

SECOND DRAFT  
JUNE 2004

INVESTMENT IN INFLUENCE AND POLITICAL ALTERNATION  
Evidence from transition countries <sup>1</sup>

**Karla Hoff**  
Research department  
World Bank  
Washington D.C.  
[khoff@worldbank.org](mailto:khoff@worldbank.org)

**Shale Horowitz**  
Dept of Political Science  
University of Wisconsin  
Milwaukee  
[shale@uwm.edu](mailto:shale@uwm.edu)

**Branko Milanovic**  
World Bank and  
Carnegie Endowment  
Washington D.C.  
[bmilanovic@ceip.org](mailto:bmilanovic@ceip.org)

ABSTRACT

Frequent alternation in power (change of government) in the newly democratic countries is likely to reduce the pay-off from bribery (investment in influence). Entrepreneurs will reduce their investment in influence. We find that governance indicators in almost all dimensions are better in transition economies that have experienced more frequent government changes. This effect is present whether alternation is ideological (switch from left to right or the reverse) or merely personal (without ideological change).

JEL classification: D7, D72, P26

Keywords: governance, corruption, Eastern Europe, politics

<sup>1</sup> We are grateful to the participants of the seminar at the Brighton Business School for very useful comments. Corresponding author: [bmilanovic@ceip.org](mailto:bmilanovic@ceip.org).

## 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 to be taken for granted (Huntington, 1991, Przeworski, BM: ). With a single switchover from authoritarianism to democracy, the fruits of new democracy are too tender and the structure of the polity, people's customs, and interests of the elites are such that a reversal is not at all improbable. And 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 Brazil, Argentina, and a number of Latin American and African countries).<sup>2</sup>

But if several power alternations are needed for the democratic rules of the game to become credible, then also power alternation may be needed for the economic effects associated with democracy to be felt. We have in mind in particular the effect of democracy on governance. More power alternation after the establishment of a new democratic regime should result in better governance. We base this view on the argument that, particularly at the early stages of transition to democracy, political process can easily fall prey to the influence of well-organized interest groups. At that stage, when civil society, the media and the representative institutions are weak, well-organized and rich special interests may be able to buy their own politicians, favorable legislation, or, if ever accused of improprieties, to ignore with impunity the country's courts. If that's the case, then organized business will tend to shift a non-negligible part of its resources (monetary and time) into investing in influence since the returns on influence acquisition will be high.

---

<sup>2</sup> According to PolityIV, level of democracy in Brazil went from 6 (out of the maximum of 10) in 1961 to zero five years later; Argentina went from 3 in 1957-1965 to zero between 1966 and 1972; Nigeria went from 8 in 1965 to zero during the next fifteen years.

The only way to break the vicious circle of weak institutions and strong particular interests, is through power alternation. What happens with power alternation is that a new set of political players comes to power, and while these players may, in their own turn, be beholden to some interest groups, it is unlikely that these would be the same interest groups that have supported the previous government. Thus the rate of return on 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 groups realize that the same fate may await them too if they become too closely associated with only one ruling coalition. For the decrease in the return on influence-buying to happen, another alternation in power needs to be assumed—that is, democracy has to become routinized. Interest groups then have two choices: either to try to influence the entire political spectrum of the parties in order to be well-represented across the spectrum, or to forsake their direct influence-buying in favor of the establishment of more transparent and anonymous laws. Some, of course, may pursue the first strategy, as indeed in many well-established democracies we see businesses supporting several different parties. Yet this is a very costly option. In addition, unless there is a two-party system with rather minimal differences between the parties, it is also a strategy difficult to implement since there are obvious political, in addition to commercial only, affinities between various business interest groups and political parties. In other words, businesses that need to buy high protection of the domestic market are unlikely to be politically acceptable to a very liberal, 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. We would thus expect that in newly democratic countries, more frequent power alternation will be associated with “cleaner” government and less corruption.

Now, the importance of power alternation will be great during the early stages of transition to democracy. As the number of turnovers (changes in either or both ruling parties, ruling coalitions and leaders) reaches a certain threshold number (say 4 or 5) and turnovers become a routine feature of parliamentary life and elections, we cannot expect

that the effects of additional alternations will be the same. At some point, the effect could be almost nil. But during the first stages, the effects may be significant.

