

**The Impact of Administrative Power on Political and Economic Development: Toward
Political Economy of Implementation**

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Abstract

Why did limited government and 'constitutionalism' (the rule of law, constitutional rules, and political representation) evolve in some societies but not others? Guided by history, this paper examines why this evolution reflects dependence on administrators to implement policy choices including those affecting them. Limited government and constitutionalism are manifestations of equilibria in which the administrators have the power to influence choices. The thesis that constitutionalism reflects an equilibrium among the powerful differs from the prevailing one, which asserts that it reflects gains to the weak from constraining the powerful. Analyzing the determinants and implications of administrative power reveals its impact on trajectories of economic development. Distinct administrative-power equilibria have different impacts on the security of the non-elite's property rights; intra-state and inter-state violence (e.g. civil wars and wars, respectively); policies; entry barriers to new technologies and economic sectors; the nature of political conflicts; and the means to resolve conflicts concerning political rights.

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This paper presents a conjecture regarding the origin of constitutionalism, why it was historically insufficient to protect property rights, and why it was nevertheless positively correlated with prosperity. Recent theories of constitutionalism have focused on constitutional rules viewing them as a coordination device that fosters the security of property rights. Motivated by the interests of protecting their wealth, property owners utilize constitutional rules to coordinate on an equilibrium in which powerful rulers and elite respect property rights.¹ Constitutionalism is thus a means to constrain the powerful.

However, history suggests that constitutionalism emerged to facilitate cooperation among the powerful. Constitutionalism was not a means to coordinate the weak on an equilibrium constraining the powerful but was an observable implication of particular equilibria among the powerful. Specifically, constitutionalism reflects equilibria in which those with the administrative capacity to implement or counteract policy choices had to take into account each other's preferences when making choices. Roughly speaking, constitutionalism served as a means to facilitate cooperation and decision-making among the powerful while reducing costly, on-the-equilibrium-path conflicts among them. Administrative equilibria determined which, if any, the three main features of constitutionalism (i.e. constitutional rules, the rule of law and political representation) emerged and with respect to whom.

The premise of the analysis is that policy choices are nothing but a wish without an administration to implement them. An administration is composed of individuals and organizations that are directly involved in the implementation of military, financial, legal or other policy choices (e.g. a professional or citizens' army, militias, tax farmers, the IRS, feudal lords, self-governed provinces and cities, tribes, and lineages). An effective administration has the organizational capacity to execute policy choices by acting on the ruler's behalf (e.g. assembling an army, advancing loans, collecting taxes, or dispensing justice), making policy choices publically known, monitoring behavior, and punishing deviators.

¹E.g. Hardin 1989; North and Weingast 1989; and Myerson 2007. For recent analyses of political representation in this line of research, see Engerman and Sokoloff 1997; Ticci and Vindigni 2006; Acemoglu and Robinson 2006; Lezzeri and Persico 2004. See discussion in Barzel 2002. For social and cultural determinants of constitutionalism see, e.g. Greif 1998; Aston and Philpin 2002; Mokyr 2006.

Among its other tasks, an administration is a means to retaliate against those refusing to comply with policy choices. Administrators therefore can be in the particularly advantageous position of defying those who make policy choices (the ‘ruler’ or ‘political elite’) while, at the same time, reducing these choice-makers’ capacity to retaliate against them. Indeed, military, financial, and legal administrators often have defied rulers and thereby influenced outcomes. *Administrative power* is the extent to which the ruler’s choices and outcomes are influenced by potential defiance by those with administrative capacity.²

A necessary condition for administrative power is that it is costly for the ruler to replace the administrators. Environmental and technological factors influence this cost, but so are cultural factors reflecting multiple equilibria in the loyalty and legitimacy relations among the administrators, their agents, and the ruler. Equilibria with different levels of administrative power therefore exist.³ (Section I.)

When the administrative equilibrium entails sufficiently high power, the ruler’s and administrators have self-enforcing rights and constitutionalism is Pareto-optimal for them. Constitutional rules and due process and equality before the law reduce costly conflicts caused by information problems and political assemblies foster cooperation (and particularly coordination on implementable choices). In such cases, the elite – those with formal influence over policy choices – include the ruler and the administrators. (Section II present the argument and section III provides historical evidence.)

For ease of exposition, the argument abstracts from important issues. It implicitly assumed that gains from cooperation among the ruler and administrators are sufficient to prevents the state from disintegrating and that we can consider the powerful administrators as one agent. Hence, the argument ignores, for example, possible collective action problems or individuals or groups with equilibrium administrative capacity who refrain from cooperating via

² Unlike the usual agency problem, the issue here is not the limit of enforcement (and hence contracting) due to asymmetric information but the capacity to control one’s agents when enforcement is endogenous to the relations.

³ This situation resembles the ‘hold-up’ problem in inter-firm relations (Williamson 1985). Most of the time administrators do not defy their rulers, but this equilibrium outcome does not indicate whether the possibility of administrative defiance impacts institutional development.

the state. (The tribes in the Federally Administered Tribal Areas (FATA) in Pakistan are an example for such groups.)

Leaving such subtleties to future work, this paper's preliminary analysis of administrative-power as the origin of constitutionalism suggests its promise. It seems to provide a consistent explanation for the rise, decline, and implications of constitutionalism. The administrative-power view reveals, for example, why constitutionalism rose in most of Europe (but not, for example, in Russia or China) by the 15th century, why rulers often protected the rights of the non-elite, and why the composition and interests of the elite changed over time and place.

In particular, the administrative-power view reveals why constitutionalism is not sufficient for economic prosperity and why, nevertheless, pre-modern (European) constitutionalism was positively correlated with prosperity.⁴ When administrative power underpins constitutionalism, those without power do not necessarily have protected rights, and welfare-related policy is biased by power considerations. Indeed, constitutional institutions benefitting the elite can be socially harmful exactly because they are 'good' at fostering intra-elite cooperation in abusing the rights of the non-elite (Section IV).

Yet, the administrative-power view reveals causal relations between constitutionalism and prosperity beyond the protection of property rights. Administrative power influences intra- and inter-state violence (Section V), the total level of violence (Section VI), administrators' incentives to implement (even unauthorized) growth-enhancing policy choices (Section VII), and whether the nature and expected outcomes of political conflicts motivate the creation of new wealth (Section VIII).

This analysis suggests that the historically positive correlation between constitutionalism and prosperity is due to the administrative equilibria leading to both. These administrative equilibria reduce overall violence, motivate administrators to implement growth-promoting choices, and lead to political conflicts favorable to the creation of new wealth. Furthermore,

⁴ Correlation: De Long and Shleifer 1993. Insufficiency: e.g. O'Brien 1998; Harris 2004; Greif 2005.

constitutionalism complements prosperity by providing a means for collective decision making and for peacefully providing political voice and influence to a new economic group.

This paper differs from the more common *choice*-theoretic approaches to institutional development because it considers institutional development as reflecting the strategic problems associated with implementation differentiates. The choice-theoretic approach assumes that rulers' choices correspond to outcomes and it abstracts from the need to implement these choices.⁵ Although this assumption is often useful, we can gain from combining the analysis of choice with that of implementation. (Greif 2005.) Indeed, choices and implementation are inter-related: implementing choices requires an administration and powerful administrators influence choices.⁶

Similarly, focusing on constitutions as an equilibrium institutions (as in Greif 2006) reflecting self-enforcing institutional outcome differentiates this paper from the literature on administration. This literature studies how agency problems determine a ruler's optimal administrative forms (e.g. Levi 1989; Kiser 1999; Dixit 2006); how the interactions between politicians, bureaucrats and interest groups influence policy choices in democracies (e.g. McConnell 1966); and what determines bureaucratic effectiveness (e.g. Wilson 1991; Evans and Rauch 1999). These important lines of work have taken legal and political institutions as given, while this paper considers them as endogenous equilibrium outcomes.

Considering the ruler-administrators strategic problem also differentiates this paper from the literature examining administration as a function of the relations among social groups (e.g. Greif 1998), or among rulers and their subjects (e.g. Levi 1989; Kiser 1999; Arias 2007). More generally, while Weber (1987) and Tilly (1990) among others, asserted that intra-state administrative growth is due to inter-state warfare, here the analysis highlights the reverse causal

⁵ E.g. North 1982, 1990; Bates, 1991; Bates et. al. 2002; Olson 1993; Acemoglu et. al. 2005; Acemoglu and Robinson 2006. Among the notable exceptions are Greif 1994, 1998, 2005; Egorov and Sonin 2006.

⁶ Previous important analyses of the impact of economic or coercive powers on the rule of law assumed that agents are endowed with the ability to sanction a ruler rather than considering it as endogenous. E.g. Olson 1993; Bates 1991; Bates et al. 2002; Barzel and Kiser 1997; Haber et al. 2003; Skaperdas 1992.

relations. Administrative equilibria influence the growth of the state – whether or not it disintegrates or consolidates – and whether violence prevails within or between states.

The analysis in this paper is highly preliminary. It neither provides an explicit model nor conducts an empirical test, or rigorously integrates important considerations such as technological changes or environmental factors. As such, it represents the beginning rather than the end of a research agenda. Its only aim is to highlight the merit of developing the political economy of implementation that contends with the implications of the necessity of governing via administrators. Its key insight is that distinct initial endowments of administrative power can have profound implications for historical trajectories of institutional and economic developments.

I. Administration and Administrative Power

This section defines the term administration as it is used in this paper. It then differentiates between *powerful administrators* (or ‘*powerful administrations*’) who can sanction a ruler using their administrative capacity and *weak administrators* (or ‘*ruler-controlled administrations*’) who cannot.⁷ It concludes by considering the technological, strategic, and structural determinants of administrative power and why multiple administrative equilibria are possible.

Administration

Kings, dictators, landlords, elected leaders, aristocrats, generals, and merchants have been, at different time and places, members of the *political elite*, namely, those with formal and effective influence over policy choices. The analysis here considers the membership of this elite as endogenous to the administrative equilibrium. For simplicity of exposition, however, suppose at this point that there is a ‘ruler’ who makes policy choices regarding the internal and external affairs of the state. These include the distribution of political, legal, and economic rights, the processes for making legal and political decisions, and foreign policy.

