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MISSING DISCUSSIONS: INSTITUTIONAL CONSTRAINTS IN THE ISLAMIC POLITICAL TRADITION

A. Arda Gitmez, James A. Robinson and Mehdi Shadmehr

POLITICAL ECONOMY



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Abstract

Institutional constraints to counter potential abuses in the use of political power have been viewed as essential to well-functioning political institutions and good public policy outcomes in the Western World since the time of ancient Greece. A sophisticated intellectual tradition emerged to justify the need for such constraints. In this paper we identify a new puzzle: such an intellectual tradition did not exist in the Islamic world, even if the potential for abuse was recognized. We develop a model to explain why such ideas might not have emerged. We argue that this is due to the nature of Islamic law (the Sharia) being far more encompassing than Western law, making it easier for citizens to identify abuses of power and use collective action to discipline them. We study how the relative homogeneity and solidarity of Islamic society fortified this logic.

JEL Classification: D7, P00, Z1

Keywords: Executive constraints, Islam, Collective action

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Missing Discussions: Institutional Constraints in the Islamic Political Tradition^{*}

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Abstract

Institutional constraints to counter potential abuses in the use of political power have been viewed as essential to well-functioning political institutions and good public policy outcomes in the Western World since the time of ancient Greece. A sophisticated intellectual tradition emerged to justify the need for such constraints. In this paper we identify a new puzzle: such an intellectual tradition did not exist in the Islamic world, even if the potential for abuse was recognized. We develop a model to explain why such ideas might not have emerged. We argue that this is due to the nature of Islamic law (the Sharia) being far more encompassing than Western law, making it easier for citizens to identify abuses of power and use collective action to discipline them. We study how the relative homogeneity and solidarity of Islamic society fortified this logic.

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1 Introduction

Political institutions matter for public policy. A large political economy literature emphasizes the importance of institutional constraints on rulers to induce them to act in the collective interest (Persson et al., 1997; Aghion et al., 2004; Persson and Tabellini, 2004; Acemoglu et al., 2013). Some argue that the "rise of Europe" was based on the creation of such political institutions (North and Thomas, 1973; North and Weingast, 1989; Acemoglu et al., 2005). This modern literature reflects a deep Western intellectual tradition that includes the political thought of Madison, Montesquieu, Aquinas, Cicero, Polybius, and many others reaching as far back as Plato and Aristotle.

In this paper we identify a new puzzle: A similar intellectual tradition never arose in the Islamic world from the rise of Islam in the 7th century to the 18th century, prior to the emergence of broader modernization and Westernization currents in the Ottoman Empire and Iran. That is, Muslim thinkers, jurists, and philosophers did not develop, even in theory, ideas about the necessity of institutional mechanisms that aimed to constrain rulers.¹ This is despite the fact that Muslim thinkers were concerned about abuses of power and had access to much of the discussion of institutional political constraints by classical Greek philosophers (for example Plato's *Republic* and *Laws*, and Aristotle's *Ethics*, even if not his *Politics*). Moreover, the innovativeness of Islamic society generally in the Middle Ages is well documented, e.g., Ibn Haytham's (Alhazen) discoveries in optics—see Mokyr (1990) for other examples. How can we then make sense of the absence of discussions on institutional constraints on rulers in the Islamic political thought for over a millennium?²

We establish this puzzle and develop a model that formalizes a mechanism to make sense of it. There are two broad channels to hold rulers accountable and induce them to act in the public good: institutional constraints and collective action. In our model, the government chooses a policy, but citizens can overturn it by coordinating a revolt. Rulers may have private interests and citizens are uncertain about optimal government policies. There are

 $^{^{1}}$ We cannot claim that no Muslim scholar discussed institutional constraints in over a millennium—surely, there are undiscovered or lost works. Our aim is to establish the (likely) absence of a normative tradition.

²There is a literature on the absence of ruler-constraining institutions in the Islamic civilization (Lewis, 1982; Huntington, 1996; Blaydes and Chaney, 2013; Rubin, 2017; Stasavage, 2020; Bisin et al., 2023; Chaney, 2022; Kuran, 2012, 2023). What this research does not explain however is why notions of institutional constraints on rulers did not develop even in theory.

two categories of policies: those that fall under the scope of divine law, and those that do not. Divine law specifies the right policies under its scope. For example, divine law may specify a 10 percent tax on particular goods, but may not fully specify legitimate expenditures for the revenues. We compare citizen welfare in this environment with one in which there are also institutional constraints on rulers. Institutional constraints keep the government's transgression in check by dividing state authority. However, they also generate deadweight loss due to decision-making frictions and administrative costs.

We show that a broader scope of divine law facilitates collective action by making the rulers' deviations from the right policies observable. When the majority believe in divine law, this reduces their marginal benefits of institutional constraints. The scope of divine law is therefore a substitute for institutional constraints. This logic is strengthened when there is a larger majority (more homogeneity) and higher psychological benefits from participating in successful revolts that improve the majority's welfare (higher solidarity). The broader scope of divine law enables society to better evaluate government policy and hence the desirability of revolt; however, this knowledge helps the people only when they can mobilize, and their mobilization capacity depends on their homogeneity and solidarity. There is complementarity between the scope of divine law and societal homogeneity and solidarity.

Institutional constraints and political stability (revolt attempt and success) arise jointly in equilibrium. We show that, if institutions are adopted when they improve the majority's welfare, institutional constraints and political stability are positively correlated. Intuitively, institutional constraints will not be adopted when collective action is an effective instrument to hold rulers accountable, e.g., in societies with comprehensive divine law and higher homogeneity and solidarity. Finally, we show that such societies have more institutional inertia: they are less likely to establish or dismantle institutional constraints in response to changes in their costs, e.g., reductions in costs due to the disappearance of foreign threats.

We argue that Islamic law in Islamic societies was viewed as divine law with a broad scope in public policy (Hallaq, 2009, 2014).³ In contrast, Ancient Greek city-states and the Roman

³By Islamic law, we do not mean unified legal codes associated with modernity in the 19th and 20th century Islamic regions (Hallaq, 2009). Rather, broadly speaking, Islamic law refers to what God prescribes for human behavior and beliefs—for our purposes, according to Muslim scholars. It includes, among others, the laws of worship, contracts, inheritance, marriage, taxation, and wars. It existed since the time of Muhammad and was practiced long before the formation of Sunni schools.

Republic virtually had no divine law, and divine law had a limited scope in the subsequent Christian civilization.⁴ Moreover, in the Islamic normative tradition, Islamic societies had a high degree of homogeneity and solidarity compared to the Western societies: all (were supposed to) contribute to the general welfare, "command right and forbid wrong" even in matters of government,⁵ and all (were supposed to) seek the implementation of the God's law. These features were embodied in the notion of the Islamic *umma*.

These observations allow us to apply and interpret our formal results to compare Islamic and Western societies. We argue that the characteristics of Islamic civilization (in particular, a law with a broad scope stemming from the Quran, the Hadiths, and early traditions), combined with the nature of society, meant that it was less desirable to construct institutional constraints on rulers along the lines advocated in the West in various forms from Plato and Aristotle onwards. Given the costs of such institutions, revolt was a more effective disciplining device. We argue that this is a potential explanation for the lack of an intellectual tradition proposing institutional constraints. Islamic intellectuals and scholars were aware of the problem of tyranny, but saw the desirable solution as being different.

The normative political tradition in Jewish civilization is also consistent with these interpretations. Here, as in Islam, the scope of divine law was also broad, and the discussion of institutional constraints on rulers was absent throughout the first and second temple periods from the founding of the state up until its absorption into the Roman empire, including the Hasmoneans (Bickerman, 1962; Stern, 1968)—See Section D of the Online Appendix.

Our formalization focuses on showing that the marginal benefits of institutional constraints were lower in the Islamic and Jewish relative to the Greco-Roman and Christian ("Western") normative traditions, given their different core assumptions. Our broader argument about the "missing discussions" of institutional constraints in the Islamic normative tradition is based on our view of scholarly activities before the modern period (unmodelled here). This implicit "model of discussion" posits that scholars were more likely to write on an alternative theory to the status quo theory if they expected that societal welfare under

⁴As Bernard of Clairvaux wrote "True, thy [the pope's] palace is made to resound daily with noisy discussions relating to law, but it is not the law of the Lord, but the law of Justinian" (Tierney, 2010, p.92).

⁵This is reminiscent of Ibn Khaldûn (2015)'s *asabiyyah*, which "gives protection and makes possible mutual defense, the pressing of claims, and every other kind of social activity" (p.107).

that alternative arrangement would exceed welfare under the status quo arrangement by a higher margin. This reflects the scholars' limited resources (e.g., time and access to prior works) and their desire to work on relevant and useful topics among many potential topics of inquiry, especially when specialization was uncommon and resources were more scarce than the modern period—this resonates with modern academic readers who reflect on how we choose research topics. This approach is also familiar from the notion of paradigm shifts in science: "As in manufacturing so in science [and so in political theory]—retooling is an extravagance to be reserved for the occasion that demands it" (Kuhn, 1962, p.76). Our formal results, combined with this "model of discussion", imply that scholars in the Islamic tradition were less likely to write on institutional constraints than those in the Western tradition.

To our knowledge, this paper is the first that identifies the puzzle of missing discussions of institutional constraints on rulers in the Islamic normative tradition. Some came close, mentioning the problem in passing without offering an explanation. For example, Crone (2004, p.277) observes: "it was the scholars who formulated the law that the imam was meant to execute; by their own account, it was also they who elected and deposed him on behalf of the community. One would have thought that there was only a short step from all this to the view that the scholars should also monitor his performance, for example by forming independent councils authorized to signal when the rules had been breached, to strike out illegal decisions, and to block their execution. Small though the step may seem, however, there were few who took it."⁶ Similarly, Roy (1994, p.61) notes that the "poverty of Islamist thought on political institutions is striking"; and Cook (2014, p.312) highlights that institutional constraints on rulers or "republics... were ignored by the normative tradition".

While the puzzle and explanation are new, the implications of our model are consistent with the literature documenting higher political instability in the Islamic versus the Western civilizations. For example, Cook (2001, p.161) argues that "In no other civilization was rebellion for conscience sake so widespread as it was in the early centuries of Islamic history"; Finer (1999, p.703) observes that between the 7th and the 10th centuries, the likelihood of

 $^{^{6}}$ Crone (2004) goes on to provide a few, short-lived, attempts on the eve of the Abbasid revolution to form councils that would rule along with the rulers. None of these attempts gained traction and they stand as exceptions proving the rule.

turmoil in Caliphate was higher compared to Byzantium: "On average, Byzantium suffered a violent incident every 16.7 years while the Caliphate did so every 7.4 years - *at more than double the rate*"; and Blaydes and Chaney (2013) provide quantitative evidence for this higher instability in the Islamic world from around 1000 to 1500. Our results are also consistent with the literature finding a negative correlation between institutional constraints and conflict (Besley and Persson, 2011).

Our paper is related to the origins of political institutions (Lizzeri and Persico, 2004; Acemoglu and Robinson, 2006) and the role of religion in their emergence, especially in the Islamic and Western civilizations. Blaydes and Chaney (2013) argue that executive constraints developed in Europe because rulers relied on local elites for military support. Because Muslim rulers relied on mamluks the society had less bargaining power to impose institutional constraints—see also Crone and Hinds (1986, p.106-7).⁷ This, in turn, caused instability because rulers transgressed more often without institutional constraints—see also Besley and Persson (2011), in which institutional constraints reduce conflict by restricting in-group transfers. In our model, too, institutional constraints and stability are positively correlated, but they are determined jointly in equilibrium. While Blaydes and Chaney (2013) focus on why Muslims had relatively less *ability* to constraint rulers via institutions, we focus on the relatively lower *demand* for such institutional constraints and the puzzling absence of discussions of institutional constraints in Islamic (and Jewish) traditions.

An emerging literature explains "the long divergence" in economic performance or cultural dynamics by highlighting different aspects of Islamic law and its scholars. Kuran (2023) argues that Islamic law caused the weakening of civil society by contributing to preventing the emergence of powerful, flexible civil society organizations to counter the state's power, hindering political freedoms. He identifies multiple complementary self-enforcing causal channels, including egalitarian inheritance laws that hindered wealth accumulation, economic partnership laws that did not recognize corporations until modern times, and laws governing endowments (waqf), which did not allow for accountability of their managers to their constituents— see also Kuran (2012). Rubin (2017) argues that the rigidity of Islamic

⁷Stasavage (2020) offers a similar argument, but claims that the decisive factor was the adoption of the bureaucratic apparatus of the Persian Empire.

law compared to the law in the Western tradition caused stagnation in the long run. He further discusses how the origins of Islam caused Muslim rulers to follow Islamic law to acquire legitimacy and explores the self-enforcing dynamics of this legitimation path. Bisin et al. (2023) formalize and expand those dynamics to study the long-run evolution of culture and institutions. In their model, concessions to religious elites lead to a more religious culture, which, in turn, increases the returns from such concessions. The long-run outcomes of the resulting dynamics tend to be theocracy or a secular regime. Platteau (2017) and Auriol and Platteau (2017) argue that the decentralized clerical structure in Islam, compared to Christianity, made bargaining between rulers and the clergy less effective in avoiding conflict through the co-optation of the clergy who oppose the rulers' reforms. In Auriol, Platteau and Verdier (2023), the ruler balances concessions to the military and a decentralized clergy some of whom ideologically oppose the ruler's reforms.

We share with this literature the premise that the legitimacy and longevity of Islamic rulers depended on following Islamic law, which limited the range of legitimate policies compared to the West. However, our focus is on establishing and making sense of a novel puzzle: the missing discussions of institutional constraints in Islamic political thought. Our explanation is based on the direct influence of Islamic law on institutional constraints on rulers (in the normative tradition), unmediated by its effect on the relative power of various social groups. Critically, it is not the specific nature of the laws (e.g., contract law), but its expansive scope that underlies our explanation. Thus, our framework suggests that the development of institutional constraints may be more related to the scope of the divine law than to secular politics. Muslim thinkers in the Islamic normative tradition had very different policy preferences than their more secular counterparts in the West. However, they, too, did not want their rulers to deviate from those preferred policies. We provide an explanation for why it made sense to them to focus on revolt as the preferred means of accountability.

More broadly, our paper follows the tradition of Macpherson (1962), viewing political ideas as being embedded in the social context. For Macpherson, the arguments of Hobbes and Locke for political institutions presupposed "a certain model of society" that "did correspond in large measure to seventeenth century English society" (Macpherson, 1962, p.16)—see also Ashcraft (1986). He characterized this as a market-based society of possessive individualists,

where men "continually expected to be invaded by others" (p.46). This logic implies that Islamic society would come up with different ideas about desirable political institutions. For example, it did not make sense to imagine a state of nature where all law was removed, since God had provided the law. Moreover, Islamic society was not the hyper-individualistic society Hobbes and Locke considered. Our model helps to understand how these differences meant that Islamic thinkers did not innovate the types of ideas that Hobbes and Locke did.

Our model has two intertwined building blocks: institutional constraints on rulers, and revolt by citizens. The first is essentially an agency model, but we are agnostic about the exact mechanism through which institutional constraints improve accountability. In our baseline model, dividing power among multiple rulers check transgressors. This can be interpreted as lowering the threshold of successful revolt as in Aghion et al. (2004), or as a reduced-form way of capturing the idea that separation of powers reduces rent-seeking as in Persson et al. (1997) and Acemoglu et al. (2013). In our model in the Online Appendix (Section B), the equilibrium behavior of rulers reveals information about the policy, so that institutional constraints provide the information necessary for revolt. Our model of revolt takes a global games approach (Morris and Shin, 2003) to coordination for revolt, and can be transformed into the revolt model of Boleslavsky et al. (2021). That divine law facilitates collective action by making the ruler's transgressions more transparent is reminiscent of Weingast (1997)'s argument that constitutions and social consensus can act as focal points for coordination problems. While we abstract from the issue of conversion (Saleh and Tirole, 2021) or the role of leaders in instigating or controlling revolt (Chaney, 2013), we show how an extension of our model captures the rulers' attempts to co-opt jurists as reducing the scope of divine law and discuss the consequences—see the discussions after Proposition 7.

The paper proceeds as follows. Next, we develop our model and present the formal analysis. Section 3 presents the evidence on the absence of arguments for institutional constraints on rulers in the Islamic normative tradition. Section 4 examines the relationship between Islamic law, rebellion, and accountability. A discussion and conclusion follows, where we discuss alternative explanations. Section D of the Online Appendix explores institutional constraints on rulers in Jewish, Greco-Roman, and Christian normative traditions. The Online Appendix also examines the robustness of formal results to alternative modeling choices.

2 Model and Theoretical Analysis

Players There is a unit measure of citizens and a ruler. Each citizen belongs to one of the two groups: majority and minority, with conflicting policy preferences. The size of the majority is $M \in (1/2, 1]$ and the size of the minority is 1 - M.

There are two types of rulers: majority-congruent and minority-congruent rulers. A majority-congruent ruler's preferences are aligned with the majority, while a minority-congruent ruler's preferences are aligned with the minority. A ruler is minority-congruent with probability $q \in (0, 1)$ and is majority-congruent with probability 1 - q.

Actions The ruler chooses a binary action $a \in \{0, 1\}$, representing government policy. After observing the ruler's action, citizens simultaneously decide whether to revolt. The revolution succeeds if and only if the measure of revolters exceeds the regime's strength $T \in (1/2, M)$. If the revolt succeeds, denoted by r = 1, the ruler's action is reversed, so that government policy a becomes 1 - a. If the revolt fails, the ruler's policy is maintained. Thus, the final government policy is d(a, r) = a(1 - r) + (1 - a)r.

Payoffs Citizen's policy payoffs depend on their group (majority or minority), the final government policy d, and the state of the world $s \in \{0, 1\}$. A minority citizen receives a policy payoff 1 if the final government policy is d = 1, and otherwise, a policy payoff of -1. In contrast, a majority citizen receives a policy payoff 1 if the final government policy matches the state of the world, and otherwise, a policy payoff -1.

