# IMMUNITY \*

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### Abstract

Legal provisions that interfere with the arrest and prosecution of politicians exist throughout much of the modern democratic world. Why and with what effects do societies choose to place their politicians above the law? We examine the institution of immunity both theoretically and empirically. Our theoretical model demonstrates that immunity is a double-edged sword; while immunity provisions protect honest politicians from politically-motivated accusations, they may also incentivize corrupt behavior and attract dishonest individuals to public office. Which effect dominates depends on the quality of the judicial system. In order to empirically analyze the effects of immunity provisions, we quantify the strength of immunity protection in 73 democracies. We find empirical evidence that, though stronger immunity protection is associated with greater incidence of corruption where the judicial system is independent, this relationship has more ambiguous effects where the legal system is weak and prone to politicization. These effects remain after controlling for standard determinants of corruption.

KEYWORDS: accountability, corruption, immunity, interest groups JEL CLASSIFICATION: K40; N40; D72; D78

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## 1 Introduction

This paper seeks to examine the immunity of politicians both theoretically and empirically. We consider why societies choose to place their politicians above the law and explore the implications of this choice for governance outcomes.<sup>1</sup>

Provisions that protect elected officials from prosecution and arrest have ancient roots. In ancient Rome, the *tribuni plebis* were considered inviolable so that they could exercise their duties without interference from the Roman nobility. In early modern Europe, protection from arrest for legislative speech was among the first important privileges granted to parliamentarians, first codified in the English Privilege of Parliament Act of 1603. During the French Revolution, immunity provisions shielded representatives of the National Assembly from politically-motivated charges by a partian legal and police system that was controlled by the *Ancien Régime* (Manow, 2010). Honoré de Mirabeau famously encouraged the National Assembly to defend against *la puissance des baionettes* by declaring the deputies inviolable (Maingot, 2012).

Immunity provisions have survived the transition to modern democracy. In the modern era, more than 70 percent of democratic countries have some statutory provision that protects elected politicians—to varying degrees—from apprehension, prosecution, or indictment. Despite their historical importance and modern persistence, immunity provisions have not been comprehensively examined. This paper aims to close this gap.

The potential dangers of provisions that obstruct the prosecution of politicians are manifest. In the second book of *Politeia*, Plato relates the myth of Gyges, an ordinary shepherd from Lydia who found a ring that made him invisible. Gyges used the ring to gain power and influence. Socrates' interlocutor, Glaucon, asks, in analogy, what would happen if we gave such a ring to a just man. Would the impunity to commit crimes while invisible corrupt his character and behavior?<sup>2</sup> Plato feared the possible temptation:

No man can be imagined to be of such an iron nature that he would stand fast in justice. No man would keep his hands off what was not his own when he could safely take what he liked out of the market. Plato, Politeia II, 359-360

Some existing research is supportive of Plato's long-standing suspicion that human behavior changes when the threat of legal consequences is remote or non-existent. For instance, Fisman and Miguel (2007) examine the effect of diplomatic immunity on parking violations in New York City and reveal a sharp decrease in such violations shortly after New York City police began punishing violators by removing their license plates. In Plato's native Greece, immunity protections have recently been blamed for the mismanagement of

 $<sup>^{1}</sup>$ The term 'immunity' may refer to those provisions that either protect politicians' freedom of speech or protect politicians from criminal arrest and prosecution. The legal literature terms the former "non-accountability" protection and the latter "inviolability" protection. We limit our study to inviolability protection and use the term 'immunity' to refer exclusively to laws that provide inviolability protection.

 $<sup>^{2}</sup>$ In the field of political theory, Wigley (2003) first pointed to the parallels between Plato's treatment and immunity protection for politicians.

public funds in a number of cases.<sup>3</sup> In Italy, former Prime Minister Silvio Berlusconi skillfully navigated the country's immunity provisions to avoid criminal prosecution and was ultimately stopped only by the Italian Constitutional Court.<sup>4</sup>

To study the effects of immunity protection theoretically, we develop a model inspired by Maskin and Tirole (2004). In our model, a politician may leverage his immunity as a tool to secure re-election because immunity allows bribes and other forms of corruption to go unpunished. In addition, stronger immunity protection reduces accountability and encourages more dishonest people to run for public office.<sup>5</sup> However, immunity can also protect honest politicians from false accusations and smear campaigns in response to their refusal to cater to interest groups. We show that immunity is a double-edged sword; our theoretical model predicts that stronger immunity engenders corruption in countries with strong legal systems, whereas in countries with poor legal systems, it ameliorates or leaves the incidence of corruption unchanged.

The intuition for these results is as follows. Whether immunity is a vice or a virtue depends on whether stronger immunity is relatively more valuable to corrupt politicians or to honest ones. This comparison depends, in turn, on the quality of crime detection and the judicial system. Where detection and justice are effective, corrupt politicians benefit relatively more from stronger immunity than honest politicians do; in such systems, immunity is not particularly useful for honest politicians, as false accusations and smear campaigns are ordinarily uncovered. Immunity in such a context is, however, useful to corrupt politicians, as it prevents prosecution.

In order to study immunity empirically, we systematically code immunity protection in 73 countries by consulting written constitutions, founding documents, legislative acts, case law, statutes, and legislative rules of procedure. Immunity provisions may apply to three different groups of politicians: legislators, ministers, and heads of government. We find that the primary differences between various immunity regimes fall into three categories: (1) the procedure required to lift immunity, which can be more or less burdensome; (2) the duration of immunity protection, which can coincide with the term in office or extend beyond it; and (3) the scope of activities covered and the prosecutorial action prohibited by immunity. We develop an immunity score that aggregates eighteen variables that represent the strength of the immunity regime in a country. To the best of our knowledge, our effort represents the first detailed and systematic quantification of the strength of immunity protection, which is an important prerequisite for further research about the effects of

<sup>&</sup>lt;sup>3</sup>The most conspicuous instance of the alleged malfeasance involved  $\in 100$  million in pay-for-play bribery payments to fifteen Greek ministers. See Donadio and Kitsantonis (2012), among others.

<sup>&</sup>lt;sup>4</sup>Our mention of malfeasance charges in Greece and Italy are by no means exhaustive. For example, Mexican legislator-elect Julio César Godoy Toscano, who disappeared in 2009 after being charged with money laundering and having ties to one of Mexico's most powerful drug cartels, hatched an even more overt plan to exploit immunity. After 15 months spent hiding from police, Godoy Toscano managed to slip through police checkpoints and steal into the Mexican Chamber of Deputies, where he took his oath of office and, protected by immunity, revealed himself to the public. See D.R. (2010). In a similarly conspicuous case, Salvadoran prosecutors could do nothing when Congressman Jose Francisco Merino shot and wounded a police officer during a drunken rampage in San Salvador. Darling (2000) provides further details.

<sup>&</sup>lt;sup>5</sup>This is in-line with Maingot (2012)

this institution.<sup>6</sup>

We find empirical support for the predictions of our model. Controlling for standard determinants of corruption, such as income, electoral rules, and trade openness, we find evidence that stronger immunity protection is associated with greater corruption and weaker governance. However, this relationship is considerably more pronounced in countries with *strong* legal systems (systems with *high* levels of judicial independence). In countries with *weak* legal systems, the effects of immunity protection are ambiguous. These effects are visible when using both perception-based and incidence-based measures of corruption as the dependent variable, which takes into consideration the concerns voiced by Treisman (2007). The results remain equally strong when we allow for non-linear effects of the covariates in matching regressions.

Reverse causality is, doubtless, a potential concern that must be addressed; corrupt politicians may choose to design stronger immunity protections in order to protect themselves from prosecution. The evidence, however, contradicts this proposition. By coding the strength of immunity in the first democratic constitution of each country in our sample, we observe that immunity provisions are highly persistent over time and are a function of the original constitutional choices made at independence. For instance, Argentina has strong immunity provisions and high levels of corruption, but its rules have remained essentially constant since their inception 160 years ago. Historical contingency, not politicians' machinations, primarily account for the observed variation in immunity rules around the world.

We are certainly not the first to study the economic effects of political institutions. The seminal book by North (1990) highlights the link between institutions and transaction costs. Persson and Tabellini (2003) examine the economic effects of constitutions and focus on electoral rules<sup>7</sup> and form of government.<sup>8</sup> Besley and Persson (2011) examine the causes of the clustering of state institutions, violence and income. A recent influential book by Acemoglu and Robinson (2012) investigates the impact of formal and informal institutions on power relations and prosperity. Our approach corresponds closely to these important studies.

Our theoretical analysis comports with the broader literature that examines the accountability of politicians. An extensive body of political economy literature, beginning with Barro (1973) and further developed

<sup>&</sup>lt;sup>6</sup>The Comparative Constitutions Project, Elkins et al. (2007), asks and documents in a yes or no question immunity of heads of state, heads of government, and legislators in present and historical constitutions. Hoppe (2011), Maingot (2012), McGee (2001), Van der Hulst (2000), Myttenaere (1998), and Geesteranus (1996) do collect information on immunity provisions in a number of jurisdictions, but focus primarily on immunity protections afforded to parliamentarians. Maingot (2012) and Van der Hulst (2000) undertake a partial attempt to document immunity regimes outside of Europe.

<sup>&</sup>lt;sup>7</sup>Electoral rules determine how votes in a given district or constituency translate into seats in the legislature. There is a large body of literature examining the effects that different electoral rules have on economic policy. Lizzeri and Persico (2001) argue that in majoritarian systems, where the candidate with the highest vote share wins the only seat, there is greater incentive to target spending on a small and concentrated groups of voters. There is also substantial literature on the effects of electoral rules on corruption, or "rent extraction,"by elected officials. For instance, Myerson (1993) argues that the greater competition induced by proportional systems and larger electoral districts reduces the incentive for rent extraction.

<sup>&</sup>lt;sup>8</sup>"Form of government" is generally characterized as either "presidential" or "parliamentary."In a parliamentary system, the executive must hold the confidence of a majority of the legislature at all times. In effect, any member of a parliamentary coalition can veto any policy proposal (see Huber, 1996; Diermeier and Feddersen, 1998). Persson et al. (2000) argue that the ability to construct ad hoc coalitions leads to more-targeted spending in a presidential system than in a parliamentary system, at the expense of broad spending programs. They also claim that the lack of a residual claimant in a presidential system results in a lower overall level of government spending and taxation. Persson and Tabellini (2004) investigate these claims empirically and find robust evidence that presidential systems result in smaller government.

by Ferejohn (1986), analyzes how re-election influences the behavior of politicians. Maskin and Tirole (2004) show that accountable policymakers are more likely to pander to the electorate and overlook minority interests. The re-election motive for politicians is dampened if there are limits on the number of terms an individual can hold office.<sup>9</sup> Another branch of the literature investigates configurations where branches of government are accountable to one another–e.g., regulators or judges that are accountable to a directly elected legislature.<sup>10</sup> Acemoglu et al. (2012) consider the effect of checks and balances in a weakly-institutionalized regime where bribery of politicians is a serious concern.

Immunity provisions for legislators, chief executives, and ministers comprise an overlooked dimension of accountability. An important exception is the work of Dal Bó et al. (2006), who propose a model that incorporates corruption through bribery and conclude, theoretically, that granting officials immunity from charges of bribery can have an ambivalent effect on corruption. As in this paper, Dal Bó et al. (2006) model immunity's role as dependent on the quality of the legal system. However, as immunity is relevant to our model because it influences a politician's probability of re-election, ours is a model tailored to address the behavior and selection of elected officials.

The paper proceeds by briefly describing the history of immunity provisions in Section 2. In Section 3, we propose a theoretical model that shows how immunity affects corruption and governance. Section 4 outlines the key dimensions of politicians' immunity provisions. Section 4.2 describes our method of coding the current and historical differences in immunity protection across countries; presents a number of key stylized facts; and documents the historical persistence of immunity. In Section 5, we study the relationship between immunity and corruption empirically. Section 6 concludes.

## 2 History of Immunity Provisions

The first modern protections for parliamentarians originated in England. The idea that legislators' speech in Parliament should be legally protected evolved from struggles between the English Parliament and the King. In 1397, in Parliament, Sir Thomas Haxey rebuked King Richard II's prodigal habits. When the incensed monarch discovered Haxey's name, he orchestrated the parliamentarian's treason conviction and subsequent death sentence. While the intercession of the Archbishop of Canterbury saved Haxey's life, Parliament was, nevertheless, concerned with the case's implication for legislative independence in England; following Richard II's overthrow in 1399, Parliament forced his successor to annul the judgment against Haxey and restore his estate (Chafetz, 2007, p. 69). Haxey's Case (1397) was the first in a number of assertions of legislators' right to freedom from liability for speech uttered in Parliament (Chafetz, 2007, p.

 $<sup>^{9}</sup>$ Smart and Sturm (2006) and Alt et al. (2011) examine the relationship between term length and politicians' behavior.  $^{10}$ Hanssen (2004) considers the degree of accountability of judges who are appointed by elected politicians.