Whether the policy-maker is a person (such as a king, dictator, or president) or a group (such as a tribe, party, ethnic group, oligarchy, republic, or theocracy), governing requires administration. An *administration* is composed of individuals and organizations that are directly

⁷ Weakness is vis-à-vis the ruler and not necessarily other members of the society.

involved in the implementation of military, financial, legal or other policy choices. An effective administration executes choices by acting on the ruler's behalf (e.g. assembling an army or dispensing justice), making choices publically known, monitoring behavior, and punishing deviators.

Because rulers have only limited physical capacity to implement policy choices, the administration at their disposal determines which of their choices will be implemented. For example, federal authorities choose tax rates but the effectiveness of the IRS determines how much tax revenues are actually collected. Similarly, a ruler might choose to have an army of a certain size but an administration is necessary to implement this choice. It must obtain the necessary funds, solicit recruits, and then equip, train and maintain them.

In studying the impact of administrations on developmental processes, it is useful to adopt the broader definition stated above rather than to equate administrations with bureaucracy. Throughout history, administrations have taken a wide variety of forms, including citizens' militias, mercenaries, feudal lords, warlords, privateers, tax farmers, modern bureaucracies, temples, parishes, and self-governed provinces, colonies, cities, tribes and clans.

Administrative power

Ignoring incentive issues, administrators can use their administrative capacity to 'sanction the ruler' by withdrawing their services, implementing another choice, or using their administrative capacity against him. (Henceforth, the term 'sanction' refers to any of these actions.) Historically, administrators sometimes refused to implement choices of even seemingly mighty rulers such as Frederick Barbarossa (d. 1190) who was the Emperor of the Holy Roman Empire, the king of Germany, Italy, and Burgundy, and the Duke of Swabia. In 1174 Barbarossa prepared a campaign against the Italian city-republics and asked one of his feudal lords, Henry the Lion, the Duke of Saxony and Bavaria, to send out his troops. However, Henry declined and used his troops to secure his domain's Eastern borders instead.⁸

⁸ This argument about distinct preferences over choices differs from the argument that commitment failure is the source of failure in political bargaining (e.g. Greif 1994; Fearon 1997; Nye 1997; Acemoglu 2003).

Administrators have *administrative power* when their capacity to sanction a ruler influences his choices. Having influence requires the threat of sanctioning to be credible and the sanction to be sufficiently large. The larger the set of choices on which the administrators can have influence, the higher is their power. Attempts to pre-empt power also influence choices. For example, after the American Revolution of 1776 revealed the administrative power of self-governed colonies to Britain, it attempted to establish Crown Colonies instead.

Individuals and organizations that are not part of the state's administration also might have the capacity to sanction rulers. The expectations of such sanctions might influence rulers' choices (e.g. Greif 2005). Choices made by Chinese Emperors reflect their concerns about mass peasant revolts, while those of elected officials in democracies often reflect their concerns with future votes by members of organized groups.⁹ Still, there is an important distinction between the sanctioning capacities of administrators and non-administrators. To sanction the ruler, non-administrators have to take *action* (e.g. revolt or vote) while potentially facing a repressive administration. In contrast, powerful administrators can impose costs on a ruler through *inaction* and face only a state apparatus that has been weakened because of their inaction. Powerful administrators thus have a comparative advantage in sanctioning rulers.

Self-enforcing Administrative Power

Different levels of administrative power can be equilibrium outcomes for a given environment and technology. Multiple equilibria exist because administrative power increases with the ruler's cost of replacing incumbent administrators, while this cost increases with administrative power. (By 'replacing administrators,' I also mean creating an alternative administration.) To see why this is the case ignores, for simplicity, considerations such as collective action problems, heterogeneity in administrators' preferences, and asymmetric information.

⁹ Administrations may have a comparative advantage in coordinating such protests (Moe 2005). Groups with independent administrative capacity, even if not used by the ruler, are relatively effective in influencing the costs of implementing policy choices. The distribution of organizational capacity at the disposal of the ruler and other actors impacts the cost of implementing various policy choices and hence their net benefit to the ruler.

Suppose that the cost of replacing the administrators is infinite. In this case, the administrators can implement their first-best choice with impunity because the ruler cannot retaliate against them.¹⁰ The ruler's optimal (implementable) choice is the administrators' first-best choice. (Section V discusses the role of rulers when administrators are powerful.) However, if the ruler can replace the administrators with alternatives at some cost, their ability to sanction him is limited by the threat of replacement (and the implied retaliation). If the cost to the ruler of not implementing a particular choice is higher than his cost of replacing the non-compliant administrators with others who would comply, then the incumbent administrators cannot prevent implementation. The administrators' impact on choices is lowest if the cost of replacing them is zero. In other words, if they have perfect substitutes.¹¹

Both environmental and technological factors influence the cost to the ruler of replacing the incumbent administrators, and hence their power. For example, the cost of replacing financial administrators, and hence their power, declines if the ruler gains an independent source of income or has access to alternative financiers. More generally, replacement cost and power increases if providing administrative services requires highly specific human capital. Fighting as a knight required a long period of training and costly equipment. Therefore, during the Feudal period European rulers could not increase their heavy cavalry force simply by knighting non-nobles. In 1981, the Federal air traffic controllers who went on an illegal strike in the US in 1981 assumed that their special skills were of sufficient value to empower them; their mistake was that military air traffic controllers had similar skills and therefore President Reagan could replace the civilians.

Multiple equilibria in administrative power can exist for a given set of exogenous factors. High replacement costs render the administrators powerful, while powerful administrators can prevent choices that reduce their replacement costs. The Emperor Barbarossa, for example, faced powerful administrators – the German Dukes – who gained administrative capacity during the civil war that preceded his regime. The cost of replacing them seems to have been high enough to

¹⁰ By first-best I mean their optimal choice given the technological and strategic costs of implementation.

¹¹ Even if they have perfect substitutes, however, the multiplicity of equilibria implies that they can have power. There can be an equilibrium in which the new administrators are expected not to implement the choice either.

restrict his ability to reduce their power. After his loss in the battle of Legnano (1176) which concluded his Italian campaign, Barbarossa had to recognize the autonomy of the Italian cities. He blamed his failure on Henry's absence and upon returning to Germany, fought and deposed Henry. But the Dukes who assisted Barbarossa were the ones who devoured Henry's territories; they were sufficiently powerful to prevent Barbarossa from becoming stronger.

The high costs of replacing administrators render them powerful, and that power can be used to prevent policies reducing replacement costs. Similarly, low replacement costs imply weak ('ruler-controlled') administrators who cannot prevent choices that keep these costs low. Thus, there are at least two administrative equilibrium structures, one with weak and the other with strong administrations.¹² In between, these two structures, there are likely to be others in which neither side will find it beneficial to unilaterally change the structure. Once an administrative equilibrium corresponding to any one of these many equilibria prevails, it is *self-enforcing*. In such cases, the administrative structure – whether commissioned by a ruler, created by the administrators, or inherited from the past – will perpetuate.

Although focusing on administrative equilibria is analytically useful and empirically relevant, it is intuitive that administrative equilibria – particularly those with powerful administrators – are generally unstable. A distribution of administrative power is likely to be an equilibrium in only relatively small set of parameters and hence correspondently small exogenous shocks are likely to cause this distribution to cease being an equilibrium outcome. Furthermore, administrative equilibria tend to undermine themselves, in the sense of leading to changes that render them self-enforcing in small set of parameters. In addition, information and coordination problems provide opportunities to rulers and administrators to shift the equilibrium in their favor. The discussion below illustrates the fragility of administrative equilibria and the associated dynamics. (See general discussion in Greif 1998 and 2006, chapter 6.)

Rulers with limited administrative capacity, however, might benefit from increasing administrative power when it fosters their ability to commit. A ruler who cannot take at will, need others to be willing to provide him. The history of France provides an example. When the Bourbons came to power (1589), the Crown auctioned short-term leases to bidders who were

¹² These correspond to the 'coordinating' and 'powerful' states in Greif 2006, chapter 8.

weak because they were perfect substitutes ex-ante and ex-post. However, the crown's expenses grew faster than its revenues and the budgetary pressure led the Crown to ex-post renegotiate leases and renege on its contractual obligations. Once the farmers realized this, they made smaller bids, and the budgetary crisis worsened. In response, Colbert, France's finance minister, created a strong administrator, the 'Company of General Farms,' in the second half of the 17th century. The company became the sole collector of indirect taxes and thus could more credibly threaten to halt collections if the crown reneged on its obligations. The crown's enhanced commitment increased revenues and resolved the budgetary crisis. (Balla and Johnson 2006.)

Endogenous Costs: Legitimacy, Loyalty, and Administrative Practices

The discussion so far has noted that the cost of replacing administrators is endogenous to their administrative power. It is also endogenous, however, to notions of legitimacy and loyalty and different notions can be self-enforcing. One notion of legitimacy is that of 'absolutism:' It is common knowledge that each (potential and actual) administrator believes that everyone else will follow the behavior the ruler ordered. A ruler with such unlimited coordinative legitimacy can thus respond to an administrator's defiance by mobilizing all other administrators against him. If all administrators are expected to side with the ruler, each administrator's best response is to do so as well. *Ceteris paribus*, the cost of replacing a defiant administrator is therefore lower. Another possible notion of legitimacy is that of a 'figurehead' ruler: It is common knowledge that no (potential and actual) administrator will follow the behavior the ruler ordered against another administrator. In this case, the cost to the ruler of replacing an administrator is infinite.