Let k be the measure of revolters. Table 1 (Table 2) illustrates citizen i's payoffs when i is a member of the majority (minority), where $T \in (1/2, M)$ is the regime's strength, $\gamma \in (0, 1)$ is pleasure-in-agency rewards from revolting (Morris and Shadmehr, 2023), and $c_i \geq 0$ is citizen i's direct costs of revolting.⁸

The majority-congruent ruler is nonstrategic, always taking the action that matches the state of the world. The minority-congruent ruler's payoff, u, depends on his action, the state

⁸Without loss of generality, higher costs from participation in an unsuccessful revolt can be absorbed into pleasure-in-agency rewards γ and the distribution of heterogeneous costs c_i .

	If $a \neq s$			If $a = s$				
	k > T	$k \leq T$		k > T	$k \leq T$			
revolt	$(1+\gamma) - c_i$	$-1 - c_i$		$-(1+\gamma)-c_i$	$1 - c_i$			
no revolt	1	-1		-1	1			
Table 1: Majority citizens' payoffs.								
	If $a = 0$			If $a = 1$				

	11 W 0			11 0 1		
	k > T	$k \leq T$		k > T	$k \leq T$	
revolt	$(1+\gamma) - c_i$	$-1 - c_i$		$-(1+\gamma)-c_i$	$1 - c_i$	
no revolt	1	-1		-1	1	

Table 2: Minority citizens' payoffs.

of the world, and whether or not a successful revolution occurred against him. In particular,

$$u(a, r, s) = (a + (1 - a)\delta_s)(1 - r), \ \delta_s \in (0, 1)$$
(1)

That is, the minority-congruent ruler receives 0 if there is a successful revolt against him. Otherwise, he receives a payoff 1 if he takes action 1, and a payoff of δ_s if he takes action 0 in state s. We set $0 = \delta_1 < \delta_0 < 1$, so that he has more incentives to take action 0 in state 0 than in state 1, and he has more incentives to take action 1 overall.

Information It is common knowledge that Pr(s = 1) = Pr(s = 0) = 1/2. The ruler always observes the state s. Citizens do not observe the ruler's type, and they observe the state with probability $p \in [0, 1]$. For exposition, let \hat{s} be a truth-or-noise public signal of the state:

$$\hat{s} = \begin{cases} s, & \text{with probability } p \\ \emptyset, & \text{with probability } 1 - p \end{cases}$$

An interpretation is that there are various policy issues, ranging from criminal law (e.g., punishment for burglars) to public finance (e.g., the expenditure of revenue from conquests). A policy issue may be *preordained/canonical* or *non-preordained/secular*. When a policy issue is preordained/canonical, the majority has better information about the "right policy" for them. The probability that a preordained issue arises is $p \in [0, 1]$. Thus, a higher p

captures a larger scope of the law.

The costs of revolting c_i are correlated among citizens. In particular, $c_i = \bar{c} + \rho \epsilon_i$, $\rho > 0$, where $\bar{c} \sim H = U[0, 1]$ and $\epsilon_i \sim_{iid} F$, with F(0) = 0 and corresponding log-concave pdf f. A citizen *i*'s cost c_i is citizen *i*'s private information. We take a global games approach to equilibrium selection, focusing on the equilibrium outcomes in the limit when ρ is vanishingly small $(\rho \rightarrow 0)$.

Timing The timing of the game is as follows.

- 1. The nature determines the realizations of ruler's type, the state of the world s, signal \hat{s} , the common value of costs \bar{c} , and idiosyncratic elements of costs $\epsilon_i s$.
- 2. The ruler observes his own type, the state s, and \hat{s} . Each citizen i observes \hat{s} and her private cost c_i s.
- 3. The ruler chooses government policy a, which the citizens observe.
- 4. Citizens simultaneously decide whether or not to revolt.
- 5. Success of the revolution is determined, payoffs are received, and the game ends.

Strategies and Equilibrium A majority-congruent ruler is a behavioral type who always chooses a = s. A minority-congruent ruler's strategy is a mapping from the state of the world s and signal \hat{s} to a probability $\sigma(\hat{s}, s)$ of taking action 1: for every possible history $(\hat{s}, s) \in$ $\{(0,0), (1,1), (\emptyset,0), (\emptyset,1)\}$, the minority-congruent ruler's strategy specifies $\sigma(\hat{s}, s) \in [0,1]$. A strategy for citizen i is a mapping from her group membership, signal \hat{s} , government policy a and her private costs c_i to a decision whether to revolt. We characterize Perfect Bayesian Equilibria in the limit when ρ approaches 0.

Preliminary Analysis Because a minority citizen prefers d = 1, she revolts only if a = 0. Moreover, because $T \in (1/2, M)$, she revolts only if she believes that some members of the majority revolt as well when a = 0. For this to be part of an equilibrium, the (minority-congruent) ruler must sometimes take action 0 when the state is 1, and receive a payoff of 0. If, instead, the ruler takes action a = 1, his payoff will be 0 if and only if the probability of successful revolution is 1. As we will show in Proposition 1 below, this probability is always strictly less than one due to coordination and information frictions. Therefore, a ruler never takes a = 0 when the state is 1, and consequently a minority citizen never revolts in equilibrium.

We now focus on the decision of majority citizens; henceforth, by citizen, we mean a majority citizen. Let q' be a citizen's posterior belief that the ruler's action a does not match the state of the world s. The majority citizens' payoffs (Table 1) and information structure maps into the coordination problem analyzed in Proposition 1 of Boleslavsky, Shadmehr and Sonin (2021) by setting $u_r = u_0 = 1$, $\delta = \gamma$, $\theta = T$, and normalizing the size of citizens to M. Because the game has only one-sided limit dominance, there is always an equilibrium in which no one revolts. We follow the analysis of Boleslavsky, Shadmehr and Sonin (2021), and focus on symmetric cutoff strategy equilibria with cutoffs strictly greater than 0, when they exist.

To communicate the logic, suppose \bar{c} has full support on \mathbb{R} . A citizen *i*'s strategy in a symmetric equilibrium is described by a threshold c^* , so that she revolts if and only if her direct cost of revolt is below that threshold: $c_i < c^*$. When almost all citizens follow this strategy, for any \bar{c} , the size of revolters is $k(\bar{c}) = Pr(c_i < c^*|\bar{c})M$. The size of revolters $k(\bar{c})$ is decreasing, falling from $\lim_{\bar{c}\to-\infty} k(\bar{c}) = M$ to $\lim_{\bar{c}\to\infty} k(\bar{c}) = 0$, and crossing $T \in (0, M)$ at a unique \bar{c} . Let \bar{c}^* be that threshold, so that

$$Pr(c_i < c^* | \bar{c} = \bar{c}^*) = T/M$$
 (belief consistency)

Thus, given the strategy of others c^* , the consistency of beliefs with strategies implies that a citizen will believe: if $\bar{c} < \bar{c}^*$, then $Pr(c_i < c^* | \bar{c} = \bar{c}^*) > T/M$ and the revolution succeeds; if $\bar{c} \ge \bar{c}^*$, then $Pr(c_i < c^* | \bar{c} = \bar{c}^*) \le T/M$ and the revolution fails. A citizen with the critical threshold $c_i = c^*$ must be indifferent between revolting and not revolting:

 $Pr(\bar{c} < \bar{c}^* | c_i = c^*)(2q' - 1)\gamma = c^*$ (individual rationality)

where we recall that $q' = Pr(a \neq s)$, so that $Pr(a \neq s)\gamma - Pr(a = s)\gamma = (2q'-1)\gamma$. As Morris

and Shin (1998, 2003) show, when there is no common knowledge about the value of \bar{c} or when the noise in private signals becomes vanishingly small $(\rho \to 0)$, a citizen with the threshold signal $c_i = c^*$ believes that the size of revolters is distributed uniformly in its range [0, M], so that a revolution succeeds with probability (1-T/M).⁹ Thus, individual rationality condition implies that in the limit: $\lim_{\rho\to 0} c^*(\rho) = \lim_{\rho\to 0} \bar{c}^*(\rho) = (1-T/M)\gamma(2q'-1)$. Along with $\bar{c} \sim$ H, then, the probability of a successful revolution in the limit is $H((1-T/M)\gamma(2q'-1))$.

Proposition 1. In the limit when $\rho \to 0$, the likelihood of successful revolution is $\beta(q', M, \gamma) = H((1 - T/M)\gamma(2q' - 1))).$

The likelihood of successful revolution $\beta(q', M, \gamma)$ has natural properties: it is increasing in the size of the majority M and in pleasure-in-agency rewards γ , implying that the probability of successful revolt is higher in societies with higher levels of homogeneity or solidarity. It is also increasing in the posterior that the ruler chose a policy that did not match the state. In particular, citizens have a dominant strategy not to revolt when q' < 1/2; there is a successful revolution only if citizens believe that the ruler has likely taken a wrong policy.¹⁰

Proposition 1 summarizes the implications of our model of revolt, which we will use in the subsequent analysis. Alternative models of revolt can generate similar implications. We followed the literature that views coordination as a key element of revolt (Persson and Tabellini, 2009; Yanagizawa-Drott, 2014; Chen and Suen, 2016; Ananyev et al., 2019; Enikolopov et al., 2020).¹¹ As in the literature, participants can be viewed as both ordinary citizens and local elites as long as the overall number is sufficiently large that each potential participant views the marginal effect of her participation as negligible.

⁹This follows from the a statistical property that, in the limit, $Pr(\bar{c} < \bar{c}^* | c_i = c^*) = Pr(c_i \ge c^* | \bar{c} = \bar{c}^*)$. Alternatively, using this statistical property, one can substitute 1 - T/M from the belief consistency condition into the individual rationality condition to obtain the same result.

¹⁰The likelihood of successful revolt β is also decreasing in T, which captures, e.g., the ruler's strength relative to citizens. For instance, all else equal, a more vibrant civil society with more independent and flexible private organizations that control large resources corresponds to a lower T. Kuran (2016, 2023) argues that the institution of *waqf* contributed to locking private resources for public uses, relatively immune from government confiscations, but also with restrictions that hindered their employment in political actions.

¹¹Cantoni et al. (2019) find that protest actions can be strategic substitutes. Shadmehr (2021) reconciles empirical results by arguing that actions are strategic substitutes when goals are modest (e.g., keeping a movement alive), but coordination concerns dominate for ambitious goals such as changing the government.

Equilibrium Characterization To characterize equilibrium outcomes, recall that (1) $\sigma(\hat{s}, s)$ is the minority-congruent ruler's strategy given signal \hat{s} and state s, (2) $\hat{s} = s$ captures preordained policy issues and $\hat{s} = \emptyset$ captures non-preordained policy issues, and (3) $\beta(q', M, \gamma)$ is the probability of a successful revolt given a posterior belief q' that the ruler's action does not match the state $(a \neq s)$. First, consider preordained policy issues, so that citizens observe the state s, and hence they know whether it matches the ruler's action $(q' \in \{0, 1\})$. When s = 1, so that there is no conflict of interest between the ruler and citizens, the ruler chooses action 1. When s = 0, so that there is conflict of interest, the ruler faces a trade-off. Take action 1 and risk revolution for a high payoff of 1, or take the safe action 0 and receive a low payoff of δ_0 with certainty.¹² From Proposition 1, the probability of a successful revolt following action 1 is $\beta(1, M, \gamma)$. Thus, the ruler takes action 1 whenever $\delta_0 < 1 - \beta(1, M, \gamma)$.

Next, consider non-preordained issues, so that $\hat{s} = \emptyset$, and hence citizens have to infer whether the state matches the ruler's action in equilibrium. Let q'(a) be citizen posterior that the state does not match the ruler's action a:

$$q'(a) = Pr(s \neq a|a) = \frac{Pr(s \neq a, a)}{Pr(a)}.$$

Observe that $q'(a) \leq 1/2$ if and only if, in equilibrium, $Pr(s \neq a, a) \leq Pr(s = a, a)$. A majority-congruent ruler's action always matches the state. Thus, in equilibrium, a sufficient condition for $Pr(s \neq a, a) \leq Pr(s = a, a)$ is that the minority-congruent ruler takes action 1 with a weakly higher probability in state 1 than in state 0; that is, $\sigma(\emptyset, 1) \geq \sigma(\emptyset, 0)$. This is ensured by $\delta_0 > \delta_1$, so that the ruler has more incentives to take action 1 in state 1 than in state 0. Now, because $q'(\hat{s} = \emptyset, a) \leq 1/2$, no one revolts and the probability of successful revolution is 0 for any a (Proposition 1). Given that there is no risk of revolution in taking action 1, the minority-congruent ruler always takes action 1.

The majority citizen's expected policy payoff can then be calculated from this equilibrium

¹²When the ruler takes a = 1, minority members do not take part in the revolution because they strictly prefer to keep a = 1. Therefore, the only citizens who may participate in a revolt are the majority citizens, and Proposition 1 applies. On the other hand, if the ruler takes a = 0 when $\hat{s} = 0$, majority members do not take part in the revolution. Anticipating this, minority members recognize that a revolution will not succeed, and so they do not revolt.

characterization. Thus, we have proved the following Proposition.

Proposition 2. In equilibrium,

$$\sigma(\hat{s},1) = \sigma(\hat{s} = \emptyset, 0) = 1 \quad and \quad \sigma(\hat{s} = s, 0) = \begin{cases} 0 & ; \ \beta(1,M,\gamma) > 1 - \delta_0 \\ 1 & ; \ \beta(1,M,\gamma) < 1 - \delta_0 \end{cases}$$

There is a revolt only if $\hat{s} = 0$ and the ruler takes action 1. This revolt succeeds with probability $\beta(1, M, \gamma)$. Moreover, the expected policy payoff for a majority citizen is

$$\begin{cases} 1 - q(1 - p) & ; \ \beta(1, M, \gamma) > 1 - \delta_0 \\ 1 - q(1 - p\beta(1, M, \gamma)) & ; \ \beta(1, M, \gamma) < 1 - \delta_0. \end{cases}$$

When $\beta(1, M, \gamma)$ is sufficiently large, the threat of successful revolt deters rulers from majority-incongruent policies that fall under the scope of preordained law. Thus, a citizen's policy payoff is 1 unless both the ruler is minority-congruent and the policy issue is secular, in which case the citizen receives -1. When $\beta(1, M, \gamma)$ is lower, e.g., due to low levels of homogeneity or solidarity, there is no deterrence effect, and bad policies (from the majority's perspective) are reversed when the policy issue is preordained (so that a revolt is attempted) and the revolt succeeds.

To simplify exposition, in the main text, we focus on the citizens' policy payoffs. In Section A of the Online Appendix, we show that our results go through if the costs of revolt are included in the payoff of majority citizens. In particular, we show that accounting for the expected costs of revolt in citizen payoffs amounts to substituting β with $\beta_c(\beta) = \beta - \beta^2/4$ when calculating expected payoffs. This allows us to extend our qualitative results and comparative statics when payoffs are inclusive of revolt costs.

It is worth highlighting that to improve their welfare the majority could also attempt to reduce q. One may call this approach the Deuteronomic or Platonic approach to good governance by attempting to install good rulers and controlling their temptations via education, advice, or prayer. Plato's ideas in *Republic* on the selection and training of the guardians and philosopher-kings was an early secular example. In the Jewish tradition, Deuteronomic editors insisted that the king must "write for himself a copy of this Law on a scroll... And it shall be with him, and he shall read it all the days of his life, so that he will learn to fear the LORD his God, by carefully following all the words of this Law and these statutes, that his heart may not be lifted up above his brothers, and that he may not turn aside from the commandment, either to the right hand or to the left" (Deut 17:18-19). The Mirrors for Princes in the Islamic tradition (e.g., Nizam al-Mulk's $S\bar{\imath}a\bar{s}at N\bar{a}mih$, see Section 3.3) similarly advise the rulers to meet with religious scholars routinely to learn about Islamic law and tradition.

Discussions on the institutions designed to select good rulers reflect this approach. Such institutions include $sh\bar{u}r\bar{a}$ in the Islamic tradition (see Section 3) and various electoral institutions in the Western tradition, including arguments about the effect of larger electoral districts on improving the quality of elected officials ("fit characters" with "enlightened views and virtuous sentiments") in the Federalist No. 10 (Hamilton et al., 2008). However, institutional arrangements to select rulers are distinct from those aimed to constrain rulers once they are in power. As Halpern (1981, p.222) puts it in the context of the ancient Jewish tradition, "The body negotiating the elevation of the monarch has the opportunity to impose conditions, to extract promises, and to level ultimata. Whether the king after his accession actually paid attention to them is, of course, another matter, about which our sources are too inadequate to permit speculation". Similarly, in the Islamic tradition, Crone (2004, p.277) argues that, "once elected, the caliph was free to ignore all the advice he received". The next section turns to institutional constraints on rulers once they are in power.

2.1 Institutional Constraint, Revolt, and the Scope of Law

We now introduce institutional constraints to the model. These institutional constraints are aimed to increase the likelihood of majority-congruent government policies. We consider a particular form of institutional constraints that divide decision-making power between multiple rulers. This approach is reminiscent of separation of powers, but we are not concerned with executive versus legislative or judicial powers per se. For example, the presence of two Roman consuls is an example of this power-sharing institutional setting among rulers. **Model** The model is the same except that there are two rulers, ruler 1 and ruler 2, whose types (denoted by t_1 and t_2) are independent. Nature determines the state s, the signal \hat{s} , the rulers' types, the common value \bar{c} and the idiosyncratic values ϵ_i s of revolution costs. All the fundamentals and noises are independent of each other. The state is observed by both rulers, and the signal is observed by all. Moreover, a ruler observes his own type and the type of the other ruler,¹³ and a citizen i privately observes her own revolution cost $c_i = \bar{c} + \rho \epsilon_i$. Ruler 1 moves first, choosing $a_1 \in \{0, 1\}$. Then, ruler 2 observes a_1 and chooses $a_2 \in \{0, 1\}$. Absent revolt, the government's aggregate policy is a function of the rulers' actions, $A = y(a_1, a_2)$. Upon observing the rulers' actions a_1 and a_2 , citizens simultaneously decide whether to revolt. If the revolution succeeds, denoted by r = 1, the government's aggregate policy is maintained. Thus, the final government policy is $d(a_1, a_2, r) = A(1 - r) + (1 - A)r$. Payoffs are realized and the game ends.

