ECONSTOR
Make Your Publications Visible.

A Service of

ZBW Leibniz-Informationszentrum Wirtschaft
Leibniz Information Centre for Economics

Adsera, Alicia; Boix, Carles; Payne, Mark

Working Paper

Are You Being Served?: Political Accountability and Quality of Government

Working Paper, No. 438

Provided in Cooperation with:
Inter-American Development Bank (IDB), Washington, DC

Suggested Citation: Adsera, Alicia; Boix, Carles; Payne, Mark (2000) : Are You Being Served?: Political Accountability and Quality of Government, Working Paper, No. 438, Inter-American Development Bank, Research Department, Washington, DC

This Version is available at:
http://hdl.handle.net/10419/87999

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

WWW.ECONSTOR.EU

Mitglied der Leibniz-Gemeinschaft

Inter-American Development Bank
Banco Interamericano de Desarrollo (BID)
Research department
Departamento de investigación
Working Paper #438

Are You Being Served?: Political Accountability and Quality of Government

By

Alícia Adserà*
Carles Boix**
Mark Payne***

***University of Illinois at Chicago**
****University of Chicago**
*****Inter-American Development Bank**

November 2000

Cataloging-in-Publication data provided by the
Inter-American Development Bank
Felipe Herrera Library

Adserà, Alícia.
Are you being served? : political accountability and quality of government / by Alícia Adserà, Carles Boix, Mark Payne.

p. cm. (Research Department Working papers series ; 438)
Includes bibliographical references.

1. Political corruption. 2. Political ethics I.Boix, Carles. II. Payne, Mark. III. Inter-American Development Bank. Research Dept. IV. Title. V. Series.

364.1323 A86--dc21

©2000
Inter-American Development Bank
1300 New York Avenue, N.W.
Washington, D.C. 20577

The views and interpretations in this document are those of the authors and should not be attributed to the Inter-American Development Bank, or to any individual acting on its behalf.

The Research Department (RES) publishes the *Latin American Economic Policies Newsletter*, as well as working papers and books, on diverse economic issues.

To obtain a complete list of RES publications, and read or download them please visit our web site at: http://www.iadb.org/res/32.htm

Abstract [i]

This paper explores, both formally and empirically, the political accountability mechanisms that lie behind the varying levels of public corruption and of effective governance taking place across nations. The first section develops a principal-agent model in which good governance is a function of the extent to which citizens can hold political officials accountable for their actions. Although policy-makers may have strong incentives to appropriate parts of the citizens' income, well-designed institutions (those increasing both informational flows and elite competitiveness) boost political accountability and reduce the space left for the appropriation of rents. The following sections of the paper test the model. The presence of democratic mechanisms of control and an increasingly informed electorate, measured through the frequency of newspaper readership, explain considerably well the distribution of corrupt practices and governmental ineffectiveness in three types of data sets: a large cross-section of countries in the late 1990s for which an extensive battery of governance indicators has been recently developed by Kaufmann *et al*. (1999a); a panel data set for the period 1980-95 and about 100 nations on corruption and bureaucratic quality based on experts' rankings; and corruption data for the cross-section of US states in the period 1977-95.

[i] A previous version of this paper has been presented at the "Performance of Democracies" Workshop, October 25, 2000, at Harvard University. We acknowledge the comments of its participants and particularly those of Peter Hall, Susan Pharr and Robert Putnam. We thank Thomas Schlesinger for making the data on corruption at the US states level available to us and Cristina Mora for her research assistance. Mark Payne acknowledges the support of the Research Department at the Inter-American Development Bank. Comments may be directed to the authors at adsera@uic.edu, cboix@midway.uchicago.edu and markp@iadb.org, respectively.

Introduction

Although the number of democratic regimes, and thus the use of proper constitutional mechanisms to make politicians accountable to citizens, have expanded substantially in the last decades, corruption among public officials and, more generally, malfunctioning governments remain widespread phenomena across the globe. Unfortunately, this failure to create good governing institutions has dramatic economic and political consequences. On the one hand, growth and, in broader terms, the welfare of citizens have been shown to be enhanced by well-functioning governments, that is, governments that abide by the rule of law, whose bureaucrats and policymakers are not affected by graft practices, and whose administrative machinery delivers goods and services in an efficient manner (Easterly and Levine, 1997; Kaufmann *et al*., 1999a; Knack and Keefer, 1995; Mauro, 1995). On the other hand, for those regimes with elected governments, the presence of political corruption and administrative inefficiency point to a fundamental break in the basis of what should be formally considered representative democracies.

In contrast to the mounting scholarly research on the consequences of good governance, our knowledge about what causes governments to be clean and efficient is still in its infancy. The current literature has alternatively embraced pre-existing economic conditions, broad cultural patterns, the existence of a particular cooperative milieu among social agents and certain constitutional frameworks as the causes that lie behind good governance. For those researchers who stress the role of the economy, well-performing public institutions are the result of having enough physical and human assets to enable policy-makers to fund and manage in an effective manner comprehensive policies and modern administrative agencies. Cultural theorists emphasize instead the set of normative bonds in which political action is embedded. Effective and uncorrupted governments only arise whenever public civicness or certain ethical beliefs constitute a dominant value in the political community. More recently, good governance has been related to the existence of social capital, that is, the presence of institutionalized norms of reciprocity and trust, enough to empower citizens to overcome potential collective action problems. Finally, and in direct correspondence with the Federalist debates of two centuries ago, for the neoinstitutionalist strand of political science good constitutional engineering should eventually generate the conditions for effective governance. Matching this oversupply of

theoretical models, the current empirical work is still inconclusive.[1] More importantly, the prevailing theories of political corruption and governmental performance have hardly fleshed out the micro-mechanisms through which policy-makers comply or, more exactly, are made to comply with the law and behave in a benevolent fashion.

Accordingly, to account for varying levels of public corruption and of effective governmental governance across nations, this paper develops, in its first section, a principal-agent model in which good governance is a function of the extent to which citizens can hold political officials accountable for their actions. In a world in which the actions of a policymaker (as well their consequences) are only partly observable to citizens, the former can be shown to have strong incentives to appropriate parts of the latter's income. Rent-seeking behavior, however, is conditional on the information citizens have over both the state of the world and the policy-maker's decisions. As information goes up, political accountability rises, and the space left for the appropriation of rents declines. The following two sections of the paper test the model. In Section 2 we show that both the presence of democratic mechanisms of control and an increasingly informed electorate, measured through the frequency of newspaper readership, explain considerably well the distribution of corrupt practices and governmental ineffectiveness across a world sample. In Section 3 we extend these results to the universe of U.S. states. Section 4 concludes.

1. A Theory of Political Accountability

To develop a theory of the causes of political corruption (and, more generally, of good governance), we explore the institutional and informational conditions under which the public can induce policymakers and bureaucrats to behave well.

Following the most recent literature on the sources of political accountability, we can conceive of the machinery of government as a game in which a principal, the public, delegates on an agent, the policy-maker, a given set of instruments to execute certain goals (Przeworski, Stokes and Manin, 1999). This delegation process is not exempted, however, from considerable political tensions due to the existence of both heterogeneous interests and informational asymmetries between the principal and the agent. First, policymakers and voters may have

[1] Most studies on corruption are focused on case studies. Exceptions to this trend are Treisman (1998) and La Porta *et al.* (1998), who use a worldwide sample. Putnam (1993) explores the broader issue of governance for the universe

interests at odds with each other: the former may be simply interested in enriching themselves while in office; or, even if they are honest, their ideas about what enhances the welfare of the public may differ from what the public itself wants. Second, the principal and agents may differ in their corresponding levels of information about the state of the world, the policies to be pursued and their welfare consequences. If the public is less well informed than the policy-maker, the latter can more easily impose her preferences or even exploit the public. In short, the delegation of decision-making and policy implementation responsibilities, a "must" in modern representative democracies, automatically opens up the possibility for significant inefficiencies and corruption among political practitioners.

As shown in the seminal papers of Barro (1973) and Ferejohn (1986), the solution to the delegation problem lies in the public setting up a control mechanism, such as regular elections, to discipline the policy-maker. If electors vote retrospectively, that is, if they look backwards to the results provided by the incumbent before casting their ballot, elections should make policymakers accountable to the public. Being dependent on electors' support, politicians would strive to deliver good services and refrain from extracting rents. Yet that solution may be only partial. As we show formally below, the effectiveness of any control mechanism depends both on the instruments that the public has to collect information on the behavior of the government and on the ease with which the control device can be exercised.

To model the relationship between policymakers and citizens and to explore the mechanisms through which political accountability and good government take place, we use a principal-agent model developed in Persson and Tabellini (2000). We extend it to allow for variation in both the extent of information citizens have and on the type of political regime (democratic or authoritarian) in place.

Agents and budget constraint. In the model we consider the incumbent politician's single-period payoff as:

$$U^P = ? r + P \qquad (1)$$

where r are the rents she is able to extract in the period, reduced by the transaction costs of appropriating them ($0<? <1$), and P are the perks she gets from being in the government, such as recognition, nice cars, good restaurants and so on.

---

of Italian regions. These studies also include systematic reviews of the existing theoretical literature.

Income does not vary among individuals. Moreover, government spending cannot be targeted to any specific group. As a result, there are *N* voters with identical preferences, that is, with the following utility function:

$$U^V = c + H(g) = y - t + H(g) \quad (2)$$

where *c* denotes consumption, *y* income, t taxes, *g* a public good and *H(.)* is a concave and increasing function.

In that setting, the government budget constraint is given by:

$$? g = N t - r \quad (3)$$

where $?e [?_L, ?_H]$ is a random variable, with a well defined density *s(.)* and distribution *S(.)* functions, that denotes the cost of producing public goods.

Complete information. In the absence of information or moral hazard problems, rents should be zero, *r=0,* and the public goods provision by a benevolent dictator should follow the Samuelson criteria:

$$N H_g(g) = ? \quad (4)$$

As a result, the optimal g would be defined by an decreasing function *G(?)*, and the optimal tax would be set at t *=T(?)=? G(?)/N*. This policy will be unanimously endorsed by the citizens.

Incomplete or no information. A more plausible scenario, however, is one in which the principal, that is, citizens, cannot fully observe either the state of the world or the actions (and their consequences) of policymakers. To understand how citizens may discipline the policymaker, consider the following game.

First, the state of the economy *?* is realized. Whereas the policy-maker fully observes it, the degree of information that voters have may be incomplete. In the most extreme case, that is, in a situation in which voters have no information about the state of the economy and/or life in the presidential palace, they can only use the unconditional distribution of *?* to make their inferences, that is, *S(.)*, to vote. More plausibly, over time voters obtain some information, through news media, personal networks or their own direct experiences, about the realization of *?*, which they will use to update their beliefs about the distribution of *?* in that particular period. As voters gather more relevant information, they obtain a conditional distribution of the realization of *?* that has a smaller support than *s(.)* and, consequently, a lower variance. (If the information is complete, of course, they perfectly observe the realized state of nature with no

uncertainty.) We define *S(.)* and *s(.)* as the conditional cumulative distribution and density functions of *?* that voters use each period. These functions vary each period depending both on the particular realization of *?* and on the information that voters have.

