A Theory of Minimalist Democracy∗

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Abstract

A majority of the world democracies are far from the benchmark of representative democracy. This paper presents a model of political transitions based on a minimalist conception of the democratic state, i.e. a form of government solely characterized by competitive elections. We show that the model can produce dynamics of transition into democracy without requiring any role for redistribution or representation of voters, but solely based on interactions among the ruling elites. This allows the model to match several relevant stylized facts concerning the organization of new and consolidating democracies, weakly institutionalized countries, and hybrid regimes.

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1 Introduction

Consolidated democracies are characterized by a long list of complementary attributes that many scholars feel necessary for effective democratic representation of the populace. Dahl (1971) spells out explicitly several institutional guarantees that need to be met: the right to vote; freedom of political organization; freedom of expression; broad eligibility for public office; the right to compete for support and for votes; the availability of alternative sources of information; free and fair elections; the dependence of public policies on citizens’ preferences.¹

A large share of democracies worldwide, however, are less than consolidated. In the words of Diamond (2002), such systems operate in the “political gray zone...between full-fledged democracy and outright dictatorship”. These ‘hybrid’ systems are empirically relevant. According to the 2012 Polity IV Project, a popular data series coding authority characteristics of states in the world since 1800, of the 115 countries that had a (Polity2) score above 0 – entering the incremental democratic score range between 0 and 10 points – only 51 countries had a score above 8 (e.g. above Paraguay, Philippines, Ghana or Indonesia in 2012). The pervasiveness of political systems gravitating around democratic principles, but failing to fully meet the conditions of a representative democracy, is evident in Figure 1, which reports their historical evolution.

As a starting point, this paper establishes in Section 2 that most of these hybrid regimes, or proto-democracies, share some precise systematic features. Such regimes meet an electoral criterion for being defined democracies (i.e. they hold competitive elections for executive office), but not much else. More specifically, competitive elections appear to be the first emergent feature of political regimes exiting from autocratic form. In fact, substantial constraints on executive power or widespread political inclusiveness appear to systematically lag the dimension of electoral competition. In the words of Dahl (1971), contestation leads inclusiveness.²

There are multiple historical examples of this phenomenon. A pertinent instance is the wave of African democratizations in the 1990’s. According to Bratton and van de Walle (1997), in pre-1990 Sub-Saharan Africa (SSA), elections were “largely non-competitive affairs in which, by forgone conclusion, a dominant ruling party won all available seats.” The authors report that over the 1985-89 period only 9 countries out of 47 had competitive elections. Only one SSA incumbent ruler (Seewoosagur Ramgoolam of Mauritius) was ever replaced through elections over the 1980-1989 period. In contrast, the authors report that in the early democratization phase between 1990 and 1994, 38 countries out of 47 experienced competitive elections and 11 SSA incumbent rulers were replaced through elections. Yet, over the same sample period, 37 of the 47 SSA countries were not full democracies according to Polity IV scores.

Emphasis on elections as the primary feature of democracy and the role of elections in the transfer of power without bloodshed (Popper, 1963) has a long tradition in political science, political philosophy, and political economics. Indeed, a minimalist conception of democracy, discussed first in Schumpeter (1942) and precisely argued by Przeworski (1999) and others, simply puts competitive elections as the fulcrum of the very definition of democracy: “A system in which rulers are selected by competitive elections...Governments are elected by the toss of a, ¹See discussion in Coppedge, Alvarez, and Maldonado (2008).
²Dahl (1971, ch. 3) indicates as the most robust path towards stable polyarchy one of increased political competition followed by the expansion of participation, citing the historical sequences of the United States and the United Kingdom as examples.
not necessarily fair, coin....citizens have no electoral sanction and incumbents have no electoral incentives to behave well."

Given the empirical prevalence, a relevant question to ask is therefore: Is an electoral criterion a purely procedural phenomenon without bite? Glaeser, La Porta, Lopez-de-Silanes and Shleifer (2004), for instance, criticize the use of Polity2 series as an institutional measure because it “provides a rapidly moving assessment of electoral outcomes over time, not a measure of actual political constraints on government.” This paper provides a negative answer to this question and addresses a set of pertinent and related ones: Is there value in the minimalist approach? How relevant are competitive elections per se in the process of democratization of autocratic regimes? Are political liberalizations (in the minimalist sense) and economic/civil reforms friends or foes? Given that so many developing economies only meet minimal democratic criteria, if any, answering such questions offers important insights to their political development and their process of institutional consolidation.

This paper characterizes the problem of leadership survival for an autocrat facing coup threats from regime insiders. The empirical frequency of coups and insider-induced leader exits suggests that the main threat to a dictator's survival comes from within an autocrat's regime, not from the masses. The autocrat can assuage challengers to leadership through patronage disbursements. However, lacking sufficient resources triggers instability. A minimalist democracy (i.e. allowing competitive elections and some chance of leadership replacement) is shown to be a sufficiently attractive institutional setting to be selected by leaders exposed to coup attempts in equilibrium. This paper thus provides a theoretical analysis of what Kendall-Taylor and Frantz (2014, p.38) argue is an important new realization in the literature on autocracies. Namely that: “the primary reason an autocrat creates legislatures or holds multi-party elections is to maintain the loyalty and co-opt the support of regime insiders.” We show that the chance given to challengers to ascend to the leadership plays an important role in disciplining them.

The autocrat can even decide to introduce reforms to abate patronage-extraction capital useful in autocracies. By doing so he may be able to make his claim to respect free and fair elections credible, and thus make minimalist democracy self-enforcing. This sort of ‘burning bridges behind oneself’ makes autocratic reversals costlier and can serve to consolidate democracy. This mechanism rationalizes findings such as Liu and Ornelas (2014) for rent-abating free trade agreements leading to democratizations and several cases of democracy-stabilizing reforms discussed in Acemoglu and Robinson (2006).

Importantly, our framework does not rely on democracy being redistributive or representative in nature as in models à la Meltzer and Richard (1981)4, nor on elections having any ‘bite’ in terms of political accountability. Nor do elections, or the democratic process per se, impose on participants any technological or physical constraints that would limit their use of force to secure political objectives. Participants decide whether to abide by electoral rules. Leaders are free to null election results that go against their interest and remain in power if they choose so. Insiders are free to stage coups against democratically elected leaders if they have the opportunity to do so and believe they will benefit. Moreover, these opportunities are assumed to be

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3See Kendall-Taylor and Frantz (2014), Geddes (2003), Svolik (2009) and Ezrow and Frantz (2011) for further analysis of turnovers in autocracies.

4More recent models of political transitions motivated by redistributive policies are presented in Acemoglu and Robinson (2001, 2006) and Boix (2003). Also related is Benhabib and Przeworski (2006).
equivalent in democracies and autocracies. Thus, a minimalist democracy as we characterize it can only exist if democratic rules are self-enforcing in the sense of those with the capacity to use violence for political ends choose not to do so, which we will show they can be.

We believe that a theory of democratization that does not rely on redistributive motives is relevant. The main argument in support of this statement is that redistributive democratizations are not observed in the data (see in particular Acemoglu, Naidu, Restrepo, Robinson, 2013; Mulligan, Gil, Sala-i-Martin, 2004 for a cross-sectional analysis). Indeed, the broken nexus of democratization and redistribution is as close as an uncontroversial empirical finding as the literature has uncovered.

Excluding any redistributional concern, elections have two main benefits for leadership survival that we emphasize: 1. they generate uncertainty as to the identity of the leader, hence offering a mechanism of stochastic power-sharing of leadership rents to the non-leader elites; 2. when credible, elections allow the transfer of power without bloodshed (Popper, 1963), hence avoiding welfare losses due to coups (which are typically violent and welfare reducing, as often either the leader or the coup plotter dies).

For elections to be able to do this without any additional coercive power, it is necessary that citizens have a very specific set of beliefs that distinguishes the electoral democracy we study here from the pure coin toss case forwarded by Przeworski (1999). Though a stochastic aspect is needed – all protagonists should have some chance of winning office through an election – more is required. Specifically, voters must not willingly support leaders who are perceived to be tyrannical in their disregard of the electorate’s choices. A leader who violates electoral rules, who flouts democratic principles, and who chooses to stay in office without an electoral mandate or in violation of an electoral rebuke is able to do so in our framework – as elections have no coercive power. But such a leader can never again hope to receive an electoral mandate from the citizens who care about having their electoral will respected. Such a leader can thus never credibly promise that he will subject himself to allowing insiders a chance at power sharing through the electoral process. He is forced to rule as an autocrat, with all its attendant existential insecurity, from then on. The threat of this can be enough for leaders to choose to respect electoral outcomes. We characterize the conditions under which this holds, and hence under which minimalist democracy arises.

The paper shows that the minimalist approach to democracy can shed light on the dynamics of political transition orchestrated by elites for the elites, a recurrent empirical phenomenon. Section 3 presents the setup of our model and the main results.

This paper contributes to the literature on political transitions by reconciling three sets of facts, namely: some new facts on the features of democratic transitions; their systematic lack of redistributational aspects; and, we will show, relevant dimensions pertinent to the natural resource curse. A comprehensive review of this vast area of research, spanning political science, economics, and political philosophy, is a task beyond the scope of the paper. More concisely, this paper speaks to the literature on the causes of democratizations and democratic transitions.

The literature dates at least back to Lipset (1959) and his modernization hypothesis, postulating economic development as a prerequisite to democratization, and includes prominently the contributions by Huntington (1991) on the third wave of democratizations, Przeworski, Al-
varez, Cheibub (1996), the cross-country empirical work by Barro (1999), the selectorate theory of Bueno de Mesquita, Smith, Siverson, Morrow (2003), and theories of democracy as commitment to redistribution as in Acemoglu and Robinson (2001, 2006). We touch the literature on the socioeconomic consequences of democratizations as in Acemoglu, Naidu, Restrepo, and Robinson (2013) and Przeworski, Alvarez, Cheibub, Limongi (2000), but also the work by Persson and Tabellini (2009) on democratic capital accumulation and growth, and Rodrik and Wacziarg (2005) on the economic effects of democracy, among others. Finally, it is possible to directly connect our work to other recent contributions in the political economy of development and of autocratic survival in neopatrimonial systems. A set of recent contributions in this direction includes Geddes (2003), Posner (2005), Gandhi (2008), and, most related, Francois, Rainer and Trebbi (2014a,b). We present some considerations on future directions of the literature in our conclusions in Section 5.