A majority-congruent ruler is the same behavioral type as before. A minority-congruent ruler has the same payoffs as before, and if a revolution succeeds, both rulers receive 0. That is, the minority-congruent ruler's payoff u is:

$$u(a_1, a_2, r, s) = (A + (1 - A)\delta_s)(1 - r)$$
(2)

Citizens' payoffs are identical to the previous model, with the government's aggregate action A replacing the single ruler's action a. There is a deadweight loss $\mu \in [0, 1]$ due to institutional constraints, subtracted from the citizens' policy payoffs. The deadweight loss is associated with direct inefficiencies, delays, or administrative costs of institutional constraints such as power-sharing.

To proceed with the analysis, we must specify how the actions of two rulers (a_1, a_2) are combined into a government's aggregate policy A. Naturally, if both rulers take the same action, the aggregate government policy is the same as individual actions. When the rulers' actions differ, we take a certain stance. We assume that if one ruler takes action 0 and the

¹³In Section C of the Online Appendix, we present a model where the rulers do not observe each others' types. That model has multiple equilibria, and the forward induction refinement yields a unique equilibrium outcome described in Proposition 3.

other takes action 1, the government's aggregate policy will be 0: $A = \min\{a_1, a_2\}$. When actions differ, citizens will know that at least one ruler is minority-congruent, and that it is the minority-congruent ruler who has incentives to take action 1 in state 0. Moreover, the division in the government weakens the rulers' coercive power. Motivated by these observations, we assume that a majority-congruent ruler, backed by the majority, succeeds in making the aggregate government policy 0 even when his minority-congruent co-ruler attempts to set government policy 1. Another rationale is that when one of the rulers is majority-congruent, he will help the majority with government resources and ensure that a revolution attempt succeeds. In Section B of the Online Appendix, we present an alternative model of institutional constraints where $A = \max\{a_1, a_2\}$, and discuss which one of our main insights remain robust to the alternative specification.

Our modeling of institutional constraints aims to capture two key features. (i) Institutional constraints can directly reduce government power. While this may hinder the government's capacity to formulate and implement best policies (captured by μ), it also curbs the government's coercive power against citizens. (ii) Institutional constraints can facilitate the revelation of information to citizens about the government's private information (e.g., about the right policies). Our model in the text focuses on (i), while our model in Section B of the Online Appendix focuses on (ii).

Strategies and Equilibrium Let g denote the type of a majority-congruent ruler and b denote the type of a minority-congruent ruler, so that $t_j \in \{g, b\}$, for $j \in \{1, 2\}$. As before, a ruler j with type $t_j = g$ always chooses $a_j = s$. Let σ_1 be the strategy of ruler 1 with type $t_1 = b$, and σ_2 be the strategy of ruler 2 with type $t_2 = b$.

The strategy σ_1 is a mapping from the state of the world s, signal \hat{s} , and ruler 2's type t_2 to a probability of taking action 1: $\sigma_1(\hat{s}, s, t_2) \in [0, 1]$. The strategy σ_2 is a mapping from the state of the world s, signal \hat{s} , ruler 1's action a_1 , and ruler 1's type t_1 to the probability of taking action 1. Given that ruler 2 observes a_1 , ruler 1's type t_1 is not payoff-relevant, and hence we drop it from the arguments of σ_2 , writing $\sigma_2(\hat{s}, s, a_1) \in [0, 1]$.¹⁴ As before, a citizen i's strategy is a mapping from his group membership, signal \hat{s} , actions (a_1, a_2) and

¹⁴When ruler 2 is indifferent between actions 0 and 1, he may condition his action on t_1 , but as we will see, that will not matter for the equilibrium government policy A or citizen decisions.

her private costs c_i to a decision whether to revolt; and we characterize Perfect Bayesian Equilibria in the limit when ρ approaches 0.

Equilibrium Characterization under Institutional Constraints First, consider preordained policy issues, so that $\hat{s} = s$. When at least one ruler is majority-congruent, or when s = 1 (so that there is no conflict of interest), the aggregate policy will match the state. When both rulers are minority-congruent and s = 0, the minority-congruent rulers face a trade-off. As in Proposition 2, both of them take action 1 whenever $\beta(1, M, \gamma) < 1 - \delta_0$.

Next, consider non-preordained issues, so that $\hat{s} = \emptyset$. Let $Pr_{(t_1,t_2)}(A)$ be the probability of A conditional on rulers' types (t_1, t_2) , and let $q'(a_1, a_2)$ be the citizen posterior that the state does not match the aggregate policy A: $q'(a_1, a_2) = Pr(s \neq A | a_1, a_2)$. Suppose s = 1. The majority-congruent ruler takes action 1. If $a_1 = 1$, the minority-congruent ruler 1 takes action 1, because action 0 will yield a payoff of 0 whereas action 1 yields a strictly positive payoff; even if a revolution attempt follows, it fails with a non-zero probability. Due to the same reasoning, the minority-congruent ruler 1 also always chooses $a_1 = 1$ when s = 1. This implies that $Pr_{(t_1,t_2)}(A = 1 | \hat{s} = \emptyset, s = 1) = 1$ in any equilibrium. Moreover,

$$q'(1,1) = \frac{Pr(a_1 = a_2 = 1, s = 0)}{\sum_s Pr(a_1 = a_2 = 1, s)} = \frac{Pr(a_1 = a_2 = 1|s = 0)}{1 + Pr(a_1 = a_2 = 1|s = 0)} \le \frac{1}{2}.$$

That is, $(a_1, a_2) = (1, 1)$ does not provide sufficient information in favor of s = 0, and no revolts follow this action profile. This implies $\sigma_2(\emptyset, 0, 1) = 1$ in any equilibrium: upon observing $a_1 = 1$, if ruler 2 takes action 0, he at most gets δ_0 ; however, if he takes action 1, he will receive $1 > \delta_0$. Knowing that the minority-congruent ruler 2 will follow suit, the minority-congruent ruler 1 also takes action 1 even when s = 0: $\sigma_1(\emptyset, 0, b) = 1$. Thus, $Pr_{(b,b)}(A = 1|\hat{s} = \emptyset, s = 0) = 1$. This also implies q'(0, 0) = 0, therefore, majority citizens do not revolt following $(a_1, a_2) = (0, 0)$ and, because minority citizens cannot successfully revolt on their own, there are no revolts.

It remains to analyze what happens when s = 0 and rulers have different types. Suppose ruler 1 is majority-congruent, and ruler 2 is minority-congruent. If $(a_1, a_2) = (0, 1)$ is observed on the equilibrium path, majority citizens will deduce that s = 0: q'(0, 1) = 0, and they will not revolt because the aggregate action is 0. Because minority citizens cannot successfully revolt on their own, we conclude that there are no revolts following this action profile. Thus, ruler 2 is indifferent between the two actions, which is consistent with observing $(a_1, a_2) = (0, 1)$ on the equilibrium path: there is an equilibrium where $\sigma_2(\emptyset, 0, 0) > 0$. Alternatively, if $(a_1, a_2) = (0, 1)$ is never observed on the equilibrium path, Bayesian updating does not restrict q'(0, 1). If q'(0, 1) is high enough, ruler 2 is deterred from taking action 1, which is consistent with never observing $(a_1, a_2) = (0, 1)$ on the equilibrium path: there is an equilibrium where $\sigma_2(\emptyset, 0, 0) = 0$.¹⁵ Regardless, in any equilibrium, the aggregate action is 0 and there are no revolts: the majority-congruent ruler 1 will discipline the minority-congruent ruler 2. The same logic applies when the order is reversed. The following Proposition summarizes these results.

Proposition 3. Recall that A is the aggregate government action, and $Pr_{(t_1,t_2)}(A)$ is the probability of A conditional on rulers' types (t_1,t_2) . In equilibrium,

$$Pr_{(t_1,t_2)}(A=s) = 1, \quad if(t_1,t_2) \neq (b,b).$$

Otherwise,

$$Pr_{(b,b)}(A = 1|\hat{s}, s = 1) = Pr_{(b,b)}(A = 1|\hat{s} = \emptyset, s = 0) = 1$$

and

$$Pr_{(b,b)}(A = 1 | \hat{s} = s, s = 0) = \begin{cases} 1 & ; \beta(1, M, \gamma) < 1 - \delta_0 \\ 0 & ; otherwise. \end{cases}$$

There is a revolt only if $\hat{s} = 0$ and both rulers take action 1. This revolt succeeds with

¹⁵The equilibrium analysis simplifies even further if the minority-congruent ruler has a tie-breaking rule that favors $a_j = 0$ when he is indifferent. This can be microfounded by assuming that the minority-congruent ruler j obtains the payoffs associated with A if he takes action $a_j = A$, and 0 otherwise; or considering a infinitesimal positive payoff from taking $a_j = A$.

probability $\beta(1, M, \gamma)$. Moreover, the expected policy payoff for a majority citizen is

$$\begin{cases} 1 - q^2(1-p) - \mu & ; \beta(1, M, \gamma) > 1 - \delta_0 \\ 1 - q^2(1 - p\beta(1, M, \gamma)) - \mu & ; \beta(1, M, \gamma) < 1 - \delta_0. \end{cases}$$

Proposition 3 shows that institutional constraints disciplines a bad ruler when he is matched with a good co-ruler, and does not change his behavior when his co-ruler is bad.

Propositions 2 and 3 enable us to compare the marginal change in a majority citizen's policy payoff from institutional constraints, and study how it varies with the environment.

Corollary 1. The value of institutional constraints is:

$$\begin{cases} (1-p)(q-q^2) - \mu & ; \beta(1,M,\gamma) > 1 - \delta_0 \\ (1-p\beta(1,M,\gamma))(q-q^2) - \mu & ; \beta(1,M,\gamma) < 1 - \delta_0. \end{cases}$$

When the policy issue is not preordained, which happens with probability 1 - p, both rulers must be minority-congruent for the final government policy to be A = 1 in state s = 0. Thus, the marginal benefit of institutional constraints is $(1 - p)(q - q^2)$. When the policy issue is preordained, but the probability of successful revolt is sufficiently high $(\beta(1, M, \gamma) > 1 - \delta_0)$, the threat of revolt suffices to discipline the minority-congruent rulers and there is not marginal benefit to institutional constraints. However, when the probability of successful revolt is lower $(\beta(1, M, \gamma) < 1 - \delta_0)$, so that minority-congruent rulers risk revolt, again institutional constraints imply that both rulers must be minority-congruent and the revolution fails for the final government policy to be A = 1 in state s = 0. Thus, the marginal benefits of institutional constraint is $p(1 - \beta(1, M, \gamma))(q - q^2)$.

Overall, institutional constraints benefit the majority both when the policy issues are preordained and when they are not, but with a higher margin for non-preordained policy issues: $(q - q^2)$ when the policy issue is not preordained and 0 or $(1 - \beta(1, M, \gamma))(q - q^2)$ when it is preordained. Thus, a wider scope of the law (higher p) tend to reduce the added value of institutional constraints. We now state our main formal result. **Proposition 4.** There is a threshold $p^*(M, \gamma, q, \mu)$ such that a majority citizen's policy payoff is higher without institutional constraints if and only if the scope of the divine law $p > p^*$, where

$$p^*(M,\gamma,q,\mu) = \begin{cases} 1 - \frac{\mu}{q(1-q)} & ; \beta(1,M,\gamma) > 1 - \delta_0 \\ \\ \frac{1}{\beta(1,M,\gamma)} \left(1 - \frac{\mu}{q(1-q)}\right) & ; \beta(1,M,\gamma) < 1 - \delta_0. \end{cases}$$

Moreover,

- 1. If $p^*(M, \gamma, q, \mu) > 0$, then $p^*(M, \gamma, q, \mu)$ is decreasing in M and γ ; strictly so if and only if $\beta(1, M, \gamma) < 1 \delta_0$.
- 2. $p^*(M, \gamma, q, \mu = 0) \ge 1$. For $\mu > 0$, $p^*(M, \gamma, q, \mu)$ has an inverted U-shape in q, with

$$lim_{q\to 0^+}p^*(M, \gamma, q, \mu) = lim_{q\to 1^-}p^*(M, \gamma, q, \mu) = -\infty.$$

The threshold p^* follows from Corollary 1 and results 1 and 2 follow from the inspection of p^* . The majority can discipline the government to some extent solely by revolt or the threat of revolt. They can also combine this accountability instrument with institutional constraints at a cost. If these costs were negligible ($\mu \approx 0$), they would always do so. When the costs are higher, they must trade off the added benefits of institutional constraints against their costs. These benefits are higher when the scope of the law is narrower (p is lower), when the society is more heterogeneous (M is lower), or when the society has less "solidarity" (γ is lower). All these reduce the effectiveness of the revolt accountability channel by intensifying information and coordination frictions involved in collective action. That is, the marginal net gain from institutional constraints are lower when the revolt channel of disciplining rulers works more effectively. In this sense, institutional constraints and revolt are substitutes. Figure 1 illustrates p^* as a function of the degree of homogeneity in society M. The majority do not set up institutional constraints above the curve, where p and Mare higher. Like the effect of homogeneity M, higher solidarity sentiments γ lower $p^*(M)$, as the dashed curve in Figure 1 illustrates.

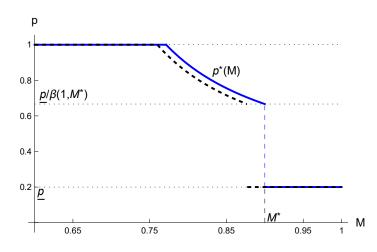


Figure 1: $p^*(M; q, \mu)$, where $\beta(1, M^*, \gamma) = 1 - \delta_0$ and $\underline{p} = 1 - \mu/(q(1-q))$. Parameters: $\mu = 0.2, q = 0.5, T = 0.6, \delta_0 = 0.7$, and $\gamma = 0.9$. The dashed curve corresponds to $\gamma = 0.95$.

Increases in the likelihood q that a ruler is bad first raise and then reduce the added value of institutional constraints. When rulers are almost surely good $q \approx 0$ or almost surely bad $q \approx 1$, institutional constraints have little marginal effect. The effect is maximized when there is also maximum uncertainty about the ruler's type q = 1/2. Figure 2 illustrates.

Moreover, it may be reasonable to posit that normative traditions view the typical range of q to be (0, 1/2], perhaps closer to 1/2. After all, citizens are supposed to do everything possible to install a good ruler. It then follows that p^* is increasing in q, so that societies that believe rulers are more likely to be bad, tend to value institutional constraints more. This observation points to another point of departure between the Christian tradition and the Jewish and Islamic traditions. The notion of the Original Sin (formulated by Augustine), prevalent in the Christian tradition, has no counterpart in the Jewish and Islamic traditions. That negative view of human nature may be reflected in having higher likelihood that a ruler is bad, thereby raising the marginal benefit of institutional constraints. The notion that selfinterested rational people would, if they got the chance, take actions that were collectively undesirable is deeply embedded in western intellectual traditions (see Ober (2022) for an analysis of how this emerged in the Greek world).

In Proposition 4, we focused on the threshold of the scope of the law p. We can also focus on the threshold of the costs μ . From Corollary 1, we have:

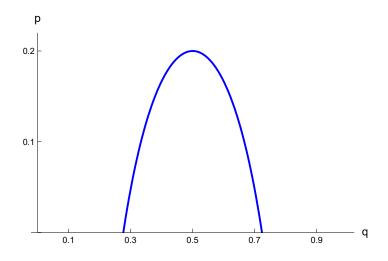


Figure 2: $p^*(q; M, \mu)$ when $\beta(1, M) > 1 - \delta_0$. The case of $\beta(1, M) < 1 - \delta_0$ differs only in scale. Parameters: $\mu = 0.2$.

Proposition 5. There is a cost threshold such that the majority citizen's policy payoff is higher without institutional constraints if and only if $\mu > \mu^*$, where

$$u^*(\beta, p, q) = \begin{cases} (1-p)(q-q^2) & ; \beta > 1-\delta_0 \\ \\ (1-p\beta)(q-q^2) & ; \beta < 1-\delta_0, \end{cases}$$

where $\beta = \beta(1, M, \gamma)$. Moreover,

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- 1. μ^* is strictly decreasing in p, and weakly decreasing in $\beta(1, M, \gamma)$ (and hence in M and γ); strictly so when $\beta < 1 \delta_0$.
- 2. Suppose $\delta_0 < T/M$, so that there is sufficient conflict of interest that the threat of revolt does not deter the minority-congruent ruler ($\beta < 1 \delta_0$). Then,

$$\frac{\partial^2 \mu^*(\beta, p, q)}{\partial p \partial \beta} = -(q - q^2) < 0.$$

Higher scope of the law p, societal homogeneity M or solidarity γ all improve the majority's ability to control the ruler via revolt channel, thereby reducing the marginal value of institutional constraints, and hence the cost threshold below which they are adopted. Importantly, the second part of Proposition 5 highlights the complementarity between the scope of the law p on the one hand and homogeneity M and solidarity γ on the other (recall that β is increasing in both M and γ). Higher homogeneity and solidarity both increase the likelihood of successful revolution. Higher scope of the law enable majority citizens to better assess whether a successful revolution, which overturns the status quo, will be beneficial. These two channels complement each other: higher scope of the law is valuable because it enables citizens to better know when their rulers deviate from the right policy, but this knowledge helps them if only if they can mobilize, and their mobilization capacity depends on their homogeneity and solidarity.

Increases in the marginal costs of institutional constraints μ tend to reduce their use. For example, in the Roman Republic, in which two consuls shared the highest executive office, the Senate, during times of crisis such as military defeats, sometimes authorized a "dictator" to reduce the costs of institutional constraints, including joint decision-making. Wars and natural disasters may raise μ and reduce institutional constraints on rulers. Which conditions are more conducive to the dismantlement of institutional checks due to such events? To glean insights, we introduce uncertainty about γ and discuss the probability of adopting institutional constraints due to an exogenous change in the cost of institutional constraints.

