Immunity*

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Abstract

Legal provisions that protect elected politicians from prosecution have been common throughout history and still exist in most democracies. We provide the first systematic measurement of immunity and study, theoretically and empirically, its relation to corruption. Theory predicts that immunity is a double-edged sword. To test whether immunity is a vice or a virtue, we quantify immunity enjoyed by heads of government, ministers, and legislators in 90 countries. Controlling for standard determinants of corruption, we find that stronger immunity is associated with greater corruption. Instrumental variable estimations using immunity at the first democratic constitution suggest the effect could be causal.

Keywords: accountability, corruption, immunity, interest groups

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1 Introduction

In this paper, we study the institution of immunity both theoretically and empirically. Legal provisions that protect elected officials from prosecution and arrest have been common throughout history. They remain in force in most contemporary democracies. Despite their longevity, immunity provisions have been at the center of the debate surrounding corruption in many countries, such as Italy and Greece. In some countries, immunity appears to provide a valuable cover for corrupt activities by officials. The main goal of this study is to explore why societies choose to place their politicians above the law and the implications that this choice may have for governance outcomes.[2]

The history of immunity is long and colorful. In Ancient Rome, the *tribuni plebis* were considered inviolable so that they could exercise their duties without interference from the nobility. In early modern Europe, protection from arrest for legislative speech was among the first important privileges granted to parliamentarians, codified in the English Privilege of Parliament Act 1603. During the French Revolution, immunity provisions shielded the democratic representatives of the National Assembly from politically motivated charges initiated by a partisan legal and police system that remained under the control of 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).

Such immunity provisions have survived the transition to modern democracy. In the modern era, more than 70 percent of democratic countries have some legal provision that protects elected politicians–to varying degrees–from apprehension, prosecution, or indictment. Despite their historical importance and modern persistence, the political economy effects of 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 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 were to give such a ring to a just man. Would the impunity to commit crimes while invisible corrupt his character and behavior?[3] 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*

[2]The term "immunity" may refer to those provisions that either protect politicians' freedom of speech or more generally 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.

[3]In the field of political theory, Wigley (2003) first pointed to the parallels between Plato's treatment and immunity protection for politicians.

market. (Plato, Politeia II, 359-360).

Some existing research supports Plato's longstanding suspicion that human behavior changes when the threat of legal consequences is remote or nonexistent. For instance, Fisman and Miguel (2007) examine the effect of diplomatic immunity on parking violations in New York City and document 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 public funds in a number of cases.[4] Former Italian Prime Minister Silvio Berlusconi skillfully navigated his country's immunity laws to avoid criminal prosecution for nearly a decade.[5]

Despite its prevalence and its potential effects on governance and political outcomes–through policies or even through who chooses to run for office–the institution of immunity is understudied. In this paper we provide a first complete and systematic coding of immunity protection in 90 democratic countries. We do so by consulting written constitutions, founding documents, statutes, legislative rules of procedure, and case law from each country. 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 purported criminal activities covered and the prosecutorial action prohibited by immunity. We develop an immunity score that aggregates eighteen variables that represent the strength of a given country's immunity regime. To 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 this institution.[6]

To study the effects of immunity, we employ a model in which an official can leverage his or her immunity

[4]The most conspicuous instance of the alleged malfeasance involved €100 million in pay-to-play bribery payments to fifteen Greek ministers. See Donadio and Kitsantonis (2012), among others.

[5]Our mention of malfeasance charges in Greece and Italy is 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 The Economist (2010). In a similarly conspicuous case, Salvadoran prosecutors could do little when Congressman Jose Francisco Merino allegedly shot and wounded a police officer during a drunken rampage in San Salvador. Darling (2000) provides further details.

[6]The Comparative Constitutions Project, Elkins, Ginsburg and Melton (2007), asks and documents in a yes-or-no question immunity of heads of state, heads of government, and legislators in contemporary 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.

to receive bribes and engage in other corrupt behavior without the risk of legal consequences. Simultaneously, immunity protects officials from false charges or politically motivated campaigns arising from their refusal to cater to interest groups. 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 relative value of immunity depends, in turn, on the efficacy of crime detection and the quality of the judicial system. Dal Bó, Dal Bó and Tella (2006) study the role of violence and of bribes as modes to exert influence on politicians. In that framework, they also examine the role of immunity and point out that where detection and justice are effective and operate free from external interference, corrupt politicians benefit relatively more from stronger immunity than do honest politicians; in such systems, immunity is not particularly useful for honest politicians, as false accusations and smear campaigns are ordinarily uncovered. Hence, immunity has differential effects that depend on the degree of judicial independence.[7]

In this paper, we push the analysis further to better understand the circumstances under which immunity matters for corruption. We find that the extent to which immunity encourages corruption depends not only on the quality of the judiciary, but also on the relative benefits from catering to the electorate versus succumbing to pressure groups. We show that when the quality of the judiciary is strong and the benefits of being corrupt outweigh those of catering to the electorate, higher immunity encourages corruption. When the quality of the judiciary is weak and the benefits of catering to the electorate outweigh those of corruption, higher immunity encourages honesty and reduces corruption. We also identify two circumstances where immunity is inconsequential for the level of corruption: In the first case, politicians always cater to the electorate because it is more rewarding than succumbing to pressure groups, and the judiciary is sufficiently strong such that false accusations are ineffective. In the second case, politicians are always corrupt because pressure groups are very strong and can offer large rewards such as bribes and campaign financing while the judiciary is weak, making punishment for corruption unlikely.

These theoretical insights shed new light on the history of the institution of immunity. More specifically, they help to rationalize the emergence of immunity in emerging democracies and hint to its possible effects in today's mature democracies. In emerging democracies–for instance at the time of the democratic transition in Europe during the revolutions of 1848–the courts and police were often still controlled by the monarchy. At the same time, the democratic revolutionaries were idealists and had a strong desire to cater to the people they represented. Under such circumstances, immunity shields politicians from pressure groups and enables them to cater to the electorate rather than to succumb to pressure groups. Put differently, immunity aligns politicians' behavior with the desires of the electorate. One could conclude that immunity is also beneficial

[7]The essential differences are first, that in our model the decision of whether or not to be corrupt is discrete, whereas bribes can take a continuum of values in their model. Also in our model bribes are not used simultaneously with threats or smears. Smears are used only when politicians refuse to cater to pressure groups.

in many of today's democracies that have weak legal systems, for instance, in Latin America.

However, the model highlights the crucial interaction between the rule of law and the strength of pressure groups. We show that in a country where the rule of law is weak *and* pressure groups are strong (rendering the benefits that a politician enjoys from serving such groups more substantial compared those of catering to the electorate) immunity does not matter since regardless of its level, politicians succumb to pressures to bend rules and engage in corruption. The benefits are simply too large and the danger of punishment small since courts and law enforcement can be bribed. Ultimately, then, whether immunity is a vice or a virtue in the modern world depends on a variety of factors and highlights the importance of empirical analysis.

Using our new measure of immunity, we study the effects of immunity on corruption and on other measures of governance. Our empirical investigations provide evidence that stronger immunity protection is associated with greater corruption and weaker governance. We control for standard determinants of corruption, such as income, legal origin, electoral rules, and trade openness. Culture is often seen as an important determinant of corruption, but it is also one that is notoriously difficult to quantify. Thanks to the work of Fisman and Miguel (2007) on parking violations of United Nations diplomats in New York, we avail ourselves of a measure for differences in behavior when law enforcement is absent. Following Fisman and Miguel (2007), we interpret these differences as a proxy for cultural attitudes towards law abiding behavior and include this measure of culture in our empirical exercises. We find that the relationship between immunity and corruption is somewhat more pronounced in countries with *strong* legal systems (systems with *high* levels of judicial independence). In countries with *weak* legal institutions, as is typically the case in early stages of the democratic transition process, the effects of immunity protection tend to be more ambiguous. In light of the theoretical model, this suggests that in countries where the rule of law is weak, pressure groups are also strong and hence there is an ambiguous relationship between immunity and corruption. Taking into consideration the concerns over the efficacy of corruption measurement voiced by Treisman (2007), we establish these effects using both perception-based and incidence-based measures of corruption as well as other measures of public mismanagement.

Importantly, we also leverage the rich and new dataset of the V-Dem (Varieties of Democracy) project (see Coppedge et al. (2019)), which provides measures of *executive* corruption as well as historical corruption estimates.[8]

OLS estimates show that there is a strong relationship between immunity and corruption outcomes, but it remains unclear whether immunity has a causal impact on corruption. Our identification strategy proceeds as follows: First, we use the data from the V-Dem project, which allow us to examine the effects of immunity provisions on executive corruption while *controlling* for the overall corruption culture in a country, which

[8]We are grateful to an anonymous referee for pointing us to the V-Dem project.

helps address reverse-causality and omitted-variable concerns. In addition, by focusing on the effects of immunity on executive bribery and embezzlement, we provide a direct test of the theoretical part that refers to governance outcomes at high levels of government.

Second, we address remaining endogeneity concerns via an instrumental variable strategy. A particular concern could be that corrupt economies and politicians select more robust immunity regimes. To address this concern, we use the strength of immunity protection in the first democratic constitution as an instrument for current immunity rules. We construct the historical immunity scores using the same methodology employed for the contemporary coding. We show that these early immunity provisions persisted over time and explain a large share of the variation in today's immunity rules. Moreover, thanks to the latest edition of the V-Dem dataset, which includes corruption estimates going back to the 19th century, we can control for the level of corruption at the time of the first constitution. By doing so, we account for the plausible objection that more corrupt countries might have chosen more generous immunity protections in the past.

The IV estimations commend the conclusion that the effect of immunity provisions on corruption is likely causal. Immunity of politicians may be a useful device to protect democratically elected politicians in nascent democracies, and this is its historical origin. In mature democracies, however, immunity becomes a cause of corruption and poor governance. Thus, in line with the empirical findings of Fisman and Miguel (2007), who document that once New York City found a way to circumvent the impunity implied by diplomatic immunity, parking violations dropped significantly, we expect that weakening politicians' immunity could help tackle corruption.

Related Literature We are not the first to study the economic effects of political institutions. A recent influential book by Acemoglu and Robinson (2012) investigates the impact of formal and informal institutions on power relations and prosperity. 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[9] and form of government.[10] Besley and Persson (2011) examine the causes of the clustering

[9]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.

[10]"Form of government" is generally characterized as either "presidential" or "parliamentary." In a parliamentary system, the executive must generally 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, Roland and Tabellini (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

of state institutions, violence, and income. Following these studies, we focus on formal rules rather than their implementation, which is difficult to measure and compare across countries. The abstraction from differences in implementation, to the extent they exist, introduces measurement error and hence attenuation bias. This stacks the cards against the hypothesis that differences in immunity matter for governance.

Our 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 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.[11] 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.[12] Acemoglu, Robinson and Torvik (2013) consider the effect of checks and balances in a weakly institutionalized regime where bribery of politicians is a serious concern. In a fascinating paper, Fisman (2001) documents how political connections affected firms' profitability in Indonesia and the role of such connections in the 1997 crisis. More recently, Andersen, Johannesen, Lassen and Paltseva (2017) employ data on bank deposits in tax havens to investigate the extent to which politicians divert national rents for personal use.

We proceed by briefly describing the history of immunity provisions in Section 2. In Section 3, we examine theoretically how immunity affects corruption and governance. Section 4 outlines the key dimensions of the immunity that politicians enjoy. 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 Parliament in 1397, Sir Thomas Haxey rebuked King Richard II's prodigal habits. When the incensed monarch discovered Haxey's affront, he orchestrated the parliamentarian's treason conviction

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.