The newly-democratic countries of Eastern Europe and the former Soviet Union represent an almost perfect natural experiment to test our hypothesis. They have set out to become democratic from a very similar point, having all been Communist authoritarian regimes. Political differences that doubtlessly existed between (say) a Poland and an Uzbekistan were much less pronounced under Communism than they are today. We argue that more frequent changes in ruling party/coalition or president, and particularly between different political regimes (center-left and center-right) are indeed a very healthy development for the country's governance structure. We thus regard governance as outcome of an essentially political process—at least in the early years of the democratic transition. Once that transition has ended, as in the case of Central European countries it might be considered to have ended with their accession to the European Union, the impact of later alternations on governance should become weaker.

Some casual observation also motivates our view regarding the role of alternation in Eastern Europe. When East European countries democratized and went through the first round of free elections, the elections were often won by the new center-right parties. This was the case, most famously, with the first (semi-free) Polish elections in 1989, as well as with Slovenian and Hungarian elections in 1990.<sup>3</sup> This was not an unexpected outcome given the low regard in which the old regime was held by the majority of the population. What was unexpected though was that in the next round of elections, the reformed Communist parties came to power, dealing to the rightist governments almost as a severe blow as the one they had received only a few years earlier. Thus, in 1993 and 1994, socialists recaptured power in Poland, Hungary, Slovenia, and Lithuania, practically routing one right-wing coalition after another. Many commentators then worried about Communist resurgence, unsure about the reformed Communists' commitment to democracy and not a few voiced concern about the fate of reforms and

---

<sup>3</sup> These were the first three free elections in Eastern Europe since Czechoslovak elections in 1948.

democracy. The reality proved them wrong. Countries that switched from a right-wing to a left-wing coalition kept the key reforms intact, in some areas even accelerated them, did not put democracy in jeopardy, and imparted an air of stability and orderly succession between governments of different political hues that foreign investors often find attractive and soothing.

Thus, rather than being destabilizing, the electoral victories of the former Communists (who have in the meantime morphed into social-democrats) entrenched the process of democratic transition, and improved governance. In contrast, countries that did not experience these alternation in power did much worse. There the leaders, be it of the nationalist kind like Milosevic in Serbia or older Communist type like Lukashenko in Belarus or secular authoritarians like Karimov in Uzbekistan, created a veneer of a democratic process but were in reality able to keep power firmly in their own hands. This, in a process explained above, provided strong incentives for special interests to organize and thrive. Even in countries like Russia whose initial record in the area of democratization was better than that of Serbia, or Belarus or Uzbekistan, the absence of ideological alternation in power helped the business groups that have captured the state early on under Yeltsin's presidency to retain their privileged position. Even under Putin who has recently shown signs of trying to cut off the links with the oligarchs from the Yeltsin era, it is only the top oligarchs, particularly when they have political aspirations, who have been made to feel the power of the state. Many others remain quite well-entrenched and skillful in buying influence and favorable legislation at the federal or lower levels. Thus the much-vaunted "dictatorship of the law" has been applied very selectively in a practice eerily reminiscent of Communism where laws were kept intentionally vague so that their application could respond to political expediency. There is, we argue, little doubt that absence of clear power alternation in Russia, and nowadays even the absence of a credible party opposition in Russia, has had a negative effect on all aspects of governance.

We thus present a new approach to the issue of governance which we believe to make intuitive sense, and which we model in the next section before exploring it

empirically on the example of East European transition economies. As will become clear, we believe that the model has validity in general, that is for all democratizing countries and the current empirical test is merely the first of several that can be envisaged. Our approach differs from other “political” approaches to governance as for example those that relate bad governance and corruption to political decentralization (Treisman, 2000), presidential rather than parliamentary system (Kunicova 2001), polarization between executive and legislature (Frye 2002), or difference in the legal tradition (La Porta, Silanes, Shleifer and Vishny, 1999). Moreover, the hypothesis advanced here is directly opposite to the one made by Treisman (2002, p. 16), namely that greater political instability, proxied by Treisman by the number of prime ministers since transition, should lead to greater corruption.

The paper empirically investigates these issues on the sample of 27 transition economies. In section 2, we present a model that formulates the insights sketched here. In Section 3, we discuss the political data base which has recently been created by one of us and is used in the empirical estimates here. Section 4 presents the empirical estimates, and Section 5 ends the paper with some conclusions and policy implications.

## 2. The model

We use a simple two-period model. The assumptions are intended to capture two basic features of investing in influence. First, the payoff to buying influence is a lengthy (more than one-period) process. In investing in influence, an enterprise director offers money or political support in exchange for government actions that by their very nature cannot be reduced to a spot transaction. Protection from competition or regulation, for example, entails actions that occur over time.