More generally, there can be notions of legitimacy between these two extremes. Specifically, it can be common knowledge that each administrator believes that everyone else will not mobilize their administrative capacity against a defiant administrator in some situations. Indeed, this 'limited ruler' notion of legitimacy might also specify the situations under which the administrators will collectively sanction the ruler. *Ceteris paribus*, the cost of replacing a defiant administrator in these situations is therefore higher. Different notions of legitimacy, like other

cultural beliefs more generally, evolve historically and hence, in the short run, are beyond the ruler's control.¹³

Events during the Kapp Putsch, the attempt to overthrow the Weimar Republic in 1919, illustrate the difficulty of mobilizing administrators who consider the actions of the government as illegitimate. The peace treaty at the end of World War I stipulated that Germany would reduce the size of its army. When *Freikorps* (paramilitary) units were ordered to disband, they marched on Berlin. The regular army refused to suppress the putsch, asserting that "*Reichswehr* does not shoot on *Reichswehr*." The putsch failed only because the working class responded to the government's call for a general strike, which paralyzed the country.

The loyalty of an administrator's agents constitutes a special case of the relations between legitimacy and the cost of replacing an administrator. If an administrator's agents are loyal to him, the cost of replacing that administrator increases. Different notions of loyalty, in turn, can be self-enforcing. If a ruler expects some agents to be loyal to an administrator, then his best response is to replace these agents in case conflicts arise with their administrator, but if they expect to be replaced, then their best response is more likely to be to support the administrator.

European feudal knights were expected to be, and indeed often were, loyal to their direct overlords and not their kings. It was commonly believed that they would follow their lords and not their kings. As a matter of fact, the knights of Saxony did not join Frederic Barbarossa on his Italian Campaign, and eventually fought alongside Henry against their Emperor. The decision Henry's knights made to join him against the Emperor are consistent with the possibility that multiple notions of loyalty can be self-enforcing. When Henry refused to join Barbarossa's Italian campaign, the Emperor could have replaced him. The fact that Barbarossa did not, suggests that he expected Henry's knights not to follow a new duke and to join him on the battlefield. Their loyalty was to Henry alone.

The thirteenth-century Barons who demanded the Magna Carta from the English king (in 1215) had similarly loyal knights. In the subsequent war with the king, their knights fought against him. It is difficult to imagine contemporary English soldiers fighting against the Queen of England. Unlike their feudal predecessors, their loyalty is to England, not to their superiors.

¹³Regarding legitimacy and cultural beliefs, see Greif, 1994; 2006, chp. 5 and 8.

(Arguably, the welfare state that has replaced patronage is one factor contributing to this distinction.) In short, different loyalties can be equilibrium outcomes. If an administrator's agents are loyal to him and not the ruler, then the cost of replacing the administrator can be positive because he cannot be replaced by coordinating his agents.

The cost of replacing administrators is also endogenous to administrative practices. For example, if the same administrative service is provided by relatively many administrators then, *ceteris paribus*, the cost of replacing each of them is lower than it would otherwise have been. Choosing administrators from different cultures and with diverse interests has the same impact in that it reduces their ability to coordinate and credibly commit to sanction the ruler. The cost of replacing an administrator also declines with more frequent geographical rotations of administrators, which undermine their ability to cultivate loyalty among the local citizenry. Finally, greater uniformity of administrative training, tasks, and routines render administrators closer substitute to each other and hence lowers the cost of replacing an administrator.

Indeed, administrative practices that prevented administrators from acquiring large administrative capacity, cultivating of loyalty, and forming common perceptions of rights were quite common historically. In such diverse polities as France under the Bourbon kings and China under the Qing Emperors on the one hand, and Republican Genoa and Venice on the other, frequent rotation of administrators was mandatory. Muslim rulers often used slaves without local roots as administrators. The Mongol Emperors of China employed foreigners, including Marco Polo, as administrators. Administrative redundancy and uniformity were created in Imperial China and in Communist Russia where the Party's administration paralleled that of the state. Although wasteful, it provided information and administrative capacity that limited administrative power.

The concept of administrative power relates, yet differs, from other administrative attributes used for analysis, such as effectiveness (the capacity and cost of implementing choices); centrality (whether decisions are made centrally and/or there are economies of scale and scope in administration); or corruption (the use of administrative posts for private gains). Some examples can illustrate this point. Both the French Company of General Farms, discussed above, and its contemporary English customs collectors were effective but only the former was powerful. The Federal Reserve is a centralized and powerful administrator as it is controlled by a board that

cannot be arbitrarily replaced by the White House and Congress. The ideal type of Weberian bureaucracy, in contrast, is centralized but weak.

II. The Origin of Limited Government and Constitutionalism

This section discusses why and how administrative power leads to limited government and constitutionalism, that is, the rule of law, constitutional rights, and political representation. It argues that constitutionalism is an observable implication of administrative equilibria with powerful administrators.

Limited Government and Constitutional Rules

A limited government is one in which the ruler is constrained from arbitrarily assigning rights. When the administrators are powerful, they will have some rights as an equilibrium outcome. There are rights that the ruler will prefer them having then confronting them and triggering sanctions. The more power administrators have, the more rights they can secure for themselves.¹⁴ (The ruler's power, if any, comes from his control over the 'weak' component of his administration.)

Limited 'government' – in which rulers respect pre-determined customary, legal, explicit, or implicit rights – is an equilibrium outcome reflecting a balance of administrative power. Constitutional rules – charters, golden bulls, constitutions, political traditions, or basic laws – specify such rights to reduce misunderstandings and hence conflicts along the equilibrium path.

The discussion implicitly assumed that the relative power of the ruler and the administrators is common knowledge. In reality, though, asymmetric information about the sides' powers is likely to prevail. Furthermore, constitutional rules have implications beyond reducing conflicts: they also determine the allocation of gains from fewer conflicts. For these reasons, conflicts that reveal relative power and select among rules are likely to transpire.

¹⁴ There is a rich literature that examines the relations between military or production technology and the rights that one can personally secure as an equilibrium outcome when facing a predatory ruler (e.g. Olson 1993). This work differs in considering the institutional (non-technologically) determined foundations of the rule of law as an equilibrium outcome. For previous analyses in this spirit, see Greif 1994, 1998; Bates, et. al. 2002.

The history of the Magna Carta reflects this argument: that rights and constitutional rules must be self-enforcing to be followed and conflicts are a means of revealing relative power through which self-enforcing rules are selected. The first version of the Magna Carta was imposed on King John in 1215 by the Barons, who demanded and obtained many rights when he was militarily unprepared for confrontation. In particular, they imposed 'clause 61' upon him, which specified that kings must swear an oath of loyalty to an independent baronial committee that could overrule their decisions, through force if necessary.

Later events indicate that clause 61 was not self-enforcing, although the barons may have hoped to make it so by forcing King John to swear in God's name to keep it. Subsequently, John asked for, and received from the Pope, an annulment of his oath, gathered his forces, and invalidated the Magna Carta. The later version of the Magna Carta, confirmed by King Henry III in 1225, remained in force into the 19th century, and excluded clause 61. Indeed, it contained only 37 clauses. Those that were not self-enforcing did not last.¹⁵

Equality and Due Process Before the Law

The causal relationship between administrative equilibria and equality and due process before the law are due to two factors. First, conflicts are costly to both the ruler and the administrators. Second, there is imperfect public information. Specifically, if the ruler makes legal decisions, there is a positive probability that the administrators will interpret them as aimed at transgressing on their rights or reducing their power.

In such repeated, imperfect monitoring games the characteristics of equilibria are well known. Costly conflicts will occur on-the-equilibrium-path whenever the administrators interpret a ruler's legal decision as aimed to gain power. If the cost of conflicts is high, both rulers and administrators gain from adopting decision-making processes that improve the quality of information and reduce the likelihood of conflicts.

Information improves by instituting equality and due process before the law, because legal decisions and processes are uniform and conditional on the objective attributes of the situation,

¹⁵ These 37 clauses remained in force despite the decline in the Crown's power vis-a-vis the Parliament probably because the Crown never regained the rights that were relinquished in the Magna Carta.

not on the identity of the litigants. By relinquishing discretion and respecting legal procedures with outcomes he does not control, the ruler signals that the legal decision is not aimed at influencing power. Some constitutional rules – particularly those specifying processes for making decisions – similarly reduce the possibility of costly misinterpretation of choices (Greif 2006).

Rulers facing powerful administrators have often behaved in a manner consistent with this argument. Even before the Magna Carta (1215) affirmed the English Barons' rights to be tried by their peers, the English kings followed this procedure. The Magna Carta also specified processes for trial by one's peers and handling fiefdoms that were under the supervision of regents or widows rather than an adult male lord. Similarly, Barbarossa followed the rule of law before attacking Henry. He had sought legal consent for the attack from a council of Dukes and attacked only after they had found Henry guilty of insubordination and declared him an outlaw. This process, most likely, was about clarifying Barbarossa's intentions rather than justice. The territory captured from Henry was given to other Dukes, thereby retaining the balance of power between them and Barbarossa.

Political Representation

Constitutional and other rules specifying rights inherently are incomplete 'contracts.' Hence, the rights and choices they specify are not likely to remain optimal to both sides as time passes. Yet, because these rules are an equilibrium outcome, neither side can *unilaterally* alter them without risking conflict. For example, a ruler risks costly retaliation if he increases taxes based on private information regarding a forthcoming external attack.

When past rights and choices are no longer optimal to both sides, their re-adjustment is mutually beneficial. Both the ruler and administrators can gain from coordinating on changing rights or taking other actions. Such Pareto improving changes may be procedural (e.g. specifying a process to determine tax rates), quantitative (e.g. change in the tax rates), and/or structural and aimed at keeping the balance of power (e.g. creating militia to balance an increase in a ruler's military strength). The Magna Carta, for example, specified the process by which the king can request the imposition of a higher tax and a Baronial council to supervise his actions.

Political assemblies are means for changing rights and making choices in order to achieve Pareto optimal outcomes for the ruler and administrators. They facilitate revealing private

information, changing rights, adjusting choices, and cooperating. These assemblies will be composed of individuals with administrative capacity (e.g. nobles), the leaders of hierarchical structures (e.g. tribal leaders), or the elected representative of horizontal structures (e.g. officials of self-governed cities).¹⁶

However, assemblies are costly to rulers because they increase administrative power by fostering coordination among the administrators. Aristotle, for one, noted that tyrants "don't allow [even] associations for social and cultural activities or anything of that kind; these are the breeding grounds of independence and self-confidence, two things which tyrants must guard against" (Politics 5.11).¹⁷ Thus, if the ruler does not gain much from changing rights and making new choices, he is better off without representative assemblies.

