

# Transition from Communism: Political Alternation as a Restraint on Investing in Influence<sup>1</sup>

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A central question in development economics is how institutions for good governance emerge. One reason this is a difficult question is that the emergence of new institutions depends on expectations, and expectations are difficult to measure. But certain events that occur during political liberalization may have a large effect in shaping expectations and thus proxy for expectations of the future. In this paper, we examine how the number of leadership changes affects corruption and the quality of governance. Our hypothesis is that more alternations in power mean that political connections pay off less and so attract less investment by those seeking privileged treatment by the state. We construct a set of indices of political alternation in the post-communist economies, and find that governance indicators are better where alternation in power has been more frequent.

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## 1. The relationship between alternation in power and governance

It is often held in political science and democracy studies that after initial democratization, at least several power turnovers are needed in order for democracy to become established and the observance of its ground rules taken for granted (Huntington, 1991; Przeworski, 1988). With a single switchover from authoritarianism to democracy, the roots of new democracy are too tender and the structure of the polity, people's customs, and the interests of the elites make a reversal not improbable. Indeed, the record of democratization over the last 50 years has been impressive but also quite patchy, as a number of countries have switched back and forth between authoritarian and democratic regimes (examples include Argentina, Brazil, Nigeria, and Sierra Leone).<sup>1</sup>

But if several power alternations are needed for the democratic rules of the game to become credible, then power alternation may also be needed for the rule of law to become established. Some of the literature shows how paths of institutional development have been shaped by factors that, from today's perspective, are fully exogenous—for example, colonial regime and geography. In contrast, in this paper we look at the emergence of institutions as the product of *current* political interplay. We argue that if political rules are such that, during the period of liberalization, more frequent political changes occur, it is likely that better governance institutions will be created. We show how more frequent power alternation in the period following initial liberalization can result in better governance. We test this relationship using data from 27 post-communist countries and find that governance indicators in almost all dimensions are better in transition economies that have experienced more frequent government changes.

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<sup>1</sup> According to Polity IV, which assigns countries a democracy score on a scale from 0 (worst) to 10 (best), democracy in Brazil went from 6 to 0 in the period 1961-66, Argentina went from 3 in 1957-65 to 0 in 1966-72, Nigeria went from 8 in 1965 to zero during the next fifteen years, and Sierra Leone went from 6 in 1960-66 to 0 in 1971-95. By 2002, Argentina and Brazil were back to high democracy scores (both 8), and Nigeria and Sierra Leone had, respectively, scores of 4 and 5.

The intuition behind our explanation of this relationship is simple. Particularly at the early stages of transition to democracy, the political process can easily become corrupted. When civil society, the media, and representative institutions are weak and the legal boundaries on corruption are neither well-defined nor well enforced, organized and rich special interests have few constraints on their ability to buy politicians. If that is the case, then organized business will tend to shift a non-negligible part of its resources (in money and time) into investing in influence, since the returns on influence acquisition will be high. By *investing in influence*, we mean an activity that is broader than mere bribery or corruption. It also includes implicit deals that cannot strictly speaking be ruled illegal, in which a public official uses the power of his office to obtain a private gain for himself and his business partners.

The most direct way to break the vicious circle of weak institutions and strong particular interests is through power alternation. With power alternation, a new set of political players comes to power; and while these players may, in their turn, be beholden to some interest groups, it is unlikely that these would be the *same* interest groups that supported the previous government. Thus the rate of return to buying influence for the previous group drops sharply. But this is not merely a replacement of one group of influence-buyers by another. A more fundamental change occurs. The newly powerful influence-buying groups realize that the same fate may await them too.

The expected return on influence-buying falls if power changes hands and individuals revise downward their expectations that any given party will long retain its hold on power—that is, if democracy and power alternation become routinized. Political alternation plays the “signaling” function. It conveys information that the rules of the game have changed compared to the old system and that hold on power is time-bound and obeys precise formal rules. “Sweet deals” may be rapidly undone—not by the caprice of the rulers but by the popular vote. In an authoritarian system, an investor in influence has to worry about not offending the rulers and making sure that he lives up to their implicit bargain. But in a democracy, the bargain is not enforceable even if there is good will on both sides, for it could happen that the rulers themselves are thrown out of office.

*With* political alternation, one set of beliefs and institutions would thus be created; *without* it, an “old” set of beliefs and institutions is much more likely to be held and validated. To put it another way, until political alternation is routinized, actors may doubt whether the incumbent party or leader will accept defeat in a popular vote and play according to the formal rules.<sup>2</sup>

If the idea of alternation becomes accepted, firms seeking preferential treatment from the state will face the following choice: either to try to influence the entire political spectrum of parties or to forsake influence-buying in favor of legal forms of competition. Some, of course, may pursue the first strategy. Yet this is a very costly option: it entails paying for preferential treatment more than once. Further, unless the differences among the political parties are slight, this strategy may also be difficult to implement: there may be ideological affinities or aversion among various interest groups and political parties. (For example, firms that seek to block competition would be unlikely to be politically acceptable to a non-protectionist party.) Thus, the second course of action—acceptance of more transparent and equal rules of the game—may often seem a better strategy when political alternation is high. We would thus expect that when democracy is in the nascent stage of development, that is, during what Przeworski (1998) calls periods of “political liberalization” and “democratization,” more frequent power alternation would be associated with better governance.

Thus, we regard the quality of governance as the outcome of a *political* process. Since governance depends on institutions, our contention is that these institutions are products of political processes. This, in turn, means that we provide a political answer to the question of how a country can improve its institutions. Its institutions can be improved, in some areas at least, if certain political outcomes, namely, more frequent alternations in power, occur. But how can that be done? And why do countries differ in the frequency of alternations in power? The results of this paper are consistent with three complementary explanations. First, negotiations about the electoral system, division of

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<sup>2</sup> Uncertainty regarding the stability of democracy characterized, for example, the transitions in Spain (recall Tejero’s attempted coup), Portugal, and Greece.

powers, and other institutions between the power-holding elite and the reformers in the early stage of political liberalization influence the frequency of alternations in power.<sup>3</sup> Second, as we show theoretically, beliefs about future political alternation can play an autonomous role; they can be self-fulfilling. Third, our empirical results suggest that whatever “deep” historical factors account for differences across countries in the quality of governance, they are in part mediated by political alternation.

The experience of the transition economies over the period 1990-2002, in which authoritarian communist regimes collapsed and were often replaced by democratic systems, makes for an extremely interesting quasi-experiment. Investigators should, in principle, be able to identify the degree to which greater leadership turnover, in general, and more frequent shifts in regime ideologies (to the left or right), in particular, are associated with improved governance. It is only very recently (2004), as eight former transition countries joined the European Union, that we can assume that for these countries, democratic alternation in power has been accepted and internalized by all political participants.

Casual observation also motivates our view that alternation between political regimes has been a healthy development for governance in Eastern Europe. When Eastern European countries went through the first round of free elections, new center-right parties often won the elections. This was the case, most famously, in the first (semi-free) Polish elections in 1989, as well as in the Slovenian and Hungarian elections in 1990.<sup>4</sup> This was not an unexpected outcome given the low regard in which the majority of the population held the old regime. What was unexpected was that the reformed Communist parties soon returned to power. In 1992-94, reformed Communist parties recaptured power in Lithuania, Poland, and Hungary—routing one right-wing coalition after another. At the time, many commentators, unsure of the reformed Communists’ commitment to democracy, worried about their resurgence. Not a few voiced concern

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<sup>3</sup> A related discussion is in Przeworski (1988).

<sup>4</sup> These were the first three free elections in Eastern Europe since Czechoslovak elections in 1948

about the fate of reforms and democracy. Events proved their fears unfounded. Countries that switched from a right-wing to a left-wing coalition kept the key reforms intact and, in some areas, accelerated them. The alternation in power did not put democracy in jeopardy. Rather, the orderly succession between governments of different political hues imparted an air of stability to the new democracies—one that foreign investors, for example, found attractive and soothing.

Thus, rather than destabilizing the reform process, the electoral victories of the former communists (who have in the meantime morphed into social democrats) seem to have *entrenched* the democratic transition and improved governance. In contrast, countries that did not experience alternations in power fared much worse. There the leaders, be it the nationalist kind like Slobodan Milosevic in Serbia, the older communist type like Aleksandr Lukashenko in Belarus, or a secular authoritarian like Islam Karimov in Uzbekistan, created a veneer of democratic process but in reality kept power firmly in their own hands. This, as explained above, increased the incentive for special interests to invest in influence.

Russia also provides a case in point. Despite an initial record in democratization better than that of Serbia, Belarus, or Uzbekistan, limited subsequent alternation in power helped the business groups that captured the state under Boris Yeltsin's presidency to retain their privileged position. Even under Vladimir Putin, only some of the top Yeltsin-era oligarchs, particularly those who had political aspirations, have been made to feel the power of the state. Many others remain well-entrenched and quite successful in buying influence at the federal and lower levels. Thus the much-vaunted "dictatorship of the law" has been applied very selectively in a practice eerily reminiscent of communism, which intentionally kept laws vague so that their application could respond to political expediency. There is a broad consensus that the absence of power alternation in Russia and, currently, the absence of even a credible party opposition, has had a negative effect on all aspects of governance.

Motivated by these observations, we present in Section 2 a simple model in which political alternation reduces the rewards to investing in influence and thus the level of such investment. We allow for the possibility that the level of political alternation and the quality

of governance are jointly determined. The greater the expected frequency of political alternation, the lower the level of investment in influence because, once new leadership takes office, the old corruption contracts will be unenforceable and the parties to them might even be punished. The lower the level of investment in influence, the lower the proportion of voters with a vested interest in reelecting the incumbent and so the greater the frequency of turnover. In this way, beliefs about the level of political alternation can play an autonomous role and be self-fulfilling.

Our approach complements the work of Landes and Posner (1975) and Stephenson (2004), who have argued that political alternation is a factor conducive to the establishment of a rule of law. Approaching the matter from the perspective of political parties in power rather than, as we do, from the perspective of citizens, Landes and Posner, and Stephenson trace the emergence of an independent judiciary to the desire of politicians to enforce promises to their constituents beyond their own terms of office.

Our approach differs from much other recent empirical work on governance, which identifies as factors in poor governance the extent of political decentralization and instability (Treisman, 2000, 2002<sup>5</sup>), a presidential rather than parliamentary system (Kunicova 2001), polarization between the executive and legislature (Frye 2002), and legal tradition (La Porta, Silanes, Shleifer and Vishny, 1999).

After presenting the model in Section 2, we show in Section 3 how we constructed a family of indices of cumulative political alternation for the transition economies. In Section 4, we describe the governance measures of Kaufmann-Kraay-Mastruzzi (2003), and in Sections 5 we report out empirical results. We believe that the approach we take here to understanding the emergence of good governance in liberalizing and democratizing countries has general validity. The current empirical test is merely the first of several that can be envisaged.

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<sup>5</sup> The hypothesis advanced here is directly opposite to that of Treisman (2002, p. 16), who has argued that greater political turnover in the transition economies, proxied by the number of prime ministers since the onset of the transition, leads to greater corruption.

## 2. The model

### A. Assumptions

We use a simple two-period model. The assumptions are intended to capture two general features of investing in influence. First, the payoff is obtained in a lengthy (more than one-period) process. Our focus is on “grand corruption,” situations where agents (enterprise directors) purchase rules of the game that privilege their own interests, protection from competitors, favorable judicial decisions, property rights as private goods, and so on. Such privileged protection normally entails government actions that occur *over time*. In our model, influence is a durable good purchased from influential politicians.<sup>6</sup> In contrast, “petty corruption,” which may involve bribes to policemen to avoid a fine or giving presents to get ahead in a queue, normally involves *spot* transactions. To curtail petty corruption, much more than political change at the top is required.<sup>7</sup>

The second feature is that corruption contracts are enforced only as long as the party remains in power. If the party loses power, the investor will incur a loss: the loss might take the form of a loss on sunk investments or a punishment imposed by a successor government. If the party remains in power, then we assume that one of a variety of devices exists to enforce the contract. One possible device relies on the fact that corruption is in general illegal, so that its revelation could be costly to both the giver and the receiver of a bribe. If the politician reneged, the investor might use his knowledge of the transaction to hurt the office-holder, which in turn gives the politician an incentive to honor the contract.<sup>8</sup> The organization of firms into political networks provides another means for enforcement.