Proposition 6. Suppose $\gamma \sim U[0,1]$. Let $Q = Pr_{\gamma}(\mu \leq \mu^*(\gamma))$ be the probability that institutional constraints improve the majority citizen's policy payoff. Suppose $\delta_0 < T/M$, so that there is sufficient conflict of interest that the threat of revolt does not deter the minoritycongruent ruler ($\beta < 1 - \delta_0$). Then,

$$Q(\mu'; M, p) = \begin{cases} 1 & ; \mu' \le 1 - (1 - T/M)p \\ \frac{1 - \mu'}{(1 - T/M)p} & ; 1 - (1 - T/M)p \le \mu' \le 1 \\ 0 & ; 1 < \mu', \end{cases}$$

where $\mu' = \mu/(q - q^2)$. Moreover,

- 1. Q is decreasing in p and in M; strictly so when $\mu' \in (1 p(1 T/M), 1)$.
- 2. $|Q(\mu'_2) Q(\mu'_1)|$ is strictly decreasing in p and M for all $\mu'_2 > \mu'_1$, with $\mu'_1 \in (1 p(1 T/M), 1)$.

Proposition 6 provides insights into the effect of changes in the costs of institutions. It may be more realistic to focus on settings where society's potential for collective action is high enough, so that the society may or may not adopt institutional constraints depending on the level of solidarity γ : $1 - p\beta(1, M, \gamma) < \mu/(q - q^2)$ for $\gamma = 1$. Thus, consider a reduction in the costs of institutional constraints from μ'_2 to $\mu'_1 > 1 - p(1 - T/M)$, e.g., due to peacetime. This drop in costs leads societies with lower levels of γ to adopt institutional constraints. But, as part 2 of the Proposition shows, this change tends to be smaller when the scope of the law p is larger. This is because solidarity and the scope of the law are complements in disciplining the rulers: the disciplining value of higher γ s are larger when the scope of the law p is higher, and hence the added-value (marginal benefits) of institutional constraints are smaller. Therefore, societies with high scope of law are less responsive to a decrease in Conversely, an increase in costs from $\mu'_1 > 1 - p(1 - T/M)$ to $\mu'_2 > \mu'_1$ will cause the μ . dismantling of institutional constraints by less when in societies with a larger scope of law p. That is, higher scope of law generates inertia in the institutional constraints that aim to control rulers. The same logic applies to the degree of homogeneity of the society M.

Taking the emergence of institutional constraints as exogenous, for a given set of parameter values, the probability of revolt attempt $(p\hat{q}/2)$ and successful revolt $(p\hat{q}\beta/2)$ are both lower with institutional constraints, where $\hat{q} = q^2$ and q, with and without institutional constraints, respectively. This observation captures Blaydes and Chaney (2013, p.24-5)'s argument that the development of feudalism (and hence some form of executive constraints) in Europe led to its higher political stability compared to the Islamic societies. However, our analysis highlights that the adoption of institutional constraints as means to hold rulers accountable may be the consequence, not the cause, of the ability of the society to mount revolts. More broadly, institutional constraints and political stability (the likelihoods of revolt attempts and successes) arise jointly in equilibrium. To see this, consider two societies W (for West) and E (for East), which are identical in all aspects except the scope of the law, with $p_W < p^* < p_E$. In this case, society W adopts institutional constraints, but society E does not. The likelihood of successful revolt in W is smaller than that in E: $q^2\beta p_W/2 < q\beta p_E/2$. The reason is twofold: (1) conditional on an incongruent government policy, revolt attempts are more likely in society E (revolt are attempted when deviations are observed, which happen with probabilities $p_W < p_E$); (2) the likelihood of deviations (i.e., incongruent government policies) are higher in society E, which has not adopted institutional constraints $(q^2 < q)$. But as our analysis highlights, society E may forgo institutional constraints exactly because it is more effective at holding rulers accountable through collective action. The following proposition formalizes this logic. It highlights how the substitutability of revolt and institutional constraints can predict a negative correlation between institutional constraints and political stability (i.e., revolt attempts and successes), both of which are determined jointly in equilibrium. In the proposition, we focus on the comparative statics with respect to our main variable of interest p, fixing all other parameters (e.g., q, M, γ).

Proposition 7. Suppose that $p^* \in (0,1)$ and that $\delta_0 < T/M$, so that there is sufficient conflict of interest and the threat of revolt does not deter the minority-congruent ruler $(\beta < 1 - \delta_0)$. Focusing on the scope of the law p as the only source of variation, the equilibrium probabilities of revolt attempts and successful revolt are both lower in societies with institutional constraints. Formally,

$$\mathbb{E}[pq/2 \mid p > p^*] > \mathbb{E}[pq^2/2 \mid p < p^*] \quad and \quad \mathbb{E}[pq\beta/2 \mid p > p^*] > \mathbb{E}[pq^2\beta/2 \mid p < p^*],$$

for a given q and $\beta = \beta(1, M, \gamma)$.

The endogeneity of institutional constraints is captured in the conditioning on the subset of parameters in which institutional constraints are or are not adopted (i.e., the added-value of institutional constraints exceeds their cost, $p > p^*$, or not, $p < p^*$). As we discussed in the Introduction, these results are consistent with the empirical observations in the literature on Islamic civilization (Blaydes and Chaney, 2013; Finer, 1999) and with the broader literature on the positive correlation between institutional constraints and political stability (Besley and Persson, 2011).

Of course, multiple causes can contribute to this systematic difference in stability. For example, Auriol and Platteau (2017) and Platteau (2017) argue that the decentralized structure of the clergy in Islam, compared to Christianity, made bargaining between rulers and the clergy less effective in avoiding conflict through the co-optation of the clergy who oppose the rulers' reforms. More broadly, because some form of co-option of the clerics also appear in Rubin (2017), Bisin et al. (2023), and Auriol et al. (2023), we next discuss how our setting can accommodate such actions.

To capture the rulers' attempts to co-opt the law or the jurists, suppose that rulers can pay a cost to reduce the probability p that citizens observe the state. These costs include co-opting the jurists to overlook transgressions, or offer an interpretation of the law, when possible, to support the rulers. Of course, jurists (even in a centralized setting) cannot make interpretations or take positions that too starkly contradict the broad understanding of the law—else, they lose their support and risk condemnation by other clerics. However, occasionally there is room for overlooking the law or providing non-standard interpretations which may benefit the rulers. Recalling that citizens revolt when the state is s = 0, they observe the state $\hat{s} = s$, and the government takes action 1, the marginal benefit of reducing p to the (incongruent) government is $\beta(1, M, \gamma)/2$, both without and with institutional constraints—when both rulers are bad. The government then chooses an appropriate expenditure that equates the marginal costs and benefits of reducing p. In this extended model, co-option translates into a smaller scope of the law. One may further relax the assumption that the costs of reducing p is the same with and without institutional constraint. This, in turn, further increases the added value of the institutional constraints. Either way, a higher scope of the law reduces the added-value of institutional constraint, which is the core of our argument about Islamic and Western normative traditions.

3 Institutional Constraints on Rulers in the Islamic Tradition

As the prophet, Mohammad (d. 632) was the leader (*imam*) of the Islamic community (*umma*). The Constitution of Medina also recognizes Mohammad as the ultimate judge and arbitrator in case of disagreements among the members of the *umma* (Watt, 2003, p.130-4; Lecker, 2004). The tribal nature of early Muslim society and Mohammad's emphasis on building consensus through consultation (*mashwara/shūrā*; e.g., the Quran (3:159; 42:38)), combined with his prophetic charisma, would alleviate concerns about the concentration of

coercive power. Upon Mohammad's death, Abū Bakr (d. 634) was selected as the next leader in a gathering of a group of prominent members of the Medinese Muslim community, and he adopted the title of *caliph* (*khalīfa*, meaning "successor" or "deputy"). Before his death, Abū Bakr designated 'Umar (d. 646) as his successor. 'Umar, in turn, designated a small group of notables ($sh\bar{u}r\bar{a}$) to select the third caliph, and so 'Uthman (d. 656) was selected.¹⁶ However, this semi-egalitarian structure changed soon after. The rebellion and killing of the third caliph, 'Uthman, led to a crisis, which evolved into the First Civil War (656-661) during the rule of the fourth caliph, 'Ali (d. 661). In turn, 'Ali was assassinated and his challenger Mu'awyah (d. 680), a kinsman of 'Uthman and the governor of Syria, became the next caliph (Madelung, 1997; Crone, 2004).

Concerns about tyranny became widespread under Mu'awyah who established hereditary succession and thereby the Umayyad dynasty. By the late 7th century, the fourth Umayyad caliph 'Abd al-Malik (d. 705) "wanted his subjects to believe that the power and the kingship...was a possession...granted by God and inalienable according to the divine will (Lambton, 1981, p.46; see also Black, 2011, p.18, and Donner, 2011, p.82-4). The title *caliph* referring to the deputy of God (*khalīfat Allāh*), as opposed to the deputy of God's messenger (*khalīfat rasūl Allāh*), appeared on coins for the first time in 'Abd al-Malik's reign (Anjum, 2012, p.47); The policies of the Umayyad caliphs and their sumptuous lifestyle were sharp departures from the behavior of Mohammad and his immediate successors. For example, the second Umayyid caliph, Yazid ibn Mu'awyah, "is often considered the epitome of injustice, impiety, and corruption" (Abou El Fadl, 2001, p.117). Various revolts broke out over "the Umayyad manner of distributing revenues...maltreatment of the Prophet's family, tyranny and the like" (Crone and Hinds, 1986, p.64).

However, we have no record of discussions about institutional constraints on rulers in that period. This puzzling absence persists during the Abbasids, who replaced the Umayyads in

¹⁶Crone (2001, p.3) traces early references to $sh\bar{u}r\bar{a}$ "as a procedure for deciding who should be in charge of the government". Stasavage (2020) takes the ideas and practices of $sh\bar{u}r\bar{a}$ as evidence of "early democracy" in the Islamic community, inherited from the pre-Islamic Arabia, which was overturned when the Islamic state adopted the elaborate Sassanian bureaucratic apparatus of the conquered regions. However, in his history of the early Islamic state and its political and military structures, Donner (1981) highlights the emergence of a ruling elite from the early years. For our purposes, different notions of $sh\bar{u}r\bar{a}$ did not develop (in theory or practice) into institutional constraints on rulers once they assumed power, via $sh\bar{u}r\bar{a}$ or other mechanisms. Of course, rulers were encouraged to consult the community and religious scholars.

750, and through various dynasties and kingdoms in the following millennium.¹⁷

To establish this puzzle, following Rosenthal's (1971, p.17-33; see also Lambton, 1981) classic categories, we divide political writings in Islamic civilization into three groups, depending on whether their primary foundation is Islamic law, philosophy, or advice-giving in the manner of Mirrors of Princes.¹⁸ We provide brief discussions of a few well-known examples in each category to touch on the political themes that Muslim thinkers engaged with and to demonstrate the absence of discussions about institutional constraints on rulers. Such discussions are also absent in comprehensive surveys of Islamic political thought (Rosenthal, 1958; Lambton, 1981; Crone and Hinds, 1986; Crone, 2004; Black, 2011; Cook, 2014).

Obviously, the corpus of Islamic writings with direct political implications is vast. For example, the above categories do not include the writings and traditions of mystic orders that sometimes had direct political implications (Babayan, 2002; Ziad, 2021). However, mystic orders with their emphasis on the spiritual (and sometimes temporal) leaders with divine inspiration tended to be even less concerned with institutional constraints.

3.1 Juristic Writings

Jurists insisted that caliphs must follow Islamic law and resisted attempts by caliphs to modify the law. In this narrow conception of constitutionalism (Klosko, 2012, p.297-9), they were "constitutionalists" (Watt, 2003). For example, when the caliph Hārūn al-Rashīd commissioned his chief judge Abu Yusuf (d. 798) to review taxation, the resulting *Kitāb al-Kharāj* detailed Islamic law "for the rates of taxation and the expenditure of the revenue according to the source from which it derived" (Lambton, 1981, p.55). Shāfi'ī's (d. 820) emphasis on the role of $ijm\bar{a}^{\epsilon}$ (consensus) as a source of Islamic law (Bernand, *Encyclopaedia of Islam, 2nd Ed.*) further reduced the legislative power of caliphs: "To al-Shāfi'ī the ultimate arbiter was the consensus of the entire community: the caliph counted only so far as every

¹⁷There are hints of institutional constraints in the reported statements of a few individuals, e.g., *al-Hārith ibn Surayj* (d. 746), a rebel leader against the Ummayads, or *al-Aṣamm* (d. 816/7), a Mu tazilī theologian. However, these sparks did not turn into any coherent discussions (Crone, 2004, p.277-8)—see also van Ess (*Encyclopaedia of Islam, 2nd Ed.*), Crone (2000), and Stern (1970).

¹⁸Many writings have multiple elements. For example, religious concerns and orthodoxy are intertwined with politics, justice, and stability in Nizam al-Mulk's $S\bar{i}y\bar{a}sat N\bar{a}mih$, in contrast to Machiavelli's instrumentalist approach to Christianity. However, the dominant theme of each work is typically clear.

member of the *umma* did" (Crone and Hinds, 1986, p.93). Hallaq (2009, p.70) goes as far as arguing that "[w]hereas law – as a legislated system – was often 'state'–based in other imperial and complex civilizations, in Islam the ruling powers had, until the dawn of modernity, almost nothing to do with the production and promulgation of legal knowledge."

Of course, rulers tried to give themselves more freedom to change or reinterpret the law in ways that suited them. An example of such an attempt is the inquisition (*mihna*), which was started in 833 by the Abbasid caliph al-Ma'mūn (d. 833) and lasted until 848/9. During the inquisition, religious judges and scholars were pressured to accept the doctrine that the Quran was created (Lapidus, 1975, p.380). This theological point had critical implications. Watt (2003, p.88) argues that "if the Qur'ān was created, God could presumably have created a different Qur'ān in other circumstances. Or... God's plenipotentiary, the imam or the charismatic head of the state, acting with divine authority, could set aside...specific commands of the Qur'ān and, more generally, the provisions of the Sharī'a" (p.87-88). According to Lapidus (1975, p.380), during the inquisition, "the theological opposition is clearly linked to popular demonstrations against the policy of the regime".

Some jurists specified conditions under which a sitting ruler could be deposed, and some such depositions "may have been accompanied by a formal *fatwa* [a legal opinion issued by a jurist] authorizing it on various moral or religious grounds" (Gibb, 1982, p.161)—see Section 4.2. Critically, while jurists discussed conditions that disqualify a sitting imam, they did not "lay down any procedure by which an Imam may be deposed" (Gibb, 1982, p.161) (imam/imamate and caliph/caliphate are virtually the same in our discussions). According to Lambton (1981, p.19), "a command contrary to *sharī'a* was not to be obeyed. The jurists, however, did not specify in what way or by what tribunal it was to be decided that the leader of the community had failed to remain faithful to the *sharī'a*". There were some procedures for the election of caliphs in theory – see below. However, as Crone (2004, p.277) argues, "once elected, the caliph was free to ignore all the advice he received."

Systematized juristic formulations of government authority appeared in the High Middle Ages. An example is Mawardi's (d. 1058) *al-Aḥkām al-Sulţāniyah* (The Ordinances of Government), which provides a theory of the caliphate. Like his Sunni and proto-Sunni predecessors, Mawardi viewed the institution of imamate as obligatory for the Muslim community. He argued that the imam should be elected by qualified electors from qualified candidates. However, even one elector could suffice; the previous imam could designate the next one, or limit the candidate pool. Mawardi's main contribution was to offer a juristic theory of imamate, partly based on the principles of necessity and expediency, that would allow for a caliph with little de facto power to remain as caliph, so that the umma is not left without an imam while the de facto power remains with various Muslim dynasties that ruled different Islamic regions—e.g., the Buyids (945-1055). His theory was a response to a crisis in the theory of caliphate. On the one hand, the institution of imamate was obligatory and it was necessary for the fulfilment of various Islamic laws. On the other, the Abbasid caliphs were at the mercy of the Buyid rulers. Thus, Mawardi developed the notion of *imārat al-istīlā*, in which "the governor of a province, instead of being appointed and revocable by the caliphs, imposes his rule by force" (Gibb, 1982, p.162). As long as such rulers maintained their allegiance to the caliph and upheld Sharia, Mawardi argued, the caliph must validate and legitimize their government. An imam/caliph could coexist with various kings/sultans.

Importantly for our purposes, Mawardi detailed conditions that disqualify a sitting imam, but without offering any institutional procedure for deposing him. Neither did he suggest institutional procedures for holding regional kings accountable. Even if a sultan acted egregiously, all Mawardi offered was that "it becomes the duty of the Imam to call to his aid those who will restrain the usurper's hand" (Gibb, 1982, p.160). Like other jurists, he seems to have preferred rebellion and war as the instruments of accountability. Baghdadi (d. 1037), Juwayni (d. 1085) and Ghazali (d. 1111) provided variations of these themes—see Hallaq (1984) on Juwayni's and Hillenbrand (1988) on Ghazali's political views.¹⁹

The next major development occurred after the fall of the Abbasid caliphate to the Mongols. The problem was to provide an Islamic foundation for the government without the caliphate. Ibn Taymiyya (d. 1328), in $al-S\bar{i}y\bar{a}sa\ al-Shar iyya$, argued that the legitimacy of government lies in upholding sharia, encompassing obedience to God and the prophet and establishing peace and prosperity. So there could be many imams and governments in different parts of Islamic lands, established by force or some form of election. He viewed the "oath of

¹⁹They disagreed on details. For example, while Baghdadi (d. 1037), allowed for multiple imams on distant lands with no overlapping jurisdictions, Mawardi insisted on there being a sole imam at a given time.

allegiance" between the community and the imam as a form of contract. "It was, he states, a contract and was, like all contracts, defined by its end, which was the common will to obey God and His prophet. Also, like all contracts, it presupposed two parties: on the one side there was the *imam* and on the other Ibn Taymiyya sets not only the '*ulama*' [(jurists)] but all those who by their learning, talent, wealth, or personal influence actually held authority over the community" (Lambton, 1981, p.148). Mutual obligations included the obedience of the community, but also their duty to offer council to the ruler, enjoin the good and forbid evil. Conversely, the ruler was obligated to consult the community, uphold justice (including just division of government funds), and appoint good officials. In his view, Lambton (1981, p.149) argues, government was to be "a harmonious association of complementary qualities which had originally been centered in one person and which were indispensable for the perfect functioning of the state. He conceives such co-operation as existing between the 'ulama', the depositories of the law and the 'umara' [(rulers)], the holders of political power." Whether the government was a contract or "a harmonious association" between the ruler and the community, Ibn Taymiyya did not propose institutional constraints on rulers to hold them accountable. Khunji (d. 1521) provided a variation of these themes, e.g., recognizing as an imam someone who establishes the government by military force, without any form of election or expression of allegiance on the part of the community-effacing the distinction between imams/caliphs and kings/sultans (Lambton, 1981, Ch.XI).

