The Political Power of Civil Society

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Abstract

We propose a model to understand how civil society affects political reform. A member of civil society who is a political actor can defect to the opposition and directly erode the ruler's power. An ordinary citizen, however, can only indirectly depose the ruler through popular discontent, generating governance costs which, if sufficiently large, can trigger defection to the opposition by political actors. A key factor that determines the success of reform is the degree of organization of civil society into particular groups. Wide-reaching groups whose membership spans political actors and ordinary citizens are most effective; groups composed of solely political actors are somewhat effective; while groups composed solely of ordinary citizens are the least effective. We apply this framework to explain key features of the Glorious Revolution in England in 1688. We also discuss two other examples: the People Power Revolution in the Philippines, and the Arab Spring.

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JEL: D72, D74, H41, N13

1 Introduction

This paper investigates the role of civil society in generating political reform. Civil society refers to the sphere of voluntary associations and organizations that exist outside of the state or the market. Going back to Tocqueville (2000), and the work of modernization theorists, numerous scholars have argued that civil society can play an important role in political and economic development. More recently, North, Wallis, and Weingast (2009) emphasize the importance of non-state organizations in the transition from a closed to an open-access order and the influential work of Acemoglu and Robinson (2019, 2023) focuses on the role of civil society in placing constraints on the power of the state.

While the role of civil society in democracies is well known (Putnam, 1994; Ostrom, 1997; Fukuyama, 2011, 2014), less attention has been paid to the potential power of civil society organizations in disciplining rulers and causing political turnovers in other types of regimes. Building on selectorate theory, we develop a model in which civil society groupings influence the probability of political turnover and reform. A key feature of selectorate theory is that it can be applied across regime type providing a continuous measure of political contestation that can applied to democracies, non-democracies and various hybrid regimes (Bueno de Mesquita and Smith, 2010, 937). Our main application is historical: we show how our model sheds light on key aspects of political change in England during the late 17th century, culminating in the Glorious Revolution, traditionally seen as a seminal event on the road to constitutional government (North and Weingast, 1989; Acemoglu and Robinson, 2012; Murrell, 2017; Hodgson, 2017).

A fundamental problem of political economy is that a ruler's preferences are often not aligned with those of the ruled. There is no guarantee that a ruler will pursue policies that are in the interests of the people. What keeps a ruler in check is the threat of being deposed or replaced. Such threats to the rulers can come from a variety of sources. Rulers can be toppled when a pivotal set of individuals switch allegiance – they either vote for another political challenger, in the case of democracies, or defect to the challenger, in the case of autocracies (Bueno de Mesquita, Morrow, Siverson, and Smith, 2003). Rulers can also be threatened by military coups (Leon, 2014). And they can be overthrown by revolutionary action from below (Acemoglu and Robinson, 2006).

Where, then, does civil society fit in all this? While the literature on civil societies in democracies is extensive, the exact mechanism by which civil societies check executive power is still undertheorized.[1]

[1]An important exception is Grajzl and Murrell (2009) who develop a model to study how civil society shapes institutional building effort. In their model, civil society can either alleviate or amplify adverse selection problems that arise during periods of reform. They note that civil society is not always beneficial for institution building and its effects are context-dependent. Grajzl and Murrell (2009, 2) indeed note that "the general agreement on the practical importance of civil society has not led to sustained formal analysis within economics".

There are many reasons for this. For one, it is often unclear what is meant by civil society. If it is the body of private individuals and organized entities, e.g. firms, NGOs, then there exist several avenues of political contestation through which individuals and organizations can discipline the ruler. In our main historical application, we will focus on the role of political parties, but the argument encompasses a range of civil society organizations.[2] Second, while there is a large literature on social movements – see Goldstone (2001a,b) for an overview, this has not been incorporated in formal models of political economy.[3] In fact, the theoretical literature seems to make no distinction between protests, riots, revolutions, and any other kind of political unrest. Most models depict these as situations of strategic complementarity, in which an individual's decision to join the protest is reinforced as other individuals join as well. Such a framework is indeed well suited to explaining why protests can fail or only partially succeed.[4] It remains unclear, however, what the role of civil society is in such strategic interactions.

A third source of confusion is that while civil society organizations can organize opposition to the state, they do not always support democratization. Civil society organizations have even been implicated in the rise of the Nazi Party in the 1930s – see e.g. (Berman, 1997; Satyanath, Voigtländer, and Voth, 2017). Autocratic regimes also create their own organizations which can perform similar functions to those we associate with civil society. Examples include the Hitler Youth, the All-Russia People's Front, or the Basij in Iran.

The definition of civil society has always been contested. For example, whether political parties count as civil society organizations has been subject to debate (Diamond, 1994; Linz and Stepan, 1996). Scholars such as Bernhard (1993) trace civil society organizations back to the European Middle Ages. These organizations include universities and guilds. Guilds were often involved in local government, for example in the communes of medieval Italian city states or in the cities of the Holy Roman Empire (Wahl, 2018). Putnam (1994) links these organizations to social capital and support for democracy today. However, other scholars have argued that guilds were often highly exclusionary and are better viewed as vehicles for rent-seeking (Ogilvie, 2019).

Kuran (2023) links the absence of civil society institutions in the Middle East to the weakness of democratic politics in that part of the world. Specifically, he argues that the widespread prevalence of the Islamic *waqf* together with the individualism of the Islamic legal system precluded the emergence of independent and long-lived civil society organizations such as universities or political organizations. Kuru (2019) argues that the alliance between the state and religious authorities

[2]Acemoglu and Robinson (2023) use a somewhat broader term: society's capacity. This encompasses both civil society, narrowly defined, and mass popular politics and political participation.

[3]There is also a literature on civil action and protests (see Alagappa, 2004).

[4]For instance, Acemoglu et al. (2017) find that street protests during the Arab Spring in Egypt reduced the value of politically connected firms. They interpret this as evidence that protests can act as a *partial* check on rent-seeking by elites.

that emerged in the 11th century weakened civil society institutions in the Islamic Middle East.

Finally, it is unclear what role civil society plays in more autocratic regimes. In such cases, rulers are more able to hold on to power, as they only need to satisfy or keep loyal a small set of elites. Unless civil society comprises this set of elites, what kind of political pressure can it exert on the ruler?

In this paper, we offer a simple model that can begin to address such concerns. The main theoretical innovation we propose is to consider the composition of civil society – which groups are involved in political contestation, to be able to depict the exact form of contestation. We posit two types of civil society members: political actors who can replace the ruler by defecting to the opposition, e.g, voting for another candidate, and ordinary citizens who can only indirectly depose the leader by engaging in protest, riots, or revolutions that increase the costs of governance. We do not impose the relative number of political actors to ordinary citizens. Our framework is thus flexible enough to accommodate the whole spectrum of regime types. In an electoral democracy, for instance, many citizens would be political actors in that they can express their preferences through the ballot box. More autocratic regimes would have a smaller set of political actors – even if they held some kind of election, not all votes would 'count', and therefore, de facto, many citizens are ordinary. For the latter, the only way to pressure the incumbent ruler is to raise governance costs by engaging in mass protests, in the hope of inducing political actors to defect.

If any individual is either a political actor or an ordinary citizen, then any civil society group can be composed either entirely of political actors, entirely of ordinary citizens, or a combination of the two types. Thus, in the first instance, the group can directly affect political reform by threatening to defect to the opposition; in the second instance, it can only increase governance costs; in the third, it can do both.

Irrespective of the particular kind of political contestation a group can exert, it remains to specify the strength of such contestation, and therefore the probability that such efforts can succeed. For this we posit that the larger the group size, the stronger the contestation. This could easily be made consistent with the literature. For instance, this could mean that there is greater strategic complementarity among group members, and therefore one member is more likely to join a protest if another member of their group has joined, than if someone from outside its group has joined. Also, one voter could be more likely to vote for the same candidate that her party member is voting for – political parties, after all, are groups of individuals whose political preferences align.

From this simple framework, we are able to deduce that large, wide-reaching groups whose membership includes both political actors and ordinary citizens are most effective at inducing political reform. They can pressure the ruler directly, e.g. through the ballot box, and indirectly through protests. More importantly, any attempt to protest by the ordinary citizens in the group

is more likely to influence the political actors in that same group to defect to the opposition. In contrast, groups whose members are all ordinary citizens are least likely to succeed in pushing for reform. They can only raise governance costs, which a ruler with plenty of resources can overcome. Finally, groups composed solely of political actors are somewhat effective in that they can threaten to directly depose the ruler, but a rich ruler can also prevent defection through patronage.

We demonstrate the usefulness of these theoretical findings in explaining the success and failure of particular movements in bringing about political transitions. Our main example is historical – the Glorious Revolution of 1688/89. This seminal event was crucial to the strengthening of constitutional constraints on the monarchy. We show that the existence of organized political parties with wide-reaching popular support were crucial to a successful and peaceful transfer of power. We demonstrate how the model generates new insights into the role organized civil society groups had in generating political turnover.

We briefly extend our analysis to more recent case studies, in particular, the People Power Revolution in the Philippines that overthrew Ferdinand Marcos, and the Arab Spring protests which, although initially gained much momentum, were unable to effect lasting change. In the former example, one very large, wide-reaching group – the Catholic Church, spanned political actors and ordinary citizens. Thus, what began as protests eventually induced large-scale defection of political actors as well. In contrast, the Arab Spring protests did not generate defection by political actors.

Our paper contributes to the literature on civil society by specifying the mechanisms by which it can affect political reform, and by highlighting the size and composition of groups within civil society. Apart from Acemoglu and Robinson (2023), there have not been many attempts to model the contestation of civil society against the ruling state. We also make a contribution to the literature on political selection and contestation. In particular, we apply the formation of coalitions *á la* selectorate theory (Bueno de Mesquita et al. (2003)) in modeling the political contestation of political actors. We also capture the idea of strategic complementarity in existing models of protests and revolutions by letting group size increase the strength of contestation by ordinary citizens.[5]

2 A Model

A civil society is a set of individuals, $N = \{i\}$ (of size $|N|$), partitioned into groups. To simplify, suppose there are only two groups G_1 and G_2, of respective sizes $|G_1|$ and $|G_2|$, and a set U of

[5]For existing models characterized by strategic complementarity, see, e.g., the canonical global-game model of Morris and Shin (2003), and more recent papers such as Passarelli and Tabellini (2017) and Barbera and Jackson (2020). See also Cantoni, Yang, Yuchtman, and Zhang (2019) and Cantoni, Kao, Yang, and Yuchtman (2024) for a recent survey.

unaffiliated people, of size $|U|$, who belong to neither group, and that an individual can only be a member of one group. Then, $N = G_1 \cup G_2 \cup U$, where G_1, G_2, and U are disjoint sets. A civil society in which most individuals belong to a group, i.e. $|U|$ is small, is more organized than one in which $|U|$ is large.

Civil society can engage in two kinds of political contestation – by selecting rulers, and by engaging in protests. To simplify, and without loss of generality, assume that any member of civil society can only do either the former or the latter. An individual who can select a ruler is a political actor, while an individual who can engage in protests is an ordinary citizen.[6] Thus, N can also be partitioned into the set P of political actors, of size $|P|$, and the set O of ordinary citizens, of size $|O|$, i.e. $N = P \cup O$, where P and O are disjoint sets.

