks and balances the rents to the president are determined as $R^P = R^*$, where R^* satisfies

$$\alpha v'(R^*) = \frac{1-\alpha}{1-\delta}. \quad (\text{B-2})$$

The transfer to the poor is given by $T^p = (\tau \bar{y} - R^*) / (1-\delta)$. The utility of poor agents is given by

$$U^p [\gamma = 0, \kappa = 0] = \frac{(\tau \theta + 1 - \theta) \bar{y} - R^*}{1-\delta}. \quad (\text{B-3})$$

Next, suppose that $\kappa = 1$. In this case, the rich lobby can make a bribe offer, $\{\hat{b}^P, \hat{\tau}, \hat{T}^p, \hat{T}^r, \hat{R}^L, \hat{R}^P\}$. However, for the same reason as in Section 2 in the paper we can also see that in this case the rich lobby can never get strictly higher utility by offering a bribe. There would be no offer that the rich lobby can make that would be acceptable to the politician and at the same time increase their own utility.

The following proposition summarizes the case without checks and balances:

Proposition B-3 *Suppose the constitution involves no checks and balances (i.e., $\gamma = 0$). Then the equilibrium policy involves $\tau = \bar{\tau}$, $R^P = R^*$ (as given by (B-2)), $R^L = 0$, $b^P = 0$, $b^L = 0$, $T^r = 0$, and $T^p = (\bar{\tau}\bar{y} - R^*) / (1 - \delta)$. The utility of poor agents in this case is given by (B-3).*

Next, suppose that there is separation of powers ($\gamma = 1$) and again start with $\kappa = 0$, so that the rich are not able to solve their collective action problem and will not make a bribe offer. In the policy-making subgame, the legislator will make the spending decisions and will solve the program

$$V^{L,p}[\tau, \gamma = 1, \kappa = 0] \equiv \max_{\{T^p, T^r, R^L, R^P\}} \alpha v(R^L) + (1 - \alpha)((1 - \tau)y^p + T^p),$$

subject to the government budget constraint (B-1) and the tax rate τ decided by the president. The solution in this case is $T^r = R^P = 0$, and

$$R^L = \min\{R^*, \tau\bar{y}\}. \quad (\text{B-4})$$

and

$$T^p = \frac{\tau\bar{y} - R^L}{1 - \delta}, \quad (\text{B-5})$$

Given this the president sets the tax rate so as to maximize

$$V^{P,p}[\gamma = 1, \kappa = 0] \equiv \max_{\tau} \alpha v(R^P) + (1 - \alpha)((1 - \tau)y^p + T^p),$$

subject to the best response spending policy of the legislator, i.e., subject to

$$\{T^p, T^r, R^L, R^P\} \in \arg \max V^{L,p}[\tau, \gamma = 1, \kappa = 0].$$

Since separation of powers gives $R^P = 0$, we have that

$$\tau = \arg \max_{\tau'} [\alpha v(0) + (1 - \alpha)((1 - \tau')y^p + T^p)] = \arg \max_{\tau'} U^p.$$

Therefore, in this case the president will set the tax rate so as to maximize utility of the poor.

The president realizes that tax income in excess of R^* will be transferred to the poor while none of the tax income will end up as rents for the president. Thus compared to the case without checks and balances it is now less tempting for the president to tax. The income of the poor if the tax rate is set to zero is $(1 - \theta)\bar{y} / (1 - \delta)$, while the income of the poor if the tax rate is set so as to maximize the income transfers to the poor is given by (B-3). The president sets the tax rate to zero or $\bar{\tau}$ depending on what maximizes the income of the poor. If R^* is greater than $\theta\bar{\tau}\bar{y}$, then the tax rate is set to zero, while if R^* is less than $\theta\bar{\tau}\bar{y}$ the tax rate is set to $\bar{\tau}$.

Note from (B-2) that $R^* = R^*(\alpha)$ and let α^H be defined by

$$R^*(\alpha^H) = \theta\bar{\tau}\bar{y},$$

which inserting for $R^*(\alpha^H)$ in (B-2) yields

$$\alpha^H = \frac{1}{1 + (1 - \delta)v'(\theta\bar{\tau}\bar{y})}. \quad (\text{B-6})$$

Then when $\alpha < \alpha^H$ the weight the legislator puts on his own utility is sufficiently small that the president still adopts the maximum tax rate $\tau = \bar{\tau}$, while when $\alpha > \alpha^H$ the income of the poor is maximized by setting $\tau = 0$. In this latter case when $\tau = 0$ it follows from the government budget constraint (B-1) that under checks and balances then when $\kappa = 0$ policy is $T^p = T^r = R^P = R^L = 0$.

The situation when there are checks and balances and the rich lobby is organized (i.e., $\gamma = 1$ and $\kappa = 1$) is a little more involved. In this case, the rich lobby will make bribe offers $\{\hat{b}^L, \hat{T}^p, \hat{T}^r, \hat{R}^L, \hat{R}^P\}$ and $\{\hat{b}^P, \hat{\tau}\}$ to the legislator and the president, respectively. For the politicians to accept these bribe offers they must satisfy the participation constraints

$$V^{L,p}(\hat{b}^L, \hat{\tau}, \hat{T}^p, \hat{T}^r, \hat{R}^L, \hat{R}^P) \geq V^{L,p}[\gamma = 1, \kappa = 0],$$

and

$$V^{P,p}(\hat{b}^P, \hat{\tau}, \hat{T}^p, \hat{T}^r, \hat{R}^L, \hat{R}^P) \geq V^{P,p}[\gamma = 1, \kappa = 0].$$

Consider first the case where $\alpha < \alpha^H$. Here the tax rate without bribing is set at its maximum $\tau = \bar{\tau}$, and the legislator obtains his bliss point policy with positive rents and transfers to the poor. Thus the rich lobby has nothing to offer him that they find it worth paying for. However, in this case the president can be bribed. Since checks and balances means no rents for the president, he becomes cheap to buy for the rich lobby. The rich lobby can offer him rents in exchange for a lower tax rate, taking into account that the legislator will set policy according to (B-5) and (B-4). Since when $R^P = 0$ the marginal utility of bribes is higher than the president's marginal utility of transfers the poor, it will be beneficial for the rich lobby to bribe and induce the president to set a tax rate lower than $\tau = \bar{\tau}$. But for this reason of course, it is already clear that a constitution with checks and balances can never be an equilibrium when $\alpha < \alpha^H$; in this case the poor prefer $\tau = \bar{\tau}$ which they will always get when the constitution does not involve checks and balances. Thus in this case, checks and balances simply make the president too cheap to buy for the rich lobby, in turn limiting redistribution to the poor. Since they are straightforward, we do not provide details of this case.

When $\alpha > \alpha^H$ the tax rate without bribing is set to zero. This leaves both the president and the legislator with zero rents, making both of them cheap to buy for the rich lobby. The rich lobby can then bribe politicians into redistributing income to themselves. The only remaining question is to determine the cheapest way for the rich lobby to capture the politicians. As should now be clear from the paper, since we have direct income transfers there are many bribing proposals that will be payoff equivalent to all agents. Without loss of any generality we focus here on the case where the tax rate is set at its maximum, and all redistribution to different groups is undertaken by targeted transfers.