By the 16th century, following the Ottoman conquests, the title of caliph was claimed by Ottoman kings. Jurists obtained significant power in the Ottoman Empire by the 17th century. Islamic law was invoked in matters of "succession, the legitimacy of a particular sultan, and the question of legitimate revolt against the government in a manner and frequency unmatched in the history of the Islamic world before the Ottomans" (Tezcan, 2010, p.237). For example, jurists were involved in the rebellions against Othman II in 1622, Ibrahim in 1648, Mehmed IV in 1678 (Tezcan, 2010), and Mustafa II in 1703 (Abou-El-Haj, 1984). In fact, Abdurrahim, the grand mufti [(chief jurist)], "gave the legal opinion that legitimized the regicide [of Ibrahim], and oversaw the execution personally" (Tezcan, 2010, p.220). Abou-El-Haj (1984, p.71-2) provides legal opinions (fatwas) by Ottoman jurists, which legitimized revolt against an unjust imam/caliph/sultan/king and rendered supporting such an unjust imam against the rebels unlawful. Of these legal opinions, Aksan (2022, Ch.2) describes, "The second legitimated the right of a Muslim community to stand up to an unjust ruler. The third condemned those who sided with an unjust ruler." The ability to constrain the sultan through rebellion, Tezcan (2010, p.238) argues, contributed to the longevity of the dynasty: "If an emperor could be 'recalled' and replaced by another one, not only was there no longer any need to challenge the dynasty but... there was also a considerable incentive to keep the dynasty in operation to maintain its openness to political representation". Ottoman jurists, like their predecessors, seem to have preferred the "revolt channel" over more institutional means of accountability.

Of course, there were various branches of Islam. Our focus on Sunni Islam reflect its predominance in Islamic history. In some regions (e.g., Iran), variations of Shia Islam became prevalent with Shi'i rulers controlling political power. Proto-Shi'i and Shi'i jurists, with their various divisions, believed in the divine spiritual and temporal mandates of their imams (Modarressi, 1993; Dakake, 2007). Given this theology, their minority position, and messianic beliefs, Shi'i jurists did not contemplate institutional constraints on rulers. A tenet of the Twelver Shia is that the 12th imam, who has the public authority, is in occultation since the 10th century. Thus, through the 19th century, to the extent that Twelver Shi'i jurists engaged in developing political thought, their focus was on justifying governmental authority in the absence of the 12th imam. Most jurists refrained from discussing political authority, some argued for a Shi'i kingship (e.g., Majlisi (d. 1699)), and a group assigned political authority to Shi'i jurists (e.g., Naraqi (d. 1829)). However, they did not contemplate institutional constraints on rulers, whatever their identity, until the early 20th century, when a sense of crisis, that of imminent colonial domination compelled juristic justifications for constitutional constraints (Arjomand, 1984, 1988; Amanat, 2009; Ansari and Shadmehr, 2021).

3.2 Philosophical Writings

"From about the middle of the eighth century to the end of the tenth, almost *all* non-literary and non-historical secular Greek books that were available throughout the Eastern Byzantine Empire and the Near East were translated into Arabic" (Gutas, 1998, p.1). Muslim philosophers adapted the Greek tradition but aimed to make it compatible with Islamic teachings. Thus, for Farabi (d. 950), who is sometimes called the founder of Islamic philosophy, "Religion is an imitation of philosophy... In everything of which philosophy gives an account based on intellectual perception or conception, religion gives an account based on imagination" (Lerner and Mahdi, 1963, p.77). Later Muslim philosophers, most notably Ibn Sina (d. 1037) and Ibn Rushd (d. 1198), further synthesized the Greek tradition with Islamic philosophy; see Goodman (1992) on Ibn Sina, and Leaman (1988) on Ibn Rushd.

In al-Madīnah al- $F\bar{a}$ dilah (Virtuous City), Farabi developed a political theory reminiscent of Plato's *Republic*. Thus, "the founder of a virtuous city was a person endowed with an exceptional set of outstanding characteristics... Such a man, the first or ultimate chief... was imam, king, philosopher, and prophet alike. In short, he was Plato's lawgiver and the prophet of the Islamic tradition rolled together" (Crone, 2004, p.178; Rosenthal, 1958, p.128); see also al- $S\bar{i}y\bar{a}sat$ al-Madaniyyah (known as Political Regimes) (Farabi and Butterworth, 2015).

"What is missing in al-Farabi is any concept - let alone discussion - of civic institutions as central to the political life" (Gutas, 2004, p.276, 263-4; quoted in Black, 2011). Absent an Islamicized "philosopher-king", lesser leaders should take charge, which necessitates the memorization of laws laid down by the founder. Farabi recognizes that "various qualities that went to make a first chief might also be dispersed in many people; if so, they could take the place of the first chief and rule as a team. This was how al-Farabi understood aristocracy (*riyasat al-afadil/al-akhyar*): a virtuous regime in which several philosophically trained people managed things together, perhaps as king, vizier, military leader, and advisors, though he does not say precisely how" (Crone, 2004, p.179). Critically, this allusion to conciliary government did not invoke a discussion of how dividing power could reduce its abuses.

Ibn Sina (d. 1037) and Ibn Rushd (d. 1198) generally followed Farabi. Ibn Sina "adopted a Sunni view on *succession* to Prophet-Legislator. This can be either by testamentary designation – the 'Abbasid practice – or by 'consensus of the elders'. Ibn Sina recommended designation because it avoids strife" (Black, 2011, p.75, quoting Lerner and Mahdi, 1963). However, he "roundly condemns usurpation, and actually demands the death of a tyrant (*mutaghallib*) and the punishment of those who fail to carry out such a tyrannicide if they have means to do it" (Rosenthal, 1958, p.153).

Ibn Rushd's political theory appears in his commentaries on Plato's *Republic* and Aris-

totle's *Ethics* and *Rhetoric* – he states that he did not have access to Aristotle's *Politics* (Averroes and Lerner, 1974, p.4). Ibn Rushd's commentary on Plato's *Republic* adapts it to his Islamic environment – with the remarkable exception of promoting women's participation in public life. Thus, in discussing the philosopher-king he writes: "Hence these names are... synonymous – i.e., 'philosopher,' 'king,' 'Lawgiver'; and so also is 'Imam,' since imām in Arabic means one who is followed in his action. He who is followed in these actions by which he is a philosopher, is an Imam in the absolute sense" (Averroes and Lerner, 1974, p.72). He provides examples from his environment to demonstrate regime types and their transformation, e.g., stating that during Mu'awyah the government transformed from virtuous to timocratic (Averroes and Lerner, 1974, p.121). Like Farabi, Ibn Rushd recognizes that characteristics of a good ruler may not all be present in one person: "However, it may not happen that both these [qualifications] are found in one man, rather the one [capable of] waging Holy War being another than the legal expert. Yet of necessity both will share in the rule, as in the case with many of the Muslim kings" (Averroes and Rosenthal, 1966, p.208-9). In his commentary on Aristotle's *Rhetoric*, Ibn Rushd also "Platonizes" Aristotle's brief discussion of political regimes by elevating "rulership of the king" and "imamate" (Butterworth, 1998, p.236-7; Averroes and Ezzaher, 2015, p.129-131). Again, allusions to division of power or discussions on the transformation of political regimes from Greek political thought stopped short of discussions about institutional constraints to check tyranny.

In sum, Farabi, Ibn Sina, Ibn Rushd, and many other Muslim philosophers, while engaged in political theory, did not discuss institutional mechanisms to constrain rulers.

3.3 Mirrors for Princes (*Sīyāsat Nāmih*)

Among the earliest survived political writings of the Islamic period are Rasalih fi al-Ṣaḥābih and $Adab \ Kab\bar{i}r$ by Ibn Muqaffa (d. 759), an Iranian bureaucrat and literary figure in the Umayyad and Abbasid caliphates. Ibn Muqaffa asserted that the general public cannot obtain their welfare on their own, and they need an imam to guide them. He advocated that the ruler imposes consistency in law and argued that the imam's opinions and policies must be followed unless they explicitly contradict God's orders. Ibn Muqaffa was among the early transmitters of political writings in the Persian mirrors for princes traditions, which aimed to rationalize government to promote peace and prosperity.²⁰

A classic writing in the Mirrors of Princes tradition is Nizam al-Mulk's (d. 1092) $S\bar{v}y\bar{a}sat$ $N\bar{a}mih$. Nizam al-Mulk was an Iranian vizier during the Seljuk Empire and the de facto ruler after Alp Arslan. In the tradition of Persian kingship, he asserts that just kings are chosen by God, have royal charisma, and are the shepherds of their people. When God becomes angry with the people, good kings disappear, and war replace peace and prosperity, so that wrongdoers are killed. He highlights that power is fragile, because of overt and covert contenders, but a competent and just ruler maximizes peace and prosperity. The ruler should follow God's law and respect religious scholars and the pious. He should have religious scholars advise him "once or twice a week" on God's law and Islamic traditions and stories of past just kings (Tabatabai, 2006/1385, p.97) – see also Yavari (2014).

Some works in this genre rely more on earlier philosophical writings (e.g., Tusi's $Akhl\bar{a}q$ $N\bar{a}sir\bar{i}$), while some have more religious overtone (e.g., Ghazali's $Nasihat al-Mul\bar{u}k$). Overall, this genre is a middle ground between theoretical works on ethics and moral philosophy and manuals for governance.²¹ While offering useful advice on good governance, like juristic and philosophical writings, these works do not provide discussions of institutional constraints on rulers. Rather, they rely on invoking the rulers' intrinsic motivations (moral or selfish interests in prosperity and longevity) to achieve good governance.

4 Islamic Law, Rebellion, and Accountability

The previous section provided evidence for establishing the puzzle of missing discussions. We also suggested an explanation for this puzzle. This section provides further evidence for the key assumptions that our explanation relies on.

Two anecdotes highlight the key features of the explanation. The first caliph Abū Bakr, in his speech upon assuming leadership, stated: "I have been given the authority over you, and I am not the best of you. If I do well, help me; and if I do wrong, set me right... Obey me

²⁰Mirrors for Princes were also translated from Greek during the Umayyads when Greek was the language of bureaucracy in Damascus, adapted from the Byzantine Empire (Gutas, 1998, p.23).

²¹Other examples includes Davani's $Akhl\bar{a}q Jal\bar{a}l\bar{i}$, Amasi' $Kit\bar{a}b Mir^{\circ}\bar{a}t al-Mul\bar{u}k$, Bitlisi's Hasht Bihisht, and Çelebi's $Akhl\bar{a}q \ cal\bar{a}^{\circ}\bar{i}$; Sariyannis (2019) discusses this genre in the Ottoman period. Blaydes et al. (2018) quantify and analyze the topics for a sample of 21 works that have been translated to English.

so long as I obey Allah and His Messenger. But if I disobey Allah and His Messenger, you owe me no obedience" (from Ibn Hisham's $S\bar{v}rah$ quoted in Cook, 2014, p.320). 'Umar, the second caliph, "asks that anyone who sees any crookedness in him should tell him; a distinguished Companion of the Prophet responds that in that event 'we will straighten you out with our swords,' a sentiment to which 'Umar responds with strong approval" (Cook, 2014, p.320). These anecdotes show (1) the presence and importance of Islamic law (reflected, e.g., in "obey Allah and His [deceased] Messenger"); (2) the deviations from the law are presumed clear and easily observable; (3) rebellion against a caliph who does not follow the law is not only allowed, but also encouraged; (4) Muslims are vigilant to hold rulers accountable through revolt if needs be. According to Cook (2014, p.320-1), this reflects "a political culture in which it is not just conceded that subjects are entitled, and perhaps obligated, to act in such ways; they are portrayed as ready to do so at the drop of a hat".

We now provide more evidence for these themes. In Section 4.1, we ask: Can we even speak of Islamic law given that there are always disagreements over details and different interpretations? To what extent can we speak of Islamic law as independent from the political, social, and economic environment? Did Islamic law have a significantly larger scope than, say, the divine law in Christian tradition? Importantly, is there evidence that Muslim thinkers believed that there was such a thing as Islamic law and that it had a wide scope? In Section 4.2, we ask: What was the normative view on revolt in Islam? Did it happen often or it was rare? Did distinguished figures in Islam participate in rebellions? What, if any, was the Islamic law of rebellion? Do we have evidence that some rebels invoked the violation of the law as a key reason for their revolt? Finally, in Section 4.3, we discuss some cultural elements, moral themes, and religious obligations that would imply a high degree of solidarity.

4.1 Islamic Law

Most Muslim scholars took as given that individuals can only infer or interpret Islamic law, so that pious and knowledgeable scholars can have legitimate disagreements over details. But the range of interpretations, while it surely would evolve in the long run, was relatively narrow and stable in the short run. Islamic law was not monolithic. However, these differences were small compared to potential differences in laws that could be. Hence the disagreements took place within a highly constrained space. Despite geographical variations (perhaps most apparently between Sunni and proto-Shi'i or Shi'i societies), the relatively narrow range of acceptable interpretations in a given region and period projected a coherent notion of Islamic law, from Andalus (as Ibn Rushd's quote below indicates) to India. For example, [d]escribing the late Mughals of India, the eighteenth-century English scholar Alexander Dow observed that the Sharia 'circumscribed the will of the Prince' and 'the House of Timur always observed [the law]; and the practice of ages had rendered some ancient usages and edicts so sacred in the eves of the people, that no prudent monarch would choose to violate either by a wanton act of power'" (Hallaq, 2009, p.211). As late as the 20th century, jurists' chief concerns about the codification and unification of laws in Iran and the Ottoman Empire was that the codes conform to Islamic law. For example, Article 2 of the Supplementary Laws to the Iranian (1906) Constitution, proposed by Shi'i jurists, required that a few jurists supervise the laws passed by the parliament to ensure their consistency with Islamic law (Bayat, 1991; Afary, 1996). Later, jurists such as Modarres were involved in drafting unified civil and criminal codes and Kharaqani took the initiative to codify 831 items of Islamic law, offering the resulting booklet to the government (Jafarian, 2003/1382). All the quibbling among jurists was slim next to the wide range of potential alternatives.

Crucially, that was how Muslim scholars, jurists, and philosophers perceived their environment, even a cosmopolitan philosopher such as Ibn Rushd in Andalus. For example, comparing the nature of law in Islamic and Christian societies in his commentary on Aristotle's *Rhetoric*, Ibn Rushd wrote (Averroes and Ezzaher, 2015, p.130):

Perhaps the laws instituted in these cities were definite, invariable, and permanent, as in the case of our Islamic law. And perhaps these cities did not have definite laws, but the matter was delegated to those who held the power, depending on what was more useful at each moment, as in the case of Byzantine laws.

Similarly, Ibn Khaldûn (2015, p.189-90) states:

The religious laws govern all (governmental positions) and apply to each one of

them in all its aspects, because the religious law governs all the actions of human beings. Jurists, therefore, are concerned with the rank of ruler... and with the conditions under which it is assumed... Furthermore, (they are concerned with the causes) that necessitate (the ruler's) removal, should (such causes) present themselves, and with other things connected with the ruler or sultan.

Ibn Sina, Mawardi, Juwayni, Ghazali, among others had similar (or more rigid) views.

This perception was rooted in reality. Rulers, even imams/caliphs, could not easily change the law. At best, they could assert their superior understanding—often with little success. Rulers attempted to define what divine law was, as evidenced by the inquisition project of the Abbasids discussed in Section 3.1. However, these attempts failed. Even jurists who preached against rebellion insisted that rulers cannot determine the law: caliphs must implement God's law, not theirs. "By locating the power to legislate outside the political system, it [(Islamic law)] denied to rulers the ability to make law to suit their fancies. It is thus a significant point about the Sharī a that... it is in principle the antithesis of the legislative autocracy or a traditional patrimonial state or a modern dictatorship" (Cook, 2014, p.329-30). Namik Kemal, during the Ottoman Tanzimat period, stated that "even the greatest tyrants cannot alter" Sharia for it is protected by God (Mardin, 1962, p.315, cited in Cook, 2014, p.330). This perception is a persistent feature of Islamic tradition that continues to modern times across branches of Islam. In his lectures on Islamic government, Khomeini (2006/1385, p.72-3) stated that "Islamic government is the government of laws... the law is the real ruler". Some surveys suggest that many contemporary Muslims in Turkey, Iran, and Egypt still believe that Sharia "limits the power of rulers" (Rheault and Mogahed, 2008); the law institutes rulers, not vice versa.

Even jurists could not alter the range of interpretations more than marginally at a given time. There was no hierarchical ecclesiastical structure as in Christianity. There were many scholars at a given time, and eventually a well-established juristic culture. Rulers could bribe or threaten judges to look the other way, or to misrepresent the facts, but they had extreme difficulty to rewrite the Islamic law. As Abou El Fadl (2001) shows in the context of the Islamic law of rebellion (which rulers had great interest to influence), "Once legal precedent is set, and the legal culture becomes institutionalized and developed, legal doctrines often assume a life of their own. These legal doctrines set their own base of authority and their own doctrinal imperative" (p.162). Jurists and rulers had some common interests "but this did not mean that the jurists simply became the ideologues of the state. The emerging corporate or institutional culture of the jurists demanded that order and stability be maintained, but once the precedents of the law of rebellion had come into existence, these precedents became an imperative force by themselves" (p.187). As Kuran (2023, p.278) argues, "the freedom to interpret Islam was bounded".