[11]Smart and Sturm (2013) and Alt, Bueno de Mesquita and Rose (2011) examine the relationship between term length and politicians' behavior.

[12]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.

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 parliamentary 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). The case was the first in a number of assertions of legislators' right to freedom from liability for speech uttered in Parliament (Chafetz, 2007, p. 69).[13]

Statutory limits on the general 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 criminal prosecution unrelated to speech were introduced. Those struggles between democratizing forces and the *Ancien Régime* were 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 a still-powerful monarch. Elements of 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 legal 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 Title III, Chapter 1 of the Constitution of 1791 consequently exceeded English freedom-of-speech protections and 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 drafting of the United States Constitution. The framers of the document placed the authority to remove the president in the hands of the legislature. Similar to their concerned French contemporaries, the American framers feared that without the independent judgment of the Senate, politically motivated charges could interfere with the functioning of the executive branch of government. 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

[13]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 with the assistance of English colonial rule. The principle was later expanded to protect other public officials from recrimination for words spoken or votes taken in their official capacities. 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). Generally, non-liability protection may not be waived, and in some jurisdictions the protection 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.

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.

3 The Two Faces of Immunity

In this section, we introduce a model that seeks to shed light on the interaction of immunity and *corruption*–where the term stands for other variants of politician malfeasance. We also reinterpret the model to discuss the optimal level of immunity chosen by constitutional designers as a function of the maturity of a democracy. While simple–its main purpose is to guide the empirical exercise–the model sheds light on immunity's prevalence in early constitutions and suggests that its role may have fundamentally changed as democratic institutions have become more firmly established.[14]

We begin by assuming that the utility of an elected official depends on the policies he chooses and on whether or not he is involved in corruption $c \in \{0, 1\}$. Corruption ($c = 1$) may serve old elites or interest groups at the expense of the electorate. The relative costs and benefits of corruption depend on the degree to which politicians are likely to be held legally responsible for it, which, in turn, is determined by the strength of immunity protection that politicians enjoy, denoted by q, and the degree to which the judiciary is institutionally independent β,[15] as follows:

$$U = a - \gamma(1 - q)(1 - \beta) \text{ and } U_c = a_c - \gamma_c(1 - q)\beta,$$

where a, a_c and $\gamma, \gamma_c > 0$ are positive constants. The parameter a captures benefits from choosing the right policies and serving the electorate, while a_c captures benefits from catering to interest groups, who may offer campaign financing, bribes, positive publicity, or other forms of support.[16] The parameter γ captures the costs of facing a smear campaign (legal costs, losing office, the inability to be re-elected, reputation costs,

[14]In an online Appendix, we analyze the interaction of immunity and the quality of the judicial system in a dynamic model of *electoral competition* based on the model of Maskin and Tirole (2004). That model has the advantage of highlighting precisely how politicians, who are primarily concerned with re-election, can leverage their immunity. However, since the empirically testable implications of that richer model largely coincide with ones of this simpler model inspired by Dal Bó, Dal Bó and Tella (2006), we opted for the simplest framework that illustrates how immunity works and refer the interested reader to the Appendix for the richer model.

[15]The parameter β could also capture the degree to which the judiciary is susceptible to corruption.

[16]Since these benefits do not depend on the level of immunity protection that an official enjoys we opt to model in this reduced form fashion. The more elaborate dynamic electoral model we develop in Reddy, Schularick and Skreta (2014) provides more details about the precise form of these benefits.

and the like). How likely it is that these costs are incurred by an honest politician–one who refuses to cater to interest groups and chooses $c = 0$–depends on the level of immunity q as well as on the quality of judiciary β. The expected costs $\gamma(1-q)(1-\beta)$ are high when β is low and/or when q is low. The parameter γ_c captures the severity of penalties for corruption. The expected costs of corruption $\gamma_c(1-q)\beta$ are high when the rule of law β is high and immunity q is low.

The interaction of the level of immunity with the quality of the judicial system determines the relative costs and benefits of engaging in illegal activities that cater to elites at the expense of the electorate: A politician chooses not to be corrupt and to cater to the electorate when $U - U_c > 0$, which holds if

$$a - a_c - [\gamma(1-\beta) - \gamma_c\beta] > -q[\gamma(1-\beta) - \gamma_c\beta]. \tag{3.1}$$

Let $A \equiv [\gamma(1-\beta) - \gamma_c\beta]$. Depending on whether A is positive or negative there are two cases to consider: If $A > 0$, which is equivalent to $\frac{\gamma}{\gamma+\gamma_c} > \beta$, then (3.1) reduces to:

$$U - U_c > 0 \Leftrightarrow q > 1 - \frac{(a-a_c)}{A}. \tag{3.2}$$

If $A < 0$, which is equivalent to $\frac{\gamma}{\gamma+\gamma_c} < \beta$, then (3.1) reduces to:

$$U - U_c > 0 \Leftrightarrow q < 1 - \frac{(a-a_c)}{A}. \tag{3.3}$$

Inequalities (3.2) and (3.3) suggest that whether a politician chooses honesty over corruption depends not only on the interaction between the quality of judiciary β, immunity q, but also on the difference $a - a_c$, which reflects the strength of interest groups. Thus, to better understand these relationships, we analyze the interaction of immunity and the quality of judiciary with the benefits of catering to the electorate and the direct benefits of corruption, the difference $a - a_c$:

Case 1: Benefits from corruption outweigh benefits from honesty: $a < a_c$

Case 1.1: Weak judiciary ($\frac{\gamma}{\gamma+\gamma_c} > \beta$): When $a < a_c$, and $\frac{\gamma}{\gamma+\gamma_c} > \beta$, (3.2) is never satisfied since $q \in [0,1]$, whereas the RHS of (3.2) is strictly greater than 1. This suggests that when the quality of the judiciary is low and the benefits from being corrupt outweigh the ones from catering to the electorate, politicians always choose to be corrupt regardless of the level of immunity protection.

Case 1.2: Strong judiciary ($\frac{\gamma}{\gamma+\gamma_c} < \beta$): Now when $a < a_c$, and the quality of the judiciary is above a threshold, $\frac{\gamma}{\gamma+\gamma_c} < \beta$, then (3.3) implies that $U > U_c$ when immunity is low enough (below $1 - \frac{(a-a_c)}{A}$), whereas corruption becomes optimal if immunity exceeds this threshold. Hence, when the quality of the judiciary is strong and the benefits from being corrupt outweigh the ones from catering to the electorate,

politicians choose to be honest when immunity protection is below a threshold given by the RHS of (3.3).

Case 2: Benefits from honesty outweigh benefits from corruption: $a > a_c$

Case 2.1: Weak judiciary ($\frac{\gamma}{\gamma+\gamma_c} > \beta$): When $a > a_c$, and $\frac{\gamma}{\gamma+\gamma_c} > \beta$, (3.2) implies, that $U > U_c$ when immunity is high enough (above $1 - \frac{(a-a_c)}{A}$), whereas corruption becomes optimal if immunity is below this threshold.

Case 2.2: Strong judiciary ($\frac{\gamma}{\gamma+\gamma_c} < \beta$): Now when $a > a_c$, and the quality of the judiciary is above a threshold, $\frac{\gamma}{\gamma+\gamma_c} < \beta$, then (3.3) implies that $U > U_c$ always holds regardless of the level of immunity. Then, when the judiciary is strong and the benefits from catering to the electorate are high, honesty prevails regardless of the level of immunity.

This analysis suggests that whether or not higher immunity encourages corruption depends on the quality of the judiciary and the relative benefits of catering to the electorate (a) versus those of catering to interest groups (a_c). When the quality of the judiciary is strong and the benefits of being corrupt outweigh those of catering to the electorate, higher immunity encourages corruption whereas when the quality of the judiciary is weak and the benefits of catering to the electorate outweigh those of corruption, more robust immunity encourages honesty and reduces corruption. When the judiciary is strong and catering to the electorate is more rewarding than succumbing to pressure groups, politicians always cater to the electorate, and the level of immunity is inconsequential. Analogously, when the judiciary is weak and succumbing to pressure groups is more rewarding as compared to catering to the electorate, politicians always choose to be corrupt, and the level of immunity is again inconsequential.

We now employ these findings to shed light on the optimal level of immunity protection for constitutional designers who want to set the rules so as to incentivize politicians to cater to the electorate rather than to succumb to interest-group pressures. Consider two different points in time: The first point occurs at a society's transition to democracy, around the time when the first democratic constitution is written. The second point occurs later, when the society's democratic institutions have matured and are stable.

Date 1: When democracy is still in its infancy, immunity safeguards democratic institutions. At the historical point when a society is transitioning to democracy, it is likely that β is low because the judiciary might still be controlled by the old elite and not by democratizing forces: The old elites may try to influence democratically elected officials by prosecuting them and by running smear campaigns against them if they do not cater to the elites' wishes. At the same time, it is likely that $a > a_c$ since democratizing forces feel very strongly about serving the electorate. Hence, we are in Case 2.1 and framers designing a constitution that seeks to incentivize elected officials to be honest and to serve the majority optimally choose a high level of immunity protection q.

Date 2: When democracy is mature, immunity encourages corruption. How does immunity affect the behavior of an elected official when democratic institutions are mature and the judiciary is independent and

free of the control of old elites, i.e., when β is high? If at the same time interest groups are strong and can offer large bribes or significant re-election support, that is when $a_c > a$, then we are in Case 1.2 where higher immunity encourages corruption. Under these circumstances constitutional designers representing the electorate would rationally choose a low degree of immunity q.

To summarize, in a world where β was initially low and catering to the electorate relatively more rewarding vis-a-vis corruption, constitutional drafters optimally chose high immunity protection q. However, this choice may backfire as democracy matures and the judiciary becomes independent, that is, when β increases while interest groups become more influential and can offer significant bribes and electorate support. Then, immunity facilitates corrupt behavior and induces bad governance as well as policy choices that serve interest groups rather than the majority of voters.

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 Parliament and British ministers may speak and 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 relevant legislative chamber. 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. Only after removal may prosecutors proceed with criminal prosecution. Additionally, Paraguayan law grants former presidents life-long procedural protections from prosecution.

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.

The 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 heads of government and 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 coverage for 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 length of an officeholder's term 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 relevant legislative house votes to remove the legislator's immunity. In jurisdictions where immunity protection is not as robust, the procedure for waiving immunity often requires the consent of only a legislative committee or 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 lifetimes.

Scope: Immunity provisions in different jurisdictions provide politicians with varying degrees of coverage, which may affect immunity in two ways. First, immunity provisions may explicitly 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.... (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 explicitly 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.

4.2 Quantifying Immunity Regimes

We use an eighteen-variable rubric, summarized in Table 1, to score immunity provisions and compare their strength across different countries. 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.