Stephenson and Nzelibe (2010) argue that electoral accountability and institutions that provide checks and balances cannot be considered in isolation because the checks-and-balances regime will have an effect on voter behavior.

69).<sup>11</sup> However, later codifications of the English rule did not provide parliamentarians with protection from arrest on criminal charges.

Statutory limits on the criminal liability of legislators date to the struggles between revolutionaries and the Ancien Régime during the French Revolution, when the first comprehensive immunity provisions offering limitations on the criminal prosecution were introduced. The struggle between democratizing forces and the Ancien Régime waged for more than two decades after the revolution of 1789. Despite the successes of the revolutionary armies, the nobility retained considerable influence over the police corps, the judiciary and the clergy.

Under these circumstances, immunity served the important function of protecting nascent democratic institutions against infringements by an influential monarchy. The French judiciary remained in the hands of the Ancien Régime in the early years of the Revolution, and proponents of democracy feared the infamous *lettres de cachet* as a pretext for arrest. In this context of considerable insecurity, Honoré de Mirabeau proclaimed the inviolability of members of the self-constituted National Assembly on June 23, 1789. The provisions in Articles 7 and 8 of the Constitution of 1791 consequently exceeded the English freedom-ofspeech protections and incorporated provisions that restricted the liability of members of the legislature for criminal activities perpetrated in a personal capacity.

The process of impeaching and removing executive branch members as a prerequisite to prosecution in presidential systems developed independently during the ratification of the United States Constitution. The framers of the document made a conscious decision to place the authority to remove the president and authorize his/her legal prosecution in the hands of the legislature. Similar to their French contemporaries, the framers feared that placing the president under the direct jurisdiction of the judiciary without legislative consent would allow for politically-motivated charges to interfere with the functioning of the executive branch of government.<sup>12</sup> In contrast to the approaches to politicians' criminal responsibility in France and the United States, England did not incorporate such protections for elected officials and relied, instead, on the conventional judicial process to discipline these actors in criminal cases.

Following the French and American Revolutions, variations on these approaches to immunity emerged and spread throughout the world. The result is a patchwork of diverse immunity regimes throughout the modern world that we document in Section 4 and in Section 4.2.

<sup>&</sup>lt;sup>11</sup>Parliamentarians ultimately codified freedom-of-speech protection into the English Bill of Rights three centuries later: "The freedom of speech and debates and proceedings in Parliament ought not to be impeached or questioned in any court or place out of Parliament." The English Parliament's assertion was subsequently adopted in a number of democratizing jurisdictions and was spread throughout the world through English colonial rule. The principle was later expanded to protect other public officials from recrimination for words spoken or votes taken in their official capacity. This protection-which the literature refers to as non-liability protection-is now "not only relatively homogenous but also a highly stable principle throughout the world," (Van der Hulst, 2000, p. 66). Non-liability protection may not generally be waived, and in some jurisdictions extends beyond speech uttered in Parliament to include written work, debates, or other forms of expression that may or may not be disseminated beyond the confines of the legislature.

 $<sup>^{12}</sup>$ See Alexander Hamilton, *The Federalist*, Number 65 (1788).

## **3** Accountability of Politicians and Immunity: Theory

We construct a simple theory to comprehend how immunity might affect politicians' behavior. In our model, politicians succumb to interest-group pressure and exploit their immunity by engaging in illegal behavior that rewards these groups, which, in turn, help to secure their re-election. At the same time, immunity protects politicians from being framed.

Our theory meshes with an astute observation by Myerson (2009):

According to Xenophon, Cyrus established himself as a great political leader by cultivating a reputation for generously rewarding his captains after victory. So the essential point of his story is that a successful leader needs a reputation for reliably rewarding those who work to put him in power.

Our model, which is based on Maskin and Tirole (2004), consists of an incumbent politician P, a measure of voters (or a median voter V), and interest groups I. The incumbent politician cares both about choosing the correct policies and achieving re-election. Voters care about the policies chosen. Interest groups enjoy kickbacks and favors associated with high levels of corruption and, in return, help the politician win reelection.<sup>13</sup> In the event that the incumbent does not engage is such favors, interest groups use smear campaigns or even outright violence to diminish the chance of his re-election.<sup>14</sup>

There are two policies  $\{a_1, a_2\}$ , and following Maskin and Tirole (2004), all voters have the same ranking of these policies, but they do not know, ex-ante, what the correct ranking is. The probability that  $a_1$  is the optimal policy is  $p > \frac{1}{2}$ ; thus,  $a_1$  is the popular policy. The politician also chooses c, which stands for corrupt or criminal activities, to serve interest groups. For the sake of simplicity, we assume that  $c \in \{0, 1\}$ . This simplification does not change the qualitative nature of our results, but simplifies the narration, as we call a politician corrupt when c = 1 is chosen, whereas we call a politician non-corrupt when c = 0 is chosen. If a corrupt (c = 1) politician is prosecuted, he faces an expected punishment (monetary fine or imprisonment time) J > 0. The probability that a corrupt politician is discovered is  $\beta$ , which can be thought to measure the effectiveness of the crime-detection and legal systems.

**Immunity:** We model immunity as the probability that the politician is not punished (prosecuted and/or convicted) for wrongdoing and denote it by q. In line with our empirical scoring, if q = 1, then we have the highest level of immunity, whereas if q = 0, the politician has no immunity.

<sup>&</sup>lt;sup>13</sup>Interest groups help politicians win re-election by providing resources, such as campaign contributions, which can be used for bribes or for vote-buying (see, for example, Finan and Schechter (2012)); by providing good publicity; and also by making sure that their members vote for the politician. Interest groups provide support in exchange for rewards that may include the passage of laws favorable to these groups, non-enforcement of laws that are hostile to them, or favoritism towards these groups in public procurement. For a comprehensive theoretical analysis of the role of interest groups in policy choice, see Snyder and Ting (2008). For empirical evidence linking clientelism and corruption, see Singer (2009). See, also, Besley and Coate (2001) for the impact of lobbying on political competition.

 $<sup>^{14}</sup>$ For further examples of how interest groups may use violence or smear campaigns to get their way, see Dal Bó et al. (2006) and Dal Bó and Di Tella (2003).

**Smear campaigns:** When the incumbent refuses to cater to the interest groups (chooses c = 0), they run smear campaigns and threats denoted by s. We set  $s = (1 - q)(1 - \beta)$  to capture that their effectiveness depends negatively on the quality of the legal system and the degree of immunity protection.

**Timing:** There are two periods in the game, periods 1 and 2. In period 1, the incumbent politician chooses a and c. Interest groups observe both choices, while voters observe only the incumbent's policy choice. Elections take place at the beginning of period t = 2. If the incumbent wins the election, he/she chooses the t = 2 policy. Second-period payoffs are discounted by  $\delta$ .

**Payoffs:** We do not need to be explicit about the interest groups' payoff, so we simply assume that it increases with c. Coming to the incumbent, we define  $R(a, \hat{a})$  to stand for the benefit the politician enjoys from being in office when he chooses policy a, when he believes that policy  $\hat{a}$  is the correct one, for  $\hat{a}, a \in \{a_1, a_2\}$ . Following Maskin and Tirole (2004), we let  $R(a, \hat{a}) = R$  if  $a \neq \hat{a}$ , and  $R(a, \hat{a}) = G$ if  $a = \hat{a}$ , with G > R; that is, politicians care about choosing the correct policy, given their information. The politician also receives a payoff  $\theta \cdot c$  from c, where  $\theta$  stands for the degree of his dishonesty: if  $\theta \leq 0$ , the politician is "honest" in the sense that he dislikes bribes; if  $\theta \geq 0$ , the politician enjoys kickbacks. The dishonesty level of the politician increases with  $\theta \in [\underline{\theta}, \overline{\theta}]$ , with  $-\infty < \underline{\theta} < \overline{\theta} < \infty$ . As in Maskin and Tirole (2004), voters care about the politician choosing the correct policy according to their preferences, but they do not care about  $\theta$  per se.

Voters' beliefs: The probability of re-election depends on the voters' perception that the politician is congruent (i.e., the politician has the same preferences as the voters), which is denoted by  $\pi$ . We assume that voters' perception  $\pi$  increases in c, while it decreases with s. Corruption affects voters' perception in a latent way<sup>15</sup> through several possible channels:  $\pi$  increases with campaign spending or other kind of support, such as propaganda or publicity, support of unions, and vote-buying that come from interest groups as a reward for c = 1;  $\pi$  decreases with threats, smear campaigns or false accusations from interest groups. When the politician chooses policy  $a_1$  (respectively,  $a_2$ ) and  $c \in \{0, 1\}$ , voters perceive that he is congruent with probability

$$\hat{\pi}(a_1) = \frac{\pi(c,s) p}{\pi(c,s) p + [1 - \pi(c,s)] (1 - p)},$$

(respectively,  $\hat{\pi}(a_2) = \frac{\pi(c,s)(1-p)}{\pi(c,s)(1-p)+[1-\pi(c,s)]p}$ ). These expressions are similar to those in Maskin and Tirole (2004), with the main difference that, here,  $\pi$  depends on the level of corruption c and on s.

**Re-election:** The incumbent faces an opposition that is perceived to have probability  $\pi^O$  of being congruent. The incumbent will hold office at T = 2 if (i) he is not under prosecution, which happens with probability  $1 - \beta + \beta q$ , or (ii) he is re-elected, which has probability

$$P(a,c,s) = \Pr\left[\hat{\pi}(a) > \pi^O\right].$$
(3.1)

 $<sup>^{15}</sup>$ Voters' perceptions are affected, despite the fact that voters do not observe the incumbent's choice of c.

In other words, the incumbent can lose office either because the public's perception at T = 2 is low or because he is under legal prosecution. Smear campaigns are run only when the incumbent does not cater to the interest groups, so when c = 1, we have that s = 0, while, when c = 0, we have that  $s = (1 - q)(1 - \beta)$ . Given this observation, in what follows, we simplify notation by setting  $P(a, c, s) = P_c(a)$  when c = 1 and  $P(a, c, s) = P_0(a)$  when c = 0.

Policy and Corruption: In period 2, the incumbent politician has no re-election motives, so he will always choose the policy that he prefers, yielding a payoff of G. In period 1, things are more complex because policy and corruption choices affect current and future payoffs also through the probability of re-election. When the incumbent chooses c = 1 and policy a when he believes that policy  $\hat{a}$  is the correct one, his payoff is:

$$R(a, \hat{a}) + \theta - \beta (1 - q) J + \delta P_c(a) (1 - \beta + \beta q) G,$$

whereas when he chooses c = 0, his payoff is:

$$R(a,\hat{a}) + \delta P_0(a))G$$

These expressions imply that the optimal policy depends on c and  $\hat{a}$  (the correct policy for the politician) but not on  $\theta$ . Hence, given  $\hat{a}$ , there is an optimal policy choice corresponding to c = 1 and another choice corresponding c = 0; we call these policy choices  $a^c$  and  $a^0$ , respectively.

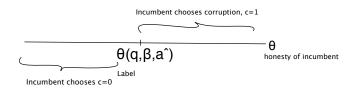
When c = 1, the incumbent's payoff is increasing in  $\theta$ . Then, for a given level of immunity protection, quality of judicial system  $\beta$ , and correct policy choice  $\hat{a}$ , there exists a threshold  $\theta(q, \beta, \hat{a})$ , above which type- $\theta$  politicians choose to be corrupt; that is,  $c^*(\theta) = \begin{cases} 1 \text{ for } \theta > \theta(q, \beta, \hat{a}) \\ 0 \text{ otherwise} \end{cases}$ . Proposition 1 summarizes these findings:

**Proposition 1.** The highest payoff for a type- $\theta$  politician is

$$U^{P}(\theta) = \begin{cases} R(a^{c}, \hat{a}) + \theta - \beta (1 - q) J + \delta P_{c}(a^{c})(1 - \beta + \beta q)G & \text{for } \theta > \theta (q, \beta, \hat{a}) \\ R(a^{0}, \hat{a}) + \delta P_{0}(a^{0})G & \text{otherwise} \end{cases},$$
(3.2)

**Discussion:** In this model, politicians can increase their probability of re-election by pandering to the electorate through choosing the popular action, and by supporting interest groups through c. Both of these practices are associated with costs: Pandering to the electorate reduces the benefit from holding office by  $\Delta = G - R$ , whereas if corruption is revealed and the politician is prosecuted, he loses office and faces legal consequences. The relative costs and benefits depend on the level of immunity protection q and on the quality of the judicial system  $\beta$ . These two features have a direct effect and an indirect effect through s.