Islamic law had a wide scope. It covered "subjects such as taxation, the conduct of holy war, the suppression of rebels, the punishment of criminals, and the appointment of judges... The law left much to the discretion of rulers, but its letter was often detailed and its spirit was unmistakably protective of the believers" (Crone, 2004, p.282). Crone and Hinds (1986) argue that the Abbasid caliphs "found that the past which they were supposed to imitate consisted of narrowly defined rules, not the ancestral practice compatible with any interpretation they might wish to put on it. In practice, their hands had thus been tied... The law was the sum total of God's guidance... it dealt with every aspect of life from taxation to the proper way of wearing moustaches" (p.92-3, see also p.109-110). Legitimate public policy then was restricted, or it was so perceived, by the wide scope of Islamic law, which covered topics from taxation, inheritance, and family laws to tort and contract laws.

Hallaq (2009, p.551-5) provides a breakdown of topics in Islamic law books, covering 57 topics, including $zak\bar{a}t$, various contracts, tort, and rules of procedure such as testimonies. Abu Yusuf's *Kitāb al-Kharāj*, mentioned above, was an early example of Islamic law on taxation. Modarressi (1983) provides a detailed description of the origins of *kharāj* in Islam and the jurists' opinions about its justification and rate, lands subject to it and the expenditure of the revenues. As Hallaq (2014, p.62) argues, "the benchmark of taxation was the Sharā-ī-stipulated rates... In other words, taxation could be determined by fixed and objective criteria, and thus overtaxation was relatively easy to evaluate and dispute in a Sharā court". Based on Johansen (1988)'s study of land tax in Islamic law, Khoury (1997, p.179) argues that in the Ottoman Empire, the "sphere of action of the sultan was at all times confined within the parameters of a concept of justice which ensured the rights of the proprietor against the absolute and ultimate control by the sultan". Even in the 20th cen-

tury, during the Iranian Constitutional Revolution, it was repeatedly argued: "it is obvious that our Divine Law is not limited to acts of worship but, on the contrary, embraces every major and minor political issue, down to the indemnity for a minor abrasion. Consequently, we will never be in need of man-made law" (Dabashi, 1988, p.361-2).

4.2 Rebellion and its Status in Islamic Law

The speed and magnitude of Islamic conquests and the relative prosperity of Islamic civilization for several centuries may give the impression of political stability in the Islamic polity. This is a false impression.²² Revolt by Muslims against Muslim rulers was ubiquitous throughout much of the Islamic history. There were revolts against Abu Bakr (d. 634) (Donner, 1981, p.82-90), and against the third and forth caliphs, 'Uthmān and 'Ali (both of whom were killed), including the Battle of Siffin, Battle of Nahrawan, and the Battle of the Camel, in which different groups of Muslims fought with each other. This First Fitna (civil war) led to the establishment of the Umayyad Caliphate in Damascus. The Second Fitna (680-692) began two decades later and included the revolts of Husayn Ibn Ali, Tawwabin, Mukhtar, and Abd Allah ibn al-Zubayr. The third Fitna was another civil war in the 740s, which blended into the fourth Fitna, the Abbasid Revolution and the establishment of the Abbasid Caliphate in 750. There were many other revolts by Muslims and also by non-Muslims throughout the Islamic empire (e.g., see Wasserstrom (1995, Ch.Two) for Jewish revolts, and Crone (2012) for Zoroasterian-inspired revolts).

Rebellions continued throughout Islamic history though with some relatively stable periods, especially under the Ottomans and Safavids. Abou El Fadl (2001) mentions many examples and states that "there is hardly any period in Islamic history that was not plagued by rebellions" (p.107). Rebellions are common occurrences in Islamic history books, from the general histories of Tabari (d. 923) and Ibn Khaldun to specialized histories in the genres of $Maq\bar{a}tal$ (e.g., Abu al-Faraj al-Isbahānī's (d. 967)) or $Tabaq\bar{a}t$.

Rebellions can form from coalitions of different groups with different grievances. These grievances can also vary, including one or a combination of ethnic or religious conflicts (e.g.,

 $^{^{22}}$ Crone (2012, p.17) cleverly worded this impression as: "how long can a tiny minority be expected to hang on to power in a foreign land if it fights itself every thirty years?"

Zoroastrians, Hindus, or Jews may rebel against Muslim rulers), tribal or individual conflict over rulership or succession, and gross violations of the law by rulers. Islamic history seem to feature all these combinations. For our purposes, some statements of rebel leaders on the agenda of their revolts have been preserved, in which they highlight gross violations of Islamic law the reason for their rebellion. We provide three such examples, focusing on the classic, Tabari's *History*. The following is from Husayn ibn Ali's speech during his rebellion (Tabarī, 1990, vol.19, p.95-6; see also his letter to Basrans on p.32):

People, the Apostle of God said: 'When anyone sees the authorities make permissible what God had forbidden, violating God's covenant, and opposing the Sunnah of the Apostle of God by acting against the servants of God [people] sinfully and with hostility, when anyone sees all these incidents and does not upbraid them by deed or by word, it is God's decree to make that person subject to [mis]fortune.' Indeed, these authorities... have neglected the [religious] punishment ($hud\bar{u}d$) laid down by God; they have appropriated the fay [war booty] exclusively to themselves; they have permitted what God has forbidden, and they have forbidden what He has permitted.

Tabarī (1989, vol.26, p.37-8) records an episode in the Zayd's rebellion, when some accuse Zayd of rebelling to seek power. Zayd responds that Abu Bakr and Umar "behaved justly with the people and acted according to the Qur³ān and the *sunnah*." But Umayyad rulers "are tyrannical to me, to you, and to themselves. We are only summoning you to the Book of God and the *sunnah* of His prophet so that God's ordinances (*sunan*) may be revived and innovations (*bida*^c) may be wiped out."

During the movement of "commanding right and forbidding wrong" in Iraq, one of the leaders, Sahl ibn Salāmah would explicitly state: "I shall attack anyone who opposes the Book and the *sunnah* whoever it may be, the government authority itself or anyone else" (Tabarī, 1987, vol.32, p.58). Importantly, Sahl's actions were not part of the power struggle and succession, e.g., between Ma'mūn and Ibrāhīm ibn al-Mahdi (p.61-83), or even part of the Kharijites' rebellion in the same period (p.67-8).

We highlighted the prevalence of rebellions, gross violations of Islamic law as the justi-

fication for some rebellions, and the participation of the Prophet's companions and family members, who were well-versed in Islamic law. What about the attitude of later scholars and distinguished jurists towards rebellion? Evidence suggests a persistent Islamic juristic tradition, involving the participation of jurists in rebellions, their advocacy for the rights of rebels, and juristic writings on the conditions for legitimate, even obligatory, rebellion.²³

Some group such as Kharijites and Mu'tazilites believed that "the community was obliged to remove a wrongful ruler" (Crone, 2004, p.229). Ibadis, a branch of Kharijites who constitute a majority in contemporary Oman, routinely engaged in revolts, sanctioned by their jurists, against rulers, including Ummayads and Abbassids, to establish an Ibadi Imamate. They believed that a wrongful imam should be removed by force if necessary and possible (Cook, 2001, Ch.15). In fact, tendencies to view rebellion as a form of forbidding wrong (an important ordinance of Islamic law) "characterise the early Khārijites, the Ībādīs, the Zaydīs...[and are] embalmed in the Imāmī heritage" (Cook, 2001, p.477-8).²⁴ For example, "Zaydism laid claim to, and continued, an old 'Alid pattern: rebellion against unjust rule with the aim of establishing a legitimate imamate. References to forbidding wrong are a recurring...feature of accounts of such 'Alid risings" (Cook, 2001, p.231). Next, we focus on the proto-Sunni/Sunni branch of Islam.

There are four major Sunni schools of jurisprudence, Hanafi, Maliki, Shafi'i, and Hanbali, whose origins are associated with four prominent jurists, Abu Hanifa (d. 767), Malik ibn Anas (d. 795), Shafi'i (d. 820), and Ahmad ibn Hanbal (d. 855), respectively. The interaction between Abu Hanifa and a certain goldsmith is illuminating about the logic of his attitude toward revolt and those of many other jurists (Cook, 2001, Ch.1). The goldsmith discusses with Abu Hanifa if forbidding wrong is obligatory. Abu Hanifa confirms that it is. The goldsmith then proposes that he gives his allegiance to Abu Hanifa to start a rebellion.

 $^{^{23}}$ Given the tendency of legal scholarship toward order and the prevalence of rebellion in Islamic civilization, this tradition may reflect some core elements of Islam—see, e.g., Rubin (2017, p.51-2). As Abou El Fadl (2001, p.26) argues, "Jurists... will be concerned with issues of order, conflict resolution, and stability. They may demand that this order be just, or that it would comply with the divine command, but they can hardly be expected to advocate lawlessness or anarchy." And yet, "the idea of a revolt as a means to power was neither alien nor abhorrent to Muslim jurists" (p.75).

²⁴Zaydis, Isma'ilis, and Imamis were eventually formed as branches of Shi'i Islam. The majority of Shi'is today (e.g., in Iran, Iraq, and Lebanon) are Imamis. The Fatimid caliphate in Egypt (prior to Mamluks) were Isma'ilis. The majority of Shi'is in Yemen are Zaydis.

Abu Hanifa refuses, arguing that the rebellion will fail, and the goldsmith will be killed without bringing any good to others. Abu Hanifa repeats the same logic in subsequent interactions, even highlighting that such actions come close to one becoming an accomplice in one's own death. All the while, the jurist transmits to the goldsmith the Prophetic tradition that "The lord of the martyrs is Hamza ibn Abd al-Muttalib and a man who stands up to an unjust ruler, commanding and forbidding, and is killed by him." The goldsmith is said to have also transmitted another Prophetic tradition from Abu Hanifa: "The finest form of holy war [jihad] is speaking out in the presence of an unjust ruler, and getting killed for it." The goldsmith got killed later while forbidding wrong. Variations of this last tradition appear in various canonical hadith collections. In fact, the topics of forbidding wrong and holy war are discussed together in various law-books (Cook, 2001, Ch.1 and p.490). Abu Hanifa (d. 767) himself was imprisoned, tortured, and died in an Abbasid prison for his defiance toward the caliph (Abou El Fadl, 2001, p.73, p.76-8). While the exact reason for his imprisonment and death is disputed, according to Schacht (Encyclopaedia of Islam, 2nd Ed.), "The truth is probably that he compromised himself by unguarded remarks at the time of the rising of the Alids al-Nafs al-Zakiyya and his brother"—see also Cook (2001, p.8-9). There are also reports of his support for Zayd's rebellion (Abou El Fadl, 2001, p.72-3).

Similar reports exist about the founders of the other schools. Asked about whether it was legal to join a rebellion, Mālik responded that it was, arguing that "the bay a given to the caliph al-Manşūr was obtained under duress". Later, the "governor, had Mālik beaten and flogged for his views on duress and, possibly, for supporting the rebellion" (Abou El Fadl, 2001, p.76). Even the "quietist" Ibn Hanbal was imprisoned during the Abbasid inquisition for refusing to accept the Abbasid doctrine that the Quran is created, which would allow the caliph discretion to alter the law—see Section 3.1.

Shafi'i was among the "Several jurists [who], even before Hārūn al-Rashīd came to power, had either sympathized with or pledged their allegiance to al-Daylamī" associated with some Alid rebels (Abou El Fadl, 2001, p.80-1). Shafi'i later was arrested for suspicion of plotting against the caliph, or according to a different report, for criticizing the governor (p.83-4). Once released, he settled in Egypt and developed a legal discourse on rebellion. The juristic tradition that he initiated was such that, centuries later, "Ibn Taymiyya [d. 1328]... even accused him and those who preceded him or followed in his footsteps of suborning rebellion and spreading *fitna*" (p.98). For example, he defined a rebel $(b\bar{a}gh\bar{i})$ as "one who refuses to obey the just ruler (*al-imām al-cādil*), and intends to rebel by fighting him." Jurists discussed extensively whether Shafi'i meant a ruler who initially came to power lawfully, or a ruler who behaves justly. He "seems to have used the expression to mean the substantively just ruler. This implies that those who rebel against an unjust ruler are not rebels at all, and in fact later jurists explicitly argue that if the ruler is unjust and the rebels are just, then the ruler is to be considered the $b\bar{a}gh\bar{i}$ and not the rebels" (Abou El Fadl, 2001, p.148-9).

The juristic tradition that developed included the law of rebellion, which specified a significant degree of protection and leniency toward rebels, regardless of whether the ruler against whom they had rebelled was just or unjust. Abou El Fadl (2001, p.238) states:

At a minimum, the majority of Sunnī jurists agreed that the rebels are not to be held liable for life and property destroyed during the course of their rebellion, and that, as a general matter, rebels may not be executed and their properties may not be confiscated.

The openly critical attitude of distinguished jurists was not limited to the founders of the schools. Abou El Fadl (2001, p.96-8, 166) and (Cook, 2001, p.148-9, 348, 355-6, 383-5) provide many examples from Thawrī (d. 788) to Nūr al-Dīn al-Bakrī (d. 1324). Summarizing the political aspect of the religious duties of *Commanding Right and Forbidding Wrong*, Cook (2001) observes that "the biographical and anecdotal record is full of sympathetically presented examples of pious Muslims harshly rebuking rulers, governors and their henchmen, often at great risk to themselves... This activity has the sanction of the Prophetic tradition... It is occasionally suggested that it is a duty to forbid wrong in this fashion, and in any case the activity is widely regarded with favour... someone who loses his life in the process is accordingly a martyr... Favourable attitudes to forbidding wrong through rebellion are less common, but they do exist" (p.476-7). In fact, many jurists were involved in rebellions. Ibn Khaldûn (2015, p.127) writes of "revolutionaries from among the common people *and of jurists* who undertake to reform evil practices. Many religious people who follow the ways of religion come to revolt against unjust amirs. They call for a change in,

and prohibition of, evil practices" (our emphasis). Abou El Fadl (2001, p.70-1, 76, 100, 205) provides other examples and Section 3.1 mentions examples of the jurists' involvements in revolts in the Ottoman empire—see also Lapidus (1975, p.381).

There was a range of juristic arguments regarding initiating, aiding, or joining rebellion. Some jurists explicitly argued that initiating rebellion to depose an unjust ruler was lawful, as long as the likelihood of success and the expected net social benefit of rebellion are sufficiently high. "Rebels should balance the chance of success and weigh it against the potential harm that will result from the rebellion. If the potential harm to society is grave, and the chances of success are limited, then rebellion is prohibited. However, if the chances of success are reasonably good, and the harm to society is limited, then rebellion is permitted" (Abou El Fadl, 2001, p.286). Some even argued that assisting just rebels against unjust rulers was obligatory. For example, Simnānī (d. 1105) "argues that if the ruler becomes oppressive and unjust, and usurps property, then it becomes incumbent upon the jurists and Muslims to overthrow him, and he even goes as far as claiming that this has been the consistent practice of Muslims in dealing with corrupt rulers" (Abou El Fadl, 2001, p.194). Cook (2001, p.337, 346, 385-6, 390) and Abou El Fadl (2001, p.286-7, fn.161) document various other examples. Moreover, some jurists who were against rebellion or aiding rebels, also insisted that Muslims must not aid an unjust ruler to repress rebels who have a just cause. Instead, they should stay entirely out of the conflict. Clearly, this subtle form of collective action, if followed, would effectively render the ruler defenseless, ensuring the rebels' victory.

We end by highlighting the attitudes of two influential and well-known jurists: Juwayni (d. 1085) and Ghazali (d. 1111). In his classic, *Irshād*, Juwayni writes (Cook, 2001, p.346):

If the ruler of the time $(w\bar{a}l\bar{\imath} \ al-waqt)$ acts in a manifestly unjust fashion, and does not respond to verbal admonition, then it is for 'the people of binding and loosing' $(ahl \ al-hall \ wa^{-}l^{-c}aqd)$ to prevent him, even if this means doing battle with him. [See Abou El Fadl (2001, p.182) for a discussion.]

In his influential $Ihy\bar{a}$, Ghazali allocated a chapter to commanding and forbidding rulers. He praises those who speak out harshly against rulers for their wrongdoings, providing 17 anecdotes of the earlier Muslims who stood up to rulers and died martyrs. Moreover, he argues in detail that when lower degrees of forbidding wrong fails, ordinary Mulsims, without the permission of rulers, can band together, arm themselves, and use force and violence in forbidding wrong. In his Iqtişād, Ghazali argues that an imam who is not a mujtahid should be removed, if it could be done without a fighting (Crone, 2004, p.228, fn.53). Even in $Fada^{a}ih$, written primarily to defend the Abbasids, he offers a conditional support for rebellion. Abou El Fadl (2001, p.184) summarizes:

If the ruler's commands are illegal, or if he does not rely on jurists, and someone more qualified for the position is found, people should weigh the benefits and costs of attempting to overthrow him, and replace him with someone better if they are able to do so. Ultimately, despite all the polemics in favor of the 'Abbāsid caliph, al-Ghazālī's argument...reduces itself to a balancing act between the pros and cons of attempting to overthrow the ruler.

The Christian recension of Ghazali's $Ihy\bar{a}$ in Gregory Barhebraeus's (d. 1286) *Ethicos* is telling about the radically different attitude toward rebellion in the Christian West and Islamic world. *Ethicos* closely follows Ghazali's structure of arguments, but Christianizes various aspects. In particular, in *Ethicos*, the duty of admonition and rebuke (corresponding to forbidding wrong) are reserved for ecclesiastical authority, because orders can be given only from superiors to inferiors. Moreover, even churchmen must not use force, which are reserved for the secular authority. This contrasts with Ghazali's views, even in his conservative $Ihy\bar{a}$ —see Cook (2001, p.600-3). Differences are more striking once we recognize that, among Muslim thinkers, Ghazali's "political thought is dominated rather by a fear of civil war (*fitna*) and disturbances (*fasād*) leading to disorder and anarchy" (Lambton, 1981, p.109).