2 Motivating Facts

This section has the goal of providing a set of stylized facts justifying our focus on electoral (minimalist) democracies. In the previous section we briefly motivated our analysis by emphasizing how prevalent less than consolidated democracies are. As reported in Figure 1, they cover a sizeable share of polities world wide and over time.

Even more interestingly, less than consolidated democracies are typically minimalist, in the sense of satisfying electoral competitiveness requirements but little more. This could be readily observed in the raw data, were detailed disaggregated measures of political features in fact available. Ideally one would require, at the very least, specific scores for both competitiveness and inclusiveness of the political process, the two main factors in Robert Dahl’s famous decomposition of the democratic state.

The Polity IV project (Marshall, 2013), a standard reference in the measurement of political regimes characteristics, offers such decomposition, producing scores for competitiveness of executive recruitment (XRCOMP), openness of executive recruitment (XROPEN), limitations on the executive authorities (XCONST) and inclusiveness/competitiveness of political participation (PARCOMP) among different groups in society. Polity IV also offers an aggregate measure indicating the overall degree of democracy in a country, specifically through its revised Polity 2 score, which cumulates the full set of sub-dimensions on a discrete scale of democracy increasing from −10 to 10.5 By looking at what levels of the Polity 2 score (from less democratic to more democratic) the different features of competitiveness and inclusiveness emerge, one can garner a first indication of along what dimensions the process of democratic development typically unfolds.

It is easy to show that electoral competitiveness emerges systematically earlier than political inclusiveness. Table 1 considers three different country-year subsamples of the Polity 2 data: consolidated democracies (with scores above 8), less than consolidated democracies with scores above 0 but less than 8, less than consolidated autocracies (with score between −5 and 0). It then evaluates how many of the countries in each subgroup meet full or almost democratic criteria for: a. competitiveness of executive recruitment, defined as XRCOMP = 2

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5For details see http://www.systemicpeace.org/inscr/p4manualv2012.pdf
(transitional arrangements between selection, ascription and/or designation, and competitive election) or \( \text{XRCOMP} = 3 \) (election); b. political inclusiveness, defined as \( \text{PARCOMP} = 4 \) (transitional arrangements to fully politically competitive patterns of all voters) or \( \text{PARCOMP} = 5 \) (competitive: alternative preferences for policy and leadership can be pursued in the political arena.); c. executive constraints, defined as \( \text{XCONST} = 5 \) (substantial limitations on executive authority) or higher. In a sense we try to capture which dimensions of democracy ‘mature’ first.

Consolidated (mature) democracies fare as well in terms of competitiveness of executive recruitment, through election, as in terms of limitations on the executive authorities and the competitiveness and inclusiveness of political participation. Weak/unconsolidated democracies fare almost as well as consolidated democracies in terms of competitiveness of executive recruitment (XRCOMP) through elections. However, they fare much worse in terms of limitations on the executive authority (XCONST) and on the competitiveness and inclusiveness of political participation (PARCOMP). Weak autocracies finally lose the competitiveness of executive recruitment. Using an alternative, but much coarser measure for electoral competitiveness, defined based on the openness of executive recruitment (XROPEN = 4, i.e. open executive recruitment), produces similar patterns.

In Figure 2 we report the nonparametric representation by local polynomial of the relationship between a dummy for competitiveness of executive recruitment and the overall Polity 2 score in the dashed line. It is evident that competitiveness arises much earlier in the process of democratic consolidation than the same line but for political inclusiveness (in solid). In Figure 3 we again report the nonparametric representation by local polynomial of the relationship between a dummy for competitiveness of executive recruitment and the overall Polity 2 score in the dashed line. And again competitiveness arises much earlier in the process of democratic consolidation than executive constraints (in solid). In Figures 4, 5, and 6 we repeat the analysis, but controlling for country and year fixed effects using semiparametric methods. The competitiveness of executive recruitment emerges at Polity 2 levels around 0 and significantly differently (based on 95% country-clustered confidence bands) than political inclusiveness or executive constraints, which both appear more frequently later in the consolidation process.

The evidence so far shows that exit from autocracy entails a gradual process of institutional change, early on through competitive elections for authority recruitment and, only secondarily, through constraining such authority and guaranteeing inclusion of other political agents (the poor, for instance). It remains to be shown what are typical triggers of democratizations and whether they primarily affect the presence of competitive elections as the evidence above suggests. We formalize such issues next.

### 3 Model

#### 3.1 Setup

Consider an infinite horizon discrete time economy populated by two types of agents: citizens and the elite. At each date \( t \) there are \( N \) elites, one of which is the leader and the remainder are insiders. A member of the elite dies (for exogenous reasons) with probability \( \delta \) each period. An elite that dies is replaced by another in the next period (in a process that is exogenous to the model) and the replacement occupies the same position.
At the start of the period, the leader obtains a non-transferable payoff from holding office (ego rents, prestige, status, power, etc.) worth $F$ and is endowed with $U$ units of transferable patronage (graft, cash, resource revenues, public offices, bribes, etc.).\(^6\) The leader then decides how to allocate the available patronage across the elite. Thus, if $\tau$ units of patronage are allocated to the insiders in some period, then the leader obtains a payoff of $F + U - \tau$ in that period. It is key to all of the results that will follow that at least some part of the total value of holding the leader's position is in a non-transferrable form. Patronage, graft and the state’s wealth are all clearly of a transferrable form, but it is equally realistic that no small part of the motivation for leading a country comes in the form of status and the even more nebulous form of “power”. A voluminous literature exploring the psyche of dictators attests to this.\(^7\) Again, it is conceivable that some of this could be transferrable – leaders can appoint a “right hand man” with immense power. But the residual component of a leader's power in a weakly politicized state is inherently non-transferrable – the leader always has the right to “un-appoint” the right hand man too. A non-trivial component of power, and hence a leader's status, seems inextricably linked to actually being the leader, and we recognize this as distinct from regular patronage by fixing $F$ to the leader.

Insiders observe their allocated patronage and decide whether they wish to mount a coup. We assume that one (and only one) of the insiders has the opportunity to mount a coup in any given period, and that this is determined randomly after the patronage has been allocated. A coup requires that the allocated patronage is forgone and the coup succeeds with probability $\gamma$. If successful, the coup instigator becomes leader in the following period and the current leader dies. If unsuccessful, the coup instigator dies.

If there is no coup, then the leader can choose whether to hold an election. The role of citizens in the model is the determination of election results. Following the election, the leader chooses whether they are going to respect the result.

In terms of describing the preferences of citizens, we stress that a leader’s maintenance of power here ultimately depends only on being able to survive coup attempts. We deliberately set aside the possibility of revolutionary threats in order to highlight the equilibrium logic of a minimalist democracy. As such, and as is consistent with repeated observation in weakly politicized settings, citizens correctly anticipate that leaders do not deliver pro-citizen policies. The only possible distinguishing feature in the eyes of citizens is whether or not the leader respects the election results. To this end, we assume that a leader is one of two types – a regular type that follows equilibrium incentives and a tyrant type that never steps down following an election defeat. We assume that a leader becomes a tyrant with probability $\epsilon$ when taking office through an exogenous i.i.d. process. In evaluating candidates, citizens vote for the one that is

\(^6\)Patronage is a ubiquitous feature of weakly institutionalized polities: Bratton and Van de Walle (1994):

“The distinctive institutional hallmark of African regimes is neopatrimonialism. In neopatrimonial regimes, the chief executive maintains authority through personal patronage. ...The essence of neopatrimonialism is the award by public officials of personal favors, both within the state (notably public sector jobs) and in society (for instance licenses, contracts and projects). ...it is the core feature of politics in Africa...”

\(^7\)For example, much has been made of the self-aggrandizing aspects of power which satisfy deep personal needs within a particular type of leader, see Padilla, Hogan and Kaiser (2007).
least likely to act like a tyrant. If all candidates are equally likely to act like a tyrant, we suppose that the incumbent wins with probability $p$. The value of $p$ captures actual preferences for the incumbent but also the extent to which elections favour the incumbent.

Citizens observe whether elections are held and respected and update their beliefs about the probability that the incumbent is a tyrant accordingly (the details of which will depend on equilibrium play, as explained below). These beliefs translate into a probability that the incumbent is re-elected in the event of an election, $\pi$. Notice that $\pi$ is the only payoff-relevant state variable facing the elite at the start of the period.

We focus on Markov-perfect equilibria (MPE), where strategies depend only on the pay-off relevant state variable, $\pi$, and prior actions taken within the period. Specifically, the strategy of the leader maps their probability of being re-elected, $\pi$, into a patronage allocation decision, and a pair of functions that indicate the probability of holding an election and of respecting an election loss as a function of the history of actions observed in the period (a patronage allocation and a coup decision). The strategy of an insider maps $\pi$ to a function that indicates a coup probability as a function of the offered patronage.

We are interested in autocratic and democratic equilibria. An autocratic equilibrium is one in which leaders never respect an election loss (equivalently, never hold elections). A democratic equilibrium is one in which elections are held and respected. These are analyzed in turn.

### 3.2 Autocratic Equilibrium

If leaders never respect an election loss, then all election candidates are equally likely to act like tyrants, since both regular types and tyrants ignore election results. As such, $\pi_t = p$ for all $t$, so that there is only one state. Equilibrium strategies boil down to a patronage transfer level, $\tau_A$, and a coup probability function, $\sigma(\tau)$.

To establish the behaviour as an equilibrium, we must establish the optimality of behaviour at each decision point. For simplicity, assume from now on that there is a single insider—and all results generalize to multiple insiders. Specifically, if we let $V^L_A$ be the value of starting a period as the leader and $V^N_A$ be the value of starting a period as the insider, then the leader is optimizing in their transfer choice if

$$\tau_A \in \arg \max_{\tau \in [0,U]} \left\{ F + U - \tau + (1 - \sigma_A(\tau) \cdot \gamma) \cdot (1 - \delta) \cdot V^L_A \right\}$$

and the insider is optimizing at each possible transfer if

$$\sigma_A(\tau) \in \arg \max_{\sigma \in [0,1]} \left\{ \sigma \cdot [\gamma \cdot (1 - \delta) \cdot V^L_A] + (1 - \sigma) \cdot [\tau + (1 - \delta) \cdot V^N_A] \right\}$$

for all $\tau \geq 0$. In order for the leader to optimally ignoring election results, it must be that

$$V^L_A \geq V^N_A.$$  

Given equilibrium outcomes, $\tau_A$ and $c_A \equiv \sigma_A(\tau_A)$, the value functions satisfy

$$V^L_A = F + U - \tau_A + (1 - c_A \cdot \gamma) \cdot (1 - \delta) \cdot V^L_A$$

$$V^N_A = c \cdot [\gamma \cdot (1 - \delta) \cdot V^L_A] + (1 - c_A) \cdot [\tau_A + (1 - \delta) \cdot V^N_A].$$

The strategies $\tau_A$ and $\sigma_A(\tau)$ form an autocratic equilibrium if conditions (1)-(5) are satisfied.
Result 1. The belief that elections will not be respected is self-fulfilling: The $V^L_A \geq V^N_A$ condition is implied by the others.