Second, with that information about the state of the world, citizens set their reservation utility level $\hat{U}^V$, that is, a minimal performance standard, such as a given unemployment rate or a certain speed in issuing drivers' licenses, to evaluate the incumbent. If the standard is met, citizens support the incumbent—independently of the real effort made by the policymaker. Conversely, whenever that standard is not attained, citizens shift to the opposition candidate. In short, citizens simply behave using a retrospective voting rule, in which ex-ante all politicians are considered to have similar preferences and abilities. Formally, their support rule will be:

$$p^I = 1 \text{ if } W(?)\, y - t + H(g) \;\; \hat{U}^V \qquad (5)$$

$$p^I = 0 \quad otherwise \qquad (6)$$

where p^I is the probability of supporting the incumbent.

Citizens only re-extend their support to the incumbent if the utility level they derive from public policy in state *?* exceeds a certain cutoff point $\hat{U}^V$. Now, how strict that evaluation yardstick will be varies with the beliefs that citizens have about the state of the world and about the efficacy of the instruments at the hands of the policy-maker. Notice that standard models of political accountability always assume a competitive democratic system in which voters hold policymakers accountable through elections. Here, however, we cast our net wider: we substitute citizens and support for voters and ballots. The goal is to extend the idea of political accountability through the more generic concept of support to examine how political control (and good government) fare under both democratic and non-democratic regimes. Even the most cruel dictatorships require some level of support (at least among sympathizers) to sustain themselves over time. With support related to some minimal performance, whenever that performance is not met, the regime should fall. Naturally, the higher cost of overthrowing a dictatorship (compared with kicking out the incumbent through elections) reduces the relative price of the goods the regime should deliver to avoid a revolution. As a result, mismanagement and corruption should be much higher under authoritarian regimes than democracies, other things being equal. The possibility of different types of regimes (with very different support thresholds) is formally modeled below.

Knowing the state of the world, the information citizens have, and the retrospective rule they have chosen, the policymaker may embrace two alternative policies. She may please the voters, giving them a policy that satisfies (5) and that secures her reelection. In this case, that is, in securing reelection, the total payoff for the incumbent will be $?r^* + P + ßO^I$, where r^* are the minimal rents politicians get, P the perks, $ß$ the discounting factor and O^I the present discounted utility of being in office in the next period. Alternatively, the incumbent may decide to behave myopically and maximize short-term rents, setting $t = d\,y$ and obtaining $r = d\,Ny$. This will allow her to secure $?d\,N\,y + P + ßO^O$.[2] The parameter O^O represents the present discounted utility of being out of office in the next period.[3] The parameter d ($0 < d < 1$) captures the difficulty with which politicians may appropriate citizens' income. It declines to 0 as the appropriation of the income y becomes more difficult. Accordingly, as d drops, the incentive politicians have to behave myopically decline and the probability of having good policies go up.

There are two main factors that make the appropriation (or confiscation) of the national income harder for politicians, that is, that lead to a fall of the parameter d. First, d declines with an increase in the regular use of democratic procedures to elect public officials. Overthrowing an incumbent through a revolution or mass protests rather than through regularly contested elections is much more costly to citizens, due to the risks associated with the violence, the problems of coordinating high numbers of protesters, etc. In other words, in authoritarian regimes, where the price of making politicians accountable is much higher, politicians would be more likely to maximize short-term rents. Corruption and mismanagement should be much higher in dictatorships.[4] Second, d varies with the economic structure in place for two reasons: it decreases as the specificity of assets (that generate y) falls; and it also falls as the economic resources become more diversified. As assets become less specific, that is, as the cost of putting them to alternative uses declines, their owners can more easily escape the brunt of self-interested policy-makers. Anticipating the exit option of asset owners, which makes the possibility of appropriating income more difficult to politicians, policymakers will be more inclined to follow

[2] Alternatively, we may consider that the ability to confiscate only extends to that amount of revenue that the voters may consider ex-ante reasonable for any potential realization of the state of nature, given their information. This will of course reduce the size of rents.

[3] In an a complete intertemporal model, O^I and O^O would be determined by the model (see Persson, Roland and Tabellini, 1997). For simplicity of the exposition here, we consider them as given.

[4] Another way to reduce d may consist of designing constitutional structures that increase the costs of appropriating income. This would the case of a separation-of-powers system or a federal structure: with several politicians in charge, the ability of just one of them appropriating the whole national income diminishes substantially.

the first political strategy, which consists on providing the level of public goods expected by citizens. Similarly, as the economy becomes more diversified, that is, as it moves from producing only one product, say oil, to having many economic sectors, the cost of appropriating rents by the state is likely to increase. In short, as asset specificity and economic concentration decline, governmental performance should improve.

Voters may always have to cope with a minimum amount of rents (for any state of nature) depending on the parameters of the model. Minimum rents will be determined by comparing the discounted stream of gains from being reelected to those that result from losing power:

$$? r^{*} + P + ßO^{I} = ? d N y + P + ßO^{O} \quad (7)$$

Defining $O = (ß O^{I} - ßO^{O})$, the policy-maker's minimal rents will be given by:

$$r^{*} = \max (0, dNy - O / ?) \quad (8)$$

As the public recognition of the job goes up (and the satisfaction this brings to the politician increases, that is, P increases), O and O^{I} go up and the minimum rents decrease. Similarly, as d declines, due to more democratic mechanisms, more mobile assets or a more diversified economy, minimum rents also decline.

Using both the government constraint (3) to substitute for t and expression (8) to substitute for y, we can rewrite the voter's utility as:

$$U^{V} = (1 - d)y + \frac{\Omega}{gN} - \frac{qg}{N} - \frac{r_x}{N} + H(g) \quad (9)$$

where r_X is any additional rent beyond the minimum that the politician can seize.[5]

We know that because voters cannot observe the true state of nature, they choose a reservation utility $\hat{U}^{V}$ using the information they have on the distribution of $?$, that is, the cost of producing public goods. The higher $\hat{U}^{V}$, the more likely the politician will act myopically. Note that each level of reservation utility $\hat{U}^{V}$ implies a threshold value $? ^{*}$. If the real cost of producing public goods is above this threshold value, that is, if $? > ? ^{*}$, the politician will choose to seize the maximum amount of income possible, setting $t = dy$ and obtaining $r = dNy$. She immediately sees that since she cannot satisfy the expectations of voters, she will be defeated in the election. Conversely, if the real costs of production are below the voter's threshold, that is, $? < ? ^{*}$, the

[5] We assume that after giving up r^{*}, there is still enough revenue in every state, that is, $? G?) = (1-d)y + O / ?$.

politician will just satisfy the re-election constraint. The politician will set *g* equal to *G(? *)* and will collect the minimum rent r^* plus an additional rent, r_x = *G(? *) (? * -?)*, due to the cost difference of providing the public good under the realized state and under *.

Using the last expression, we can rewrite the voter's utility level as follows:

$$U^V(q^*) = (1-d)y + \frac{\Omega}{gN} - \frac{q^*G(q^*)}{N} + H(G(q^*)) \tag{10}$$

Voters will choose the best reservation utility $\hat{U}^V$ given their information about the distribution of the state of nature S *(?)*. The expected utility is given by:

$$E(U^V) = \int_{\underline{q}}^{q^*} U^V(q^*)\hat{s}(q)dq + \int_{q^*}^{\bar{q}}((1-d)y)\hat{s}(q)dq = U^V(q^*)\hat{S}(q^*) + (1-d)y(1-\hat{S}(q^*)) \tag{11}$$

where $\underline{?} = ?_L$ and $\bar{q} \leq ?_H$ are the bounds of the function s*(.)*. As a result the optimal threshold value $?^*$ is given by:

$$\frac{U^V_{q^*}(q^*)}{U^V(q^*) - (1-d)y} = -\frac{\hat{s}(q^*)}{\hat{S}(q^*)} \tag{12}$$

In each period, voters expect a certain rent to be seized, on average, by the politician:

$$E(r) = (1-\hat{S}(q^*))dNy + \hat{S}(q^*)\int_{\underline{q}}^{q^*}[dNy - \frac{\Omega}{g} + G(q^*)(q^* - q)]\hat{s}(q)dq \tag{13}$$

This can be rewritten as:

$$E(r) = dNY + \hat{S}(q^*)(G(q^*)(q^* - q_m) - \frac{\Omega}{g}) \tag{14}$$

where

$$q_m = \int_{\underline{q}}^{q^*} q\hat{s}(q)dq$$

From (14) it is easy to see that the expected size of rents for the policy-maker declines as voters gather better information. With increasing levels of information, the probability that voters undervalue the costs of generating public goods will decline. This in turn will depress the policy-makers' incentives to appropriate rents than exceed the minimal ones.

In the limit, as the variance of the distribution of *?* the voters use shrinks toward zero, *(? *-? $_\mu$)? 0* and *S(? *) ? 1*. As a result, the expected rents move down towards the minimum r^*,

that is, $E(r) = dNy - O / ?$[6] With voters having perfect information about the state of nature in the period, they would still set $\hat{U}^V$ at the optimal level implied by that particular realization, once minimum rents for politicians had been taken into account. Whenever d=0, either because certain very transparent democratic mechanisms are imposed or because assets are completely mobile, no rents will be appropriated at all—that case would be identical to having a benevolent dictator (that is, a policymaker unconcerned with rents or perks).

2. Governance and Corruption in the World

To explore the impact of democracy and informational mechanisms on political accountability across nations, we use two types of indicators in this section. In its first part, we employ the recent indices of quality of government developed by Kaufmann, Kraay and Zoido-Lobatón (1999a and 1999b) for a cross-section of nations in the mid-1990s. We then extend our analysis to a time-series cross-sectional analysis of corruption and other governance indicators that are available since the early 1980s.

2.1. Political Governance in the Late 1990s

Dependent variable. Kaufmann, Kraay, and Zoido-Lobatón (1999a and 1999b) have recently provided new comprehensive indicators of the quality of government for a cross-section of between 155 and 173 countries for 1997-98. In these studies the quality of governance is measured along three dimensions: "(1) the process by which governments are selected, monitored and replaced; (2) the capacity of the government to effectively formulate and implement sound policies; and (3) the respect of citizens and the state for the institutions that govern economic and social interactions among them" (Kaufmann *et al*., 1999a: 1).