In sum, there is a common thread among Muslims jurists from Abu Hanifa in the 8th century to Juwayni and Ghazali in the 11th and 12th centuries to (Ubbi (d. 1424) in the 14th and 15th centuries: Rebellion is costly and its success is uncertain, and hence should only be attempted if its social benefits are sufficiently higher than its social costs and the chances of success are sufficiently high. These features are built into our model. Importantly, jurists, even Ottoman jurists of the 17th and early 18th century (see Section 3.1), sometimes found revolt lawful, even obligatory, and prohibited aiding an unjust ruler against rebels.

4.3 Solidarity and Rebellion

Islamic normative tradition viewed the Muslim community as a family and stressed each member's responsibility to enjoin right and forbid wrong: "Indeed, Muslims are brothers" (Quran 49:10); "hold firmly to the rope of Allah all together and do not become divided...remember the favor of Allah upon you, when you were enemies and He brought your hearts together and you became, by His favor, brothers...let there be from you a nation inviting to good, enjoining what is right and forbidding what is wrong" (Quran 3:103-4). "You are the best nation produced [as an example] for mankind. You enjoin what is right and forbid what is wrong" (Quran 3:110; see also 9:71, 9:112, 22:41). The normative ideas of solidarity and homogeneity (in the desire to follow God's law) were also included in the concept of Islamic *umma*, as the universal community of believers, worshipping one God and following His law. "[B]reaking with the community... was not merely unfortunate and undesirable, but positively evil, because there was only one Islamic *umma*. To break ties with the *umma* was to break both with God and man" (Donner, 1981, p.56).

As Cook (2014, p.20-3) argues, solidarity and equality before the law were integral parts of the ideal Islamic identity. Muslims are "like a body, parts of a whole" (p.22), with no caste: "We have created you from male and female and made you peoples and tribes that you may know one another. Indeed, the most noble of you in the sight of Allah is the most righteous of you" (Quran 49:13). These were reflected in politics. Compared to other dynasties in Eurasia, "the early Muslim state was exceptional in that it refused to adopt the title 'king' "(Anjum, 2012, p.47, fn.39). Anjum (2012, p.51) argues: "The ethic of the Qur'an is on the whole egalitarian and activist... the unyielding monotheism of the Qur'an... that required obeying none but God and his Prophet, encouraged questioning authority".

An implication of these features was that taking actions to uphold the law and improve the welfare of the Muslim community (the two intertwined concepts) were religious obligations (under some conditions) and were highly commendable in the Islamic normative tradition, associated with great rewards in the afterlife. Such notions would facilitate participation in costly collective action. Section 4.2 includes several examples of how these ideas are invoked in rebellions against unjust rulers.

5 Discussion and Conclusion

In this paper we have identified a new puzzle; that Islamic scholars never developed, until the reforms of the 19th century, institutional models of executive constraints. This was so even though they were aware of the dangers of tyranny. In this they diverged from the Western tradition emanating from Sparta, Aristotle, and Plato. We argued that this was because of the cultural and social contexts in which Islamic normative tradition was embedded. Unlike in the Greco-Roman-Christian world, where legislation was mostly in secular hands, in Islam the law was determined in detail by God. We argued that this made it much easier for Muslims to determine when rulers were deviating from set policies and thus they were better able to use collective action to discipline rulers without the need for institutional safeguards. In our theory this mechanism is fortified by the homogeneity of Islamic societies, since everyone was a believer, and in the basic norms of solidarity in Islam, including the stipulation that everyone should "command right and forbid wrong" (Cook, 2001).

We do not claim that our explanation is the sole reason for the historical absence of the discussion of institutional constraints in the Islamic normative tradition. Because the puzzle is new, it is unclear what alternative explanation to consider. One possibility is to attribute this absence to Muslim thinkers' limited access to the Greco-Roman philosophical writings or history. For example, while Plato's *Republic* and *Laws* and Aristotle's *Ethics* were familiar to Muslim philosophers, it seems that they did not have access to a translation of Cicero's De re publica, or Aristotle's Politics where theories of mixed constitutions were more explicitly advocated (Melamed, 2011). This view implies that, without the help of the Greeks' discoveries, many generations of Muslim thinkers could not take what Crone calls "a short step" toward even a theoretical discussion of institutional constraints on rulers. Their "political horizon... did not reach to suggesting reforms or offering alternative institutions," as Halbertal and Holmes (2017, p.166) describe some of their earlier Jewish counterparts in antiquity. This view seems implausible. The vast territory of the Islamic Empire included people of various geographical and religious backgrounds, some of whom interacted routinely with Muslim scholars and many of whom played key roles in translating the vast corpus of Greek knowledge into Arabic (Gutas, 1998). That generations of Muslim scholars over huge geographical and time periods did not have any knowledge of the political structure of Greek city-states, the Roman Republic, or even the Roman Empire with its Senate seems unlikely. As Gutas (1998, p.23) argues, "the historian Ḥamza al-Iṣfahānī (d. after 350/961) relates that when 'he needed information on Graeco-Roman history, he asked an old Greek, who had been captured and served as a valet, to translate for him a Greek historical work orally... oral translation by native speakers of whatever language within the Islamic domain did occur and that... it must have been widely practiced". To make sense of the puzzle, one must go beyond explanations that Muslim and Jewish thinkers did not discuss institutional constraints on rulers even in theory because they did not learn their usefulness from Aristotle or Cicero.

Another possibility is that "[p]olitics in Islam had remained the domain of the barbarian", while the Islamic ideal remained a "tribal state" inspired by pre-Islamic free Arab tribes, lacking "a form of settled government" (Crone, 1980, p.91). One could deduce such interpretations from Crone's earlier works. However, Crone's subsequent works corrected this view. "Neither the pre-Islamic Arabs nor the tribesmen who continued to inhabit the peninsula after the conquests were regarded as a model of inspiration or imitation for Muslims as far as political organization was concerned" (Crone, 2004, p.268-9). In fact, the domination of Arab tribes by the Muslim elite (e.g., Ridda Wars) reflects a relatively centralized state with an energetic executive (Donner, 1981). Moreover, the importance of imams/caliphs and the executive duties to implement the law were far from notions of tribal confederacies. Muslims thinkers routinely investigated all practical matters from contracts to taxes. They theorized the caliphate even when it had departed from its ideal—see Section 3.1. It would be odd to ignore taming contemporary governments due to historical ideals of a tribal state. Finally, many Muslim thinkers were of non-Arabic descent, living in cosmopolitan city environments or in a Persianate milieu.²⁵ A more plausible explanation should account for why Muslim thinkers in different social environment over vast geographical regions in an extended period of time did not engage in discussing institutional constraints on rulers.

²⁵Alternatively, one may argue that notions of absolutism from Persian kingship prevented theorizing about institutional constraints. However, such notions contradicted basic tenets of Islam, where only God's authority is absolute and government is constrained by God's law. Moreover, even the "divine charisma" bestowed upon some rulers in Persian traditions is not permanent and will depart if the king behaves badly. Ferdowsi's *Book of Kings* (*Shāhnāmih*) includes good rulers who turn bad (e.g., *Jamshīd* who lost his *farrah*), bad rulers who turn worse (e.g., *Zahhāk*), and popular revolts against bad rulers (e.g., the story of *Kāvih*).

Appendix

A Proofs

Proposition 6 is obtained as a corollary of the following Proposition.

Proposition 8. Suppose $\gamma \sim U[0,1]$. Let $Q = Pr_{\gamma}(\mu \leq \mu^*(\gamma))$ be the probability that institutional constraints improve the majority citizen's policy payoff. Then,

$$Q(\mu; M, p) = \begin{cases} 1 & ; \mu \leq (1-p)(q-q^2) \\ \min\left\{1, \frac{1-\delta_0}{1-T/M}\right\} & ; (1-p)(q-q^2) \leq \mu \leq (1-p(1-\delta_0))(q-q^2) \\ \min\left\{1, \frac{1}{(1-T/M)p}\left(1-\frac{\mu}{q-q^2}\right)\right\} & ; (1-p(1-\delta_0))(q-q^2) \leq \mu \leq (q-q^2) \\ 0 & ; (q-q^2) < \mu. \end{cases}$$

Proof of Proposition 8. Using Proposition 5,

$$\begin{aligned} Q &= Pr_{\gamma}(\mu \le \mu^{*}(\gamma)) \\ &= Pr_{\gamma}\left(\mu \le (1-p)(q-q^{2}), \beta > 1-\delta_{0}\right) + Pr_{\gamma}\left(\mu \le (1-p\beta)(q-q^{2}), \beta < 1-\delta_{0}\right) \end{aligned}$$

Using the fact that $\beta = \beta(1, M, \gamma)$, and substituting Proposition 1, we have: $\beta = H\left((1 - \frac{T}{M})\gamma\right)$. Because $H = U[0, 1], \beta = (1 - \frac{T}{M})\gamma$. Substituting, we have:

$$\begin{aligned} Q &= Pr_{\gamma} \left(\mu \leq (1-p)(q-q^2), (1-\frac{T}{M})\gamma > 1-\delta_0 \right) \\ &+ Pr_{\gamma} \left(\mu \leq (1-p(1-\frac{T}{M})\gamma)(q-q^2), (1-\frac{T}{M})\gamma < 1-\delta_0 \right) \\ &= Pr_{\gamma} \left(\mu \leq (1-p)(q-q^2), \gamma > \frac{1-\delta_0}{1-\frac{T}{M}} \right) + Pr_{\gamma} \left(\gamma \leq \frac{1}{p\left(1-\frac{T}{M}\right)} \left(1-\frac{\mu}{q(1-q)} \right), \gamma < \frac{1-\delta_0}{1-\frac{T}{M}} \right) \end{aligned}$$

Now, consider four different cases.

1. Suppose $\mu \leq (1-p)(q-q^2)$. In this case,

$$Q = Pr_{\gamma}\left(\gamma > \frac{1-\delta_0}{1-\frac{T}{M}}\right) + Pr_{\gamma}\left(\gamma \le \frac{1}{p\left(1-\frac{T}{M}\right)}\left(1-\frac{\mu}{q(1-q)}\right), \gamma < \frac{1-\delta_0}{1-\frac{T}{M}}\right)$$
(3)

Rearranging $\mu < (1-p)(q-q^2)$ yields: $1 < \frac{1}{p}\left(1 - \frac{\mu}{q(1-q)}\right)$. Therefore, $\frac{1}{p\left(1 - \frac{T}{M}\right)}\left(1 - \frac{\mu}{q(1-q)}\right) > \frac{1}{1 - \frac{T}{M}} > \frac{1 - \delta_0}{1 - \frac{T}{M}}$, and Equation (3) further simplifies to:

$$Q = Pr_{\gamma}\left(\gamma > \frac{1-\delta_0}{1-\frac{T}{M}}\right) + Pr_{\gamma}\left(\gamma < \frac{1-\delta_0}{1-\frac{T}{M}}\right) = 1$$

2. Suppose $(1-p)(q-q^2) \le \mu \le (1-p(1-\delta_0))(q-q^2)$. In this case,

$$Q = Pr_{\gamma}\left(\gamma \leq \frac{1}{p\left(1 - \frac{T}{M}\right)}\left(1 - \frac{\mu}{q(1-q)}\right), \gamma < \frac{1 - \delta_0}{1 - \frac{T}{M}}\right)$$
(4)

Since $\mu < (1 - p(1 - \delta_0))(q - q^2)$, $\frac{1}{p(1 - \frac{T}{M})} \left(1 - \frac{\mu}{q(1 - q)}\right) > \frac{1 - \delta_0}{1 - \frac{T}{M}}$, and Equation (4) further simplifies to:

$$Q = Pr_{\gamma}\left(\gamma \le \frac{1-\delta_0}{1-\frac{T}{M}}\right) = \min\left\{1, \frac{1-\delta_0}{1-\frac{T}{M}}\right\}$$

3. Suppose $(1 - p(1 - \delta_0))(q - q^2) \le \mu \le q - q^2$. Because $\mu > (1 - p(1 - \delta_0))(q - q^2) > (1 - p)(q - q^2)$, in this case,

$$Q = Pr_{\gamma}\left(\gamma \leq \frac{1}{p\left(1 - \frac{T}{M}\right)}\left(1 - \frac{\mu}{q(1-q)}\right), \gamma < \frac{1 - \delta_0}{1 - \frac{T}{M}}\right)$$
(5)

Since $\mu > (1 - p(1 - \delta_0))(q - q^2)$, $\frac{1}{p(1 - \frac{T}{M})} \left(1 - \frac{\mu}{q(1-q)}\right) < \frac{1 - \delta_0}{1 - \frac{T}{M}}$, and Equation (4) further simplifies to:

$$Q = Pr_{\gamma}\left(\gamma \le \frac{1}{p\left(1 - \frac{T}{M}\right)}\left(1 - \frac{\mu}{q(1-q)}\right)\right) = \min\left\{1, \frac{1}{p\left(1 - \frac{T}{M}\right)}\left(1 - \frac{\mu}{q(1-q)}\right)\right\}$$

4. Finally, suppose $\mu > q - q^2$. Because $\mu > (q - q^2) > (1 - p)(q - q^2)$, in this case,

$$Q = Pr_{\gamma}\left(\gamma \leq \frac{1}{p\left(1 - \frac{T}{M}\right)}\left(1 - \frac{\mu}{q(1-q)}\right), \gamma < \frac{1 - \delta_0}{1 - \frac{T}{M}}\right)$$
(6)

Since $\mu > q - q^2$, $1 - \frac{\mu}{q(1-q)} < 0$. Then, Q = 0.

The first part of Proposition 6 is then obtained as a special case of Proposition 8 for the case $\delta_0 < T/M$, and with defining $\mu' = \frac{\mu}{q-q^2}$. The second part of Proposition 6 follows because, as $Q(\mu')$ is decreasing in μ' , with $\mu'_1 < \mu'_2$:

$$|Q(\mu'_2) - Q(\mu'_1)| = Q(\mu'_1) - Q(\mu'_2)$$

Moreover, since $\mu'_1 \in (1 - p(1 - T/M), 1)$, $Q(\mu'_1) = \frac{1 - \mu'_1}{(1 - T/M)p}$. Also, for any $\mu'_2 > \mu'_1 > 1 - p(1 - T/M)$, $Q(\mu'_2) = \max\{\frac{1 - \mu'_2}{(1 - T/M)p}, 0\}$. Therefore,

$$Q(\mu'_1) - Q(\mu'_2) = \frac{1 - \mu'_1}{(1 - T/M)p} - \max\{\frac{1 - \mu'_2}{(1 - T/M)p}, 0\}$$
$$= \frac{\min\{\mu'_2, 1\} - \mu'_1}{(1 - T/M)p}$$

which is strictly decreasing in p and M.

References

- Abou El Fadl, Khaled. 2001. *Rebellion and Violence in Islamic Law*, Cambridge: Cambridge University Press.
- Abou-El-Haj, Rifa'at. 1984. The 1703 Rebellion and the Structure of Ottoman Politics, Netherlands: Nederlands Historisch-Archaeologisch Instituut te Istanbul.
- Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2005. "The Rise of Europe: Atlantic Trade, Institutional Change, and Economic Growth," *American Economic Review*, 95 (3), 546–579.
- Acemoglu, Daron and James A. Robinson. 2006. *Economic Origins of Dictatorship and Democracy*, Cambridge: Cambridge University Press.

- Acemoglu, Daron, James A. Robinson, and Ragnar Torvik. 2013. "Why Do Voters Dismantle Checks and Balances?" *Review of Economic Studies*, 80 (3), 845–875.
- Afary, Janet. 1996. The Iranian Constitutional Revolution, 1906-1911: Grassroots Democracy, Social Democracy, and the Origins of Feminism, New York: Columbia University Press.
- Aghion, Philippe, Alberto Alesina, and Francesco Trebbi. 2004. "Endogenous Political Institutions," The Quarterly Journal of Economics, 119 (2), 565–611.
- Aksan, Virginia. 2022. The Ottomans 1700-1923: An Empire Besieged, 2nd Edition, New York: Routledge.
- Amanat, Abbas. 2009. Apocalyptic Islam and Iranian Shi'ism, New York: Tauris.
- Ananyev, Maxim, Dimitrios Xefteris, Galina Zudenkova, and Maria Petrova. 2019. "Information and Communication Technologies, Protests, and Censorship," http://dx.doi.org/ 10.2139/ssrn.2978549.
- Anjum, Ovamir. 2012. Politics, Law, and Community in Islamic Thought: The Taymiyyan Moment, New York: Cambridge University Press.
- Ansari, Hassan and Mehdi Shadmehr. 2021. "Theological Origins of the Iranian Islamic Government," Mimeo.
- Arjomand, Said Amir. 1984. The Shadow of God and the Hidden Imam: Religion, Political Order, and Societal Change in Shi'ite Iran from the Beginning to 1890, Chicago: University of Chicago Press.
- Arjomand, Said Amir. 1988. The Turban for the Crown: The Islamic Revolution in Iran, New York: Oxford University Press.
- Ashcraft, Richard. 1986. Revolutionary Politics and Locke's Two Treatises of Government, Princeton: Princeton University Press.
- Auriol, Emmanuelle and Jean-Philippe Platteau. 2017. "Religious Co-option in Autocracy: A Theory Inspired by History," *Journal of Development Economics*, 127, 395–412.
- Auriol, Emmanuelle, Jean-Philippe Platteau, and Thierry Verdier. 2023. "The Quran and the Sword," Journal of the European Economic Association, 21 (5), 1772–1820.
- Averroes and Lahcen Elyazghi Ezzaher. 2015. Three Arabic Treatises on Aristotle's Rhetoric: The Commentaries of Al-Fārābi, Avicenna, and Averroes. Translated, with Introduction and Notes, by Lahcen Elyazghi Ezzaher, Carbondale: Southern Illinois University Press.
- Averroes and Ralph Lerner. 1974. Averroes on Plato's "Republic". Translated, with an Introduction and Notes, by Ralph Lerner, Ithaca: Cornell University Press.