Intuitively, when there is no bribing and rents are zero, the marginal utility of rents for politicians is relatively high. As a consequence, bribing politicians will always imply positive direct bribes. Moreover, if politicians put sufficiently high weight, $1 - \alpha$, on the utility of the members of their group and if income distribution is not too unequal, then the bribing proposal

will also contain direct income transfers to the poor. In the converse case where α is high and income distribution is relatively unequal, it is more efficient for the rich lobby to capture politicians by offering direct bribes rather than income transfers to the poor. This latter result is particularly interesting because it implies that when inequality is high, which is when we would typically expect greater redistribution, the poor may in fact receive no redistribution. Intuitively, this is because greater inequality also increases the willingness of the rich to use bribes to reduce redistribution. The details of the analysis of this case, which underlies Part 1.(b) of Proposition B-4, is provided in Section 2.2 below.

The next proposition summarizes these results.

Proposition B-4 *Suppose $\gamma = 1$. Let α^H be given as in (B-6).*

1. *Suppose that $\alpha > \alpha^H$.*

- (a) *When $\kappa = 0$ so that there is no bribing, the equilibrium involves $\tau = 0$, $R^P = 0$, $R^L = 0$, $T^P = 0$, and $T^r = 0$.*
- (b) *When $\kappa = 1$, there exist θ^* and α_L such that:*
 - i. *If $\theta > \theta^*$ or $\alpha > \alpha_L$, then $\tau = \bar{\tau}$, $R^P = 0$, $R^L = 0$, $b^P = b^L > 0$, $T^P = 0$, and $T^r > 0$.*
 - ii. *If $\theta < \theta^*$ and $\alpha < \alpha_L$, then $\tau = \bar{\tau}$, $R^P = 0$, $R^L = 0$, $b^P = b^L = b^*$, with b^* determined by $v'(b^*) = 2(1 - \alpha)/\alpha(1 - \delta)$, $T^P > 0$, and $T^r > 0$.*

Taking into account that the probability the rich can solve their collective action problem and bribe politicians is q , we have that:

If $\theta > \theta^$ or $\alpha > \alpha_L$, then the expected utility of poor agents is*

$$U^P[\gamma = 1] = \frac{(1 - \theta)(1 - q\bar{\tau})}{1 - \delta} \bar{y}. \quad (\text{B-7})$$

If $\theta < \theta^$ and $\alpha < \alpha_L$, then the expected utility of poor agents is*

$$U^P[\gamma = 1] = \frac{1 - \theta}{1 - \delta} \bar{y} - \frac{q}{1 - \delta} \left(\frac{2v(b^*)}{v'(b^*)} \right). \quad (\text{B-8})$$

2. *Suppose that $\alpha < \alpha^H$.*

- (a) *When $\kappa = 0$, the equilibrium involves $\tau = \bar{\tau}$, $R^P = 0$, $R^L = R^*$, $T^P = (\bar{\tau}\bar{y} - R^*)/(1 - \delta)$, and $T^r = 0$.*
- (b) *When $\kappa = 1$, the equilibrium involves $\tau < \bar{\tau}$, $R^P = 0$, $R^L \leq R^*$, $b^P > 0$, $b^L = 0$, $T^P = (\tau\bar{y} - R^L)/(1 - \delta)$, and $T^r = 0$.*

Taking into account that $q \geq 0$ we have that when $\alpha < \alpha^H$ then $U^P[\gamma = 1] \leq U^P[\gamma = 0]$.

When politicians put sufficiently high weight on rents, i.e., when $\alpha > \alpha^H$, checks and balances, in the absence of bribery, lead to an equilibrium in which they obtain zero rents. This makes them relatively cheap to bribe and influence. Given the above characterization, the outcome in the referendum on checks and balances is straightforward to determine.

Proposition B-5 *Let α^H be as in (B-6) and θ^* and α_L as in Proposition B-4.*

1. *Suppose that $\alpha > \alpha^H$.*

(a) *When $\theta > \theta^*$ or $\alpha \geq \alpha_L$, the constitution will involve no checks and balances provided that*

$$q > \frac{R^* - \bar{\tau}\theta\bar{y}}{(1 - \theta)\bar{\tau}\bar{y}}, \quad (\text{B-9})$$

and it will involve checks and balances if the converse inequality holds.

(b) *When $\theta < \theta^*$ and $\alpha < \alpha_L$, the constitution will involve no checks and balances provided that*

$$q > \frac{(R^* - \bar{\tau}\theta\bar{y})v'(b^*)}{2v(b^*)}, \quad (\text{B-10})$$

and it will involve checks and balances if the converse inequality holds.

2. *Suppose that $\alpha < \alpha^H$. Then the constitution will never involve checks and balances.*

Proof. To see part 1, note that an individual from the poor income group prefers a constitution without checks and balances when $U^p[\gamma = 0] > U^p[\gamma = 1]$. When $\theta > \theta^*$ or $\alpha \geq \alpha_L$ part 1.(a) follows from (B-3) and (B-7). When $\theta < \theta^*$ and $\alpha < \alpha_L$ part 1.(b) follows from (B-3) and (B-8). Part 2 follows since in this case poor voters prefer the president to set $\tau = \bar{\tau}$ in order to get income redistribution. In the case without checks and balances the president always sets $\tau = \bar{\tau}$, while with checks and balances with probability q the rich lobby bribe him into setting a lower tax rate. ■

This proposition shows that when checks and balances take the form of the separation of taxation and spending, if politicians sufficiently high weight on the utility of their group ($\alpha < \alpha^H$), poor voters always prefer a constitution without checks and balances. The intuition is again similar: with concentrated power the president becomes too expensive to buy for the rich lobby, which is good for the poor provided that the president puts a sufficiently high weight on their utility relative to his own rents. In contrast, when the constitution includes checks and balances, the president is weaker, and this allows the rich lobby to bribe and obtain policies in their favor. By inspection of (B-6), we see that the condition $\alpha < \alpha^H$ is more likely to be satisfied when income distribution is unequal (θ high) and economic activity is easily taxable ($\bar{\tau}$ high). This implies that in more unequal societies and in societies where income is easier to tax, poor voters are more likely to opt for a constitution without checks and balances, even when politicians put more weight on their own rents.

The next two corollaries are again straightforward implications of our main result:

Corollary 1 *Suppose that $\alpha > \alpha^H$. When $q = 0$, so that the rich are never able to bribe politicians, then the constitution will always include checks and balances.*

Proof. This immediately follows by noting that when $q = 0$ the inequalities in (B-9) and (B-10) reduce to $\alpha < \alpha^H$, which is a contradiction. ■

When politicians can never be captured because the lobby are not able to solve the collective action problem, the constitution will always involve checks and balances. This highlights again that the reason why the majority may prefer a constitution without checks and balances is because of the interaction between politician behavior and bribing by the rich lobby.