To measure these dimensions, the authors employ data drawn from both polls of experts which reflect country ratings (on a global or regional basis) and cross-country surveys of firms or citizens carried out by international and non-governmental organizations. All the available indicators are grouped into six clusters, two for each of the three dimensions. The processes by which governments are selected and replaced are summarized by indicators grouped in the clusters labeled "Voice and Accountability," which measures the ability of citizens to participate in the selection of governments, and "Political Instability and Violence," which indicates the

[6] Notice that, even if the size of the expected rents shrinks smoothly as more information becomes available, the

likelihood that governments could be destabilized or overthrown by unconstitutional or other violent means. The capacity of the state to implement sound policies is captured by clusters referred to as "Government Effectiveness" and "Regulatory Burden." The former combines perceptions of the quality of public services and bureaucracy, the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the government's commitment to policies. The latter includes measures of distortionary policies, such as price controls or inadequate bank supervision, as well as perceptions of the burdens due to excessive regulations in areas such as foreign trade and business development. The two clusters called "Rule of Law" and "Graft" capture the respect of citizens and the state for the rules which govern their interactions. The index on the "Rule of Law" is based on measures on the extent to which agents have confidence in and abide by the rules of society; it includes perceptions about the incidence of crime, the effectiveness and predictability of the judiciary, and the enforceability of contracts. Finally, "Graft" provides an indicator of subjective perceptions of public corruption.

The aggregate indicators for each cluster were estimated by means of an unobserved components model which expresses the observed data in each cluster as a linear function of the unobserved common component of governance, plus a disturbance term capturing perception errors and/or sampling variation in each indicator.[7]

To measure government quality we have used the aggregate indicators for Graft, the Rule of Law, Regulatory Burden, and Government Effectiveness, as well as an Overall Indicator of Government Quality which is estimated from these four indicators using the principal components method. The index of overall quality has a mean of about 0, varies from a minimum of -4.6 to a maximum of 4.5, and has a standard deviation of 1.86. The separate indexes have a mean around 0 and a standard deviation of 0.9 and generally vary from -1.5 to 2.

Model and independent variables. To estimate the causes of variation in government effectiveness, we estimate the following OLS regression model in a cross-section of nations:

$$\text{Quality of Government}_t = a + a_1\ \text{Democracy}_t + a_2\ \text{Informational Mechanisms}_t + a_3\ \text{Democracy}_t * \text{Informational Mechanisms}_t + a_4\ \text{Control Variables}_t + e_t.$$

range for the actual size of the rent still supports the state of partial or complete confiscation.

[7] For the estimation procedure, see Kaufmann *et al*. (1999b).

The variables employed are:

(1) "Level of Democracy" in 1994, taken from the Polity III database developed by Jaggers and Gurr (1995), and rescaled as a variable from 0 to 1.[8] If our discussion on the mechanisms that create political accountability is right, a democratic regime should bolster good governance.

(2) The "Circulation of Daily Newspapers" per person in 1995 to measure the quality of informational controls. The data comes from the World Bank, *World Development Indicators*, which draws the figures from UNESCO.

(3) The interactive term "Level of Democracy * Circulation of Newspapers," which should gauge the extent to which newspaper readership generates real political accountability only under conditions of political freedom. Massive levels of readership without political liberties, like in the former Soviet Union, resulted from a strongly mobilized (or a highly controlled) electorate but they clearly did not make the Politburo any more accountable to the public.

(4) The following stack of control variables is also introduced to test the robustness of our measures:

(a) The log of "Per Capita Income" to measure the impact of economic development. The data correspond to 1990 and are expressed in 1987 constant dollars. They come from the World Bank. We have also controlled for educational levels through both mean years of schooling and the sum of primary, secondary and tertiary enrollment rates.

(b) The level of "Political Instability," measured through Kaufmann's Political Instability and Violence Index in 1997-98. The level of political instability approximates the likelihood that, given the conditions independent of her actions, the incumbent will remain in office in the future. Accordingly, we should expect that, other things being equal, as political instability increases, the incumbent has a higher incentive to appropriate maximum rents in the present period. In other words, corruption and inefficient policies should rise with instability.

(c) Percentage of the population of each country that belonged to the three most widespread religions (Catholicism, Islam, and Protestantism), using the data reported in La Porta

[8] Democracy is there defined as having three essential elements: (1) the presence of institutions and procedures through which citizens can express effective preferences about alternative political policies and leaders; (2) the existence of institutionalized constraints on the exercise of executive power; and (3) the guarantee of civil liberties

et al. (1998). These three measures of religious beliefs and practices tap the cultural and ethical norms that may influence the behavior of politicians in office. If we are to believe LaPorta *et al*. (1998), Protestant countries should exhibit, in typical Weberian fashion, better governmental performance due to higher ethical standards, widespread literacy and non-hierarchical structures of social interaction.

(d) Type of legal code, which LaPorta *et al*. (1998) consider relevant to understand the type of incentives that constrain policymakers in each country. According to this study, whereas common law systems developed to defend parliament and property owners from the sovereign's attempts to regulate and expropriate them, civil law systems were established as instruments for state building and to control the economy. We use here a measure from La Porta *et al*. (1998) that considers whether the Company Law or Commercial Code of the country comes from: (1) English Common Law; (2) French Commercial Code; (3) German Commercial Code; (4) Scandinavian Commercial Code; or (5) Socialist/Communist laws.

(e) Ethnic fractionalization, measured through an index built by LaPorta *et al*. (1998) by averaging five different sources in Easterly and Levine (1997).

(f) Constitutional framework. We consider three types of political institutions: (i) the use or not of a proportional representation electoral system (coded through a dummy variable); (ii) the existence of a federal arrangement (also measured through a dichotomous variable); and (iii) the relationship between the executive and legislative branches through a variable that takes the values of 0 if the president is elected directly, 1 if the president is elected by the assembly but has substantial powers and 2 if the system is purely parliamentarian. The first variable has been built based on Cox (1997), IDEA (1997), Linz and Valenzuela (1994), Shugart and Carey (1992) and *Keesing's Record of World Events* (formerly *Keesing's Contemporary Archives*). The variable on federalism follows Downes (2000). The latter variable is taken from the Harvard Center for International Development Political data set. The literature is split on the effects these variables may have on governance. Researchers have alternatively claimed that proportional representation reduces rent-seeking behavior (Rogowski, 1987) and enhances patronage relationships and hinder governmental responsiveness. Similarly, while some see federal systems and separation-of-powers systems as disciplining devices that sharpen the extent of potential conflict among

---

to all citizens. In fact, however, given the absence of data on civil liberties, their measure of democracy is built from the subjective coding of the first two elements.

politicians and therefore reduce the level of rents (Persson and Tabellini, 2000), for others a multiplication of veto points simply generates wasteful and inefficient policies.

(g) To measure the political mobilization of the electorate, we control for voter turnout, alone and jointly with democratic regime. Higher levels of electoral mobilization should increase the responsiveness of politicians and improve the quality of government—particularly in democratic settings. The variable "turnout," taken from IDEA (1997), is defined as the proportion of those voting out of all those citizens above the legal voting age. It is calculated as the average of the elections taking place in the decade previous to 1997.

(h) The size of government, measured as proportion of public revenues of the central government over GDP. The sign of the variable may go in either direction. On the one hand, larger governments may imply higher public wages and hence both lower incentives to accept bribes among civil servants and better public services. On the other hand, a bigger state may signal more opportunities for corruption and inefficiencies.

(i) The log value of the ratio of trade (sum of imports and exports) to GDP and the proportion of capital controls to measure the degree of economic openness. A higher degree of economic openness may again operate in opposite directions. Although higher levels of internationalization may discipline politicians into delivering better services to attract foreign investors, they could also open up the space for corruption and rent-extraction. Data on exports and imports comes from the World Bank. The presence of capital controls is based on Quinn's financial liberalization index of government restrictions on international capital movements (based on the IMF's coding in Quinn, 1997), normalized to a range from 0 to 1. A higher number implies fewer capital controls.

(j) Finally, the presence of "cooperative" practices or arrangements in the population, that is, the level of social capital, which has recently been hailed as a fundamental mechanism to explain good government (Putnam, 1993, 2000). Although it is often bundled together with "newspaper readership" and "turnout," we have decided to measure it separately through the level of "interpersonal trust" (as measured in the World Value Surveys). One of the purposes of this paper is to determine through which precise mechanisms do efficient and clean government occur—a question that has not yet been well solved in the literature on social capital (Boix and Posner, 1998).

Results. Tables 1 through 4 present the results for the indicators of Overall Quality, Government Efficiency, Graft and Rule of Law, respectively. In each table we report three models: the first one includes newspaper readership and two control variables, economic development and political instability, that are very stable and highly significant from a statistical point of view; the second model adds the level of democracy; the third model includes as well the interactive term of democracy and newspaper readership.

Results for Regulatory Burden are not reported. Unsurprisingly, newspaper readership (alone or jointly with democracy) has no impact on the level of regulations in each country. Newspaper readership is clearly tapping the ability citizens have to control public institutions. Yet it says nothing about the level of state intervention (through policy regulations) citizens demand from their politicians.

TABLE 1

The Overall Quality of Governments across the World

	OVERALL QUALITY		
INDEPENDENT VARIABLES	(1)	(2)	(3)
Constant	-2.23***	-2.43***	-2.42***
	(0.62)	(0.66)	(0.66)
Circulation of Newspapers [a]	1.70**	1.17^	-0.36^
	(0.83)	(0.96)	(1.87)
Level of Democracy [b]		0.57**	0.43^
		(0.25)	(0.29)
Circulation of Newspapers * Level of Democracy			1.75^
			(1.85)
Per Capita Income (Log) [c]	0.30***	0.29***	0.30***
	(0.09)	(0.10)	(0.10)
Political Instability [d]	1.20***	1.14***	1.14***
	(0.11)	(0.12)	(0.12)
R-Squared	0.798	0.806	0.807
Ajusted R-Squared	0.793	0.799	0.799
Number of observations	126	117	117

[a] Newspaper Circulation per Person.
[b] Gurr Index of Democracy, rescaled from 0 to 1.
[c] Per Capita Income. Log of per capita GDP in $ and 1985 constant prices. Source: World Penn Tables.
[d] Index of Political Stability from Kaufmann et al. (1999a).

Estimation: Ordinary last squares estimation.
Standard errors in parenthesis.
*** p<0.01; **p<0.05
^ In joint test with democratic institutions, statistically significant at 0.05 level.