Thus, each individual $i \in N$ either belongs to G_1 or to G_2, or neither (unaffiliated), and is either a political actor or an ordinary citizen.

We model the selection of rulers (by political actors) via selectorate theory.[7] There is a coalition $C \subset P$, of size $|C|$, whose support the ruler needs to stay in power. That is, defection by any member of C to a political challenger deposes the ruler and installs the challenger as the new ruler.[8] We adopt this framework as it is flexible enough to depict ruler selection across all kinds of regimes. In a democracy, the set P of political actors typically corresponds to the voting population, and the size of the ruling coalition C is usually large. For instance, in a majoritarian, two-party system, the coalition consists of $\frac{1}{2}$ of the voting population because $\frac{1}{2}$ of voters can swing the election result. In contrast, autocratic regimes need the support of only a small number of individuals, and therefore the ruling coalition would constitute only a small fraction of political actors. Yet even among autocratic regimes, the size of the set P of political actors can also vary. For instance, the CCP from which the ruling coalition in China is drawn is larger than, say, the Saudi extended Royal Family or the immediate family of Kim Jong-Un.

Note, however, that we make P a proper subset of N since, even in a well functioning democracy, not all individuals in the population can vote.[9] These individuals, then, cannot directly select

[6]This simplifying assumption is innocuous - as we will show, the model allows a political actor to *indirectly* influence the strength of protests, and an ordinary citizen to *indirectly* affect a political actor's selection of ruler. One can thus think of a political actor as an individual whose *main* tool for political contestation is direct selection, and an ordinary citizen an individual whose main tool is protest.

[7]See, e.g., Bueno de Mesquita et al. (2003), and for particular applications, Desierto and Koyama (2020), Desierto (2023), and Desierto and Koyama (2024).

[8]One can think of C as a minimal winning coalition (*á la* Riker (1962)) in that *each* of its members, *and no more*, is necessary and sufficient to keep the ruler in power. However, this is not necessary in the framework. One can, for instance, let some political actors have greater power than others such that they are equivalent to more than one member. In other words, the cardinality $|C|$ could refer to the number of 'power units' in set C, in which some individuals have more than one power unit. Thus, even if $|C| = \frac{1}{2}|P|$, the actual physical body count could be less than that. This would not change the results, as what is important is that there is some cardinality $|C|$ necessary for the ruler needs to stay in power, whatever the physical composition of C is.

[9]An example are minors and resident immigrants who are not allowed to vote by law, and emigrants – citizens of the

the ruler. In non-democratic settings where voting is rigged or non-existent, P is even much smaller than N. Current models using selectorate theory ignore the remaining, ordinary, individuals $O = N \setminus P$ and only focus on how political actors can directly select rulers. We thus add another kind of political activity – that of engaging in protests, that ordinary citizens can do and which can *indirectly* affect ruler selection by raising the cost of governance.

We follow the formal literature on protests by assuming *strategic complementarity* in the decision to participate in a protest, i.e, that an individual is more likely to participate when other individuals also participate.[10] We capture this simply in our model by letting the cost to an ordinary citizen of engaging in protest decrease with the total number $\mu = \{0, 1, 2, ...|O|\}$ of ordinary citizens who participate in the protest. In addition, we also let the cost decrease with the number of individuals in one's group, to capture the idea that group members can provide support within their network. (Note, then, that political actors, through their group membership, can indirectly participate in protests by lowering the cost to ordinary citizens in their group.) An unaffiliated ordinary citizen, however, does not have any group support, and therefore faces higher cost of protest than one who is a member of a group.

To be precise, let $\mathbb{1}_1$ indicate membership in G_1 and $\mathbb{1}_2$ membership in G_2, and let $\mu_g \equiv \mathbb{1}_1|G_1| + \mathbb{1}_2|G_2|$ denote the size of the group to which the ordinary citizen, $i \in O$, belongs, which is thus zero for the unaffiliated. Then the cost to $i \in O$ of engaging in protest is given by $\chi(\mu, \mu_g)$, where χ is a concave function that is decreasing in the total number of protesters, μ, and the size of one's group, μ_g.[11]

The incumbent ruler thus faces pressure from political actors in her coalition who can defect to another potential ruler – a political challenger, and from ordinary citizens who can protest. The challenger attempts to induce defection by nominating her own coalition, which includes at least one member of the ruler's coalition, and offering to transfer to them some rents as well as providing public goods. The ruler then attempts to match the value of the challenger's offer of transfers and public goods in order to prevent defection.

Note that transfers are a private benefit that only accrue to coalition members, but public goods benefit the entire population. Ordinary citizens, then, can only get public goods from any ruler. To the extent that transfers reduce the resources that can be allotted to public good provision, ordinary citizens may then want to protest if they think that transfers are too large and public goods too little. Protests, then, increase the cost of making transfers, thereby tilting government

country who reside abroad and may find it very difficult to vote, even when it is allowed.

[10] See, e.g., Kuran (1989), Morris and Shin (2003), (Bueno de Mesquita and Smith, 2010), Edmond (2013), Barbera and Jackson (2020), and Passarelli and Tabellini (2017). For a survey of models of protest, see Gehlbach et al. (2016) and Cantoni, Yang, Yuchtman, and Zhang (2019).

[11] Formally, $\chi : (\mathbb{N}_{\geq 0} \times \mathbb{N}_{\geq 0}) \to \mathbb{R}_{\geq 0}$, with $\chi(0,0) < \infty$, $\lim \chi(\mu, \mu_g)_{\mu,\mu_g \to \infty} = 0$, $\chi'_\mu, \chi'_{\mu_g} < 0$, $\chi''_\mu, \chi''_{\mu_g} < 0$, $\chi''_{\mu\mu_g}, \chi''_{\mu_g\mu} < 0$, and $\chi''_\mu \chi''_{\mu_g} > \chi''_{\mu\mu_g} \chi''_{\mu_g\mu}$.

spending toward public good provision. (Ordinary citizens can thus indirectly affect ruler selection by letting coalition members feel the cost of protest, thereby inducing them to defect.)

To be precise, let public goods g be the numeraire (i.e. the cost of public good provision is one), while the cost to any ruler of transferring total rents T to her coalition members is $\epsilon > 0$ if there is no protest. If there is protest, the cost increases to $\kappa(\mu) + \epsilon$, where κ is a concave function that is increasing in the number μ of protesters.[12] To fund total spending on public goods and transfers, the ruler has for her disposal, tax revenues τyN, where $\tau \in (0, 1)$ is the tax rate on income which, for simplicity, we fix at y for each $i \in N$, and other revenues R, such as rents from oil and natural resources. The budget constraint of any ruler is thus

$$\tau yN + R \geq g + (\kappa(\mu) + \epsilon)T. \tag{1}$$

Finally, let each individual $i \in N$ derive (concave) utility $U(x_i, g)$ from public goods g and consumption of other ordinary goods x_i. While everyone gets the same g, x_i varies across individuals for two reasons. One is that some individuals, i.e. coalition members, earn transfers on top of income y. The other is that some ordinary citizens may engage in protest, thereby incurring cost $\chi(\mu, \mu_g)$. Thus, an individual's total resources consist of net income $(1 - \tau)y$, public goods g, and any transfer R_i, which she can use to fund x_i and any protest activity. The budget constraint of any $i \in N$ is thus given by

$$(1 - \tau)y + g + \mathbb{1}_C R_i = x_i + \mathbb{1}_\mu \chi(\mu, \mu_g), \tag{2}$$

where $\mathbb{1}_C$ indicates membership in the ruler's coalition and $\mathbb{1}_\mu$ indicates participation in protest activity.[13]

2.1 Sequence of Events

Consider, thus, a game played by an incumbent ruler I, a political challenger J, the set P of political actors, and set O of ordinary citizens, in which the following sequence of events occur at each time period $t = 1, 2, ..., \infty$.[14]

1. Each $i \in N$ earns income y, taxed at rate τ. The incumbent ruler I forms a coalition $C \subset P$ from the set of political actors. Each coalition member either belongs to G_1 or to G_2, or is otherwise unaffiliated. Assume that any political actor in G_1 has the same probability p_1 of being included in C as the other political actors in G_1. Similarly, any political actor in G_2

[12] Formally, $\kappa : \mathbb{N}_{\geq 0} \to \mathbb{R}_{\geq 0}$, with $\kappa(0) = 0$, $\lim \kappa(\mu)_{\mu \to \infty} < \infty$, and $\kappa'(\mu) > 0$, $\kappa''(\mu) < 0$ for $\mu > 0$

[13] Notice that public goods is both a resource, which can be used for consumption of x_i and (protest) spending, as well as itself a kind of consumption good from which utility is derived. This is possible since public goods are non-rival and non-excludable.

[14] The timing of protest is actually immaterial – the results are the same even if step 2 occurred after, or simultaneously with, step 3.

has the same probability p_2 of being included in C as the other political actors in G_2. Then the number of coalition members that belong in G_1 is $n_1 = p_1|P \cap G_1|$, while the number that belong in G_2 is $n_2 = p_2|P \cap G_2|$. The number of unaffiliated coalition members is thus $|C| - n_1 - n_2$, with $|C| < (n_1 + n_2)$.[15] I proposes to transfer to each coalition member some amount R_i^I, and to provide public goods g^I which benefit all $i \in N$.

At the same time, a political challenger J nominates a different coalition, whose members from G_1 also number n_1, members from G_2 number n_2, and $|C| - n_1 - n_2$ are unaffiliated, but at least one member is currently a member of I's coalition. J offers to transfer to each nominated member some amount R_i^J, and to provide public goods g^J which benefit all $i \in N$.

2. Each ordinary citizen $i \in O$ decides whether or not to engage in protest.

3. Each political actor $i \in P$ selects either I or J to be the ruler. I retains power if all members of her coalition select her; J replaces I if everyone she nominated selects her, which thus implies defection of that member/s who was/were part of I's coalition.

4. Tax revenues and other sources of income accrue to whoever is in power, $r = \{I, J\}$, who then transfers the amounts promised to coalition members at total cost $(\kappa(\mu) + \epsilon)T$, where $T = \sum_{i \in C} R_i^r$, and provides public goods g^r(at price one). Consumption occurs.

2.2 Equilibrium

We are ultimately interested in showing how civil society exerts pressure on the ruler to behave according to what is socially optimal. Thus, we focus on how the incumbent attempts to match the challenger's offer in order to keep her coalition loyal and prevent any defection. That is, we construct an equilibrium in which the incumbent ruler remains in power at each time period.[16]

To see what challenger J offers in equilibrium, note that the best that *any* challenger can do is to nominate a coalition whose members each get transfers and public goods that each of them would have chosen for herself. Thus, the optimal offer of J is one that simultaneously maximizes the utility of each nominated member, given the ruler's budget constraint.

We will show that in equilibrium, J offers different transfer amounts depending on the size of one's group in the coalition. Denote, then, as R_1^J the transfer to a member from G_1,

[15] This reflects the organizational power of groups, which gets their members into the coalition. That is, $(n_1 + n_2)$ is large when $|G_1| + |G_2|$ and $(p_1 + p_2)$ are large. Most models using the selectorate framework do not distinguish political actors according to group membership, and therefore assume that each political actor has the same probability of being included in the coalition. Thus, if there are $|P|$ political actors, and there are $|C|$ coalition members, the probability that a political actor is in C is simply $\frac{|C|}{|P|}$. An exception is Desierto and Koyama (2020), in which the set of political actors are divided into K groups.