The tradeoffs also depend on politicians' level of dishonesty as measured by the parameter  $\theta$ . For very dishonest politicians-very high  $\theta$ -it is always optimal to choose c = 1, regardless of which is the correct policy. Honest politicians-those with very low  $\theta$  (which we allow to be negative)-may prefer to increase their



#### Figure 3.1: Immunity, Legal System and Corruption by Incumbent

probability of re-election by pandering to the electorate rather than by catering to interest groups through corruption. Politicians with moderate values of  $\theta$  may choose to cater to interest groups when the correct policy is the unpopular one. In this model, the level of immunity protection q and the quality of the legal system  $\beta$  affect the degree of both corruption and pandering.

In summary, higher c (bribes, corruption etc.) increases the probability of re-election directly because it increases financial contributions from interest groups, or they improve press coverage and have the indirect benefit of preventing smear campaigns. At the same time, corruption carries the risk that the incumbent is not re-elected if he is prosecuted. The level of immunity protection affects the relative costs and benefits of higher c and the effectiveness of smear campaigns.

### 3.1 Immunity, Judicial System and Corruption

We investigate the effect of immunity protection on corruption for various levels of quality of the judicial system  $\beta$ . In this model, the level of corruption is measured by the range of  $\theta$  that choose c = 1-that is, by the interval  $[\theta(q, \beta, \hat{a}), \bar{\theta}]$ .

**Proposition 2.** Higher immunity encourages corruption when the legal system is strong, while it lowers or leaves corruption unchanged when the legal system is weak.

Proof. Formally, we investigate the effect of an increase in q on the ranges of  $\theta$  that choose c = 1. When q changes, it affects the incumbent's payoff both when he is corrupt and when he is not corrupt. In particular, when q increases, it raises the benefit of choosing c = 1 by  $\beta J + \beta \delta P_c(a^c)G$  and the benefit of choosing c = 0 by  $\delta G \frac{\partial P_0(a^0)}{\partial q}$ . When  $\beta$  is low, the benefit to c = 0,  $\delta G \frac{\partial P_0(a^0)}{\partial q}$  dominates the benefit to c = 1,  $\beta J + \beta \delta P_c(a^c)G$ , implying that the threshold  $\theta(q, \beta, \hat{a})$  increases. We conclude that when the judicial system is poor, stronger immunity protection is associated with lower corruption. However, when  $\beta$  is high, the benefit of stronger immunity to a politician who chooses c = 1 dominates the benefit to a politician who

chooses c = 0, and an increase in the strength of immunity protection decreases the threshold  $\theta(q, \beta, \hat{a})$ , thus increasing corruption.

Notice that these effects could be zero. In particular, an increase in the strength of immunity could have no effect on the level of corruption when the legal system is very weak: When  $\beta = 0$ , for most values of q, we have that  $P_0(a^0) = 0$  because smear campaigns are effective enough to prevent re-election. Hence, q has no effect on corruption for most values of  $\theta$ .

Other determinants of corruption: It is worth investigating what other factors captured in the model increase corruption. The level of corruption also depends on the relative desirability of policy choices: For popular policies,  $P_0(a)$  can be close to 1, implying that corruption does not increase the probability of re-election, but, instead, brings only material benefits and protection from smear campaigns to the politician if he is dishonest. In this case, then, honest politicians-those with relatively low  $\theta$ -will choose not be corrupt if the judicial system is sufficiently good. At the same time, support from interest groups can enable the politician to implement unpopular policies by improving the voter's perception and the probability of re-election through positive publicity or vote-buying.

We saw that the effect of immunity protection on corruption depends on the quality of the judicial system. For countries with an effective and independent judicial system, corruption is higher when immunity protection is stronger and when interest groups are strong, in the sense that they have a big effect on the probability of re-election–i.e., the difference in  $P_c(a) - P_0(a)$  is large. If the judicial system is ineffective, stronger immunity helps protect honest politicians from false accusations. Other dimensions that affect the impact of immunity in this model are the strength of opposition–namely,  $\pi^O$ –and the difference between G and R.

### 3.2 Endogenizing the type of politicians

The analysis, so far, has taken the honesty level of politicians  $\theta$  as exogenous. We now augment the baseline model by introducing occupational choices in the private sector in order to endogenize the honesty level of individuals who decide to go into politics.<sup>16</sup> Suppose that there is an economy in which the wage in the private sector is w. Consider an individual characterized by honesty level  $\theta$ , and let the expected benefit from criminal activities in the private sector be  $c \cdot \theta - J$ , where J is the expected jail cost in case of prosecution. If a person becomes a politician, the consequences of corruption decrease with immunity protection because he is prosecuted only if immunity is lifted, which happens with probability 1 - q. In these circumstances, who chooses to be a politician?

To answer this question, we must first analyze the occupational choices for citizens within the private

<sup>&</sup>lt;sup>16</sup>Other models that endogenize the character of politicians are Caselli and Morelli (2004), Mattozzi and Merlo (2011), and Bernheim and Kartik (2013).

sector: If  $c \cdot \theta - J > w$ , then a type  $\theta$  individual will choose illegal activities. Let  $\theta(c, J, w)$  denote the threshold level type that chooses illegal activities. Private citizens' payoff as a function of type  $\theta$  is

$$U^{C}(\theta) = \begin{cases} c \cdot \theta - J + \delta (c \cdot \theta - J) & \text{for } \theta > \theta (c, J, w) \\ (1 + \delta) w & \text{otherwise} \end{cases}.$$
(3.3)

The payoffs for private citizens given by (3.3) and the ones for politicians (3.2) imply that the most dishonest members of society (above  $\theta(c, J, w)$ ) choose illegal over legal work, and the most dishonest fraction of politicians-above  $\theta(q, \beta, \hat{a})$ -choose corruption. Then, the question that arises is which ranges of  $\theta$  choose to become politicians, and how does this range depend on the level of immunity protection? This question is addressed in the Proposition that follows:

**Proposition 3.** If the legal system is strong, then higher immunity encourages more-dishonest individuals to enter politics. In contrast, when the legal system is weak, higher immunity encourages more-honest individuals to enter politics.

The lesson from Proposition 3 is that in a world in which occupational choices are endogenous to institutional arrangements, higher immunity protection has an adverse effect on the honesty level of individuals that choose to become politicians if the judicial system is effective, whereas it attracts more-honest people into politics if the judicial system is poor.

## 4 Immunity Provisions in Contemporary Democracies

This section describes how immunity provisions differ across jurisdictions. There is substantial variation in the strength and structure of immunity regimes in democratic countries. At one end of the spectrum lie countries with no immunity protection, such as the United Kingdom; while members of the British Parliament and British ministers may speak or vote without the threat of legal retaliation, no procedural obstacles impede or limit the criminal prosecution of these politicians.

At the other end lie countries with strong immunity regimes, such as Paraguay. The Constitution of Paraguay stipulates that any arrest or prosecution of a member of the legislature must be authorized by a two-thirds majority vote in the legislative chamber to which the legislator belongs. Should prosecutors wish to take action against a minister or the president, the lower house of the legislature must first impeach the politician by a vote of two-thirds, followed by a two-thirds majority vote for removal in the Paraguayan Senate. It is within the Senate's sole purview to determine whether the removed politician should be referred to a competent court, which only then may proceed with criminal prosecution. Additionally, Paraguayan law grants former presidents special legal status through which they retain some procedural protections from prosecution for the remainder of their lifetimes.

Most contemporary democracies employ immunity regimes that lie somewhere between the two extremes of the United Kingdom and Paraguay. France approximates a mid-point between the two. French legislators enjoy immunity from criminal prosecution for the duration of their mandate, but this immunity may be waived with the consent of a legislative committee. While French ministers do not enjoy immunity from criminal prosecution, the President of France must be removed from office before being prosecuted, a process that requires the consent of supermajorities in both houses of the legislature.

These differences among the approaches to immunity in the United Kingdom, Paraguay, and France evince significant cross-jurisdictional variation in the strength and nature of immunity regimes throughout the modern democratic world. Our measure of immunity is designed to capture these differences in a comprehensive manner.

## 4.1 Dimensions of Immunity

We study the immunity protections afforded to legislators, ministers, and chief executives. The distinction among these actors is crucial; while some countries protect only legislators from criminal prosecution, others protect only members of the executive branch. Some protect all politicians. We derive an aggregate measure of immunity protection that incorporates the strength of immunity protections that each group of politicians enjoys.

A broad measure that incorporates the immunity protections of all three groups has two distinct advantages. First, wider coverage better captures the interplay among different political actors. It is not always possible to identify the extent to which immunity provisions for one set of political actors may influence the effective immunity enjoyed by another, distinct set of political actors. For example, since executive branch members in some countries often enter the legislature after leaving office, the likelihood of malfeasant behavior among members of the executive branch may depend somewhat on the strength of the country's legislative immunity regime. Second, governance indices do not measure the performance of each individual branch of government, but, rather, assess the broader public sector. A comprehensive coding of immunity protections that includes legislators, ministers, and chief executives most adequately measures the degree to which a society has chosen to place its politicians above the law, and, therefore best corresponds to aggregative measures of governance.

In addition to the coverage of different kinds of politicians, the key differences between different countries' immunity regimes present themselves along the following lines: (1) the procedure required to lift immunity, which can be more or less burdensome; (2) the duration of immunity protection, which can coincide with the political office or extend beyond it; and (3) the scope of activities covered and the legal actions prohibited by immunity.

**Procedure:** Protection from criminal prosecution, where it exists, may generally be waived if some procedural requirement is fulfilled. Jurisdictions with strong immunity protection employ a number of burdensome procedural obstacles that must be overcome before a politician can be prosecuted. These

obstacles are few and undemanding in jurisdictions with weak immunity protections. In the overwhelming majority of jurisdictions that offer their legislators immunity, this protection may be waived if either a supermajority or a simple majority of legislators in the legislative houses to which the legislator in question belongs votes to remove his or her immunity. In jurisdictions where immunity protection is not as robust, the procedure for waiving immunity requires the consent of only a legislative committee, the cabinet, the chief executive, or the chief justice of an appellate court. The immunity of ministers and chief executives is lifted in the same way as that of legislators, though the assent of majorities in two legislative houses is occasionally required to authorize prosecution in countries with bicameral legislatures.

**Duration:** Immunity provisions may also differ from one another with respect to the time during which they apply. Immunity in most jurisdictions expires at the end of a politician's term of office. Other jurisdictions, however, continue to protect politicians from prosecution after their term of office has expired. Such is the case with former presidents of Paraguay, who enjoy the same immunity as legislators for the remainders of their lifetime.

**Scope:** Immunity provisions in different jurisdictions provide politicians with varying degrees of coverage, which may affect immunity in two ways. First, immunity provisions may limit the application of immunity to certain crimes, such as those with some relation to a politician's official duties. The Greek ministerial immunity provision is an example of such laws:

No prosecution against, no questioning or preliminary questioning of [present or former members of the Government] ... for acts carried out by commission or omission in the discharge of their duties shall be permitted, before Parliament has decided on the matter. (Constitution of Greece, Article 86, Section 2)

Alternatively, these provisions may extend further and protect against prosecution for the commission of common crimes wholly unrelated to a politician's official duties, such as the legislative immunity clause in the Constitution of El Salvador:

From the day of their election until the end of the period for which they have been selected, deputies may not be judged for serious crimes that they commit except for those cases in which the Legislative Assembly declares in advance that there are grounds for prosecution....<sup>17</sup> (Constitution of El Salvador, Article 238)

Such laws have protected politicians from prosecution for crimes unrelated to their official duties–even for crimes as serious as homicide.

Second, the range of prosecutorial activities that immunity proscribes differs from one jurisdiction to another. Some jurisdictions prohibit only the arrest and detention of a legislator, while others prevent the opening of judicial proceedings, as well. Ministers and chief executives who have immunity may generally not be arrested, detained, or prosecuted without the fulfillment of the appropriate procedural requirement.

<sup>&</sup>lt;sup>17</sup>Translation is the authors' own.

## 4.2 Quantifying Immunity Regimes

We use an eighteen-variable rubric to score immunity provisions and compare their strength across different countries summarized in Table 1. The first six variables apply to legislators, the second six to ministers, and the last six to chief executives. In all cases, a value of 1 indicates that the protection is provided by law, while a value of 0 indicates that no such protection from criminal liability exists.