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

Table 1: Immunity Coding

No.	Dimension of Immunity	Countries	Countries by Region
	LEGISLATIVE IMMUNITY		
1	Detention requires some authorization	61	Afr.[5]/Asi.[10]/Eur. [31]/N.Am.[7]/S.Am.[8]
2	Simple majority vote in legislative house	50	Afr.[3]/Asi.[7]/Eur.[28]/N.Am.[6]/S.Am.[6]
3	Supermajority vote in legislative house	7	Afr.[0]/Asi.[0]/Eur.[3]/N.Am.[1]/S.Am.[3]
4	Immunity continues to apply after term in office expires	4	Afr.[0]/Asi.[0]/Eur.[3]/N.Am.[1]/S.Am.[0]
5	Immunity protects common crimes	55	Afr.[4]/Asi.[10]/Eur.[28]/N.Am.[6]/S.Am.[7]
6	Immunity protects against judicial proceedings	46	Afr.[4]/Asi.[6]/Eur.[25]/N.Am.[5]/S.Am.[6]
	MINISTERIAL IMMUNITY		
7	Prosecution requires some authorization	48	Afr.[2]/Asi.[7]/Eur.[25]/N.Am.[6]/S.Am.[8]
8	Simple majority vote in at least one legislative house	38	Afr.[2]/Asi.[3]/Eur.[19]/N.Am.[6]/S.Am.[8]
9	Supermajority vote in at least one legislative house	11	Afr.[1]/Asi.[1]/Eur.[1]/N.Am.[4]/S.Am.[4]
10	Assent of two legislative houses	7	Afr.[0]/Asi.[1]/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 common crimes	40	Afr.[2]/Asi.[7]/Eur.[19]/N.Am.[5]/S.Am.[7]
	CHIEF EXECUTIVE IMMUNITY		
13	Prosecution requires some authorization	65	Afr.[10]/Asi.[9]/Eur.[29]/N.Am.[8]/S.Am.[9]
14	Simple majority vote in at least one legislative house	57	Afr.[10]/Asi.[7]/Eur.[23]/N.Am.[8]/S.Am.[9]
15	Supermajority vote in at least one legislative house	32	Afr.[8]/Asi.[6]/Eur.[4]/N.Am.[6]/S.Am.[8]
16	Assent of two legislative houses	14	Afr.[2]/Asi.[1]/Eur.[2]/N.Am.[3]/S.Am.[6]
17	Immunity continues to apply after term in office expires	13	Afr.[4]/Asi.[0]/Eur.[5]/N.Am.[1]/S.Am.[3]
18	Immunity protects common crimes	58	Afr.[10]/Asi.[9]/Eur.[23]/N.Am.[7]/S.Am.[9]

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. As procedural requirements for waiving executive branch immunity may involve the assent of two legislative houses, 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 Appendix **??** we provide a detailed account of how we constructed our immunity coding and fully

illustrate the procedure for three countries. Appendix **??** lists all the relevant sources (constitutional provisions and other sources) that we used to construct the contemporary and the historical coding for each of the 90 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, Dal Bó and Tella (2006) suggest, immunity provisions may function differently in authoritarian or semi-authoritarian contexts, where a proper division of powers does not exist and, as a consequence, legal protection against prosecution is less likely to afford ministers or parliamentarians with meaningful protection in practice. Consequently, we coded immunity provisions for only those nations with a score of 5.00 or higher on the Economist Intelligence Unit's 2012 "Democracy Index." As the Democracy Index scores countries on a 0.00-10.00 scale–wherein a higher number indicates greater commitment to democracy–our selection covers all countries that meet at least half of the criteria identified by the Economist Intelligence Unit as indicative of democratic government. However, because the Economist Intelligence Unit relies heavily on public-opinion surveys to calculate its Democracy Index, we removed from our sample any country with average score of greater than 4.00 on the 2013 Freedom House "Freedom in the World" Index. The Freedom in the World Index–a 1.00-7.00 scale, wherein a lower number indicates more democratic institutions–relies more heavily on objective standard-based analysis. These classifications correspond closely to alternative regime classifications such as those in the Polity IV database.

The countries that meet these criteria constitute a diverse sample in a number of respects. Geographically, 13 countries are in Africa, 18 in Asia and Oceania, 38 in Europe, and 21 in the Americas. Economically, 34 countries qualify as advanced economies according to the International Monetary Fund. Legally, 21 employ common-law systems, 65 civil-law systems, and 4 mixed systems. Politically, 41 employ presidential or semi-presidential systems, while 49 are parliamentary democracies.

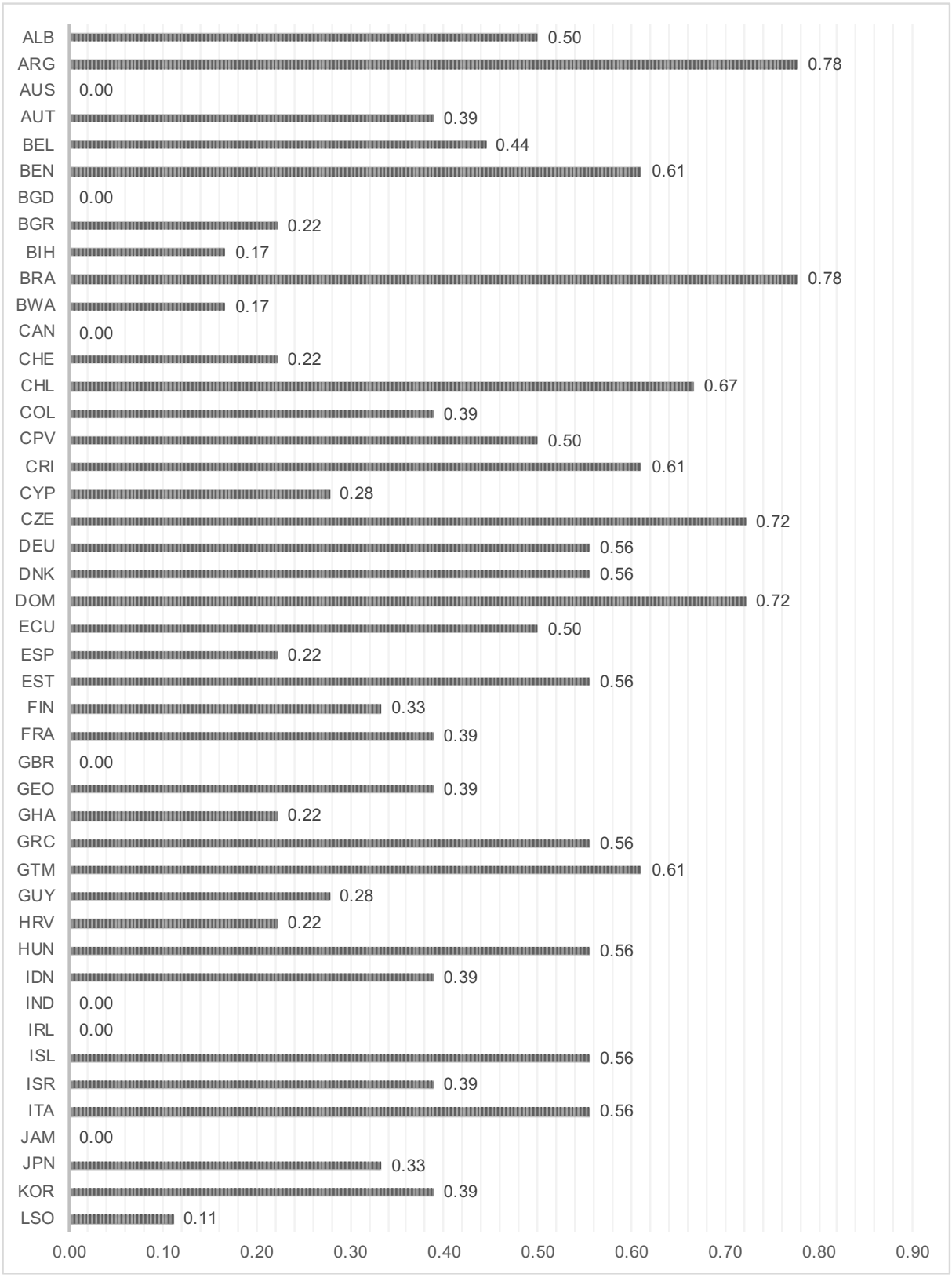
4.4 Immunity Scores

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 90 countries is 0.38, with a maximum of 0.89 and a standard deviation of 0.24. 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. Latin American countries generally have the strongest 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 United States' 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. Table 4.1 depicts the current immunity score. We discuss the historical score in Section 5.5.2.