The second feature is that corruption contracts are enforced only as long as the office-holder with whom they are made remains in power. If he loses power, then the investor will incur a loss. The loss might take the form of a capital loss on investments complementary to the provision of state privileges, or a levy imposed by the successor government on corruption in the past administration. If the office-holder remains in power, then a variety of devices could lead to contract enforcement. The office-holder and investor might be beholden to each other: if the office-holder reneged, the investor might use his knowledge of the illegal transactions to hurt the office-holder.<sup>4</sup> If the investor was part of a business network, then a violation of a contract with any member of the network might result in the withdrawal of support from all members.<sup>5</sup>

The specific assumptions of the model are as follows:

We assume that there is a set of agents of unit mass who are enterprise directors. Each has an opportunity to obtain privileged access to state protection or resources. The individual must decide whether or not to act. If he does not act, he will receive a return

---

<sup>4</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, and threatened to—and did block—actions that Yeltsin wished to take by exposing corruption in his administration.

<sup>5</sup> Stoner-Weiss (1997) suggests that such collective enforcement has occurred in parts of Russia. Haber (200\*) argues that in Mexico, business networks control labor unions, which play the role of third-party enforcer: if the government violates agreements with the network, then a general strike can be called that brings down the government.

of zero. If he invests in influence with an office-holder who remains in power in the second period, then he receives a net return  $R$  in this period and the next period. But if the office-holder loses office in the second period, then the enterprise director will suffer a loss  $l$  in that period.

Enterprise directors differ in their ability to invest in influence. In the real world, many factors would give rise to such differences: wealth, past associations with members of the government and bureaucracy, and membership in a network of enterprise directors that can provide third-party enforcement of the corruption contract. We let  $q$  denote a director's type. Directors with a higher value of  $q$  earn a higher net return to investing in influence:  $R(q) > 0$ .  $q$  has a continuous, differentiable cumulative distribution function  $H(q)$  with  $H' > 0$  for  $q > 0$ .

As discussed above, we consider a setting where democracy is new. Institutions to permit regular alternation in power are only emerging. 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 reelection,  $\pi$ , is a decreasing function of cumulative alternation,  $\alpha$ .<sup>6</sup> Under these assumptions, the expected payoff to investing in influence can be written as

$$(1) \quad v(q, \alpha) = R(q) + \delta[\pi R(q) - (1-\pi)l]$$

where  $\delta$  is the discount factor. The first term of (1) gives first period's certain return, and the second term, the second period's expected return. We assume that  $R(0) \leq 0$ , which means that the individual least able to invest in influence cannot earn a positive return from corruption. We may also assume (although it is not critical) that  $v(q_{\max}, \alpha) > 0$  for all  $\alpha$ : that is, the return to investing in influence will be positive for at least one (highest) type.

---

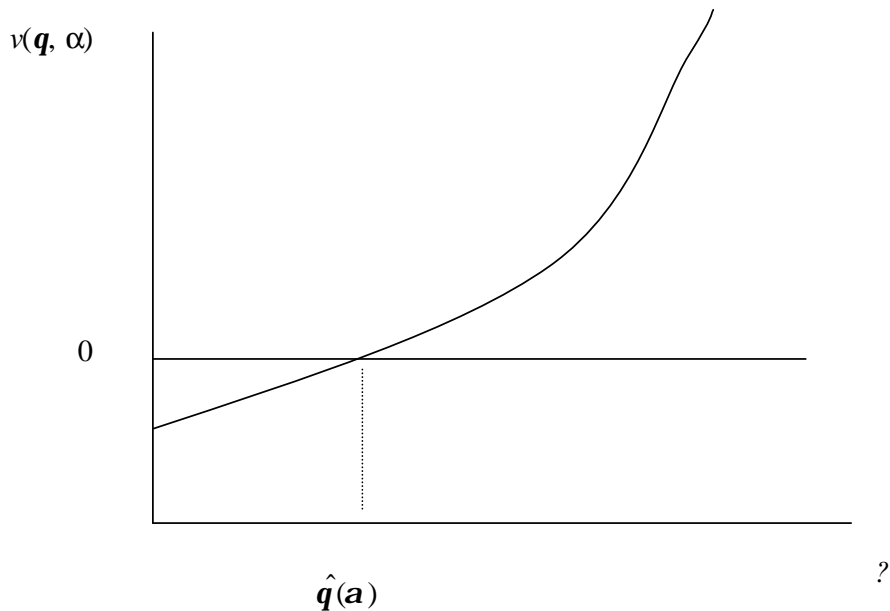
<sup>6</sup> The probability of reelection is, of course, influenced by other factors as well (e.g. the popularity of the government), but the focus of this paper is the effect of alternation on the behavior of business enterprises.