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<sup>6</sup> Thus, the idea of investing in influence as a durable good applies to other settings too. A government official who works on (say) airline regulation and after a few years takes a job as a commercial airline executive may not be doing, strictly speaking, anything illegal. Yet he could have participated in (selling) the “investment in influence” on the tacit understanding that he would be rewarded with a job offer after he leaves the government.

<sup>7</sup> A mere change of government is unlikely to affect the behavior of a street cop. Administrative reform, change in salary structure, etc., are needed for that.

<sup>8</sup> Freeland (2000, ch. 12) argues that in 1997, one of the beneficiaries of the “loans-for-shares” arrangement in Russia believed that the government had not given him a fair share of state assets. He threatened to block—and did block—actions that Yeltsin wished to take by exposing corruption. The revelations were a factor in delegitimizing Yeltsin’s administration.



In that case, a violation of a contract with any member of the network might result in the withdrawal of crucial financial or political support to the party in power.<sup>9</sup>

A direct implication of these two assumptions is that by investing in influence, enterprise directors obtain an interest in the reelection of the incumbent party. The specific assumptions of the model are as follows:

(i) *Agents*. There are a large number (formally, a continuum) of enterprise directors, and we normalize their mass to unity. Enterprise directors, indexed by  $i$ , differ in their political preferences and also in their ability to invest in influence. For simplicity, we assume that these two parameters are independently distributed. We let  $\theta_i$  denote a director's ability to invest in influence, and assume that this parameter has a continuous, differentiable cumulative distribution function  $H(\cdot)$ , with  $H(\cdot) > 0$  for  $\theta > 0$ . In the real world, many factors would give rise to differences in the ability to earn "influence-rents," including wealth, the size of the enterprise (larger firms have more bargaining power and control more resources), and membership in a network of enterprise directors that can enforce bargains between a firm and the state.

(ii) *Payoffs to investing in influence*. Each director has an opportunity to make one bargain (a "corruption contract") with the party in power. In the bargain, the party uses its *de facto* authority to create rents for the enterprise director. The enterprise director must decide whether or not to act. If he does not act, he receives a return of zero. If he invests in influence and the party retains power in the second period, then he receives a net return  $R$  in this period and the next period. But if the party loses office in the second period, then the enterprise director will suffer a loss  $\ell$ .  $R$  is the return that divides the surplus from the corruption contract between the politician and the enterprise director according to the Nash or some other bargaining solution. Directors with a higher value of  $\theta$  earn a higher net

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<sup>9</sup>Stoner-Weiss (1997 [check]) suggests that such collective enforcement has occurred in parts of Russia. Haber et al. (2003) argue that, in Mexico, networks of manufacturing firms control labor unions, which play the role of third-party enforcer. If the government violates agreements with any member of the network, then the network can bring down the government by calling a general strike.

return to investing in influence:  $R'(\theta) > 0$ . Given these assumptions, the expected payoff to investing in influence can be written as

$$(1) \quad v(\theta, \pi) = R(\theta) + \delta \{ [1-\pi]R(\theta) - \pi \ell \}$$

where  $\pi$  is the probability of political turnover and  $\delta$  is the discount factor. The first term of (1) gives the first period's return, which occurs with certainty. The second term gives the second period's expected return, which depends on the probability of turnover in power.<sup>10</sup> This equation is relevant to a setting where the institutions to limit corruption are sufficiently weak that a central determinant of the payoff to investing in influence is the probability of turnover in effective power in government. Thus, our model applies particularly to nascent democracies and other countries undergoing political liberalization, not to ones with strong institutions to define and punish corruption.<sup>11</sup>

(iii) *Political structure.* Enterprise directors interact with politicians in two ways: through investing in influence for private gain, as discussed above, and through their influence on the outcome of the election at the end of the first period. Two parties A and B compete for office, and the outcome depends on a simple majority voting rule among the enterprise directors. A is the incumbent, B is the challenger. A voter  $i$  prefers candidate B over the incumbent if

$$(2) \quad \Delta_i + b - d[R(\theta_i) + \ell] > 0.$$

Here  $\Delta_i$  is an individual-specific parameter that can take on negative as well as positive values. It measures voter  $i$ 's ideological bias toward candidate B. A positive value of  $\Delta_i$

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<sup>10</sup> Preferential treatment obtained by some firms may impose a cost on other firms through barriers to entry and distorted expenditures on public goods. This effect may raise the relative return to each firm to investing influence (relative to not doing so). Our model abstracts from this possible effect, but taking it into account would strengthen our results by magnifying the effect of expected turnover on the level of investment in influence.

<sup>11</sup> Our model also does not apply to highly politically unstable countries, such as Angola and Liberia, where the time horizon of politicians tends to be so short that, as Bates (2004) has argued, the private sale of property rights does not in general occur; anything that government can easily appropriate, it loots.

implies that voter  $i$  has a bias in favor of party B, whereas voters with  $\Delta_i = 0$  are ideologically neutral. We assume that  $\Delta$  has a uniform distribution on  $[-\frac{1}{2}, +\frac{1}{2}]$ . Thus some individuals are inherently biased towards one or the other candidate. Preferences also have a random component,  $b$ , uniformly distributed over  $[-\frac{1}{2}, +\frac{1}{2}]$ , whose realization is common to everyone (say, higher inflation or unemployment).  $b$  is the unexpected “bad news” associated with the incumbent candidate or his policies. The final term in (2) is the loss that the voter incurs if the incumbent party is not reelected in the second period.  $d = 0$  if the voter did not invest in influence, and  $d = 1$  otherwise. To keep things simple, we assume that if an individual invests in influence, (2)  $< 0$  for all  $i$ , formally,  $R(\theta_{\min}) + \ell > 1$ . This inequality is satisfied if costs foregone from the breakup of a corruption contract exceed the maximum fixed and random component of the voter’s inherent bias towards a challenger.<sup>12</sup> This assumption implies that the only voters who are responsive to news ( $b$ ) are those who do not invest in influence.

## B. The Decision to Invest in Influence

We are now ready to consider the enterprise director’s decision whether or not to invest in influence. The payoff to investing in influence is increasing in one’s type,  $\theta_i$ , as depicted in Figure 1. Monotonicity of  $v$  in  $\theta_i$  implies that a unique critical value  $\hat{\theta}(\pi)$  exists for each  $\pi$  such that agents of type  $\theta_i > \hat{\theta}(\pi)$  invest in influence and agents of type  $\theta_i < \hat{\theta}(\pi)$  do not. Given  $\pi$ , the critical value is the type who is indifferent between investing and not investing in influence, that is, where  $v(\theta_i, \pi) = 0$ .<sup>13</sup> We will refer to the critical value of  $\theta_i$  as the *switch point*. Then  $H(\hat{\theta})$  is the fraction of directors who do not invest in influence, and  $1-H(\hat{\theta})$  is the fraction who do. We denote this fraction by  $x$ :

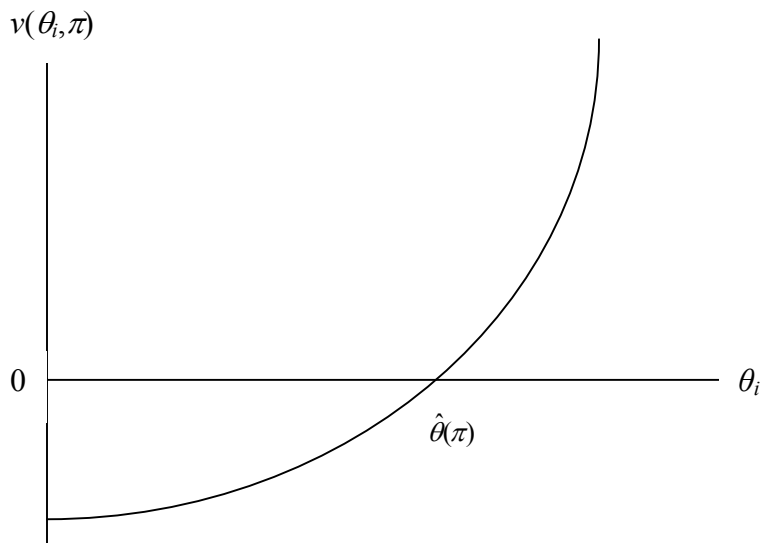
$$(3) \quad x(\theta) = 1 - H(\hat{\theta}(\pi)).$$

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<sup>12</sup> Our qualitative results depend only on the much weaker assumption that corruption contracts are enforced only as long as the party remains in power; thus, they create a stake in the incumbent’s reelection, which lowers the likelihood that an investor in influence prefers the challenger. We make the strong assumption that an investment in influence ensures a preference for the incumbent only for simplicity.

<sup>13</sup> An individual’s decision to invest in influence will give him a stake in the incumbent party and so affect his voting behavior, described below, but the individual does not take this into account because a single individual’s vote has a negligible effect on the outcome of the election.

FIGURE 1. ENTERPRISE DIRECTORS DIFFER IN THE ABILITY TO INVEST IN INFLUENCE, AND THE PAYOFF IS POSITIVE FOR TYPES  $\theta_i > \hat{\theta}$ .



Consider next the effect of a change in beliefs. An increase in  $\pi$  raises perceptions of the competitiveness of the political process and shifts down the expected return from investing in influence. This moves the switch point rightward, so fewer people invest in influence. Figure 2 provides the basic insight: the switch point moves from  $\hat{\theta}(\pi_1)$  to  $\hat{\theta}(\pi_2)$ . Formally,

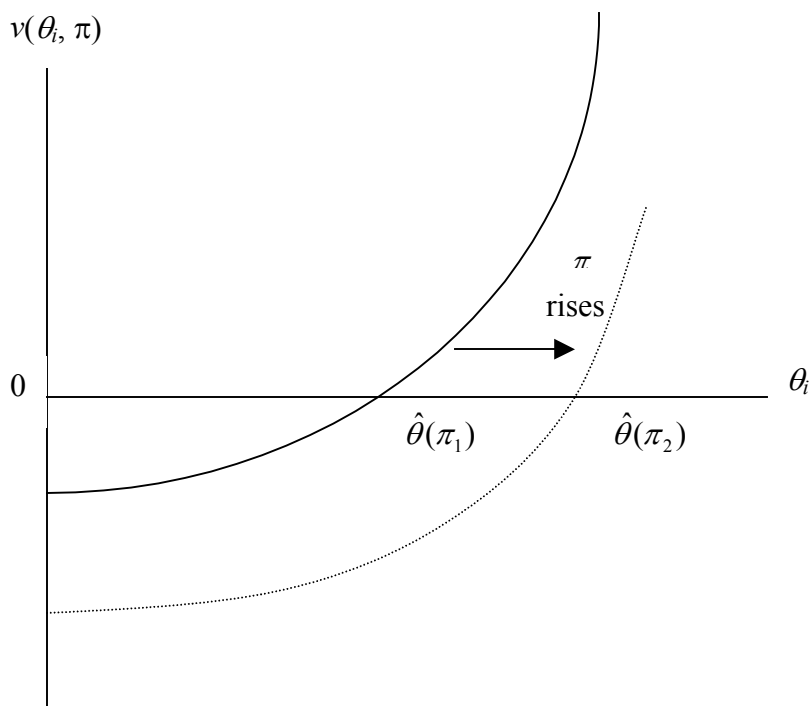
$$(4) \quad \frac{d\hat{\theta}}{d\pi} = -\frac{\frac{dv}{d\pi}}{\frac{dv}{d\theta}} = \frac{\delta[R(\theta) + \ell]}{R'(\theta)[1 + \delta - \delta\pi]} > 0$$

The increase in the switch point means that the proportion of individuals who engage in corruption decreases. Differentiating (3) with respect to  $\pi$  gives:

$$(5) \quad \frac{dx}{d\pi} = -H'(\theta) \frac{d\hat{\theta}}{d\pi} < 0.$$

(5) states that an increase in the probability of turnover lowers the fraction of enterprise directors who invest in influence. It does so because it makes corruption contracts less likely to pay off.

FIGURE 2. AN INCREASE IN THE PROBABILITY OF TURNOVER ( $\pi$ ) LOWERS THE RETURN TO INVESTING IN INFLUENCE AND RAISES THE SWITCH POINT ( $\hat{\theta}$ ).