Figure 4.1: Contemporary Immunity Scores Across Democracies



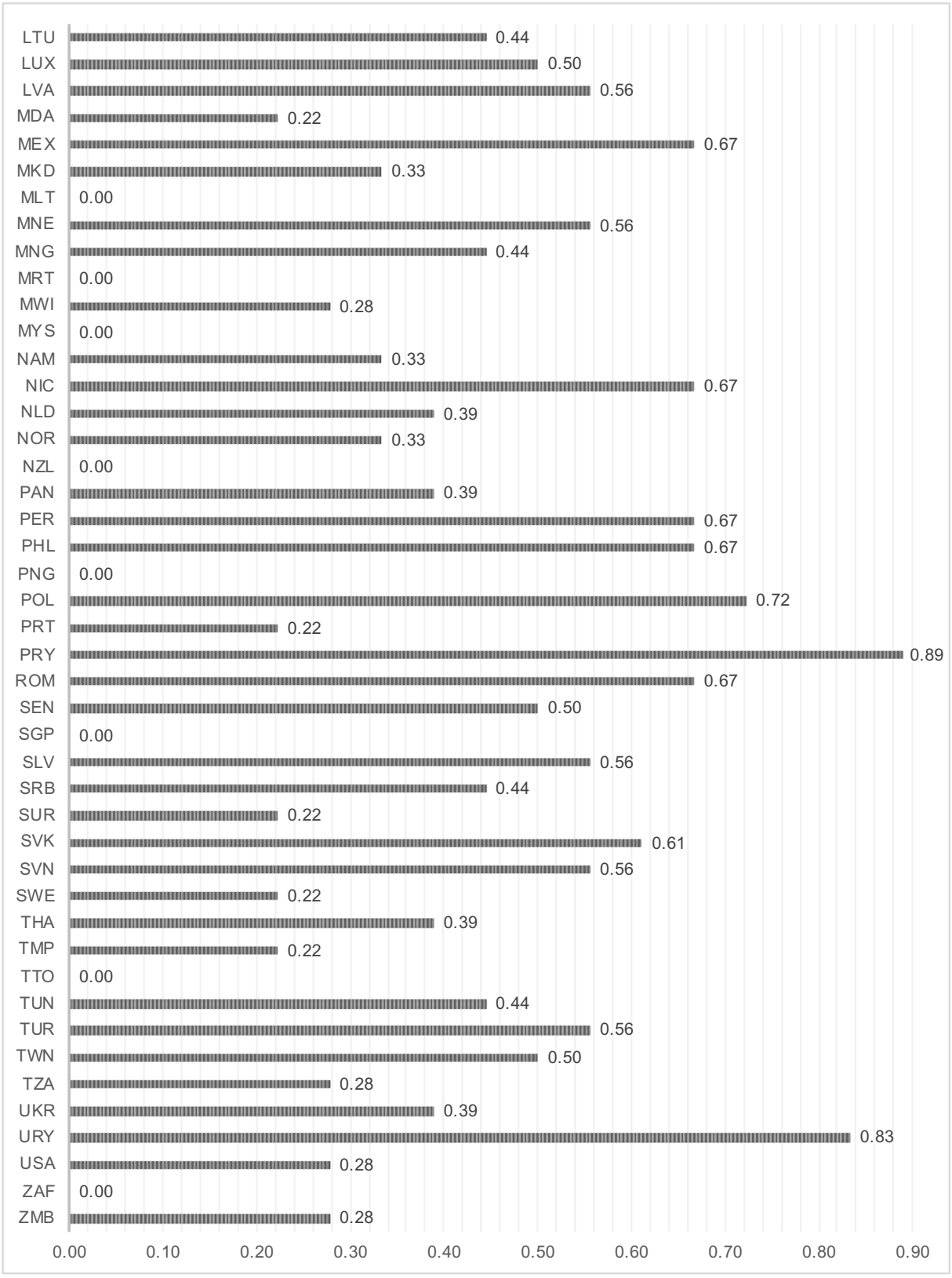
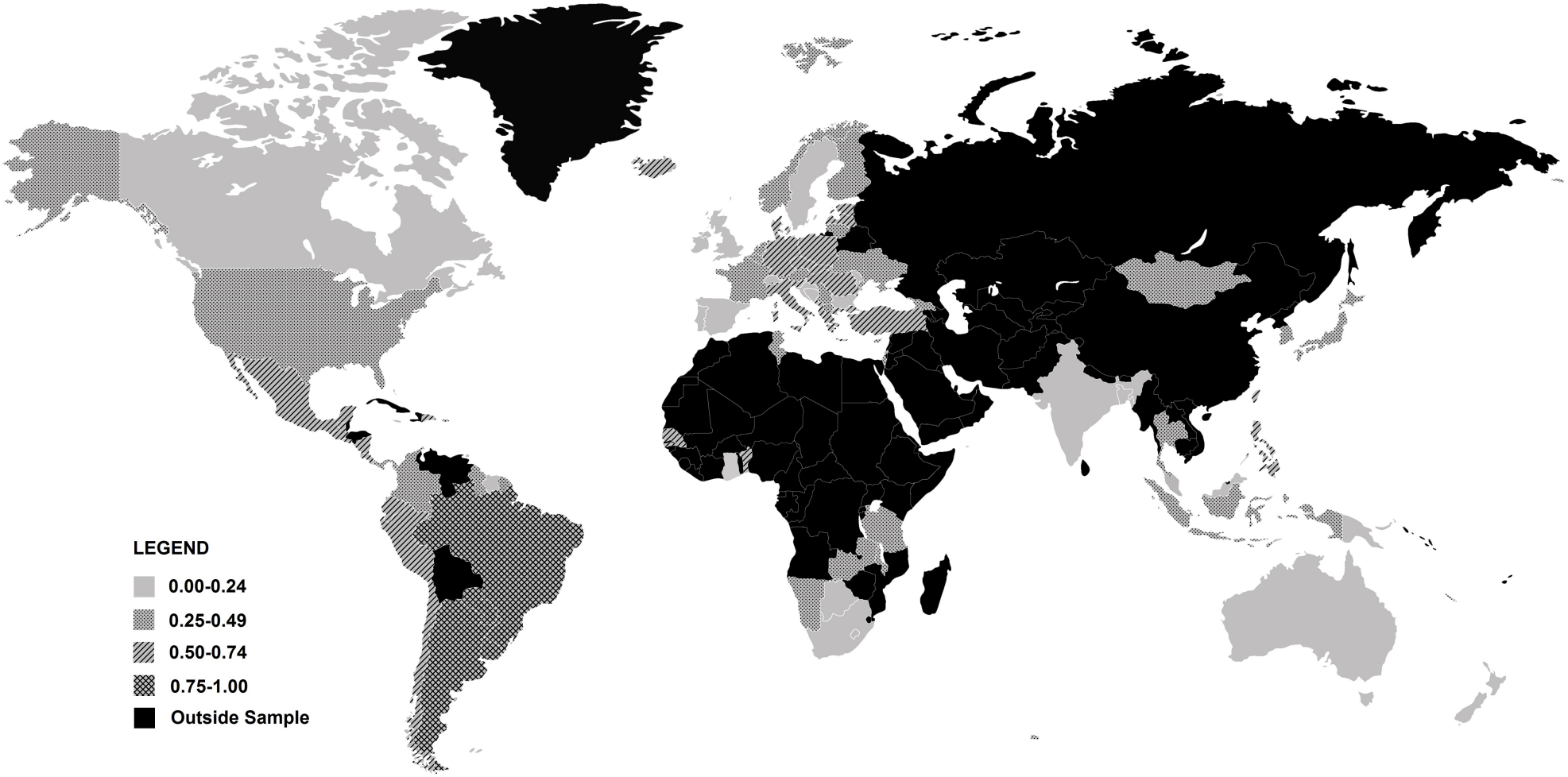

LTU 0.44
LUX 0.50
LVA 0.56
MDA 0.22
MEX 0.67
MKD 0.33
MLT 0.00
MNE 0.56
MNG 0.44
MRT 0.00
MWI 0.28
MYS 0.00
NAM 0.33
NIC 0.67
NLD 0.39
NOR 0.33
NZL 0.00
PAN 0.39
PER 0.67
PHL 0.67
PNG 0.00
POL 0.72
PRT 0.22
PRY 0.89
ROM 0.67
SEN 0.50
SGP 0.00
SLV 0.56
SRB 0.44
SUR 0.22
SVK 0.61
SVN 0.56
SWE 0.22
THA 0.39
TMP 0.22
TTO 0.00
TUN 0.44
TUR 0.56
TWN 0.50
TZA 0.28
UKR 0.39
URY 0.83
USA 0.28
ZAF 0.00
ZMB 0.28
0.00 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90

Figure 4.2: Immunity Index scores in 90 democracies



5 The Empirics of Immunity and Corruption

We now turn to the empirical evidence for the effects of immunity on governance outcomes. The focus is on corruption as the most pervasive and arguably best-documented form of abuse of public office. Our empirical efforts complement two strands in the literature. First, we study how constitutional rules 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 policy and performance in great detail. Second, a considerable body of empirical literature has investigated the determinants of cross-country differences in corruption.[17] The existing literature has already considered a variety of explanatory variables, but to our knowledge the role of immunity rules has not been studied.

We proceed in two steps. We first present OLS estimations demonstrating that, controlling for a wide range of determinants of corruption cited in the literature, a higher level of immunity protection is associated with more corruption. Moreover, we also test evidence that the effect of immunity on corruption is less pronounced in countries where the legal system is weak and judges are not independent from external influence. We find strong evidence that immunity and corruption are closely linked, and some evidence that these effects are less pronounced and could be ambiguous in societies with weak legal system, as the model suggests.

Although the OLS estimates point to a close relationship between immunity and corruption outcomes, it remains unclear whether immunity's impact on corruption is causal. In a second step, we turn to instrumental variable estimation and show that these effects are likely causal. We instrument current immunity rules with immunity rules at the time of the first democratic constitution.[18] The instrumental variables results confirm the OLS estimates and show a positive and significant effect of historical immunity provisions on corruption today.

5.1 Outcome Variable and Basic Correlations

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 of activities, 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

[17] Detailed surveys can be found in Lambsdorff (2006) and Treisman (2007).

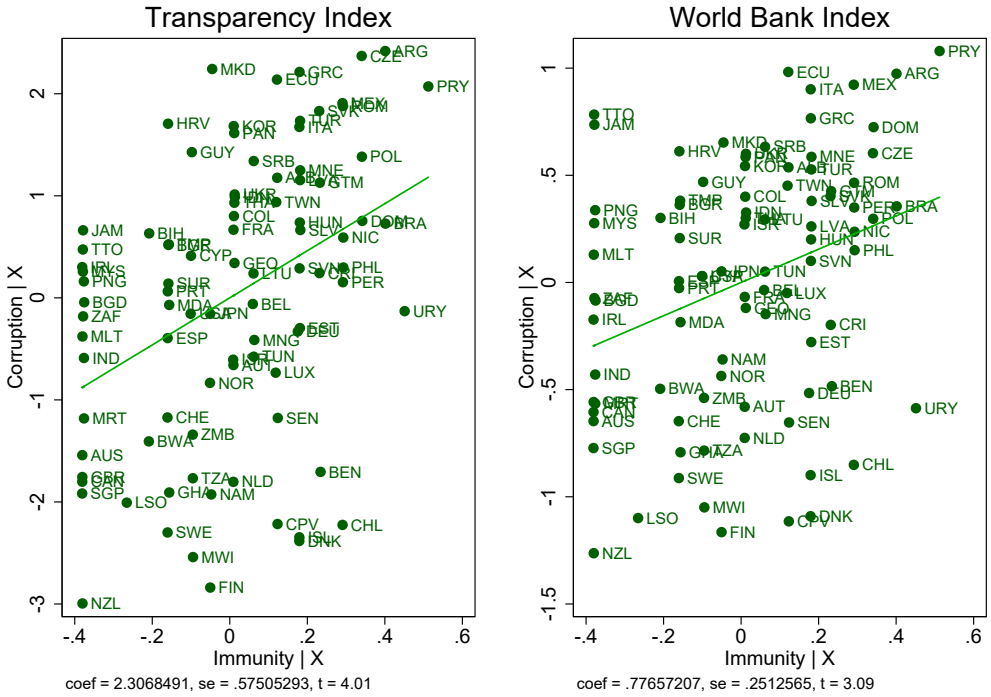
[18] We define the first democratic constitution as the document or practices that governed a country when both the executive and legislative branches of government were subject to democratic control. For purposes of scoring, where early documents were not readily available or unclear, we turned to next available democratic constitution.

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.

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 Corruption Perceptions Index provided by Transparency International. Both institutions produce quantitative indices of cross-country differences in corruption based on survey data. Treisman (2007) points to the differences between perception- and incidence-based indicators of corruption.[19] We demonstrate the robustness of our findings using incidence-based corruption indicators as well as a variety of different corruption indicators, such as the quality of governance index contained in the International Country Risk Guide (ICRG) and various other corruption measures ("diversion of public funds;" "irregular payments and bribes") provided by the World Economic Forum (WEF). While these much-used standard governance indicators serve as a benchmark, for identification we rely heavily on the rich dataset of the V-Dem (Varieties of Democracy) project that provides measures of executive corruption as well as historical corruption estimates (we employ version 9 of the data, see Coppedge et al. (2019)). 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.

[19]For a discussion of the relative strengths and weaknesses of perception and incidence based indicators, see Treisman (2007).

Figure 5.1: Partial Correlation of Immunity Protection (X) & Indices of Corruption (Y)



Notes: Partial correlation between corruption on immunity, controlling for GDP per capita. See text.

In Figure 5.1, we begin by examining the relationship between immunity and corruption. The two partial correlation plots display the relationship between the strength of immunity and the level of corruption, controlling for GDP per capita. We use both the "Control of Corruption" indicator from the Transparency International "Corruption Perceptions Index" and the World Bank.[20] Both measures yield very similar results. Visually, the impression is clear: across the 90 countries in our sample, countries with more immunity protection for politicians also tend to have more corruption when controlling for differences in per capita income.

5.2 Control Variables

We further examine this relationship by controlling for other country characteristics that are also potentially important for corruption. In the literature on the determinants of corruption, a large number of explanatory variables has been considered. There is consensus that higher-income countries have lower levels of corruption, and our regressions control for GDP per capita. Additional explanatory variables can be

[20]These measures are both negative numbers. In the graphs below we change the sign, so a higher number means more corruption.

broadly grouped into (1) political, legal, and institutional factors; (2) demographic and geographic factors; and (3) economic factors. In our empirical analysis, we will consider the following control variables:

- Political, legal, and institutional factors. *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 through a dummy variable for majoritarian electoral systems. *Legal systems*: Common-law countries tend to have lower aggregate immunity protection, on average, although differences exist between parliamentary and presidential common-law countries. To disentangle the effects of immunity rules from other differences relating to legal origin, we add controls for English and French legal origin (La Porta et al., 2008). *Presidential regime*: 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). *Democracy*: The de facto degree of democracy and hence electoral accountability may be negatively related to corruption (Treisman, 2007). We use the Polity II democracy score to control for the degree of democratic accountability. We also use Freedom House's index of press freedom to control for the importance of independent media to expose corrupt politicians, following Brunetti and Weder (2003), Chowdhury (2004), Lederman, Loayza and Soares (2005), Suphachalasai (2005), and Freille, Haque and Kneller (2007). We also tested the impact of federalism as suggested by Treisman (2000).