Hence, states with powerful administrators will have assemblies representing them, but only if they face an unstable environment that requires periodical adjustment of rights and choices. In that case, the elite will be composed of the ruler and the administrators. States with very powerful administrators are unlikely to have assemblies, as these states disintegrate – unless, due to external threats or other factors, the administrators can gain from cooperation via the state. (I will return to this issue below.) Finally, states with weak administrators will not have representative assemblies (although rulers may still rely on various advisory councils). The *elite* (those with formal influence over policy choices) will be the ruler and his close aides.

III. The Origin of Limited Government and Constitutionalism: History

While relevant evidence has yet to be systematically collected, a cursory historical examination confirms the relevance of the argument above and its predictions. In the late medieval period, constitutional monarchies and republic were the norm, not the exception, in Europe. Their most visible component was political assemblies, known as Parliaments in the British Isles, Estates in France, Diets (Landtage) in the Germanic lands, Sejm in Poland, and Cortes in the Iberian Peninsula. By the end of the 15th century, at least 25 national and

¹⁶ E.g. Bates 1991; Hoffman and Norberg 2001; Barzel and Kiser. 1997; Barzel 2002.

¹⁷ Myerson (2007) argues that political representation are established by rulers when they can gain from the implied better ability to coordinate actions against them.

provisional assemblies operated in the main principalities of Europe, including Scotland, England, Spain, Portugal, France, Sicily, the Netherlands, Germany, Austria, Poland, Hungary, Sweden, Denmark, and Norway. (Herb 2003.)

Consistent with the conjecture regarding the administrative origin of constitutionalism, these political assemblies were composed of individuals and corporate bodies with independent administrative capacity (e.g. feudal lords and self-governed cities), or they had a standing committee with administrative power. Interestingly, although Japan also had powerful administrators under the Tokugawa Shogunate (1603 to 1868) it did not have an assembly. This is consistent with the argument that assemblies are established in response to the need to adjust rights. Japan did not face external military threat and its international trade was very limited implying it had less need for adjusting rights.

The timing of European constitutionalism also lends support to the conjecture that it is an equilibrium outcome in the relations between rulers and powerful administrators. The late-medieval European states were established by rulers who had little administrative capacity. Their abilities were so meager that many of them could not even support a stationary court and had to travel throughout their kingdoms to consume local products as late as the 11th century. “The travels of the Holy Roman Emperor Conrad [for that reason] in 1033 were fairly typical. He traveled some 1600 miles” (Webber et. al., 1986: 168). After the 11th century, outside raids on Europe subsided and rulers gradually acquired greater administrative capacity, mobilized larger armies, collected higher taxes, and administered justice.

Rulers faced the challenge of increasing their administrative capacity in the context of intense, existential, intra-European political competition. It led to the destruction of such kingdoms as the Kingdom of Upper Burgundy and the Kingdom of Provence. They did not have the resources to create even a weak administration and therefore relied on those with administrative capacity. Among them were lords (secular and ecclesiastical), the Church, and economic corporations – mainly self-governed cities (communes) – many of which had acquired administrative capacity at the time when the states were incompetent. The administrative capacity to confront external threats came with having powerful administrators. Rulers who failed to comprehend the advantages of constitutionalism in this trade-off often paid dearly. The German

Emperors lost Italy and the Swiss cantons. The English, Spanish, French, Polish, and most other European rulers learned the lesson, or had the foresight to adopt constitutionalism.

Histories of individual countries similarly confirm that rulers created or summoned political assemblies when they could have gained from changing rights but feared the response of their powerful administrators to a unilateral action. The French Estates-General, for example, was created in 1302 when the King, Philip the Fair, sought its consent before entering into a conflict with the Pope, Boniface VIII. The Estates-General was composed of powerful administrators, namely the chief lords, both lay and ecclesiastical, and the representatives of self-governed towns. Afterwards, it was summoned regularly when the Crown needed financial support. This was true during the Hundred Years War (1337-1453) and the Wars of Religion of the late 16th and early 17th centuries. The Estates-General was not summoned, however, from 1484 to 1560 when peace generally prevailed. Having sufficient funds without changes in rights, the Crown probably preferred not to face an assembly.

Consistent with the argument that administrators' rights are an equilibrium outcome reflecting a balance of power, they were adjusted in France when the balance changed. This happened when the first Bourbon, Henry IV, was crowned in 1589. Because he was a powerful administrator (governing Navarre), his ascension to the throne shifted the balance of power in favor of the crown. Indeed, Henry embarked on a campaign to take rights away from administrators, particularly through the use of *intendants* to check the provisional governments. Subsequent kings continued weakening these nobility-controlled governments, particularly from 1621-1661. The role of the intendants, for example, was expanded from supervision to tax collection.

The previously powerful administrators often attempted to prevent the further undermining of their power in various ways. The feudal nobility and the officers of the Parlement of Paris often revolted, but the series of failed revolts, known as the Fronde (1648-1653) revealed the new balance of power. In the absence of powerful administrators, there was no need for the Estates-General, and it was not summoned after 1615. It was next summoned in 1789 when the Crown faced a financial crisis reflecting its limited success in creating an effective, yet weak, administration.

The histories of Russia and Poland similarly illustrate that constitutionalism rises and falls with administrative power and that whether a weak or a strong administration prevails will depend on the initial administrative endowment rather than technology or environment. Despite their similar endowments, Russia's constitutionalism declined over time while Poland's increased.

As noted above, Moscow's functioned as the tax collector for the Mongol who bestowed the title of Grand Prince of Moscow on its ruler. The Muscovite Princes, protected by the Mongol, gathered taxes while gradually developing a military and financial administration of their own. The Mongol seems to have underestimated the role of legitimacy and administrative rotation on administrative power. The Muscovite Princes were administrators, with both military and taxation capacities, who served an illegitimate ruler while having the required tenure to cultivate the loyalty of their agents. These conditions favored political disintegration (secession of Russia from the Mongol Empire) and weak administrators in the new political unit.

Indeed, by the second half of the 14th century, the Muscovite Princes revolted and gradually gained independence. Initially, the hereditary high nobility (*boyars*) retained some administrative power and gained political representation in the Boyar Duma. As the economic importance of the Church and cities increased, consistent with the argument here, a 'assembly of the land' (*zemsky sobor*) was created (1459) with representation from the nobility, those high in the bureaucracy, the Church, and the towns. Once the war with the Mongol ended, though, the Princes of Moscow began to undermine these administrators' power.

Later Princes, particularly Ivan III and Ivan IV, gradually restricted the boyars' power, conquered the city-republic of Novograd and eliminated its self-governance, created a standing army (the *Streltsy*), and for a period ruled over about one third of Russia as their private domain. After 1654, the Assembly of the Land met only once before its final meeting in 1684. The Boyar Duma was abolished in 1711. The development of effective administration with weak administrators ended whatever small degree of constitutionalism Russia had possessed.

One of the main powers facing the Russian Empire was the Commonwealth of Poland-Lithuania (Poland). It was established in 1569 through the union of Poland and Lithuania and extended over contemporary Poland, Lithuania, Belarus, Latvia, the western part of Russia, as well as much of the Ukraine and Estonia (e.g. Stone 2001). Despite the similar technologies and

natural endowments of Russia and Poland, the former was an autocracy and the latter was a constitutional monarchy from its inception until 1795 (when it was partitioned by other powers).

This distinct institutional trajectory seems to reflect a different process of state formation. Polish kings did not initially function as tax collectors, supported by an occupying military force. Instead, they consolidated – but did not conquer – an area governed by local aristocracies. These aristocrats did not provide the kings with the resources required for creating a ruler-controlled administration. After 1572, for example, the king was forbidden to dismiss any official, and his army was restricted to 3000 men, while various Magnates’ armies were larger. (The next section provides additional details.)

The rule of law, constitutions, and political assemblies historically have been the observable implications of an equilibrium with powerful administrators. They were means for reducing conflicts and gaining from adjusting rights, and for making choices in the presence of administrative power. Clearly, constitutional institutions can emerge for similar reasons when rulers face other powerful actors and social groups. Yet, the comparative advantage of powerful administrators in sanctioning rulers, as well as the historical evidence, suggests that administrative power has been particularly important in leading to constitutionalism in Europe.

IV. Why is Constitutionalism Insufficient for Prosperity?

This section argues that when constitutionalism is an equilibrium underpinned by administrative power, it is insufficient for prosperity because the rights of the non-powerful are not necessarily secured, while the policies are biased by power considerations and the interests of the powerful.¹⁸

History is often invoked to claim that constitutionalism is sufficient for prosperity. Pre-modern constitutional states secured the property rights necessary for markets thereby leading to modern economic growth. England became the canonical example: according to this interpretation of English history, it prospered after the Glorious Revolution (1688) because the constitutionalism that followed secured rights and promoted markets (North and Weingast 1989).

¹⁸ On incentives to introduce reinforcing institutional elements that make a Pareto-optimal allocation self-enforcing, see Greif 1998, 2006.

Yet, after the Glorious Revolution, England also witnessed some of the greatest property rights abuses in its history, including the nineteenth-century Parliamentary Enclosure of the Open Fields (which constituted regressive confiscation of assets), higher taxation of politically unrepresented Englishmen, and land grabs in Ireland and in the colonies (e.g. O'Brien 2001; Harris 2004). Despite these abuses, England prospered, but other constitutional monarchies (as most European states were by the 15th century) did not.

Poland is an example of a constitutional monarchy that, although older than England's, is neither known for its prosperity nor for leading the transition to modern economies. Its kings were elected, and a political assembly (*sejm*) had probably existed since the 12th century, representing the nobles, clergy, and elected local representatives. Under the Polish-Lithuanian Commonwealth (1569-1795), elections to the assembly were held every other year. The assembly was summoned every year and operated under a set of constitutional rules, elected the king, and made final decisions about legislation, taxation, budgets, and foreign affairs.