Since  $q$  parameterizes the ability to invest in influence,  $v$  is monotonically increasing in  $q$ ; as depicted in Figure 1. Monotonicity of  $v$  in  $q$  implies that a unique critical value  $\hat{q}(\mathbf{a})$  exists for each  $\mathbf{a}$  such that agents of type  $q > \hat{q}(\mathbf{a})$  invest in influence and agents of type  $q < \hat{q}(\mathbf{a})$  do not.<sup>7</sup> Given  $\mathbf{a}$ , the critical value is the type who is indifferent between investing and not investing in influence: that is, where  $v(q, \mathbf{a}) = 0$ . We will refer to the critical value of  $q$  as the *switch point*. Then  $H(\hat{q})$  is the fraction of directors who do not invest in influence, and  $1-H(\hat{q})$  is the fraction who do. We denote this fraction by  $x$ :

$$(2) \quad x = 1 - H(\hat{q}(\mathbf{a})).$$

Figure 1. Relationship between individual type ( $q$ ) and expected pay-off ( $v$ ) to investing in influence, given cumulative alternation  $\alpha$

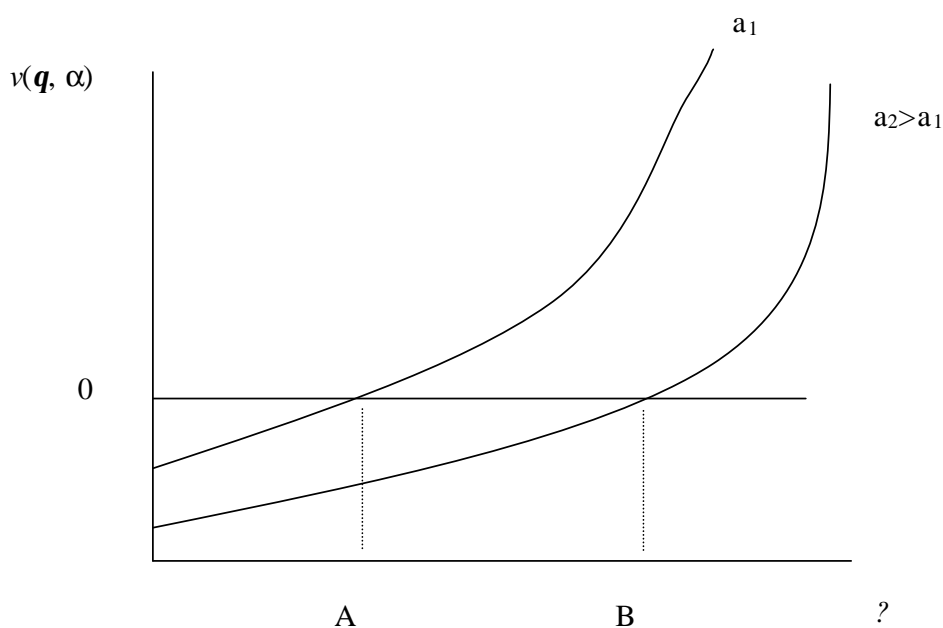


<sup>7</sup> Hellman, Jones, and Kaufmann (2003) find evidence that even small entrepreneurs aspire to bribe the state—i.e. to become little “oligarchs.”

We are now ready to consider the influence on corruption of the level of cumulative alternation. Consider two countries identical in all respects except that one has a greater cumulative alternation in power of its leaders during the early years of experimentation with democracy. An increase in  $\alpha$  shifts down the expected return from investing in influence. This moves the switch point rightward and fewer people invest in influence. Figure 2 provides the basic insight: the switch point moves from A to B. Formally,

$$(3) \quad \frac{d\hat{q}}{d\alpha} = -\frac{\frac{dv}{d\alpha}}{\frac{dv}{dq}} = -\frac{dp'[R+f]}{R[1+dp]} > 0$$

Figure 2. Change in the switch off point as cumulative alternation  $\alpha$  increases



The increase in the switch point means that corruption decreases. Differentiating (2) with respect to  $\alpha$  and using (3) gives:

$$(4) \quad \frac{dx}{da} = -H'(\mathbf{q}) \frac{d\hat{\mathbf{q}}}{da} < 0.$$

(4) states that an increase in alternation lowers the fraction of enterprise directors that invests in influence. It does so because it makes corruption contracts less likely to pay off.