TABLE 2

Effectiveness

	GOVERNMENT EFFICIENCY		
INDEPENDENT VARIABLES	(1)	(2)	(3)
Constant	-1.03***	-1.09***	-1.08***
	(0.35)	(0.37)	(0.37)
Circulation of Newspapers [a]	0.89**	0.74^	-0.64^
	(0.47)	(0.54)	(1.06)
Level of Democracy [b]		0.23^	0.10^
		(0.14)	(0.16)
Circulation of Newspapers * Level of Democracy			1.59^
			(1.04)
Per Capita Income (Log) [c]	0.13***	0.13**	0.14**
	(0.05)	(0.05)	(0.05)
Political Instability [d]	0.55***	0.53***	0.54***
	(0.07)	(0.07)	(0.07)
R-Squared	0.727	0.737	0.742
Ajusted R-Squared	0.720	0.728	0.731
Number of observations	126	117	117

[a] Newspaper Circulation per Person.
[b] Gurr Index of Democracy, rescaled from 0 to 1.
[c] Per Capita Income. Log of per capita GDP in $ and 1985 constant prices. Source: World Penn Tables.
[d] Index of Political Stability from Kaufmann et al. (1999a).

Estimation: Ordinary last squares estimation.
Standard errors in parenthesis.
* p<0.01; **p<0.05; * p<0.10.
^ In joint test with democratic institutions, statistically significant at 0.05 level.

TABLE 3

Corruption

	LEVEL OF CORRUPTION		
INDEPENDENT VARIABLES	(1)	(2)	(3)
Constant	-1.36***	-1.39***	-1.37***
	(0.38)	(0.39)	(0.39)
Circulation of Newspapers [a]	1.46***	1.44***	-0.30^
	(0.50)	(0.58)	(1.11)
Level of Democracy [b]		0.26*	0.10^
		(0.15)	(0.17)
Circulation of Newspapers * Level of Democracy			1.99*
			(1.10)
Per Capita Income (Log) [c]	0.17***	0.16***	0.17***
	(0.14)	(0.06)	(0.06)
Political Instability [d]	0.42***	0.38***	0.39***
	(0.07)	(0.07)	(0.07)
R-Squared	0.703	0.712	0.721
Ajusted R-Squared	0.695	0.702	0.708
Number of observations	126	117	117

[a] Newspaper Circulation per Person.
[b] Gurr Index of Democracy, rescaled from 0 to 1.
[c] Per Capita Income. Log of per capita GDP in $ and 1985 constant prices. Source: World Penn Tables.
[d] Index of Political Stability from Kaufmann et al. (1999a).

Estimation: Ordinary last squares estimation.
Standard errors in parenthesis.
*** p<0.01; **p<0.05; *p<0.10.
^ In joint test with democratic institutions, statistically significant at 0.05 level

TABLE 4

Rule of Law

	RULE OF LAW		
INDEPENDENT VARIABLES	(1)	(2)	(3)
Constant	-1.34***	-1.38***	-1.37***
	(0.28)	(0.29)	(0.29)
Circulation of Newspapers [a]	0.49	0.41	-0.27^
	(0.36)	(0.43)	(0.84)
Level of Democracy [b]		-0.08	0.14^
		(0.11)	(0.13)
Circulation of Newspapers * Level of Democracy			0.78*
			(0.83)
Per Capita Income (Log) [c]	0.18***	0.20***	0.20***
	(0.04)	(0.04)	(0.04)
Political Instability [d]	0.64***	0.66***	0.67**
	(0.05)	(0.06)	(0.06)
R-Squared	0.849	0.849	0.850
Ajusted R-Squared	0.846	0.843	0.843
Number of observations	126	117	117

[a] Newspaper Circulation per Person.
[b] Gurr Index of Democracy, rescaled from 0 to 1.
[c] Per Capita Income. Log of per capita GDP in $ in 1985 constant prices. Source: World Penn Tables.
[d] Index of Political Stability from Kaufmann et al. (1999a).

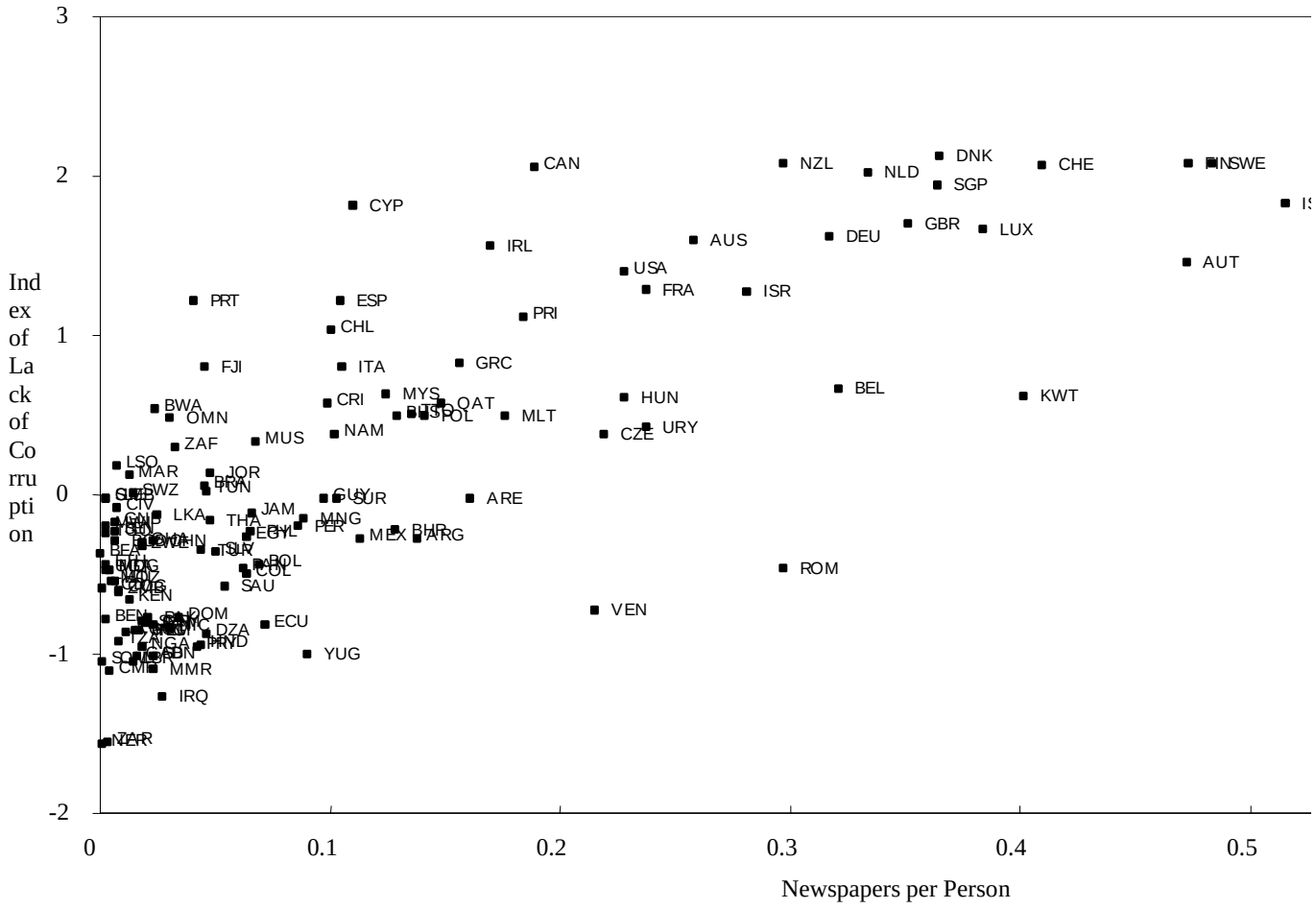
Estimation: Ordinary last squares estimation.
Standard errors in parenthesis.
*** p<0.01; **p<0.05; *p<0.10.
^ In joint test with democratic institutions and per capita income, statistically significant at 0.05 level.

The models in Tables 1 through 4 have strong explanatory power—the explained variance ranges from 70 percent to 85 percent. As shown in column 1, the level of newspaper readership has a strong impact on the overall index of quality of government, government efficiency and the level of corruption. Newspaper readership varies from 0.7 daily copies per person in Hong Kong to 0 in Mauritania. This difference implies 1.20 points in the quality of government, 0.6 points in government efficiency and 1 point in the index of corruption, amounting to two thirds of a standard deviation in the first two indexes and slightly over a whole standard deviation in the case of corruption.[9] Figure 1 displays the relationship between corruption and newspaper circulation to convey the robustness of the results. By contrast, daily newspaper circulation does not have a statistically significant impact on the level of rule of law. This result is not surprising—the type of behavior captured by this index may be more dependent on societal institutions and practices than on politicians' actions.[10]

[9] For a first cut on newspaper readership, turnout and quality of government, see IADB (2000). See also Brunetti and Weder (1999) on the relationship of press consumption and corrupt practices using a cross-section of countries in the early 1990s.

[10] The daily circulation of newspapers per person is only partly tapping the degree of monitoring that citizens exercise over public officials. Non-written media, radio and TV, constitute a major and growing source of information for public opinion. As far as we know, however, cross-national studies on TV exposure are not large enough to provide data to check the impact of this mass media on institutional performance. Exposure to political information given in radio and television may have a similar impact as newspaper circulation since, although the impact on political information and action of total time watching TV is still debated, recent studies show that both newspaper readership and time of exposure to TV news are correlated across individuals and increase the political sophistication of voters (Norris, 2000).

Figure 1. Level of Corruption and Newspaper Circulation in 1997-98



Democracy boosts the effectiveness and cleanliness of government as expected—corruption declines and government effectiveness increases by about a fourth of a standard deviation of the sample as a country moves from an authoritarian to a democratic regime (Model 2, Tables 1 to 4).

Model 3 in all four tables fits particularly well our theoretical expectations. Once we introduce the interactive term "Circulation of Newspapers * Level of Democracy," the level of daily newspaper readership has a negative impact on the quality of government. As the per capita circulation of newspapers increases, governments become less efficient and corruption goes up. The variable is clearly proxying for the political mobilization that some authoritarian (totalitarian) regimes build through the news media and that, without corresponding political liberties, have a depressing effect on the accountability of policy-makers. Democracy still has a positive impact on governance quality. More importantly, the interactive term shows a very substantial effect on the quality of governments—it is statistically significant either alone (in Tables 3 and 4) or jointly with its components (in Tables 1 and 2).[11] Figure 2 simulates the impact of different values of press circulation and democracy on governmental effectiveness and corruption.[12] Consider the case of corruption, shown in the bottom simulation. The difference between an authoritarian regime with no press readership and a democratic regime with a strong newspaper circulation amounts to 1.28 points in the level of corruption, well over one standard deviation in the sample under analysis. The simulation also makes apparent under what conditions inefficiency and corruption attain their maximum levels. In a country with strong readership and no political liberties, corruption is 1.49 points higher than in a democracy with a similar press circulation. In short, it is only the combination of a vibrant and free press that leads to a well-served public.[13]

[11] The importance of press, democracy and their interaction is not affected by the exclusion of either per capita income or political instability.

[12] These simulations are based on Models 3 in Tables 2 and 3. The values of per capita income and political instability have been set at their means.