Expected rents to those who invest in influence are given by  $M = \int_{\hat{\theta}(\pi)}^{\infty} v(\theta) dH(\theta)$ .

This function has the following properties. First, it is decreasing in  $\pi$ . Formally,

$$(6) \quad \frac{dM}{d\pi} = -v(\hat{\theta}, \pi) - \delta \int_{\hat{\theta}}^{\infty} [R(\theta) + \ell] dH.$$

Expected rents fall because the marginal investor in influence drops out and because the inframarginal investors in influence forgo second-period rents,  $R$ , and suffer a loss,  $\ell$ .

Second, an increase in inequality in the distribution of  $\theta$  among firms that invest in influence increases their expected rents if  $R(\theta)$  is convex, and decreases them if  $R(\theta)$  is concave. This is true because a mean preserving spread of the distribution of a variable raises the expected value of a convex function, and lowers the expected value of a concave function (Rothschild and Stiglitz, 1970). This result has an interesting implication where ability to invest in influence depends on wealth (private wealth and the

resources of the firm). In that case, it is plausible that buying influence is characterized by increasing returns to scale ( $R(\theta)$  is convex). Given two otherwise identical countries, the country with higher inequality of wealth among influence-buying firms would provide higher corruption rents.

Firms in manufacturing industries eventually run into scale diseconomies, which limit their size. This is not true with oil and natural gas companies, whose value reflects reserves, whether developed or not. Economies rich in oil and natural gas will tend to have a few extremely wealthy firms.<sup>14</sup> In such economies, our result implies that aggregate corruption rents will tend to be high, since some enterprise directors may have extraordinary power to extract rents from government.

### C. The Voting Outcome

We now consider the outcome of the election between the incumbent (candidate A) and a challenger (candidate B). Recall that the “non-vested voters” are those who have not invested in influence; investors in influence vote for the incumbent. Let  $\lambda$  be the share of non-vested voters that the challenger attracts. The probability that the challenger wins is the probability that his vote share is at least one-half:  $\text{Prob} \{[1-x]\lambda \geq 1/2\}$ . Thus, given a fraction  $x$  of the population that invests in influence, the share of non-vested voters required to win is a fraction

$$(7) \quad \lambda^* = \frac{1}{2[1-x]}.$$

(7) states that as  $x$  rises above zero, the fraction of non-vested voters (the “tipping point”  $\lambda^*$ ) needed for political turnover to occur rises above one-half.

Associated with the tipping point is a critical value of preferences, which we denote by  $\Delta_p$ , such that a fraction  $\lambda^*$  of the population has preferences for the challenger above the critical value and a fraction  $1-\lambda^*$  below it. Formally,  $\text{prob} \{\Delta_i > \Delta_p\} = \lambda^*$ ,

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<sup>14</sup> Assuming that these assets are not held by the state.

which implies that<sup>15</sup>

$$(8) \quad \Delta_p = \frac{1}{2} - \lambda^* \leq 0 .$$

The election of the challenger depends completely on the incentives of the individual of type  $\Delta_p$ . If he prefers the challenger, then so will at least half the voters (those who invested in influence plus those who did not and have type  $\Delta_i > \Delta_p$ ) and political turnover will surely occur. If, however, he prefers the incumbent, then again so will at least half the population (those who invested in influence plus those who did not and have type  $\Delta_i < \Delta_p$ ) and the incumbent will be reelected with certainty. Thus, as an individual of type  $\Delta_p$  votes, so votes the majority.

From (2), the pivotal voter will vote for the challenger if  $\Delta_p + b \geq 0$ . The probability of that event is

$$\begin{aligned} (9) \quad \pi &= \text{prob} \{b \geq -\Delta_p\} \\ &= \frac{1}{2} + \Delta_p && \text{(given the uniform distribution of } \Delta_i \text{ on } [-\frac{1}{2}, \frac{1}{2}]) \\ &= 1 - \lambda^* && \text{(using (8))} \\ &= 1 - \frac{1}{2[1-x]} \equiv \pi(x) && \text{(using (7)).} \end{aligned}$$

We will refer to the last expression as the *turnover curve*,  $\pi(x)$ . It is decreasing in the level of corruption.<sup>16</sup>

Equilibrium is a value of  $x$  and  $\pi$  that solves equations (3) and (9):

$$(10) \quad x = 1 - H(\hat{\theta}(\pi(x))).$$

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<sup>15</sup> The result follows from the properties of a uniform distribution on  $[-\frac{1}{2}, \frac{1}{2}]$ .

<sup>16</sup> There are other ways in which corruption may influence turnover, which our model does not capture. For example, it may influence the fairness of elections and that in turn may influence the quality of individuals who come forward to challenge incumbents. In our model, the level of democracy is held constant as the level of investment in influence changes.

(3) and (9) are both downward sloping in the  $(\pi, x)$  space. This implies that multiple equilibria may exist.<sup>17</sup>

To summarize, the model establishes a link between beliefs about the probability of political turnover, and corruption, by supposing that corruption entails contracts for benefits conditional on the incumbent's remaining in office. The model predicts that

- (a) There is a negative relationship between corruption and the expected probability of turnover in the political leadership. The direction of causation goes both ways: Corruption is lower, the greater the belief that political turnover will occur. Turnover is more likely to occur, the lower is corruption.
- (b) If influence is a convex increasing function of enterprise wealth, then corruption rents are higher when enterprise wealth is more unequally distributed.

### 3. Measures of political alternation

Testing the theory calls for relating measures of expectations about the probability of political alternation, to indicators of the quality of governance. In this section, we discuss the way we constructed the first set of measures. We cannot measure expectations directly. But certain events that occur during political liberalization may have a large effect in shaping expectations and thus proxy for expectations of the future. We capture the idea that the greater is *past* cumulative alternation in power, the greater the expectation of an alternation in the *current* period, by assuming that the probability of political turnover is an increasing function of cumulative alternation since the onset of political liberalization. For this purpose, we have constructed, for the first time, measures of political alternation for a large sample of countries. The measures represent hypothetical answers to the question, what kinds of political turnover render the “corruption contracts” considered in Section 2 unenforceable?

To define political alternation in a meaningful way, we need to decide where the seat of political power is—*e.g.*, whether it is in a presidency or a parliament or both—and hence when a power switch matters. An obvious refinement is to count only those cases

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<sup>17</sup> Discussion of conditions to be added.



of leadership alternation that entail a change in the ideology of the party in power, since it may be that a government with a different ideology than its predecessor is more likely to challenge corrupt provision of privileged government protection by its predecessor. An extension of this logic is that greater ideological distance between an old and a new government would be more likely to lead to losses for businessmen who entered into corruption contracts with the old government.<sup>18</sup>

We rely on a new database on political institutions—the Post-Communist Party Ideology (PCPI) database, developed by Shale Horowitz and Eric Browne (forthcoming) to distinguish three types of alternation in the post-communist countries: *leadership alternation*, *ideological alternation*, and *weighted ideological alternation*. *Leadership alternation* counts any change in the control of the effective lawmaking or executive institutions. *Ideological alternation* counts only cases of leadership alternation that entail a change in the ideology of the party in power. *Weighted ideological alternation* incorporates a measure of the ideological distance between an old and a new government.<sup>19</sup>

Ideologies of governments are here understood in terms of the positions of ruling individuals, groups, or parties on the most salient policy issues. Following the tradition of much applied work in comparative politics (e.g., Dawisha and Parrott 1997a, 1997b, 1997c, 1997d), we use a two-dimensional policy space, where one dimension captures left-right differences in economic ideology-cum-policy, and the other dimension captures differences on what are called cultural or “national identity” policies.<sup>20</sup> In economic policy, the main issue that faced the post-communist world in its first dozen years was

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<sup>18</sup> In other words, we tend not to view some governments or parties to be more or less susceptible to corruption per se but believe that there is a “specialization” in corruption in the sense that some businesses will tend (for whatever reasons: accidental, ideological, or ethnic) to have preferential relations with one set of parties while other businesses will have the same links with another set of parties. Then, alternation in power will sever the links between the office holders and the previous group of preferred investors.

<sup>19</sup> A fourth measure of alternation can be constructed by counting only ideological changes that occurred by democratic succession rather than authoritarian means, such as coups or elite-brokered successions. The distinction is important in principle since an ideological change brought about by a democratic election might be more disruptive of state-business clientelistic relationships than one brought about by authoritarian means. Democratically elected leaders, unlike authoritarian ones, might be accountable to an organized party apparatus and mass support base. But in our sample, ideological changes nearly always occurred by democratic means, and so this distinction does not matter.

<sup>20</sup> For more theoretical treatments, see Sartori (1976) and Tsebelis (1995).

whether and how to make the transition from planned or socialized economies to market economies. In debates over national identity, the main ideological issue was how to define and protect the nation’s collective identity, and the main policy issues concerned the status and treatment of internal ethnic minorities and of related ethnic groups in neighboring countries.

For purposes of coding leaders and parties, we distinguish four intervals<sup>21</sup> along each of the two ideology-cum-policy dimensions, according to criteria set out in the Appendix. This two-dimensional, four-interval classification yields the 16-cell ideological space shown in Table 1. The number in each cell represents total country/years that different ideological parties or coalitions were in power over the period 1989-2003. For example, center-left parties were in power for 157 country/years or almost 40 percent of country/time.<sup>22</sup>

TABLE 1. IDEOLOGICAL CLASSIFICATION SCHEME FOR PARTIES CONTESTING ELECTIONS IN POST-COMMUNIST COUNTRIES, AND NUMBER OF COUNTRY/YEARS RULED BY DIFFERENT REGIMES

<i>Economic ideology</i>	<i>Far Left</i>	<i>Center-Left</i>	<i>Center-Right</i>	<i>Far Right</i>
National identity policy				
Extreme Nationalist				
Moderate Nationalist	63	157	182	
Moderate Autonomist	2*		1**	
Secessionist				

Note: The cells inside the square represent moderate (centrist) political ideologies.

\*Moldova 2001 and 2002. \*\*Moldova 2003.

Using these classifications of alternations and ideologies, we define four variables:

(i) *Cumulative leadership alternation* is the year-by-year sum of leadership alternations of the ruling leader, party, or coalition, counted over the number of years

<sup>21</sup> Based on party platforms, campaign statements, and secondary discussions by journalists and scholars, we could not consistently discern finer distinctions in most of the countries.

<sup>22</sup> Total number of country/years is 15 years times 27 countries = 405. Empty cells mean that such a coalition or party was never ruling (say, far-right parties were never in power).

elapsed since 1989. A change is counted as occurring in a given year if the ruling leadership changes. A change must involve a full transfer of the legislative and executive law-making powers to a new leader or an institutionally different party or coalition.

In democratic political systems, control of all veto-wielding legislative houses must change. In democracies with strong presidencies—where presidents have either decree powers, or veto power that can be overridden only by legislative supermajorities—the president, too, must change. A leadership change in some but not all of the relevant veto-wielding institutions is not counted. For example, if control of a unicameral legislature shifts and the presidency is not strong, this counts as a leadership change. If control of a unicameral legislature shifts but the holder of a strong presidency does not, this does not count as a change. If, as in Ukraine in 1994, a new president is elected but control of the legislature does not change, then again this does not count as a change. On the other hand, if a leadership change in all the relevant law-making institutions is completed over more than one electoral cycle, a change is coded as having occurred in the year that the change in control becomes complete. Thus, if control of the presidency changed in an earlier election and has not changed since, and in the current election control of the legislature shifts to parties supportive of the president, then one change is counted as having occurred in the current election, as in the case of Ukraine in 2002.

The mean number of leadership changes in the transition economies through 2003 was 2.24, and the median was 2. The largest number of leadership changes—five—occurred in Estonia and Poland. Zero changes occurred in Kazakhstan, Turkmenistan, and Uzbekistan. How are scores of zero possible? Why doesn't the collapse of the USSR automatically count as a leadership change for all the Soviet successor states? Our coding principle is that the successor state leadership must be a new leadership in its republic to be counted as a change. If such a new leadership did come to power, the change is coded as occurring in the year that the new leadership began to wield effective authority in its Republic—either 1990 or 1991. The collapse of the Soviet Union did not involve a leadership change in Azerbaijan, Belarus, Kazakhstan, Tajikistan, Turkmenistan, and Uzbekistan. For the same reason, no leadership change is counted as having occurred in

1991 in Macedonia, Montenegro, and Serbia with the break-up of Yugoslavia. Similarly, the initial leadership changes in Slovenia and Croatia are coded as occurring in 1990, and that in Bosnia as happening in 1991.