The intuition is that one becomes an insider by stepping down. But the best that an insider can get is holding a successful coup. But this puts them in a position of being a leader, which could have been achieved by not stepping down.

In analyzing this, it is useful to provide a taxonomy of possible autocratic equilibria according to the coup probability arising in the equilibrium. To this end, autocratic equilibria in which there are never coups are called secure autocratic equilibria. Autocratic equilibria in which there are coups are called insecure autocratic equilibria. We describe equilibria in which coups occur with probability 1 as being strongly insecure, and those in which coups occur with a probability strictly between 0 and 1 as being weakly insecure.

In exploring these types of equilibria, we begin by noting that there exists a critical transfer level that the insider requires in order to be dissuaded from a coup. Let this be denoted $\hat{\tau}_A$ and note that it is the transfer that makes the insider indifferent to holding a coup. That is, it satisfies $\hat{\tau}_A + (1 - \delta) \cdot V^N_A = \gamma \cdot (1 - \delta) \cdot V^L_A$. Re-arranging gives:

$$\hat{\tau}_A = (1 - \delta) \cdot \left[ \gamma \cdot V^L_A - V^N_A \right].$$

By establishing a basic property of $\hat{\tau}_A$, the following result indicates that avoiding coups is costly in any autocratic equilibrium.

Lemma 1. Avoiding a coup requires a positive transfer: $\hat{\tau}_A > 0$

Given the transfer required to dissuade a coup, the leader’s optimal transfer is either $\hat{\tau}_A$ or zero. Paying the former helps dissuade coups but the latter preserves patronage for the leader’s consumption. The following shows that leaders will always prefer to make the positive transfer and avoid coups whenever possible.

Lemma 2. Coups are avoided whenever it is strictly feasible to do so: $\hat{\tau}_A < U$ implies $\tau_A = \hat{\tau}_A$.

Thus, leaders will never keep patronage if giving it away could dissuade a coup (even if $\gamma$ is small), so that political violence in equilibrium reflects insufficient patronage rather than the leader’s optimal risk-taking. Intuitively, this is because coups are surplus destroying – either the leader or challenger dies with probability one – so avoiding them raises the surplus of the game played by insiders and leader. This efficiency gain, which is always claimed by the leader through his discretionary allocations of $\tau^a$, ensures that, whenever possible, coups are avoided along the equilibrium path.

Given the above discussion, we would expect that secure autocracy arises when there is sufficient patronage, a strongly insecure autocracy to arise when there is insufficient patronage, and a weakly insecure autocracy to arises when patronage falls between these. In order to help state the following proposition, let the availability of patronage be denoted by $\psi \equiv U/(U + F)$, and define the critical values $\mu_1 \equiv \frac{\delta \cdot \gamma}{\delta + \gamma (1 - \delta)}$ and $\mu_2 \equiv \frac{\gamma (1 - \delta)}{1 + \gamma (1 - \delta)}$, noting that $0 < \mu_1 < \mu_2 < 1$.

Proposition 1. An Autocratic equilibrium always exists and is generically unique. Specifically:

- A secure Autocratic equilibrium exists if and only if $\psi \geq \mu_2$,
- A weakly insecure Autocratic equilibrium exists if and only if $\psi \in [\mu_1, \mu_2)$, and
• A strongly insecure Autocratic equilibrium exists if and only if $\psi \leq \mu_1$.

When patronage is sufficiently abundant, $\psi \geq \mu_2$, leaders can afford to pay off insiders an amount that fully dissuades them from holding a coup. When patronage is sufficiently scarce, $\psi < \mu_1$, the leader does not have the resources to pay off insiders and therefore is resigned to facing coups each period. When patronage falls in the middle region, $\psi \in (\mu_1, \mu_2)$, the leader has just enough patronage to make insiders indifferent to mounting a coup and coups occur with some interior probability.

This result thus links the stability of autocracies to the existence of a steady stream of patronage rents; a theme already well reflected in the study of autocracies. For example, Van de Walle (1994):

“Cameroon's 'patrimonial orientation' was due to its political leaders' management of oil wealth and that this wealth, along with foreign aid, allowed the authoritarian regime to endure.”

Fjelde (2009):

“The conversion of public funds into private payoffs has prolonged poverty and bred economic inequality in many oil-wealthy states, but it has also helped foster powerful alliances with a stake in the continuation of the prevailing rule (Smith, 2004). Countries such as Gabon, Libya and Saudi Arabia illustrate how oil-based rent-seeking can strengthen regimes, by extinguing their clientelist networks and thus placating restive groups.”

And:

“Oil-rich Gabon provides another illustration of how oil wealth and institutionalized corruption have converged to produce relatively high political stability, ...the political stability of Gabon has relied crucially on the president's (Bango) patronage networks. These have derived their strength from a careful ethnic balancing in the ethnically diverse country and a deliberate integration of powerful political opponents into the regime's power base (Yates, 1996; Basedau & Lacher, 2006).” p.203

Another implication is that, for much of the relevant parameter space, the marginal dollar of patronage is best used by an autocrat as a transfer to insiders to increase regime security rather than taken as consumption. Only insecure autocrats, those for whom $\psi < \mu_1$, would retain marginal increases in patronage. Otherwise, some of the marginal increase will be transferred to insiders, and all of it is transferred if $\psi \in (\mu_1, \mu_2)$ (the autocrat is weakly insecure). The intuition here is that increases in security (lowering the coup probability) raise the surplus in the game – as coups lead to one agent dying for certain. All agents are better off when transfers minimize coups. Were the leader to instead take patronage as personal consumption by reducing transfers, insiders would clearly be worse off, but this must lead to a rise in the frequency of coups so that insiders are again indifferent between loyalty and a coup. But this then means that the leader must be worse off too.

Autocratic equilibrium involves wasteful coups only if patronage is insufficient. This observation hints at the underlying value that the elites may find in minimalist democracy: the
inability to avoid coups via patronage could possibly be overcome if insiders were instead offered the promise of future power via elections. We now turn to this issue.

### 3.3 Minimalist Democracy Equilibrium

A minimalist democracy equilibrium has two key features. The first is that leaders respect election results and the second is that democratic leaders do not have their rule truncated by coups. A key role in sustaining minimalist democracies will be seen to be played by the beliefs of voters, which we now discuss.

Winning elections and remaining in office tells voters nothing about the type of a leader in democracy – both regular and tyrannical types respond identically to election wins – so voters do not update their belief about the leader being a ‘tyrant’ away from $\epsilon$. But if regular leaders always respect an election loss, then refusing to step down when losing elections raises a Bayesian citizen’s belief that the leader is a ‘tyrant’ above $\epsilon$. To evaluate the impact of this on future elections, consider voter beliefs about the tyrannical possibilities of an electoral challenger.

Citizens’ beliefs regarding challengers can essentially be divided up in two categories: an insider who was previously a leader, an insider who has never before been a leader. In the latter case, the insider is currently a regular type, but were he to come to power he would be subject to a tyranny shock so he will be a tyrannical leader with probability $\epsilon$. A challenger who was previously a leader and is standing for office again cannot have been a tyrant when he previously ruled. A tyrant would never have left office voluntarily, and if deposed in a coup would be dead. Consequently, a challenger who was previously a leader also has probability $\epsilon$ of becoming a tyrant once he comes to power. This makes a leader that has not stepped down less attractive relative to any possible challengers in the eyes of citizens. Given their preference for non-tyrants citizens will never vote back a leader who has violated an election result.

As such, there are two possible states: $\pi = 0$ if the current leader has failed to step down from an election loss in the past, and $\pi = p$ otherwise. We call the former the ‘tyranny’ state and the latter the ‘democratic’ state. State transitions can thus occur only when leaders are replaced or refuse to step down. If the state is $\pi = p$, then it remains so if the leader wins election, loses election and steps down, or dies. If the leader loses election and stays, the state transitions to $\pi = 0$. If the state is $\pi = 0$, it remains so as long as the leader stays in power. If he dies or is deposed, then it transitions to $\pi = p$.

Equilibrium strategies boil down to a patronage transfer level and a coup probability function for each of the two states: $\{[\tau_D, \sigma_D(\tau)], \{\tau_T, \sigma_T(\tau)]\}$. To establish behaviour as an equilibrium, we must establish the optimality of behaviour at each decision point. In order to describe this, let $V^L_D$ and $V^N_D$ be the values of starting a period as the leader and insider in state $\theta \in \{D, T\}$ respectively.