[16] Such equilibrium permits any size of protest. For an analysis of an ordinary citizen's optimal decision to protest and the size of protest in equilibrium, see the Appendix.

R_2^J to a member from G_2, and R_u^J to an unaffiliated member. Since coalition members do not (directly) engage in protests, one can thus re-write (2) for any member from G_1 as $x_1^J = (1-\tau)y + g^J + R_1^J$; for any member from G_2 as $x_2^J = (1-\tau)y + g^J + R_2^J$; and for any unaffiliated member as $x_u^J = (1-\tau)y + g^J + R_u^J$. Thus, to satisfy all nominated members, J simultaneously solves

$$\begin{aligned} \max U(x_1^J, g^J)_{g^J, R_1^J} &= U\Big(((1-\tau)y + g^J + R_1^J), g^J\Big) \\ s.t.\ \tau yN + R &= g^J + (\kappa(\mu)+\epsilon)(n_1 R_1^J + n_2 R_2^J + (|C| - n_1 - n_2)R_u^J) \end{aligned}$$

$$\begin{aligned} \max U(x_2^J, g^J)_{g^J, R_2^J} &= U\Big(((1-\tau)y + g^J + R_2^J), g^J\Big) \\ s.t.\ \tau yN + R &= g^J + (\kappa(\mu)+\epsilon)(n_1 R_1^J + n_2 R_2^J + (|C| - n_1 - n_2)R_u^J) \end{aligned}$$

$$\begin{aligned} \max U(x_u^J, g^J)_{g^J, R_u^J} &= U\Big(((1-\tau)y + g^J + R_u^J), g^J\Big) \\ s.t.\ \tau yN + R &= g^J + (\kappa(\mu)+\epsilon)(n_1 R_1^J + n_2 R_2^J + (|C| - n_1 - n_2)R_u^J) \end{aligned}$$

One can simplify the problem by re-writing the ruler's budget constraint as

$$g^J = \tau yN + R - (\kappa(\mu)+\epsilon)(n_1 R_1^J + n_2 R_2^J + (|C| - n_1 - n_2)R_u^J), \tag{3}$$

and plugging these into each maximand.

The FOC for optimal R_1^J can thus be written as

$$(\kappa(\mu)+\epsilon)n_1 = \frac{\frac{\partial U}{\partial x_1^J}}{\frac{\partial U}{\partial x_1^J} + \frac{\partial U}{\partial g^J}}. \tag{4}$$

Analogously, the FOC for optimal R_2^J is

$$(\kappa(\mu)+\epsilon)n_2 = \frac{\frac{\partial U}{\partial x_2^J}}{\frac{\partial U}{\partial x_2^J} + \frac{\partial U}{\partial g^J}}, \tag{5}$$

and the FOC for optimal R_u^J is

$$(\kappa(\mu)+\epsilon)(|C| - n_1 - n_2) = \frac{\frac{\partial U}{\partial x_u^J}}{\frac{\partial U}{\partial x_u^J} + \frac{\partial U}{\partial g^J}}. \tag{6}$$

This yields the following result. (All proofs are in the Appendix.)

Proposition 1 *In equilibrium, the challenger J offers to transfer amounts to coalition members according to the size of their respective groups, with the largest group getting the largest transfers. Specifically, if $n_1 > n_2 > |C| - n_1 - n_2$, then $R_1^J > R_2^J > R_u^J$.*

One can then plug the optimal transfer amounts R_1^J, R_2^J, R_u^J into (3) to get the level of public goods g^J that J offers to provide in equilibrium.

In effect, the one-period utility offered by J to a nominated member from G_1 is $U_1 = (x_1^J, g^J)$; to a member from G_2 $U_2 = (x_2^J, g^J)$, and to an unaffiliated member $U_u = (x_u^J, g^J)$. One's position in the coalition, however, is not guaranteed. In the next period, if J is the new incumbent, she will form a new coalition, and therefore anyone who was nominated by J to be part of her coalition can be subsequently dropped. Recall that the probability that a member from G_1 is in the (new) incumbent's coalition is p_1, the probability for someone from G_2 is p_2, and, thus, for an unaffiliated member $p_u = 1 - p_1 - p_2$.

Thus, for any nominated member from G_1, the present value V_1^J of the infinite stream of payoffs from choosing J as ruler is

$$V_1^J = U(x_1^J, g^J) + \delta[p_1 V_1^I + (1 - p_1)V_1^O], \tag{7}$$

where V_1^I is the value to a member from G_1 of being inside the coalition, and V_1^O the value outside of it, and $\delta \in (0, 1)$ the discount rate.

Analogously, for a member from G_2 and an unaffiliated member, respectively:

$$V_2^J = U(x_2^J, g^J) + \delta[p_2 V_2^I + (1 - p_2)V_2^O], \tag{8}$$

$$V_u^J = U(x_u^J, g^J) + \delta[p_u V_1^I + (1 - p_u)V_u^O]. \tag{9}$$

Now g^J is obtained by everyone, i.e. those inside and outside the incumbent ruler's coalition, while transfers are only obtained while inside of it. Thus, one can write $V_1^I = \frac{U(x_1^I, g^I)}{1-\delta}$, $V_2^I = \frac{U(x_2^I, g^I)}{1-\delta}$, $V_u^I = \frac{U(x_u^I, g^I)}{1-\delta}$, where x_1^I, x_2^I, x_u^I reflect the amount of transfers that the incumbent ruler will give, and g^I the public goods she will provide. Those outside the ruler's coalition do not get transfers but only public goods, and so $V_1^O = \frac{U((x_1^I - R_1^I), g^I)}{1-\delta}$, $V_2^O = \frac{U((x_2^I - R_2^I), g^I)}{1-\delta}$, $V_u^O = \frac{U((x_u^I - R_u^I), g^I)}{1-\delta}$.

To remain in power, the incumbent must keep all members of her coalition loyal and prevent defection. Thus, she must match the value of J's offer, which allows us to write $V_1^I = V_1^J$, $V_2^I = V_2^J$, $V_u^I = V_u^J$, or:

$$V_1^I = \frac{1}{1 - \delta p_1}[U(x_1^J, g^J) + \delta(1 - p_1)V_1^O] \tag{10}$$

$$V_2^I = \frac{1}{1 - \delta p_2}[U(x_2^J, g^J) + \delta(1 - p_2)V_2^O] \tag{11}$$

$$V_u^I = \frac{1}{1-\delta p_u}[U(x_u^J, g^J) + \delta(1-p_u)V_u^O]. \tag{12}$$

The ruler cannot use public good provision to prevent defection as no can be excluded from the benefits of public goods. Thus, in equilibrium, $g^I = g^J \equiv \bar{g}$. We can thus re-write $V_1^I = \frac{U(x_1^I,\bar{g})}{1-\delta}$, $V_2^I = \frac{U(x_2^I,\bar{g})}{1-\delta}$, $V_u^I = \frac{U(x_u^I,\bar{g})}{1-\delta}$, and $V_1^O = \frac{U((x_1^I-R_1^I),\bar{g})}{1-\delta}$, $V_2^O = \frac{U((x_2^I-R_2^I),\bar{g})}{1-\delta}$, $V_u^O = \frac{U((x_u^I-R_u^I),\bar{g})}{1-\delta}$. Substituting these into (10), (11) and (12), and re-arranging, give the following equations which are implicit in R_1^I, R_2^I, and R_u^I:

$$U(x_1^I, \bar{g}) = \frac{1-\delta}{1-\delta p_1}[U(x_1^J, \bar{g}) + \delta(1-p_1)U((x_1^I - R_1^I), \bar{g})] \tag{13}$$

$$U(x_2^I, \bar{g}) = \frac{1-\delta}{1-\delta p_2}[U(x_2^J, \bar{g}) + \delta(1-p_2)U((x_2^I - R_2^I), \bar{g})] \tag{14}$$

$$U(x_u^I, \bar{g}) = \frac{1-\delta}{1-\delta p_u}[U(x_u^J, \bar{g}) + \delta(1-p_u)U((x_u^I - R_u^I), \bar{g})] \tag{15}$$

In other words, the above equations give the equilibrium amount of transfers R_1^I, R_2^I, R_u^I offered by the incumbent.

It can be shown that the incumbent always offers less transfers than the challenger. That is:

Proposition 2 *In equilibrium, the incumbent provides the same level of public goods that any challenger would:* $g^I = g^J \equiv \bar{g}$*, and gives to each of her coalition member less rents that any challenger would, i.e.* $R_1^I < R_1^J$, $R_2^I < R_2^J$, $R_u^I < R_u^J$.

Since the incumbent provides the same public goods but less transfers than the challenger, Proposition 2 implies that the incumbent gets to keep rents (i.e. unspent revenues) in equilibrium:

Proposition 3 *The incumbent ruler earns positive rents:* $Z \equiv \tau yN + R - \bar{g} - (\kappa(\mu) + \epsilon)(n_1 R_1^I + n_2 R_2^I + (|C| - n_1 - n_2)R_u^I) > 0$.

That is, after spending $S \equiv \bar{g} + (\kappa(\mu) + \epsilon)(n_1 R_1^I + n_2 R_2^I + (|C| - n_1 - n_2)R_u^I)$ on public goods and transfers, the incumbent gets to keep positive rents $Z = (\tau YN + R) - S$ and still remain in power. The incumbent is able to do so because no coalition member's position in the coalition is guaranteed. Even if a member defected to a challenger, the latter can subsequently drop that member from her own coalition once she becomes the incumbent. The lower the probability of being in the coalition, the more precarious one's position is in the coalition and, therefore, the less transfers the incumbent has to give to keep her loyal. This is why the probability of being in the coalition is called the *loyalty norm* in selectorate theory.

One can thus interpret S as the minimum spending the incumbent has to undertake – below this, she loses power. On one hand, the larger the ruler's revenues, the more she is able to afford S and therefore remain in power. On the other hand, it becomes more expensive for the ruler to stay in power the larger $(n_1 R_1^I + n_2 R_2^I + (|C| - n_1 + n_2) R_u^I)$ is and, therefore, the larger the size of the coalition.

Proposition 4 *The larger the revenues the ruler has at her disposal, and the smaller the size of the ruler's coalition, the easier it is for the ruler to remain in power.*

This explains why democracies tend to have greater disciplining power over rulers, while autocracies, especially rich ones, tend to enable the ruler to extract large rents and still remain in power.

In addition, since n_1 and n_2 increase with the size of G_1 and G_2, then a very organized society, i.e. in which most individuals are in groups, and therefore $|U|$ is small, is able to increase S more and therefore exert more disciplining power over rulers. S is also larger when μ is – that is, when there are large protests. Thus, while political actors play a direct role in selecting the incumbent, ordinary citizens have an indirect role – by protesting, they make it harder for the ruler to buy loyalty from her coalition. Moreover, since an individual's cost of protesting decreases with the size of the group to which she belongs, it can be shown that the number of protesters μ in equilibrium is large when $|G_1| + |G_2|$ is, or equivalently, when $|U|$ is small.

Thus, when $|U|$ is small, both types of political contestation – direct selection of rulers by political actors, and protests by ordinary citizens, are more potent. S is large, which makes it more difficult for a ruler to hold on to power. In this case, the political power of civil society is high.