(ii) *Cumulative ideological alternation* is the year-by-year sum of changes in the ideology of the ruling leader, party, or coalition, counted over the number of years elapsed since 1989. A change is counted as occurring in a given year if the ideology of the dominant leader, party, or party coalition has changed. A change must involve a full transfer of the legislative and executive law-making powers to a *new* leader, party, or coalition of a different ideological persuasion, as defined by the 4-by-4 ideological classification of Table 1. Thus, a country where the leadership has not changed but a continuing communist-era authoritarian leader “rebrands” himself with a center-left or center-right ideology—such as Kazakhstan’s Nursultan Nazarbayev or Uzbekistan’s Islam Karimov—is not counted as having undergone an ideological change with the collapse of the Soviet Union. On the other hand, when a communist party wins an initial, fairly conducted post-communist election after having reformed itself into a center-left, European-style social democratic party—as the Bulgarian Socialist Party did in 1990—this is counted as an ideological change.

In democratic political systems, ideological control of all veto-wielding legislative houses must change.<sup>23</sup> In democracies with strong presidencies, the president’s ideology too must change. An ideological shift in the control of some but not all of the relevant veto-wielding institutions is not counted. On the other hand, if an ideological change in the control of all the relevant law-making institutions is completed over more

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<sup>23</sup> In cases where a new majority coalition contains one or more parties present in the previous majority coalition, it can be debatable whether a change in legislative control has occurred. In practice, however, such cases have been quite rare in the post-communist world and are usually coded without much difficulty. For example, if holdover parties are not necessary to form a legislative majority, then a change in control has definitely occurred. Even in cases where one or more holdover parties is necessary to form a majority, the newly dominant, ideologically different parties sometimes rule with support from smaller parties of differing ideologies. The latter typically trade broader support for the government for influence in narrower legislative and bureaucratic arenas. Examples are the new, center-left-dominated coalitions that governed Slovenia after the December 1992 elections, and the Czech Republic after the June 1998 elections.

than one electoral cycle, a change is coded as having occurred in the year that the change in control becomes complete.

The mean number of ideological changes through 2003 was 1.76, and the median was 1. The largest number of ideological changes—four—occurred in Bulgaria, Hungary, Lithuania, and Poland. Zero changes occurred in Belarus, Kazakhstan, Tajikistan, Turkmenistan, and Uzbekistan. As would be expected, there were many fewer ideological changes than leadership changes.

(iii) *Cumulative weighted ideological alternation* takes into account the extent of ideological change by counting a change as the number of cells moved in the space of Table 1. Weights are distances between ideologies. Over the period 1989-2003, no change produced a shift of more than two cells, and all two-cell changes were initial shifts from far-left to center-right governments and in general occurred in 1989-92. The mean number of weighted ideological changes through 2003 was 2.41, and the median was 2. The largest number of weighted ideological changes—five—occurred in Hungary, Lithuania, and Poland. Zero changes occurred in Belarus, Kazakhstan, Tajikistan, Turkmenistan, and Uzbekistan.

(iv) *Political system* is the last variable that we construct. Here we distinguish three different types: parliamentary, presidential and authoritarian. The variable measures the strength of presidential powers in democracies—where democracies (as opposed to authoritarian regimes) are considered to be countries having democracy scores of -3 or greater.<sup>24</sup> Strong presidencies are defined as those having either decree powers; or veto power that can only be overridden by legislative supermajorities. In other words, strong presidencies are defined as providing positive law-making power that a legislature can only limit ex post; or as allowing the executive to block any initiatives that do not have extraordinary legislative support. Parliamentary system is the one where presidents lack

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<sup>24</sup> Democracy is proxied by the variable *Polity2*. from Polity IV database. The *Polity2* scores are derived by subtracting a scale of autocracy (0 to 10) from a scale of democracy (0 to 10). Democracy and autocracy do not, strictly speaking, share any common categories (see Marshall and Jaggers, 2000, p. 14). The scores are taken from the Polity IV project dataset; see <http://www.cidcm.umd.edu/inscr/polity/>.

such sweeping power and governments depend on parliamentary majority. Finally, the presidential systems combined with low democracy scores (*Polity2* variable less than -3) are classified as authoritarian.

Table 2 shows the distribution of observations between the three political systems. There is no clear prevalence of either system, and although the share of parliamentary systems in Eastern Europe is twice as great as in the countries of the former Soviet Union, the differences between the two distributions (FSU and non-FSU) are not too clear-cut. Note that a quarter of observations in Eastern Europe fall under the authoritarian regime. Although systems within a given country do not change frequently, they do change; in other words, we do not deal with a country-fixed effect even over a relatively short period of time as here. For example, Azerbaijan switched from authoritarian to parliamentary regime in 1993, and then went back to authoritarian in 1994. Croatia, even more interestingly, went from authoritarian to presidential in 1991, then back to authoritarian in 1995 and, after Franjo Tudjman's death, back to parliamentary. Georgia experienced all three regimes.

TABLE 2. PRESIDENTIAL, PARLIAMENTARY AND AUTHORITARIAN POLITICAL SYSTEM (PERCENTAGE OF COUNTRY/YEARS OBSERVED)

	All	FSU countries	Eastern Europe
Parliamentary	48	34	63
Presidential	17	23	10
Authoritarian	35	43	26
<i>Total</i>	<i>100</i>	<i>100</i>	<i>100</i>

Table 3 illustrates for Poland and Russia the values of the variables for alternation, ideology of the ruling party/coalition, and political system. Poland has not had a strong presidency. Poland's upper house does not have binding law-making power since a majority of the lower house can impose its own version of a law. So it is only changes in control of the lower house of the legislature that count. Through the end of 2003, lower house elections held in June 1989, October 1991, September 1993, September 1997, and September 2001 brought new ruling parties or party coalitions to power, so that five leadership changes had occurred by September 2001. With the

exception of the October 1991 election, all of these leadership changes brought to power ideologically different governments.<sup>25</sup> Thus, four ideological alternations had occurred by September 2001. The values for weighted ideological alternation reflect the movement in 1989 from a far left to a center-right economic ideology—a change of two ideological cells—and subsequent movements to center-left (1993), center-right (1997), and center-left (2001)—changes of one ideological cell each.

Turning now to Russia, we have a strong presidency, so that changes must occur in both the presidency and the legislature to be counted as an alternation. The first leadership change occurred in August 1991, when the failure of the hard-line communist coup attempt against Mikhail Gorbachev transferred effective power to Boris Yeltsin and the Russian legislature and led to the break-up of the Soviet Union. President Yeltsin remained in power until December 1999, when he resigned in favor of Vladimir Putin. As prime minister, Putin had led his Unity Party to success in the December 1999 lower house elections. Thus, in December 1999, a full leadership change was completed as a new president and a supporting lower house coalition came to power. The regionally-selected upper house, founded in 1996, was likewise supportive of Putin. Through 2003, this late 1999 leadership change was the only one since August 1991. Putin and his supporting parliamentary coalition are not classified as having a different ideology from Yeltsin and his supporting coalition, so there is no ideological change in 1999. Yeltsin and his supporting coalition had a center-right economic ideology, in contrast to the far left ideology of Mikhail Gorbachev's Communist Party of the Soviet Union. So the weighted ideological change in 1991 covered two cells.

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<sup>25</sup> By October 1991, the popular front Solidarity movement, which had overwhelmingly won the June 1989 election, had splintered. A loose coalition of smaller parties, which were only a subset of the much broader Solidarity movement, formed the government after the October 1991 election. This coalition had a center-right economic ideology similar to a majority of the broader Solidarity movement.

TABLE 3. MEASURES OF GOVERNMENT ALTERNATIONS (COUNTED CUMULATIVELY),  
REGIME TYPE AND POLITICAL SYSTEM IN POLAND AND RUSSIA

	89	90	91	92	93	94	95	96	97	98	99	00	01	02
<b>Poland</b>														
Leadership alternation	1		2		3				4				5	
Ideological alternation	1				2				3				4	
Weighted ideological alternation	2				3				4				5	
Regime type	CR	CR	CR	CR	CR	CL	CL	CL	CL	CR	CR	CR	CR	CL
Political system			2	2	2	2	2	2	2	2	2	2	2	2
<b>Russia</b>														
Leadership alternation			1								2			
Ideological alternation			1											
Weighted ideological alternation			2											
Ideology	EL	EL	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR
Political system	3	3		2	2	2	2	2	2	2	2	2	2	2

Note: Ideology: EX = extreme left (authoritarian); CL = center-left (democracy), CR = center-right (democracy).  
Political system: 1=parliamentary, 2=presidential, 3=authoritarian.



#### 4. Measures of the quality of governance

In this section, we describe the measures we use for quality of governance. The phenomena we wish to capture are “grand corruption” and adherence to the rule of law. We use two out of six governance indicators defined by Kaufmann-Kraay-Mastruzzi (2003) (hereafter KKM).<sup>26</sup> The two measures are *control of corruption* (corruption is defined as the exercise of public power for private gain) and *rule of law* (the extent to which agents have confidence in, and abide by, the rules). Among existing governance measures, we believe that these capture most closely the phenomena with which we are concerned—aspects of the quality of governance affected by the exercise of political power.<sup>27</sup> The data are weighted composite indicators based on the pre-existing sources (25 in total). The sources include expert surveys, estimates by government think tanks, and credit rating agencies. The KKM composite indicators assign greater weight to sources that are more precise (as measured by the correlation between a particular indicator and other indicators that try to measure the same phenomenon). Each indicator is scaled so that the average and median value for the world is 0 and the standard deviation is 1. Thus, a value of an indicator for a country gives only the country’s relative position in the world. An increase in an indicator signifies better governance relative to others. However, since there is no trend in the indicators, Kaufmann, Kraay and Masstruzzi (2003) write that the measures for each individual country over time can be compared, that is read as indicators of an absolute improvement or deterioration. The data are available at two-year intervals starting in 1996 and ending in 2002.

The post-Communist countries do cover almost the entire span of rule of law or control of corruption scores for the world; they also display a clear bi-modal distribution

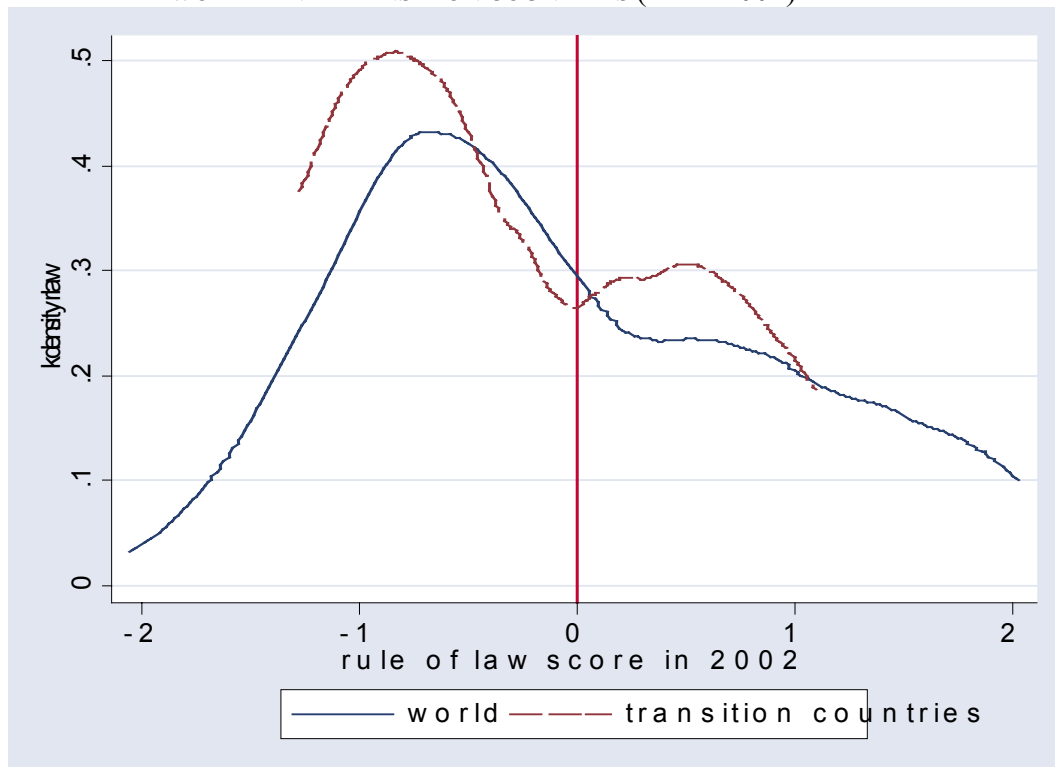
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<sup>26</sup> The data are available at <http://www.worldbank.org/wbi/governance/data.html>.