In the democratic state, the leader is optimizing in their transfer choice if

$$\tau_D \in \arg \max_{\tau \in [0,U]} \{ F + U - \tau + (1 - \sigma_D(\tau) \cdot \gamma) \cdot (1 - \delta) \cdot [p \cdot V^L_D + (1 - p) \cdot V^N_D] \}$$

and the insider is optimizing at each possible transfer if

$$\sigma_D(\tau) \in \arg \max_{\sigma \in [0,1]} \{ \sigma \cdot [\gamma \cdot (1 - \delta) \cdot V^L_D] + (1 - \sigma) \cdot [\tau + (1 - \delta) \cdot V^N_D] \}$$
In the tyranny state, the leader is optimizing in their transfer choice if
\[
\tau_T \in \arg \max_{\tau \in [0, U]} \{ F + U - \tau + (1 - \sigma_T(\tau)) \cdot (1 - \delta) \cdot V^L_T \}
\] (9)
and the insider is optimizing at each possible transfer if
\[
\sigma_T(\tau) \in \arg \max_{\sigma \in [0,1]} \{ \sigma \cdot [\gamma \cdot (1 - \delta) \cdot V^N_D] + (1 - \sigma) \cdot [\tau + (1 - \delta) \cdot V^N_T] \}
\] (10)

We must verify that two key imposed 'democratic' actions – that leaders hold elections and respect the outcome – are indeed optimal. For leaders to optimally hold elections, they must prefer doing so to acting as a tyrant:
\[
V^L_D \geq V^L_T.
\] (11)

For a leader to optimally step down following an election defeat – i.e. for democracy to be self-enforcing they must prefer being an insider in democracy to being a tyrant:
\[
V^N_D \geq V^L_T.
\] (12)

In addition to the above, our conception of minimalist democracy also requires that democracy is peaceful – there must be no coups in the democracy state:
\[
\tau_D + (1 - \delta) \cdot V^N_D \geq \gamma \cdot (1 - \delta) \cdot V^L_D.
\] (13)

Given equilibrium outcomes, \(\tau_D, \tau_T\) and \(c_T \equiv \sigma(\tau_T)\), the value functions satisfy
\[
V^L_D = F + U - \tau_D + (1 - \delta) \cdot [p \cdot V^L_D + (1 - p) \cdot V^N_D]
\] (14)
\[
V^N_D = \tau_D + (1 - \delta) \cdot [p \cdot V^N_D + (1 - p) \cdot V^N_D]
\] (15)

and
\[
V^L_T = F + U - \tau_T + (1 - c_T \cdot \gamma) \cdot (1 - \delta) \cdot V^L_T
\] (16)
\[
V^N_T = c_T \cdot [\gamma \cdot (1 - \delta) \cdot V^L_D] + (1 - c_T) \cdot [\tau_T + (1 - \delta) \cdot \{ \delta \cdot V^N_D + (1 - \delta) \cdot V^N_T \}].
\] (17)

In the democratic phase, equations (14) and (15), value functions reflect that leaders do not face coups, so only transition out of leadership via election losses, p. Insiders face the reciprocal probability of moving to power. Tyrannic value functions, equations (16) and (17), are similar to the autocracy case we studied previously. A difference is that, in case of leader death via either coup success or exogenous causes, since democracy is a preferred governance mode, the replacement leader will govern democratically and value functions reflect a transition back to the democratic phase.

The strategies \(\{\tau_D, \sigma_D(\tau)\}, \{\tau_T, \sigma_T(\tau)\}\) constitute a democratic equilibrium if (7)-(17) are satisfied.

**Result 2.** If it is optimal for leaders to respect elections and for insiders to never mount a coup, then it is always optimal to hold elections. That is, the \(V^L_D \geq V^L_T\) condition is implied by the others.

The result follows from verifying that agents prefer being a leader over being an insider in democratic equilibrium. If it is optimal to respect an election, then it must be that being an insider is preferred to being a tyrant. Thus, it must be that being a leader in democratic equilibrium is preferred to being a tyrant.
3.3.1 Optimal Transfers in Democracy

We begin by considering play in the democratic state. In order to dissuade coups, the leader must make a sufficiently large transfer to the insider. Specifically, the transfer must be at least \( \hat{\tau}_D \), where this ensures the insider is indifferent to holding a coup. Using (8), this is:

\[
\tau_D \equiv (1 - \delta) \cdot [\gamma \cdot V^P_D - (p \cdot V^N_D + (1 - p) \cdot V^L_D)].
\] (18)

Unlike the autocracy case, it can be that \( \hat{\tau}_D \leq 0 \) when the probability of an insider winning an election, \( 1 - p \), is sufficiently high to make them withhold coups without the need for transfers. Democratic equilibrium clearly involves \( \tau_D = 0 \) in this case. But what about in the remaining possible cases where \( \hat{\tau}_D \in (0, U] \)? We see that, as in the autocracy case, democratic leaders always have an incentive to avoid coups when possible.

**Result 3.** If democratic leaders need to make a positive transfer to avoid coups, then they always prefer making the transfer. That is, if \( \hat{\tau}_D \in (0, U] \) then there is no profitable deviation from \( \tau_D = \hat{\tau}_D \).

Democratic equilibrium may involve zero transfers. In this case the leader gets all the benefits from office. In order to dissuade a coup, it must be the case that insiders anticipate becoming the leader with sufficiently high probability (that is, \( p \) must be sufficiently low). On the other hand, democratic equilibrium may involve a positive (feasible) transfer. In this case the insider needs a positive transfer to be dissuaded from seizing power violently when the chance arises, implying that \( p \) is not sufficiently low. In order for the transfer to be feasible, the availability of patronage needs to be sufficiently great. This is formalized below.

**Lemma 3.** Democratic equilibrium involves \( \tau_D = 0 \) if and only if \( p \leq p^* \equiv \frac{1 - \gamma}{1 - \gamma + (1 - \delta)} \). Democratic equilibrium involves \( \tau_D \in (0, U] \) if and only if \( p > p^* \) and \( \psi \geq f(p) \equiv \frac{(1 - \delta)(\gamma - p\gamma + (1 - \delta) - (1 - p))}{\delta(1 + \gamma - (1 - \delta))} \).

Lemma 3 identifies conditions on parameters that are necessary to ensure that democracy is peaceful. More specifically, it identifies two (disjoint) sets, say \( P_1 \) and \( P_2 \), such that peaceful transfers are achieved with zero transfers in \( P_1 \) and with positive transfers in \( P_2 \). These parameter regions are illustrated in figure 1.\(^8\)

This has two key implications. The first is related to the uniqueness of transfers in democratic equilibrium. The fact that \( P_1 \) and \( P_2 \) are disjoint rules out the possibility that a democratic equilibrium with zero transfers coexists alongside one with positive transfers. By ruling out the possibility of democratic equilibria with different positive transfers coexisting, Result 4 in the appendix establishes the uniqueness of transfers in democratic equilibrium.

The second key implication of Lemma 3 is that it indicates when democratic equilibria will fail to exist because of an inability to ensure peaceful power transfers (i.e. the unshaded region in the bottom right of figure 1). It is straightforward to verify that parameters will not belong in either \( P_1 \) or \( P_2 \) if and only if \( \psi < f(p) \).\(^9\) Since \( f \) is increasing in \( p \),\(^10\) an incapacity for dissuading coups arises if \( \psi \) is low or if \( p \) is high. That is, in order to ensure that insiders do not attempt

\(^8\)Formally, \( P_1 \equiv \{p, \delta, \gamma, U, F \mid p \leq p^*\} \) and \( P_2 \equiv \{p, \delta, \gamma, U, F \mid p > p^*, \psi \geq f(p)\} \).

\(^9\)This can be seen by noting that the function \( f(p) \) is strictly increasing with \( f(p^*) = 0 \) and \( f(1) = \mu_2 \).

\(^10\)Intuitively, a higher \( p \) makes the insider worse off, thereby leading them to require a higher transfer in order to dissuade them from mounting a coup.
Incumbent Bias: $p$
Patronage Availability: $\psi$
\[\mu_2 \mu_1 \]
\[p^* \]
0 1
Incumbent Bias: $p$
Patronage Availability: $\psi$
\[\mu_2 \mu_1 \]
\[p^* \]
0 1
Incumbent Bias: $p$
Patronage Availability: $\psi$
\[\mu_2 \mu_1 \]
\[p^* \]
0 1
\[f(p)\]
\[g(p)\]
\[f(p)\]
\[P_1 P_2 \]
\[S_1 S_2 \]

Figure 1: Peaceful Power Transfers

to seize power with violence, democracy requires the availability of sufficient patronage or that elections are sufficiently competitive.

3.3.2 Respect for Elections in Democracy

We now turn to the condition that election losers optimally step down. This condition compares the value of being a democratic insider, $V_{ID}^N$, with that of being a tyrant, $V_{IT}^T$. The value of $V_{ID}^N$ has been pinned down by the above analysis,\(^\text{11}\) so we need now to turn to an analysis of play in the tyrant state.

Recall that the tyrant state is triggered when the leader refuses to step down following an election. Citizens perceive the leader to be a tyrant with a greater probability than a challenger and therefore the leader is sure to lose any future election. As such, the leader who is believed to be a tyrant with high probability will be believed to ignore any future election results too, and will remain in office until deposed via coup or death.

In determining whether a tyrant is secure, we note that the insider must be transferred a minimum amount, $\tau_T$ to be dissuaded from a coup. This value makes an insider in the tyrant state indifferent to mounting a coup. From (10), it is given by:

\[\tau_T \equiv (1-\delta) \cdot [\gamma \cdot V_{ID}^L - (\delta \cdot V_{ID}^N + (1-\delta) \cdot V_{IT}^N)] \tag{19}\]

\(^\text{11}\)Specifically, the value of $\{V_{ID}^L, V_{ID}^N\}$ are the solutions to (14) and (15) where $\tau_D = 0$ if parameters are in $P_1$ and $\tau_D = \tau_D$ (as defined in (18)) if parameters are in $P_2$.  
As in the case of autocracy, a tyrant may be secure (face coups with zero probability) or insecure (face coups with a positive probability). Whether or not tyrants face insecurity has an important implication for the self-enforceability of democracy.

**Lemma 4.** *Leaders respect elections only if tyrants are insecure.*

Intuitively, if peace is available to an autocratic leader in the tyranny state then the total surplus available to all players in the game is the same under both democracy and under tyranny. Coups are the only surplus destroying event and they will then not occur in either tyranny or democracy. Under tyranny, the leader transfers just enough of this surplus to insiders to buy peace, and thus makes them indifferent to undertaking coups. Necessarily then under democracy either the leader transfers $\tau^d > 0$ leaving insiders indifferent to coups, or $\tau^d = 0$. In the latter case, the possibility of winning power through elections is sufficient to motivate insider loyalty. But then insiders strictly prefer loyalty over taking a coup, implying that their share of the surplus exceeds that which they would obtain under tyranny – where leader transfers make them just indifferent to undertaking coups. Necessarily then, leaders share more of the (same total) surplus with insiders in democracy than they do with insiders under secure tyranny implying that tyrannical rule must be preferred. Alternatively, the leader makes a positive transfer to insiders so that they are just indifferent to taking a coup under tyranny. But this implies that the leader’s share of the total surplus is as high under democracy as it would be under tyranny. When that is the case a leader would never voluntarily step down from leadership, as staying on and ruling as a tyrant is just as good. In either case, democracy cannot be self-enforcing.

For democracy to be self-enforcing leaders must fear its alternative so much that they are willing to walk away from office when losing elections. But peaceful rule under tyranny is sufficiently attractive to losing leaders that they will never choose to do that. Democracies can be self-enforcing only when a leader violating democratic rules is forced to rule as a tyrant, and such rule features perpetual existential threats. If it fails to do so, then democracy fails.