Proposition 5 *A more organized civil society, i.e. in which most individuals - political actors and ordinary citizens alike, belong to groups, is more likely to be successful in replacing a ruler.*

Note, however, that the political power of ordinary citizens actually rests on political actors'. Protests cannot induce a change of ruler, unless they can induce coalition members to defect. In contrast, defection can occur even if there are no protests. To see this, note that if $\mu = 0$, transfers still have an effect (through ϵ) on the minimum amount the incumbent has to spend to prevent defection, whereas $\mu > 0$ has no effect if there is no political actor who can potentially defect, i.e. if $|C| = 0$.

That is, $\frac{\partial S}{\partial n_1} = (\kappa(\mu) + \epsilon)\left(R_1^I \cdot \frac{\partial R_1^I}{\partial n_1}\right)$, $\frac{\partial S}{\partial n_2} = (\kappa(\mu) + \epsilon)\left(R_2^I \cdot \frac{\partial R_2^I}{\partial n_2}\right)$, $\frac{\partial S}{\partial (|C| - n_1 - n_2)} = (\kappa(\mu) + \epsilon)\left(R_u^I \cdot \frac{\partial R_u^I}{\partial (|C| - n_1 - n_2)}\right)$, all of which remain greater than zero even when $\mu = 0$.

In contrast, $\frac{\partial S}{\partial \mu} = (n_1 R_1^I + n_2 R_2^I + (|C| - n_1 - n_2) R_u^I) \cdot \frac{\partial \kappa}{\partial \mu}$, which is zero if there is no one who can potentially defect, i.e. if $|C| = 0$ and, in which case $p_1 = p_2 = 0 \rightarrow n_1 = n_2 = 0$.

Moreover, groups are not as effective when they only consist of ordinary citizens. In this case, group size still tends to amplify protests, but if there are no group members in the coalition, then defection is less likely.

That is, suppose that all $i \in O$ is in G_1 or G_2, but no member of either group can ever be in the coalition, i.e. $n_1 = n_2 = 0$. Then no group member can exert direct pressure on the ruler since $\frac{\partial S}{\partial n_1} = \frac{\partial S}{\partial n_2} = 0$.

Groups can still exert indirect pressure through protests, but the effect will be smaller, than when G_1 and G_2 also include some members of the coalition.

That is, the effect of μ on S when (a): all ordinary citizens are in groups, but no coalition member belongs to either is $\frac{\partial S}{\partial \mu}^a = (|C|R_u^I)\frac{\partial \kappa}{\partial \mu}^a$, which is smaller than the effect when (b) all ordinary citizens are in groups, as well as some coalition members, which is $\frac{\partial S}{\partial \mu}^b = (n_1 R_1^I + n_2 R_2^I + (|C| - n_1 - n_2)R_u^I) \cdot \frac{\partial \kappa}{\partial \mu}^b$.[17]

The foregoing analysis implies that to be effective, any protest by ordinary citizens needs to induce defection by political actors (in the ruler's coalition), and that even if protests are highly organized – all or most of $i \in O$ are in $G_1 \cup G_2$, the likelihood of any defection is small if political actors do not also belong to these groups. In this sense:

Proposition 6 *Protests by ordinary citizens, even when organized by large groups, are unlikely to replace a ruler unless political actors are also included in those groups.*

3 Application to the Glorious Revolution

We apply our framework to several historical case studies. Our main example is from late 17th century England. We first provide a detailed historical narrative before relating the main predictions of our framework to the details of the historical case study. To help us think about generalizability and external validity we go on to consider several other more recent historical examples of civil society playing a critical role in regime change. These examples are kept concise and could be extended in future work.

The Glorious Revolution in England has been the subject of vast literature both in history and among social scientists. But much of that literature is concerned with the *consequences* of the Glorious Revolution on either political institutions, on property rights protection, on financial markets, or indeed on the Industrial Revolution (e.g. North and Weingast, 1989; Stasavage, 2002; Cox, 2011, 2015; Pincus and Robinson, 2014; Hodgson, 2017, 2023; Murrell, 2017). In contrast, here we are concerned with the events that led up to the Glorious Revolution and which help to

[17] $\frac{\partial S}{\partial \mu}^a < \frac{\partial S}{\partial \mu}^b$, not only because $|U|$ in (a) is larger than in (b) and, hence, $\frac{\partial \kappa}{\partial \mu}^a < \frac{\partial \kappa}{\partial \mu}^b$, but because $|C| < n_1 + n_2$ and, therefore (by Proposition 1), $R_u^I < R_1^I$, or $R_u^I < R_2^I$, or both.

explain its success. Our focus is on the role played by civil society organizations; we do not intend to provide a complete explanation of the Glorious Revolution and future work will explore other dimensions of this event in more detail.

The Glorious Revolution is among the earliest "revolutions" for which we can definitely attribute an important role to an increased organization of political actors into well-defined groups. Specifically, these were the first political "parties", whose origins date from approximately a decade earlier (Jones, 1961). It is important to note that these parties were, of course, not fully modern political parties; nonetheless, they did extend deep into society and possessed the ability to mobilize elites and non-elites in a way that crucially distinguished them from solely elite groupings.[18] As Jones (1961, 2) notes, these parties "possessed, and required, organization in both Parliament and country, effective discipline, and a wide popular appeal, stimulated and maintained by a large-scale propaganda machine". In terms of the mapping between our framework and our historical narrative, these proto-parties can be thought of as corresponding to groups whose membership included political actors and ordinary citizens.

To understand this development one has to go back several decades to the conflicts between Crown and Parliament that caused the civil wars that spanned the British isles in the 1640s. These conflicts were at once about the relative power of the King and Parliament and a religious struggle. While previous conflicts such as the Wars of the Roses (1455-1487) were conducted by aristocratic elites, the conflicts of the 17th century saw much broader popular participation.[19] Moreover, previous conflicts had lacked an ideological or religious dimension. But the Reformation had led to deep religious polarization (Desierto, Koyama, and Shera, 2024). By the mid-17th century, the important groupings were as follows: Anglicans who supported the Church of England and who also tended to support the Crown; Presbyterians who wanted a more Calvinist Church along Scottish lines and tended to be in moderate opposition to the Crown; and Independents who were in favor of greater religious toleration and included a wide array of dissenting Protestants. There were other groups: Catholics or Catholic sympathizers and those who wanted more radical political and religious reforms. By the late 1670s, however the radicals who flourished during the Commonwealth period had been subdued and the Catholic nobility were excluded from sitting in the House of Lords, and therefore no longer belonged to the set of political actors.[20]

There had been important economic and social change as well. The sale of monastic lands had

[18] See Harris (2014) for further discussion.

[19] There were rebellions in the 16th century that had popular and elite involvement, notably The Pilgrimage of Grace and Kett's rebellion. We discuss this briefly below.

[20] According to Miller (1972), around 7% of lords and gentry were Catholic but they were politically marginalized. From 1678 onwards, they could not sit in the House of Lords or take government offices due to the Test Acts. Overall: '[v]ery few Catholics took an active part in politics during this period' (Miller, 1972, 14). The queens of both Charles I and Charles II were Catholics but we would characterize their influence as *indirect*.

created a new class — the gentry — of landowners whose status was below that of the aristocratic but who collectively wielded considerable political and economic influence (Tawney, 1926; Heldring, Robinson, and Vollmer, 2021; Desierto, Koyama, and Shera, 2024). Many of the Members of Parliament (MPs) were drawn from the ranks of the gentry. Moreover, as Adamson (2010) documents leading aristocrats and gentry were enmeshed in close personal relationships with one another and that both operated through family networks, coordinating their opposition to Charles I (r. 1625-1649). There were also important intellectual developments in this period and government attempts to control print media declined during the 1640s and was not full restored thereafter (see Murrell and Grajzl, 2025).

The Republican and Cromwellian regime that followed struggled to build a ruling coalition beyond that created by Cromwell's personal influence and prestige. His death in 1658 heralded the collapse of the regime and the return to power of the Stuarts with the restoration of Charles II (r. 1660-1685). While the Parliament that had negotiated Charles's restoration was dominated by Presbyterians, the Parliament elected in 1661 was Anglican and royalist in character. It supported the rights of the Crown and it was steadfast in its commitment to a policy of religious coercion. Laws against those who did not conform to the Church of England were enforced with renewed vigor (see Johnson and Koyama, 2019, Chapter 9). But the Restoration did not resolve the fundamental constitutional and religious disagreements that had caused the Civil War.

The Exclusion Crisis and the Formation of Parties

Charles II had many children but none were legitimate. His heir was his younger brother James, Duke of York. The political crisis of the era began once James's conversion to Roman Catholicism became public knowledge in the early 1670s.

Political divisions at this point were based around loose groups, denoting whether elites were aligned with or against current crown policies. These were referred to as "Court" and "Country". But these were not yet organizations or "groups" in the language of our model, as they could not mobilize, and therefore could not get their members in the ruling coalition, nor lower the cost of engaging in popular dissent.[21]

But more distinctive and organized groupings did emerge in the late 1670s over the issue of excluding James from the throne. The issue of "Exclusion" unified opponents of the regime into

[21] "Contemporaries often traced the emergence of party tensions back to the Restoration. For example, in 1675 the leading Country spokesman and future Whig, the Earl of Shaftesbury, in his famous attack on the policies being pursued by the government under the Earl of Danby's administration, complained of 'a Project of several Years standing . . . to make a distinct Party from the rest of the Nation of the High Episcopal Man, and the Old Cavalier', which he dated back to at least 1661. The Tory Francis North, writing during the Exclusion Crisis, thought that England's troubles could be blamed on republicans, Presbyterians and sectarians, who had been 'Restless under the Monarchy' and 'under Episcopacy, from the first Resetlement of it upon their legall foundation"" (Harris, 2014, 7). In the towns, partisan and conflictual politics predated the emergence of organized parties (see Halliday, 98).

a party that acquired the name Whigs. Anthony Ashley Cooper, the Earl of Shaftesbury was a political entrepreneur and he built a country-wide organization around Exclusion (see Henning, 1983). The Whigs were united by their opposition to James as heir (Jones, 1961). But they did not specify who the heir should be. In response to the formation of an organized Whig party, their opponents who were labelled Tories also formed what is recognizably a party organization. It is important to recognize that these labels reflected religious as well as political differences. It was no accident that the term whigs originally referred to Scottish Presbyterian rebels while the label Tories referred to Irish Catholic rebels. As Goldie notes in the 1670s and 1680s, the Whigs were seen as the Presbyterian party and "to be a Whig was to be anticlerical" (Goldie, 2023, 99).[22]

Crucially, these groups extended beyond Parliament. As Harris (2014, 14) notes, "it was not just the political elite at the centre who became polarised along Whig-Tory lines; party rivalry can also be detected at the local level, in the shires and corporations, amongst the electorate, and even amongst the 'crowd', at the level of street politics".[23]

The Whigs were quite different from the County "party" that had preceded it. They extended the Houses of Parliament and they were organized with links among London merchants, the members of borough governments, and individual activists and pamphleteers. In addition to the role of parties, other loose forms of civic association were important in building opposition to James. Leadership in the House of Lords was provided by the Earl of Shaftesbury, whom contemporaries recognized as a novel type of political entrepreneur.[24]

We can now explicitly connect the actors in our model to the historical setting. Recall, we distinguish between *Political Actors (P)*; *Ordinary Citizens (O)* and between two groups: G_1 and G_2. Members of P clearly correspond to MPs, peers, military officers, judges, bishops and lord lieutenants. In contrast, members of O include soldiers, pamphleteers, London merchants, coffee house patrons, petition signers, members of the lower clergy. Groups G_1 and G_2 correspond to Whigs and Tories whose members, in this case, were drawn both from the set of political actors and the set of ordinary citizens.