- Economic structure. *Trade openness*: The impact of trade openness on corruption is explored by Bonaglia, Braga de Macedo and Bussolo (2001). We control for trade openness using the sum of imports and exports over GDP from the World Bank Development Indicators. *Raw-material dependence*: High dependence on raw-material exports is often associated with higher levels of corruption while foreign aid might lower it, as studied by Tavares (2003), and Bonaglia, Braga de Macedo and Bussolo (2001). We use a proxy for dependence on raw-material exports by looking at the share of oil exports in total exports. Fisman and Gatti (2002) and Gurgur and Shah (2014) also discuss the effects of decentralization.

- Cultural factors. *Culture*: Culture is often seen as an important determinant of corruption, but it is also one that is notoriously difficult to quantify. Thanks to the work of Fisman and Miguel (2007) on parking violations of United Nations diplomats in New York, we dispose of a measure for differences in behavior when law enforcement is absent. Until 2002, diplomatic immunity protected diplomats from enforcement actions. Following Fisman and Miguel (2007), we interpret the variation in parking violation when penalties were non-enforceable as a proxy for different cultural attitudes towards to law-abiding behavior. As immunity provisions (even historical ones discussed later) might reflect

underlying cultural norms, the inclusion of the Fisman and Miguel (2007) index enables us to test directly if immunity has an independent effect on corruption or merely proxies deeper cultural norms that also determine institutional choices. *Fractionalization*: In robustness checks we also consider the degree of ethnic and linguistic fractionalization as they have been found to correlate positively with corruption and poor governance outcomes, as studied by Alesina, Devleeschauwer, Easterly, Kurlat and Wacziarg (2003), La Porta, Lopez-de Silanes, Shleifer and Vishny (1999), and Easterly and Levine (1997). *Religion*: Whether religious beliefs, especially Protestant values, are associated with corruption remains a debated issue from an empirical point of view (Rothstein and Broms (2017)). As part of our robustness tests, we also control for the share of Protestants in the population.

The summary statistics of the variables used in the regression analysis and their sources are shown in Table 2.

Table 2: Summary Statistics

Variable	Mean	Std. Dev.	Min.	Max.	N
Immunity Index	0.379	0.237	0	0.89	90
Historical Immunity	0.433	0.265	0	0.830	82
Corruption (TI)	-4.866	2.337	-9.700	-1.2	90
Corruption (WB)	-0.377	1.022	-2.47	1.19	90
Bribes Paid	1.878	0.939	0	3.784	55
ICRQ	-0.611	0.206	-1	-0.259	81
ICRG	-3.205	1.225	-6	-1.2	66
Government Effectiveness - Estimate	-0.491	0.982	-2.25	0.985	90
Fisman-Miguel Index	12.623	20.874	0	119	81
Overall Political Corruption (V-Dem, v2x-corr)	0.356	0.283	0.006	0.886	72
Executive Corruption (V-Dem, v2x-execorr)	0.287	0.257	0.013	0.839	72
Historical Corruption (V-Dem, v2x-corr)	0.402	0.266	0.016	0.893	65
Real GDP Per Capita (log)	8.947	1.095	6.326	10.924	90
Presidential System	0.4	0.493	0	1	90
Democracy	2.113	0.248	0.981	2.303	90
Majoritarian Election	0.211	0.41	0	1	90
English Legal Origin	0.278	0.45	0	1	90
French Legal Origin	0.467	0.502	0	1	90
Rule of Law	0.337	0.959	-1.272	1.988	90
Population (log)	16.025	1.643	12.567	20.802	90
Oil Export Share (log)	0.86	1.615	-2.303	4.107	90
Trade Openness (log)	4.350	0.541	2.61	5.909	90
Latitude	0.356	0.201	0.014	0.722	90
Protestant Share	0.162	0.251	0	0.978	86
Ethnic Fractionalization	0.374	0.228	0.002	0.787	87
Press Freedom	31.778	17.199	8	78	90

5.3 Ordinary Least Squares Regressions

In this section, the primary goal is to determine whether our model's predictions for a relationship between immunity provisions and governance outcomes in modern democracies finds support in the data. To estimate

the link, we regress corruption measures on the immunity scores introduced above, while controlling for other potential determinants of corruption. We begin by estimating the following reduced form cross-sectional regression:

$$C_i = \alpha + \beta I_i + \gamma \mathbf{X}_i + \epsilon_i \tag{5.1}$$

where C_i is our corruption measure, I_i the level of immunity protection, and the coefficient β is the main object of study, with the 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 $\mathbf{X}$. For now, the error term ϵ_i is assumed to be well behaved. We report robust standard errors throughout. While we have calculated immunity scores for 90 democracies, some control variables are not available for all countries, resulting in slightly smaller sample sizes in some regressions.

Table 3 presents our benchmark estimates using the standard and much used corruption indices compiled by Transparency International (TI), and the index from the World Bank Governance Indicators (WB).

The table is constructed as follows. We first control for the income level only, and then add economic, political, cultural, and other controls. Regressing corruption levels on our immunity score and real income yields a highly significant positive association between the two. None of the additional control variables in regressions (2) and (3) materially alter this picture. Immunity and corruption remain closely correlated and the effect grows with additional controls. Note that including the Fisman-Miguel index as an additional control in regressions (3) and (6) pushes up the immunity coefficient. This is, however, mainly due to the smaller sample. Restricting the samples in regression (2) and (5) to the same 81 observations shows similar results. The choice of the indicator of corruption, be it Transparency International's Corruption Index (1-3) or the World Bank (4-6) has little impact. Moreover, our results are well aligned with the empirical corruption literature. In most of the empirical literature on the determinants of corruption, a high share of commodity exports tends to be associated with more opportunities for corruption and rent-seeking, while trade openness dampens it. We find some evidence that majoritarian election systems and presidential regimes have lower corruption, but the effects are not very robust across specifications. In any case, stronger immunity protection, as measured by our immunity score, goes hand in hand with more corruption after controlling for a standard set of variables associated with corruption outcomes.

5.3.1 Robustness: Different Corruption Measures

In the next step, we explore the robustness of our results in Table 4. We start by using an alternative outcome variable, the incidence-based corruption indicator proposed by Treisman (2007) (BP). This measure overcomes some of the shortcomings of perception-based corruption measures. We also use the Quality of

Table 3: Benchmark Estimates

	TI	TI	TI	WB	WB	WB
	(1)	(2)	(3)	(4)	(5)	(6)
Immunity Index	1.631***	2.291***	3.117***	0.464*	0.746**	1.155***
	(0.544)	(0.801)	(0.902)	(0.259)	(0.368)	(0.373)
Real GDP Per Capita (log)	-2.057***	-2.128***	-2.225***	-0.872***	-0.884***	-0.923***
	(0.137)	(0.147)	(0.169)	(0.064)	(0.069)	(0.082)
English Legal Origin		0.597	0.895*		0.318	0.476**
		(0.475)	(0.531)		(0.203)	(0.235)
French Legal Origin		0.420	0.545		0.277*	0.296*
		(0.349)	(0.366)		(0.143)	(0.153)
Majoritarian Election		-0.390	-0.138		-0.131	-0.020
		(0.359)	(0.334)		(0.159)	(0.153)
Presidential System		-0.421	-1.036***		-0.142	-0.377**
		(0.338)	(0.370)		(0.134)	(0.149)
Democracy		-0.680	-0.743		-0.354	-0.385
		(0.595)	(0.539)		(0.288)	(0.264)
Trade Openness (log)		-0.099	0.080		-0.041	0.032
		(0.217)	(0.271)		(0.103)	(0.130)
Oil Export Share (log)		0.215**	0.228**		0.092**	0.108**
		(0.091)	(0.097)		(0.041)	(0.043)
Fisman-Miguel Index			0.002			0.003
			(0.004)			(0.002)
Regional fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	90	90	81	90	90	81
Adjusted R^2	0.750	0.765	0.800	0.742	0.763	0.801

Dependent variable: Transparency International Corruption Index in Column 1-3;
Control of Corruption (World Bank) in Column 4-6.
All regressions include regional fixed effects.
Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Government indicator from the International Country Risk Guide (ICRG). The latter includes, compared to other corruption measures, a wider range of governance dimensions such as the quality of public administration and law enforcement. In columns (3) and (4) we turn to two corruption indices from the V-Dem dataset that builds on assessments by country experts. First, we study the effects on the overall corruption in a country, proxied by what V-Dem calls "Political Corruption Index" (CORR) in column (3). This is a composite index that covers a broad range of corruption outcomes across different levels of government. In column (4), we test the effects of immunity on executive corruption that specifically covers bribery and embezzlement at the executive level, the variable EXECORR. In column (5), we finally construct the first principal component of all available corruption measures and use it as a dependent variable in the regression.

Neither the specific corruption indicator chosen nor the different country samples that are a result of the varying coverage of the different corruption indicators affect the relation between immunity and corruption. In a number of further robustness tests reported in Table 10 in the Appendix, we extend the checks by adding additional controls such as ethnic fractionalization, press freedom, and the share of Protestants in the population. In all cases, the results correspond closely to the benchmark results discussed above.

5.4 Immunity and the Rule of Law

Immunity may have differential effects on governance outcomes depending on the independence and quality of law enforcement agencies, including the judiciary, prosecution, and police. Our theoretical model implies that more generous immunity provisions are likely to have more pernicious effects on corruption in mature democracies with well-established legal independence, but not necessarily in countries at early stages of the democratic transition process, where old elites may try to influence the democratic transition. In this case, the corruption-inducing effect of immunity protection is counterbalanced by the protection it gives to honest democratic politicians. We should therefore expect the negative effect of immunity rules to be less pronounced in countries in which police forces and judges fail to maintain high professional standards, and malicious prosecution, smear campaigns, and extralegal intimidation are not only more likely, but are also less likely to be detected and corrected in favor of an honest politician.