- Averroes and Erwin I.J. Rosenthal. 1966. Averroes' Commentary on Plato's Republic. Edited with an Introduction, Translation and Notes by E.I.J. Rosenthal, Cambridge: Cambridge University Press.
- Babayan, Kathryn. 2002. Mystics, Monarchs, and Messiahs: Cultural Landscapes of Early Modern Iran, Cambridge: Harvard University Press.
- Bayat, Mangol. 1991. Iran's First Revolution : Shi'ism and the Constitutional Revolution of 1905-1909, New York: Oxford University Press.
- Bernand, M. "Idjmā^c," In Encyclopaedia of Islam, Second Edition, edited by P. Bearman, Th. Bianquis, C.E. Bosworth, E. van Donzel, W.P. Heinrichs, P.J. Bearman (Volumes X, XI, XII), Th. Bianquis (Volumes X, XI, XII), et al. doi: http://dx.doi.org/10.1163/ 1573-3912_islam_COM_0350, Accessed February 16, 2022.
- Besley, Timothy and Torsten Persson. 2011. "The Logic of Political Violence"," The Quarterly Journal of Economics, 126 (3), 1411–1445.
- Bickerman, Elias J. 1962. From Ezra to the Last of the Maccabees: Foundations of Post-Biblical Judaism, New York: Schocken.
- Bisin, Alberto, Jared Rubin, Avner Seror, and Thierry Verdier. 2023. "Culture, Institutions and the Long Divergence," *Journal of Economic Growth*, https://doi.org/10.1007/ s10887-023-09227-7, forthcoming.
- Black, Antony. 2011. *History of Islamic Political Thought: From the Prophet to the Present*, Edinburgh: Edinburgh University Press.
- Blaydes, Lisa and Eric Chaney. 2013. "The Feudal Revolution and Europe's Rise: Political Divergence of the Christian West and the Muslim World before 1500 CE," American Political Science Review, 107 (1), 16–34.
- Blaydes, Lisa, Justin Grimmer, and Alison McQueen. 2018. "Mirrors for Princes and Sultans: Advice on the Art of Governance in the Medieval Christian and Islamic Worlds," *The Journal of Politics*, 80 (4), 1150–1167.
- Boleslavsky, Raphael, Mehdi Shadmehr, and Konstantin Sonin. 2021. "Media Freedom in the Shadow of a Coup," Journal of the European Economic Association, 19 (3), 1782–1815.
- Butterworth, Charles E. 1998. "Averroës' Platonization of Aristotle's Art of Rhetoric," in La Rhétorique d'Aristote: traditions et commentaires de l'Antiquité au XVII^e siècle eds. by Dahan, Gilbert and Irène Rosier-Catach, 227–40, Paris: J. Vrin.
- Cantoni, Davide, David Y. Yang, Noam Yuchtman, and Y. Jane Zhang. 2019. "Protests as Strategic Games: Experimental Evidence from Hong Kong's Antiauthoritarian Movement," *The Quarterly Journal of Economics*, 134 (2), 1021–1077.
- Chaney, Eric. 2013. "Revolt on the Nile: Economic Shocks, Religion, and Political Power," *Econometrica*, 81 (5), 2033–2053.

- Chaney, Eric. 2022. "Islam and Political Structure in Historical Perspective," in *The Oxford Handbook of Politics in Muslim Societies* eds. by Cammett, Melani and Pauline Jones, New York: Oxford University Press.
- Chen, Heng and Wing Suen. 2016. "Falling Dominoes: A Theory of Rare Events and Crisis Contagion," *American Economic Journal: Microeconomics*, 8 (1), 228–55.
- Cook, Michael. 2001. Commanding Right and Forbidding Wrong in Islamic Thought, New York: Cambridge University Press.
- Cook, Michael. 2014. Ancient Religions, Modern Politics: The Islamic Case in Comparative Perspective, Princeton: Princeton University Press.
- Crone, Patricia. 1980. Slaves on Horses: The Evolution of the Islamic Polity: Cambridge University Press.
- Crone, Patricia. 2000. "Ninth-Century Muslim Anarchists," Past & Present, 167, 3-28.
- Crone, Patricia. 2001. "Shūrā as an Elective Institution," Quaderni di Studi Arabi, 19, 3–39.
- Crone, Patricia. 2004. God's Rule Government and Islam: Six Centuries of Medieval Islamic Political Thought, New York: Columbia University Press.
- Crone, Patricia. 2012. The Nativist Prophets of Early Islamic Iran: Rural Revolt and Local Zoroastrianism, Cambridge: Cambridge University Press.
- Crone, Patricia and Martin Hinds. 1986. God's Caliph: Religious Authority in the First Centuries of Islam, Cambridge: Cambridge University Press.
- Dabashi, Hamid. 1988. "Two Clerical Tracts on Constitutionalism," in Authority and Political Culture in Shi'ism ed. by Arjomand, Said Amir, Albany: State University of New York Press.
- Dakake, Maria. 2007. The Charismatic Community: Shi'ite Identity in Early Islam, New York: State University of New York Press.
- Donner, Fred. 1981. The Early Islamic Conquests, Princeton: Princeton University Press.
- Donner, Fred M. 2011. "Qur'ânicization of Religio-Political Discourse in the Umayyad Period," Revue des mondes musulmans et de la Méditerranée (129), 79–92.
- Enikolopov, Ruben, Alexey Makarin, and Maria Petrova. 2020. "Social Media and Protest Participation: Evidence From Russia," *Econometrica*, 88 (4), 1479–1514.
- Farabi and Charles E. Butterworth. 2015. Alfarabi: The Political Writings, Volume II. Translated, Annotated, and with Introduction by Charles E. Butterworth, Ithaca: Cornell University Press.
- Finer, Samuel Edward. 1999. The History of Government from the Earliest Times Volume II: The Intermediate Ages, Oxford: Oxford University Press.

- Gibb, Hamilton A. R. 1982. *Studies on the Civilization of Islam*, Princeton: Princeton University Press.
- Goodman, Lenn Evan. 1992. Avicenna, New York: Routledge.
- Gutas, Dimitri. 1998. Greek Thought, Arabic Culture: The Graeco-Arabic Translation Movement in Baghdad and Early 'Abbasaid Society (2nd-4th/5th-10th c.), Abingdon: Taylor & Francis Group.
- Gutas, Dimitri. 2004. "The Meaning of Madani in al-Farabi's "Political" Philosophy," Mélanges de l'Université Saint-Joseph, 57, 259–282.
- Halbertal, Moshe and Stephen Holmes. 2017. The Beginning of Politics: Power in the Biblical Book of Samuel, Princeton: Princeton University Press.
- Hallaq, Wael. 1984. "Caliphs, Jurists and the Saljūqs in the Political Thought of Juwaynī," The Muslim World (Hartford), 74 (1), 26–41.
- Hallaq, Wael. 2009. Sharī'a: Theory, Practice, Transformations, New York: Cambridge University Press.
- Hallaq, Wael. 2014. The Impossible State: Islam, Politics, and Modernity's Moral Predicament, New York: Columbia University Press.
- Halpern, Baruch. 1981. The Constitution of the Monarchy in Israel, The Netherlands: Brill.
- Hamilton, Alexander, James Madison, and John Jay. 2008. The Federalist Papers, Oxford World's Classics, New York: Oxford University Press.
- Hillenbrand, Carole. 1988. "Islamic Orthodoxy or Realpolitik? Al-Ghazālī's Views on Government," Iran, 26 (1), 81–94.
- Huntington, Samuel. 1996. The Clash of Civilizations and the Remaking of World Order, New York: Simon & Schuster.
- Ibn Khaldûn. 2015. The Muqaddimah: An Introduction to History Abridged Edition, Translated and introduced by Franz Rosenthal, Abridged and Edited by N. J. Dawood, with an Introduction by Bruce B. Lawrence, Princeton: Princeton University Press.
- Jafarian, Rasool. 2003/1382. Siyyid Asadullāh Kharaqānī: Ruhānī Nugarāy Mashrūțih va Riza Shāh, Tehran: Markaz Asnad Enqelab Eslami.
- Johansen, Baber. 1988. The Islamic Law on Land Tax and Rent: The Peasants' Loss of Property Rights as Interpreted in the Hanafite Legal Literature of the Mamluk and Ottoman Periods, London: Croom Helm.
- Khomeini, Roohollah. 2006/1385. Vilāyat Faqīh, Tehran: Moasseseh Tanzim va Nashr Asar Emam Khomeini.

- Khoury, Dina Rizk. 1997. State and Provincial Society in the Ottoman Empire: Mosul, 1540-1834, Cambridge: Cambridge University Press.
- Klosko, George. 2012. History of Political Theory: An Introduction. Volume I: Ancient and Medieval. Second Edition, Oxford: Oxford University Press.
- Kuhn, Thomas S. 1962. *The Structure of Scientific Revolutions*, Chicago: University of Chicago Press.
- Kuran, Timur. 2012. The Long Divergence: How Islamic Law Held Back the Middle East, Princeton: Princeton University Press.
- Kuran, Timur. 2016. "Legal Roots of Authoritarian Rule in the Middle East: Civic Legacies of the Islamic Waqf," *The American Journal of Comparative Law*, 64 (2), 419–454.
- Kuran, Timur. 2023. Freedoms Delayed: Political Legacies of Islamic Law in the Middle East: Cambridge University Press.
- Lambton, Ann K.S. 1981. State and Government in Medieval Islam An Introduction to the Study of Islamic Political Theory: the Jurists, Oxford: Oxford University Press.
- Lapidus, Ira M. 1975. "The Separation of State and Religion in the Development of Early Islamic Society," Int. J. Middle East Stud., 6 (4), 363–385.
- Leaman, Oliver. 1988. Averroes and His Philosophy, London: Routledge.
- Lecker, Michael. 2004. The "Constitution of Medina": Muhammad's First Legal Document, Princeton: Darwin Press.
- Lerner, Ralph and Muhsin Mahdi. 1963. *Medieval Political Philosophy: A Sourcebook*, Ithaca: Free Press of Glencoe.
- Lewis, Bernard. 1982. The Muslim Discovery of Europe, New York: Norton & Company.
- Lizzeri, Alessandro and Nicola Persico. 2004. "Why did the Elites Extend the Suffrage? Democracy and the Scope of Government, with an Application to Britain's 'Age of Reform'," *The Quarterly Journal of Economics*, 119 (2), 707–765.
- Macpherson, C.B. 1962. *The Political Theory of Possessive Individualism*, New York: Oxford University Press.
- Madelung, Wilferd. 1997. The Succession to Muhammad: A Study of the Early Caliphate, Cambridge: Cambridge University Press.
- Mardin, Serif. 1962. *Genesis of Young Ottoman Thought*, Princeton: Princeton University Press.
- Melamed, Abraham. 2011. "Aristotle's Politics in Medieval and Renaissance Jewish Political Thought," in Well Begun is Only Half Done: Tracing Aristotle's Political Ideas in Medieval Arabic, Syriac, Byzantine, and Jewish Sources ed. by Syross, Vasileios, 145–186, Tempe: Arizona Center for Medieval and Renaissance Studies.

Modarressi, Hossein. 1983. Kharāj in Islamic Law, London: Anchor Press.

- Modarressi, Hossein. 1993. Crisis and Consolidation in the Formative Period of Shi'ite Islam, Princeton: Princeton University Press.
- Mokyr, Joel. 1990. The Lever of Riches: Technological Creativity and Economic Progress, New York: Oxford University Press.
- Morris, Stephen and Mehdi Shadmehr. 2023. "Inspiring Regime Change," Journal of the European Economic Association, 21 (6), 2635–81.
- Morris, Stephen and Hyun Song Shin. 1998. "Unique Equilibrium in a Model of Self-Fulfilling Currency Attacks," *American Economic Review*, 88 (3), 587–597.
- Morris, Stephen and Hyun Song Shin. 2003. "Global Games: Theory and Applications," in Advances in Economics and Econometrics, Theory and Applications, Eighth World Congress, Vol. I eds. by Dewatripont, Mathias, Lars Peter Hansen, and Stephen J. Turnovsky, Cambridge: Cambridge University Press.
- North, Douglass C. and Robert P. Thomas. 1973. The Rise of the Western World: A New Economic History, New York: Cambridge University Press.
- North, Douglass C. and Barry R. Weingast. 1989. "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England," *Journal of Economic History*, 49 (4), 803–832.
- Ober, Josiah. 2022. The Greeks and the Rational: The Discovery of Practical Reason, Berkeley: University of California Press.
- Persson, Torsten, Gérard Roland, and Guido Tabellini. 1997. "Separation of Powers and Political Accountability," *The Quarterly Journal of Economics*, 112 (4), 1163–1202.
- Persson, Torsten and Guido Tabellini. 2004. "Constitutional Rules and Fiscal Policy Outcomes," American Economic Review, 94 (1), 25–45.
- Persson, Torsten and Guido Tabellini. 2009. "Democratic Capital: The Nexus of Political and Economic Change," American Economic Journal: Macroeconomics, 1 (2), 88–126.
- Platteau, Jean-Philippe. 2017. Islam Instrumentalized: Religion and Politics in Historical Perspective, New York: Cambridge University Press.
- Rheault, Magali and Dalia Mogahed. "Many Turks, 2008.Iranians, Egyptians Sharia and Justice," https://news.gallup.com/poll/109072/ link many-turks-iranians-egyptians-link-sharia-justice.aspx.
- Rosenthal, Erwin Isak Jakob. 1958. Political Thought in Medieval Islam: An Introductory Outline, New York: Cambridge University Press.
- Rosenthal, Erwin Isak Jakob. 1971. *Studia Semitica, Volume II: Islamic Themes*, Cambridge: Cambridge University Press.

Roy, Olivier. 1994. The Failure of Political Islam, Cambridge: Harvard University Press.

- Rubin, Jared. 2017. Rulers, Religion, and Riches: Why the West Got Rich and the Middle East Did Not, New York: Cambridge University Press.
- Saleh, Mohamed and Jean Tirole. 2021. "Taxing Identity: Theory and Evidence from Early Islam," *Econometrica*, 89 (4), 1881–1919.
- Sariyannis, Marinos. 2019. A History of Ottoman Political Thought up to the Early Nineteenth Century, with a chapter by E. Ekin Tuşalp Atiyas, Leiden: Brill.
- Schacht, J. "Abū Hanīfa Al-Nu'mān," In Encyclopaedia of Islam, Second Edition, edited by P. Bearman, Th. Bianquis, C.E. Bosworth, E. van Donzel, W.P. Heinrichs, P.J. Bearman (Volumes X, XI, XII), Th. Bianquis (Volumes X, XI, XII). doi:http://dx.doi.org/10. 1163/1573-3912_islam_SIM_0194, Accessed November 23, 2022.
- Shadmehr, Mehdi. 2021. "Protest Puzzles: Tullock's Paradox, Hong Kong Experiment, and the Strength of Weak States," *Quarterly Journal of Political Science*, 16 (3), 245–264.
- Stasavage, David. 2020. The Decline and Rise of Democracy: A Global History from Antiquity to Today, Princeton: Princeton University Press.
- Stern, Menahem. 1968. "The Hasmonean Revolt and its Place in the History of Jewish Society and Religion," *Cahiers d'Histoire Mondiale. Journal of World History. Cuadernos* de Historia Mundial, 11 (1), 92–106.
- Stern, Samuel Miklos. 1970. "The Constitution of the Islamic City," in Papers on Islamic History, I: The Islamic City, A Colloquium eds. by Hourani, Albert Habib and Samuel Miklos Stern, Oxford: Bruno Cassirer; Philadelphia: University of Pennsylvania Press.
- Țabarī, Abū Jacfar Muḥammad b. Jarīr. 1987. The History of al-Ṭabarī, Vol. XXXII: The Reunification of The Abbāsid Caliphate. Translated and Annotated by C. E. Bosworth, Albany: State University of New York Press.
- Țabarī, Abū Jasfar Muḥammad b. Jarīr. 1989. The History of al-Ṭabarī, Vol. XXVI: The Waning of the Umayyad Caliphate. Translated and Annotated by Carole Hillenbrand, Albany: State University of New York Press.
- Țabarī, Abū Jacfar Muḥammad b. Jarīr. 1990. The History of al-Ṭabarī, Vol. XIX: The Caliphate of Yazīd b. Muʿāwiyah. Translated and Annotated by I. K. A. Howard, Albany: State University of New York Press.
- Tabatabai, Javad. 2006/1385. Darāmadī bar Tārīkh Andīshih Dar Iran, Vīrāstih Jadīd, Tehran: Kavir.
- Tezcan, Baki. 2010. The Second Ottoman Empire: Political and Social Transformation in the Early Modern World, New York: Cambridge University Press.
- Tierney, Brian. 2010. The Crisis of Church and State: 1050–1300, Toronto: University of Toronto Press.

- van Ess, Josef, "al-Aṣamm," In Encyclopaedia of Islam, Second Edition, edited by P. Bearman, Th. Bianquis, C.E. Bosworth, E. van Donzel, W.P. Heinrichs, P.J. Bearman (Volumes X, XI, XII), Th. Bianquis (Volumes X, XI, XII), et al. doi: http://dx.doi.org/10.1163/1573-3912_islam_SIM_8354, Accessed January 24, 2023.
- Wasserstrom, Steven M. 1995. Between Muslim and Jew: The Problem of Symbiosis under Early Islam, Princeton: Princeton University Press.
- Watt, William Montgomery. 2003. Islamic Political Thought, Edinburgh: Edinburgh University Press.
- Weingast, Barry R. 1997. "The Political Foundations of Democracy and the Rule of Law," American Political Science Review, 91 (2), 245–263.
- Yanagizawa-Drott, David. 2014. "Propaganda and Conflict: Evidence from the Rwandan Genocide," The Quarterly Journal of Economics, 129 (4), 1947–1994.
- Yavari, Neguin. 2014. Advice for the Sultan: Prophetic Voices and Secular Politics in Medieval Islam, New York: Oxford University Press.
- Ziad, Waleed. 2021. *Hidden Caliphate: Sufi Saints beyond the Oxus and Indus*, Cambridge: Harvard University Press.