Poland's experience suggests why constitutionalism was historically insufficient for prosperity. The rights of those without administrative power may not have been better protected than the rights of their equivalents in non-constitutional states. The administratively powerful Polish landlords abused the rights of cities and peasants. The elected assembly prevented urban expansion by prohibiting cities from buying land, and gradually increased taxation on peasants and legally subjugated them to serfdom. In absolutist Russia the situation was not very different. The Russian peasantry similarly was subjected to serfdom. The main distinction between the two reflects the impact of different distributions of administrative power. In Poland, the landlords gained from serfdom, while in Russia the central government was the major beneficiary.

In fact, constitutionalism can be socially harmful exactly because it is 'good' at fostering intra-elite cooperation. In particular, constitutionalism fosters cooperation among the ruler and the administrators in abusing the rights of the non-elite. Indeed, not long after the English Parliament met for the first time, it approved tripling the poll tax that peasants paid, thereby reducing the elite's tax burden. Similarly, after England's Glorious Revolution (1688), as noted above, some of the greatest property rights abuses in its history occurred. Better institutions for the elite do not necessarily imply good institutions for others.

More generally, rulers' incentives to protect the property rights of the non-elites are theoretically ambiguous under either constitutionalism or non-constitutionalism. The issue is how abuse affects the balance of administrative power. On one hand, rulers can benefit from preventing abuse that increases the administrators' power. Indeed, in late medieval Europe, the kings were supposed to, and often did, protect the rights of the non-elite. This summary of Frederic Barbarossa's duty is representative: his duty "was merely to protect all the subjective rights everybody had ... he was supposed to play [the his] role as law protector" (Munz 1969: 100). Similarly, the Byzantine Emperors enacted laws designed to protect small landholders from larger ones, fearing that land consolidation would undermine the military force provided by the small landholders. The 18th century Austrian Emperors, Maria Theresa and Joseph II, also reformed the agricultural sector to the benefit of the peasants.

However, when rulers are unable to prevent abuses that increase administrators' power, they can benefit from socially inefficient policies that check that power. The Ottoman Sultans, for example, enacted policies that favored their tax-base in Istanbul but hindered growth in the provinces administered by governors who might have challenged them. (Kivanc 2006.)

Whether or not constitutionalism prevails, those making policy choices consider their impact on relative administrative power. Socially beneficial choices that undermine their powers are less likely to be chosen. Administrative power creates a wedge between the socially optimal choices and those that are an equilibrium outcome in the relations among the ruler and administrators.¹⁹

Comparing England and the Polish-Lithuanian Commonwealth exemplifies that the welfare implications of limited monarchies depend on their administrators' interests and concerns regarding the maintenance of power. In the Commonwealth, those with administrative power did not pass policies encouraging urbanization, markets, and industry, which potentially would have led to rival administrators. The administratively powerful Polish landed aristocracy pursued policies such as serfdom, which increased their profits from export-oriented commercial agriculture without undermining their power.

¹⁹ Both sides have incentives to introduce reinforcing institutional elements that make a Pareto-optimal allocation self-enforcing ex-post. See Greif 1998, 2006.

In 17th century England, by contrast, the parliamentarians were engaged in domestic agriculture, commerce, finance, and industry. Their interests lay in policies that fostered market expansion and internal demand, and following the increase in their power during the Civil Wars of the 17th century, they implemented policies that supported commercial expansion overseas. England built the largest Navy in Europe, enacted the Navigation Act, gained control over the seas, and created an Empire. These policies did not initially benefit all Englishmen, but eventually contributed to general prosperity. In England, unlike the Commonwealth, the interests of those with administrative power were in line with the interests of the economy at large.²⁰

Constitutionalism based on administrative power is insufficient for prosperity but has some prosperity-enhancing attributes. Under constitutionalism, the administrators' property rights are explicit and secured and there is an institutionalized way to adjust property rights and policies. When the administrators are economic agents whose interests are aligned with economic prosperity, their political voice provides information about beneficial policies; their political influence contributes to rendering these policies official; and their administrative capacity fosters the implementation of these policies. When the administrators are military or economic agents whose interests conflict with economic prosperity, though, their voice, influence, and capacity will be welfare reducing under constitutionalism.

The interests of the administrators, in turn, are endogenous to the administrative equilibrium. In particular, when the administrative equilibrium reduces violence and administrative power is diffused, the administrators' interests will shift toward beneficial economic policy. This issue is discussed in Section VI but before turning to it, I discuss the relation between administrative power and violence.

V. To Revolt or to Invade? Intra-state and Inter-state Violence

It has long been recognized that an effective administration contributes to welfare and economic progress by reducing inter-personal ('private') violence. Yet, whether an administration (effective in reducing private violence) is powerful or weak matters to other forms of violence, as

²⁰ It may be that this policy was not pursued prior to the Civil War because it could have undermined the parliamentarians' administrative power since the Crown still controlled custom revenues. Commercial expansion would have altered the balance of administrative power in his favor.

well. A state with powerful administration is more likely to experience intra-state violence (for a given level of external military threat), while a state with weak administration is more likely to experience inter-state violence initiated by its ruler.

Sufficiently powerful administrators are more likely to stage a coup, revolt, or (*de-facto* or *de-jure*) to secede. When several powerful administrators act in this way, the state is likely to disintegrate. It is reasonable to conjecture that the expected level of intra-state violence (revolutions, coups, secessions, fighting among the administrators, etc.) increases with administrative power, its concentration (at the hands of a fewer administrators), and the extent to which powerful administrators are regionally based and provide military services.

Many pre-modern states were established through a process which, if the above conjecture is correct, should have led to high levels of intra-state violence. States often were created by rulers who did not have the resources required to create ruler-controlled administrations but were nevertheless sufficiently talented and charismatic to mobilize tribes, nobles or others who had administrative capacity. This process led to the emergence of the empires of Alexander the Great, Attila the Hun, the Mongols, and the Muslims, among others. As long as such states were expanding, the relatively few military administrators found it beneficial to cooperate. Over time, usually after the death of the first leader, the gains from cooperation would decline as the empire reached its limit, and the interests of administrators would diverge. The administrators would secede, quarrel over the spoils, or fight over leadership.

For example, upon his death, the empire of Alexander the Great disintegrated as his former generals fought over control. The Mongol Empire, the largest contiguous land empire in history, began expanding in 1206, relying on the military services of multiple Mongol, Turkish and other tribes. It attained its largest area and disintegrated during the 1260s. The history of Russia, presented earlier, exemplifies how powerful administrators at the edge of an Empire contributed to its disintegration. In the late fourteenth century, the Songhai played a similar role in the disintegration of the Mali Empire in Africa.

I am not familiar with a theory articulating the conditions under which powerful administrators cause the state to disintegrate or to cooperate through the state. Yet, it is clear that whether powerful administrators cause the state to disintegrate or maintain some political unity depends on their benefits from cooperation via the state, and on the ruler's ability to mobilize

administrators to prevent violence (e.g. secession) by one of them. Disintegration therefore is less likely the higher is the gain from cooperation and the higher is the ruler's legitimacy.

Germany's history illustrates how gains from cooperation through the state are important to maintaining its unity. The Germanic Dukes, mentioned earlier, progressively acquired power and independence. By the end of the Thirty Years War (1648), the German Empire had disintegrated into de facto independent principalities. Yet, the Holy Roman Empire survived until the 19th century because it provided a means for cooperating in defense.

The history of the Caliphate of Cordoba (in Spain) illustrates the importance of the ruler's legitimacy that lower administrative power in preventing disintegration. Although Islam does not specify a legitimate process for choosing rulers, the Caliphate was peacefully governed by members of the Umayyad dynasty who, as blood relatives of the prophet Mohammad, had considerable legitimacy. The Caliphate was rather successful in withstanding attacks by Christian forces. When the last member of the family, Hisham III, died in 1031, the Caliphate disintegrated into multiple rival principalities.²¹

The experience of the Caliphate reflects two reasons that rulers were useful for powerful administrators. First, the succession laws specifying who was entitled to rule prevented intra-state wars over the throne. This role of succession laws is transparent in the Golden Bull (1356) issued by the German Emperor. "We have promulgated, decreed and recommended for ratification the subjoined laws [governing the election of the king who will also be the Emperor] for the purpose of cherishing unity among the electors, and of bringing about a unanimous election, and of closing all approach to the aforesaid detestable discord and to the various dangers which arise from it."²² The Golden Bull explicitly named the seven or prince-electors who were to choose the King. Second, kings provided military leadership in confronting external threats. Even the Dutch

²¹ The inability of the local Muslim elite to agree on an alternative ruler facilitated the subsequent conquest of Muslim Spain. I am not familiar with a theory indicating the conditions under which external threats prevent disintegration when there is no legitimate ruler.

²² The Avalon Project, [http://www.yale.edu/lawweb/avalon/medieval/golden .htm](http://www.yale.edu/lawweb/avalon/medieval/golden.htm). For analysis and additional evidence, see Greif 2006, chapter 8. In Russia, the assembly was rarely able to effectively object or impose its will on the tzars, yet in 1598 and 1613 it appointed the new tzars after the previous dynasty died out.

Republic had a *stadtholder* who was a de facto hereditary head of state. His main task was to lead the Republic in war.

Relative to powerful administrations, ruler-controlled administrations imply less intra-state violence. Their weak administrators are less able to engage in intra-state violence. Administrative equilibria with weak administrators are likely to remain self-enforcing in larger set of parameters than those with powerful administrators. Under weak administration, larger changes in relative power are required to make the administrators powerful enough to defy the ruler.²³

However, an effective ruler-controlled administration provides the ruler with the resources to initiate wars with other states. The level of inter-state violence under weak administration, nevertheless may be relatively low if there is a dominant, but not aggressive state. Such was the case of China in East Asia in various periods. Indeed, hegemonic peace periods saw relative prosperity. Such peace did not commonly prevail though and inter-state warfare, made possible by ruler-controlled administrations, further motivated each ruler to extend his administrative capacities (Tilly 1990).²⁴

The economic and human cost of inter-state wars is particularly high (for a given technology and administrative equilibrium) when the interests of rulers, administrators, and the masses are aligned by ideology or economic factors. The high costs of modern wars are due partially to nationalism and democracy, which aligned the interests of elite and non-elite. Ireland's history illustrate this point. During World War I, general conscription was instituted in the United Kingdom, including Ireland. The Catholic Irish, however, supported independence and did not consider it in their interest to fight for the UK. The British recognized that without intrinsic motivation, forcing the Irish to join the army would be counter-productive, so they were not enlisted.