Similarly, a second corollary to Proposition B-5 is that:

Corollary 2 *Suppose that $\alpha > \alpha^H$ and $q > 0$. The comparative statics with respect to q and $\bar{\tau}$ from the basic model continue to hold in the model with separation of taxing and spending. Thus a constitution without checks and balances is more likely when q is greater and when $\bar{\tau}$ is higher.*

Proof. The comparative statics with respect to q follow as the left-hand sides of both (B-9) and (B-10) are increasing in q while the right-hand sides are independent of q . The comparative statics with respect to $\bar{\tau}$ follow as the left-hand sides of (B-9) and (B-10) are independent of $\bar{\tau}$ while the right-hand sides are decreasing in $\bar{\tau}$. ■

But the likelihood of a constitution without checks and balances is now also affected by income inequality:

Corollary 3 *Suppose that $\alpha > \alpha^H$ and $q > 0$. Then a constitution without checks and balances is more likely when θ is higher, that is when income inequality is higher.*

Proof. This follows as the left-hand sides of (B-9) and (B-10) are independent of θ while the right-hand sides are decreasing in θ . ■

Moreover, since in this case a greater q may tilt the equilibrium constitution from one that features checks and balances to one that does not, we again have that the political power and utility of the rich may in fact become lower if the rich become better at solving the collective action problem (in the sense that q increases).

2.3 Political Minorities

In the model presented in the previous subsection, checks and balances is a way of sharing political power between the president and the legislature. However, as the poor citizens constitute a majority and select both the legislator and the president, such checks and balances do not transfer political power from the majority group to the minority group. In many political systems even minority groups get some political power in the legislature. We now briefly consider an extension to allow for this possibility. The main result is the following paradoxical finding: greater power sharing in the legislature can backfire and lead to an equilibrium with fewer checks on the president (which is thus worse for the political minority, the rich in this case).

To capture the effect of the political power of the minority, we now assume that the legislature consists of two (or many) elected politicians where one (group) represents the poor voters and the other represents the rich.¹ We assume that there is a probability $1 - \eta$ that a legislator from the poor is selected to decide spending and a probability η that a legislator from the rich is selected. The timing of events is the same as above, except that now at stage 3 where uncertainty is revealed not only whether or not the rich can bribe becomes common knowledge, but also the identity of the spending legislator (which was not uncertain in the model above).

It is straightforward to see that parts 1.(a) and 2 of Proposition B-5 are unaffected. Thus the only situation where the extension of the model into a multi-member legislature modifies the analysis and the results is when $\theta < \theta^*$ and $\alpha < \alpha_L$ and we are in part 1.(b) of Proposition B-5. This is the case we focus on in this subsection, thus assuming throughout that $\theta < \theta^*$ and $\alpha < \alpha_L$, which implies that under checks and balances the bribing equilibrium with a legislator and a president from the poor involves positive income transfers to the poor.

Now consider the situation with a legislator from the rich. In this case, when $\kappa = 1$ (i.e., when it is able to offer bribes), the rich lobby will prefer to include no or less income transfers to the poor in the bribing proposal than in the case where it was facing a legislator from the poor. Intuitively, this is because transferring resources to the poor is now less attractive for the rich lobby as these transfers only benefit one of the politicians it is bribing. In Section 2.3 below, we characterize the optimal bribing proposal for the rich in this case and the expected utility of the poor from a constitution with and without checks and balances (and checks and balances corresponding to a multi-member legislature). This characterization immediately implies:

Proposition B-6 *Suppose there is a multi-member legislature, $\gamma = 1$, $\theta < \theta^*$ and $\alpha < \alpha_L$. Then there exists $\alpha_M < \alpha_L$ such that:*

1. *when $\alpha > \alpha_M$, the constitution will involve no checks and balances provided that*

$$q > \frac{R^* - \bar{\tau}\theta\bar{y}}{\left((1 - \eta)\frac{2v(b^*)}{v'(b^*)} + \eta(1 - \theta)\bar{\tau}\bar{y} \right)}, \quad (\text{B-11})$$

and it will involve checks and balances if the converse inequality holds;

2. *when $\alpha < \alpha_M$, the constitution will involve no checks and balances provided that*

$$q > \frac{R^* - \bar{\tau}\theta\bar{y}}{\left((1 - \eta)\frac{2v(b^*)}{v'(b^*)} + \eta\frac{v(R^{**})}{v'(R^{**})} \right)}, \quad (\text{B-12})$$

and it will involve checks and balances if the converse inequality holds.

Proof. See the Appendix. ■

¹The implications of providing greater power/voice to political minorities can also be studied, with similar results, using a structure similar to Diermeier and Myerson (1999) or equivalently in the context of the veto player model introduced in subsection 2.1.

Naturally, when $\eta = 0$, (B-11) and (B-12) both reduce to (B-10), and we obtain the same results as in the previous subsection.

In addition, when $q = 0$ so that the rich are never able to bribe politicians, Proposition B-6 implies that the constitution will always include checks and balances. Moreover, it is straightforward to verify that all the comparative statics with respect to q , θ and $\bar{\tau}$ from the single-member legislature case continue to apply in the case with a multi-member legislature.

The more interesting result from Proposition B-6 concerns the comparative statics with respect to η , which are provided in the next corollary.

Corollary 4 *A greater η , i.e., granting greater power to the political minority in the legislature, makes checks and balances less likely.*

Proof. This follows as the left-hand sides of (B-11) and (B-12) are independent of η , while the denominators on the right-hand sides of (B-11) and (B-12) are increasing in η (because as can be verified in the Appendix in (B-11), $(1 - \theta)\bar{\tau}\bar{y}v'(b^*) > 2v(b^*)$, and in (B-12), $v(R^*)v'(b^*) > 2v(b^*)v'(R^*)$). ■

This corollary thus implies that efforts to protect the rights of the rich elite by giving them greater representation in the legislature, a strategy often adopted by many newly independent countries, may actually backfire and lead to lower checks and balances in equilibrium. This is because increasing the representation of the rich under checks and balances makes political corruption even more costly for the poor and discourages them from choosing checks and balances in the first place. When this is the case granting more political power to the minority makes them less powerful and results in policies providing them with lower utility.

2.4 Relaxing Quasi-Linearity

We now explore the solution of the model in Section 2 in the paper when the utility function of politicians is no longer quasi-linear. In particular, suppose that the utility function of a politician j from income group $i \in \{p, r\}$ is given by

$$V^{j,i} = (R^j + b^j + r)^\beta (U^i)^{1-\beta}, \quad (\text{B-13})$$

where $\beta \in (0, 1)$, and $r > 0$ denotes the ego rents of becoming an elected politician. These ego rents may also be interpreted as the wage of a politician. With $r > 0$ the utility function is defined and well behaved also in cases where $R^j + b^j = 0$.

To facilitate comparison with the model in Section 2 in the paper that does not include ego rents, in the text we simplify by focusing on the case where $r \rightarrow 0$, so that for simplicity the ego rent term vanishes. Nevertheless, the presence of this vanishing term implies that even when $R^j = b^j = 0$ the utility function has standard properties. We show the solution in the slightly more complicated case when r can take any value in Section 2.4.

We first investigate the case where the constitution does not involve checks and balances, i.e. $\gamma = 0$.