However, the theoretical model also points to some ambiguity: First, while it is true that immunity becomes relatively more valuable for honest politicians when the legal system is weak, the likelihood that corrupt politicians are brought to justice also decreases. Second, in countries with weak legal systems, interest groups may be powerful and can offer significant support in terms of bribes and campaign financing. With respect to the model, this would imply that $a_c > a$ which puts us in Case 1.1 in which the level of immunity can be inconsequential. Another possible channel is that the honesty level of politicians is endogenous and

Table 4: Alternative Outcome Variables

Corruption Index	BP	ICRQ	CORR	EXECORR	PC
	(1)	(2)	(3)	(4)	(5)
Immunity Index	1.919***	0.254***	0.283**	0.471***	2.545**
	(0.596)	(0.072)	(0.140)	(0.137)	(1.206)
Real GDP Per Capita (log)	-0.738***	-0.149***	-0.229***	-0.206***	-2.132***
	(0.145)	(0.018)	(0.036)	(0.038)	(0.300)
English Legal Origin	0.321	0.069*	0.147*	0.269***	1.084
	(0.309)	(0.038)	(0.078)	(0.078)	(0.742)
French Legal Origin	-0.004	0.095***	0.151***	0.139***	0.761
	(0.294)	(0.035)	(0.056)	(0.048)	(0.473)
Majoritarian Election	0.032	0.020	-0.059	-0.050	-0.270
	(0.218)	(0.040)	(0.057)	(0.056)	(0.366)
Presidential System	-0.326	-0.090**	-0.137*	-0.172**	-0.722
	(0.415)	(0.038)	(0.075)	(0.065)	(0.482)
Democracy	-0.363	-0.006	-0.077	-0.114	-4.288***
	(0.640)	(0.068)	(0.122)	(0.138)	(1.412)
Trade Openness (log)	0.452*	0.004	0.026	0.026	0.083
	(0.231)	(0.025)	(0.044)	(0.044)	(0.404)
Oil Export Share (log)	0.176**	0.024**	0.019	0.024	0.116
	(0.072)	(0.010)	(0.015)	(0.015)	(0.116)
Fisman-Miguel Index	-0.004	0.001***	0.001	0.001	0.013**
	(0.004)	(0.000)	(0.001)	(0.001)	(0.006)
Observations	50	74	67	67	53
Adjusted R^2	0.555	0.785	0.645	0.589	0.789

Dependent variables: corruption indexes

BP=Bribes Paid by Treisman, ICRQ=ICRQ Quality of Governance,

CORR=Overall Political Corruption Index (V-Dem).

EXECORR=Executive Corruption Index (V-Dem).

PC=First Principal Component of corruption measures.

All columns include regional fixed effects.

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

depends of the level of immunity protection as well as on the quality of the judiciary.[21]

In Table 5 we look at the evidence for a differential effect of immunity in countries with weak/strong legal systems. We use the World Bank's Governance Indicator for the quality of the rule of law–which inquires into formal judicial independence, enforcement of court orders, the reliability of and trust in police services–as a measure of the quality and de facto independence of law enforcement.[22] The results of the regressions provide support for the idea that immunity does less harm when the legal system is weak, but the evidence is ambiguous. The first two regressions include an interaction term between immunity and the rule of law. The coefficient has the expected sign, but is significant at the 95% level only in the first regression and turns (marginally) insignificant when we add further controls. Including our full set of control variables, the coefficient stays positive but is no longer significant. In regressions (3) to (6), we look at different sub-samples of countries with good (bad) rule-of-law environments. We use different cut-offs along the distribution of the rule-of-law variables. In (3) and (4) we split the sample along the median, in (5) and (6) we only classify countries in the bottom tercile as weak rule-of-law systems. We find some evidence that the negative effects of immunity are stronger in good legal environments as evidenced by the higher and more precisely estimated coefficients. The explanatory power of the model is also considerably lower in the weak rule-of-law sample.

5.5 Identification

While the above results provide empirical support for our theoretical predictions, the issue of identification and hence causal interpretation of our results still needs to be addressed. Broad cross-country studies like ours deal with potentially important questions but face particular challenges in this dimension. In this section we make an effort to meet the identification challenge. We do so in two ways. First, we employ newly available granular corruption data from the V-Dem project (Coppedge et al. (2019)). This allows us to use top-level

[21] The model in Reddy, Schularick and Skreta (2014) allows for differences in politician's innate honesty level, so for each set of parameters there is a fraction of politicians who choose to be corrupt. There we also discuss the issue that politician's types can be endogenous to the level of the immunity protection.

[22] Although the variable measures some facets of the rule of law that are not directly related to formal understandings of law-enforcement independence–such as the extent to which persons and property are protected from criminality–we use the variable because it addresses a wide variety of legal mechanisms that a government could use to pressure an individual politician to take or refrain from a particular course of action. Hayo and Voigt (2007) find that public confidence in law-enforcement processes explains some of the gap between de jure and de facto judicial independence. In addition, this variable is employed by a large number of influential studies: La Porta, de Silanes, Pop-Eleches and Shleifer (2004), Haggard and Tiede (2011), Gourinchas, Rey and Truempler (2012), Antràs and Chor (2013). We have also corroborated the analysis with the only alternative indicator we are aware of, namely the rule-of-law index compiled by Freedom House.

Table 5: Immunity and the Rule of Law: Sample Split

Corruption (Transp. Intern.)	(1)	(2)	(3) weak < 50	(4) strong > 50	(5) weak < 33	(6) strong > 33
Immunity	0.195**	0.295**				
	(0.095)	(0.126)				
Immunity x Rule of Law	0.195**	0.105				
	(0.091)	(0.099)				
Rule of Law	-2.126***	-1.917***				
	(0.095)	(0.199)				
Real GDP Per Capita (log)		-0.502***	-0.640**	-2.195***	-0.526*	-1.940***
		(0.182)	(0.241)	(0.344)	(0.260)	(0.154)
English Legal Origin		0.082	0.017	-0.080	-0.164	-0.126
		(0.343)	(0.415)	(0.616)	(0.420)	(0.536)
French Legal Origin		0.029	0.182	0.223	0.149	0.211
		(0.263)	(0.304)	(0.529)	(0.285)	(0.417)
Democracy		0.876*	0.355	-0.224	0.698	0.395
		(0.447)	(0.756)	(1.324)	(0.755)	(0.682)
Trade Openness (log)		0.266	0.047	0.059	0.211	0.095
		(0.168)	(0.279)	(0.387)	(0.243)	(0.269)
Oil Export Share (log)		0.057	0.112	0.174	0.029	0.364***
		(0.060)	(0.091)	(0.126)	(0.068)	(0.113)
Observations	90	90	45	45	30	60
Adjusted R^2	0.881	0.894	0.039	0.525	-0.034	0.653

Dependent variable: Transparency International Corruption Index

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

executive corruption as the dependent variable while controlling for the overall corruption environment.[23] In a second step, we introduce an instrumental variable strategy relying on historical immunity provisions.

5.5.1 Controlling for Overall Corruption

We start by looking at corrupt behavior at the executive level only from the V-Dem dataset (Coppedge et al. (2019)). The focus on executive bribery and embezzlement also provides a direct test of the theoretical part that refers to governance outcomes at high levels of government.

The results are in Table 6. The regressions mirror the specifications shown above, but now the dependent variable is the narrower high-level executive corruption index from the V-Dem database, and we use the corresponding general corruption indicator from the V-Dem database ("Political Corruption") as a control variable. This general corruption index captures both "petty" and "grand," as well as corruption aimed and influencing law making and affecting implementation. Including this general corruption index as a right-hand-side variable arguably goes a long way towards eliminating concerns about omitted variables and simultaneity issues. In regression (2)-(4), we also include the broad Transparency and the World Bank indices that also constitute rather broad measurements of the overall corruption environments.

Reassuringly, the results remain supportive of the immunity-corruption link. The corruption-inducing effects of immunity provisions are strong across the specifications: Cross-country variation in immunity protection is closely associated with executive corruption levels while holding the overall corruption environment constant. While these results arguably address the most prominent concerns about omitted variables, corrupt elites may still successfully push for generous executive immunity rules. The instrumental variable strategy outlined in the next section aims to address the remaining identification challenges.

5.5.2 Instrumental Variables Estimations

The previous analysis has demonstrated a conditional correlation between immunity protection and corruption that was robust to various additional checks. In the following, we turn to instrumental variable regressions to support the causal interpretation of the results. Our strategy is as follows. As above, we are interested in the relationship between corruption outcomes and political immunity given by:

$$C_i = \alpha + \beta_C I_i + \gamma_C \mathbf{X}_i + \epsilon_{Ci}. \tag{5.2}$$

In a first step, we show that current immunity regimes are closely correlated to historical immunity rules at the time of a country's first democratic constitution H_i. If historical immunity provisions are correlated with current immunity, but uncorrelated with other country characteristics, they constitute a valid instrument.

[23] We are indebted to an anonymous referee for suggesting this strategy.

Table 6: Controlling Overall Corruption

Executive Corruption (V-Dem)	(1)	(2)	(3)	(4)
Current Immunity	0.310***	0.333***	0.339***	0.387***
	(0.100)	(0.098)	(0.098)	(0.138)
Real GDP Per Capita (log)	-0.065	-0.082	-0.079	-0.029
	(0.042)	(0.049)	(0.050)	(0.066)
English Legal Origin	0.218***	0.225***	0.220***	0.168*
	(0.053)	(0.054)	(0.054)	(0.085)
French Legal Origin	0.055	0.057	0.053	0.025
	(0.037)	(0.037)	(0.038)	(0.058)
Majoritarian Election	-0.018	-0.019	-0.022	-0.032
	(0.048)	(0.050)	(0.052)	(0.070)
Presidential System	-0.085	-0.092*	-0.092*	-0.172
	(0.051)	(0.051)	(0.051)	(0.105)
Democracy	0.095	0.099	0.099	-0.123
	(0.137)	(0.140)	(0.141)	(0.140)
Trade Openness (log)	0.010	0.011	0.011	0.021
	(0.031)	(0.031)	(0.031)	(0.062)
Oil Export Share (log)	0.012	0.014	0.012	0.012
	(0.011)	(0.011)	(0.011)	(0.013)
Fisman-Miguel Index	0.000	0.000	-0.000	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Overall Political Corruption (V-Dem)	0.658***	0.690***	0.672***	0.699***
	(0.098)	(0.119)	(0.123)	(0.186)
Corruption (TI)		-0.010	-0.026	-0.023
		(0.015)	(0.028)	(0.038)
Corruption (WB)			0.045	0.088
			(0.067)	(0.115)
Bribes paid				-0.025
				(0.042)
Observations	67	67	67	43
Adjusted R^2	0.771	0.768	0.765	0.810

Dependent variables: Executive Corruption (V-Dem)

All columns include regional fixed effects and controls for legal origins.

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The crucial assumption here is that early institutional choices at the time of the first democratic constitution reflected historical contingencies at the time that persist over time and are uncorrelated with the error term.