Table	1.	Immunity	Coding
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		1 0	
No.	Dimension of Immunity	No. of Countries Applies	Countries by Region
	LEGISLATIVE IMMUNITY		
1	Detention requires some authorization	49	Afr.[3]/Asi.[7]/Eur. [28]/N.Am.[5]/S.Am.[6]
2	Simple majority vote in legislative house	41	Afr.[1]/Asi.[6]/Eur.[24]/N.Am.[5]/S.Am.[5]
3	Supermajority vote in legislative house	5	Afr.[0]/Asi.[0]/Eur.[2]/N.Am.[0]/S.Am.[3]
4	Immunity continues to apply after term in office expires	3	Afr.[0]/Asi.[0]/Eur.[3]/N.Am.[0]/S.Am.[0]
5	Immunity protects common crimes	45	Afr.[2]/Asi.[6]/Eur.[26]/N.Am.[5]/S.Am.[6]
6	Immunity protects against judicial proceedings	39	Afr.[2]/Asi.[4]/Eur.[25]/N.Am.[3]/S.Am.[5]
	MINISTERIAL IMMUNITY		
7	Prosecution requires some authorization	41	Afr.[2]/Asi.[3]/Eur.[25]/N.Am.[4]/S.Am.[7]
8	Simple majority vote in at least one legislative house	32	Afr.[2]/Asi.[1]/Eur.[18]/N.Am.[4]/S.Am.[7]
9	Supermajority vote in at least one legislative house	9	Afr.[1]/Asi.[1]/Eur.[1]/N.Am.[2]/S.Am.[4]
10	Assent of two legislative houses	6	Afr.[0]/Asi.[0]/Eur.[0]/N.Am.[1]/S.Am.[5]
11	Immunity continues to apply after term in office expires	7	Afr.[0]/Asi.[0]/Eur.[5]/N.Am.[0]/S.Am.[2]
12	Immunity protects against common crimes	35	Afr.[2]/Asi.[3]/Eur.[19]/N.Am.[4]/S.Am.[7]
	CHIEF EXECUTIVE IMMUNITY		
13	Prosecution requires some authorization	52	Afr.[4]/Asi.[7]/Eur.[27]/N.Am.[6]/S.Am.[8]
14	Simple majority vote in at least one legislative house	45	Afr.[4]/Asi.[6]/Eur.[21]/N.Am.[6]/S.Am.[8]
15	Supermajority vote in at least one legislative house	22	Afr.[2]/Asi.[6]/Eur.[3]/N.Am.[4]/S.Am.[7]
16	Assent of two legislative houses	13	Afr.[1]/Asi.[1]/Eur.[2]/N.Am.[3]/S.Am.[6]
17	Immunity continues to apply after term in office expires	10	Afr.[1]/Asi.[1]/Eur.[5]/N.Am.[0]/S.Am.[3]
18	Immunity protects against common crimes	46	Afr.[4]/Asi.[7]/Eur.[21]/N.Am.[6]/S.Am.[8]

Questions 1-3 measure the differences in the procedural requirement necessary to waive legislative immunity. The questions differentiate among the various procedural mechanisms for lifting immunity. A country in which a legislative committee or an appellate court judge may lift a legislator's immunity, for example, would receive an affirmative answer to question 1 only; a country in which immunity may be lifted only by a supermajority vote in the relevant legislative house would receive an affirmative answer to Questions 1, 2, and 3. Question 4 addresses the duration of legislative immunity and distinguishes between regimes in which legislative immunity expires at the end of the legislative term and those in which it continues to apply beyond the term of office. Questions 5 and 6 refer to the scope of legislative immunity: Question 5 examines the types of crimes covered by immunity protection, and question 6 indicates whether immunity also protects legislators from the opening of judicial proceedings in addition to arrest.

The ways in which we quantify the strength of ministerial and chief executive immunity provisions are

identical to each other, as immunity provisions applicable to ministers behave in the same way as those that apply to chief executives. Questions 7-10, as well as questions 13-16, code the essential differences in the procedural difficulty of waiving immunity provisions for these executive branch members. Procedural requirements for waiving executive branch immunity may involve the assent of two legislative houses. Consequently, there is one supplementary procedural question for ministers and chief executives that does not exist for legislators. Questions 11 and 17 code immunity provisions that extend beyond the term of office. Questions 12 and 18 measure the scope of ministerial and chief executive immunity by inquiring about the types of crimes protected by immunity. With respect to immunity provisions applicable to ministers and chief executives, we do not include a question measuring whether judicial proceedings may be instituted; such proceedings are generally barred and subject to the same procedural constraints that apply to arrest in the countries in our sample that provide protections against the arrest of ministers and chief executives.

In Reddy et al. (2013b) we provide a detailed account of how we constructed our immunity coding and fully illustrate the procedure for three countries. Reddy et al. (2013a) lists all the relevant sources (articles in the constitution and other) that we used to construct the contemporary and the historical coding for each of the 73 countries in our sample.

### 4.3 Data Sources and Country Sample

In order to compile data on immunity in each country, we began by examining each country's written constitution, seeking the relevant immunity provisions. For countries without written constitutions and for those in which constitutional language was vague or deferred to legislation, we consulted founding documents, case law, statutes, and legislative rules of procedure. For situations in which the nature of the immunity regime remained unavailable or unclear, we consulted the "PARLINE" database of the Inter-Parliamentary Union, as well as the existing literature summarizing immunity provisions, specifically Hoppe (2011), Maingot (2012), McGee (2001), Van der Hulst (2000), Myttenaere (1998), and Geesteranus (1996).

We limited our immunity scoring to democratic countries. As Wigley (2003, 2009), Koçan and Wigley (2005), and Dal Bó et al. (2006) suggest, immunity provisions may function differently in authoritarian or semi-authoritarian contexts, where a proper division of powers does not exist. Consequently, we coded immunity provisions for only those nations with a score of 6.00 or higher on the Economist Intelligence Unit's "Democracy Index." This covers all countries that the index classifies as "full democracies" or "flawed democracies," and excludes "hybrid" and "authoritarian" regimes. These classifications correspond closely to alternative regime classifications such as those in the Polity database. We further omitted from our sample those countries with "hybrid regimes" in one or more of the five years since the index was first published. The countries that meet these criteria constitute a diverse sample in a number of respects. Geographically, seven countries are in Africa, 13 in Asia and Oceania, 35 in Europe, eight in North America and the Caribbean,

and ten in South America. Economically, 32 countries qualify as advanced economies according to the International Monetary Fund. Legally, 19 employ common-law systems and 54 civil-law systems. Politically, 29 employ presidential or semi-presidential systems, while 44 are parliamentary democracies.

#### 4.4 Immunity Scores

The immunity index resulting from our scoring reveals considerable cross-jurisdictional variation in the strength of provisions that limit politicians' judicial control. The mean score across 73 countries is 0.38, with a maximum of 0.89 and a standard deviation of 0.25. The immunity scores are not closely correlated to either income (correlation coefficient: -0.05) or to the level of democracy (correlation coefficient: 0.04). The coefficients are insignificant by a wide margin in both cases.

Figure 4.1 and Figure 4.2 demonstrate the large geographic variation in immunity provisions in the jurisdictions studied.<sup>18</sup> Latin American countries generally have high levels of immunity protection, followed by Southern and Eastern European countries. Many Latin American countries were early adopters of relatively strong legislative immunity provisions in the French tradition. Further influenced by the presidential democracy developed in the United States, these countries adopted the U.S.'s approach to presidential immunity. The combination of both systems resulted in strong immunity regimes throughout South and Central America. By contrast, countries that were influenced by the English parliamentary tradition generally have the weakest immunity protection; most have a score of 0. Immunity regimes are, thus, another channel through which colonial rule and legal traditions continue to shape the modern world.

The remaining countries generally lie somewhere between the two extremes. The United States, for instance, has comparatively low levels of legislative and ministerial immunity protection, but a very high presidential immunity score. It is also noteworthy that Southern and Eastern European countries tend to have more-generous immunity provisions than their Northern and Western European neighbors. Overall, our immunity scoring, which represents the first effort to systematically measure the differences in immunity protections across jurisdictions, reveals substantial variation in immunity regimes across countries.

 $<sup>^{18}</sup>$ Table 4.1 depicts both scores we constructed: the current immunity score, as well as the historical one, which we discuss in Section 5.4.

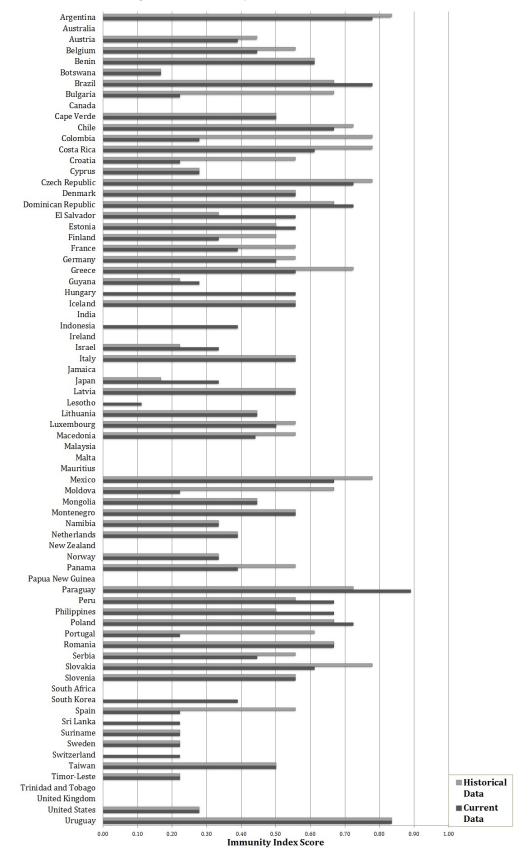


Figure 4.1: Immunity Index Across Democracies



Figure 4.2: Immunity Index scores in 73 democracies

## 5 The Empirics of Immunity and Corruption

In this section, we examine the empirical evidence for the effects suggested by our model by correlating immunity with various indicators for corruption and other forms of dishonest behavior by politicians. We focus on corruption outcomes as the primary and best-documented form of abuse of public office. In Figure 5.1, we begin our analysis with two partial correlation plots, which display the relationship between the strength of immunity and the level of corruption in a given country after removing the effects of income. We use both the "Control of Corruption" indicator from the World Bank and the Transparency International "Corruption Perceptions Index." Both measures yield virtually identical results. Visually, the impression is clear: Controlling for income levels, stronger immunity protection is associated with higher corruption.

However, our theoretical model predicts that immunity has differential effects on governance outcomes, depending on the quality of the judicial system. To obtain a first impression, we use the World Bank's Governance Indicator for the rule of law as a measure of the quality and independence of the court system, and we split our sample at the median value of the indicator. We then examine the partial correlation between immunity protection and corruption levels in countries with weak and strong legal systems, again controlling only for GDP per capita. The resulting correlations are shown in Figure 5.2. The results reveal a clear *prima facie* case confirming our model's theoretical prediction. The relationship between immunity and corruption is weakly negative if the quality of judicial systems is below the mean, while the association is considerably stronger when the judiciary is independent. The impression of a differential impact is stark. We proceed by evaluating whether this relationship survives the inclusion of additional conditioning variables on the determinants of corruption, which have been discussed in the empirical literature.

Our empirical efforts relate to two important developments in the recent literature. First, we aim to study how constitutional rules governing politicians' immunity shape economic outcomes. This approach follows in the footsteps of important research in comparative political economy by Persson and Tabellini (2003), who study the effects of constitutional rules on economic policymaking and performance in great detail. We confront the same empirical problems. Just as with electoral rules (majoritarian/proportional) and form of government (parliamentary/presidential), immunity rules tend to be highly persistent over time, as discussed above. Some recent attempts at changing immunity provisions (e.g., in Italy under Prime Minister Berlusconi) notwithstanding, there are very few immunity experiments that we could exploit to identify the effects of changes in immunity provision on corruption outcomes. Therefore, as in much of the literature on constitutional rules, we are left with cross-sectional variation and the statistical challenges this brings.

Second, our analysis contributes to the comparative literature on the determinants of cross-country

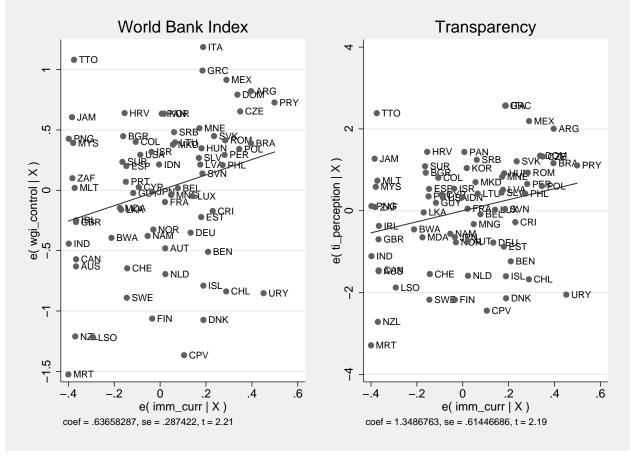


Figure 5.1: Immunity of politicians and corruption

Notes: Partial correlation plot controlling for income per capita (log). See text.