<sup>27</sup> The ability of government to formulate and implement sound policies, which is the overall heading under which KKM include two other governance indicators—government effectiveness and regulatory quality—depends much more on the quality of bureaucracy than on the political process. Voice and accountability, another governance indicator, defined as “the extent to which citizens participate in the selection of government” seems to have more to do with democracy than governance in a narrow sense. The sixth governance indicator is political stability. In an earlier version of the paper available from the authors, we ran regressions on all six governance indicators, and the results on alternation were found to be significant for all except political stability.

as shown in Figure 3 (to save space, the results for control of corruption, which are virtually identical are not shown). This means that the diversity in the governance outcomes is high for the transition countries—a fact which we hope to exploit in our analysis of determinants of governance outcomes. Finally, note that our two selected measures (rule of law and control of corruption) are not the same as evidenced from the fact that although they are, in the case of transition countries, strongly correlated in *levels* (+0.93), they are much less so in *changes* (+0.48).<sup>28</sup> There are a number of countries where improvements in rule of law (Czech Republic, Hungary, Poland) are accompanied by no change or an *increase* in corruption.

FIGURE 3. DISTRIBUTION OF RULE OF LAW SCORE FROM KKM DATABASE IN THE WORLD AND TRANSITION COUNTRIES (YEAR 2002)



Note: Distributions drawn using kernel density function with Epanechnikov bandwidth. Mean value for the world is 0.

<sup>28</sup> The same is true for the world as a whole: the correlation in levels is +0.92 and in changes only +0.23.

## 5. Empirical estimation

Our hypothesis is that post-Communist countries that experienced more frequent power alternations between 1989 and year  $t$  ( $t \in \{1996, 1998, 2000, 2002\}$ ) will tend to have better governance. Figure 4 shows that differences in the frequency of ideological alternation in the early period of transition predict reasonably well differences in the quality of governance in 2002. The correlation is quite strong (0.74). The rule of law scores in 2002 seem almost uniformly better in countries that experienced more frequent alternations in 1990-95.<sup>29</sup> Consider the marked difference between the countries that had no ideological alternation by 1995 and those that experienced two: the distributions of rule of law indicator seven years later are nowhere close to even touching each other.

Another way to inspect the data for a role of political alternation is to divide the countries into two groups, those that have by 2002 experienced fewer than 2 ideological alternations and those with more, and then look at the distribution of their rule of law scores in 2002. The results are shown in Figure 5. The two distributions barely intersect: almost all countries that had more than two ideological alternations have superior scores on rule of law. The means (shown by vertical lines) are of course quite different too: countries with fewer than two alternations had an average score of  $-0.78$ , those with more than two, an average score of  $+0.4$ .

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<sup>29</sup> The clear exception is Bulgaria—the only country to have had three ideological alternations by 1995 but which had a mediocre rule of law score in 2002.

FIGURE 4. NUMBER OF IDEOLOGICAL ALTERNATIONS BY 1995 AND RULE OF LAW IN 2002

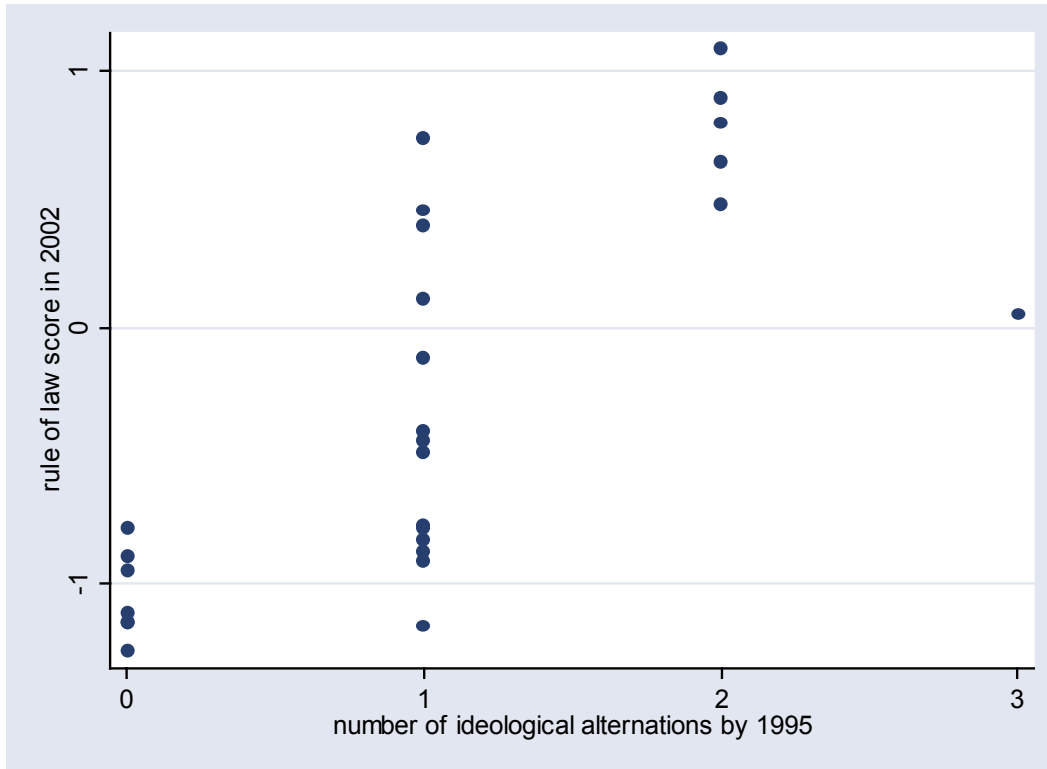
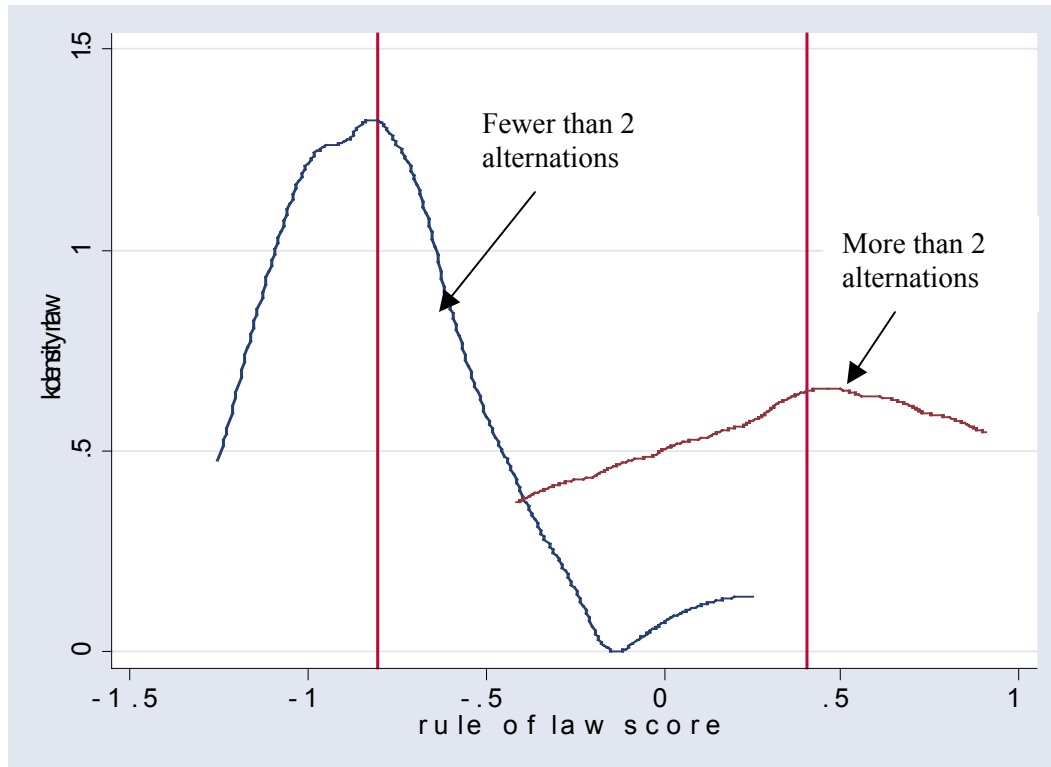


FIGURE 5. IDEOLOGICAL ALTERNATION AND RULE OF LAW SCORES IN 2002



Note: Distributions drawn using kernel density function with Epanechnikov bandwidth. The means shown by the two vertical lines.

Do these relationships “survive” controlling for other factors that influence governance? We estimate the following reduced form equation:

$$(11) \quad GOV_{it} = \beta_0 + \beta_1 ALT_{it} + \beta_2 DEMOC_{it} + \beta_3 SYSTEM_{it} + \beta_4 INC_{1990} + \beta_5 WAR_{it} + \beta_6 FUEL_{1996} + \beta_7 FSU + \varepsilon_{it}$$

The equation relates governance (measured as rule of law and control of corruption) to six variables: cumulative alternation in power, level of democracy, type of political system (parliamentary, presidential or authoritarian), income, cumulative years of war, importance of fuel exports in GDP, and a dummy variable distinguishing between the former USSR countries and the rest of Eastern and Central Europe.

Cumulative alternation is measured, as explained before, in three different forms (ideological, leadership, and weighted ideological). Democracy (DEM) is measured directly through a Polity IV variable which is equal to the democracy score *minus* the autocracy score. The variable ranges from  $-10$  (full autocracy) to  $+10$  (full democracy). Since 1996, there is a steady increase in the average level of DEM across transition countries: it rises from 2 in 1996 to 4.2 in 2002. However, the standard deviation of scores, ranging between 6 and 7, remains quite high. The range of outcomes covers almost the entire spectrum, from Uzbekistan and Turkmenistan recording value of  $-9$  in 2002 to Slovenia, Czech republic, Hungary and Lithuania having the value of  $+10$  in the same year. Previous work has found that democracy is associated with better observance of rule of law and less corruption (see Treisman (2002) for transition economies, and Goldsmith (1999) and Lipset and Linz (1999) in general).<sup>30</sup>

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<sup>30</sup> Note that the inclusion of DEM on the right-hand side together with alternation is likely to impart a downward bias to alternation. This is because past alternations, by affecting future institution-building, are likely to have a direct effect on observed checks and balances and political openness variables coded by POLITY. To put this another way, alternation influences the coziness of relationships between firms and the state, and that in turn can affect both rule of law and, e.g., the independence of the judiciary (a factor which is included in DEM). Some of the effect of alternation may be thus ascribed to the democracy variable.

System variable is an indicator variable distinguishing between parliamentary, presidential and authoritarian political systems. We measure income as (ln) GDP per capita expressed in purchasing power parity dollars. In order to control for possible endogeneity (bad governance affecting income), we use the 1990 level of GDP per capita.

Cumulative involvement in war is defined as the proportion of time the country was involved in large-scale military conflict since 1989 or, for the former Soviet Republics, since their independence in August 1991. Minor conflicts that did not significantly disrupt the entire polity and economy, are not included. Thus, Russia's wars in Chechnya are not included, although wars on this scale would have qualified in a small country. Tajikistan was at war for the longest time—almost six and a half years. Bosnia, Croatia, and Serbia were all at war for about four years, and Armenia and Azerbaijan for almost three years. Moldova was at war for one year, Albania and Slovenia for only a few weeks, and the remainder of the sample not at all.