Consider first the case in which $\kappa = 0$ so that the rich are not able to solve their collective action problem and will not make a bribe offer. Then, in the policy-making subgame, the president will solve the program

$$V^{P,p}[\gamma = 0, \kappa = 0] \equiv \max_{\{\tau, T^p, T^r, R^L, R^P\}} (R^P + r)^\beta ((1 - \tau)y^p + T^p)^{1-\beta}, \quad (\text{B-14})$$

subject to the government budget constraint. This problem has a unique solution where incomes are taxed at the maximum rate, with all the proceeds spent on rents to the president and transfers to the poor (so that government budget constraint holds as equality).

Next, suppose that $\kappa = 1$. Again the rich lobby can never strictly increase its utility by offering a bribe that the president will accept. Any such offer is payoff equivalent for all parties and without loss of any generality we set $\hat{b}^P = 0$. The following proposition summarizes the case where the constitution does not have checks and balances:

Proposition B-7 *Suppose $\gamma = 0$. Let $r \rightarrow 0$ and*

$$\beta^H = \frac{\bar{\tau}}{1 - \theta + \bar{\tau}\theta}. \quad (\text{B-15})$$

Then the equilibrium policy always has $\tau = \bar{\tau}$. Moreover:

1. *if $\beta > \beta^H$, then $T^p = 0$. The utility of poor agents in this case is $U^p[\gamma = 0] = (1 - \theta)(1 - \bar{\tau})\bar{y}/(1 - \delta)$;*
2. *if $\beta < \beta^H$, then transfers are given by*

$$T^p = (\bar{\tau} - \beta(1 - \theta + \bar{\tau}\theta)) \frac{\bar{y}}{1 - \delta}.$$

The utility of poor agents in this case is

$$U^p[\gamma = 0] = \frac{1 - \beta}{1 - \delta} (1 - \theta + \bar{\tau}\theta) \bar{y}. \quad (\text{B-16})$$

Proof. This proposition follows by letting $r \rightarrow 0$ in the general case where r can take any value shown in Proposition B-11 in Section 2.4. ■

Consider next the case where the constitution involves checks and balances, i.e. $\gamma = 1$. When $\kappa = 0$ then for the same reason as in Section 2 in the paper the legislator will ensure there are no rents to the president, which in turn has the implication that the president decides policy so as to maximize the utility of the poor, i.e. the maximum tax rate is imposed, $T^p = \bar{\tau}\bar{y}/(1 - \delta)$, and the utility of the poor is given by

$$U^p[\gamma = 1, \kappa = 0] = \frac{(1 - \theta + \bar{\tau}\theta)\bar{y}}{1 - \delta}.$$

On the other hand when $\kappa = 1$ the rich lobby can successfully bribe the president. In particular as $r \rightarrow 0$, the rich lobby induce the president to set the tax rate to zero, which in turn implies that the poor will get no redistribution. In this case we have:

Proposition B-8 *Suppose $\gamma = 1$ and let $r \rightarrow 0$.*

1. *When $\kappa = 0$ so that the rich lobby is not organized and there is no bribing, the equilibrium involves $\tau = \bar{\tau}$, $R^P = 0$, $R^L = 0$, and $T^P = \bar{\tau}\bar{y}/(1 - \delta)$.*
2. *When $\kappa = 1$ so that the rich lobby is organized and there is bribing, then $\tau = \bar{\tau}$, $R^P = 0$, $R^L = 0$, $b^P > 0$, $b^L = 0$, and $T^P = 0$.*

The expected utility of poor agents is given by

$$U^P [\gamma = 1] = \frac{(1 - \theta + \bar{\tau}\theta)\bar{y}}{1 - \delta} - q\frac{\bar{\tau}\bar{y}}{1 - \delta}. \quad (\text{B-17})$$

Proof. This result follows by letting $r \rightarrow 0$ in the general case where r can take any value shown in Proposition B-12 in the Appendix. ■

When poor voters vote to decide if the constitution should involve checks and balances or not we then have the proposition stated in the main paper:

Proposition B-9 *Let $r \rightarrow 0$.*

1. *When $\beta > \beta^H$ the constitution will always involve checks and balances.*
2. *When $\beta < \beta^H$ then the constitution will involve no checks and balances if*

$$q > \frac{\beta(1 - \theta + \bar{\tau}\theta)}{\bar{\tau}}, \quad (\text{B-18})$$

and it will involve checks and balances if the converse inequality holds.

A greater q (a higher likelihood of the rich lobby being organized) makes a constitution without checks and balances more likely.

Proof. Part 1 follows as in this case under no checks and balances the poor pay maximum taxes but get no transfers, while under checks and balances there is a positive probability they will receive transfers. Part 2 follows after simple calculation by comparing (B-16) with (B-17). The effect of q in part 2 follows as the left-hand side of (B-18) is increasing in q while the right-hand side of this equation is independent of q . ■

It is easy to verify that also in this case the constitution will always involve checks and balances when $q = 0$, and that all the comparative statics with respect to q and $\bar{\tau}$ from the basic model is still valid. More interesting, as discussed in the main paper now income distribution also matters for the choice of constitution. A more unequal income distribution, that is a higher θ , makes a constitution without checks and balances more likely.

Further Proofs

Proof of Part 1.(b) of Proposition B-4 in Section 2.2

In this Appendix we provide analytical details behind Part 1.(b) in Proposition B-4. Recall that the rich lobby now can propose a bribe for policy in all policy dimensions and $\alpha > \alpha_H$. To simplify the exposition, note also that for any combination of rents R^j and bribes b^j , both politicians and all other agents just care about sum of these two, and thus without loss of generality we can set $R^P = R^L = 0$, so that all payments to politicians are in the form of bribes. Furthermore, without loss of any generality we set $\tau = \bar{\tau}$ so that if an income group is proposed to get higher income this is through targeted transfers. Again, note that the budget constraint will be satisfied with equality as the rich lobby can always increase their utility by proposing unused funds as transfers to themselves. Inserting from the budget constraint in the utility of the rich that $\hat{T}^r = (\bar{\tau}\bar{y} - (1 - \delta)\hat{T}^p)/\delta$, the rich lobby then solves the program

$$\begin{aligned} & \max_{\{\hat{b}^L, \hat{b}^P, \hat{T}^p\}} (1 - \bar{\tau})y^r - \frac{\hat{b}^L + \hat{b}^P}{\delta} + \frac{\bar{\tau}\bar{y} - (1 - \delta)\hat{T}^p}{\delta} \text{ subject to} & \text{(B-19)} \\ & \alpha v(\hat{b}^L) + (1 - \alpha)\left((1 - \bar{\tau})y^p + \hat{T}^p\right) \geq (1 - \alpha)y^p \\ & \alpha v(\hat{b}^P) + (1 - \alpha)\left((1 - \bar{\tau})y^p + \hat{T}^p\right) \geq (1 - \alpha)y^p \\ & \hat{b}^L \geq 0 \\ & \hat{b}^P \geq 0 \\ & \hat{T}^p \geq 0, \end{aligned}$$

Denoting the multipliers on the five constraints in (B-19) by λ_1 , λ_2 , λ_3 , λ_4 and λ_5 , the first-order conditions are:

$$-\frac{1}{\delta} + \lambda_1 \alpha v'(\hat{b}^L) + \lambda_3 = 0 \quad \text{(B-20)}$$

$$-\frac{1}{\delta} + \lambda_2 \alpha v'(\hat{b}^P) + \lambda_4 = 0 \quad \text{(B-21)}$$

$$-\frac{(1 - \delta)}{\delta} + \lambda_1(1 - \alpha) + \lambda_2(1 - \alpha) + \lambda_5 = 0. \quad \text{(B-22)}$$

From the participation constraints of the politicians it follows immediately that the non-negative constraints on bribes and transfers to the poor can not all be binding at once. Thus, we have three possible cases.