Lemma 3 provides the set of necessary conditions implied by the requirement that democracy involves peaceful power transfers (i.e. a democratic equilibrium exists only if parameters are in $P_1$ or $P_2$). We now refine these conditions further by imposing the necessary conditions implied by the requirement that democracy be self-enforcing. Lemma 4 implies that we can do so by imposing the necessary conditions implied by insecure tyranny.

**Lemma 5.** *A tyrant is insecure only if patronage is sufficiently small. Specifically, only if*

- $\psi \leq g(p) \equiv \frac{\gamma (1 - \delta)(1 - p(1 - \delta))}{2 - \delta - 2(1 - \delta)p}$ if parameters are in $P_1$ and, or
- $\psi \leq \mu_2$ if parameters are in $P_2$.

Since insecure tyrants are necessary for democracy to be self-enforcing, Lemma 5 identifies a tighter set of necessary conditions for the existence of democratic equilibrium. This is illustrated in figure 2 where democracy is self-enforcing only if parameters are in $S_1$ or $S_2$ (which are subsets of $P_1$ and $P_2$). That is, a democratic equilibrium with zero transfers exists only if parameters are in $S_1$ and a democratic equilibrium with positive transfers exists only if parameters are in $S_2$. To get the intuition for the shapes, first consider $S_1$. In this region democratic equilibrium necessarily involves zero transfers. Thus a larger $p$ makes elections more biased.

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Formally, $S_1 \equiv \{p, \delta, \gamma, U, F \mid \psi \leq g(p)\} \cap P_1$ and $S_2 \equiv \{p, \delta, \gamma, U, F \mid \psi \leq \mu_2\} \cap P_2$. 

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12Formally, $S_1 \equiv \{p, \delta, \gamma, U, F \mid \psi \leq g(p)\} \cap P_1$ and $S_2 \equiv \{p, \delta, \gamma, U, F \mid \psi \leq \mu_2\} \cap P_2$. 

---

15
Figure 2: Self-Enforcing Democracy
toward incumbents, and since transfers are zero, it must be that leaders in democracy are better off. But this gives insiders under tyranny a greater incentive to mount a coup. Thus tyranny becomes even more insecure in the sense that a greater transfer is required to dissuade a coup. Thus the upper boundary of \( S_1 \) is upward sloping. On the other hand, in \( S_2 \) democratic equilibrium necessarily involves positive transfers. A larger \( p \) makes elections more biased toward incumbents, which would induce insiders to strictly prefer a coup. To avoid this the equilibrium transfer required by the insider is raised. The net effect on payoffs is unaffected. Thus, the payoff to being a democratic leader is unchanging in \( p \) in this region and therefore incentives for insiders to mount a coup against a tyrant is unchanged. The security of tyranny is unaffected, and therefore the upper boundary of \( S_2 \) is flat.

Importantly, \textit{the conditions that democracy requires in order to be self-enforcing are of the opposite nature to those democracy requires to be peaceful: patronage must be sufficiently low or elections must be sufficiently favorable to the incumbent}. As is clear from the above, tyrannical rule is insecure with low levels of patronage. This makes it an unattractive choice for a leader, so he respects democratic rules. But this is also the reason why \( p \) cannot be too low. When \( p \) is low, insiders have little chance of coming to power so that democratic rule becomes infeasible without a high level of \( U \). Insiders who depose tyrants via coups rule as democrats, so that when \( p \) is low, the attractiveness of coups is also low, making tyrannical rule more secure.

### 3.3.3 Existence of Democratic Equilibrium

We now turn to the question of existence of democratic equilibrium. So far we have that a democratic equilibrium exists only if parameters are in \( S_1 \) or \( S_2 \). But being insecure is, in general, not sufficient to ensure that elections are respected. An insecure tyranny may still be chosen by a leader over relinquishing power. But this will not occur if coups are likely to succeed or if the future is not lightly discounted. Under such a condition, democratic equilibrium will exist if and only if tyrants are insecure (i.e. in \( S_1 \) or \( S_2 \)).

**Proposition 2.** \textit{Let} \( \delta \leq (1 - \delta)^2 \cdot \gamma^2 \). \textit{A democratic equilibrium exists if and only if (i) \( p \leq p^* \) and \( \psi \leq g(p) \), or (ii) \( p > p^* \) and \( \psi \in [f(p), \mu_2] \), and is generically unique. Specifically,}

- if \( p \leq p^* \) and \( \psi < g(p) \), the equilibrium involves zero transfers in the democracy state, and zero transfers and coups with probability one in the tyranny state.
- if \( p > p^* \) and \( \psi \in [f(p), \mu_2] \), the equilibrium involves positive transfers in the democracy state, and zero transfers and coups with probability one in the tyranny state.

Under the condition stated, insecure tyranny is daunting enough to be avoided and leaders will respect elections. When this is not the case, existence requires that elections are not too biased toward the incumbent.

**Proposition 3.** If \( \delta > (1 - \delta)^2 \cdot \gamma^2 \), then a democratic equilibrium exists if and only if \( \psi \leq g(p) \) and \( p \) is sufficiently small that

\[
\frac{p}{1 - p} \leq \gamma \left( \frac{1 - \delta}{\delta} \right)^2 - \frac{1}{\delta},
\]

is generically unique, and involves zero transfers in the democratic state.
The problem a leader faces in pursuing a democratic strategy rests with the credibility of the leader’s claims to respect democracy, and the adequacy of promised electoral processes in appeasing the elite. These two propositions characterize the full parameter range in which these problems are solved. Credibility depends on the interaction between the patronage value of the state, and the nature of electoral processes in democracy. For low values of $p$ a democratic equilibrium will exist provided the patronage value of the state is not too high. For higher values of $p$ patronage helps keep peace in democracy. Since leaders enjoy large incumbency advantages and are removed by elections only rarely, insiders must receive sufficient transfers to eschew coup opportunities, but without sufficient patronage leaders will not be able to meet these transfers. It is still the case in this region though that patronage levels cannot become too large or autocracy will be secure, and hence chosen by leaders.

4 Discussion

When minimalist democracy is feasible there are two equilibria, this means that a well-known dynamic coordination problem inherent to the electoral voting game arises in the present setting as well.\(^{13}\) If the current leader believes that future leaders will not respect election results, then this belief becomes self-reinforcing; it is a best response for the current leader to also not do so. This is why, as established in Proposition 1, there exists an autocratic equilibrium of this form for all parameter values; turnover only occurs through leader death (violent or peaceful) and the democratic machinery lies dormant. Jointly, propositions 2 and 3 fully demarcate the parameter values for which a democratic alternative exists as well. Here, where the patronage value of the state is not too high, and provided the electoral system delivers reasonable (as formally defined in the propositions) chances for electoral turnover, a confidence that future leaders will respect elections becomes self-enforcing as well. As such the current leader voluntarily steps aside too when losing elections, and violent challenges to power disappear.

Overall, the potential benefit of democratization to leaders who are free to rule as they please is that, when credible, it helps solve the non-divisibility of the spoils of leadership problem. It is the non-divisibility of (at least a partial aspect of) power or prestige – which we have modeled through the utility term $F$ – that generates leadership insecurity here. The converse implication is that if leading a state generates neither power, prestige nor any other non-transferable benefit, an autocratic leader will always be able to devise a means of transferring the state’s divisible benefits to those who threaten him so that peace will ensue and autocratic power will persist.

But with a non-divisible component of leadership this is no longer the case, and as we have shown, offering insiders a peaceful, stochastic avenue to power through elections may stop them using the (costly) coup technology, making both the leader and insiders better off. A further implication is that for values of patronage that are close to, but not sufficiently low that democracy can be sustained, leaders would benefit by a decline in patronage putting them in to the region where a democratic equilibrium holds. This provides a possible rationale for

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\(^{13}\)This has been analyzed by Myerson (2006) who shows how modifications of the game can help select the democratic equilibrium and Bidner and Francois (2013) who analyze the role of leaders in shifting norms towards equilibrium where leaders are responsive to voters.
reforms of the state that a patronage reducing in helping to engineer democratic transitions.

The analogy between the democratic process of elections in this case and a coin-toss has been noted before; Przeworski (1999). But elections are slightly more than that here. A leader commits to tossing the electoral coin and wins elections with probability $p$. But unlike a real coin, if he violates the electoral outcome, though he is free to toss it again, it is now biased against him; he wins with probability zero. Such a leader may remain in office, but must now rule as an autocrat.

The analysis generates two broad insights regarding the credibility, and hence the viability, of democracy. Firstly, if a leader who flouts democratic rules, i.e., one who is relegated to permanent autocracy, is able to enjoy security from coups, then democracy can never be viable. Consequently, the threat of violent removal from office is a valuable tool in sustaining democracy. If this threat could be mitigated – as it is with sufficient graft to buy off threats to autocratic rule – then democracy can never be sustainable.

Secondly, the threat of presiding over an insecure autocracy, though necessary, is not sufficient to make democracy viable. It also depends on how pressing a problem regime insecurity presents. If the leader is overwhelmingly powerful so that coups can almost never succeed, or if he does not value the future enough to relinquish immediate power, democracy is again non-viable.

Due to the configuration of equilibria, a strong empirical implication here is that a permanent increase in graft to a sufficiently high level threatens democracy; it will always force democracy in to autocracy. It is also trivial to show that the democratic equilibrium always Pareto dominates the autocratic one, suggesting a reason for why elites would choose to coordinate on democracy where it is feasible. This underpins a slightly less strong empirical argument the other way: low enough graft will give rise to electoral systems in which minimalist democracy is feasible, and if we believe political elite are able to coordinate on preferred equilibria, would also predict democratization – in the minimalist sense.

This is consistent with the pattern described by Jensen and Wantchekon (2004)

“...most African resource-dependent countries were authoritarian governments and struggled with democratic consolidation after the “third wave” of democratization. These resource-dependent countries include Algeria, Nigeria, Libya, Gabon, Cameroon, and the former Zaire. Besides South Africa, the transition to democracy has been successful only in resource-poor countries such as Benin, Mali, Senegal, and Madagascar.”

These perspectives are also reflected in the data. A large literature on the natural resource curse, which resonates clearly with our theoretical model, focuses on resource abundance as an obstacle to inclusive institutions and democratization. In particular, resource shocks that lower the cost of coups or deplete the amount of resources available for autocrats to buy off threats to their survival appear to play a role in the literature.