The formation of political parties during the Exclusion Crisis produced cross-cutting groups that contained both important political actors such as Shaftesbury and much less well-known ordinary citizens. For example, radical Whigs associated around the Green Ribbon Club which met at King's Head Tavern and whose members included both peers such as the Duke of Monmouth as

[22]These were not necessarily political parties in the modern sense. They did not have paid membership or formal organization. Nonetheless, they were more than mere political factions. They involved grassroots activism and had wide support beyond and outside of Parliament (Harris, 2014, 5). Indeed "[s]uch joining together' inevitably required some degree of organisation, to co-ordinate tactics and ensure unity of action" (Harris, 2014, 5).

[23]The deeper ideological differences between Whigs and Tories are discussed in Western (1972). The philosophical issues at play are the focus of Ashcraft (1986).

[24]See Haley (1968).

well as men like John Ayloffe (c. 1645-1685), a lawyer, political activist, and propagandist. Ayloffe played an important role in organizing the 1680 "Great Petition" demanding recall of Parliament, and signed by 16,000 people. London merchants were also active in opposition to James becoming king (Knights, 1993). Other important members of O included John Locke, who was prominent in organizing Whig activity, Robert Ferguson, a radical Presbyterian minister, military men like Richard Rumbold, and many from London's merchant community.

The Critical Role of Resources: French Subsidies and Coalition Management

The Exclusion Crisis revealed not only deep political divisions but also the critical importance of resources in maintaining ruling coalitions—an important prediction of our model (Proposition 4). Throughout 1680-81, the Whigs appeared ascendant: they dominated three successive parliaments, controlled London's governance, and mobilized mass protests, marches, and petitions. Yet Charles II successfully resisted exclusion and ultimately triumphed.

In March 1681, Charles II secretly negotiated a subsidy treaty with Louis XIV worth £385,000 over three years, with immediate payment of £40,000.[25] This external injection of resources altered the political situation. As our model predicts, with sufficient rents, Charles could maintain his coalition without making greater concessions to the opposition. In fact, he dissolved the Oxford Parliament after just one week, knowing French gold made parliamentary supply unnecessary.

Equally important, the Tory party coalesced as a counterweight to Whig organization, creating a competing organizational structure that also spanned political actors and ordinary citizens. The Tories rallied around principles of hereditary succession, passive obedience, and Anglican supremacy.[26] Tory political actors included Henry and Laurence Hyde, (the Earls of Clarendon and Rochester respectively), the Earl of Halifax, and most bishops and many country gentry; ordinary citizens included Anglican clergy, and those who feared civil war more than Catholicism. The Tories also had support among London merchants such as Dudley and Roger North (Dillon, 2006, 25-26).

The financial resources Charles obtained relaxed his budget constraint allowing him to (i)maintain his guards regiments without parliamentary supply (approximately £200,000 annually); (ii) reward loyal Tory magistrates and lord lieutenants through patronage; (iii) prosecute Whig leaders without fear of financial retaliation; and wait for the political tide to turn, which it did, as the anti-Catholic fanaticism that had accompanied the Popish Plot began to ebb after 1681(see

[25]Between 1681 and 1685, French subsidies, amounted to 4 million livre or perhaps £325,000 (Harris, 2005, 253). The remainder was paid on the ascension of James II. Improved economic conditions also meant that the king obtained more than anticipated from the customs revenues.

[26]On Tory ideology, see Harris (1993, Chapter 2). For Tory organization, Knights (2005) documents their clubs, ceremonies, and networks.

Kenyon, 1972, Chapter 8).[27] Equally important was the steadfast support of the Tories who organized petitions and popular marches in support of the king. Harris (2005, 258) notes that the "Tory propaganda counter-offensive was highly sophisticated, designed to target a socially diverse audience, including not just the elite and the middling sort but even the lower orders". Formal processions burned Oliver Cromwell in effigy and organized 211 addresses of loyalty across the country (Harris, 2005, 268). These were typically organized "from above" by political actors but they obviously involved many thousands of ordinary citizens.

The predictions of our model also explain the failure of the radical Whig response to political defeat: The Rye House Plot. The Rye House Plot was an alleged conspiracy to assassinate Charles II and his brother James as they returned from Newmarket in March 1683. The plot involved many figures who had been prominent in the Exclusion Crisis and those who would be important in the Glorious Revolution, the so-called "radical whigs" (Zook, 1999)

From our model's perspective, the Rye House Plot failed for several reasons: (i) by 1683 the radical Whigs were a much smaller and less well-connected group and they possessed insufficient cross-cutting networks; (ii) by its very nature the conspiracy excluded more moderate Whigs and Tories; (iii) the Rye House conspirators lacked broad elite support: the plot did not include enough political actors with formal institutional positions; (iv) and they had only a small number of military officers within their conspiracy. Charles II's resources in the 1680s, moreover, were certainly large enough to keep together a broad Tory based coalition, one that comprised the majority of political actors but also had considerable popular support.

The Tory Reaction of 1681-85 also saw the systematic persecution of Whigs—Shaftesbury fled to Holland, Russell and Sidney were executed, others like Monmouth went into exile. Corporate charters were revoked through quo warranto proceedings, replacing Whig-dominated corporations with Tory loyalists.[28] By 1685, the Whigs as an organized force appeared finished, while Tory organization dominated both local and national government. Nonetheless, the Whig's core program and ideology remained potent.

The Ascension of James II and the Failure of the Monmouth Rebellion

In 1685 James ascended to the throne in a powerful position (Speck, 1988, 41). He reassured his Tory allies by promising to uphold and support the Church of England. Following the defeat of the Whigs, the pro-monarchy Tories dominated local government and the Parliament that was called in 1685. (If the Tories are group G_2, then the probability p_2 that a Tory is in Parliament has become much larger than the probability p_1 that a Whig is in Parliament.) Initially the Tory and

[27] Hutton (See 1989, Chapter 15) Harris (2005, 293-300) details how Charles used this period to purge Whigs from local government, appointing Tory loyalists to local positions wherever possible.

[28] On the quo warranto campaign, see Halliday (98).

Anglican establishment remained extremely loyal to James. Nonetheless, in just over three years James would loses his throne in what would be a largely peaceful transfer of power. How did this take place? And what light does our model shed on this transformation?

The first challenge that James faced was the rebellion of the Duke of Monmouth, Charles's Protestant bastard son. Monmouth was a popular soldier and Shaftesbury had favored him as a successor to Charles II. But his rebellion was rapidly defeated in July 1685.

The failure of Monmouth's rebellion provides an intriguing counterfactual for our analysis. Unlike the successful revolution three years later, Monmouth's uprising is informative about what happens when ordinary citizens mobilize without political actor support. Consistent with Proposition 6, a rebellion without the involvement of political actors was likely to fail.

Support from political actors was conspicuous in its absence. Monmouth conspicuously failed to induce defections. The vast majority of the nation rallied behind James II, including not only Tories but also moderate Whigs. Using information from the *History of Parliament* website, we find that just 3.6% of individuals who had been an MP in at least one Parliament between 1678-1685 actively supported Monmouth's invasion. No sitting MPs joined Monmouth and no military officers above the rank of captain defected—critically, John Churchill (future Duke of Marlborough) led royal forces against Monmouth at Sedgemoor despite his earlier Whig sympathies. The Lords Lieutenant remained loyal, with the Duke of Somerset actively suppressing rebellion in the West Country. Even former Exclusionist MPs like Sir William Portman, who had voted against James as Duke of York, now supported him as king. The few gentry who joined Monmouth, like Thomas Dare, held no current offices—they were former political actors at best.[29]

A second related factor was the narrow organizational base for Monmouth's rebellion. Monmouth's support came overwhelmingly from ordinary citizens: Somerset clothworkers, Taunton artisans, and dissenting congregations. Even within the class of ordinary citizens, this was a narrow base of support. While he had some organizational structure through radical Whig networks—Ferguson acted as chaplain, Rumbold as military advisor—these groups lacked the cross-cutting membership our model identifies as crucial. The Green Ribbon Club had been suppressed; the Whig infrastructure dismantled after the Rye House Plot. Most significantly, Monmouth failed to secure any major institutional backing: no municipal corporations (recently purged through quo warranto proceedings), and crucially, no support from the Anglican Church, which viewed him as illegitimate.

Third, in the terms of our model, James was well-resourced in summer 1685. In this re-

[29]Thomas Dare was a member of the Green Ribbon Club and was active in Whig campaigning for Exclusion and for the prosecution of Catholic recusants. But the only political position that he held was that of a councilor in the town of Taunton (see Harris, 2009).

spect, Monmouth's timing was catastrophic. James had just received generous parliamentary supply—customs revenues for life plus additional grants totaling nearly £2 million annually.[30] This gave him ample rents to maintain coalition loyalty. Moreover, James had not yet alienated his base. The Test Acts remained in place; Catholic officers had not been appointed; the Anglican establishment still supported hereditary succession. James's coalition remained intact: Parliament had just demonstrated its loyalty with unanimous votes of supply, and the recently remodeled corporations ensured local control.

James Alienates his Coalition Supporters

James II's primary political objective was to alleviate the condition of his co-religionists. This required repealing both the Penal Laws (which punished non-Church attendance) and the Test Acts (which barred Catholics from Parliament and from participating in the House of Lords). Establishment Tories, however, were strongly opposed to his plans for greater religious toleration for both Catholics and dissenting Protestants and what was seen as James's sympathies to the policies of France under Louis XIV (r. 1643-1715). It became apparent over the course of 1687 that he was willing to pursue the policy of religious toleration even at the expense of the support of the Tories (Miller, 1972; Sowerby, 2013). In terms of the model, the 'optimal' public good for most of James's coalition is that of *less* religious toleration, which James did not provide.[31]

This upset the coalition that had previously supported him. James therefore sought to build an alternative coalition comprising those Tories who were personally loyal to him and those Whigs who were in favor of religious toleration (Sowerby, 2013).

James then blundered in a seemingly minor controversy surrounding the appointment of Catholics to Oxford colleges. This was perceived as an attack on property rights (as a college fellowship was a type of freehold) (Speck, 1988, 144). In November 1687 James II ordered his lord lieutenants to canvas the opinions of local elites across all of England and Wales with respect to his proposed policy of repealing the Penal Acts and Test laws (Carswell, 1969; Walker, 2011). This canvasing revealed large-scale opposition to James's policies. Indeed, the very process of asking these questions appeared to allow opposition to these policies to coordinate (Sowerby, 2013). The opinion poll made the extent of opposition to James's policy common knowledge (Speck, 1987).[32]

When this opposition coalesced, it did so along the lines of party, local connections, and social and religious groups. By the spring 1688, the defection of moderate Tory support was making

[30] Both the customs and the excise had been brought under direct collection during the reign of Charles II (Johnson and Koyama, 2014).