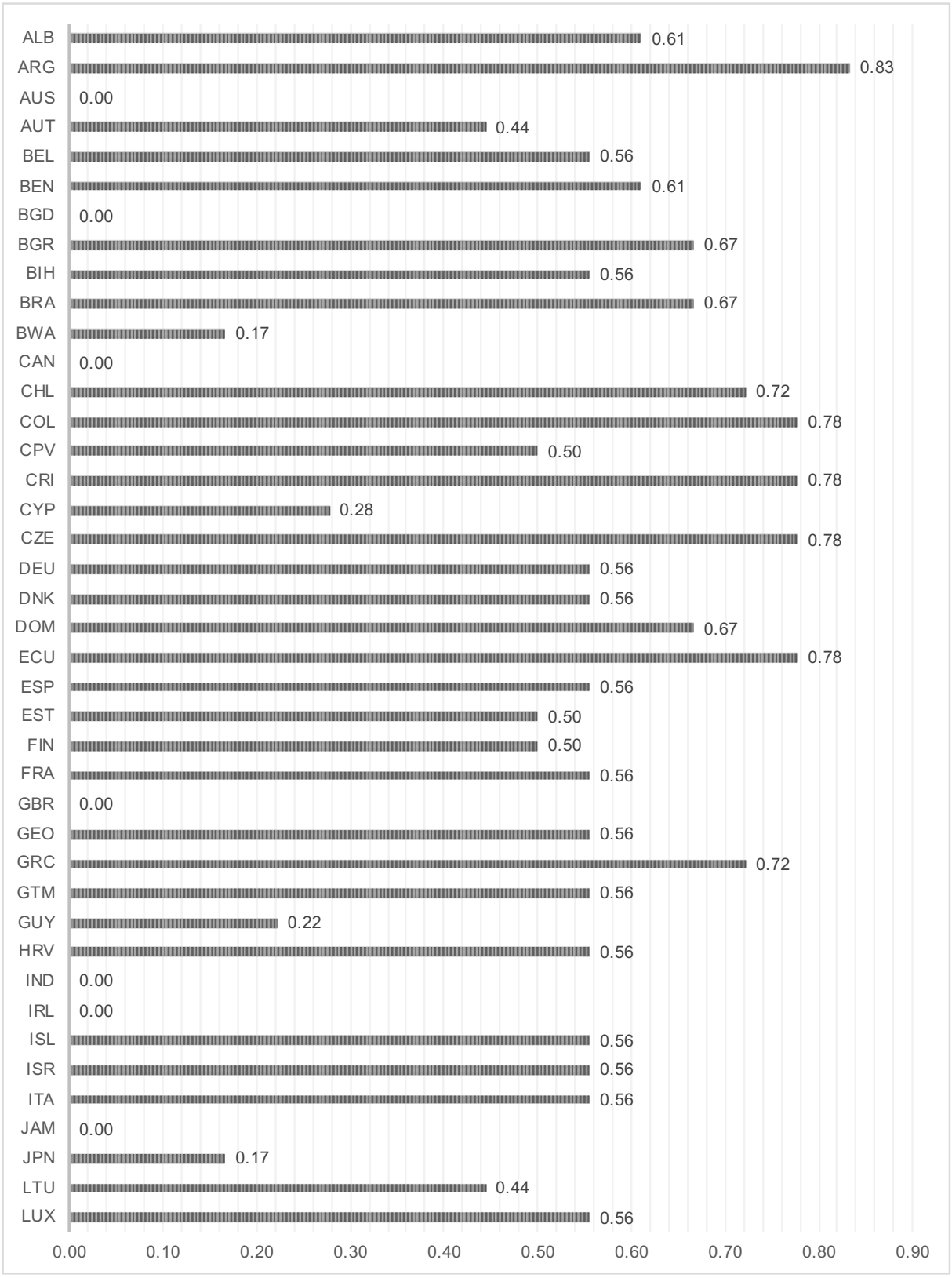
While it seems plausible that specific immunity provisions dating back to previous centuries impact current corruption mainly through institutional persistence, a potential objection could be that even early immunity provisions could still be a function of deep cultural or other parameters. Put differently, more corrupt societies could have already chosen more generous early immunity provisions two centuries ago. We alleviate these concerns using new data made available by the V-Dem project that gives us information about the corruption level at the time when the first constitution was introduced. While such historical corruption levels will be measured with error (essentially relying on historians' reading of the sources and political situation at the time), it is still plausible that it will capture large cross-country differences in corruption when early constitutional choices were made. This means that we can control for the effect of historical corruption levels and orthogonalize immunity provisions in the first constitution with respect to corruption levels back in time. As immunity provisions at the time of the first democratic constitution are to some extent driven by different legal histories, we will also include controls for legal origins in the regressions, and only study variation within legal origin "families".

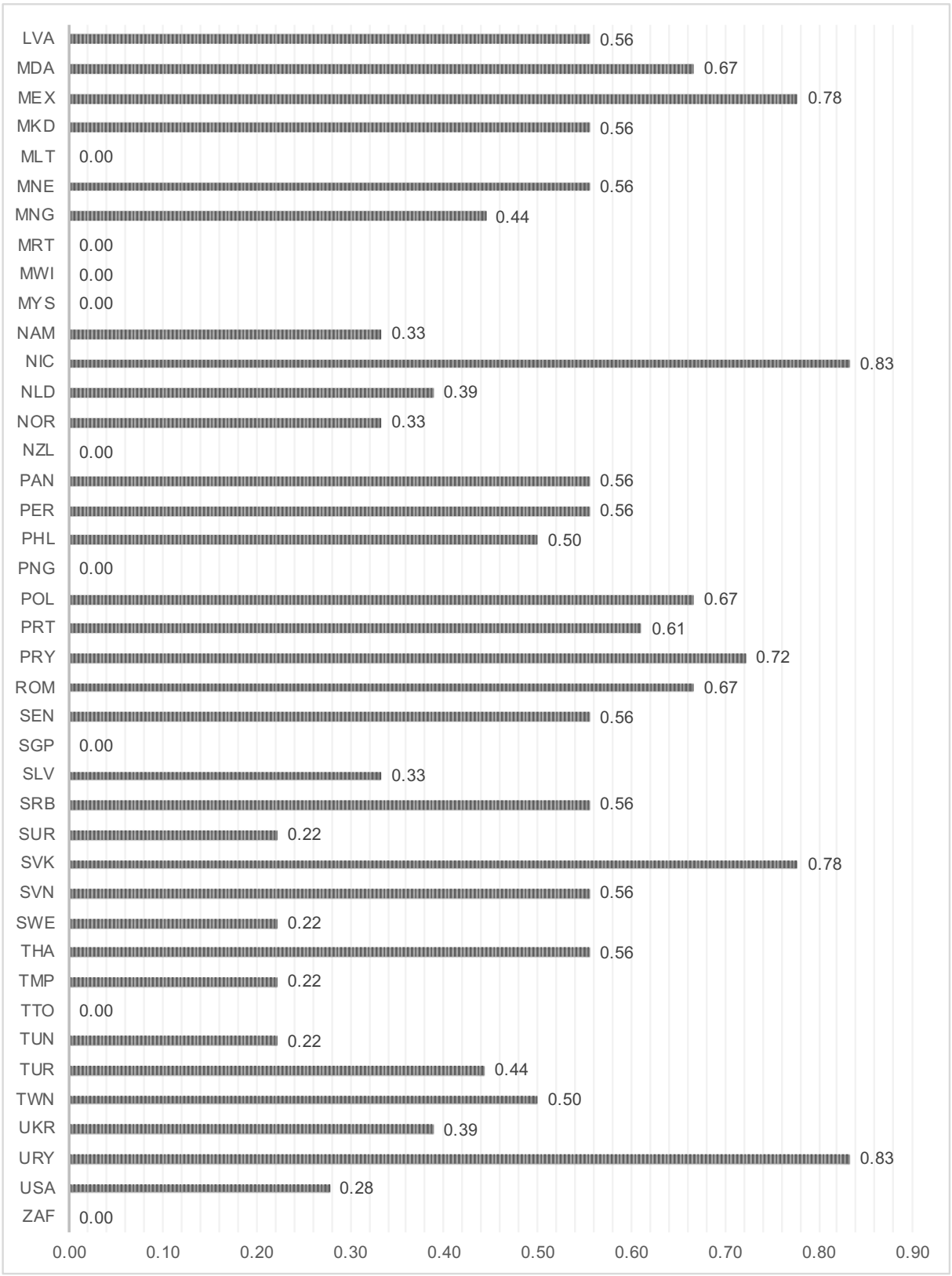
We propose to use the historical immunity regime H_i to instrument for the current regime I_i:

$$I_i = \alpha + \beta_I H_i + \gamma_I \mathbf{X}_i + \epsilon_{Ii'}. \tag{5.3}$$

Relying on historical constitutions and legal documents, we generate the scores by quantifying the strength of the immunity regime in each country in the year of the first democratic constitution, typically in the 19th century. Table A in the Appendix shows the years of the first democratic constitution that we use for the coding of historical immunity rules. We code historical immunity using the same methodology as for the coding of current immunity, we namely, apply the same 18-question scoring rubric. We could not locate the applicable historical legal provisions for Ghana, Hungary, Indonesia, Lesotho, South Korea, Switzerland, Tanzania, and Zambia, and thus had to omit these states from the historical sample. The resulting historical immunity scores are shown in Figure 5.2.

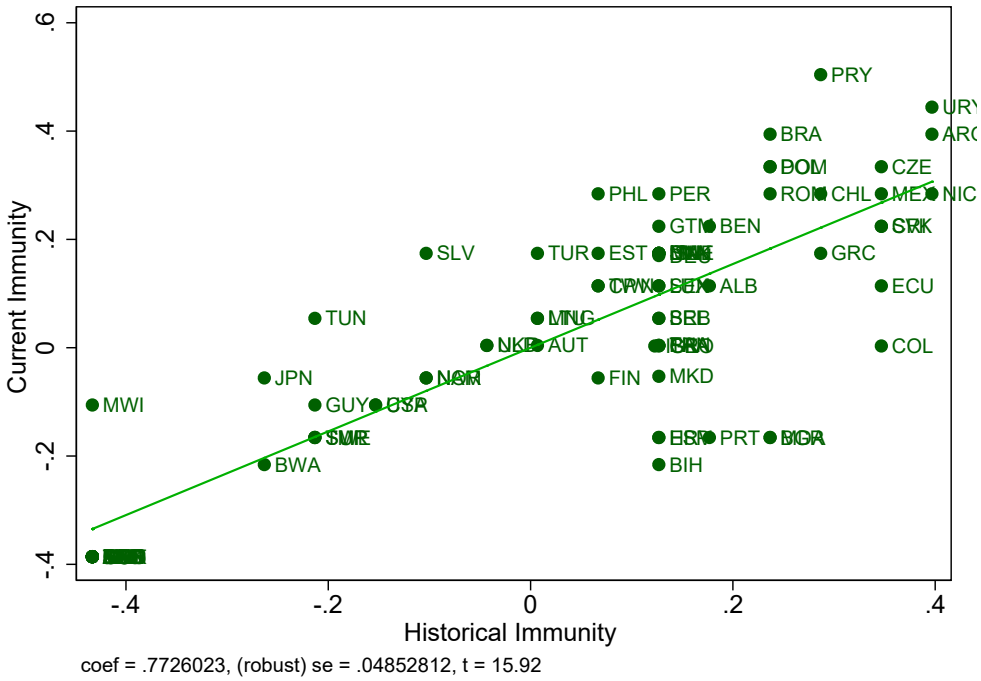
Figure 5.2: Historical Immunity Scores Across Democracies




LVA 0.56
MDA 0.67
MEX 0.78
MKD 0.56
MLT 0.00
MNE 0.56
MNG 0.44
MRT 0.00
MWI 0.00
MYS 0.00
NAM 0.33
NIC 0.83
NLD 0.39
NOR 0.33
NZL 0.00
PAN 0.56
PER 0.56
PHL 0.50
PNG 0.00
POL 0.67
PRT 0.61
PRY 0.72
ROM 0.67
SEN 0.56
SGP 0.00
SLV 0.33
SRB 0.56
SUR 0.22
SVK 0.78
SVN 0.56
SWE 0.22
THA 0.56
TMP 0.22
TTO 0.00
TUN 0.22
TUR 0.44
TWN 0.50
UKR 0.39
URY 0.83
USA 0.28
ZAF 0.00
0.00 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90

In Figure 5.3 we plot the historical immunity scores against the current level of immunity protection of politicians. The graph shows that immunity regimes are highly persistent over time. In the Americas, for instance, the mean age of immunity provisions that we studied 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 orchestrated a revision of the Chilean Constitution that included lifelong immunity for former presidents, a change that was repealed after the country returned to democratic rule. This persistence is present in our entire sample: The correlation between the historical and current immunity scores coefficient is 0.83 and statistically highly significant. Modern immunity provisions seem to follow the historical choices made early on in a country's democratic history.

Figure 5.3: Current and Historical Immunity Regime



Notes: See text.