²³ Such administrations are undermined for at least two reasons. First, the agency problem in ruler-administrator relations reduces the ability to prevent administrators from gaining power. Second, weak administrations are inflexible and 'bureaucratic' because these features reduce the cost of replacing an administrator. They are therefore slow to adjust and the implied ineffectiveness fosters the rise of actors with administrative power.

²⁴ The lack of a legitimate heir also can lead to inter-state wars due to inter-state marriages among royal families. A claimant to the throne could be from another state.

VI. The Benefit of Mid-Level Administrative Power: Reducing Overall Violence

The conditions under which intra-state or inter-state violence are more prosperity-reducing have yet to be examined. However, the above discussion suggests that the level of overall violence – and hence its cost – is U-shaped (given the level of external military threat). Intra-state violence increases with the administrators' power, while inter-states violence increases with the ruler's power (that is, with the administration's weakness).²⁵ Administrative equilibria thus present a trade-off between intra-state and inter-state violence (that is, between social order and war).

This suggests the argument, developed here, that violence is lowest when the administrators' power is neither too high nor too low (henceforth, '*mid-level*'). In seeking to maintain their relative power, each side is motivated to check the violence beneficial to the other. The ruler (controlled administration) is strong enough to reduce intra-state violence, while the administrators are powerful enough to reduce inter-state violence.²⁶

A necessary condition for such a low-violence equilibrium to exist is that the administrators, as a group, have the power to restrain the ruler, but each is too weak to benefit from initiating intra-state violence.²⁷ (Greif 1998, 2006, Chapter 8 and Bates et. al. 2002 provide a formal analysis.) Among the factors making such an equilibrium more likely to exist is that the ruler control the military administration (i.e., the military administration is weak) and that the state's finances are controlled by powerful administrators. The administrators have a limited capacity to resort to violence but nevertheless can sanction the ruler by ceasing to finance the army. Recall that the administration's power declines with the number of administrators and their frequent rotation (Section I). A low-violence equilibrium thus is more likely to exist if there are

²⁵ A caveat is that rulers might strategically initiate wars to reduce administrative power.

²⁶ The ruler's ability to prevent intra-state violence declines in administrative power, its concentration, and in the extent to which power is based on military administration. The ruler's ability to engage in inter-state violence is higher, the lower is administrative power.

²⁷ Cultural beliefs regarding legitimate actions and loyalty are among the factors that determine whether an equilibrium with social order and security will prevail. Such equilibrium requires that administrators should consider it legitimate that the ruler will punish an administrator who harms others (e.g. by raids, not maintaining roads, or failing to participate in defending the state)

relatively many military administrators who are frequently rotated, while the financial administrators are stationary and either well-coordinated or few in number.

The power of financial administrators can be substantial, as France's history illustrates. Colbert's response to the budgetary crisis in France in the 17th century, as already noted, was to create a strong financial administrator, the Company of General Farmers. The Crown gained because a powerful administration fostered its ability to commit to repay loans. By the eve of the French Revolution (1789), the Company provided the Crown with more than one-third of its total royal tax revenues and about 40% of its operating budget. Indeed, it had gained sufficient power to block the proposed financial reforms that would have rendered it obsolete but might have prevented the Revolution (e.g. Root 1989; White 2004; Balla and Johnson 2006). Unable to reform its finances, the Crown ended up summoning the Estates-General, and the Revolution followed.

The history of the Ottoman Empire illustrates the cost of failing to separate financial and military administrations and the importance of rotation in creating a weak administration. Like France, the Military Revolution of the 17th century (which increased the cost of war) led to a budgetary crisis. However, the Ottomans responded by changing the duration of the tax farms from three years to lifetime tenure, resulting in an immediate and substantial increase in revenues. Tax farmers with long tenure cultivated the loyalty of local militias, ceased paying their annual dues, and assumed (sometimes even hereditary) political power. Only by the early 19th century were the Ottomans able to militarily subdue all the farmers. (Balla and Johnson 2006; Hickok 1997.)

In an administrative equilibrium under which the ruler and administrators constrain each other's actions, their conflicting interests regarding intra- and inter-state violence are endogenous (as mentioned in Section IV). Rulers bear the costs of intra-state violence but benefit from successful inter-state wars through which they gain resources to undermine administrative power. Recall, for example, the discussion of the Ottomans' success in weakening their administrators after the conquest of Constantinople. Legitimacy enhances rulers' interests in inter-state war by reducing the likelihood that defeat will lead to de-throning.

An empirical evaluation of this argument is yet to be conducted. But we know that powerful administrators often were averse to inter-state wars initiated by their rulers. In late

medieval Europe, administrators often refused to finance the ‘private’ wars of their rulers, although they were willing to finance those for the ‘benefit of the community of the realm’ to use a phrase common in the sources. The English kings sought loans from Italian bankers to finance the One Hundred Years War they had initiated to regain their personal possessions in France; the French Bourbon Kings had to cut deals with their feudal lords to finance their expansionist wars (Rosenthal 1998); and the Spanish Cortes refused to provide Philip II the tax revenues required to build the Grand Armada which he sent to conquer England in 1588.

The administrative balance of power that reduces intra-state violence influences interests in yet another way. Although administrators no longer can gain from intra-state violence, they can gain from the economic opportunities that social order presents. The administrators’ interests are transformed by the administrative equilibrium, from specialization in violence to economic activities. Japan’s history illustrates this process. When the Tokugawa Shogunate (1603-1688) was established after a lengthy civil war, it was a *bakufu*, a ‘military government.’ Its administrators were men-of-arms, daimyo (lords) and samurai (warriors), and they were legally forbidden to engage in economic activities. The power between the Shogun and his administrators apparently was well-balanced, as the period was remarkably peaceful. However, as time passed, and despite the prohibition, the lords and warriors began engaging in economic activities.

To summarize, intra- and inter-state violence are economically costly. When administrative power is high, intra-state violence is more likely to transpire; if it is too weak, the ruler is more likely to initiate inter-state wars. Mid-level administrative power increases the likelihood of an equilibrium that reduces both intra and inter-state violence. In the long run, such an equilibrium can transform military administrators to economic agents. Moreover, because mid-level administrative power entails constitutionalism, the administrators-turned-economic agents have an institutionalized way to influence policy choices. Economic prosperity is more likely because economic agents have political voice and influence.

The dynamics of such economically beneficial processes, however, can cease if the balance of administrative power supporting a low level of violence fails to hold. This often was the case, arguably because such equilibria depend on a delicate balance of power and hence are often unstable. Temporary shocks in relative power can tilt the balance in favor of either the ruler or the administrators.

Ottoman history illustrates how temporary shocks in relative power can lead to new equilibria. Initially, the Ottoman Empire followed the common process of relying on powerful administrators – mainly Turkish tribes and clans, in this case – to provide military services. Civil wars were common, particularly upon the death of a Sultan. In 1453, when the Ottomans conquered Constantinople this period ended. The Ottomans gained the resources and prestige to create a military force to balance (at least for a while) that of their Turkish administrators.²⁸

During the upheavals of the 19th century, several administrators were able to increase their power and to become independent rulers. The most successful of them was Muhammed Ali, known as the founder of the modern Egypt. He was originally the Wāli (viceroy) of Egypt under the Ottoman rule. He later revolted and gained international recognition of his hereditary rights over Egypt in return for not conquering Istanbul.

VII. Administrations, Incentives and Economic Growth

Intensive economic growth depends on the introduction of new economic sectors and technologies, but rulers (as discussed below) tend to make *growth-inhibiting choices*. This section describes how distinct administrative equilibria provide different incentives to administrators for implementing growth-inhibiting choices. What weakens administrators also provides them with incentives for implement these choices. On the other hand, administrators with mid-level power are likely to have incentives to ignore growth-inhibiting choices, implementing those that are *growth-enhancing* instead.

Historically, the economic policy choices that rulers made (as well as the choices made by very powerful administrators) were not guided by belief in the feasibility of intensive growth, or a self-regulating market economy. These are relatively recent beliefs that have contributed to

²⁸ It seems reasonable that the administrators' ability to prevent any undermining of their power would increase with the uniformity of their interests and their capacity to overcome collective actions and free rider problems. It would decrease in the extent to which the ruler is considered legitimate by those he governs and his tenure being long enough to nurture their loyalty. The creation of a relatively weak administration in France by the Bourbons in the 17th and 18th centuries, for example, was facilitated by the longevity of several monarchs.

modern economic growth and reflect attempts to rationalize it.²⁹ Although pre-modern rulers often recognized the economic benefits of trade and the security of property rights, the concept of intensive growth did not underpin their policy choices which therefore did not encourage such growth.

Considerations regarding power and social order probably also led to growth-inhibiting policy choices. Rulers, and more generally the elite, have the most to lose from the rise of new economic groups who might aspire to influence policy choices. New sectors, and more generally economic change that might lead to new groups, are a threat. Finally, the incumbent sectors have the resources to influence policy choice as well as an interest in preventing the rise of competing sectors and technology.³⁰

For these reasons, growth-inhibiting choices were the rule rather than the exception in pre-modern states. In such diverse states as Spain under the Habsburg and Japan under the Tokugawa Shogunate, potentially productive members of society (e.g. nobles), were not allowed to be economically active. In Tokugawa Japan and in China under the Qing Dynasty, subjects were prohibited from trading abroad or immigrating overseas, and alien traders' activities were restricted. Economic and social regulations in the Roman and Ottoman Empires aimed at replicating the pre-existing social and economic orders. Serfdom and other forms of labor restrictions prevailed in Europe well into the modern period, while in the Muslim world (e.g. Kuran 2001, 2006), religious laws restricted contractual forms, the development of a capital market and the formation of corporations.