For the importance of fuel exports, we use the share in GDP of exports of oil, natural gas, and gold. These are natural-resource “point” exports—resources that can be easily controlled physically and exploited without involvement by many independent actors (*e.g.*, oil wells as opposed to agriculture). We argued in Section 2 that the greater this share, the greater the likelihood that a large fraction of wealth would be controlled by a small number of firms, which would tend to increase the bargaining power of firms and their ability to capture the state.<sup>31</sup> Casual evidence of the role that privatization of oil and gas has had in furthering corruption in Russia, Azerbaijan, and the Central Asian republics lends support to this view. The fuel exports/GDP variable ranges from negligible for most transition countries (Albania, Hungary, Latvia, Moldova, Poland, etc.) to about 15 percent (over the period 1990-2002) for Russia, Azerbaijan and Kazakhstan,

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<sup>31</sup> A large literature on the “natural resource curse” points to other reasons that a high concentration of wealth in point exports would lead to worse governance—see, *e.g.*, Robinson *et al.* (2002), Isham, Pritchett, Woolcock and Busby (2002), Hoff and Stiglitz (2004), and Murshed (2004).

and even a third of GDP for Turkmenistan. The overall average is about 5 percent. Again, in order to control for possible endogeneity, we use the fuel exports/GDP variable from 1996 (the first year when the data are available for all countries). We do this to adjust for the possibility that low governance scores may discourage investment in any activity other than fuel and natural material exports, in other words, that de-industrialization may be a product of bad governance.

The three political variables (alternation, democracy and political system) measure distinct aspects of the political process and, in general, we would not expect much correlation among them. Democracy can coexist with infrequent alternation in power, as long rules of Social Democrats in Sweden (1936-76) and Liberal Democrats in Japan (1955-93) attest. Parliamentary or presidential systems can be democratic, or not, and can exhibit a lot of alternation in power, or few. Only in the extreme cases do the absence of democracy and the type of political system (authoritarian) go hand-in-hand. But in our sample, in which political liberalization is recent, we would expect somewhat greater correlation between alternation and level of democracy. Table 4 shows that the correlations between democracy and the different measures of alternation are between 0.6 and 0.7. The table also reports the correlations between measures of alternation themselves: the correlation between *ideological alternation* and *leadership alternation* is fairly high at around +0.8, but even higher is the correlation between the two variants of *ideological alternation*. Finally, the correlations among political system (scaled so that 0 is for parliamentary, 1 for presidential and 2 for authoritarian) and alternations are negative and range between -0.52 and -0.67 implying that parliamentary systems (as we would expect) would tend to have more alternations. The correlation between political system and democracy however is stronger because of the obvious link between authoritarian regimes and low democracy scores. Once we drop authoritarian regimes though, the correlation is only -0.34.

TABLE 4. CORRELATION AMONG POLITICAL VARIABLES

	Democracy	Ideological alternation	Leadership alternation	Weighted ideological alternation
Ideological alternation	0.65 (0.00)			
Leadership alternation	0.61 (0.00)	0.84 (0.00)		
Weighted ideological alternation	0.69 (0.00)	0.94 (0.00)	0.83 (0.00)	
Political system	-0.84 (0.00)	-0.63 (0.00)	-0.52 (0.00)	-0.67 (0.00)

Note: Calculated across all years. *p*-values are in parentheses. For political system, 0=parliamentary, 1=presidential, 2=authoritarian. Democracy is *Polity2* variable defined as democracy score minus autocracy score.

We run three types of regressions: (i) pooled time series and cross-section, (ii) two-stage least square in levels where alternation is instrumented, and (iii) fixed effects. The last regression controls for unobservable country effects.<sup>32</sup> There is also much less cause to worry about reverse causality from governance to income when the regression is run in first-differences or fixed-effects. As already mentioned, to mitigate the problem of the influence of governance on income and fuel-to-GDP ratio, in the level regressions, we use the pre-transition (1990) GDP per capita and the 1996 fuel exports/GDP ratio.<sup>33</sup>

We also need to address possible endogeneity between governance and alternation. As argued before, current governance is likely to influence current and future alternation, but could not have affected past cumulative alternations which is our measure. Thus a pooled level regression seems reasonable. However, current governance is correlated with past governance and thus we do an instrumental variable (IV) estimation as well. We use as instrument the dummy variable for the presence of non-Communist government in 1992 (NONCOM92). The logic is as follows. The presence of non-Communist governments in 1992 is proxying for the strength of anti-Communist opposition at the very early stages of transition. We argue that the stronger was the

<sup>32</sup> Estimated coefficients are unbiased in the presence of correlation between independent variables and the error term, and are consistent if shocks do not affect future realizations of the dependent variable (governance).

<sup>33</sup> In the fixed effect regressions, where we need annual values of income, we use annual GDP per capita in current dollars (since PPP values are not available for all years).



opposition the more likely was general acceptance of democratic rules of the game, including alternation, and hence more difficult continuation of de facto one-party rule. But whether a country had a non-Communist government in 1992 has very little to do with quality of governance in 1996 and later. This is because nominally Communist governments in 1992 were unlikely to be as such more or less corrupt than non-Communist governments in 1992. On the one hand, this was too early in the transition for the links between businesses and governments, which in our view is the key cause of bad governance, to have been formed; thus neither Communist nor non-Communist governments were likely to be beholden to particular interest groups. And on the other hand, by 1992, Communists in governments were fundamentally different (even if they were the same people) from Communists in government in (say) 1988 because they had to accept the principle of the existence and protection of property rights and checks on the executive. Absence of ideological acceptance of these two elements in the past might have arguably implied that the quality governance was bad, or more accurately might have meant that the governance variable as defined here was inapplicable.<sup>34</sup> We take a strong position that whether a country had a Communist government in 1992 or not was a strong predictor of how democratic it will ultimately become and how much alternation in power would be accepted as part of the political game, but had nothing directly to do with how corrupt it would be.<sup>35</sup> Or, in other words, the effect of being non-Communist on governance is mediated through political alternation.<sup>36</sup> Finally, it may be important to note that NONCOM92 is not a proxy for the division of transition countries between Eastern Europe and the FSU with the former being non-Communist and the latter Communist. In effect, in 1992 there were nine countries (out of 26) that did not fit this description, i.e. had non-Communist (Communist) government while being part of the former USSR (Eastern Europe).

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<sup>34</sup> Governance variables as defined are not ideologically neutral. For example, an important component of the rule of law variable has to do with the quality of protection of private property rights. But in a true Communist regime where private property was non-existent such a variable obviously does not make much sense.

<sup>35</sup> Indeed, the correlation between NONCOM92 and control of corruption in 2002 is +0.52 while the correlation between NONCOM92 and either cumulative leadership or ideological alternation is +0.7.

<sup>36</sup> The F test of excluded instruments in all IV regressions is highly significant (see Table 5 and tables in the annex).

Table 5 shows the results of regression (11) for ideological alternation and two governance indicators, rule of law and control of corruption. The results for the two other types of alternation (leadership and weighted ideological) are very similar to those for ideological alternation, and we are not including them here. They are available from the authors on request. In Annex Table 1 we also show how the values of the coefficients on alternation and (on other RHS variables) change when RHS variables are sequentially introduced in the IV regression.

Consider the rule of law indicator in Table 5. For the set of transition economies, the KKM rule of law indicator has an average value of  $-0.33$  and a median value of  $-0.49$ . Since the average and the median for the world are scaled to be 0, this means that the transition countries are doing worse than the world as a whole. The best performer is Slovenia, where in 2002, the rule of law indicator was more than 1;<sup>37</sup> the worst are Turkmenistan and Tajikistan, where the indicators are below  $-1$  in all four years. As shown in Table 5 our results imply that one additional ideological alternation raises the rule of law indicator by about 0.18 points in the pooled regression, 0.16 points in the IV regression and by 0.08 points in the fixed (country) effect regression. The first two are statistically significant effects, the third is significant at the 5.8 percent level. The latter result means that for a given country, after adjusting for its observable characteristics and unobservable country effects, an additional alternation in power is “worth” an improvement of 0.08 points in the rule of law score. In other words, with an additional alternation in power, Poland (rule of law indicator 0.65 in 2002) can almost catch up with the Czech Republic (0.74).

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<sup>37</sup> That is, taking the whole world, Slovenia’s ranking is more than one standard deviation to the right, so that Slovenia is “better” than 85 percent of all countries in the world.

TABLE 5. GOVERNANCE INDICATORS AND CUMULATIVE IDEOLOGICAL ALTERNATION

Dependent variable	Rule of law			Control of corruption		
	(1) Pooled	(2) IV in levels	(3) Fixed effects	(4) Pooled	(5) IV in levels	(6) Fixed effects
Cumulative Ideological Alternation	0.182 (0)	0.157 (0.016)	0.080 (0.058)	0.167 (0.001)	0.055 (0.434)	0.019 (0.77)
Income	0.900 (0)	0.892 (0)	0.141 (0.10)	0.961 (0)	0.928 (0)	0.176 (0.18)
War (cumulative)	-0.138 (0)	-0.140 (0)	-2.14 (0.001)	-0.155 (0)	-0.164 (0)	-2.60 (0.031)
Fuel exports to GDP ratio	-0.404 (0.081)	-0.390 (0.069)	0.151 (0.68)	-0.521 (0.062)	-0.462 (0.057)	-0.47 (0.41)
Democracy	-0.004 (0.638)	-0.002 (0.826)	0.04 (0.04)	-0.019 (0.085)	-0.009 (0.453)	0.046 (0.12)
Dummy FSU	-0.146 (0.093)	-0.162 (0.066)	----	-0.248 (0.012)	-0.321 (0.001)	---
Parliamentary System	0.172 (0.184)	0.183 (0.156)	-0.25 (0.24)	0.220 (0.115)	0.270 (0.056)	-0.231 (0.47)
Presidential System	-0.029 (0.827)	-0.030 (0.814)	0.22 (0.18)	0.102 (0.495)	0.099 (0.478)	0.286 (0.24)
Constant	-8.186 (0)	-8.088 (0)	-0.23 (0.75)	-8.723 (0)	-8.290 (0)	0.212 (0.85)
R <sup>2</sup> adjusted	0.76	0.76	0.36	0.72	0.70	0.25
F	93		4	57		3
Number of observations	96	96	86	96	96	86
F test of excluded instruments	----	21.5 (0)	----	----	21.5 (0)	----

Note: In this and all remaining tables,  $p$ -values are in parentheses. The omitted category for political system is authoritarian. Statistically significant coefficients (at less than 5 percent level) are shaded. Regressions are run with robust standard errors. The IV regression estimated using GMM estimator (ivreg2.ado routine in Stata).

FIGURE 6 RULE OF LAW REGRESSION RESIDUALS PLOTTED AGAINST CUMULATIVE IDEOLOGICAL ALTERNATION

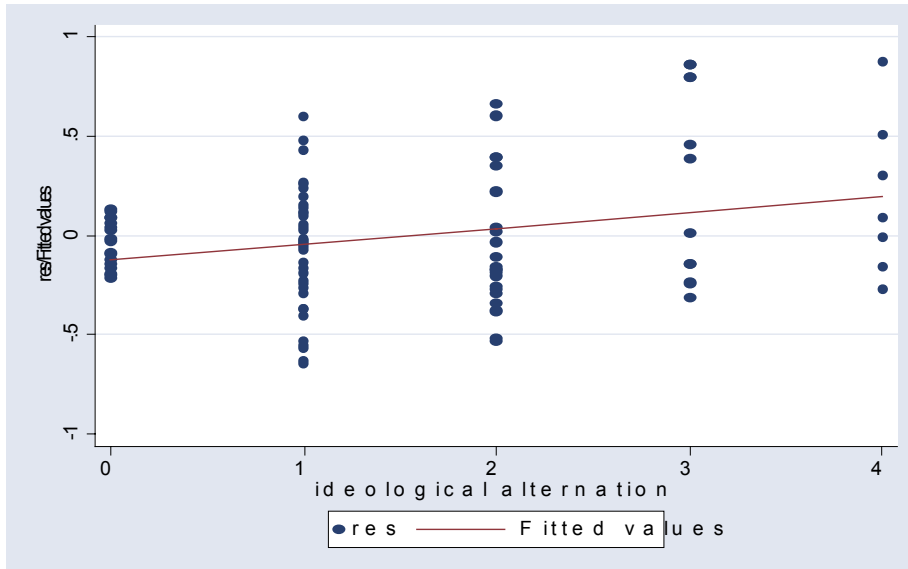
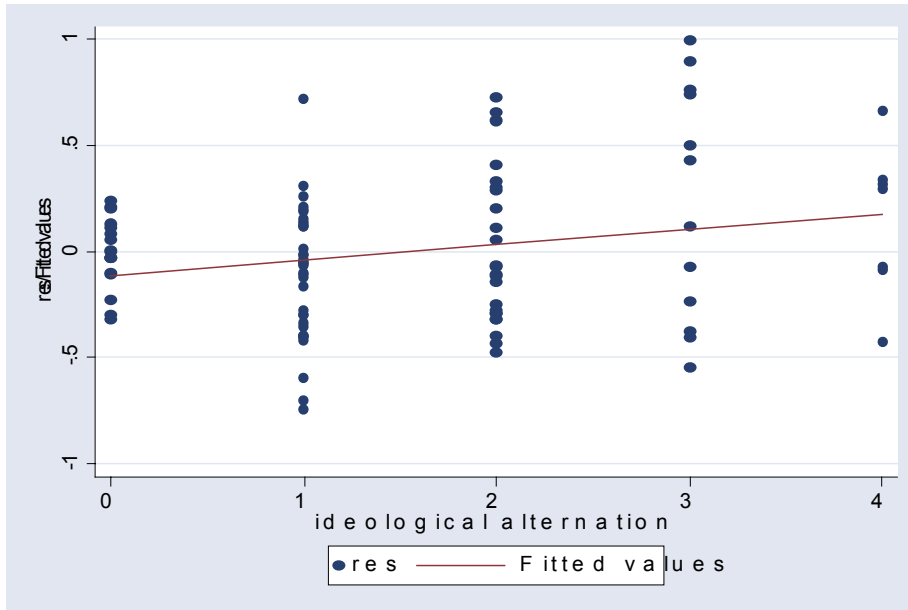