For the most part the literature has focused on temporary resource shocks. Brückner and Ciccone (2011) focus on droughts and show that low rainfall shocks tend to predict democratization in Africa. They emphasize the link between their findings and the window-of-opportunity hypothesis for revolutionary threats in Acemoglu and Robinson (2006). Caselli and Tesei (2011)
focus on a different type of temporary resource windfall, that due to improvements in the international price of the most exported commodity of a country. They show that increases in past prices consolidate autocracies, although they show no effect on democracies. In as much as international aid can be considered a windfall to the recipient country, several papers emphasize how a negative effect of more foreign aid appears to be the reduction on the prospects of democratization.\footnote{For instance see Djankov et al. (2008) on the curse of aid for democracy and references therein.}

The evidence on temporary resource shocks affecting political institutions has also found some criticism and appears far from settled. Wacziarg (2012) presents a large spectrum of empirical evidence challenging the role of temporary oil revenue windfalls, while positive effects on democracy (contrasting typical findings) are reported in Brückner, Ciccone, and Tesei (2012).

Our model is however not predicated on temporary, but on permanent resource shocks. Revenues available to fend off coup threats need to be permanently higher for our different equilibrium characterizations to have any sense. The evidence supporting permanent natural resource windfalls is reassuringly stronger. Tsui (2011) focuses on discoveries of large oil reservoirs as an important determinant of long-run autocratic drift in a large panel of countries. Wantchekon (1999) discusses the political dynamics around peak discovery in the case of Nigeria along these lines. In addition, autocracies hit with permanent resource windfalls tend to experience less internal conflict, as predicated by our theory. For instance, Cotet and Tsui (2013) show how oil-rich nondemocracies do not experience higher levels of conflict or civil war on average.

5 Conclusions and Future Directions

After positing a relevant set of stylized facts, some of which are novel, this paper studies political transitions in to and out of democracy based on the minimalist concept of Schumpeter (1942) and Przeworski (1999). The focus is the mere presence of competitive elections. The fact that elections allow a stochastic rent share from executive power to elites currently not in power can lead them to eschew coup opportunities. When the respect of such electoral outcomes is credible for leaders, elections can reduce losses to the elite as a whole that arise from coups d'état. These are distinctive advantages of hybrid systems which feature minimalist democracy and are a valuable avenue for autocratic leaders who cannot fend off coup threats with side payments.

The main contribution of the paper is to shed light on the relevance of a set of hybrid regimes – electoral democracies with drastically low inclusiveness and limited constraints on the executive – as a first step in the process of democratic transition. This exercise should therefore be interpreted as moving away from a coarse definition of a polity as purely democratic or purely autocratic, but rather as transiting through different hybrid phases, of which “electoral competition” represents a first basic stepping stone decoupled from any requirement of representation. We believe this is an important departure from the literature which is highly relevant for a large number of the world’s weak polities that lie between these two extreme poles. The Minimalist Democracies that we have studied embody elements from both ends of the politi-
cal schema. Their underlying context is one in which power would seem to be determined by force, as the institutions in such countries are weak. Yet leaders hold elections, and even leave power when they lose. In these democracies, leaders who control violence, and hence sufficient force to stay in power, choose to step aside and respect electoral outcomes. We have first established why a dictator, in control of power through force, would choose to implement a minimalist democracy. Relatedly we have demonstrated how the process of holding elections can serve a substantive function when the leader – controlling force – can always choose to anul results and remain in office.

Secondly, we have developed the conditions under which minimalist democracy may emerge. By offering a probabilistic share of future leadership spoils to insiders, leaders in minimalist democracies can obtain peace and security from attempts against their regime. Additionally, they can pay (from the patronage available to them) insiders who would threaten them less in democracies than they would have to in autocracies in order to secure peace. Importantly, however, we have demonstrated that reducing patronage as a motivation for minimalist democracy can NEVER work. Democracy can only be sustained if leaders fear that by flouting democratic rules they will face immediate threats to the stability of their regime. An important lesson here then is that the very peace with which transitions of power in democracy are characterized necessarily rests on the possibility of credible force being brought to bear on any leader who moves outside the democratic rule. Peaceful democracy rests on violent threats – necessarily.

There is a third important question that naturally follows from this analysis. Here we provide some conjectures about it but leave to future research a fuller analysis. Does this framing of the emergence of minimalist democracy tell us anything about the process by which minimalist democracy turns into a fully-fledged or consolidated democracy? The process we have analyzed points to some intriguing possibilities. The threat of force sustains a commitment to patronage transfers in autocracies. To ensure that their current share of spoils extends into the future, elites thus only need to sustain that threat through maintaining their power-base – i.e., through their links to the rank-and-file. However, as we have seen, this threat of force does not guarantee graft transfers in minimalist democracies since a probabilistic share of leadership benefits replaces it. The threat does allow one to be at the table, with a chance to run and perhaps be elected, but in a minimalist democracy leads to either no corresponding graft transfers, or lower ones than would be received in an autocracy. The other side of this coin is that the very lack of institutional commitments to probabilistic power sharing in autocracies leads to a credible commitment on the part of leaders that those with the guns will be rewarded. This is because, if not, they can threaten to use the guns, and this threat is credible. With minimalist democratic institutions in place, in contrast, the threat of using the guns is not credible. So leaders do not have to make transfers to insiders. But then those with the guns can secure less for their constituents than another sort of political actor.

A plausible conjecture would thus be that, after the transition to minimalist democracy, political elites who are able to obtain policy benefits for the rank-and-file become more valuable to them than elites who control the guns. The political elite who control violence shift from being key players with a claim to resources into marginal players through whom resources need not ever flow. We believe that this transition may play an important role in allowing the emer-
gence of an alternative, non-violent and rival form of elite who are able to offer policy benefits (in lieu of graft) to the rank-and-file in return for their support. We will explore this conjecture in future work.
A Supporting Results

Result 4. Democratic equilibria with differing transfer levels never coexist.

Proof. Lemma 3 establishes that if parameters are in \( P_1 \), then a democratic equilibrium must have \( \tau_D = 0 \). Thus, the only possible way for there to be multiplicity is if equilibria with different positive transfer levels co-exist (and thus parameters are in \( P_2 \)). But if there is an equilibrium with transfers \( \tau_D = \tau' \), then parameters must be such that \( \tau' = \hat{\tau}_D \), where \( \hat{\tau}_D \) is given by (18) where \( [V^L_D, V^N_D] \) are computed from (14) and (15) using \( \tau_D = \tau' \). The resulting condition has a unique solution for \( \tau' \), so that an equilibrium with a transfers of \( \tau' > 0 \) precludes there being an equilibrium with any other transfer. \( \square \)

B Proofs

Proof of Result 1:

Proof. Follows from \( V_A^L \geq \gamma \cdot V_A^L > V_A^N \) where the first inequality follows from \( \gamma \leq 1 \) and the second inequality is implied by lemma 1. \( \square \)

Proof of Lemma 1:

Proof. Suppose instead that we had \( \hat{\tau}_A \leq 0 \). Since \( \tau \geq 0 \geq \hat{\tau}_A \), we must have \( c = 0 \). From the optimality conditions we have \( \tau_A = 0 \) since \( \sigma_A(\tau) = 0 \) for all \( \tau \). Using this is the expressions for the value functions gives \( V_A^N = 0 \) and \( V_A^L = (F + U)/\delta \). Thus, \( \gamma \cdot V_A^L - V_A^N > 0 \) which implies \( \hat{\tau}_A > 0 \) which is a contradiction. \( \square \)

Proof of Lemma 2:

Proof. We proceed by showing that \( \hat{\tau}_A < U \) implies that (i) there are no profitable deviations from choosing \( \tau = \hat{\tau}_A \), and (ii) there is always a profitable deviation from choosing any \( \tau \neq \hat{\tau}_A \).

Suppose \( \hat{\tau}_A < U \) and that \( \tau_A = \hat{\tau}_A \). Since \( \hat{\tau}_A < U \), it must be that there are no coups in equilibrium (otherwise raising \( \tau \) by a marginal amount will cause coups to occur with probability zero). If there is a profitable deviation, it will be to setting \( \tau = 0 \). This will definitely induce a coup (since \( \tau = 0 < \hat{\tau}_A \)). Thus, there is not a profitable deviation if

\[
F + U + (1 - \delta) \cdot (1 - \gamma) \cdot V_A^L \leq V_A^L.
\]

That is, if

\[
V_A^L \geq \frac{F + U}{1 - (1 - \delta) \cdot (1 - \gamma)} = \frac{\delta}{\delta + \gamma \cdot (1 - \delta)} \cdot \frac{F + U}{\delta}.
\]

Using \( c_A = 0 \) along with (6) in (5) gives \( V_A^N = \gamma \cdot (1 - \delta) \cdot V_A^L \). Adding (4) and (5) and re-arranging gives

\[
V_A \equiv V_A^L + V_A^N = \frac{F + U}{\delta}.
\]

Therefore \( V_A^L = V_A - V_A^N = S_A - \gamma \cdot (1 - \delta) \cdot V_A^L \), so that

\[
V_A^L = \frac{1}{1 + \gamma \cdot (1 - \delta)} \cdot V_A \geq \frac{1}{1 + \gamma \cdot (1 - \delta)} \cdot \frac{F + U}{\delta} \geq \frac{\delta}{\delta + \gamma \cdot (1 - \delta)} \cdot \frac{F + U}{\delta}.
\]
as required. Thus, there are no profitable deviations from \( \tau = \hat{\tau}_A \).

Now suppose that \( \tau_A \neq \hat{\tau}_A \). If \( \tau_A > \hat{\tau}_A \) then \( \tau = \hat{\tau}_A \) is clearly a profitable deviation (it achieves coups with the same probability, zero, at a lower cost). Similarly, if \( \tau_A \in (0, \hat{\tau}_A) \) then \( \tau = 0 \) is clearly a profitable deviation (it achieves coups with the same probability, one, at a lower cost). The only remaining possibility is \( \tau = 0 \). To show that there is a profitable deviation consider a deviation to \( \tau = \hat{\tau}_A \). If this is a profitable deviation, then it must be that

\[
F + U - \hat{\tau}_A + (1 - \delta) \cdot V^L_A > V^L_A.
\]

That is, if

\[
F + U > \hat{\tau}_A + \delta \cdot V^L_A
\]

Use the fact that \( V^N_A = \gamma \cdot (1 - \delta) \cdot V^L_A \) to get \( \gamma \cdot V^L_A = V^N_A / (1 - \delta) \) which can then be used in (6) to get \( \tau_A = V^N_A - (1 - \delta) \cdot V^N_A = \delta \cdot V^N_A \). Using this in the above equation implies that we need to show

\[
F + U > \delta \cdot [V^L_A + V^N_A].
\]

Adding (4) and (5) and using \( c_A = 1 \) and \( \tau_A = 0 \), we get \( V^L_A + V^N_A = F + U + (1 - \delta) \cdot V^L_A \). That is,

\[
F + U = \delta \cdot V^L_A + V^N_A > \delta \cdot [V^L_A + V^N_A],
\]

as required. Thus, there can not be an equilibrium with \( \tau_A = 0 \) if \( \hat{\tau}_A < U \).