The puzzling 18th century European phenomenon of 'Enlightened Absolutism' illustrates how rulers' fear of social change shapes choices, even when the possibility of intensive growth is recognized. During that period of Enlightenment, the possibility of intensive growth, self-regulating markets, and economic progress was recognized. Surprisingly, however, the more absolute European rulers, not the liberal ones, were the first to alter policy choices based on these new ideas. Among them were Charles III of Spain, Joseph II of Austria, and Frederick the

²⁹ Mokyr (this volume) highlights the contributions of these ideas to modern growth. The discussion here relates to their origin.

³⁰ E.g. North 1982; Olson 1984; Greif 1998, 2006; Acemoglu 2003.

Great of Prussia. Why was this the case? Although all European rulers were exposed to the Enlightenment, acting on these new ideas was risky. The first attempts to implement them were thus made by rulers who were secured; they had weak administrators who were less likely to challenge them in case of failure.

Theoretically, inter-state competition may lead to the elimination of states with growth-inhibiting policies, but usually this was not the case in the pre-modern world.³¹ When rulers faced external military threats, they sought revenues to confront them. For example, when inter-state competition became more intense in 16th century Europe, it led to more, not less, growth-inhibiting choices. Specifically, it led to mercantilism, characterized by extensive and inefficient economic regulations. Long before that, during the Warring States Period (5th to 3th centuries BCE), China was divided among several competing states. To unify China (221 BCE), the rulers of the state of Qin stimulated extensive growth, encouraging fertility, immigration of peasants from other states, and expansion of cultivated land.

The impact of growth-inhibiting choices, however, depends on their implementation. That, in turn, depends on the administrators' capacity and motivation. Arguably, a weak (ruler-controlled) administration will be better able to prevent the rise of new economic sectors and groups because it has been created intentionally by rulers who internalized the (perceived) costs of failing to implement choices. Monitoring and enforcement of choices by weak administration are facilitated by the institutionalization of coordination and information sharing routines and the by ability to concentrate the state's resources (including coercive power) toward the suppression of deviants.

Furthermore, the means used to insure that administrators are weak also provide them with weak incentive for implementing growth-promoting choices of their own initiatives. The main means by which pre-modern states rendered administrators powerless (Section I), were using tax farmers with short tenures and frequently rotating administrators within a centralized and hierarchical administration . Theoretically, such administrators have weak incentives for promoting long-term growth. They are better off collecting the most or implementing policy

³¹ By the 19th century, once intensive growth was better understood, this was no longer the case. European states, Turkey, and Japan made growth-promoting choices partly in response to increasing international competition.

choices that foster their administrative careers. Furthermore, short-term administrators have strong incentives for preventing unauthorized behavior and private experimentations although they might reveal growth-enhancing choices. Hence, the means for maintaining weak administrators also imply strong incentives for implementing growth-inhibiting choices and weak incentives for implementing growth-enhancing choices, barring those made by the ruler.

On the other hand, there are conditions under which administrations with mid-level power would not prevent, or even implement, (unauthorized) growth-promoting choices. First take the case of administrative equilibrium in which the *military* administrators have mid-level power. A necessary condition for such administrative equilibrium to persist is that the relative military might of the ruler and the administrators does not change over time. When this is achieved, by limiting the administrators' ability to control and extract wealth from the non-elite, the latter are left relatively free to take growth-promoting actions.

Limiting the administrators' ability to control the non-elite is indeed a characteristic of Japan under the Tokugawa Shogunate (1603-1688). The Shogunate is the seminal example of an orderly state with mid-level military administrators, known as the Daimyo (lords). The Daimyo got tax revenues from their rural domains, but were prohibited from engaging in any economic activity, or even staying in the tax-paying villages of their domain. The villagers were responsible for delivering the taxes to the Daimyo at levels that the Shogunate determined and tried to enforce. The Shogun did not get tax revenues from the domains of the Daimyo. With little direct administrative supervision, economic agents were freer than would have been the case to implement growth-enhancing choices.

Now consider the case of an *economic* administration with mid-level power. Theoretically, an economic administrator has an incentive to implement growth-enhancing choices, even if unauthorized, under the following condition: growth increases his expected economic income and/or administrative power by more than the expected penalty for implementing unauthorized choices. This is more likely to be the case when the administrators are stationary (and hence benefit from investing in future growth), have administrative responsibilities beyond taxation (and hence can affect the implementation of growth-related choices), and growth increases the loyalty of those under their jurisdiction (and hence their administrative power).

This seems to describe England after the 15th century Wars of the Roses when the Justices of Peace became administratively important. These Justices were stationary administrators, with administrative responsibility beyond taxation, and whose power depended on the cooperation of their peers. Indeed, the Justices were reluctant to enforce growth-inhibiting policy choices. They administered England's counties until the 19th century and were responsible for keeping the King's peace. Hence, they were required to enforce the law, fix wages, regulate food supplies and maintain roads, among other duties. Despite this heavy load, the Justices were unpaid. Not surprisingly, they exercised discretion in what they implemented and were more responsive to local needs than to choices made in London.

One local need was to comply with the Old Poor Law, under which local parishes were supposed to finance relief for the poor (through property taxes). The Justices' motivation to care for the poor went beyond the need to implement the law because paupers threatened the local order. Yet, paying poor relief implied both paying more taxes and having to collect them. The local administrators, therefore, sought ways to reduce poverty: encouraging the industrialization of their parishes was one way. Early in the Industrial Revolution, though, the legality of employment practices in factories was often dubious at best. The local authorities chose to ignore this illegality.

More generally, contemporary observers have noted the different incentives that English administrators faced compared to their weaker counterparts in other European states. For example, in the 15th century the Spanish ambassador reported to the King and Queen of Spain (Ferdinand and Isabella) that Henry VII (r. 1485-1509) "would like to govern England in the French fashion but he cannot" (Nef 1940, p. 6). By the late 18th century, the limited ability to enforce industrial regulations in England was well reflected in the words of a contemporary English writer; he noted that "the difference between us [in England] and France consists chiefly in this: ... we are [as] remarkable [as they] for good laws, but are shamefully neglectful in their execution." (Postlethwayt, 1776, p. iii. Cited by Nef, 1940, p. 35).

The failure of individual administrators to implement 'good laws' is not necessarily optimal for administrators as a whole. Although rational for each administrator, it allows for the rise of new economic sectors, which might lead to groups whose interests differed from those of the elites and whose administrative capacity reduced the incumbent elite's power. Indeed, in the

long run, the rise of an industrial elite in England weakened the administrative power and political influence of the landed-elite.

Although the entry of new economic sectors might be costly to the incumbent elite, if there are many administrators, each he will not internalize this cost. In late medieval England, for example, many lords found it beneficial to establish cities on their land in order to increase local food demand and the value of their estates. To motivate immigration, the cities were given the right of self governance. While this was beneficial to individual lords, on the national level it led to the rise of cities as powerful administrators.

Ironically, the ability of administrators to overcome collective action problems might actually hinder growth by preventing growth-enhancing choices that are beneficial to each administrator, but not to the group. In any case, administrators who are also economic agents are more likely to implement choices that lead to economic sectors that complement rather than compete, with theirs. These choices are not necessarily beneficial to others, as the administrators seek private gains from their public position. In England during its industrialization, for example, Labor activists were sentenced to be exiled to Australia by the local authorities for demanding that these authorities enforce the English labor laws.

In sum, when the administration is composed of administrators with mid-level power, there are conditions under which they have the capacity and the incentive to implement, or to allow others to implement, (even unauthorized) growth-enhancing choices. Among these conditions are: diffused administrative power; stationary administrators with responsibilities beyond taxation; administrative power that increases with the wealth of those being administered; and enough administrators to allow for experimentation and non-internalization of the system-wide implications caused by the rise of new groups.

VIII. Political Conflicts, Constitutionalism and Economic Growth

Administrative equilibria influence the nature of political conflicts, namely those aimed at altering the composition of the elite; different political conflicts have distinct economic implications. This section describes why either powerful or weak administrations tend to lead to *intra-elite* conflicts over the distribution of existing wealth. Such conflicts tend to be violent and to motivate wasteful pre-emptive measures.

Mid-level administrative power, in contrast, tend to lead to *inter-elite* conflicts between the elite and an economic group aspiring to join it.³² The constitutionalism implied by mid-level administrative power provides an institutionalized way of peacefully absorbing the aspiring elite. The expectations that this would be the case, in turn, motivates the non-elite to pursue new sources of wealth. Because the aspiring elite brings new sources of wealth, Pareto optimal resolutions of the conflict are more likely to exist. Constitutionalism and prosperity are mutually reinforcing.

Weak (ruler-controlled) administrations have a comparative advantage in preventing the emergence of new economic sectors (Section VII) and the associated groups that might challenge the incumbent elite. Inter-elite challenges therefore are less likely, and when they transpire, it is likely to be because of growing desperation among the non-elite. Intra-elite conflicts, however, are more likely because even a ruler with weak administrators has to rely on some inner circle of elites, composed of advisors, top civil administrators, generals, etc. When random events or undermining processes alter the balance of power within this group of inner-elites, *intra-elite* conflicts transpire. (The same holds in the case of powerful administrators.) Such intra-elite conflicts concern mutually exclusive shares of the same economic pie, and Pareto-improving resolutions are more likely to exist. The only institutionalized way to gain rights is through violence and by capturing the administration.

Economically wasteful intra-elite conflicts also are more likely under a weak administration because it can be captured to serve the interests of a subset of elites. In particular, weak administrations can be captured by those who interact with it on behalf of the ruler.³³ First of all, weak administrators have no power. Each is provided with incentives to implement choices made by those at upper levels in the hierarchy. Second, rulers have to allocate their finite time to many tasks. Hence, they often rely on intermediaries – such as viziers, chancellors, and prime ministers – to form and communicate choices for the administration to implement. Reliance on an intermediary is also necessary when the ruler is unable to govern due to sickness, infancy, or old

³² The closest corresponding concepts are ‘political revolutions’ and ‘social revolutions’ in Skocpol, 1979. Recall that under powerful administrators, intra-elite conflict can transpire as a means to signal relative power.