FIGURE 7. CONTROL OF CORRUPTION REGRESSION RESIDUALS PLOTTED AGAINST CUMULATIVE IDEOLOGICAL ALTERNATION



Note: Figures 6-7 are based on a pooled regression (see Table 5) without inclusion of ideological alternation.

For control of corruption, ideological alternation, while “correctly” signed, is statistically significant in the pooled regression, but not in the other two. As argued above, alternation in power should restrain investment in influence, not “petty” bureaucratic corruption, which is presumably also reflected in the *control of corruption* score. The quality of governance as measured by the KKM control of corruption scores may thus be less sensitive to the political process than “rule of law.”

Figures 6 and 7 show the results of the partial regressions of governance measures on ideological alternation, controlling for other factors in (11). The pattern in Figures 6 and 7 suggests that zero ideological alternations—*i.e.*, the continuation of the pre-communist leadership—is associated with about the same quality of governance as one alternation;<sup>1</sup> but for countries in which at least one alternation has occurred, more alternations are better than fewer. A speculative interpretation of this pattern is that with one alternation, the discipline on governance from pre-transition institutions is lost but no new democratically-based source of discipline has emerged.

Income enters positively in pooled regressions and is insignificant in fixed-effects. This indicates that countries that were richer in 1990 have had, on average, better governance indicators over the next decade. But the effect of income is insignificant when we consider each individual country. The effect of democracy is generally weak as shown by the fact that it is statistically insignificant in all formulations except one (fixed effects for rule of law).

Cumulative duration of war affects governance indicators negatively: each additional year of war reduces rule of law indicator by about  $-0.14$  points (in level regressions), a bit less, in absolute amount, than each ideological alternation contributes to quality of governance. In the FE regression, the negative effects of war become much stronger clearly indicating that it is not unobservable country characteristics that are responsible for bad governance outcomes but civil conflict and war. The share of fuel exports in GDP is not

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<sup>1</sup> The countries with zero alternations as of 1996 are all the Central Asian countries except Kyrgyzstan, plus Yugoslavia, Ukraine, and Belarus. By 2002, Ukraine and Yugoslavia were no longer in that group.

statistically significant in any of the regressions (although in the control of corruption level regression, it comes close to being significant at the 5 percent level).

Similarly, and rather surprisingly in the view of the earlier literature, there is no difference between FSU and Eastern Europe when it comes to rule of law, although there is a difference when we deal with control of corruption. The FSU dummy variable is significant in the latter case though: it reduces control of corruption by between 0.25 and 0.3 points.<sup>2</sup>

#### **A. Extensions**

*Religion.* Annex Table 2 shows that the alternation results are not much affected when we introduce the dominant religious affiliation of the country—a variable that has often been found to be associated with governance (see Treisman, 2002; La Porta, Lopez-de-Silanes, Shleifer and Vishny, 1999). In all regressions, Catholic and Protestant countries are associated with better rule of law and control of corruption than the Orthodox-dominant or the omitted category of Muslim countries. In addition, fuel exports and the FSU dummy now enter with a significant negative sign, and parliamentary (as well as presidential system in the case of control of corruption) are revealed to be “better” than presidential authoritarian system. Political alternation however remains significant at 1 percent level in the pooled regressions, even if its coefficient becomes smaller. For example, the effect of an additional ideological alternation on rule of law in pooled regressions down from +0.18 points to +0.11 points, and on control of corruption from +0.17 to +0.08 points.

*Alternative measures of governance.* As discussed above, the composite nature of the KKM measures of governance makes them difficult to interpret. As a check, we use two EBRD measures of governance, *Legal1* and *Legal2*. They measure, respectively, the extent to which the country’s legal system approximates that of Western Europe (legal adequacy), and the effectiveness of its legal institutions. These measures are available for the period 1997-2001 (inclusive). They range from 1 to 4.3.<sup>3</sup> The average value of *Legal1* increases

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<sup>2</sup> We have also experimented with the duration of the Communist system but this variable is very strongly correlated with the FSU dummy and hence there are differences in the results.

<sup>3</sup> The measures are published in EBRD’s annual *Transition Report* for the years 2000-2002.

slightly over the period.<sup>4</sup> There is no time trend in the *Legal2* measure. For these measures, we run the same three types regressions as for the KKM indicators of governance. Annex Table 3 shows the results for ideological alternation.<sup>5</sup> In the pooled regressions, alternation enters positively and is highly statistically significant. Each ideological alternation improves both legal adequacy and legal effectiveness by 0.27 points, which is roughly about a third of *Legal1* and *Legal2* standard deviation. Alternation is also statistically significant in the IV regression for legal adequacy. When we control for country-specific effects, ideological alternation is no longer significant though.

*Civic culture and education.* It might be that omitted variables, such as civic culture and education, drive both governance and alternation and thus that there is no causal influence from cumulative past alternation to quality of governance. Civic culture surely has an effect on governance, but it is not clear why it would have an important effect on alternation. A more involved citizenry and a freer media can indeed mean less corruption and greater responsiveness of politicians to people's preferences, but these factors do not imply shorter terms of office for those in power. The well-known examples of long one-party rule in Sweden and Japan illustrate that fact. We do not have a good measure of civic culture, and so we test only for the effect of controlling for education. When we use average level of education as a regressor in place of income, not surprisingly, in the light of a fairly strong correlation between GDP per capita and average level of education, the results do not change.<sup>6</sup>

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<sup>4</sup> *Legal1* increases from an average of 3 in 1997 to 3.18 in 2000; *Legal2* in 1997 and 2000 are virtually the same (2.8 in both years), and the average value in 2001 is 3.2. The correlations between the two legal variables and KKM's ryle of law nad control of corruption are between +0.4 and +0.65.

<sup>5</sup> The same regressions are run for leadership and weighted ideological alternation. The results are virtually identical and are not shown here to save space.

<sup>6</sup> For the education variable, we use tertiary school enrollment in the years after 1996. It would have been preferable to use a pre-transition level of enrollment, but the data are fragmentary and unreliable. The correlation between GDP per capita in international dollars and tertiary school enrollment is about +0.5. All alternation variables in the level regressions are significant at less than 0.1 percent.

## 6. Conclusions

If investing in influence to obtain privileged treatment by the state is regarded like any other economic activity, then it is clear that businesses will engage in it more when the returns are higher. There are many examples, in many countries, where it is a common knowledge that paying off influential politicians to buy property rights à la carte, and paying off judges to obtain favorable rulings, are more lucrative than seeking profits through strictly economic—not political—investments. The weak link in the chain that goes from those who buy influence to those who dispense favors is that the latter cannot always “deliver” on their part of the deal: they may be gone because they lose political power. And when this happens frequently enough, the returns on investing in influence decline and eventually fewer people engage in it. Democracy and alternation in power thus play a key role in creating a situation in which the implicit contract cannot be executed although there is good will on both sides—investors in influence and politicians. We have explored this hypothesis for the sample of transition countries during the early period of political liberalization, when political alternation was not routinized. The fact that alternation did or did not occur sent a powerful signal both to those who might invest in influence and to politicians.

We find that increased political alternation—which we measure with respect to both leadership and ideologies of ruling leaders, parties or coalitions—is associated with better governance indicators. This finding persists when we control for a number of other plausible influences on governance: the type of country’s political system (presidential or parliamentary), income, exposure to war, dependence on exports of oil and natural gas, and membership in the former Soviet Union.

Our approach and conclusions differ sharply in at least two respects from some of the earlier literature on governance and the political transition from Communism. We view frequent changes in power not as some politically detrimental instability or logjam in the decision-making process, but as a factor that reduces returns to investing in influence and thus improves governance. In a setting in which alternation in power has not been routinized, there may be a trade-off between the ability of a strong unified government and friendly



legislature to push through painful economic reforms, and the corrosion of reform that results when persistence in power of the reforming party widens corruption and lowers the quality of governance. The long-term effects on governance may turn out to be more important than the short-term effects on reform. One could argue that the best outcome for a newly democratizing country is that the government that has jump-started the reforms is also thrown out of office, so long as its reforms survive. Political alternation may sever the clientelistic links that have been created between the reformers and influential business circles (many of which are also likely to benefit from the reforms). Then the reform process continues on a more level playing field.

We view the power alternation that took place in the early 1990's in several Eastern European countries, when the former communists came back to power on the groundswell of popular disenchantment with "shock therapy," as a fortunate development that improved governance. Our results depart from the view that governance problems were "preordained" for some transition countries because they had a long legacy of communist rule, a "wrong" religion, or an abundance of natural gas and oil. We argue that political developments, and not historical and geographic factors, explain much of their governance problem. Political alternation is also a mediating factor through which history influences the quality of governance.

Finally, we make two caveats. First, the data do not fully allow us to test the effects of differences among types of political alternation—particularly between leadership and ideological alternation. This is because the time series is short and there is not much difference between the two types of alternation. We plan to examine this difference in the future for a different sample of countries, *e.g.*, in Latin America. Second, the positive effect of alternation that we find here must be viewed in context. Alternation was conducive to better governance because alternation occurred within a broadly consistent ideological and policy space where, in many cases, the establishment of democratic rules of the game was clearly a possible outcome. Alternation was a visible signal to that effect. Were frequent alternations to occur unconstitutionally, say through coups, it is not obvious that governance would be helped. On the contrary, such alternations would tend to weaken institutions and

create an incentive for the ruling group to loot as much as possible while in power and preserve power at all costs. Alternation within an emerging democratic system is likely to produce very different results than alternation under a series of unstable dictatorships. That is also a topic to which we hope to return.