**Proof of Proposition 1:**

Proof. The strategy is to first characterize the set of parameters for which an autocratic equilibrium with \( \hat{\tau}_A > U \), \( \hat{\tau}_A < U \), and \( \hat{\tau}_A = U \) exist. This will allow us to then characterize the set of parameters for which a secure, insecure, and partially secure autocratic equilibrium exists. Since these cases cover all possible autocratic equilibria and since the characterized parameter sets will be generically disjoint (two of the sets will share a boundary), it follows that autocratic equilibria are generically unique.

To this end, we begin by characterizing the set of parameters that support an autocratic equilibrium in which \( \tau_A > U \). Such equilibria must have insecure autocrats since the required transfer is infeasible. The parameter set is those for which \( \hat{\tau}_A > U \), where \( \hat{\tau}_A \) is given by (6) where \( \{V^L_A, V^N_A\} \) are computed using \( \tau_A = 0 \) and \( c_A = 1 \). This gives \( \psi < \mu_1 \).

Next, we characterize the set of parameters that support an autocratic equilibrium in which \( \hat{\tau}_A < U \). Such equilibria must have secure autocrats by the above lemma. The parameter set is those for which \( \hat{\tau}_A < U \), where \( \hat{\tau}_A \) is given by (6) where \( \{V^L_A, V^N_A\} \) are computed using \( \tau_A = \hat{\tau}_A \) and \( c_A = 0 \). This gives \( \psi > \mu_2 \).

Next, we characterize the set of parameters that support an autocratic equilibrium in which \( \hat{\tau}_A = U \). We divide this case into three sub-cases.

1. The equilibrium will have a strongly insecure autocrat if and only if parameters satisfy \( \hat{\tau}_A = U \), where \( \hat{\tau}_A \) is given by (6) where \( \{V^L_A, V^N_A\} \) are computed using \( \tau_A = 0 \) and \( c_A = 1 \) (offering \( \tau = U \) is not a profitable deviation because we can have insiders holding a coup with probability one in this event, removing any incentive to offer more than zero). This gives \( \psi = \mu_1 \).
2. The equilibrium will have a secure autocrat if and only if parameters satisfy $\hat{\tau}_A = U$, where $\hat{\tau}_D$ is given by (6) where $\{V_L^D, V_A^N\}$ are computed using $\tau_A = U$ and $c_A = 0$ (offering $\tau = 0$ is not a profitable deviation for reasons identical to those given in lemma 2). This gives $\psi = \mu_2$.

3. The equilibrium will have a weakly insecure autocrat if and only if parameters satisfy $\hat{\tau}_A = U$, where $\hat{\tau}_D$ is given by (6) where $\{V_L^D, V_A^N\}$ are computed using $\tau_A = U$, the implied value of $c_A$ satisfies $c_A \in (0, 1)$, and we verify that there are no incentives to deviate to offering $\tau = 0$. This gives $\psi \in [\mu_1, \mu_2)$

In summary then, a secure autocratic equilibrium exists if and only if $\psi \geq \mu_2$. A strongly insecure autocratic equilibrium exists if and only if $\psi \leq \mu_1$, and a weakly insecure autocratic equilibrium exists if and only if $\psi \in [\mu_1, \mu_2)$. Thus, autocratic equilibrium is unique unless $\psi = \mu_1$, in which case two equilibria exist (one weakly insecure and one strongly insecure).

**Proof of Result 2:**

Proof. The strategy is to show that $V_L^D \geq V_A^N$, since this along with (12) implies (11) as claimed.

In ensuring no coups, it is either the case that $\tau_D > 0$ or $\tau_D = 0$. If $\tau_D > 0$, then $\tau_D = \hat{\tau}_D$ which ensures $V_D^N = (1 - \delta) \cdot V_L^D$, which implies $V_L^D > V_A^N$ since $\delta < 1$. If $\tau_D = 0$, then the value functions (14) and (15) imply $V_D^L \geq V_A^N$. To see the latter, note that $V_D = V_D^L + V_D^N = (F + U)/\delta$. This implies $V_D^N = V_D - V_D^L$, which can be substituted into (14) and solved to get $V_D^L = \frac{\delta + (1 - \delta) \cdot V_D}{1 - p \cdot \frac{\bar{v}}{2}}$. Since $\delta > 0$ implies the first fraction is greater than unity, it follows that $V_D^L > V_D^L$ and thus that $V_D^L > V_A^N$ as required. Thus, in either case we have $V_D^L > V_A^N$. But then this and (12) implies $V_L^D > V_A^N \geq V_L^D$, which implies $V_D^L \geq V_D^L$ as required.

**Proof of Result 3:**

Proof. Consider a proposed democratic equilibrium in which $\hat{\tau}_D \in (0, U]$. Since coups are avoided in any democratic equilibrium, we have $\tau_D = \hat{\tau}_D$. From (18) and (15) we get $V_D^N = \gamma \cdot (1 - \delta) \cdot V_D^L$, and by adding (14) and (15) we get $V_D^L + V_D^N = (F + U)/\delta$.

If there is a profitable deviation, it is to $\tau = 0$ (which must incite a coup by virtue of $\hat{\tau}_D > 0$). Thus, there is not a profitable deviation if

$$F + U + (1 - \gamma) \cdot (1 - \delta) \cdot V_D^L \leq V_D^L,$$

but since $V_D^N = \gamma \cdot (1 - \delta) \cdot V_D^L$, this is $F + U \leq \delta \cdot V_D^L + V_D^N$. But this is ensured because

$$F + U = \delta \cdot V_D^L + \delta \cdot V_D^N < \delta \cdot V_D^L + V_D^N,$$

where the equality follows from $V_D^L + V_D^N = (F + U)/\delta$.

**Proof of Lemma 3:**

Proof. The strategy is to first prove the ‘only if’ statements. The second step is to note that the fact that $P_1 \equiv \{p, \delta, \gamma, U, F | p \leq p\}$ and $P_2 \equiv \{p, \delta, \gamma, U, F | p > p^*, \psi \geq f(p)\}$ are disjoint implies the ‘if’ conditions.

If a democratic equilibrium involves $\tau_D = 0$, then it must be the case that $\hat{\tau}_D \leq 0$, where $\hat{\tau}_D$ is given by (18) where $\{V_L^D, V_A^N\}$ are computed from (14) and (15) using $\tau_D = 0$. This gives $p \leq p^*$. 

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If a democratic equilibrium involves \( \tau_D \in (0, U] \) then \( \tau_D \in (0, U] \), where \( \tau_D \) is given by (18) where \( [V^L_D, V^N_D] \) are computed from (14) and (15) using \( \tau_D = \tau_D \). This gives \( p > p^* \) and \( \psi \geq f(p) \).

So far we have established that if there is a democratic equilibrium with zero transfers then parameters are in \( P_1 \equiv \{ p, \delta, \gamma, U, F \mid p \leq p^* \} \), and that if there is a democratic equilibrium with positive transfers then parameters are in \( P_2 \equiv \{ p, \delta, \gamma, U, F \mid p > p^*, \psi \geq f(p) \} \). But the fact that \( P_1 \) and \( P_2 \) are disjoint implies the 'if' conditions. That is, if there is a democratic equilibrium with parameters in \( P_1 \) then it must involve zero transfers since a democratic equilibrium either has zero or positive transfers, yet it can not have positive transfers because parameters being in \( P_1 \) preclude them from being in \( P_2 \) (and similarly for the consequences of parameters in \( P_2 \)).

**Proof of Lemma 4:**

*Proof.* The strategy is to show that if tyrants are secure then the value to being a tyrant leader is at least as great as being a leader in democracy and therefore strictly better than being an insider in democracy since \( V^L_D > V^N_D \) (this is formally proven as part of the proof of Result 2).

If a tyrant is secure, then \( c_T = 0 \) and either \( \tau_T \leq 0 \) or \( \tau_T \in (0, U] \). If \( \tau_T \leq 0 \) then \( \tau_T = 0 \) and (16) implies

\[
V^L_T = \frac{F + U}{\delta} = V^L_D + V^N_D > V^L_D > V^N_D
\]  

(21)

where the second equality comes from adding (14) and (15) and re-arranging. If on the other hand \( \tau_T \in (0, U] \), then \( \tau_T = \tau_T \) and thus \( V^N_T = \gamma \cdot (1 - \delta) \cdot V^L_T \). Since the right side is the value of holding a coup in democracy, we have \( V^N_T \leq V^N_D \). But then using this in the right side of (17) we have \( V^L_T \geq \tau_T \cdot (1 - \delta) \cdot V^N_T \) so that

\[
\tau_T \leq \delta \cdot V^N_T
\]

(22)

Using this in (16) gives \( V^L_T \geq F + U - \delta \cdot V^N_T + (1 - \delta) \cdot V^L_T \), and using \( V^N_T \leq V^N_D \) gives \( V^L_T \geq F + U - \delta \cdot V^N_D + (1 - \delta) \cdot V^L_T \). Therefore we have

\[
V^L_T + V^N_D \geq \frac{F + U}{\delta} = V^L_D + V^N_D.
\]

(23)

Thus \( V^L_T \geq V^L_D > V^N_D \), implying again that election results are not respected.

**Proof of Lemma 5:**

*Proof.* The strategy is to note that a tyrant is insecure only if \( \tau_T \geq U \) where \( \tau_T \) is given by (19) where the values of \( [V^L_D, V^N_D] \) are given by the solutions to (14) and (15) using \( \tau_D = 0 \) if parameters are in \( P_1 \) and \( \tau_D = \tau_D \) if parameters are in \( P_2 \) where \( \tau_D \) is given by (18), and where \( V^N_T = \gamma \cdot (1 - \delta) \cdot V^L_T \) (since the insider is either indifferent to mounting a coup or strictly prefers it).