[31] For additional analysis, see Desierto and Koyama (2024) which provides a selectorate model in which the particular public good is that of religious toleration.

[32] Speck links knowledge of the replies to the opinion poll to the claim in the letter inviting William to invade that "there are nineteenth of twenty of the people throughout the kingdom who are desirous of change" (Speck, 1987, 455).

it difficult for James to govern. In the cities both Tories and Whigs agreed not to elect those supportive of James's policies (Pincus, 2009, 184).

The crucial event in solidifying Tory opposition, however, was the Bishops trial. In April 1688 James reissued the Declaration of Toleration. Then in May he ordered the clergy of the Church of England to read, that is to say, endorse the Declaration in church on two successive Sundays. This created a crisis for the Church of England. After all, loyalty to the crown was a key component of Anglicanism but a declaration of toleration was seen by many as the first move towards an attempt to reconvert England to Catholicism.

When the bishops refused, James put them on trial. The bishops' acquittal (June 30, 1688) simultaneous revealed both popular sentiment and elite opposition. Archbishop Sancroft and his fellow bishops were political actors (sitting in the Lords) who possessed influence among networks of ordinary citizens (parish clergy and congregations).[33] Their trial triggered responses across both political actors and ordinary citizens: crowds lined the Thames as they went to the Tower praying for them and applauding them. Pincus (2009, 196) observes that

> "England's most prominent nobles and gentlemen came from all across the country to attend the bishop's trial. But it was not just those present who hung on every word ... When the bishops were bail on 18 June, for example, bonfires were lit in town and villages throughout the land. When supporters of James II attempted to quell the celebrations in the Midland cathedral city of Litchfield, 'there happened a very great riot"'

Their acquittal was met with widespread celebrations and bonfires across all of England (Womersley, 2015, 78). On the same day, the seven lords dispatched their invitation to William (See Miller (1978, 187); Pincus (2009, 196)).

As the trial was unfolding, James's wife gave birth to a Catholic male heir to the throne. This unexpected development (as their marriage had produced no healthy children up to that point), transformed the political situation and demoted Mary (and her husband William) from their position as presumptive heirs to the throne.[34]

The Invasion of William of Orange and the Glorious Revolution

William then decided to invade in late 1688. Following William's landing at Torbay in November 1688, a small number of early defections grew with John Churchill and James's second daughter

[33] In the language of Greif and Rubin (2024), they were important legitimating agents.

[34] This was also the situation facing Anne, James's second daughter. "If James died without a male heir, Mary of Orange would succeed; but Mary had been married to William for ten years without having a child, so that it was not at all unlikely that Anne would eventually be queen, either in succession to Mary or, if Mary died young, directly after James II" (Jones, 1990, 59).

Anne joining William by the end of the month. In the face of these key defections from both the army and from his leading politicians, James fled rather than fight and William and Mary were peacefully installed as monarchs in early 1689. As the Houses of Commons and Lords debated the terms under which Mary and her husband would accede to the throne, popular pressure played a crucial role. As a condition of becoming King and Queen, William and Mary agreed to the Declaration of Rights.

While our model does not claim to explain the entirety of the Glorious Revolution, it sheds important light on how and why James's coalition unraveled.

First, the seven lords who invited William to invade (the so-called "Immortal Seven") represented a cross-section of political actors spanning different power bases. Henry Sidney was an Whig politician and military officer who had supported Exclusion and who had close personal ties to William. Charles Talbot, Earl of Shrewsbury was a magnate, who had supported James in 1685 against Monmouth. But he had moved into opposition due to James's religious policies and his power base was in the south. William Cavendish, the Duke of Devonshire in contrast was a northern Whig grandee who had known opponent of Catholicism. Darnby was a Tory whose power base was also in the north. Richard Lumley, Earl of Scarbrough was an army officer. Henry Compton was the Bishop of London. He represented Anglican and thus also Tory interests. Edward Russell, the Earl of Oxford was a former naval officer (with strong family connections to the Whigs). Unlike Monmouth's marginal supporters, these were men embedded in overlapping networks—Danby controlled Yorkshire through deputy lieutenants and JPs, Compton led London's Anglican clergy, Russell had naval contacts, Lumley military ones.[35]

Second, William's English supporters prior to the invasion represented a cross-cutting network that included a range of ordinary citizens as well as political actors. For example, Thomas Wharton an up-and-coming Whig politician, who had allied with Shaftesbury during the Exclusion Crisis, now began to organize a group he called "The Treason Club" (Robbins, 1991). The Club met informally at the Rose Tavern in Covent Garden, with some meetings also held at Wharton's estate at Winchendon. A key fellow conspirator was his brother Henry Wharton, a military officer in James's army. Others included Charles Godfrey, John Churchill's brother-in-law, representing a powerful influence over and pipeline to disaffected officers.[36]

Following William's invasion, the Association movement—modeled on 1584 Elizabethan prece-

[35]This details are drawn from their respective entries in the *Oxford Dictionary of National Biography*: Sidney (Handley, 2008b); Shrewsbury (Handley, 2008c); Devonshire (Handley, 2008a); Danby (Knights, 2008); Scarbrough (Childs, 2007); Compton (Coleby, 2008); Oxford (Aldridge, 2008).

[36]The Treason Club had a cross-cutting network structure that bridged two critical groups: political actors in Parliament through Wharton's parliamentary connections; and military officers with coercive capacity, as these discontented army officers who would actually defect to William. This structure allowed coordination between those who could withdraw political support (Wharton and his parliamentary allies) and those who could withdraw military support (the officers).

dents—provided a quasi-legal framework for coordinating resistance. Nobles and gentry signed formal associations pledging support for William, legitimating both elite defection and popular action. By December, associations emerged in Yorkshire (under Danby), Nottingham (under Devonshire), and Cheshire (under Henry Booth, baron Delamer).

Third, William did not make the critical mistakes that Monmouth had. Importantly, he did not claim the crown. By arguing that he was invading to ensure that there would a free and fair election, he maximized the size of the potential coalition he could attract. Monmouth's invasion had, in contrast, been identified with "the Good Old Cause," a narrowly Puritan and radical position, " ... words which sent a shiver down England's collective spine" (Dillon, 2006, 46). William's invasion in contrast was from within the royal family, it was aimed at the specific policies of one king and not at monarchy itself (see Beddard, 1991).

Finally, William and his allies were able to use print more successfully to coordinate propaganda, such as his *Letter to the English Army* (Jones, 1972, 231). William's Declaration circulated widely despite government attempts at suppression, with Anglican clergy reading it from pulpits, transforming religious authority into political coordination. Moreover it was designed to attract as broad a basis of support without being overly partisan (Jones, 1972, 246).

In other words, in late 1688, coordination among political actors and ordinary citizens was possible in a way that had not been possible in 1685. William's English supporters also had to mobilize public opinion and ordinary citizens. The revolution witnessed extensive popular unrest that raised governance costs while signaling to elites that defection would be supported. As early as October 1688, popular riots and violence directed at Catholics, appears to have shaken James's resolve (Jones, 1990, 156). In December 1688, anti-Catholic riots erupted in London, York, Newcastle, Norwich, Bristol, and Cambridge—often targeting Catholic chapels and known papists' houses. In York on December 8, Sir John Reresby reported that the people "rose in prodigious numbers, and dividing themselves, pulled down the chapels of that worship, and many houses of such as did profess it, taking and spoiling their goods, and imprisoning such as they suspected to be priests; nor did they forbear the very chapels and houses of ambassadors and other public ministers" (Reresby, 1734, 422). The timing mattered—riots intensified after William landed but before the outcome was clear, raising James's costs of governing while demonstrating to wavering elites that popular opinion supported defection.

James had been in a strong financial position in 1685. This was less true in 1688, although customs revenues remained buoyant (Chandaman, 1975). Having prorogued Parliament in November 1685 and finally dissolved it in July 1687, James had no expectation of additional supply, at least until new elections could be held. This meant that James had to make do with the revenues

voted at the beginning of the reign.[37] Childs (1980, 5-6) estimates that had he sought to maintain the armed forces raised in the 1688 indefinitely that would cost him more than £900,000 a year and that this would have been impossible unless he could summon a new parliament to grant him further taxes.[38] All of this indicates that, given his policy commitments and the opposition arrayed against him, by late 1688, James lacked resources to prevent a cascade of defections. When lords like Churchill and Grafton (the king's nephew) defected despite personal ties and financial incentives, it suggests that James could not meet the reservation price for maintaining coalition loyalty given James's religious policies.[39]

4 Other Case Studies

4.1 People Power Revolution

We now consider an instance in which a ruler is deposed when almost all members of civil society, ordinary citizens and political actors alike, belong to one, large, encompassing group – the Catholic Church.[40] The specific example is the Philippine Revolution of 1986, known as the People Power Revolution, which saw the peaceful overthrow of the dictatorship of President Ferdinand Marcos and the restoration of democratic rule.

Social scientists characterize the Marcos regime as a form of "bureaucratic authoritarianism", albeit one with highly personalized or "sultanistic tendencies" (Thompson, 1995, 3-5). Following independence after World War 2, modernizing policies were implemented (Wurfel, 1988). Nonetheless, perhaps largely because of colonial rule, the legacy of a powerful state was much weaker than elsewhere in Asia. In contrast to South Korea or Thailand, linguistic diversity, for example, is very high.[41] Land inequality was also high as is reliance on kinship networks as the basis for political organization. Slater (2010) characterizes the Philippines under Marcos as a regime with very weak state capacity, weak party strength, low military cohesion and low authoritarian durability.[42]

Why was Marcos unable to hold on to power in the face of the People Power movement? Our model provides an analytical template. Given the composition of civil society into political actors

[37] James had been granted an unprecedented supply of £700,000 in 1685 and he was in receipt of non-trivial French subsidies. But his expenditures were also unprecedented as he sought to maintain a peacetime army in excess of 20,000 men (Childs, 1980).

[38] In contrast, in the last years of Charles's reign, upkeep of the army had been around £280,000.

[39] Churchill was promoted to lieutenant general on November 8 1688 (Webb, 1995, 142). His dilemma is described in Chapter 14 of Churchill (1933).

[40] In terms of the model, not only is $|U|$ very small, but $G_1 \cup G_2 = G$ contains almost all of O and P.

[41] In Thailand, there are many indigenous languages but roughly 88% of the population speak Central Thai. In the Philippines, there are 80 distinct languages but four main languages (Cebuano, Tagalog, Ilongo, and Ilocano) accounted for over 2/3 of the population by the 1980s (Wurfel, 1988, 27). There is also a Muslim minority who were poorly integrated into the rest of the polity.

[42] Gunnar Mydral had described the Philippine state of the 1960s and 1970s as a "soft state" (Mydral, 1971).

and ordinary citizens, and their membership in the same large group, one can ask the following questions. To what degree could Marcos buy off opposition? To what extent popular protests could raise the cost of governance? And when and why did political actors withdraw support from the incumbent?