Case (1). If $\lambda_3, \lambda_4 > 0$ then $\hat{b}^L = \hat{b}^P = 0$, in which case $\lambda_5 = 0$ so that $\hat{T}^p > 0$. Thus in this case, there are no bribes.

Case (2). If $\lambda_5 > 0$ then $\hat{T}^p = 0$, in which case $\lambda_3 = \lambda_4 = 0$ so $\hat{b}^L, \hat{b}^P > 0$. We note from (B-20) and (B-21) that λ_1 and λ_2 are both positive, implying that the participation constraints of both politicians are satisfied with equality. Furthermore, both participation constraints satisfied with equality implies that $\hat{b}^L = \hat{b}^P$, and thus that $\lambda_1 = \lambda_2$. From (B-20) we find

$$\lambda_1 = \frac{1}{\delta \alpha v'(\hat{b}^L)}.$$

Combining this with (B-22), we obtain

$$\lambda_5 = \frac{1 - \delta}{\delta} - \frac{2(1 - \alpha)}{\delta \alpha v'(\hat{b}^L)}.$$

Thus the condition for $\lambda_5 > 0$ reduces to

$$v'(\hat{b}^L) > \frac{2(1 - \alpha)}{\alpha(1 - \delta)}. \quad (\text{B-23})$$

From the participation constraint of the legislator holding with equality, \hat{b}^L is obtained as

$$\alpha v(\hat{b}^L) + (1 - \alpha)(1 - \bar{\tau})y^p = (1 - \alpha)y^p,$$

which is equivalent to

$$\alpha v(\hat{b}^L) = \frac{(1 - \alpha)(1 - \theta)\bar{\tau}\bar{y}}{1 - \delta}. \quad (\text{B-24})$$

Since in this case \hat{b}^L is decreasing in α we have that $\hat{b}^L = \hat{b}^L(\alpha)$ with $\hat{b}^{L'}(\alpha) < 0$. Combining (B-23) and (B-24), the condition for $\lambda_5 > 0$ reduces to

$$\frac{v'(\hat{b}^L(\alpha))}{v(\hat{b}^L(\alpha))} > \frac{2}{(1 - \theta)\bar{\tau}\bar{y}}. \quad (\text{B-25})$$

The left-hand side of this condition is increasing in α , while the right-hand side is independent of α . The following equation thus implicitly defines a critical value of α , denoted by α_L :

$$\frac{v'(\hat{b}^L(\alpha_L))}{v(\hat{b}^L(\alpha_L))} = \frac{2}{(1 - \theta)\bar{\tau}\bar{y}}. \quad (\text{B-26})$$

Substituting for $v(\hat{b}^L(\alpha_L))$ from (B-24) we find

$$\alpha_L = \frac{1}{1 + \frac{1}{2}(1 - \delta)v'(\hat{b}^L(\alpha_L))}. \quad (\text{B-27})$$

Note from (B-24) that $\hat{b}^L(\alpha_L)$ is decreasing in θ and that as θ approaches one the bribe approaches zero. Thus from (B-27) α_L is decreasing in θ and approaches zero as θ approaches one.

Recall that we are focusing on the case where $\alpha > \alpha^H$. Thus if $\alpha^H > \alpha_L$ then the condition for $\lambda_5 > 0$ is always satisfied. From (B-6) and (B-27), $\alpha^H > \alpha_L$ is equivalent to

$$v'(\hat{b}^L(\alpha_L)) > 2v'(\theta\bar{\tau}\bar{y}),$$

which is always satisfied provided that θ is sufficiently high, i.e., provided that the distribution of income is sufficiently unequal (this follows since the right-hand side is decreasing in θ while

the left-hand side is increasing in θ and approaches infinity as θ approaches zero). Let θ^* be defined by

$$v'(\hat{b}^L(\alpha_L)) = 2v'(\theta^* \bar{\tau} \bar{y}).$$

Thus when $\theta > \theta^*$ then $\lambda_5 > 0$ and $\hat{T}^p = 0$. When $\theta < \theta^*$ then $\lambda_5 > 0$ and $\hat{T}^p = 0$ only when $\alpha > \alpha_L$. In these cases the bribing proposal contains no income transfers to the poor, only bribes to the politicians.

Finally in this case, it can be verified that the participation constraint of the rich is satisfied with strict inequality. To see this, observe that the rich are strictly better off when $(1 - \bar{\tau})y^r - 2\hat{b}^L/\delta + \bar{\tau}\bar{y}/\delta > y^r$, which is equivalent to $(1 - \theta)\bar{\tau}\bar{y} > 2\hat{b}^L$. At the same time we know from (B-25) that

$$(1 - \theta)\bar{\tau}\bar{y} > \frac{2v(\hat{b}^L)}{v'(\hat{b}^L)}.$$

Thus the participation constraint must hold provided that

$$v(\hat{b}^L) > \hat{b}^L v'(\hat{b}^L), \quad (\text{B-28})$$

which is always satisfied in light of the strict concavity of the v function.

Case (3). If $\lambda_3 = \lambda_4 = \lambda_5 = 0$, then $\hat{b}^L, \hat{b}^P, \hat{T}^p > 0$. From (B-20), (B-21) and (B-22) we then find

$$v'(\hat{b}^L) = \frac{2(1 - \alpha)}{\alpha(1 - \delta)}, \quad (\text{B-29})$$

which determines $\hat{b}^L = \hat{b}^L(\alpha) \equiv b^*$ with $\hat{b}^{L'}(\alpha) > 0$. Thus note that in this case \hat{b}^L is increasing in α .

From the participation constraint of the legislator satisfied with equality, \hat{T}^p is given by

$$\alpha v(\hat{b}^L) + (1 - \alpha) \left((1 - \bar{\tau})y^p + \hat{T}^p \right) = (1 - \alpha) y^p.$$

This implies

$$\hat{T}^p = \frac{(1 - \theta)\bar{\tau}\bar{y}}{1 - \delta} - \frac{\alpha v(\hat{b}^L)}{1 - \alpha}. \quad (\text{B-30})$$

Combining this with (B-29), we obtain

$$\hat{T}^p = \frac{1}{1 - \delta} \left((1 - \theta)\bar{\tau}\bar{y} - \frac{2v(\hat{b}^L(\alpha))}{v'(\hat{b}^L(\alpha))} \right), \quad (\text{B-31})$$

which is positive if and only if $\alpha < \alpha_L$ (which can be verified from (B-26) and taking into account that in this case $\hat{b}^{L'}(\alpha) > 0$).

It now only remains to show that the participation constraint of the rich is satisfied also in this case. To see this, note that the participation constraint in this case is $(1 - \bar{\tau})y^r - 2\hat{b}^L/\delta + (\bar{\tau}\bar{y} - (1 - \delta)\hat{T}^p)/\delta > y^r$, which is equivalent to $(1 - \theta)\bar{\tau}\bar{y} > 2\hat{b}^L + (1 - \delta)\hat{T}^p$. Inserting from (B-31) we again get (B-28), which is always satisfied.