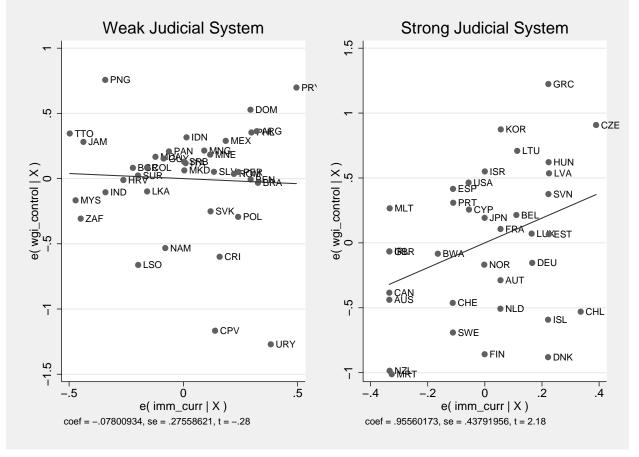


Figure 5.2: Immunity, Legal System and Corruption

Notes: Partial correlation plot controlling for income per capita (log). See text.

corruption.<sup>19</sup> The existing literature has already considered a large number of explanatory variables. While a substantial body of empirical literature exists, to the best of our knowledge, the effects of immunity rules have not yet been studied empirically.

### 5.1 Correlates of Corruption

Corruption can be defined broadly as the "misuse of public office for private gain" (Rose-Ackerman, 1999) or as an "an act in which the power of public office is used for personal gain in a manner that contravenes the rules of the game" (Jain, 2001). In practice, such misuse of public office occurs in many different ways. Corruption covers a wide spectrum, from extorting bribes for building permits or utility access to large-scale schemes through which political elites plunder state resources for personal gain. Thus, it comes as no surprise that measuring corruption has been a topic of much debate in the empirical literature (Treisman, 2007). Given the emphasis of this paper on the effects of immunity for politicians, we concern ourselves with *systemic* corruption on a high political level rather than on *petty* incidences of bribery.

There is broad consensus that there is a close association among income level, the overall quality of governance, and corruption outcomes (Lambsdorff, 2006). High-income countries tend to have less corruption. We also have to control for a number of additional variables that have been found to be associated with corruption outcomes. These can be broadly grouped into (1) political, legal and institutional factors; (2) demographic and geographic factors; and (3) economic factors. Hence, in addition to the log of GDP per capita, in our regressions, we will consider the following variables:

- Political, Legal and Institutional Factors. *Democracy*: the de facto degree of democracy and electoral accountability may be negatively related to corruption (Treisman, 2007). We use the Polity II democracy score. *Presidentialism*: factors related to the form of government are often seen as important influences on the behavior of politicians and voters (Panizza, 2001; Persson et al., 2003). *Electoral rules*: The seminal work by Persson and Tabellini (2003) points to the important effects of different electoral systems on economic outcomes, including corruption. We control for these effects by including a dummy variable for majoritarian electoral systems, which are expected to lead to better control of corruption. *Legal systems*: a particular concern in our context is that immunity regimes differ with different legal origins. Common-law countries tend to have lower aggregate immunity protection, on average, although large differences exist between parliamentary and presidential common-law countries. To disentangle the effects of immunity rules from other differences relating to legal origin, we control for different legal systems (La Porta et al., 2008).
- Cultural and Geographic factors. *Fractionalization*: A series of studies reports that ethnic and linguistic fractionalization correlate positively with corruption and poor governance outcomes, as studied

<sup>&</sup>lt;sup>19</sup>Excellent surveys can be found in Lambsdorff (2006) and Treisman (2007)

by Lederman et al. (2005), Suphachalasai (2005), Alesina et al. (2003), Herzfeld and Weiss (2003), Treisman (2000), La Porta et al. (1999), Easterly and Levine (1997), and Mauro (1995). *Religion* and culture: Whether religious beliefs-especially Protestant values-are associated with differences in corruption remains a debated issue. We control for the share of Protestants in the population. *Geography*: as is standard in much of the empirical literature, we also include continent dummies as controls.

• Economic Structure. *Trade openness*: the impact of trade openness on corruption is explored by Gurgur and Shah (2005), Brunetti and Weder (2003), Persson et al. (2003), Fisman and Gatti (2002) and Bonaglia et al. (2001). We control for trade openness using the sum of imports and export over GDP. *Raw material dependence*: high dependence on raw material exports is often associated with higher levels of corruption, as studied by Herzfeld and Weiss (2003), Tavares (2003), and Bonaglia et al. (2001). We develop a proxy for dependence on raw material exports by looking at the share of oil exports in total exports. <sup>20</sup>

With respect to the measurement of corruption, we rely on the efforts of organizations such as the World Bank's Control of Corruption Index from the World Governance Indicators and the Corruptions Perceptions Index provided by Transparency International. Both institutions produce quantitative indices of crosscountry differences in corruption based on survey data. Treisman (2007) points to the differences between perception- and incidence-based indicators of corruption.<sup>21</sup> We take this point seriously and corroborated our findings with regressions using incidence-based corruption indicators that can be found in the Appendix. We also use the first principal component of various corruption indicators.

Throughout the following analysis, higher values for the dependent variables indicate more corruption. Whenever the ordering was inverse, we inverted the scoring accordingly for ease of interpretation of the results. We also tested the robustness of benchmark results against a variety of different corruption indicators, such as the corruption index contained in the International Country Risk Guide (ICRG) and various corruption measures ("diversion of public funds"; "irregular payments and bribes") provided by the World Economic Forum (WEF); we then constructed the first principal component of all these governance measures. The summary statistics of the variables used in the regression analysis can be found in Table 2.

 $<sup>^{20}</sup>$ In addition to these variables, we test a number of additional variables sometimes discussed in the empirical literature. Among others, we control for the potential influence of press freedom on corruption, following Brunetti and Weder (2003), Chowdhury (2004), Lederman et al. (2005), Suphachalasai (2005), and Freille et al. (2007). We test the role of federalism as as suggested by (Treisman, 2000). All of these regressions yield very similar results with regard to the effects of immunity protection on corruption. The Appendix contains a detailed list of the data and sources used.

<sup>&</sup>lt;sup>21</sup>For a discussion of the relative strengths and weaknesses of perception and incidence based indicators, see Treisman (2007).

Variable	Mean	Std. Dev.	Min.	Max.	Ν	Description	Source
Immunity Index	0.38	0.246	0	0.889	73	Immunity score	see text
GDP per capita	21905.11	15126.134	1481	80119	73	in PPP (2011)	WEO Database
Oil export share	0.037	0.054	0	0.294	73	Oil exports/total exports	WDI
Trade openness	92.612	47.864	22.774	298.789	69	$\mathrm{Trade}/\mathrm{GDP}$	WDI
Corruption (WB)	-0.559	0.985	-2.483	1.254	73	Control of corruption score	World Bank
Corruption (TI)	-5.325	2.152	-9.380	-2.14	73	Corruption index	Transparency Intl.
Bribes paid	8.090	9.528	0	43	44	Bribes Paid	Treisman 2007
Irregular payments	-4.66	1.105	-6.72	-2.91	72	Irregular payments	WEF
WEF Diversion	-3.969	1.317	-6.63	-1.8	72	Diversion of public funds	WEF
ICRG	-3.194	1.218	-6	-1.2	67	ICRG Corruption	ICRG
Rule of Law (WGI)	0.567	0.911	-0.998	1.946	73	Rule of Law Index	World Bank
Democracy	8.93	1.387	4	10	69	Democracy Index	Polity Database
Presidential system	0.397	0.493	0	1	73	Presidential system dummy	Persson and Tabellini 2003
Majoritarian Election	0.137	0.346	0	1	73	Majoritarian election dummy	Persson and Tabellini 2003
English legal origin	0.26	0.442	0	1	73	English legal origin	La Porta et al. 1999
French legal origin	0.452	0.501	0	1	73	French legal origin	La Porta et al. 1999
Latitude	0.381	0.199	0.026	0.722	73	Geographic latitude	La Porta et al. 1999
Protestant share	0.183	0.269	0	0.978	70	Share of protestants/population La Porta et al. 1	
Ethnic fractionalization	0.349	0.216	0.002	0.787	73	Ethnic fractionalization	Alessina et al. 2003

Table 2: Summary statistics

## 5.2 Empirical Analysis

We regress corruption indices on the immunity score that we constructed, and we control for those factors related to corruption that previous studies have considered. As immunity regimes are not randomly assigned, the results of the regressions shown here should not be treated as causal. Our key interest is to see if the model's predictions find support in the data. We estimate the following cross-sectional regression using OLS:

### $Corruption_i = \alpha + \beta Immunity_i + \gamma \mathbf{X}_i + \epsilon_i,$

The coefficient  $\beta$  is the main object of study, with the ultimate goal of investigating whether differences in immunity regimes are informative for corruption outcomes. We control for the other possible factors in the form of additional variables in the vector **X**. Our main control variables are income, regime type, legal origins, press freedom and a number of economic variables. The error term  $u_i$  is assumed to be well behaved. While we calculate immunity scores for 73 democracies, some control variables are not available for all countries. In most estimations, we can use data for approximately 65-70 countries.

The three tables containing the regression results are constructed as follows. In the first three columns, we present the results of regressions using the entire dataset. The middle three columns display the results for the subample of countries with strong legal systems, while the three regressions on the right-hand side use the subsample of economies with weak legal systems. As in the scatterplots above, we split the sample at the median value of the World Bank index for the rule of law. We also run regressions with different cutoff values (such as the 25th and 75th percentiles) and use interaction terms between immunity and the quality instead of splitting the sample. The interaction results are reported in the Appendix, as they yield the same overall result: the relation between immunity protections and corruption outcomes varies with the

quality of the judicial system, as implied by theory.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Immunity Index	$\begin{array}{c} 0.788^{**} \\ (0.394) \end{array}$	$0.981^{*}$ (0.570)	$1.071^{**}$ (0.431)	$1.071^{*}$ (0.545)	1.577 (0.970)	$1.880^{**}$ (0.875)	-0.111 (0.398)	-0.219 (0.630)	$0.192 \\ (0.679)$
Log of GDP per capita	$-0.896^{***}$ (0.101)	$-0.692^{***}$ (0.124)	$-0.901^{***}$ (0.114)	$-1.217^{***}$ (0.205)	$-1.088^{***}$ (0.318)	$-1.149^{***}$ (0.336)	$-0.290^{**}$ (0.109)	-0.152 (0.0931)	-0.555 (0.331)
Democracy score (log)		$-1.225^{***}$ (0.426)	$-1.054^{***}$ (0.353)		-1.437 (1.555)	-1.267 (1.037)		$-1.207^{***}$ (0.389)	-0.543 (0.530)
Presidential system		0.0292 (0.165)	-0.0481 (0.149)		0.0442 (0.288)	$0.115 \\ (0.215)$		-0.000406 (0.125)	$0.0456 \\ (0.188)$
Majoritarian Election		$\begin{array}{c} 0.342 \\ (0.239) \end{array}$	-0.0942 (0.201)		$\begin{array}{c} 0.111 \\ (0.246) \end{array}$	-0.356 (0.349)		$0.700^{***}$ (0.151)	$\begin{array}{c} 0.209 \\ (0.372) \end{array}$
English legal origin		-0.0978 (0.280)	0.0512 (0.220)		$\begin{array}{c} 0.212 \\ (0.330) \end{array}$	$\begin{array}{c} 0.165 \\ (0.315) \end{array}$		$-0.516^{**}$ (0.245)	-0.142 (0.400)
French legal origin		$0.160 \\ (0.191)$	$-0.289^{*}$ (0.157)		$0.189 \\ (0.260)$	-0.113 (0.225)		$0.110 \\ (0.119)$	$0.0388 \\ (0.270)$
Oil exports/total exports			$\begin{array}{c} 0.133^{***} \\ (0.0322) \end{array}$			$0.132^{*}$ (0.0718)			$\begin{array}{c} 0.0603 \\ (0.0619) \end{array}$
Trade openness			-0.0382 (0.137)			-0.184 (0.222)			0.0498 (0.188)
Protestant share			$-1.387^{***}$ (0.214)			$-1.293^{***}$ (0.368)			$0.114 \\ (0.575)$
Ethnic fractionalization			-0.0697 (0.337)			-0.437 (0.425)			$0.169 \\ (0.444)$
Latin America Dummy			$\begin{array}{c} 0.00396 \\ (0.409) \end{array}$			$-1.522^{***}$ (0.436)			$0.482 \\ (0.522)$
North America Dummy			$\begin{array}{c} 0.506 \\ (0.371) \end{array}$			$\begin{array}{c} 0.531 \\ (0.585) \end{array}$			$0.615 \\ (0.546)$
Asia Dummy			-0.0269 (0.291)			-0.212 (0.514)			$\begin{array}{c} 0.447 \\ (0.362) \end{array}$
Europe Dummy			$0.206 \\ (0.262)$			-0.151 (0.386)			$0.703 \\ (0.565)$
Observations Adjusted $R^2$	$73 \\ 0.627$	$\begin{array}{c} 69 \\ 0.628 \end{array}$	$62 \\ 0.807$	$\frac{36}{0.448}$	$\begin{array}{c} 33 \\ 0.406 \end{array}$	$31 \\ 0.723$	$37 \\ 0.150$	$\frac{36}{0.350}$	31 0.302
114/45/04 10	0.021	0.010	0.001	0.110	0.100	0.120	0.100	0.000	0.001

 Table 3: Immunity and Corruption: Benchmark Estimates

The table shows the results of OLS regressions using the full sample of countries in the first three columns. In the middle three columns, we show results for a subsample of countries with above-average legal systems, and in the last three columns, the results for countries with below average legal systems. The dependent variable is the "Control of Corruption" measure for the World Governance Indicators of the World Bank. Detailed definitions of all variables are provided in Table 2 of the paper. Robust standard errors are shown in parentheses.