Marcos had been in power since 1965 and had declared martial law in 1972, which allowed him to rule as a dictator. By the early 1980s, many segments of Philippine society, elites as well as the masses, had reasons to oppose his continued rule. His regime was characterized by widespread corruption – a "politics of plunder", and human rights abuses. Moreover, there had been a history of support for democratic values. Prior to the establishment of autocratic rule, a survey of votes in Manila indicated that "90 percent expressed a desire to see retained without modification in the Philippine Constitution (on the eve of its rewriting) "bill of rights" provisions for due process, liberty of abode, protection against unreasonable searches, privacy of communication, freedom of association, religious freedom, and freedom of the press and of speech" (Wurfel, 1988, 42). Civil society organizations were also well established. The National Movement for Free Elections (NAMFREL) was established in the early 1950s with the involvement of the Catholic Church, businesses and veteran organizations to monitor the integrity of elections (Hedman, 2006, 1). The economy was heavily reliant on American investment and foreign aid.

Nonetheless, from the outside Marcos had built what appeared to be a resilient system of personal rule. More conservative elements within the Catholic Church were also willing to work with the regime throughout the 1970s. Marcos made himself the commander-in-chief and supreme patron of the armed forces and made significant investments in both the arms industry and the army itself. He furthermore took care to purge the arm of disloyal elements in 1976 and again in 1978 (Wurfel, 1988, 148). In response to US pressure, Marcos held rigged elections in 1978 in which his KBL party won 137 out of 166 seats. Fear of communism and the violent unrest that had been rife in the early 1970s meant that many elites were willing to give their tacit support to the regime. Thus, Thompson (1995) notes that the Marcos regime was potentially vulnerable to either a Communist-style violent revolution or to a military-coup backed by regimen insiders. However, this is not how the regime fell.

Our model captures key elements that can explain how Marcos was deposed. First, open opposition to Marcos grew following a severe economic collapse in 1981 as global interest rates spiked. This put pressure on Marcos's resource constraint. This worsened when in August 1983, the imprisoned opposition leader Ninoy Aquino was killed by the military as international loans were cut off.

Second, organized groups became important in the early 1980s in coordinating opposition. These civil society organizations exemplify the kinds of cross-cutting groups that our model shows

to be potentially most effective in deposing a ruler. Various organizations, including labor unions, student groups, and professional associations, mobilized the public against the Marcos government. An important US based group was the Movement for a Free Philippines (MFP) (Thompson, 1995, 68). These groups had been active in opposing the regime's policies and human rights abuses for years, and they played a key role in organizing protests, strikes, and other forms of nonviolent resistance. An important movement that emerged after the assassination of Aquino, was Justice for Aquino Justice for All (JAJA). JAJA organized a funeral march for Aquino that demonstrated the organizational capacity of civil opposition to Marcos (see Franco, 2001). This led to a ""a mainstreaming of nonviolent pressure politics" (Franco, 2001, 191). Another example was the Kongreso ng Mamamayang Pilipino (KOMPIL), a coalition of over 200 civil society organizations that was formed in 1984 to coordinate public opposition to the Marcos regime. KOMPIL organized a series of mass actions, including a boycott of the 1984 parliamentary elections, which helped to undermine the legitimacy of the Marcos government.

The most important civil society organization, however, was the Catholic Church. The Church plays a unique role in Philippine society. To an unusual degree, the colonial experience was dominated by the Church and throughout the 20th century Catholic institutions played a key role in the education and formation of social elites.[43] Led by Cardinal Jaime Sin, the Church united and galvanized opposition to Marcos across all segments of society; that is, in the language of our model it included members of both the set of political actors and the set of ordinary citizens. The vast majority of the population were members of the Catholic Church and it both carried moral weight and had considerable organizational capabilities. Fear of communism forced more conservative Church leaders like Cardinal Sin to acquiesce with Marcos's initial imposition of martial law. But by the early 1980s, and particularly following Aquino's murder they moved into open opposition.

In the buildup to the 1986 elections, the Church played an important role in the diffusion of NAMFREL chapters into the provinces, although support among bishops varied at the local level (Hedman, 2006, 123). Church leaders issued pastoral letters and statements condemning the government's abuses and calling for a peaceful transition to democracy. Church-owned Radio Veritas broadcast support for the opposition and countered government propaganda. This itself is an important phenomenon: civil society is not the unitary actor it is sometimes supposed to be, and it was by no means given that conservative business groups and the Catholic Church would play such a prominent role in mobilizing thousands of people in support of liberal democracy (see Hedman, 2006).

Protests began to gather pace after February 22. The sight of nuns and priests standing between the military and the protesters became an iconic image of the revolution and helped to prevent

[43] "it was located at the very core of Spanish state power in the archipelago" (Hedman, 2006, 26).

violence from escalating. The protests and demonstrations that blocked large parts of the main avenue in metro Manila (Epifanio de los Santos Avenue) raised the costs facing the government and dramatically increased the costs and risks of repression (as international attention was now focused on the ongoing revolution). From the perspective of our model, this made it very difficult to buy off members of the ruling coalition.

In fact, key military and government officials, including Defense Minister Juan Ponce Enrile and Armed Forces Vice Chief of Staff Fidel Ramos, eventually defected from the Marcos government and declared their support for the opposition leader Corazon Aquino. By February 26, Marcos realized that he could not govern and resigned and went into exile in Hawaii. Corazon Aquino was sworn in as the new president of the Philippines, and democracy was restored in the country.

There are also parallels with the People Power Revolution and later events such as the Velvet Revolution in Czechoslovakia and other color revolutions in Eastern Europe. There are also similarities between the role of civil society and the Catholic Church in the People Power Revolution in the Philippines and the Solidarity movement in Poland during the 1980s. Both were nonviolent movements. Both saw the involvement of large secular organizations like trade unions and religious organizations: in the Philippines, the Church, under Cardinal Sin's leadership, provided moral and spiritual support to the opposition and used its influence to mobilize the public. In Poland, the Catholic Church, led by Pope John Paul II, a native Pole, offered support and sanctuary to Solidarity activists and helped to legitimize the movement.

The example of the People Power Revolution illustrates the usefulness of our model in understanding regime change. The Catholic Church's role in organizing opposition to Marcos was critical because it was a wide-reaching group spanning both political actors and ordinary citizens. The Church thus had a dual role in political contestation – its bishops were elite influencers, while the local clergy were mobilizers of ordinary citizens.

Following the global recession of the early 1980s, which was particularly severely felt in the Philippines, Marcos faced diminishing access to rents. To maintain power, Marcos attempted to expand his ruling coalition beyond his original base to include the military leadership, business elites, and local political bosses. But a larger coalition required more resources to maintain loyalty, especially when the murder of Aquino can be interpreted weakened Marcos's legitimacy. The international context was also important. Declining and less certain US support weakened Marcos's ability to keep all of the members of his coalition satisfied. Under these conditions, there was increased vulnerability to popular pressure.

This popular pressure had to be coordinated by political actors like Cardinal Sin and, in a similar fashion to the role pamphleteers played in the Glorious Revolution, Radio Veritas helped to coordinate dispersed actors. The regime transition occurred rapidly once it was clear that these

protests were serious. Marcos's position became extremely vulnerable once key military leaders like the Defense Minister Juan Ponce Enrile and Vice Chief of Staff Fidel Ramos defected, which forced Marcos to flee the country.

4.2 The Arab Spring

The absence of civil society organizations weakens political contestation and can therefore lead to failure in political reform. An example is the Arab Spring, which refers to a series of uprisings that spread across the Middle East in the Spring of 2011. The initial spark was the self-immolation of Mohamed Bouazizi on December 16, 2010, in the Tunisian town of Sidi Bouzid. Bouazizi was protesting the corrupt and abusive practices of the local police who had confiscated his scale and vegetables because he lacked a permit. The protest against President Ben Ali spread first in Tunisia, and then to Egypt where protesters opposed the regime of Hosni Mubarak, and from Egypt across the Middle East.

The Arab Spring, therefore, was primarily or initially a reaction to the lack of economic freedom in the Middle East. It was a response to discontent at the lack of sustained economic growth and opportunities for betterment as well as to the absence of political rights. Malik and Awadallah (2013) note the weakness of the private sector across the region. Weak entrepreneurship, geographically fragmented markets, and an overbearing public sector are characteristic of most economies in the Middle East. This lack of economic integration and market development keeps the region trapped in a closed-access order to use the terminology of North, Wallis, and Weingast (2009). A related factor is the isolation of the different religious and ethnic minorities within the Middle East—"majorities and minorities do not fully form communities with one another" (Hourani (1947, 109) quoted in Parker and Nasrallah (2017, 2)). This is a legacy of reliance on identity rules to govern a religiously and ethnically divided region (Johnson and Koyama, 2019).

While the Arab Spring protests spread rapidly across the region, their impact was ephemeral. Tunisia experienced a transition from autocratic rule under Ben Ali to an electoral democracy. But elsewhere autocratic government was either reconstituted or successfully weathered the protests. Mubarak was deposed, but Egypt did not become a democracy. In Syria civil war erupted in which Assad eventually reconsolidated power.

Why did the Arab Spring "fail"? The Arab Spring uprisings have been described as "revolutions without revolutionaries" (Bayat, 2017). They were broadly speaking non-ideological. Bayat (2017) argues that these revolutions failed because they were not really revolutionary. They did not focus on the seizing of power from the state. They focused on injustice and human rights but did not have a coherent vision of what to replace the status quo with. Bayat argues that these revolutions failed because they had been deradicalized by neoliberalism and because they took place at a mo-

ment when "the three major postcolonial ideologies—anticolonial nationalism, Marxism-Leninism, and militant Islamism—that vigorously advocated revolution had vanished or been undermined" (Bayat, 2017, 18).

This argument however is immediately undermined when one considers the success of the Color Revolutions in Eastern Europe or the People Power Revolution in the Philippines.

Other factors rather than ideology seemed to be more important. As Goldstone (2011, 9) noted at the time, successful democratic transitions based on broad-based popular mobilization are rare and difficult because to succeed they have to bring together disparate social groups: "[h]istory is replete with student movements, workers' strikes, and peasant uprisings that were readily put down because they remained a revolt of one group, rather than of broad coalitions". This caution about the prospects of the Arab Spring were borne out.

The absence of private sector and civil society organizations is one important factor. Malik and Awadallah (2013) trace the Middle East's long history of centralized rule to the Ottoman period. As the work of Timur Kuran (2010; 2023) demonstrates, however, it has deeper and more extensive roots than this.

The thesis of Kuran (2023) is that the repression of civil society over many centuries in the Middle East is a key factor in explaining the absence of liberalism in that region today. Civil society is weak in the Middle East because there are few long-lasting and prominent non-governmental and non-market organizations. This weakness, Kuran contends, reflects several factors: the prominence of the Islamic waqf as an organizational form, the Islamic inheritance system which impeded the transmission of capital across generations, and the lack of legal personhood in Islamic law. Institutional rigidity was built into these institutions. The resources invested in a waqf were tied to the original intentions of the founder. They could not be reinvested or repurposed. And they were politically impotent. They could not be used to fund political causes. Kuran contends that this legacy can account for the ongoing weakness of civil society:

> "Mass explosions do not necessarily result in major liberalizations ... gains may disappear quickly, as they did in Arab countries after 2011 ... The civic weaknesses that led to backsliding in politically shaken Arab countries have not been overcome" (Kuran, 2023, 169).

Of course, the Middle East does have NGOs and civil society organizations today. But Kuran argues they are generally apolitical. This accords with Bayat's assessment that while there are NGOs and civic activism in the Middle East it is "engaged in charity, development, poverty reduction, or self-help, often in conjunction with international donors or corporate funding ... [and] preoccupied with amending the existing order instead of one that devoted itself to political work" (Bayat, 2017,

25). More importantly, in terms of our model, these entities were disparate, small, and therefore incapable of galvanizing strong political contestation.