Using \( V^N_T = \gamma \cdot (1 - \delta) \cdot V^L_T \) in (19) gives:

\[
\tau_T = (1 - \delta) \cdot \delta \cdot (\gamma \cdot (2 - \delta) \cdot V^L_T - V^N_T) \cdot (26)
\]

Using \( V^N_T = \gamma \cdot (1 - \delta) \cdot V^L_T \) in (19) gives:

\[
\tau_T = (1 - \delta) \cdot \delta \cdot (\gamma \cdot (2 - \delta) \cdot V^L_T - V^N_T) \cdot (26)
\]

If parameters are in \( P_1 \), then we have

\[
V^L_D = \frac{1 - p \cdot (1 - \delta)}{(2 - \delta) \cdot (1 - p) + p \cdot \delta} \cdot \frac{F + U}{\delta} \quad \text{(25)}
\]

\[
V^N_D = \frac{(1 - p \cdot (1 - \delta)}{(2 - \delta) \cdot (1 - p) + p \cdot \delta} \cdot \frac{F + U}{\delta}, \quad \text{(26)}
\]
which, when used in (24), makes the requirement that \( \tau_T \geq U \) equivalent to \( \psi \leq g(p) \).

If instead parameters are in \( P_2 \), then we have

\[
V^I_D = \frac{1}{1 + \gamma \cdot (1 - \delta)} \cdot \frac{F + U}{\delta},
\]

(27)

\[
V^N_D = \frac{\gamma \cdot (1 - \delta)}{1 + \gamma \cdot (1 - \delta)} \cdot \frac{F + U}{\delta},
\]

(28)

which, when used in (24), makes the requirement that \( \tau_T \geq U \) equivalent to \( \psi \leq \mu_2 \).

\[ \square \]

**Proof of Proposition 2:**

The ‘only if’ part follows from Lemmas 3 and 5. The strategy for showing the ‘if’ part is to show that elections are respected if tyrants are insecure (and \( \delta \leq (1 - \delta)^2 \cdot \gamma^2 \)).

If \( p \leq p^* \) and \( \psi < g(p) \) or \( p > p^* \) and \( \psi \in [f(p), \mu_2] \), then equilibrium must have \( \tau_D > U \) (by virtue of \( \psi < g(p) \) and \( \psi < \mu_2 \)). This implies that it is impossible for a tyrant to dissuade a coup, and thus any equilibrium must have \( c_T = 1 \) and \( \tau_T = 0 \). As such, (16) implies that

\[
V^I_D = \frac{F + U}{\delta + \gamma \cdot (1 - \delta)}.
\]

(29)

If \( p > p^* \) and \( \psi \in [f(p), \mu_2] \) (parameters are in \( P_2 \)), then we have \( \tau_D = \hat{\tau}_D \) where \( \hat{\tau}_D \) is given by (18). This, along with (14) and (15), gives:

\[
V^N_D = \frac{\gamma \cdot (1 - \delta)}{1 + \gamma \cdot (1 - \delta)} \cdot \frac{F + U}{\delta}.
\]

(30)

It then follows that elections are respected (i.e. \( V^D_D \geq V^I_D \)) if and only if

\[
\frac{\gamma \cdot (1 - \delta)}{1 + \gamma \cdot (1 - \delta)} \geq \frac{\delta}{\delta + \gamma \cdot (1 - \delta)}.
\]

(31)

which holds if and only if \( \delta \leq (1 - \delta)^2 \cdot \gamma \).

If instead \( p \leq p^* \) and \( \psi < g(p) \) (parameters are in \( P_1 \)), then we have \( \tau_D = 0 \) and from (14) and (15) we get:

\[
V^N_D = \frac{(1 - p) \cdot (1 - \delta)}{(2 - \delta) \cdot (1 - p) + p \cdot \delta} \cdot \frac{F + U}{\delta}.
\]

(32)

It then follows that elections are respected (i.e. \( V^N_D \geq V^I_D \)) if and only if

\[
\frac{(1 - p) \cdot (1 - \delta)}{(2 - \delta) \cdot (1 - p) + p \cdot \delta} \geq \frac{\delta}{\delta + \gamma \cdot (1 - \delta)}.
\]

(33)

which is equivalent to

\[
\frac{p}{1 - p} \leq \gamma \left( \frac{1 - \delta}{\delta} \right)^2 - \frac{1}{\delta}.
\]

(34)

But note that the left side is increasing in \( p \). But since \( p \leq p^* \), this condition is satisfied whenever \( p \leq p^* \) and \( \psi < g(p) \) if it is satisfied at \( p^* \). Since

\[
\frac{p^*}{1 - p^*} = \frac{1 - \gamma}{\gamma \cdot \delta^*},
\]

(35)

the condition holds if and only if \( \delta \leq (1 - \delta)^2 \cdot \gamma \).

Thus, as long as \( \delta \leq (1 - \delta)^2 \cdot \gamma^2 \) holds, if \( p \leq p^* \) and \( \psi < g(p) \) or \( p > p^* \) and \( \psi \in [f(p), \mu_2] \) then a unique equilibrium with the stated properties exists.
The exact same existence arguments apply in the knife-edge cases of $p \leq p^*$ and $\psi = g(p)$ or $p > p^*$ and $\psi = \mu_2$, except that another democratic equilibrium will exist. If $p \leq p^*$ and $\psi = g(p)$ the added equilibrium will have still have zero transfers in the democratic state, but will have $\tau_T = U$ and some $c_T > 0$ in the tyranny state. Similarly, if $p > p^*$ and $\psi = \mu_2$ the added equilibrium will have still have positive transfers in the democratic state, but will have $\tau_T = U$ and some $c_T > 0$ in the tyranny state. This establishes the ‘if’ statement and the generic uniqueness.

Proof of Proposition 3:

Proof. This all follows from the proof of proposition 2. (ADD)

Note that the condition is impossible to satisfy (implying a democratic equilibrium does not exist) if $\delta > (1 - \delta)^2 \cdot \gamma$.

References


Figure 1: Consolidated Democracies and the “Gray Zone” (Weak/Hybrid Democracies – Polity2 \([0,8]\))

Democracies: Consolidated vs. Gray Zone

- Share of Countries with Polity2 > 0
- Share of Consolidated Democracies (Polity2 > 8)
Figure 2: Weak Democracies fare as well as consolidated democracies in terms of Competitiveness of Executive Recruitment (Polity dimension XRCOMP –dashed line). Much less in terms of Competitiveness of Participation (PARCOMP – solid line).

Notes:

a. Sample starts in 1945 and excludes periods of interruption (Polity = -66), interregnum (Polity = -77), transition (Polity = -88).

b. Dashed line = Nonparametric representation by local polynomial of the relationship between a dummy taking value 1 if Polity dimension XRCOMP =2 (transitional arrangements between selection, ascription and/or designation, and competitive election) or XRCOMP =3 (election), and zero otherwise, and Polity 2 score.

c. Solid line = Nonparametric representation by local polynomial of the relationship between a dummy taking value 1 if Polity dimension PARCOMP =4 (transitional arrangements to fully politically competitive patterns of all voters) or PARCOMP =5 (competitive: alternative preferences for policy and leadership can be pursued in the political arena.), and zero otherwise, and Polity 2 score.
Figure 3: Weak Democracies fare as well as consolidated democracies in terms of Competitiveness of Executive Recruitment (Polity dimension XRCOMP – dashed line). Much less in terms of limitations on the Constraints on Chief Executive (XCONST – solid line).

Notes:

a. Sample starts in 1945 and excludes periods of interruption (Polity = -66), interregnum (Polity = -77), transition (Polity = -88).

b. Dashed line = Nonparametric representation by local polynomial of the relationship between a dummy taking value 1 if Polity dimension XRCOMP = 2 (transitional arrangements between selection, ascription and/or designation, and competitive election) or XRCOMP = 3 (election), and zero otherwise, and Polity 2 score.

c. Solid line = Nonparametric representation by local polynomial of the relationship between a dummy taking value 1 if Polity dimension XCONST = 5 (substantial limitations on executive authority) or higher, and zero otherwise, and Polity 2 score.
Figure 4: Competitiveness of executive recruitment emerges at Polity 2 levels around 0.

Notes:

a. Sample starts in 1945 and excludes periods of interruption (Polity = -66), interregnum (Polity = -77), transition (Polity = -88).

b. Solid line = Semiparametric representation by spline smoothing of the relationship between a dummy taking value 1 if Polity dimension XRCOMP = 2 (transitional arrangements between selection, ascription and/or designation, and competitive election) or XRCOMP = 3 (election), and zero otherwise, and Polity 2 score. Controls for country and year fixed effects. 95% confidence interval shaded around the spline smooth based on a clustered variance covariance matrix at the country level. Spline knots at Polity 2 values [-5, 0, 5].
Figure 5: Political inclusiveness emerges at Polity 2 levels around 8.

Notes:

a. Sample starts in 1945 and excludes periods of interruption (Polity = -66), interregnum (Polity = -77), transition (Polity = -88).

b. Solid line = Semiparametric representation by spline smoothing of the relationship between a dummy taking value 1 if Polity dimension PARCOMP = 4 (transitional arrangements to fully politically competitive patterns of all voters) or PARCOMP = 5 (competitive: alternative preferences for policy and leadership can be pursued in the political arena), and zero otherwise, and Polity 2 score. Controls for country and year fixed effects. 95 % confidence interval shaded around the spline smooth based on a clustered variance covariance matrix at the country level. Spline knots at Polity 2 values [-5, 0, 5].
Figure 6: Constraints on chief executive emerge at Polity 2 levels around 4.

Notes:

a. Sample starts in 1945 and excludes periods of interruption (Polity = -66), interregnum (Polity = -77), transition (Polity = -88).

b. Solid line = Semiparametric representation by spline smoothing of the relationship between a dummy taking value 1 if Polity dimension XCONST =5 (substantial limitations on executive authority) or higher, and zero otherwise, and Polity 2 score. Controls for country and year fixed effects. 95 % confidence interval shaded around the spline smooth based on a clustered variance covariance matrix at the country level. Spline knots at Polity 2 values [-5, 0 , 5].
Table 1: Weak Democracies Are Also Minimal

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<th>Sample: Polity2 $[8,10]$</th>
<th>Sample: Polity2 $[0,8]$</th>
<th>Sample: Polity2 $[-5,0]$</th>
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<tr>
<td></td>
<td>(2712 Total Obs.)</td>
<td>(1711 Total Obs.)</td>
<td>(992 Total Obs.)</td>
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<tr>
<td><strong>Electoral Competitiveness</strong></td>
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<td>Polity dimension XRCOMP =2 (transitional arrangements between selection, ascription and/or designation, and competitive election) or XRCOMP =3 (election)</td>
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<td><strong>Electoral Competitiveness</strong></td>
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