[13] The effect and statistical significance of press circulation and democracy, alone or in interaction, do not hinge on the inclusion of any control variables. In fact, once we drop per capita income and/or political stability, their coefficients grew both substantively and in statistical significance.

Figure 2. The Impact of Democracy and Newspaper Readership: A Simulation

A. Level of Government Efficiency				
		Per capita daily circulation of newspapers		
		0.00	0.35	0.70
Democracy	0.00	-0.07	-0.29	-0.51
	0.50	-0.02	0.04	0.09
	1.00	0.03	0.37	0.70

Note: The simulation is based on Model 3, Table 2. Per capita income and political instability have been set at their means.

B. Lack of Corruption*				
		Per capita daily circulation of newspapers		
		0.00	0.35	0.70
Democracy	0.00	-0.13	-0.24	-0.34
	0.50	-0.08	0.16	0.41
	1.00	-0.03	0.56	1.15

* A higher coefficient indicates less corruption.

Note: The simulation is based on Model 3, Table 3. Per capita income and political instability have been set at their means.

In Tables 1 through 4 both the level of development and the extent of political stability are statistically and substantively significant in a systematic manner. Economic development is associated with better government. The effect, however, is mild. Setting all other variables at their means, a country with a per capita income of $500 is predicted to have a corruption index of -0.20. For a per capita income of $20,000, the corruption index should be of 0.43.[14] Two comments are in order. First, the causal direction of the relationship is unclear; using the log value of per capita income in 1990 is an attempt to measure the impact that development may have on government performance rather than the other way around. Second, the result does not clarify why, that is, through which channels, does economic development affect governance. At least two mechanisms are conceivable. On the one hand, economic development may just be proxying for the level of physical and human capital available to governments. However, regressing educational variables in the benchmark models of Tables 1 to 4 shows that human

[14] When we regress per capita income alone on any index of governmental performance, the size of the coefficient multiplies roughly by three—this is due to a relatively good correlation between press readership and development.

capital is not statistically significant—although it is once we exclude per capita income.[15] On the other hand, economic development can be mostly seen as a shift from highly immobile fixed assets to progressively more mobile capital, that is, from societies that rely on the exploitation of mines and agricultural land to economies based on manufacturing industries and human capital-intensive businesses. In other words, higher levels of per capita income are associated with better governmental performance because, as the proportion of mobile assets increases (due to the process of economic modernization), the capacity of politicians to expropriate resources (the parameter d) declines.

Political stability has a substantial effect on the quality of government. One standard deviation in the level of political stability (from, say, the United Kingdom to Zambia) reduces the overall quality index by two thirds of a standard deviation of the sample and increases the level of corruption by half a standard deviation of the sample.

Tables 5 through 7 introduce, in turn, several control variables to assess the robustness of our results. Table 5 includes controls for the religious composition and legal code of each country (models A1, B1, C1 and D1) as well for the constitutional framework (columns A2, B2, C2 and D2). Table 6 shows controls for economic variables, that is, the size of the state, capital controls and trade openness (columns A1, B1, C1 and D1), and the degree of electoral mobilization (second column of each dependent variable). Table 7 displays controls for social capital (measured through interpersonal trust). In all cases, with the exception of the first column of Table 7, we employ the unrestricted model with newspaper readership, political regime, their interaction, and controls for economic development and political stability. Notice that the sample declines relative to Tables 1 to 4.[16]

[15] These results are not shown in the paper. The introduction of educational controls does not erode the impact of newspaper circulation.

[16] Ethnic fractionalization has no effect on governmental performance in our unrestricted model. It dampens it, however, when we drop the variable of political instability. Results are not reported in the paper.

TABLE 5. The Robustness of Political Accountability Mechanisms (1). Controlling for Culture and Constitutional Structure.

	A. OVERALL QUALITY		B. EFFICIENCY		C. CORRUPTION		
INDEPENDENT VARIABLES	(A1)	(A2)	(B1)	(B2)	(C1)	(C2)	(D1)
Constant	-1.03	-2.42***	-0.46	-1.13***	-0.73	-1.61***	-0.85**
	(0.88)	(0.71)	(0.54)	(0.41)	(0.52)	(0.43)	(0.41)
Circulation of Newspapers	0.41^	-0.04^^	-0.36^^	-0.60^^	0.13^	-0.11^^	-0.13^^
	(1.67)	(0.92)	(1.03)	(1.03)	(0.99)	(1.13)	(0.77)
Level of Democracy [a]	0.40^	0.30^^	0.09^^	0.00^^	0.18^	0.04^^	-0.03^^
	(0.28)	(0.35)	(0.17)	(0.21)	(0.17)	(0.21)	(0.13)
Circ. of Newspapers * Level of Democracy	1.35^	0.92^^	1.69^^	1.18^^	1.38^	1.08^^	0.65^^
	(1.67)	(1.86)	(1.16)	(1.07)	(1.12)	(1.12)	(0.87)
Political Instability	1.17***	1.11***	0.55***	0.57***	0.40***	0.38***	0.66***
	(0.11)	(0.14)	(0.07)	(0.08)	(0.07)	(0.09)	(0.05)
Per Capita Income (Log)	0.27***	0.31***	0.12**	0.15**	0.16***	0.21***	0.19***
	(0.09)	(0.11)	(0.06)	(0.06)	(0.05)	(0.06)	(0.04)
Proportion of Protestant Religion [a]	-1.21*		-0.67*		-0.38		-0.57**
	(0.62)		(0.38)		(0.37)		(0.29)
Proportion of Catholic Religion [a]	-0.64*		-0.38*		-0.46**		-0.38**
	(0.33)		(0.20)		(0.20)		(0.15)
Proportion of Muslim Religion [a]	-0.97***		-0.44**		-0.53***		-0.24
	(0.33)		(0.20)		(0.20)		(0.15)
Socialist Legal Code	-1.79**		-0.74*		-0.82*		-0.68**
	(0.71)		(0.49)		(0.43)		(0.33)
English Legal Code	-0.19		-0.12		-0.04		-0.07
	(0.63)		(0.39)		(0.38)		(0.30)
French Legal Code	-0.57		-0.15		-0.31		-0.28
	(0.40)		(0.42)		(0.40)		(0.31)
German Legal Code	-1.20*		-0.57		-0.62		-0.25
	(0.68)		(0.42)		(0.40)		(0.31)
Federalism		-0.12		-0.05		-0.15	
		(0.27)		(0.15)		(0.16)	
Presidentialism		0.15		0.05		0.15	
		(0.11)		(0.07)		(0.07)	
Proportional Representation		0.03		0.07		-0.05	
		(0.20)		(0.11)		(0.12)	
R-Squared	0.863	0.817	0.783	0.756	0.802	0.752	0.887
Ajusted R-Squared	0.847	0.801	0.757	0.735	0.779	0.731	0.874
Number of observations	115	102	115	102	115	102	115

[a] Variable goes from 0 to 1.

Estimation: Ordinary last squares estimation.
Standard errors in parenthesis.

TABLE 6. The Robustness of Political Accountability Mechanisms (2). Controlling for Economic Regime and Electoral Mobilization.

	A. OVERALL QUALITY		B. EFFICIENCY		C. CORRUPTION			D. RULE OF LAW	
INDEPENDENT VARIABLES	(A1)	(A2)	(B1)	(B2)	(C1)	(C2)		(D1)	(D2)
Constant	-3.14***	-1.77**	-1.14**	-0.75	-1.77***	-1.15**	-1.77***	-1.11***	
	(0.92)	(0.85)	(0.54)	(0.48)	(0.58)	(0.52)	(0.45)	(0.40)	
Circulation of Newspapers	-2.17^	-0.09^^	-1.57^	-0.78^	-1.27^	-0.17^	-0.81^^	0.03^^	
	(1.87)	(1.92)	(1.10)	(1.09)	(1.17)	(1.18)	(0.91)	(0.91)	
Level of Democracy [a]	0.30^	-1.73**	-0.01^	-1.15**	0.09^	-1.30**	-0.21^^	-0.76*	
	(0.30)	(0.84)	(0.18)	(0.47)	(0.19)	(0.51)	(0.15)	(0.40)	
Circ. of Newspapers * Level of Democracy	3.61*	0.87^^	2.49**	1.25^	2.70**	1.13^	1.45^^	0.37^^	
	(1.87)	(1.89)	(1.10)	(1.06)	(1.16)	(1.15)	(0.87)	(0.89)	
Political Instability	0.93***	1.07***	0.47***	0.50***	0.36***	0.40***	0.66***	0.66***	
	(0.15)	(0.13)	(0.09)	(0.07)	(0.10)	(0.08)	(0.07)	(0.06)	
Per Capita Income (Log)	0.30***	0.41***	0.13**	0.23***	0.14***	0.25***	0.19***	0.21***	
	(0.12)	(0.11)	(0.07)	(0.06)	(0.07)	(0.07)	(0.06)	(0.05)	
Public Expenditure [a] (Proportion of GDP)	-0.39		0.25		1.16**		-0.08		
	(0.80)		(0.47)		(0.50)		(0.39)		
Level of Capital Controls	0.48*		0.30*		0.17		0.06		
	(0.26)		(0.15)		(0.16)		(0.13)		
Trade Openness	0.18		0.02		0.09		0.14*		
	(0.17)		(0.10)		(0.11)		(0.08)		
Electoral Participation in the 1990s [a]		-2.24**		-1.42***		-1.18**		-0.55	
		(0.86)		(0.49)		(0.53)			(0.40)
Electoral Participation * Level of Democracy		3.35**		1.82**		2.07***			1.04*
		(1.29)		(0.73)		(0.79)			(0.30)
R-Squared	0.802	0.820	0.730	0.759	0.733	0.745	0.833	0.851	
Ajusted R-Squared	0.783	0.807	0.705	0.742	0.707	0.727	0.817	0.840	
Number of observations	94	103	94	103	94	103	94	103	

[a] Variable goes from 0 to 1.

Estimation: Ordinary last squares estimation.
Standard errors in parenthesis.
*** p<0.01; **p<0.05; *p<0.10.
^ In joint test of democracy, newspaper circulation, its interaction, statistically significant at 0.05 level.
^^ In joint test with democracy, newspaper circulation, its interaction and per capita income, statistically significant at 0.05 level.

TABLE 7. The Robustness of Political Accountability Mechanisms (3). Controlling for Interpersonal Trust.