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

In Table 3, we start by regressing the World Bank's "Control of Corruption" measure on income and immunity. In models (2) and (3), we then add the various controls discussed above. Our overall results align well with the empirical corruption literature. As expected, both higher income levels and more democracy are associated with less corruption. Presidential systems tend to have better corruption control, although the results are not statistically significant. By contrast, we find little positive effect of majoritarian electoral rules and of common-law traditions (conditional on the other factors). As expected, a high share of commodity exports in total exports worsens corruption, but we find no statistically significant effect of openness to trade. It is important to keep in mind here that our sample consists of established democracies only. In light of the literature linking corruption and trade protectionism, it seems possible that the effects of trade openness are stronger in samples that include authoritarian regimes. The share of Protestants in the population is associated with lower corruption in most regressions. However, the main insight from the first set of regressions in Table 3 is that none of the additional control variables affect the association between immunity protection and corruption in a meaningful way. Higher immunity protection, as measured by our immunity score, goes hand in hand with more corruption after controlling for a standard set of variables often associated with worse corruption outcomes. Overall, it appears that politicians have a difficult time withstanding the temptation to be above the law.

Another highly interesting insight comes from the sample split in regressions (4) to (6) and (7) to (9) in Table 3. More-generous immunity provisions are associated with higher corruption in countries with a good legal system, but not in countries with a weak legal system. For the subsample of countries with good legal systems, the overall effect is considerably stronger than in the full sample. Yet the effect is reversed in the subsample of countries with a weak legal system. There more immunity does not lead to more corruption and weaker governance. The overall association between immunity and corruption is loose and the point estimate negative. There is no evidence that immunity does harm in countries with poorly developed judicial institutions.

In Table 4, we rerun the same regressions as before but use a different corruption measure as the dependent variable: the corruption index compiled by Transparency International. The results are very stable. Higher immunity protection is positively correlated with corruption overall, but the effects are much stronger in countries with good judicial systems. The effect vanishes or reverses in countries that have weak legal systems. Moreover, these effects are again robust to the inclusion of other control variables. In further robustness tests (see Table 8 in the Appendix) we also use an incidence-based corruption measure-payment of bribes-as proposed by Treisman (2007). Incidence-based corruption measures are available only for a considerably smaller sample. While some of effects are less precisely estimated, these tests provide support for our main hypothesis that immunity tends to correspond with poorer governance outcomes in countries with good judicial systems, but has ambiguous effects when judicial independence is weak.

In Table 5, instead of splitting the sample, we interact our immunity coding with the World Bank's rule of law index. All variables are standardized with a zero mean. As before, we use the World Bank's control of corruption indicator and the corruption perception index from Transparency International.We also include the corruption coding from the International Country Risk Guide. The results support of the notion that the corruption-inducing effect of immunity rules depends on the quality of the legal system. The interaction term is positive signed and, although it is significant at standard thresholds in only two of the regressions, it

		v	1			ruption N		(2)	(0)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Immunity Index	1.667*	2.236*	2.410**	2.121*	3.501	4.308**	-0.227	-0.230	0.474
	(0.854)	(1.256)	(0.946)	(1.248)	(2.079)	(1.898)	(0.807)	(1.313)	(1.287)
Log of GDP per capita	-1.984***	-1.583***	-2.016***	-2.811***	-2.472***	-2.695***	-0.625***	$-0.417^{**}$	-1.105
	(0.200)	(0.246)	(0.245)	(0.448)	(0.716)	(0.679)	(0.179)	(0.199)	(0.689)
Democracy score (log)		$-2.151^{**}$	-2.011**		-3.141	-2.723		-1.855**	-0.818
(8)		(0.938)	(0.788)		(3.181)	(2.392)		(0.904)	(1.115)
Presidential system		0.0979	-0.0388		0.137	0.321		0.0269	-0.0301
0		(0.342)	(0.320)		(0.580)	(0.477)		(0.241)	(0.359)
Majoritarian Election		0.454	-0.392		0.0996	-0.917		1.031***	0.0719
		(0.480)	(0.434)		(0.511)	(0.732)		(0.348)	(0.817)
English legal origin		0.0678	0.363		0.642	0.703		-0.700	-0.297
0 0 0		(0.591)	(0.478)		(0.682)	(0.721)		(0.549)	(0.753)
French legal origin		0.420	-0.572		0.589	-0.0744		0.168	-0.109
		(0.411)	(0.345)		(0.592)	(0.480)		(0.263)	(0.587)
Oil exports/total exports			0.283***			$0.302^{*}$			0.0756
			(0.0664)			(0.164)			(0.136)
Trade openness			-0.129			-0.495			-0.0475
1			(0.314)			(0.539)			(0.359)
Protestant share			-3.113***			-2.801***			0.335
			(0.449)			(0.684)			(1.337)
Ethnic fractionalization			-0.358			-1.275			0.417
			(0.730)			(0.944)			(1.051)
Latin America Dummy			-0.196			-3.554***			0.930
·			(0.929)			(0.929)			(1.006)
North America Dummy			0.873			0.805			1.272
·			(0.855)			(1.142)			(1.168)
Asia Dummy			-0.419			-0.922			0.900
-			(0.658)			(0.984)			(0.869)
Europe Dummy			0.367			-0.366			1.209
			(0.585)			(0.760)			(1.259)
Observations	73	69	62	36	33	31	37	36	31
Adjusted $R^2$	0.643	0.641	0.802	0.475	0.470	0.767	0.184	0.244	0.096

Table 4: Immunity and Corruption: Alternative Corruption Measure

The table shows the results of OLS regressions using the full sample of countries in the first three columns. In the middle three columns, we show results for a subsample of countries with above average legal systems and the last three columns the results for countries with below average legal systems. The dependent variable is the corruption measure from Transparency International. Detailed definitions of all variables are provided in Table 2 of the paper. Robust standard errors are shown in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

	(1)	(2)	(3)	(4)	(5)	(6)
Immunity	0.0695	0.181	0.246**	$0.0926^{*}$	$0.224^{*}$	0.210*
	(0.0627)	(0.144)	(0.108)	(0.0506)	(0.118)	(0.114)
Immunity x Rule of Law	0.0481	$0.133^{*}$	0.0793	0.0538	$0.149^{**}$	0.0630
	(0.0350)	(0.0738)	(0.0790)	(0.0344)	(0.0704)	(0.0650)
Rule of Law	-1.049***	-2.237***	$-1.319^{***}$	-0.901***	-1.922***	-1.110***
	(0.0654)	(0.149)	(0.158)	(0.0658)	(0.156)	(0.209)
Log of GDP per capita	0.108	0.139	0.175	-0.00841	-0.104	0.0808
	(0.0782)	(0.175)	(0.205)	(0.0833)	(0.196)	(0.274)
Democracy score (log)	-0.156	0.0464	0.415	-0.326*	-0.400	-0.127
	(0.217)	(0.603)	(0.525)	(0.183)	(0.546)	(0.518)
Presidential system	-0.0243	0.0346	0.00241	-0.0137	0.0460	-0.0987
	(0.0780)	(0.186)	(0.239)	(0.0713)	(0.175)	(0.244)
Majoritarian Election	$0.189^{*}$	0.227	-0.0298	$0.197^{*}$	0.222	0.139
	(0.0989)	(0.211)	(0.243)	(0.116)	(0.211)	(0.299)
English legal origin	0.0258	0.347	0.587	0.00376	0.283	0.340
	(0.139)	(0.327)	(0.353)	(0.117)	(0.298)	(0.386)
French legal origin	-0.0100	0.0552	-0.274	-0.135	-0.226	-0.455*
	(0.0946)	(0.228)	(0.232)	(0.103)	(0.258)	(0.252)
Latin America Dummy	$-0.301^{*}$	$-0.772^{*}$	-0.261	$-0.357^{**}$	$-0.955^{**}$	-0.382
	(0.171)	(0.400)	(0.330)	(0.173)	(0.411)	(0.465)
North America Dummy	-0.152	-0.547	0.201	-0.130	-0.479	0.0311
	(0.184)	(0.412)	(0.411)	(0.174)	(0.394)	(0.475)
Asia Dummy	0.149	-0.0148	0.272	0.00355	-0.344	-0.271
	(0.151)	(0.349)	(0.317)	(0.142)	(0.339)	(0.441)
Europe Dummy	0.0802	0.0902	0.534	0.00106	-0.0715	-0.0303
	(0.184)	(0.410)	(0.436)	(0.179)	(0.409)	(0.529)
Oil exports/total exports				0.0314	0.0672	-0.0234
				(0.0210)	(0.0488)	(0.0560)
Trade openness				0.0560	0.0687	$0.315^{*}$
				(0.0794)	(0.199)	(0.174)
Protestant share				-0.609***	$-1.470^{***}$	-0.993**
				(0.161)	(0.351)	(0.425)
Ethnic fractionalization				0.0277	-0.139	-0.198
01				(0.209)	(0.471)	(0.556)
Observations	69	69	63	62	62	58

Table 5: Immunity and Corruption: Interactions

Dependent variables: World Bank (1,4); Transparency (2,5); ICRG (3,6)

The table shows the results of OLS regressions using the full sample of countries. Detailed definitions of all variables are provided in 1 of the paper. Robust standard errors are shown in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

is not far off the 90-percent level in the others. Put differently, the corruption-enhancing effects of immunity rules are amplified when the quality of the legal system is high. The magnitude of the effect is also rather large. The first regression in Table 5 shows that when the quality of the legal system is at its mean value of zero, a 1 s.d. increase in immunity protection increases the corruption measure by a factor of 0.069. Yet when the rule of law is 1 s.d. above its mean, the effect is considerably larger (0.069+0.048). While we must acknowledge the data limitations we face in a cross-sectional setting, we interpret these results as further evidence that immunity provisions are more strongly associated with bad governance outcomes when the legal system operates well, as our theoretical model predicts.

### 5.3 Matching regressions

In this section, we use matching techniques to compare outcomes for matched observations with low/high immunity scores as a further robustness test for the correlation between the strength of immunity protection and corruption outcomes that was apparent in the linear regression models. This allows us to compare the effects of different immunity 'treatments' for observations matched with the same covariates. As noted above, immunity regime 'treatments' are not randomly assigned, so the results should not be interpreted as causal. The same caveats that are common in the literature on the economic effects of institutional arrangements apply here. However, the key identifying assumption is weaker, as the effect of covariates corruption need not be linear.

We construct a discrete immunity treatment variable that takes the value of 1 for countries with aboveaverage and a value of zero for below-average strength of immunity protection of politicians. We then match countries using the nearest neighbor method on the following covariates: income per capita, democracy score, presidential vs. parliamentary regimes, origin of the legal system and majoritarian vs. proportional electoral system. Matching on additional economic and geographic criteria again yielded very similar results. As above, we use corruption perception indices from the World Bank and from Transparency International. As before, we also test an incidence-based corruption proxy (bribes paid), which yields very similar results.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
SATT	$0.496^{**}$	$1.080^{**}$	$6.264^{**}$	$0.457^{**}$	$1.036^{**}$	$5.848^{*}$	-0.0376	-0.0391	5.179
	(0.230)	(0.494)	(2.914)	(0.198)	(0.412)	(3.362)	(0.204)	(0.409)	(5.255)
Observations	69	69	42	33	33	22	36	36	20

Table 6: Immunity and Corruption. Matching Regressions

We estimate the sample average treatment effect for the treated (SATT). The treatment variable is a high/low level of immunity protection. We use nearest neighbor matching on income per capita, democracy score, presidential system, legal system and electoral system. Standard errors are shown in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

The results, shown in Table 6, offer further empirical support for the idea that immunity treatments have different effects depending on the quality of the judicial system. The average treatment effect is significant and positive for the full sample. In other words, immunity guarantees are associated with more corruption overall. Yet the treatment effect is insignificant and negative in two out of three regressions for the subsample of countries with poorly developed legal systems and positive and highly significant for the subsample of countries with independent judicial systems.

In sum, the empirical evidence we uncover suggests two conclusions. First, immunity rules seem to matter in practice, as they correlate with governance outcomes after controlling for standard determinants of corruption. Second, the available evidence corroborates our theoretical model. Our regressions provide an estimate of the association between immunity and corruption that is consistent with the model's suggestion that immunity goes hand-in-hand with poorer governance when the independence of the judiciary is strong, but has ambiguous or somewhat positive effects when courts are prone to political manipulation.