In contrast to the Philippine case, the Arab Spring did not involve organizations which spanned all of society. In addition, many rulers in the Middle East have greater resources to quell opposition. On the eve of the Arab Spring, countries like UAE, Bahrain, and Saudi Arabia had access to substantial oil revenues, which, according to our model would make their regimes more resistant to popular pressure despite having relatively large coalitions.

The countries that were relatively more vulnerable to popular pressure and protests by civil society groups, especially as their ruling coalitions expanded during the liberalization periods – Tunisia and Egypt, are precisely those that have relatively limited natural resource revenues.

Ben Ali's regime was dependent on patronage networks, and economic crisis and youth unemployment strained resources. It was thus relatively vulnerable to costly protests.

Superficially, there were civil society organizations in both Egypt and Tunisia. By the 1990s there were over 5,000 registered NGOs in Tunisia. However, and consistent with Kuran's arguments, these organizations were tightly controlled by the state, and therefore incapable of engaging in political contestation. As Beinin (2016, 148) notes: "All NGOs were required to register with the Ministry of Interior, obtain prior approval for public meetings, and refrain from political activities". Similarly, in Egypt there were many independent organizations prior to the Arab Spring, but many of them were either religious or focused on secular and liberal goals. The existence of these civil society organizations per se does not mean that they will automatically support democratization.

As the model shows, the key factor is not the mere existence of civil society organizations, but the extent to which they are large and cross-cutting organizations capable of independent action (as the Whigs and Tories were in 1688 or the Catholic Church and its civil society allies were in the Philippines). Beinin (2016) argues that a distinguishing characteristic of Tunisia was the existence of a relatively strong labor movement embodied by the Tunisian General Labour Union (UGTT). Through the period of authoritarian rule under Ben Ali, the UGTT could organize strikes and mobilize political pressure (for example, by refusing to nominate candidates for the upper house in 2005). It was the UGTT, Beinin argues, that provided critical leadership and organizational capacity when the protests began to spread in 2010 and 2011.[44]. Following Mohamed Bouazizi's self-immolation on December 17 2010, the UGTT organized strikes and protests. They formally broke with the regime in January 2011 precipitating the fall of the government of Ben Ali on January 14 and a transition to democratic rule.

The apparent success of this regime transition is consistent with our model as Tunisia had

[44]Educated, middle and upper class intellectuals were ill-equipped to do so because " most workers, unemployed, and marginalized populations regarded them as distant, privileged, and even arrogant" (Beinin, 2016, 101).

modest natural resources and relatively limited external support. Egypt is also an interesting example as it was the withdrawal of US support, a critical source of regime rents, that prompted the collapse of Mubarak's government. There were, however, important differences between Tunisia and Egypt. In contrast, to the UGTT, the leading Egypt union organization, the EFITU "never enjoyed significant autonomy from the state" (Beinin, 2016, 73). As Kuran (2023, 152) noted, the Muslim Brotherhood was Egypt's strongest non-governmental organization. The Muslim Brotherhood was a mass organization but it did not possess support among political actors, specifically the military. Egyptian liberals, moreover, Beinin (2016, 136) contends "had no idea how to organize working people and the unemployed". He argues that they sought "primarily procedural democracy and personal rights" but they had no social basis to organize ordinary citizens. When authoritarian and military rule was reinstated in Egypt, the EFITU accommodated and supported the military regime.

5 Conclusion: Civil Society Organization and Political Change

This paper provides a framework for understanding the political power of civil society organizations. We apply this framework to three case studies: The Glorious Revolution of 1688-1689, the People Power Revolution in the Philippines in 1986; and the Arab Spring of 2011.

Our model generates clear predictions about when civil society successfully induces political reform.

First, successful political reform is highly dependent on the degree of organization of civil society, especially among political actors who can directly depose a ruler by defecting to the opposition. Groups that span both political actors and ordinary citizens are most effective – rulers are more easily deposed either by direct selection, or indirectly through popular protests. The Glorious Revolution provides an important illustration of this: both Whigs and Tories contained MPs and peers (P) alongside merchants, pamphleteers, and clergy (O). The Philippines case provides further support—the Catholic Church uniquely bridged bishops as political actors and parish networks mobilizing ordinary citizens. In contrast, the Arab Spring's failure aligns with our prediction: protest movements remained largely confined to ordinary citizens without securing defection from political actors. Organizations of ordinary citizens can strengthen efforts by citizens to demonstrate popular discontent, but alone this is typically insufficient to depose the ruler, as it only raises the cost of governance of the ruler.

Second, rulers with binding resource constraints are more vulnerable to civil society pressure. Charles II survived the Exclusion Crisis with French subsidies, while James II faced cascade de-

fections when he had aliened key Tory support and the revenues he relied upon proved inadequate relative to military costs. Similarly, Marcos's regime collapsed when economic crisis and withdrawal of US support tightened his resource constraint.

Overall, the size and organizational density of groups matters. Where organized civil society is large and $|U|$ is therefore small, political contestation is more likely to succeed.

There is plenty of scope for future research. Scholars have pointed to the importance of overseas support in the success of the anti-apartheid movement, the People Power Revolution, and the Solidarity movement. The technology of repression available to political incumbents is another factor that could be explored as could the types of rents available to the regime.

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6 Proofs (To be Included in the Published Paper)

6.1 Optimal size of protest

Since ordinary citizens do not get transfers, one can set $\mathbb{1}_C = 0$ in i's budget constraint and re-arrange to get

$$x_i = (1-\tau)y + g - \mathbb{1}_\mu \chi(\mu, \mu_g), \tag{16}$$

which is the amount of ordinary consumption that $i \in O$ anticipates, that is, given g. Plugging this into $U(x_i, g)$ gives her one-period utility. Consider an equilibrium in which the same individuals, if any, always protest – in this case, μ and $\mathbb{1}_\mu$, and therefore x_i, are fixed, and in an equilibrium in which the incumbent ruler is never deposed, g is also fixed. Thus, in such cases, the present value of the infinite stream of utilities can be written as $\sum_{t=0}^{\infty} \delta^t U(x_i, g)$.

If an ordinary citizen $i \in O$ always protests in equilibrium, it must be that there is some reservation value, denote as $\bar{U}_i$, below which she is always unsatisfied with the ruler's offer. In other words, an ordinary citizen for whom $\sum_{t=0}^{\infty} \delta U(x_i, g) < \bar{U}_i$ protests at each t.

Thus, in an equilibrium in which at least one person always protests and therefore $\mu > 0$, it must be that at least one ordinary citizen's reservation value $\bar{U}_i$ is not met.

Since y increases x_i (and, therefore, $U(x_i, g)$), then a low y makes it more likely that some reservation values are not met. The lower y is, the more likely that more reservation values are not met. This implies that protests are more likely to occur, and more likely to be large, when incomes are low. Similarly, since g increases $U(x_i, g)$, protests are more likely to occur, and more likely to be large, when public good provision is low.

In addition, recall that there is strategic complementarity in that the higher μ is, the more likely will one protest. There is also strategic complementarity among group members, as the higher μ_g is, the more likely will one protest. Thus, all else equal, more people will protest, i.e. μ is large in equilibrium, when civil society is more organized, that is $|U|$ is small and therefore μ_g is large.

Moreover, one can construct some threshold (min) value of $\underline{\chi}$ that just equates $\sum_{t=1}^{\infty} \delta U(x_i, g)$ with $\min\{\bar{U}_i\}$, such that with sufficiently small $|U|$, $\chi < \underline{\chi}$ for each $i \in O$, and so each $i \in O$ always protests. Similarly, one can construct threshold (max) value $\bar{\chi}$ that equates $\sum_{t=1}^{\infty} \delta U(x_i, g)$ with

$\max\{\bar{U}_i\}$, such that with sufficiently large $|U|$, $\chi > \bar{\chi}$ for each $i \in O$, and therefore no one ever protests.

6.2 Proof of Proposition 1

Re-write the FOCs as

$$\frac{\partial U}{\partial g} = \frac{\partial U}{\partial x_1}\Big(\frac{1}{(\kappa(\mu)+\epsilon)n_1} - 1\Big) \tag{17}$$

$$\frac{\partial U}{\partial g} = \frac{\partial U}{\partial x_2}\Big(\frac{1}{(\kappa(\mu)+\epsilon)n_2} - 1\Big) \tag{18}$$

$$\frac{\partial U}{\partial g} = \frac{\partial U}{\partial x_u}\Big(\frac{1}{(\kappa(\mu)+\epsilon)(|C|-n_1-n_2)} - 1\Big) \tag{19}$$

Together, these imply that if $n_1 > n_2 > |C| - n_1 - n_2$, then $\frac{\partial U}{\partial x_1} > \frac{\partial U}{\partial x_2} > \frac{\partial U}{\partial x_u}$. Since the same g is provided to every member, U only varies to the extent that transfer amounts vary. Thus, $\frac{\partial U}{\partial x_1} > \frac{\partial U}{\partial x_2} > \frac{\partial U}{\partial x_u}$ implies $R_1 > R_2 > R_u$.

6.3 Proof of Proposition 2

Since no one can be excluded from public goods, in equilibrium, $g^I = g^J = \bar{g}$.

To show that $R_1^I < R_1^J$, note that this holds if $U(x_1^I, \bar{g}) < U(x_1 J, \bar{g})$, or $U(x_1^I, \bar{g}) - U(x_1 J, \bar{g}) < 0$.

Subtracting $U(x_1 J, \bar{g})$ from the RHS of (13) gives:

$$\frac{\delta p_1 - \delta}{1-\delta p_1} U(x_1^J, \bar{g}) + \frac{(1-\delta)\delta(1-p_1)}{1-\delta p_1} U((x_1^I - R_1^I), \bar{g}),$$

which is negative since $\frac{\delta p_1 - \delta}{1-\delta p_1} < 0$, $U(x_1^J, \bar{g}) > U((x_1^I - R_1^I), \bar{g})$, and $\frac{(1-\delta)\delta(1-p_1)}{1-\delta p_1} < 1$.

Thus, $U(x_1^I, \bar{g}) - U(x_1 J, \bar{g}) < 0 \rightarrow R_1^I < R_1^J$.

The proofs for $R_2^I < R_2^J$ and $R_u^I < R_u^J$ are analogous.

6.4 Proof of Proposition 3

For J, the ruler's budget constraint fully binds, and so $\tau y N + R - g^J - (\kappa(\mu)+\epsilon)(n_1 R_1^J + n_2 R_2^J + (|C| - n_1 - n_2) R_u^J) = 0$. Since $g^J = g^I \equiv \bar{g}$, but $R_1^I < R_1^J$, $R_2^I < R_2^J$, $R_u^I < R_u^J$ then $\tau y N + R - \bar{g} - (\kappa(\mu) + \epsilon)(n_1 R_1^I + n_2 R_2^I + (|C| - n_1 - n_2) R_u^I) > \tau y N + R - \bar{g} - (\kappa(\mu)+\epsilon)(n_1 R_1^J + n_2 R_2^J + (|C| - n_1 - n_2) R_u^J) = 0$.

6.5 Proofs of Propositions 4, 5, 6

The proofs are in the text.