Using the data from the V-Dem project, we dispose of a measure for the level of general corruption in a given country at the time of the first constitution. As discussed above, this allows us to rule out that we are picking up that more corrupt countries opted for more generous immunity provisions early on. Instrumental variable estimations using historical immunity rules at the time of the first democratic transition as an instrument for current immunity are reported in Table 7. As before, we begin with the established governance indices from Transparency International before moving on to the World Bank index

in 8. The first column reports the baseline estimates with only the income level as a control variable, before adding further controls. Importantly, the estimates in column (4) control for the historical corruption levels at the time of the first constitution.

Table 7: Two Stage Least Squares Estimates: Transparency Corruption Index

	(1)	(2)	(3)	(4)
Current Immunity	2.922***	3.451***	4.199***	4.048***
	(0.863)	(0.985)	(1.242)	(1.359)
Real GDP Per Capita (log)	-2.085***	-2.084***	-2.066***	-1.894***
	(0.140)	(0.143)	(0.169)	(0.190)
Oil Export Share (log)		0.204**	0.216*	0.216**
		(0.100)	(0.113)	(0.106)
Trade Openness (log)		-0.121	0.031	0.436
		(0.240)	(0.299)	(0.281)
Democracy		-0.940	-1.035	-0.191
		(0.630)	(0.653)	(0.640)
Fisman-Miguel Index			0.007	0.010**
			(0.005)	(0.004)
Historical Corruption (V-Dem)				1.425*
				(0.831)
Controls for Legal Origins	Yes	Yes	Yes	Yes
Regional Fixed Effects	Yes	Yes	Yes	Yes
Observations	82	82	74	61
Adjusted R^2	0.678	0.697	0.705	0.734

IV estimates of the relationship between immunity and governance.
Dependent variable: Transparency International Corruption Index.
Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The IV estimations strengthen the case for a causal relationship between immunity provisions and corruption outcomes. The immunity variable remains positive and statistically significant in all specifications. Moreover, the magnitude in the IV estimates is slightly larger than in the OLS specifications. The IV estimates also surpass the critical value of 16 developed by Stock and Yogo (2005) for the first stage F-statistic. In light of the result, the instrument appears sufficiently strong. Of considerable interest is the estimation in column (4) where we control for historical corruption levels at the time of the first constitution. The idea is to show that our results overcome the objection that more corrupt places might have chosen more generous immunity protections back in time. The results are also robust to controlling directly for today's cultural differences in law-abiding behavior with the Fisman and Miguel (2007) parking violation index.

In Table 8, we report the same set of instrumental variable estimations using historical immunity as an instrument for current immunity, but use the World Bank Corruption Index as our outcome variable.

As before, the choice of the dependent variable appears to make little difference. The IV regressions in Table 8 confirm the positive relationship between immunity and corruption that we found earlier in the OLS estimates. As in Table 7, the estimates are highly significant and the coefficients typically larger than in the OLS estimates suggesting that those may represent a lower-bound estimate of the strength of the relationship due to attenuation bias in OLS.

Table 8: Two Stage Least Squares Estimates: World Bank Corruption Index

	(1)	(2)	(3)	(4)
Current Immunity	0.865**	1.095**	1.404**	1.478***
	(0.388)	(0.480)	(0.563)	(0.552)
Real GDP Per Capita (log)	-0.879***	-0.878***	-0.882***	-0.847***
	(0.065)	(0.068)	(0.080)	(0.089)
Oil Export Share (log)		0.087**	0.102**	0.129***
		(0.043)	(0.047)	(0.038)
Trade Openness (log)		-0.043	0.020	0.208*
		(0.107)	(0.130)	(0.111)
Democracy		-0.409	-0.433	-0.144
		(0.282)	(0.270)	(0.273)
Fisman-Miguel Index			0.005**	0.005**
			(0.002)	(0.002)
Historical Corruption (V-Dem)				0.538
				(0.338)
Controls for Legal Origins	Yes	Yes	Yes	Yes
Regional Fixed Effects	Yes	Yes	Yes	Yes
Observations	82	82	74	61
Adjusted R^2	0.663	0.684	0.715	0.743

IV estimates of the relationship between immunity and governance.
Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Our last and perhaps most important test of a causal link between immunity and corruption combines the IV strategy with the granularity offered by the corruption measurements from the V-Dem database. As noted before, the V-Dem data rely on expert opinions with the data being made comparable across countries. With this data set we can separate high-level executive corruption from the overall corruption environment in a given country as well as control for historical corruption levels. It seems plausible that any "deep" cultural determinants of corruption are captured in the general corruption environment while the historical corruption data make sure that we only use institutional variation holding initial corruption levels constant. As before, we also include the Fisman and Miguel (2007) data to control for today's differences in corruption culture as a proxy for other cultural factors potentially affecting governance outcomes that have developed over time.

The 2-SLS regressions in Table 9 suggest that the effect of immunity provision on corruption outcomes may indeed be causal. We find a significant positive effect of the variation in today's immunity protection that is explained by historical immunity levels on executive corruption outcomes. Note that controlling for overall corruption means that we only focus on differences in executive corruption outcomes that are unrelated to the overall corruption situation in a country. Immunity provisions, we conclude, are responsible for corruption outcomes on the executive level.

Table 9: Two Stage Least Squares Estimates: Executive Corruption Index (V-Dem)

	(1)	(2)	(3)	(4)
Current Immunity	0.496***	0.576***	0.508***	0.325*
	(0.185)	(0.185)	(0.192)	(0.187)
Real GDP Per Capita (log)	-0.170***	-0.170***	-0.161***	-0.040
	(0.023)	(0.025)	(0.029)	(0.032)
Oil Export Share (log)		0.026*	0.020	0.011
		(0.015)	(0.015)	(0.015)
Trade Openness (log)		0.013	0.019	0.017
		(0.039)	(0.041)	(0.033)
Democracy		-0.121	-0.126	0.107
		(0.137)	(0.133)	(0.119)
Fisman-Miguel Index			0.002*	0.001
			(0.001)	(0.001)
Historical Corruption (V-Dem)				0.013
				(0.091)
Overall Political Corruption (V-Dem)				0.683***
				(0.094)
Controls for Legal Origins	Yes	Yes	Yes	Yes
Regional Fixed Effects	Yes	Yes	Yes	Yes
Observations	72	72	67	61
Adjusted R^2	0.402	0.411	0.422	0.675

IV estimates of the relationship between immunity and governance.
Dependent variable: Executive Corruption (V-Dem).
Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

6 Conclusions

This paper examines legal provisions that shield politicians from criminal prosecution. We show that such provisions, which we refer to as immunity, are a double-edged sword. Immunity may improve governance because it protects honest politicians from false charges and politically motivated prosecution, in particular early on in a country's democratization process. This explains why immunity has proven to be such a prevalent and persistent institution throughout the course of history. However, immunity simultaneously provides politicians with legal protection for unlawful activities.

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, both today and historically. We consult written constitutions, founding documents, legislative acts, case law, statutes, and legislative rules of procedure in 90 countries on all six settled continents. The resulting immunity scores comprise eighteen variables that measure the relative protection of politicians. The scoring reveals significant cross-jurisdictional diversity in the strength of immunity. We then use the resulting immunity scores to study the empirical connection between immunity and corruption.

Controlling for standard determinants of corruption, OLS estimations show that immunity is associated with greater corruption and that this correlation is robust to the inclusion of a large number of controls often associated with corruption. Moreover, our instrumental variable estimations suggest that the effect is likely causal. Immunity for politicians may be a useful device to protect democratically elected politicians in nascent democracies. In mature democracies, however, it is a cause of corruption, public mismanagement, and weak governance. These in turn take a potentially large toll on economic development (Mauro, 1995). Given that little attention has been devoted to this important dimension of accountability, we expect that future studies will build on our work and investigate the institution of immunity in modern democracies in greater detail. While our study focused on democracies, politicians are accountable to the electorate in democratic systems, interesting questions arise in autocracies. In autocracies officials are less accountable de facto so immunity might operate differently under such circumstances. Studying the effects of immunity protection in autocracies would be interesting but must be left for future research.

A Appendix

Table 10: Additional Control Variables

	(1) TI	(2) WB	(3) TI	(4) WB
Immunity	1.96***	0.62*	2.57***	0.92***
	(0.70)	(0.34)	(0.61)	(0.28)
Real GDP Per Capita (log)	-1.85***	-0.74***	-2.09***	-0.83***
	(0.20)	(0.10)	(0.21)	(0.12)
Democracy	1.27	0.45	1.12	0.37
	(0.77)	(0.33)	(0.70)	(0.33)
Presidential System	-0.71**	-0.24*	-1.28***	-0.46***
	(0.34)	(0.14)	(0.35)	(0.16)
Majoritarian Election	-0.09	0.03	-0.03	0.05
	(0.31)	(0.14)	(0.31)	(0.14)
English Legal Origin	-0.03	0.04	0.20	0.17
	(0.44)	(0.19)	(0.42)	(0.20)
French Legal Origin	-0.39	-0.05	-0.22	-0.01
	(0.29)	(0.13)	(0.29)	(0.14)
Oil Export Share (log)	0.31***	0.12***	0.35***	0.14***
	(0.09)	(0.04)	(0.09)	(0.04)
Trade Openness (log)	0.12	0.05	0.24	0.08
	(0.23)	(0.11)	(0.24)	(0.12)
Press Freedom	0.93**	0.44**	0.69**	0.35**
	(0.39)	(0.17)	(0.34)	(0.16)
Ethnic Fractionalization	-0.33	0.03	-0.09	0.10
	(0.51)	(0.25)	(0.57)	(0.28)
Protestant Share	-2.31***	-0.77***	-2.68***	-0.87***
	(0.52)	(0.24)	(0.56)	(0.27)
Fisman-Miguel index			-0.01*	-0.00
			(0.00)	(0.00)
Regional fixed effects	Yes	Yes	Yes	Yes
Observations	86	86	78	78
Adjusted R^2	0.841	0.821	0.871	0.850

Standard errors in parentheses
WB = World Bank, TI = Transparency International
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 11: Historical Coding Year

Country	Constitution Year
Albania	1928
Australia	1901
Austria	1920
Bangladesh	1956
Benin	1990
Botswana	1970
Brazil	1891
Bulgaria	1879
Canada	1867
Cape Verde	1992
Colombia	1821
Costa Rica	1869
Croatia	1921
Cyprus	1960
Czech Republic	1920
Denmark	1849
Dominican Republic	1844
El Salvador	1841
Estonia	1920
Finland	1928
France	1848
Georgia	1921
Germany	1919
Greece	1822
Guatemala	1825
Guyana	1970
Iceland	1944
India	1950
Ireland	1922
Israel	1968

Country Name	Constitution Year
Italy	1948
Jamaica	1962
Latvia	1922
Lithuania	1922
Malawi	1964
Malaysia	1957
Mexico	1824
Mongolia	1992
Namibia	1990
Netherlands	1848
New Zealand	1949
Norway	1814
Panama	1904
Papua New Guinea	1975
Paraguay	1870
Peru	1823
Philippines	1899
Poland	1921
Portugal	1911
Senegal	1959
Serbia	1921
Singapore	1963
Slovakia	1920
South Africa	1961
Spain	1931
Suriname	1987
Sweden	1809
Taiwan	1991
Thailand	1932
Trinidad and Tobago	1976
Tunisia	1959

Country Name	Constitution Year
Turkey	1924
Ukraine	1996
United Kingdom	1721
Uruguay	1830

N=65.

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