### 5.4 Historical Immunity Regimes

A valid concern might be that stronger immunity protection is associated with higher corruption because corrupt politicians choose to place themselves above the law by including the necessary constitutional and legal provisions. In other words, as in other studies of the effects of legal and institutional rules, reverse causality could be a problem. To address this concern, we examine the extent to which immunity provisions have changed over time by generating historical immunity scores.<sup>22</sup> We generate the score by quantifying the strength of the immunity regime in each country in the year of the first democratic constitution for which data were available.<sup>23</sup> We use the same 18-question scoring rubric that we used to generate current immunity scores.

We find that immunity regimes are highly persistent over time. In the Americas, for instance, the mean age of immunity provisions is approximately 150 years. Since 1900, we count only four substantial changes to immunity regimes in the Western Hemisphere. In the few countries that made substantial revisions, these changes typically followed constitutional revisions made under authoritarian regimes and were subsequently repealed when the authoritarian leaders were ousted from power. In 1980, for example, General Pinochet, revised the Chilean Constitution to include lifelong immunity for former presidents, a change that was swiftly repealed when the country returned to democratic rule. This persistence is present in our entire sample: The pairwise correlation between the historical and current immunity scores coefficient is 0.85 and statistically highly significant.

As an additional robustness check, we use the historical immunity score as a regressor and rerun our baseline regression. The results, reported in Table 7, show that the estimated coefficients and their significance levels are very similar. The result that the effects of immunity protection differ in countries with weak and strong legal systems appears robust. While we are aware that this is not conclusive, we read the stability of

 $<sup>^{22}</sup>$ Historical immunity for Hungary, Indonesia, Lesotho, South Korea and Switzerland could not be verified. Accordingly, these countries were omitted from the historical data sample.

 $<sup>^{23}</sup>$ As information concerning immunity in the earliest constitutions was sometimes not available, the historical data for those countries reflect a later democratic constitution.

the results as a sign that reverse causality is unlikely to be a major problem for our empirical analysis.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Historical Immunity	$0.675^{*}$ (0.344)	$\frac{1.267^{**}}{(0.591)}$	$1.040^{*}$ (0.558)	0.836 (0.493)	1.325 (0.998)	1.754 (1.126)	-0.183 (0.334)	-0.436 (0.994)	-0.965 (1.239)
Log of GDP per capita	$-0.956^{***}$ (0.105)	$-0.764^{***}$ (0.145)	$-0.946^{***}$ (0.127)	$-1.179^{***}$ (0.215)	$-1.137^{***}$ (0.334)	$-0.928^{*}$ (0.501)	$-0.339^{***}$ (0.112)	-0.128 (0.135)	-0.504 (0.291)
Democracy score (log)		$-0.968^{**}$ (0.445)	$-0.937^{**}$ (0.388)		-0.803 (1.600)	-1.229 (1.537)		$-1.216^{**}$ (0.454)	-0.622 (0.559)
Presidential system		$\begin{array}{c} 0.0402 \\ (0.169) \end{array}$	-0.0796 (0.182)		$\begin{array}{c} 0.00179 \\ (0.402) \end{array}$	-0.0755 (0.330)		$\begin{array}{c} 0.0247\\ (0.153) \end{array}$	$\begin{array}{c} 0.0797 \\ (0.214) \end{array}$
Majoritarian Election		$\begin{array}{c} 0.261 \\ (0.235) \end{array}$	-0.147 (0.206)		$\begin{array}{c} 0.0944 \\ (0.250) \end{array}$	-0.353 (0.362)		$0.702^{***}$ (0.244)	$\begin{array}{c} 0.215 \\ (0.391) \end{array}$
English legal origin		$0.146 \\ (0.298)$	$0.156 \\ (0.268)$		$0.234 \\ (0.426)$	$\begin{array}{c} 0.231 \\ (0.330) \end{array}$		-0.639 (0.478)	-0.658 (0.621)
French legal origin		$0.109 \\ (0.198)$	$-0.269^{*}$ (0.154)		$0.108 \\ (0.245)$	-0.287 (0.273)		$\begin{array}{c} 0.0722\\ (0.138) \end{array}$	$0.0328 \\ (0.236)$
Oil exports/total exports			$\begin{array}{c} 0.115^{***} \\ (0.0336) \end{array}$			$0.123 \\ (0.0689)$			0.0454 (0.0502)
Trade openness			-0.0605 (0.160)			-0.288 (0.288)			$0.0545 \\ (0.243)$
Protestant share			$-1.275^{***}$ (0.225)			$-1.319^{***}$ (0.414)			$0.256 \\ (0.721)$
Ethnic fractionalization			-0.109 (0.395)			-0.117 (0.731)			0.0693 (0.750)
Latin America Dummy			0.0420 (0.420)			$-1.291^{**}$ (0.499)			0.480 (0.402)
North America Dummy			$0.529 \\ (0.360)$			0.0601 (0.857)			0.513 (0.516)
Asia Dummy			-0.0319 (0.342)			-0.544 (0.691)			$0.308 \\ (0.608)$
Europe Dummy			$0.168 \\ (0.303)$			-0.394 (0.590)			0.622 (0.533)
Observations Adjusted $R^2$	$\begin{array}{c} 68 \\ 0.647 \end{array}$	$\begin{array}{c} 64 \\ 0.634 \end{array}$	$57 \\ 0.796$	$\begin{array}{c} 33 \\ 0.420 \end{array}$	$\begin{array}{c} 30 \\ 0.326 \end{array}$	$\begin{array}{c} 28 \\ 0.616 \end{array}$	$\begin{array}{c} 35 \\ 0.203 \end{array}$	$\begin{array}{c} 34 \\ 0.335 \end{array}$	29 0.251

Table 7: Immunity and Corruption: Estimates with Historical Immunity Score

The table shows the results of OLS regressions using the historical immunity score discussed in the text. We use the full sample of countries in the first three columns. In the middle three columns, we show results for a subsample of countries with above average legal systems and the last three columns the results for countries with below average legal systems. The dependent variable is the "Control of Corruption" measure for the World Governance Indicators of the World Bank. Detailed definitions of all variables are provided in Table 2 of the paper. Robust standard errors are shown in parentheses.

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Modern immunity provisions seem to follow the historical choices made early on in a country's democratic history. This is reassuring in the sense that today's corruption levels are unlikely to be a key driver of crosscountry variation in immunity regimes. Persson and Tabellini (2003) note that the stability of constitutional rules means that reverse causation is unlikely to be a major issue. However, other forms of simultaneity bias warrant caution with regard to the interpretation of the conditional correlations between immunity and governance outcomes that we present in the following section.

## 6 Conclusions

This paper examines the theoretical and empirical effects of statutory provisions that shield politicians from criminal prosecution. We show that such provisions, to which we refer as immunity, are a double-edged sword. Immunity may improve governance in countries with weak legal systems because it protects honest politicians from false accusations and politically-motivated charges. However, such provisions simultaneously provide politicians with legal protection for unlawful activities and attract dishonest individuals into politics. Our theoretical model illustrates how politicians, by leveraging their immunity from prosecution, may attempt to enhance their chances of re-election through illegal means by supporting interest groups through lax law enforcement, non-collection of taxes, and other forms of favoritism. Interest groups return the favor by supplying favorable propaganda, generous campaign financing, or even outright vote-buying. We conclude that whether immunity affects governance positively or negatively depends on the independence and quality of the judiciary.

To investigate the implications of the model empirically, we undertake the first systematic effort to quantify the strength of immunity protection enjoyed by elected officials in democracies around the world. We consult written constitutions, founding documents, legislative acts, case law, statutes, and legislative rules of procedure in 73 countries on all six settled continents. The resulting immunity scores comprise eighteen variables that measure the relative difficulty of bringing a malfeasant politician to justice and reveal significant cross-jurisdictional diversity in the strength of immunity.

Corroborating the influential work of North (1990), as well as books by Besley and Persson (2011), Acemoglu and Robinson (2012), and Fisman and Miguel (2009), our study confirms that institutions matter. Informal and formal institutions can play a pivotal role in the economic prosperity of a nation. Conditioning on a wide range of control variables, we uncover evidence that immunity is associated with greater corruption in countries with strong judicial systems. The empirical results are ambiguous for countries with weaker judicial systems. Given that little attention has been devoted to this important dimension of accountability, we expect and hope that future studies will build on our work and further investigate the institution of immunity in modern democracies.

## A Appendix 1: Proof of Proposition 3

First, observe that higher immunity protection increases the payoffs of going into politics, regardless of whether or not one plans to engage in corruption. Second, observe that neither w nor  $R(a^0, \hat{a}) + \delta P_0(a^0)G$  depends on  $\theta$ . Third, high  $\theta$ 's choose corruption both in the private sector and in the public sector. Hence, for the "high"  $\theta$  range, we compare  $R(a^c, \hat{a}) - \beta (1-q) J + \theta + \delta P_c(a^c)(1-\beta+\beta q)G$  with  $c \cdot \theta - J + \delta (c \cdot \theta - J)$ . The private sector will be chosen if

$$c \cdot \theta - J + \delta \left( c \cdot \theta - J \right) > R(a^{c}, \hat{a}) + \theta + \delta P_{c}(a^{c})(1 - \beta + \beta q)G - \beta \left( 1 - q \right) J$$

or

$$(c(1+\delta)-1) \cdot \theta > R(a^{c},\hat{a}) + \delta P_{c}(a^{c})(1-\beta+\beta q)G - \beta(1-q)J + (1+\delta)J.$$
(A.1)

Note that because  $-\beta (1-q) J + (1+\delta) J \ge 0$ , (A.1) is possible only if  $c (1+\delta) > 1$ . Define  $\theta^{C_1,P_1}$  as the type that makes (A.1) hold with equality, with  $\theta$ s above the threshold choosing the private sector, and ones below becoming politicians. Given that the RHS of (A.1) increases in q, it follows immediately that  $\theta^{C_1,P_1}$  is increasing in the level of immunity protection.

Before we move on to our analysis, we need to define an additional piece of notation. We will use  $\theta^{P_1,C_0}$  as the dishonesty level that satisfies  $R(a^c, \hat{a}) + \theta + \delta P_c(a^c)(1 - \beta + \beta q)G - \beta (1 - q)J + J = (1 + \delta) w$ . Note that  $\theta^{P_1,C_0}$  decreases with higher q.

The main determinants of the types of individuals (less or more corrupt) that choose to become politicians are the relative rewards from criminal and legal activities for private citizens and for politicians. Fix a level of immunity protection q. The effects of increasing it, depend on which case we are in among the following: **Case 1:**  $(1 + \delta) w < R(a^0, \hat{a}) + \beta P_0(a^0)G$ 

In this case, all members of society who would choose legitimate work, prefer to become politicians.

**Case 1.1** If  $(1 + \delta) w < R(a^0, \hat{a}) + \beta P_0(a^0)G$  and  $1 > c(1 + \delta)$ , then everyone wants to become a politician. In this case, when  $\beta J + \beta \delta P_c(a^c)G > \delta G \frac{\partial P_0(a^0)}{\partial q}$ , immunity q increases the range of corrupt politicians because it decreases  $\theta^{P_1,P_0}$ , whereas when  $\beta J + \beta \delta P_c(a^c)G < \delta G \frac{\partial P_0(a^0)}{\partial q}$ , immunity q decreases the range of corrupt politicians because it increases  $\theta^{P_1,P_0}$ .

**Case 1.2** If  $(1 + \delta) w < R(a^0, \hat{a}) + \beta P_0(a^0)G$  and  $1 < c(1 + \delta)$ , then types  $\theta > \theta^{C_1, P_1}$  become criminals in the private sector; types in  $\theta \in [\theta^{P_1, P_0}, \theta^{C_1, P_1}]$  become corrupt politicians, while types below  $\theta^{P_1, P_0}$  become honest politicians.

In this case, there is a segment of the most corrupt part of the population that chooses the private sector. This segment decreases with the level of immunity protection, as higher q increases  $\theta^{C_1,P_1}$  and, hence, enlarges the range of corrupt politicians. Again, how the level of immunity protection affects  $\theta^{P_1,P_0}$  decreases, thus increasing the range of honest politicians.

**Case 2:**  $(1 + \delta) w > R(a^0, \hat{a}) + \beta P_0(a^0)G$ 

In this case, all members of society who would become honest politicians prefer to work in the private sector.

**Case 2.1** If  $(1 + \delta) w > R(a^0, \hat{a}) + \beta P_0(a^0)G$  and  $1 > c(1 + \delta)$ , then types above  $\theta^{P_1,C_0}$  become corrupt politicians, while all types below choose legitimate work. The range of corrupt politicians increases with the level of immunity protection, as  $\theta^{P_1,C_0}$  drops with q. (If q increases substantially, then it can turn out that  $R(a^0, \hat{a}) + \beta P_0(a^0)G$  surpasses w)

**Case 2.2** If  $(1 + \delta) w > R(a^0, \hat{a}) + \beta P_0(a^0)G$  and  $1 < c(1 + \delta)$ , then types  $\theta > \theta^{C_1, P_1}$  become criminals in the private sector; types in  $\theta \in [\theta^{C_1, P_1}, \theta^{P_1, C_0}]$  become corrupt politicians, while types below  $\theta^{P_1, C_0}$  become honest citizens.