³³ Even if they don’t have administrative power and can be replaced.

age. However, an intermediary can use his authority to implement choices that will enable him to become a de-facto or de-jure ruler.

History is indeed rich with examples of intra-elite conflicts for these reasons in states with weak administrations. Consider, for example, the Merovingian dynasty, which was the first to rule the Frankish Kingdom from the fifth to the eighth centuries. Although the administration was initially powerful and provided by the aristocrats, the Merovingians' chief officials, or the Mayors of the Palace, were gradually able to establish and control an alternative military administration. By controlling it, the Mayors became the de facto rulers and over time, the de-jure rulers.

The importance of capturing the administration in becoming the new ruler is reflected in a Papal Bull issued at the request of Pepin the Short, the Mayor of the Palace. The Bull confirmed that the person with de-facto ability to implement choices should be the king, rather than the individual with the title of king. In 751 Pepin was elected King of the Franks, he sent the last Merovingian king to a monastery, and the Carolingian dynasty came to power. The Bourbons, another French dynasty, seem to have learned this lesson of history. Many of their Prime Ministers were members of the clergy and thus without legitimate heirs and dynastic ambitions. For similar reason, eunuchs were extensively employed in pre-modern administration in such states as Byzantium, China, the Ottoman Empire, and many others.

Another common means of preempting intra-elite conflicts was to provide the inner-elite with rent to motivate them to support the regime. Rent extraction, however, further weakens the incentives for the non-elite to create new wealth. Rent requires exclusivity of membership, which often was hereditary (e.g. Russia) or even meritocratic (e.g. China). Limiting the distribution of rent to a selective elite, or promoting wasteful competition for political posts (Yang 2002), further weakens the incentives to produce new wealth. Over time, limited economic growth and larger population also reduce the rent available to the elite, thereby increasing the likelihood of intra-elite conflicts.

Expectations of intra-elite conflict further motivate members of the elite to waste resources in securing their position in the courts, eliminating competition and safeguarding their assets in case they lose power. A vicious cycle of economic stagnation and political conflicts often results. The high costs of such ex-ante responses to expected intra-elite conflicts is suggested by the history of the Muslim *waqfs* (religious charities). These were established

throughout the Muslim world, usually by members of the elite, for the explicit purpose of providing local public goods. Kuran (2001) noted that members of the elite increasingly created waqfs to protect their assets from confiscation by the state. But why was the elite fearful of the state? Where intra-elite conflicts are common, members of the elite are insecure; this insecurity implies high costs. The waqfs were legally required to invest in real estate, and this led to misallocation of resources which, as noted by Kuran, who documented these facts, cost the Ottoman's economy dearly.

Under administrators with mid-level power, however, growth through the rise of new economic sectors is more likely (Section VII), leading to the rise of new economic groups within the elite or among the non-elite. Mid-level power is thus more likely to engender inter-elite political conflicts, potentially involving a new emerging elite. In the Italian city states of the late medieval period, the rise of new sectors and industries led to conflicts between the old elites and new ones.³⁴ During the English Civil War of the 17th century, members of Parliament involved in a new sector – the Atlantic trade – were more likely to be against the king (Jha 2006).

Inter-elite political conflicts caused by the emergence of new sectors and technologies have different economic origins and implications than intra-elite conflicts. Inter-elite conflicts are concerned with the redistribution of political rights to those who have created new wealth. They are positive-sum games. Intra-elite conflicts instead involve the redistribution of rights and wealth from one subset of the elite to another. They are zero-sum games. Intra-elite conflicts are wasteful, while inter-elite conflicts can be a component of a system that fosters growth. Those who challenge the elite have something to offer in exchange for political rights, while their sources of wealth are likely to complement those of the elite (Section VII).

Mid-level power, leading to inter-elite conflicts, also leads to constitutionalism (Section II) which provides an institutionalized means for the peaceful resolution of these conflicts. Constitutionalism implies that the incumbent elite has an institutionalized way of conferring rights to the emerging elite without sacrificing its own position. The inclusion of new groups via constitutionalism is a quantitative, not a qualitative, change.

³⁴ Inter-elite conflict also characterizes Poland's history, as already discussed, but there the administrators were powerful; hence, such conflicts do not reflect the growth-enhancing process associated with mid-level administrators.

If inclusion of a new economic elite is the expected outcome, then the prospect of both economic and political rewards motivates the non-elite to create new sources of wealth. The expansion of constitutionalism and economic growth thus are complementary in a given period and reinforce each other over time. This virtuous growth cycle is also more likely where the technology and environment are suitable for developing new sources of wealth (e.g. commerce) to complement the elite's (e.g. land).

Concluding Comments

Both common sense and historical evidence indicate that administrative power influences the trajectories of political and economic development. Administrative equilibria affect constitutionalism, the composition of the elite, its policy interests, policy choices, the property rights of the non-elite, the nature and level of violence, whether growth-promoting choices (even if unauthorized) are implemented, and whether the expected outcomes of political conflicts are growth-inhibiting or growth-enhancing.

This paper suggests that constitutionalism originated in the need to govern relations between rulers and administrators. A ruler's policy choice is nothing but a wish in the absence of an administration to implement it. Administrators therefore have a comparative advantage in defying rulers, but there are multiple equilibria in the ruler-administrators relations. Administrative power – the administrators' ability to influence choices by the threat of sanctioning a ruler – increases with the cost of replacing the administrators, while powerful administrators can prevent choices that will reduce the cost of replacing them.

Constitutionalism is a response to administrative power. When administrative power is 'mid-level' and hence ruler-administrators conflicts are costly to both sides, limited government is the equilibrium outcome and constitutionalism is Pareto optimal for them. Constitutional rules, equality before the law, due process before the law and political assemblies all reduce conflicts caused by asymmetric information; they foster cooperation and the aggregation of policy-related information. When the administration is weak (ruler-controlled), it cannot sanction the ruler who thus does not benefit from constitutionalism. When the administrators are very powerful, and hence the ruler cannot sanction them, constitutionalism can still be Pareto optimal by fostering administrators' cooperation against the non-elite or against external threats.

The conjecture that administrative power underpins constitutionalism explains why it was not the *deus ex machina* of prosperity. It neither necessarily secures the property rights of those without administrative power nor guarantees prosperity-promoting policies. Policy choices are biased by interests in protecting and enhancing power. Indeed, constitutionalism may have an adverse effect on the security of property rights, as it fosters the elite's ability to cooperate in abusing the rights of the non-elite.

Nevertheless, constitutionalism has been positively correlated with prosperity because mid-level administrative power (sufficient for constitutionalism) is more likely to foster prosperity. First, when administrators are economic agents whose interests are aligned with economic growth, constitutionalism provides them with the political voice and influence to pursue these interests. Second, mid-level administrative power reduces violence. High administrative power, particularly in the hands of military administrators, fosters intra-state violence while low administrative power fosters inter-state violence. Under mid-level administrative power, though, an equilibrium with low intra- and inter-state violence can exist. Administrators are too weak to revolt but strong enough to prevent the ruler from initiating wars that would increase his power. Third, mid-level administrative power transforms military administrators into economic ones. When administrative power is diffused, lower intra-state violence implies a low rate of return on investment in military might.

The fourth reason that mid-level administrative power is conducive to prosperity is its impact on the incentives for implementing growth-inhibiting policy choices. Such choices were common in pre-modern states because of incorrect beliefs about the structure of the economy and concerns about social order and power. Whether growth-inhibiting choices are implemented or not, however, depends on the administrative equilibrium. The means weakening the administrators, also motivate them to implement growth-inhibiting choices and prohibit unauthorized, growth-enhancing actions. In contrast, under certain conditions economic administrators with mid-level power have incentives to implement, or at least not to prevent, growth-enhancing (unauthorized) choices and actions. This is particularly the case for administrators who tax themselves, have broad administrative responsibilities, are based in a particularly locality, and depend on loyalty of and legitimacy among their local peers.

Finally, administrative equilibria influence the nature and economic implications of political conflicts. When the administrators are weak, intra-elite political conflicts dominate because new sectors and technologies are not created, and a new elite does not emerge to challenge the incumbents. Mid-level administrative power biases political conflicts toward being inter-elite; that is, conflicts between the incumbent elite and aspiring challengers. This bias reflects that mid-level administrative power fosters the development of new economic sectors and technologies, thus leading to the rise of new groups. Furthermore, the constitutionalism that mid-level administrative power entails provides an institutionalized means of absorbing new elites without disenfranchising incumbents. Thus, growth and constitutionalism are complementary.

But mid-level administrative power is inherently unstable, because a temporary change in relative power, or in its distribution, can undermine it. More (less) power can be used to gain (lose) further power. Hence, although constitutionalism and mid-level administrative power held by economic agents prevailed in late medieval Europe, their continuation and prosperity were not pre-ordained (Greif 2005). The instability of mid-level administrative equilibrium implied that advancement toward constitutionalism and prosperity often ceased, or even reversed. If all European rulers were successful, then constitutionalism in Europe would have come to an end, and Europe would have joined the ranks of the other regions where these institutions either did not emerge or did not survive to the modern period.

Historical contingencies and chance events nonetheless kept (a progressively) small number of states advancing toward modern constitutionalism and prosperity. Once England emerged as a liberal state, other European states adopted similar models. The beliefs inherited from their common constitutional past, such as the legitimacy of political assemblies and the possibility of self-governance, probably facilitated this transition. Commonly held beliefs facilitated the adoption of the liberal model, while popular demand – reflecting a constitutional heritage – and inter-state competition motivated the elites to adopt it.

Further research is required to develop and evaluate the merit of this comparative interpretation of distinct institutional and economic trajectories. This research will probably benefit from formalization, comparative empirical analyses, and considering the impact of other distinguishing inter-state features, such as geography, the relations between secular and the religious authorities, cultural distinctions (e.g. individualism and collectivism or conceptions of

property rights), the unique prominence of corporations in Europe, and military technology. Moreover, in considering prosperity and growth, this research will have to examine the inter-play between administrative power and other factors that limits rulers' discretionary behavior (Greif 2005). Whatever the conclusion of this research might be, the preliminary analysis in this paper indicates that administrative power has influenced economic and institutional developments.

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