	A. OVERALL QUALITY		B. EFFICIENCY		C. CORRUPTION		D. RULE OF LAW		
INDEPENDENT VARIABLES	(A1)	(A2)	(B1)	(B2)	(C1)	(C2)		(D1)	(D2)
Constant	-3.11***	-3.25***	-1.66***	-2.02***	-1.75***	-2.29***	-1.43***	-1.41***	
	(0.64)	(1.15)	(0.34)	(0.65)	(0.58)	(0.64)	(0.30)	(0.44)	
Circulation of Newspapers	-0.18^	-7.98^^	0.64^	-3.31^^	-0.96^	-4.05^^	-0.17^	-4.41**	
	(2.92)	(4.98)	(1.57)	(2.84)	(1.54)	(2.79)	(1.36)	(1.92)	
Level of Democracy [a]	2.73***	0.40^^	1.38***	0.15^^	1.40***	0.26^^	1.11^	-0.07^^	
	(0.69)	(0.74)	(0.37)	(0.42)	(0.36)	(0.41)	(0.32)	(0.29)	
Circ. of Newspapers * Level of Democracy	1.74^	7.38^^	-0.09^	2.68^	1.77^	3.64^^	1.44^	4.58**	
	(3.66)	(5.27)	(1.96)	(3.00)	(1.92)	(2.96)	(1.70)	(2.03)	
Political Instability		1.22***		0.57***		0.50***			0.66***
		(0.27)		(0.15)		(0.15)			(0.10)
Per Capita Income (Log)		0.41**		0.27**		0.26**			0.20***
		(0.18)		(0.11)		(0.10)			(0.07)
Proportion of Population [a] Saying They Trust Others (Average 1981,1990-91, 1995-96 World Surveys)	0.06***	0.01	0.03***	0.01	0.03***	0.01	0.03***	0.00	
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)		(0.01)	(0.01)
R-Squared	0.710	0.839	0.674	0.797	0.733	0.830	0.738	0.901	
Ajusted R-Squared	0.685	0.815	0.646	0.766	0.710	0.804	0.716	0.887	
Number of observations	51	47	51	47	51	47	51	47	

[a] Variable goes from 0 to 1.

Estimation: Ordinary last squares estimation.
Standard errors in parenthesis.
*** p<0.01; **p<0.05; *p<0.10.
^ In joint test of democracy, newspaper circulation, its interaction, statistically significant at 0.05 level.
^^ In joint test with democracy, newspaper circulation, its interaction and per capita income, statistically significant at 0.05 level.

Both economic development and political stability show very stable coefficients that are statistically significant. Newspaper readership alone continues to depress the quality of government. Except for the index of the rule of law, democratic regimes have a positive effect on governance. Similarly, the interactive term has a strong positive effect on governance. Excluding Table 7 and the first model of Table 6, the coefficients are very similar to Tables 1 to 4. We discuss these exceptions later; let us point out here that whenever they differ from the coefficients in Tables 1 to 4, they turn out to be substantively larger. In all cases, the coefficients are statistically significant, either alone or in a joint test of the interactive terms and their

components (and in some cases with per capita income). The need for a joint test derives from the substantial multicollinearity among several regressors.

Religion does not have the theoretical effects generally claimed by the literature (Model 1 in Table 5). Protestantism actually depresses the quality of government and it does so slightly more than Catholicism and Islam. It only delivers better results in terms of corruption. Differences in legal codes, that LaPorta *et al*. (1998) take to be fundamental in explaining the degree of state intervention and the mechanisms through which individuals protect themselves from corrupt or rent-seeking public servants, turn out to be irrelevant (Table 5, Model 1). This is not surprising, since LaPorta and his colleagues never specify in what particular ways legal codes should make politicians differ in their behavior. In fact, to the best of our knowledge, there is no aspect of Roman law that should make the public sphere more susceptible to corruption than Common law. It is evident that the highly significant coefficient of the "socialist legal code" is just proxying for the rather chaotic transition from planning to market economies that has taken place in former socialist countries. The introduction of a dummy variable for former communist countries makes the "socialist legal code" variable not statistically significant and its coefficient close to zero—this result is not shown here.

Model 2 in Table 5 shows, in turn, that constitutional frameworks do not affect the performance of states. A federal arrangement seems to be associated with slightly worse results, while presidentialism may boost very marginally the quality of government. Yet none of the three institutional variables is statistically significant.

The impact of economic policies is irregular (Table 6, Model 1). Trade openness is only positively associated with the index of rule of law—yet even in this case the coefficient is small. In line with the idea that capital liberalization (and hence asset mobility) disciplines states, fewer capital controls come together with higher levels of overall quality of government and efficiency. Finally, public expenditure only enters significantly in the corruption regression. As the resources of the state increase, graft declines: a larger public sector reduces the incentive public officials have to raise their salaries by illegal means (Table 6, Model C1).

More interestingly, all the models in the second column of each index in Table 6 show that the level of electoral turnout has a considerable impact on governance. Electoral mobilization alone, independently of the regime in place, depresses the quality of government. The result goes in line with the effect of newspaper circulation. Without democracy, high levels

of turnout and readership simply point to the presence of certain types of authoritarian governments that are rather efficient at controlling and indoctrinating their population. By contrast, as turnout increases in a democratic setting, political accountability goes up substantially. Other things being equal, the index of lack of corruption index rises by about 0.45 points (half a standard deviation in the sample) from a country where only 50 per cent of the population vote to a country where everybody votes. Given the existence of a slight correlation between turnout and newspaper readership ($r = .34$), the variables measuring newspaper circulation decline a bit. Still, media control of the government continues to affect governments in a notable way.

Table 7 turns to examine the impact of social capital, measured as the percentage of people that say people can be trusted, on governmental performance. Notice that, due to the lack of data for a large number of countries, the size of the sample declines to about 50 nations. As noted above, studies on social capital and its consequences on economic and political performance fail to disaggregate, both theoretically and empirically, the micromechanisms that make politicians perform well (Boix and Posner, 1998). One of the key goals of this paper, by contrast, is to explore the specific channels that create political accountability. Although interpersonal trust and newspaper readership are correlated—the Pearson's coefficient is 0.57—they respond to different dimensions of social and political behavior. Accordingly, Table 7 examines their separate effects through two regressions.

In the first model in Table 7, we simply report the results of adding the measure of trust to measures of newspaper readership and democracy. Excluding government efficiency, where the interactive term of democracy and press readership turn out to have a negligible effect (but not the separate components of democracy and press circulation), political accountability is still enforced through informational and electoral mechanisms. Model 1 also shows that interpersonal trust is associated with cleaner and more efficient governments. Moving from the lowest level of interpersonal trust (5 percent in Brazil) to the highest level (64 percent in Norway) leads to an increase of 1.7 points in the index of corruption (not far from two standard deviations). What is unclear, however, is the causal direction of the relationship: higher levels of trust may just be the result of better political performance. We will return to this issue in our exploration of the universe of US states.

The second model in Table 7 introduces the controls of political stability and per capita income. Newspaper readership and democracy perform in the predicted direction, although the coefficients of newspaper readership and the interactive term double in size with respect to the results of Tables 1 to 4. The variable of interpersonal trust now becomes statistically not significant. The strong correlation between interpersonal trust and economic development (with r=0.60) and between trust and political stability (with r=0.70) introduce too much collinearity. As a result, it is hard to tell whether interpersonal trust directly affects governmental performance or it is just the outcome of two variables, stability and economic resources, that foster both good governance and citizens' well-being.[17]

2.2. Corruption and Bureaucratic Performance Across Countries Since 1980

To date the indicators developed by Kaufmann *et al*. (1999a, 1999b) are both the most comprehensive and the closest to passing any internal validity test among the growing number of data that are being generated on corruption and governmental effectiveness. Their drawback, however, lies in that they only refer to a single point in time. A stronger test of our theory requires probing how well it travels over time. We turn to this task in this subsection.

To build a panel of data with cross-sectional and time-series observations, we rely on the set of indicators that the Political Risk Services Group has developed since the early 1980s to assess the political, economic and financial risks in over 110 countries, and that are published in its "International Country Risk Guide." We have employed five types of indexes as our dependent variables: "Corruption," which taps both the demand for bribes from business by political and administrative authorities as well as practices such as patronage, nepotism, job reservation and so on; "Bureaucratic Quality," which measures the institutional strength, expertise, quality and stability of the civil service; "Rule of Law," which includes an evaluation of the strength and stability of the legal system as well as an assessment of the extent of citizens' compliance; "Expropriatory Risk" of property; and "Governmental Repudiation of Contracts."

[17] In our sample, interpersonal turst turns out to be strongly conditional on political stability and income inequality. The regression is:

TRUST = 52.11 - 0.68** GINI COEFFICIENT + 9.85*** POLITICAL INSTABILITY
(12.35) (0.31) (3.44)

r^2=0.47

Standard errors in parenthesis. Significance levels: *** p<0.01; ** p<0.05.

For a more extend discussion of these results and their implications, see Boix (2000).

The first three indexes range from 0 to 6. The latter two go from 1 to 10. A higher number indicates a government that is cleaner, more efficient and less threatening to private property.

Our theoretical expectations are that the impact of democracy and information should be strongly positive in reducing corruption and the quality of bureaucracy and then decline as we move into the other variables. Since rule of law measures the stability and legitimacy of the legal system, it should be positively associated with democracy; the effects of newspaper circulation are, however, ambiguous. Finally, our theoretical model does not make any predictions on the risk of expropriation and the possibility that governments may repudiate contracts. Constitutional democracies should dampen the expropriatory threats and time-consistency problems that characterize authoritarian regimes vis-à-vis property owners (Olson, 1993). But universal suffrage democracies also give the poor the best chance to socialize the means of production. The impact of newspapers may well be negative: a higher circulation may imply a more mobilized electorate and thus stronger redistributive demands.

Due to our data for newspaper readership, which is only available for 5-year intervals, and to eliminate the year-to-year variability in the data due to mistaken evaluations, we have averaged the data in five-year periods (1982-84, 1985-89, 1990-94, and 1995-98). The dependent variable is then regressed on daily newspaper circulation, democracy, the interaction, and the log of per capita income (market value and constant 1995 dollars). The daily newspaper circulation data corresponds to the initial year of each 5-year period, that is, to 1980, 1985 (in this case an average of the years 1980 and 1990), 1990 and 1995. The democracy index is taken from Polity III, re-scaled to the range 0 to 1, and averaged for the periods 1980-84, 1985-89, 1990-93 and 1993-94 (this is the last year of the Gurr dataset). The estimation of the pooled cross-sectional time-series model is done through ordinary least squares, adjusting the standard errors for unequal variation within panels and correcting for autocorrelation.[18]

[18] For a discussion of the appropriateness of this specification, see Beck and Katz (1995). The models have also been estimated using a random-effects specification, a fixed-effect model to account for potential idiosyncratic effects for different countries, and then change rather than level of the parameters. Results are extremely robust to these different specifications and can be obtained from the authors.