To summarize, when $\alpha > \alpha^H$, there are two possible scenarios, corresponding to parts (i) and (ii) in part 1.(b) of Proposition B-4, respectively:

i. If $\theta > \theta^*$ or $\alpha > \alpha_L$, then there will be bribing with positive bribes and no transfers to the poor.

ii. If $\theta < \theta^*$ and $\alpha < \alpha_L$, then there will be bribing with positive bribes and positive transfers to the poor.

Analysis of Multi-Member Legislatures from Section 2.3

In this appendix, we characterize the equilibrium under checks and balances with a multi-member legislatures, focusing on the case where $\theta < \theta^*$ and $\alpha < \alpha_L$.

The utility of the poor voters when the constitution does not include checks and balances is given by (B-3). However, now under checks and balances, with probability η the legislator making the spending decisions represents the rich. Policy in the case without bribery is not affected, as the tax rate in this case is still zero. But when politicians can be bribed and when the legislator is from the rich, then the equilibrium is different than in the case with a legislator from the poor. This is because, as we now show, making an offer including transfers to the poor becomes less valuable to the rich, as now this only increases the utility of the president and not of the legislator.

Let us focus on the case where the legislator originates from the rich (while the president originates from the poor). The rich lobby can again propose a bribe, and again without loss of generality, we can set $R^P = R^L = 0$, and $\tau = \bar{\tau}$. Furthermore, if the rich make a bribing proposal (that gives themselves greater utility), they can always get the legislator from the rich to accept this as the participation constraint of the rich legislator is given by

$$\alpha v(\hat{b}^L) + (1 - \alpha) \left((1 - \bar{\tau}) y^r - \frac{\hat{b}^L + \hat{b}^P}{\delta} + \frac{\bar{\tau} \bar{y} - (1 - \delta) \hat{T}^p}{\delta} \right) \geq (1 - \alpha) y^r,$$

which holds with strict inequality even when $\hat{b}^L = 0$ as long as the rich are obtaining greater utility with this proposal than without. Thus $\hat{b}^L = 0$ and the rich lobby solves the program

$$\begin{aligned} & \max_{\{\hat{b}^P, \hat{T}^p\}} (1 - \bar{\tau}) y^r - \frac{\hat{b}^P}{\delta} + \frac{\bar{\tau} \bar{y} - (1 - \delta) \hat{T}^p}{\delta} \text{ subject to} & \text{(B-32)} \\ & \alpha v(\hat{b}^P) + (1 - \alpha) \left((1 - \bar{\tau}) y^p + \hat{T}^p \right) \geq (1 - \alpha) y^p \\ & \hat{T}^p \geq 0, \end{aligned}$$

Denoting the multipliers on the two constraints in (B-32) by λ_1 and λ_2 , the first-order conditions are that \hat{b}^P and \hat{T}^p satisfies:

$$-\frac{1}{\delta} + \lambda_1 \alpha v'(\hat{b}^P) = 0 \tag{B-33}$$

$$-\frac{1 - \delta}{\delta} + \lambda_1 (1 - \alpha) + \lambda_2 = 0. \tag{B-34}$$

From (B-33) it follows that $\lambda_1 > 0$, implying that the participation constraint of the president binds. Now solving for λ_1 from (B-33) in (B-34), we find that $\lambda_2 > 0$ and thus $\hat{T}^p = 0$ if

$$\frac{\alpha}{1-\alpha} v'(\hat{b}^P) > \frac{1}{1-\delta}. \quad (\text{B-35})$$

From the participation constraint of the president satisfied with equality, it follows that \hat{b}^P is again determined by

$$\alpha v(\hat{b}^P) = \frac{(1-\alpha)(1-\theta)\bar{\tau}\bar{y}}{1-\delta}. \quad (\text{B-36})$$

Since \hat{b}^P is decreasing in α in this case, we have that $\hat{b}^L = \hat{b}^L(\alpha)$ with $\hat{b}^{L'}(\alpha) < 0$. Combining (B-35) and (B-36) the condition for $\lambda_2 > 0$ reduces to

$$\frac{v'(\hat{b}^L(\alpha))}{v(\hat{b}^L(\alpha))} > \frac{1}{(1-\theta)\bar{\tau}\bar{y}}.$$

The left-hand side of this condition is increasing in α , while the right-hand side is independent of α . The following equation thus implicitly defines a critical value of α , which we denote by α_M :

$$\frac{v'(\hat{b}^L(\alpha_M))}{v(\hat{b}^L(\alpha_M))} = \frac{1}{(1-\theta)\bar{\tau}\bar{y}}.$$

From (B-24), evaluated at α_M , we have

$$v(\hat{b}^L(\alpha_M)) = \frac{(1-\alpha_M)(1-\theta)\bar{\tau}\bar{y}}{\alpha_M(1-\delta)}.$$

Substituting this in the previous expression, we obtain

$$\alpha_M = \frac{1}{1 + (1-\delta)v'(\hat{b}^L(\alpha_M))} < \alpha_L.$$

This implies that, compared with the case where the legislator is poor, the parameter space where $\hat{T}^p = 0$ is now larger (i.e., includes smaller values of α) when the legislator selected to decide spending is from the rich.

If $\alpha > \alpha_M$, then we have $\hat{T}^p = 0$. (Note also that the participation constraint for the rich lobby in this case is simply $\bar{\tau}\bar{y} > \hat{b}^P$, which is satisfied with strict inequality as $\hat{b}^P < R^* < \bar{\tau}\bar{y}$).

If, on the other hand, $\alpha < \alpha_M$, then we have $\hat{T}^p > 0$. From (B-33) and (B-34) we then find that \hat{b}^P is determined by

$$v'(\hat{b}^P) = \frac{1-\alpha}{\alpha(1-\delta)}, \quad (\text{B-37})$$

which implies that now $\hat{b}^P = R^*$ is greater than in the case where the legislator originates from the poor, i.e., $R^* > b^*$, since now it is more efficient to use bribes rather than income transfers to the poor in capturing the president. Moreover, as a consequence, the participation constraint

of the president implies that the transfer to the poor is now lower compared to the case where the legislator is poor. In particular, from the participation constraint of the president, we have

$$\hat{T}^P = \frac{\bar{\tau}(1-\theta)\bar{y}}{1-\delta} - \frac{\alpha v(R^*)}{1-\alpha},$$

which is identical to (B-30) except that now $\hat{b}^P = R^*$ is greater and thus \hat{T}^P is lower. Combining this with (B-37), we obtain

$$\hat{T}^P = \frac{1}{1-\delta} \left(\bar{\tau}(1-\theta)\bar{y} - \frac{v(R^*)}{v'(R^*)} \right).$$

Finally, it can be verified in a similar manner that in this case too the participation constraint of the rich is satisfied with strict inequality (given that $v(R^*) > R^*v'(R^*)$).