## References

- Bates, Robert H. (2004). "On *The Politics of Property Rights* by Haber, Razo, and Maurer," *Journal of Economic Literature* 42 (2), 494-500.
- Dawisha, Karen and Bruce Parrott, eds. (1997a) *Conflict, Cleavage, and Change in Central Asia and the Caucasus*. Cambridge: Cambridge University Press.
- \_\_\_\_\_ (1997b) *The Consolidation of Democracy in East-Central Europe*. Cambridge: Cambridge University Press.
- \_\_\_\_\_ (1997c) *Democratic Changes and Authoritarian Reactions in Russia, Ukraine, Belarus, and Moldova*. Cambridge: Cambridge University Press.
- \_\_\_\_\_ (1997d) *Politics, Power, and the Struggle for Democracy in South-East Europe*. Cambridge: Cambridge University Press.
- Freeland, Chrystia. *Sale of the Century: Russia's Wild Ride from Communism to Capitalism*. New York: Random House, 2000.
- Frye, Timothy (2002), "The Perils of Polarization," *World Politics*, April 2002.
- Goldsmith, Arthur (1999), "Slapping the grasping hand: correlates of political corruption in emerging markets," *American journal of economics and sociology*,
- Haber, Stephen, Armando Razo, and Noel Maurer (2003), *The politics of property rights: Political instability, credible commitments, and economic growth in Mexico, 1876-1929* Cambridge, UK: Cambridge University Press.
- Hoff, Karla and Joseph E. Stiglitz (2004). "After the Big Bang? Obstacles to the Emergence of the Rule of Law in Post-Communist Societies," *American Economic Review* 94 (3): 753-763.
- Horowitz, Shale and Eric C. Browne. (Forthcoming) "Sources of Post-Communist Party System Consolidation: Ideology vs. Institutions." *Party Politics*.
- Huntington, Samuel P. (1991), *The third wave: democratization in the late twentieth century*, Norman: University of Oklahoma Press.
- Isham, Jonathan, Lant Pritchett, Michael Woolcock and Gwen Busby (2002), "The varieties of rentier experience: how natural resource endowments affect the political economy of growth," World Bank, mimeo.
- Kaufmann, Daniel, Aart Kraay, and M. Mastruzzi (2003), "Governance Matters III: Governance Indicators, 1996-2002," World Bank Policy Research Working Paper 3106, Washington, D.C.: World Bank.

- Kunicova, Jana (2001), "Are presidential systems more susceptible to political corruption?" Department of Political Science, Yale University.
- Landes, William M. and Richard A Posner, "The Independent Judiciary in an Inter-Group Perspective," *Journal of Law and Economics* 18 (1975), 875-901.
- La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert W. Vishny (1999), "The quality of government," *Journal of Law, Economics and Organization*, vol. 15, No. 1, pp. 222-279.
- Lipsett, Seymour and Gabriel Linz (1999), "Corruption culture and markets," George Mason University Working Paper.
- Marshall, Monty G. and Keith Jagers (2000), *Polity IV Project: Dataset Users' Manual*. College Park, MD: CIDCM. Available at [www.bsos.umd.edu/cidcm/inscr/polity](http://www.bsos.umd.edu/cidcm/inscr/polity)
- Markov, Sergey (2004) in Lyudmila Uvarova, "An ideology of hyperloyalty is being formed," *Nezavisimaya Gazeta* May 24, 2004. Reported on Johnson Russia List, May 24, 2004.
- Murshed, Mansoob (2004), "When does natural resource abundance lead to a resource curse," International Institute for Environment and Development, March.
- Przeworski, Adam (1991) *Democracy and the Market : Political and Economic Reforms in Eastern Europe and Latin America*, Cambridge: Cambridge University Press.
- \_\_\_\_\_ (1998), "Democracy as a contingent outcome of conflicts" in Jon Elster and Sllagster (eds), *Constitutionalism and democracy*, Cambridge: Cambridge University Press.
- Robinson, James; Torvik, Ragnar and Verdier, Thierry. "Political Foundations of the Resource Curse." CEPR Working Paper No. 3422, 2002.
- Rothschild, Michael and Joseph E. Stiglitz (1970), "Increasing risk I: A definition," *Journal of Economic Theory* 2: 225-243.
- Stephenson, Matthew C. (2003). "When the devil turns...: The political foundations of independent judicial review," Harvard University, Department of Government, mimeo.
- Stoner-Weiss, Kathryn. (1997) *Local Heroes*. Princeton, NJ: Princeton University Press.
- Sartori, Giovanni. (1976) *Parties and Party Systems: A Framework for Analysis*. Cambridge: Cambridge University Press.
- Treisman, Daniel (2002), "Postcommunist corruption," UCLA, Department of Political Science, manuscript.

Tsebelis, George (1995) "Decision Making in Political Systems: Veto Players in Presidentialism, Parliamentarism, Multicameralism and Multipartyism," *British Journal of Political Science* 25: 289-325

## Appendix: Ideological Classification of Parties in Post-Communist Countries

Here we explain the ideological classification of parties that underlies Table 1. The criteria for distinguishing economic ideology (columns in the table) are as follows:

- *Far left*: Favors total or extensive state ownership and control of the economy. Market transition policies that dramatically weaken state control or unevenly affect the population are to be avoided.
- *Moderate left*: Favors private ownership and control of the economy outside of government services; favors heavy income taxation to finance a generous, broad-based welfare state. Market transition policies that dramatically weaken state control or unevenly affect the population are necessary, but should be cushioned by generous safety nets and transitional assistance.
- *Moderate right*: Favors private ownership and control of the economy outside of government services; favors moderate income taxation to finance a limited welfare state targeting the poor and the disabled. Market transition policies that dramatically weaken state control or unevenly affect the population are necessary. In order to preserve incentives for structural adjustment, transition policies should be cushioned with only limited safety nets and transitional assistance.
- *Far right*: Favors private ownership and control of the economy, including a large proportion of government services; favors only light income taxation to finance welfare policies targeting the disabled. Market transition policies that dramatically weaken state control or unevenly affect the population are necessary. In order to preserve incentives for structural adjustment, transition policies should be cushioned only with very limited safety nets and transitional assistance.

The criteria for distinguishing national identity-related policy (rows in the table) are as follows:

- *Extreme nationalist (top)*: The highest collective goals are protection of national security and national cultural identity, and the pursuit of national economic prosperity. These goals justify the use of discriminatory policies and, if necessary, force. Ethnic minorities have no claim to equal rights, and/or neighboring territories containing large concentrations of the state's dominant ethnic group should be incorporated.

- *Moderate nationalist (top center)*: The highest collective goals are protection of national security and national cultural identity, and the pursuit of national economic prosperity. Ethnic minorities have a claim to equal rights as long as this does not jeopardize national security, national cultural identity, and economic prosperity. There is no right to forcibly intervene in the affairs of neighboring territories containing large concentrations of the state's dominant ethnic group, unless the related ethnic group's political and cultural rights are seriously threatened.
- *Moderate autonomist (bottom center)*: Protection of the majority's national ethnic identity and pursuit of collective policy priorities must be reconciled with protection of minority ethnic or regional identities and priorities. This is usually to be achieved through the devolution of political powers down to the regional and local levels.
- *Secessionist (bottom)*: Protection of minority ethnic or regional identity and priorities cannot be reconciled with majority pursuit of national ethnic priorities. Such minority protection can only be achieved through political independence of minority regions, achieved through secession, adherence to a similarly constituted neighboring state, or at a minimum, special autonomy status combined with constitutionally imbedded minority veto power over important legislation at the national level.

ANNEX TABLE 1. STEP-WISE INTRODUCTION OF VARIABLES:  
DEPENDENT VARIABLE: RULE OF LAW

$\beta$ Coefficients (unless stated otherwise)	Instrumented ALT only	Adding income	Adding FSU	Adding war	Adding <i>Polity2</i>	Adding fuel to GDP	Adding system variable
Cumulative alternation (second stage)	0.51 (12)	0.38 (8)	0.38 (6)	0.32 (5)	0.27 (3)	0.20 (3)	0.16 (2.4)
Ln(GDP per capita) in 1990		0.78 (8)	0.78 (8)	0.80 (9)	0.78 (7)	0.92 (9)	0.89 (8)
FSU dummy			0 (0)	-0.1 (1)	-0.1 (1)	-0.16 (1.6)	-0.16 (1.8)
War duration (cumulative)				-0.08 (4)	-0.08 (5)	-0.14 (6)	-0.14 (7)
Democracy ( <i>Polity2</i> )					+0 (1)	0 (0)	0 (0)
Fuel exports to GDP in 1996						-0.4 (1.6)	-0.4 (1.8)
Parliamentary system							0.2 (1.4)
Presidential system							-0 (0)
R <sup>2</sup> second stage	0.47	0.68	0.68	0.73	0.75	0.75	0.76
F test of excluded instruments	86	71	49	41	29	21	21

Note: Alternation is ideological alternation. All regressions are two-stage regressions where alternation is instrumented by NONCOM92 dummy. Z-values given between brackets.



ANNEX TABLE 2. ADDING RELIGION VARIABLES

Dependent variable	Rule of Law		Control of corruption	
	Pooled	IV estimation	Pooled	IV estimation
Cumulative ideological alternation	0.107 (0)	0.083 (0.080)	0.084 (0.014)	-0.026 (0.608)
Income	0.314 (0.005)	0.292 (0.005)	0.326 (0.011)	0.221 (0.036)
War (cumulative)	-0.100 (0)	-0.101 (0)	-0.101 (0)	-0.106 (0)
Fuel exports as share of GDP	-0.476 (0.001)	-0.471 (0)	-0.648 (0)	-0.624 (0)
Democracy	-0.014 (0.099)	-0.012 (0.164)	-0.024 (0.009)	-0.016 (0.079)
Dummy FSU	-0.173 (0.023)	-0.184 (0.013)	-0.220 (0.004)	-0.272 (0)
Parliamentary System	0.250 (0.012)	0.263 (0.005)	0.349 (0.003)	0.412 (0)
Presidential System	0.135 (0.190)	0.136 (0.149)	0.293 (0.029)	0.300 (0.009)
Catholic	0.793 (0)	0.816 (0)	0.781 (0)	0.888 (0)
Protestant	0.941 (0)	0.951 (0)	0.760 (0)	0.809 (0)
Orthodox	0.130 (0.248)	0.135 (0.195)	0.021 (0.857)	0.046 (0.675)
Constant	-3.419 (0)	-3.204 (0)	-3.550 (0.001)	-2.555 (0.004)
Number of observations	96	96	96	96
R <sup>2</sup> adjusted	0.8995	0.8988	0.8688	0.8528
F value	113.94 (0)		67.71 (0)	

*Note.* *p* values between brackets. The omitted category for political system is authoritarian, for religion, Muslim. Statistically significant coefficients (at less than 5 percent level) are shaded. Regressions are run with robust standard errors. The IV regression estimated using GMM estimator (ivreg2.ado routine in Stata).

ANNEX TABLE 3 . USING EBRD'S TWO LEGAL VARIABLES TO MEASURE GOVERNANCE

Dependent variable	Adequacy of legal institutions (Legal1)			Effectiveness of legal institutions (Legal2)		
	Pooled	IV in levels	Fixed effects s	Pooled	IV in levels	Fixed effects s
Cumulative ideological alternation	0.267 (0)	0.357 (0.003)	0.001 (0.993)	0.266 (0)	-0.052 (0.766)	0.128 (0.480)
Income	0.532 (0.006)	0.570 (0.002)	-0.269 (0.471)	0.456 (0.058)	0.320 (0.202)	0.530 (0.226)
War (cumulative)	0.055 (0.148)	0.060 (0.113)	0.633 (0.488)	-0.051 (0.351)	-0.070 (0.196)	0.988 (0.355)
Fuel exports to GDP ratio	-1.020 (0.036)	-1.257 (0.006)	7.223 (0.003)	-0.767 (0.672)	0.070 (0.953)	10.538 (0)
Democracy	0.029 (0.175)	0.020 (0.407)	0.016 (0.711)	0.048 (0.105)	0.080 (0.032)	-0.053 (0.287)
Dummy FSU	0.201 (0.081)	0.267 (0.037)		0.044 (0.783)	-0.190 (0.293)	
Parliamentary system	-0.518 (0.095)	-0.557 (0.050)	-0.236 (0.679)	-0.831 (0.057)	-0.693 (0.154)	-0.013 (0.985)
Presidential system	-0.605 (0.050)	-0.605 (0.038)	-0.852 (0.286)	-1.006 (0.010)	-1.008 (0.014)	0.382 (0.682)
Constant	-1.522 (0.361)	-1.966 (0.228)	4.875 (0.102)	-0.856 (0.682)	0.708 (0.755)	-1.976 (0.568)
R <sup>2</sup> adjusted	0.39	0.37	0.17	0.33	0.23	0.19
F value	11.04 (0)		2.23 (0.040)	10.4 (0)		2.48 (0.024)
Number of observations	112	112	107	112	112	107
F test of excluded instruments		30	-----		30	----

Note. *p* values between brackets. The omitted category for political system is authoritarian, for religion, Muslim. Statistically significant coefficients (at less than 5 percent level) are shaded. Regressions are run with robust standard errors. The IV regression estimated using GMM estimator (ivreg2.ado routine in Stata).