TABLE 8. Quality of Government and Political Accountability: A Cross-National Time-Series Analysis (1980-95)

	A. LACK OF CORRUPTION		B. QUALITY OF BUREAUCRACY		C. RULE OF LAW		D. DECLINE IN EX-PROPRIATORY RISK	
INDEPEN-DENT VARIA-BLES	(A1)	(A2)	(B1)	(B2)	(C1)	(C2)	(D1)	(D2)
Constant	0.99**	0.82***	-1.62**	-0.66**	-0.29	0.21	2.52***	1.46***
	(0.42)	(0.21)	(0.38)	(0.28)	(0.50)	(0.33)	(0.89)	(0.39)
Lagged Dependent Variable		0.68***		0.59***	0.70***		0.78***	
		(0.04)		(0.05)		(0.05)		(0.06)
Circ. of News-papers	2.07**	0.46^	-1.26^	-0.98**	1.96*	0.27	0.66^	0.20^^
	(0.84)	(4.98)	(1.02)	(0.41)	(1.04)	(0.56)	(1.36)	(0.81)
Level of Demo-cracy *a*	0.62***	0.22**	0.23^	-0.05^	0.66***	-0.02	1.75***	0.46*
	(0.18)	(0.12)	(0.18)	(0.14)	(0.22)	(0.15)	(0.36)	(0.29)
Circ. of News-papers	1.50*	0.76^	3.27***	1.73***	0.25^	0.01	-1.03^	-1.24^^
* Level of Democracy	(0.80)	(0.55)	(0.98)	(0.44)	(0.99)	(0.14)	(1.09)	(0.86)
Per Capita Income	0.22***	0.01	0.61***	0.28***	0.43***	0.14***	0.53***	0.11
(log)	(0.06)	(0.04)	(0.06)	(0.05)	(0.07)	(0.05)	(0.13)	(0.07)
R-Squared	0.873.	0.974	0.899	0.965	0.865	0.963	0.823	0.980
Wald chi-quared	286.08	1395.02	718.67	1936.91	340.22 1	388.48	139.09	955.84
Number of obs.	405	301	405	301	405	301 4	02 3	01

a Variable goes from 0 to 1.
Estimation: Ordinary last squares estimation, panel corrected standard errors, ar-1 autocorrelation.
Standard errors in parenthesis.
*** p<0.01; **p<0.05; *p<0.10.
^ In joint test of democracy, newspaper circulation, its interaction, statistically significant at 0.01 level.
^^ In joint test of democracy, newspaper circulation, its interaction , statistically significant at 0.05 level.

Table 8 reports the results for corruption, bureaucratic quality, rule of law and risk of expropriation. Results for governmental repudiation of contracts are not included—they are similar to those for risk of expropriation. We report results with and without the lagged dependent variable (columns 1 and 2 of each dependent variable respectively).

Results for corruption are strongly in line with our model. Total explained variance is over 87 per cent in the first model and 97 per cent in the second one. Democracy increases the chances of having a clean government. The daily circulation of newspapers, alone and in interaction with democracy, is positively correlated with the lack of corruption. According to Model A1, the sum of these two variables implies that they explain over one and a half standard deviations in the level of corruption—and close to one in Model A2. Per capita income has a very modest impact on levels of corruption: moving from a per capita income of $500 to one of $20,000 implies 0.8 points in the index of lack of corruption; this is not far from our estimates for the cross-section of countries in subsection 2.1, given the standard deviation of corruption in that sample.

The quality of bureaucracy is also affected by both political regime and the information flow. Democracy has a small impact on the civil service. Newspaper readership fits very well our predictions: newspapers alone depress the quality of government. But, in interaction with democracy, they certainly boost governmental performance. Simulating Model B1 shows that whereas in an authoritarian regime with high media circulation the index of quality of bureaucracy would be 2, in a democratic regime with high media circulation it should climb up to about 4.6, other things being equal.

The import of democracy and media circulation decline substantially for all other measures of performance. Press and democracy affect positively the index of rule of law in Model C1. Their effect disappears, however, once we introduce the lagged value of rule of law.[19] Democracy has a dissuasive impact on the temptation policymakers may have to expropriate property owners. But a democratic setting with high levels of newspaper reading seems to pose a potential threat to property, at least if we are to believe the subjective perceptions that form the basis of the surveys of PRS.

[19] In the equation with first differences, press and democracy have negative signs. By contrast, the change in the interactive term of press and democracy has a positive effect on the change of rule of law.

As noted above, all these results should not surprise us. They actually reinforce the validity of the political accountability model presented in this paper. A higher level of political accountability translates into cleaner and more effective governments. But it may say nothing about whether citizens will comply with the law. And it certainly does not affect what policies citizens demand and governments pursue toward redistribution and private property. In other words, our model is not getting good empirical results merely because we are looking at different components of a well-functioning political system in which all kinds of "good behavior" cluster tightly together. On the contrary, the impact of political accountability varies across different dimensions of political life. It is fundamental to reduce corruption and increase administrative efficiency. But it does not necessarily color the character of substantive policies.[20] The strength of our estimations resides in that they are able to discriminate among different questions (corruption, performance, degree of state intervention) and models in quite a precise manner.

3. Corruption in US States

The validity of any theory ultimately hinges on how well it travels across different universes of cases. So far, we have tested our political accountability model on both a cross-section and a panel data of world states. We turn now to explore its implications as well as its robustness on the universe of US states—that is, in not fully sovereign political units. If the model is correct, higher levels of political participation and higher levels of political information and transparency should lead to more disciplined, less corrupt politicians.

To test our theory in the US, we examine the underlying causes of political corruption in the American states. The measure of political corruption is the number of public officials in each state who have been convicted for violating laws against public corruption per one hundred elected officials in that state. To eliminate random variations in yearly data, we employ the total number of convictions for two separate periods, 1977-1987 and 1986-1995. The data, gathered by the US Department of Justice's Public Integrity Section, has been collected and reported by Meier and Holbrook (1992) and Schlesinger and Meier (2000). During the first period of

[20] The differences in the explanatory value of democracy and newspaper circulation are the more robust given how relatively well correlated the different PRS indexes are. For example, the lowest Pearson's coefficient of correlation between any of the five indicators is 0.63 (the one between corruption and expropriation of risk). The highest, the one between expropriation of risk and repudiation of contracts, is 0.88. The remaining correlation coefficients fluctuate around 0.75.

analysis, the average state had 1.69 convictions per one hundred elected officials, and the standard deviation was 1.71. The number of convictions ranged from 0.03 in North Dakota, Kansas and Vermont to 5 or more in Alabama, Maryland and South Carolina. In the period of 1986-1995, the number of convictions experienced an increase: the average was 2.12 with a standard deviation of 2.35. The number of convictions increased in thirty-nine states and now spanned from 0.1 in New Hampshire and Vermont to over 8 in Florida and Virginia. The universe of cases is 49 (data for Hawaii are not reported in Schlesinger and Meier, 2000).

We examine the causes of variation in corruption in two ways. First, we estimate our model in a cross-section of the average of both periods. Second, we estimate a panel of the two periods using the same procedures discussed above. Results are reported in Table 9. Both models in Table 9 include the variables that are statistically significant: daily circulation of newspapers per person in 1983 and 1995; level of turnout in the presidential elections of 1976, 1980, 1992 and 1996; the log value of per capita income in constant dollars of 1995 for the years 1985 and 1995; the audit capabilities of the states, measured by the number of computer facilities available to the state legislature; and the index of social capital as developed in Putnam (2000). The daily circulation of newspapers is taken from the *Statistical Abstract of the US*, which gives the number of newspaper copies published in each state, and then adjusted, with data directly obtained from the major newspapers, to reflect actual readership in each state.[21] The newspaper circulation per person varies from 0.17 to 0.36 in 1983 (with a mean of 0.26 and a standard deviation of 0.05). In line with a fall in political participation and associational life (Putnam, 2000), it has dropped in recent years to a range from 0.12 to 0.30 (and a mean of 0.21) in 1995. The level of turnout and per capita income are also taken from the *Statistical Abstract of the US*. Data on audit capabilities is given by Meier and Holbrook (1992). The index of social capital is a summary measure built through factorial techniques using data on interpersonal trust, associational life and political participation (Putnam, 2000).

[21] As a result of this adjustment process, the daily newspaper circulation per person drops from 0.35 to 0.26 in New York and from 0.39 to 0.12 in Virginia (where major papers are printed) while increasing slightly in many other states. The data on New York is only partially adjusted since data on sales by state were not made available to us by the *New York Times*; this leads to an overestimation of the number of newspapers read in New York. Results do not change, however, even when we exclude this observation.

TABLE 9. Corruption in US States: Number of Prosecutions of Public Officials per 100 Hundred Officials, 1977 to 1995

INDEPENDENT VARIABLES	AVERAGE 1977-95	PANEL DATA
Constant	-5.78 (15.95)	-11.84*** (2.56)
Circulation of Newspapers [a]	-12.89** (5.37)	-12.55*** (3.42)
Turnout [b]	-0.12*** (0.05)	-0.09** (0.04)
Per Capita Income (Log) [c]	1.64 (1.61)	2.22** (0.44)
Audit Capabilities [d]	0.09** (0.04)	0.09** (0.04)
Social Capital Index [e]	-0.38 (0.42)	-0.57** (0.24)
R-Squared	0.560	0.449
Adjusted R-Squared	0.508	
Number of observations	48	96

[a] Newspaper Circulation per Person. Data for 1983 and 1995.
[b] Level of turnout in presidential elections of 1976, 1980, 1992 and 1996.
[c] Per Capita Income. Log of per capita GDP in 1995 constant prices.
[d] Computer Facilities Available to Legislature. Source: Meier and Holbrook (1992).
[e] Index of social capital developed in Putnam (2000).
Estimation: Ordinary last squares estimation. For panel, panel corrected standard errors.
Standard errors in parenthesis.
*** p<0.01; **p<0.05; *p<0.10.

Total variance in the models in Table 9 is high and the coefficients are very stable. The results show that the number of convictions declines by 3.5 (about one and half standard deviations in the panel data) if we move from the lowest to highest levels of newspaper circulation. Exactly replicating the results obtained in Table 6 above (Model 2), the level of electoral participation has a strong impact on corruption. Turnout in presidential elections varies from 40 to 70 per cent approximately (the mean is around 55 per cent). Accordingly, increasing

participation to the highest rate in the sample reduces the number of convictions by 3.7. The impact of per capita income is small. The number of computer facilities per legislature has a small but positive (rather than negative as we might have expected) impact on corruption. The impact of social capital, that is, the existence of institutionalized structures of cooperation, is ambiguous. It is only significant in the panel analysis.[22]

An introduction of a time variable in the panel data estimation leads to a very small (-0.15) and statistically not significant coefficient. We are tempted to conclude from this last result that the increase in the level of corruption from the first to the second period is neither a randomly determined effect nor a consequence of improved federal resources, but rather that it is directly tied to the decline in both newspaper readership and electoral participation that had taken place over time and that we have shown to be the key mechanisms to exact good behavior from politicians.