Summing up, recalling that the probability the spending legislator originates from the rich is given by η , we have:

Proposition B-10 *Suppose that $\theta < \theta^*$ and $\alpha < \alpha_L$, and that under checks and balances, there is a multi-member legislature.*

1. *Consider first the case where there is checks and balances and the legislator selected to decide spending is from the rich. Then:*

(a) *When $\kappa = 0$ so that there is no bribing, the equilibrium involves $\tau = 0$, $R^P = 0$, $R^L = 0$, $T^P = 0$, and $T^r = 0$, and the utility of poor agents is given by $(1-\theta)\bar{y}/(1-\delta)$;*

(b) *When $\kappa = 1$, there exists an $\alpha_M < \alpha_L$ such that:*

i. *If $\alpha > \alpha_M$, then $\tau = \bar{\tau}$, $R^P = 0$, $R^L = 0$, $b^P > 0$, $b^L = 0$, $T^P = 0$, and $T^r > 0$.*

ii. *If $\alpha < \alpha_M$, then $\tau = \bar{\tau}$, $R^P = 0$, $R^L = 0$, $b^P = R^*$, $b^L = 0$, $T^P > 0$, and $T^r > 0$.*

2. *Now taking into account that the probability the rich can solve their collective action problem and bribe politicians is q and the probability that the legislator selected to decide spending will be from the rich with probability η , we have that:*

(a) *If $\alpha > \alpha_M$, then the expected utility of poor agents is*

$$U^P[\gamma = 1] = \frac{1}{1-\delta} \left((1-\theta)\bar{y} - q\eta(1-\theta)\bar{\tau}\bar{y} - q(1-\eta) \frac{2v(b^*)}{v'(b^*)} \right); \quad (\text{B-38})$$

(b) *If $\alpha < \alpha_M$, then the expected utility of poor agents is*

$$U^P[\gamma = 1] = \frac{1}{1-\delta} \left((1-\theta)\bar{y} - q\eta \frac{v(R^*)}{v'(R^*)} - q(1-\eta) \frac{2v(b^*)}{v'(b^*)} \right). \quad (\text{B-39})$$

Proposition B-6 then follows by comparing the utility of the poor from (B-3) with (B-38) and (B-39), respectively.

Analysis of $r > 0$ from Section 2.4

We here look at the case where the ego rents r can take any value. Let us focus on a constitution not involving checks and balances, i.e., $\gamma = 0$. Consider first the case where $\kappa = 0$ so that the rich can not bribe the president. The balance between direct transfers to the poor and rents to the president depends on how much the president values own rents relative to how he values utility of the poor. Define

$$\beta_S \equiv \frac{\frac{r}{\bar{y}}}{1 - \theta + \bar{\tau}\theta + \frac{r}{\bar{y}}}$$

and

$$\beta^H \equiv \frac{\bar{\tau} + \frac{r}{\bar{y}}}{1 - \theta + \bar{\tau}\theta + \frac{r}{\bar{y}}}.$$

The balance between direct transfers to the poor and rents to the president is then given by the solution to the maximization problem in (B-14):

If $\beta > \beta^H$, $T^p = 0$, and $R^P = \bar{\tau}\bar{y}$.

If $\beta_S \leq \beta \leq \beta^H$,

$$T^p = (\bar{\tau} - \beta(1 - \theta + \bar{\tau}\theta)) \frac{\bar{y}}{1 - \delta} + \frac{1 - \beta}{1 - \delta} r, \quad (\text{B-40})$$

and

$$R^P = \beta(1 - \theta + \bar{\tau}\theta)\bar{y} - (1 - \beta)r. \quad (\text{B-41})$$

If $\beta < \beta_S$, $T^p = \bar{\tau}\bar{y}/(1 - \delta)$, and $R^P = 0$.

Next, suppose that $\kappa = 1$. Again the rich lobby can never strictly increase its utility by offering a bribe that the president will accept. Any such offer is payoff equivalent for all parties and without loss of any generality we set $\hat{b}^P = 0$. The following proposition summarizes the case where the constitution does not have checks and balances:

Proposition B-11 *Suppose $\gamma = 0$. Then the equilibrium policy always has $\tau = \bar{\tau}$, and:*

1. *If $\beta > \beta^H$, $T^p = 0$. The utility of poor agents in this case is $U^p[\gamma = 0] = (1 - \theta)(1 - \bar{\tau})\bar{y}/(1 - \delta)$.*

2. *If $\beta_S \leq \beta \leq \beta^H$, transfers are given by (B-40). The utility of poor agents in this case is*

$$U^p[\gamma = 0] = \frac{1 - \beta}{1 - \delta} \left(1 - \theta + \bar{\tau}\theta + \frac{r}{\bar{y}} \right) \bar{y}. \quad (\text{B-42})$$

3. *If $\beta < \beta_S$, $T^p = \bar{\tau}\bar{y}/(1 - \delta)$. The utility of poor agents in this case is $U^p[\gamma = 0] = (1 - \theta + \bar{\tau}\theta)\bar{y}/(1 - \delta)$.*

The case where the constitution involves checks and balances, i.e. $\gamma = 1$, and there is not bribing, i.e. $\kappa = 0$, is as discussed in the main text.

Next consider the case where there is bribing, i.e. $\kappa = 1$, and consider first the case where $\beta < \beta_S$. Then also with checks and balances in the constitution the president gets his preferred

policy where all public income is used as transfers to the poor. If the rich lobby tries to bribe the president into setting a lower tax rate or to give the rich transfers they cannot get strictly higher utility. Thus $\hat{b}^P = 0$.

Consider next the case where $\beta > \beta_S$. The rich lobby then solves the program

$$\begin{aligned} \max_{\{\hat{b}^P, \hat{T}^p\}} & \frac{(1-\bar{\tau})\theta\bar{y}}{\delta} - \frac{\hat{b}^P}{\delta} + \frac{\bar{\tau}\bar{y} - (1-\delta)\hat{T}^p}{\delta} \text{ subject to} \\ & \left(\hat{b}^P + r\right)^\beta \left(\frac{(1-\theta)(1-\bar{\tau})\bar{y}}{1-\delta} + \hat{T}^p\right)^{1-\beta} \geq r^\beta \left(\frac{(1-\theta+\bar{\tau}\theta)\bar{y}}{1-\delta}\right)^{1-\beta} \\ & \hat{T}^p \geq 0. \end{aligned}$$

Denoting the multipliers on the two constraints by μ_1 and μ_2 , the first-order conditions are that the derivatives of the maximization problem with respect to \hat{b}^P and \hat{T}^p satisfy:

$$-\frac{1}{\delta} + \mu_1\beta \left(\hat{b}^P + r\right)^{\beta-1} \left(\frac{(1-\theta)(1-\bar{\tau})\bar{y}}{1-\delta} + \hat{T}^p\right)^{1-\beta} = 0, \quad (\text{B-43})$$

and

$$-\frac{1-\delta}{\delta} + \mu_1(1-\beta) \left(\hat{b}^P + r\right)^\beta \left(\frac{(1-\theta)(1-\bar{\tau})\bar{y}}{1-\delta} + \hat{T}^p\right)^{-\beta} + \mu_2 = 0. \quad (\text{B-44})$$