In this case, there is a segment of the most corrupt part of the population that chooses the private sector. This segment decreases with the level of immunity protection, as higher q increases  $\theta^{C_1,P_1}$  and decreases  $\theta^{P_1,C_0}$ , thus enlarging the range of corrupt politicians. (Again, if q increases substantially, then it can turn out that  $R(a^0, \hat{a}) + \beta P_0(a^0)G$  surpasses w.)

#### В **Appendix Tables**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Immunity Index	$15.96^{**}$	23.26**	25.11***	$13.53^{*}$	13.52	$18.81^{*}$	25.50
	(6.663)	(10.75)	(9.006)	(6.582)	(10.49)	(10.64)	(21.16)
Log of GDP per capita	-6.726***	-5.747***	-7.100***	-7.325	-11.42	-8.754*	-10.04
	(1.674)	(2.092)	(2.302)	(6.542)	(9.907)	(4.587)	(10.05)
Democracy score (log)		$-14.37^{*}$	-20.57**		-19.86		-15.92
		(8.268)	(8.333)		(17.71)		(12.43)
Presidential system		-3.773	0.249		-4.671		0.670
		(2.397)	(2.136)		(2.993)		(8.072)
Majoritarian Election		1.376	1.516		2.324		-0.516
-		(2.002)	(3.064)		(2.944)		(10.52)
English legal origin		2.146	2.479		-0.112		-2.753
		(3.276)	(3.168)		(4.165)		(10.92)
French legal origin		1.238	0.643		-0.935		-4.184
		(2.690)	(2.169)		(2.555)		(11.93)
Oil exports/total exports			-0.538				
			(0.713)				
Trade openness			1.757				
			(2.456)				
Latitude			23.17***				
			(8.322)				
Protestant share			-1.897				
			(4.151)				
Ethnic fractionalization			7.172				
			(6.531)				
Observations	44	42	40	24	22	20	20
Adjusted $R^2$	0.402	0.366	0.453	0.209	0.187	0.216	-0.031

Table 8: Immunity and Corruption: Incidence Based Corruption

The table shows the results of OLS regressions using the full sample of countries in the first three columns. In the middle three columns, we show results for a subsample of countries with above average legal systems and the last three columns the results for countries with below average legal systems. The dependent variable is an incidence base corruption measure - the "Bribes Paid" index from Treisman (2007). Detailed definitions of all variables are provided in Table 2 of the paper. Robust standard errors are shown in parentheses. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01

			•		-	tion Meas			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Immunity Index	$1.778^{**}$	$1.978^{**}$	$4.027^{***}$	2.173	$2.950^{**}$	$5.109^{*}$	0.168	-0.592	0.777
	(0.703)	(0.873)	(1.418)	(1.715)	(1.230)	(2.592)	(0.801)	(1.788)	(2.518)
Log of GDP per capita	$-1.065^{***}$	$-1.152^{***}$	$-2.561^{***}$	$-1.424^{*}$	$-1.982^{***}$	-3.388***	-0.438	-0.777	-1.395
	(0.189)	(0.183)	(0.386)	(0.738)	(0.663)	(1.037)	(0.301)	(0.593)	(0.999)
Democracy score (log)	$-1.049^{*}$	-1.256	$-2.613^{*}$	-1.885	-1.597	-4.010	-0.155	-0.718	-2.971
	(0.535)	(0.920)	(1.324)	(2.585)	(2.187)	(3.868)	(0.701)	(1.714)	(3.358)
Presidential system	-0.208	-0.165	-0.321	-0.0249	0.0203	0.227	0.182	0.320	0.289
	(0.288)	(0.277)	(0.509)	(0.524)	(0.460)	(0.827)	(0.273)	(0.406)	(0.695)
Majoritarian Election	-0.130	-0.0740	0.193	-0.451	-0.571	-1.062	0.410	0.360	2.060
	(0.311)	(0.360)	(0.628)	(0.779)	(0.682)	(1.235)	(0.449)	(0.775)	(1.516)
English legal origin	0.176	-0.124	-0.0952	0.261	-0.0484	0.383	0.319	-0.877	-1.230
	(0.427)	(0.373)	(0.765)	(0.770)	(0.592)	(1.287)	(0.404)	(0.631)	(1.185)
French legal origin	-0.668**	-0.765**	$-0.972^{*}$	-0.585	-0.381	-0.338	0.141	-0.275	0.266
	(0.283)	(0.307)	(0.516)	(0.492)	(0.402)	(0.705)	(0.278)	(0.638)	(1.031)
Oil exports/total exports	$0.100^{*}$	$0.225^{***}$	$0.341^{***}$	0.137	$0.241^{*}$	0.441	0.00198	0.131	0.161
	(0.0530)	(0.0656)	(0.0967)	(0.236)	(0.137)	(0.344)	(0.0543)	(0.139)	(0.242)
Trade openness	0.139	-0.166	-0.393	-0.188	-0.229	-0.477	$0.539^{**}$	-0.166	-0.0645
	(0.208)	(0.241)	(0.395)	(0.417)	(0.465)	(0.793)	(0.179)	(0.325)	(0.683)
Protestant share	-2.067***	$-2.499^{***}$	-4.656***	-2.003**	-2.494***	-4.422***	-0.00625	0.266	-0.242
	(0.414)	(0.397)	(0.701)	(0.917)	(0.614)	(1.213)	(0.989)	(1.224)	(2.355)
Ethnic fractionalization	-0.383	-0.518	-0.877	-0.266	-1.353	-2.032	-0.511	-1.044	-1.040
	(0.640)	(0.605)	(1.188)	(1.054)	(0.782)	(1.466)	(0.777)	(1.044)	(1.998)
Latin America Dummy	-0.632	-0.432	$-1.987^{**}$	-1.553	-2.323***	$-4.639^{*}$	0.321	0.0849	-0.688
	(0.541)	(0.630)	(0.952)	(1.871)	(0.671)	(2.294)	(0.692)	(0.861)	(2.035)
North America Dummy	0.186	0.301	-0.235	0.748	$1.890^{*}$	2.288	0.440	0.153	-0.212
	(0.509)	(0.514)	(0.904)	(1.752)	(0.967)	(2.470)	(0.547)	(1.034)	(1.927)
Asia Dummy	-0.963**	-0.918**	-2.274***	-0.00592	-0.254	-0.834	-0.254	-0.438	-1.211
	(0.441)	(0.452)	(0.681)	(1.642)	(0.723)	(2.195)	(0.788)	(0.795)	(2.188)
Europe Dummy	-0.472	-0.196	-0.945	0.194	0.120	-0.323	0.488	0.291	0.671
	(0.522)	(0.387)	(0.821)	(1.670)	(0.647)	(2.279)	(0.790)	(1.041)	(2.110)
Observations	58	61	57	30	31	30	28	30	27
Adjusted $R^2$	0.683	0.682	0.775	0.409	0.688	0.686	0.376	-0.343	-0.159

Table 9: Immunity and Corruption: Different Corruption Measures

The table shows the results of OLS regressions using the full sample of countries in the first three columns. In the middle three columns, we show results for a subsample of countries with above average legal systems and the last three columns the results for countries with below average legal systems. The dependent variable is the corruption measure from the International Country Risk Guide in regressions (1,4,7); the Diversion of Funds measures from the World Economic Forum in regressions (2,5,8); the first principal component of all corruption measures in (3,6,9). Detailed definitions of all variables are provided in Table 2 of the paper. Robust standard errors are shown in parentheses.

\* p < 0.10,\*\* p < 0.05,\*\*\* p < 0.01

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Immunity Index	$1.044^{**}$	$2.341^{***}$	$1.738^{**}$	$1.582^{*}$	$3.631^{*}$	2.479	0.405	1.043	0.0925
	(0.393)	(0.860)	(0.684)	(0.892)	(1.865)	(1.988)	(0.816)	(1.626)	(0.819)
Log of GDP per capita	-0.750***	-1.635***	-1.020***	-1.085***	-2.550***	$-1.496^{*}$	-0.445	-0.811	-0.341
0	(0.129)	(0.273)	(0.214)	(0.357)	(0.721)	(0.794)	(0.293)	(0.548)	(0.245)
Democracy score (log)	-0.793**	$-1.352^{*}$	-0.963	-1.496	-3.242	-1.579	-0.341	-0.279	0.333
	(0.357)	(0.750)	(0.586)	(1.046)	(2.349)	(2.928)	(0.436)	(0.792)	(0.637)
Presidential system	-0.127	-0.238	-0.239	0.0719	0.222	0.0223	0.0301	-0.0716	0.128
v	(0.151)	(0.312)	(0.306)	(0.238)	(0.507)	(0.572)	(0.196)	(0.316)	(0.185)
Majoritarian Election	-0.0696	-0.330	-0.129	-0.400	-1.017	-0.404	0.422	0.640	0.386
-	(0.185)	(0.382)	(0.311)	(0.339)	(0.713)	(0.786)	(0.347)	(0.643)	(0.323)
English legal origin	0.0124	0.265	0.168	0.124	0.609	0.293	-0.233	-0.542	0.238
	(0.199)	(0.411)	(0.429)	(0.322)	(0.739)	(0.823)	(0.401)	(0.707)	(0.356)
French legal origin	-0.263*	-0.505*	-0.657**	-0.128	-0.108	-0.572	0.0780	-0.00428	0.146
	(0.139)	(0.297)	(0.289)	(0.216)	(0.461)	(0.519)	(0.232)	(0.517)	(0.236)
Oil exports/total exports	0.126***	0.265***	$0.0979^{*}$	0.129	0.295	0.145	0.0651	0.0884	0.00203
	(0.0304)	(0.0577)	(0.0544)	(0.0757)	(0.172)	(0.244)	(0.0583)	(0.125)	(0.0456)
Trade openness	0.0844	0.181	0.190	-0.138	-0.390	-0.230	0.125	0.153	0.652**
	(0.141)	(0.305)	(0.231)	(0.251)	(0.592)	(0.467)	(0.192)	(0.364)	(0.213)
Protestant share	-0.766*	-1.543*	-1.888***	$-1.126^{*}$	-2.423*	-2.190	$0.913^{*}$	$2.468^{**}$	1.106
	(0.425)	(0.881)	(0.632)	(0.596)	(1.137)	(1.267)	(0.500)	(1.036)	(0.933)
Ethnic fractionalization	-0.0608	-0.335	-0.404	-0.413	-1.219	-0.286	0.0468	0.0900	-0.947
	(0.296)	(0.612)	(0.647)	(0.430)	(0.965)	(1.089)	(0.381)	(0.823)	(0.647)
Press freedom	-0.329**	-0.830***	-0.0948	-0.110	-0.250	0.116	-0.390	$-1.042^{*}$	-0.429
	(0.137)	(0.294)	(0.208)	(0.234)	(0.473)	(0.458)	(0.255)	(0.552)	(0.262)
Latin America Dummy	0.0151	-0.168	-0.611	-1.299**	-3.049**	-1.837	0.286	0.407	0.287
	(0.339)	(0.735)	(0.550)	(0.548)	(1.113)	(2.151)	(0.527)	(0.963)	(0.569)
North America Dummy	0.468	0.776	0.182	0.645	1.065	0.587	0.446	0.820	0.365
	(0.307)	(0.680)	(0.517)	(0.608)	(1.166)	(1.863)	(0.479)	(0.933)	(0.453)
Asia Dummy	-0.0876	-0.572	-0.980**	-0.124	-0.721	-0.138	0.161	0.134	-0.427
	(0.224)	(0.466)	(0.450)	(0.558)	(1.075)	(1.788)	(0.414)	(0.869)	(0.621)
Europe Dummy	0.251	0.483	-0.466	-0.00351	-0.0320	-0.00862	0.638	1.036	0.409
	(0.219)	(0.455)	(0.541)	(0.456)	(0.887)	(1.830)	(0.534)	(1.078)	(0.592)
Observations	62	62	58	31	31	30	31	31	28
Adjusted $R^2$	0.830	0.835	0.677	0.708	0.756	0.366	0.385	0.266	0.457

Table 10: Immunity and Corruption: More Controls

The table shows the results of OLS regressions using the full sample of countries in the first three columns. In the middle three columns, we show results for a subsample of countries with above average legal systems and the last three columns the results for countries with below average legal systems. The dependent variable is the corruption measure from the World Bank in regressions (1,4,7); the corruption index from Transparency International in regressions (2,5,8); and the corruption measure from the International Country Risk Guide in regressions in (3,6,9). The regressions add press freedom as a further control variable. Detailed definitions of all variables are provided in Table 2 of the paper. Robust standard errors are shown in parentheses.

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

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