The models we report in Table 9 have been subjected to a long battery of controls—the results are not included since coefficients for those variables are not statistically significant. Controls include resources in the hands of the federal government (measured through federal attorneys per 100 population, federal judges per 100 population and backlogged federal cases), social characteristics of the state population (percent of urban population, college graduates and percent with a high school degree or higher), degree of party competition (measured as the difference between the first and second parties in elections), type of party organization (measured through the index of "traditional party organization" reported by Mayhew, 1986 and ranking party state organizations by how well they fit the ideal type of an autonomous, stable, hierarchical, centralized organization capable of controlling nominations and mobilizing sympathizers and voters), institutional characteristics of states (appointment power of the governor, state centralization measured by percentage of state and local employees who are employed by the state government, number of special districts as a percent of all government units, proportion of the electorate that must sign petitions to activate procedures for recall, referendum and initiative), ideology of the state (using the liberalism index developed by Wright,

[22] An analysis of the separate impact of each of the components of the index of social capital shows that purely associational measures (such as number of organizations per capita, attendance to club meetings, etc.) do not explain levels of corruption. Corruption declines with both higher levels of interpersonal trust and participation in politics. In the former variable, the causal direction probably flows from corruption to trust. The latter type of variable, measured through number of people attending local meetings and number serving as officers in organizations, is, as

Erikson and McIver and modified by Meier and Holbrook, 1992, to include Alaska and Hawaii), campaign reporting requirements (defined as the number of groups or types of individuals required to file campaign finance statements) and size of public budget and state bureaucracy (measured through number of government employees per 1000 inhabitants, mean salary of state employees, ratio of public budget to employees, and public tax revenue per capita).[23] Newspaper circulation and turnout are especially robust to the introduction of these control variables. Per capita income becomes statistically not significant when measures of urban share of the population and educational level are introduced in the regression. In turn, once we drop per capita income, the variables measuring education levels, urban population, and proportion of public employees become significant: the first one reduces corruption; the latter two increase it.

4. Concluding Remarks

In this paper we have explored the causes that underlie the wide variation in government performance and corruption we still observe today across the globe. Our explanation is relatively straightforward. How well any government functions simply hinges on how good citizens are at making their politicians accountable for their actions. The types of tasks modern states have to accomplish force citizens to hand over massive resources and discretionary powers to policymakers. This process of delegation, however, is likely to jeopardize the welfare of citizens. Politicians may be tempted to exploit the lack of information that voters may have about policies and their consequences either to pursue their own agenda or to appropriate part of the public budget. Thus, it is only when citizens effectively discipline policymakers to serve them that public goods are delivered in an efficient manner and corruption is curtailed.

The political control of public officials turns out to depend on two key factors. First, free and regular elections allow citizens to discipline politicians—the credible threat of losing office in the next period compels policy-makers to respond to the voters' interests. Second, and equally important, the degree of information of citizens curbs the opportunities politicians may have to engage in political corruption and mismanagement. Governmental performance improves as citizens have more precise knowledge on both the policies adopted by politicians and the environment in which they are implemented, provided that competitive elections are in place to

a matter of fact, tapping the political accountability mechanisms we have already uncovered in the course of the paper.

punish the incumbent. As shown in the paper, the presence of a well-informed electorate in a democratic setting explains between one half and two thirds of the variance in the levels of governmental performance and corruption. This result is robust to the type of indicator, the time frame and the universe we employ. It explains well why corruption is rampant in sub-Saharan Africa and Russia yet close to non-existent in Canada, Central and Northern Europe or New Zealand. It accounts for the impressive cleanliness of American states in the Plains as well as for the much higher level of federal indictments of public officials in the South of the USA.

A well-informed and politically mobilized electorate matters more than the level of economic development to ensure good government. Per capita income is correlated, although only mildly, with better performance for two reasons. First, the impact of per capita income partly reflects the fact that richer nations have more resources. Second, it proxies for the ways in which the structure of the economy, both in terms of the mobility of factors and the diversity of economic sectors, may constrain politicians. Our results on the positive impact of financial liberalization on performance provide, in fact, some indirect evidence on the disciplining effect that giving more exit options to citizens may have on public officials.

In the last decade, civil society has been resurrected as a main variable to explain the political and economic vibrancy of nations. To some extent, newspaper readership and electoral competitiveness are part and parcel of any "strong" society. But civil society is too broad a concept to have real analytical leverage: one of the goals of the paper has been to delimit more effectively what mechanisms serve to control politicians. The paper shows that strong cooperative patterns and higher levels of interpersonal trust may matter—the evidence is rather mixed for the world sample and close to non-existent for the American states once we control for participation and information levels. But overall it is the presence of politically active and sophisticated electorates that does the job of generating better politicians.

Having the proper mechanisms to enforce political accountability reduces to a marginal role most of the remaining potential variables entertained by the current literature. Neither the structure of the legal system nor any specific religion appears to affect the performance of government. Ethnic conflict has no direct effect on institutional performance—although it may indirectly, since it fosters political instability, which in turn depresses the quality of government. Variations in the type of constitution—in the electoral system, degree of political centralization

[23] Most data have been taken from Meier and Holbrook (1992) and from the *Statistical Abstract of the US*.

or legislative-executive relations—do not alter the behavior of politicians. This last result should only in part be read as rebuttal of the growing favor that neoinstitutional models are finding among political economists. Our sense is that governmental performance hinges more on the way in which the linkage between voters and politicians is structured or institutionalized than on the constitutional framework in place. As of now, however, we do not have the right type of cross-national indicators to measure the extent to which politicians and voters are connected by clientelistic or any other kind of relationships. This points out the lines of research we should work on in the future. We need to explore what types of linkages connect politicians and voters in different countries and party systems as well as the ways in which they impair or increase government's accountability. Similarly, we should pay more attention to the conditions that generate the kind of mobilized democracies that lead to good government.

REFERENCES

Barro, R. 1973. "The Control of Politicians: An Economic Model." *Public Choice*. 14: 19-42.

Beck, N. and Katz, J.N. 1995. "What to Do (and Not to do) with Time-Series Cross-Section Data (in Articles)." *American Political Science Review.* 89: 634-647.

Boix, C. 2000. "Some Thoughts on the Political Underpinning of Social Trust: The Effects of Inequality and Political Instability." Chicago, United States: University of Chicago. Unpublished manuscript.

Boix, C. and Posner, D. 1998. "The Origins and Political Consequences of Social Capital." *British Journal of Political Science.* 28: 686-693.

Brunetti, A. and Weder, B. 1999. "A Free Press is Bad News for Corruption." Basel, Switzerland: University of Basel. Mimeographed document.

Cox, G.W. 1997. *Making Votes Count: Strategic Coordination in the World's Electoral Systems*. New York, United States. Cambridge University Press.

Downes, A. 2000. "Federalism and Ethnic Conflict." Chicago, United States: University of Chicago. Mimeographed document.

Easterly, W. and Levine, R. 1997. "Africa's Growth Tragedy: Politics and Ethnic Divisions." *Quarterly Journal of Economics.* 112: 1203-1250.

Ferejohn, J. 1986. "Incumbent Performance and Electoral Control." *Public Choice.* 50: 5-25.

Inter-American Development Bank. 2000. *Development Beyond Economics. Economic and Social Progress in Latin America 2000 Report*. Washington, DC, United States: Inter-American Development Bank.

IDEA. 1997. *Voter Turnout from 1945 to 1997: A Global Report on Political Participation*. Stockholm, Sweden: International Institute for Democracy and Electoral Assistance.

Jaggers, K. and Ted Robert Gurr, T.R. 1995. *Polity III: Regime Type and Political Authority, 1800-1994*. Computer file. 2nd ICPSR version. Boulder, United States and College Park, MD, United States: University of Colorado and University of Maryland..

Kaufmann, D., Kraay, A. and Zoido-Lobatón, P. 1999a. "Aggregating Governance Indicators." *World Bank Working Paper* 2195. Washington, DC, United States: World Bank.

----. 1999b. "Governance Matters." World Bank Working Paper 2196. Washington, DC, United States: World Bank.

Knack, S. and Keefer, P. 1995. "Institutions and Economic Performance: Cross-Country Tests Using Alternative Institutional Measures." *Economics and Politics.* 7: 207-27.

LaPorta, R., Lopez de Silanes, F., Shleifer, A. *et al*. "The Quality of Government." NBER Working Paper 6727. Cambridge, United States: September.

Linz, J.J. and Valenzuela, A. 1994. *The Failure of Presidential Democracy. Volume 1: Comparative Perspectives*. Baltimore, United States: Johns Hopkins University Press.

Mauro, P. 1995. "Corruption and Growth." *Quarterly Journal of Economics.* 110: 681-712.

Mayhew, D.R. 1986. *Placing Parties in American Politics: Organization, Electoral Settings, and Government Activity in the Twentieth Century*. Princeton, United States: Princeton University Press.

Meier, K.J. and Holbrook, T.M. 1992. "I Seen My Opportunities and I Took 'Em": Political Corruption in the American States." *Journal of Politics*. 54: 135-155.

Norris, P. 2000. "The Impact of Television on Civic Malaise." In: S.J. Pharr and R.D. Putnam, editors. *Disaffected Democracies: What's Troubling the Trilateral Countries?* Princeton, United States: Princeton University Press.

Olson, M. 1993. "Dictatorship, Democracy, and Development." *American Political Science Review*. 87: 567-576.

Persson, T., Roland, G. and Tabellini, G. 1997. "Separation of Powers and Political Accountability." *Quarterly Journal of Economics*. 112: 1163-1202.

Persson, T. and Tabellini, G. 2000. *Political Economics*. Cambridge, United States: MIT Press.

Przeworski, A., Stokes, S.C. and Manin, B., editors. 1999. *Democracy, Accountability, and Representation*. New York, United States: Cambridge University Press.

Putnam, R.D. 1993. *Making Democracy Work*. Princeton, United States: Princeton University Press.

Putnam, R.D. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York, United States: Simon and Schuster.

Quinn, D. 1997. "The Correlates of Change in International Financial Regulation." *American Political Science Review.* 91: 531-551.

Rogowski, R. 1987. "Trade and the Variety of Democratic Institutions." *International Organization*. 41: 203-224.

Schlesinger, T. and Meier, K.J. 2000. "Variations in Corruption among the American States." Milwaukee, WI and College Station, TX, United States: University of Wisconsin-Milwaukee and Texas A&M University. Unpublished manuscript.

Shugart, M.S. and Carey, J.M. 1992. *Presidents and Assemblies: Constitutional Design and Electoral Dynamics*. New York, United States: Cambridge University Press.

Treisman, D. 1998. "The Causes of Corruption: A Cross-National Study." Los Angeles, United States: University of California at Los Angeles. Unpublished manuscript.