From (B-43) it follows that $\mu_1 > 0$, implying that the participation constraint of the president binds. Now solving for μ_1 from (B-43) and inserting in (B-44), we find that $\mu_2 > 0$ and thus $\hat{T}^p = 0$ if

$$\beta(1-\theta)(1-\bar{\tau})\bar{y} > (1-\beta) \left(\hat{b}^P + r\right).$$

Using the participation constraint of the president with $\hat{T}^p = 0$ this can be reformulated as

$$\beta > \frac{\frac{r}{\bar{y}} \left(\frac{1-\theta+\bar{\tau}\theta}{1-\theta+\bar{\tau}\theta-\bar{\tau}}\right)^{\frac{1-\beta}{\beta}}}{(1-\theta)(1-\bar{\tau}) + \frac{r}{\bar{y}} \left(\frac{1-\theta+\bar{\tau}\theta}{1-\theta+\bar{\tau}\theta-\bar{\tau}}\right)^{\frac{1-\beta}{\beta}}}$$

where the left-hand side is increasing in β while the right-hand side is decreasing in β . The following equation thus implicitly defines a unique value of β , β^* , such that

$$\beta^* = \frac{\frac{r}{\bar{y}} \left(\frac{1-\theta+\bar{\tau}\theta}{1-\theta+\bar{\tau}\theta-\bar{\tau}}\right)^{\frac{1-\beta^*}{\beta^*}}}{(1-\theta)(1-\bar{\tau}) + \frac{r}{\bar{y}} \left(\frac{1-\theta+\bar{\tau}\theta}{1-\theta+\bar{\tau}\theta-\bar{\tau}}\right)^{\frac{1-\beta^*}{\beta^*}}}.$$

If $\beta > \beta^*$ then we have $\hat{T}^p = 0$. The utility of poor agents in this case is given by

$$U^p[\gamma = 1, \kappa = 1] = \frac{(1-\theta)(1-\bar{\tau})\bar{y}}{1-\delta}.$$

In contrast, if $\beta < \beta^*$, then $\mu_2 = 0$ and $\hat{T}^p > 0$. In this case, we have:

$$\beta(1-\delta) \left(\frac{(1-\theta)(1-\bar{\tau})\bar{y}}{1-\delta} + \hat{T}^p\right) = (1-\beta) \left(\hat{b}^P + r\right).$$

Using the participation constraint for the president to substitute for $\hat{b}^P + r$ we find

$$\frac{(1-\theta)(1-\bar{\tau})\bar{y}}{1-\delta} + \hat{T}^p = \left(\frac{1-\beta}{\beta(1-\delta)}\right)^\beta \left(\frac{r}{\bar{y}}\right)^\beta \left(\frac{1-\theta+\bar{\tau}\theta}{1-\delta}\right)^{1-\beta} \bar{y},$$

which determines \hat{T}^p and it also follows that the utility of poor agents in this case is given by

$$\begin{aligned} U^p[\gamma=1, \kappa=1] &= \left(\frac{1-\beta}{\beta}\right)^\beta \left(\frac{r}{\bar{y}}\right)^\beta (1-\theta+\bar{\tau}\theta)^{1-\beta} \frac{\bar{y}}{1-\delta} \\ &< U^p[\gamma=1, \kappa=0]. \end{aligned}$$

It is then straightforward to show that, similarly to before, the rich get a strictly higher utility by the bribe for policy proposal than without, and we proceed without repeating the proof for this.

The preceding analysis has established (proof in text):

Proposition B-12 *Suppose that the constitution involves checks and balances (i.e., $\gamma=1$).*

1. *When $\kappa=0$ so that the rich lobby is not organized and there is no bribing, the equilibrium involves $\tau=\bar{\tau}$, $R^P=0$, $R^L=0$, and $T^p=\bar{\tau}\bar{y}/(1-\delta)$.*
2. *When $\kappa=1$ so that the rich lobby is organized and there is bribing, then the equilibrium is as follows:*

(a) *If $\beta > \beta_S$, then:*

- i. *If $\beta > \beta^*$, then $\tau=\bar{\tau}$, and $R^P=0$, $R^L=0$, $b^P > 0$, $b^L=0$, and $T^p=0$.*
- ii. *If $\beta < \beta^*$, then $R^P=0$, $R^L=0$, $b^P > 0$, $b^L=0$, $\tau=\bar{\tau}$, and $T^p > 0$.*

Taking into account that the probability the rich can solve their collective action problem and bribe politicians is q , we have that:

If $\beta > \beta^$ the expected utility of poor agents is given by*

$$U^p[\gamma=1] = \frac{(1-\theta+\bar{\tau}\theta)\bar{y}}{1-\delta} - q \frac{\bar{\tau}\bar{y}}{1-\delta}. \quad (\text{B-45})$$

If $\beta < \beta^$ the expected utility of poor agents is given by*

$$\begin{aligned} U^p[\gamma=1] &= (1-q) \frac{(1-\theta+\bar{\tau}\theta)\bar{y}}{1-\delta} \\ &+ q \left(\frac{1-\beta}{\beta}\right)^\beta \left(\frac{r}{\bar{y}}\right)^\beta (1-\theta+\bar{\tau}\theta)^{1-\beta} \frac{\bar{y}}{1-\delta}. \end{aligned} \quad (\text{B-46})$$

- (b) *If $\beta < \beta_S$, then there is no bribing and the expected utility of poor agents is given by $(1-\theta+\bar{\tau}\theta)\bar{y}/(1-\delta)$.*

Finally, in the referendum on checks and balances we then have:

Proposition B-13 1. *When $\beta > \beta^H$ the constitution will involve checks and balances.*

2. When $\beta_S \leq \beta \leq \beta^H$ then

(a) When $\beta > \beta^*$ the constitution will involve no checks and balances if

$$q > \frac{\beta(1 - \theta + \bar{\tau}\theta) - (1 - \beta)\frac{r}{\bar{y}}}{\bar{\tau}}, \quad (\text{B-47})$$

and it will involve checks and balances if the converse inequality holds.

(b) When $\beta < \beta^*$ the constitution will involve no checks and balances if

$$q - q \left(\frac{1 - \beta}{\beta} \right)^\beta \left(\frac{r}{\bar{y}} \right)^\beta (1 - \theta + \bar{\tau}\theta)^{-\beta} > \beta - \frac{(1 - \beta)\frac{r}{\bar{y}}}{1 - \theta + \bar{\tau}\theta}, \quad (\text{B-48})$$

and it will involve checks and balances if the converse inequality holds.

In both cases, a greater q (a higher likelihood of the rich lobby being organized) makes a constitution without checks and balances more likely.

3. When $\beta < \beta_S$ voters are indifferent between a constitution with and without checks and balances.

Proof. Part 1 follows as in this case under no checks and balances the poor pay maximum taxes but get no transfers, while under checks and balances there is a positive probability they will get transfers. Parts 2.(a) and 2.(b) follow after simple calculation by comparing (B-42) with (B-45) and (B-46), respectively. The effect of q in part 2 follows as the left-hand sides of (B-47) and (B-48) are both increasing in q while the right-hand sides of (B-47) and (B-48) are independent of q . (To see that the left-hand side of (B-48) is increasing in q note that this reduces to the condition $U^p[\gamma = 1, \kappa = 1] < U^p[\gamma = 1, \kappa = 0]$ which is always satisfied). Part 3 follows as in this case policy is the same whether the constitution involves checks and balances or not. ■