In our analysis, each individual is assumed to have beliefs about the level of future alternation, but we do not explore here whether those beliefs are fulfilled in equilibrium. Our analysis is partial equilibrium; it provides a link between two endogenous variables, corruption and the cumulative level of alternation. In work in progress, we develop a model in which we show that the positive relationship between these two variables carries over to steady state equilibrium. The reason is that the greater the level of corruption, the greater the proportion of voters with a vested interest in the incumbent and, thus, the smaller the fraction of swing voters to whom a new candidate for office can appeal.

The simple model presented here sheds light on a quandary that countries, such as Russia, face as they both try to concentrate power in the hands of the president and reduce corruption. Putin's objectives are both to silence opposition to his leadership and to establish a "dictatorship of the law", that is, a rule of law. Our model suggests that by effectively creating a one-party state, he increases the return to investing in influence and thus makes achievement of his second goal more difficult.<sup>8</sup> In contrast, vibrant political competition could be the means to establish the rule of law, as Landes and Posner (1975) have argued, as each party finds that it cannot make enforceable corruption contracts, and

<sup>8</sup> As Russian commentator Sergey Markov (2004) recently put it, "Creating the foundations of democracy is contrary to creating an ideology of hyperloyalty as an ideology of the corrupt bureaucracy. Therefore, it is insufficient to be merely creating the basis for democracy. We also need a policy to build mechanisms for spontaneous democracy [for democracy to function naturally] – in other words, the [current] system of managed democracy should be used to develop democratic institutions; otherwise, the authoritarian trend will...develop."

that if it is to make credible promises it needs an independent judiciary to enforce them. In this view, political competition (high alternation) promotes a *public* good—the rule of law—while limited political competition, by facilitating private deals, promotes the uses of state resources as *private* goods (corruption contracts).

### 3. Data on political alternation

The empirical analysis of the issues sketched above and presented in the model in Section 2 can be conducted only if we have adequate data on political alternation and governance. For governance, we use six aspects of governance (control of corruption, government effectiveness, political stability, regulatory quality, rule of law, and voice and accountability) defined in the Kaufmann-Kraay-Mastruzzi (2003) database. The Kaufmann-Kraay-Mastrozzi (KKM) data on governance indicators is available at two-year intervals starting in 1996.<sup>9</sup> Thus, the period covered in the empirical analysis here will be 1996-2002. The six governance indicators defined by KKM are: control of corruption, government effectiveness, political stability, regulatory quality, rule of law, and voice and accountability. The KKM indicators are not original, “new” indicators created by the authors but are weighted composite indicators based on the data provided by various sources (25 in total). The sources include expert surveys, estimates by governments think tanks, credit rating agencies etc. Kaufmann et al. obtain their indicators after an elaborate process of weighting where the weight of each source is proportional to the precision of the estimate (which in turn is supposed to be proportional to the correlation between a particular indicator and other indicators that measure the same phenomenon). The results for each governance category are scaled so that the average (and median) value for the world is 0 and the standard deviation is 1. Thus, a value of given indicator for a country gives country’s relative position in the world. Increase in the indicator signifies improvement in governance.

Our key issue is defining political alternation. This is not a trivial exercise. To define alternation in a meaningful way we need to decide (1) where the “seat” of political power is—whether it is in a presidency or a parliament—and hence where a power switch matters, and (2) what is the correct ideological definition of the ruling political group so that we can distinguish ideological from merely personnel changes. To do both we rely on a new database on political institutions, the Post-Communist Party Ideology (PCPI), developed by Shale Horowitz and Eric Browne (forthcoming).

---

<sup>9</sup> The data are available at <http://www.worldbank.org/wbi/governance/data.html>

### *The PCPI database and types of political alternations*

Alternation of government can be understood and measured in different ways, and such diverse types of political alternation might have varying impacts on governance. We distinguish four types of alternation. The simplest is formal or institutional: such *leadership* alternation counts any change in the personal control of the effective lawmaking or executive institutions. An obvious refinement is to ask whether leadership alternation is likely to involve significant changes in policy orientation. Such substantive changes should be more likely if a new government has a different *ideology* than its predecessor. It may be that governments with different ideologies are less likely to maintain patronage relations that existed under the old regime. An extension of this logic might ask whether greater *ideological distances* between old and new governments are more likely to disrupt and thus deter patron-client relations. Fourth, it may be that the mode of formal or institutional change matters. In particular, it may be that the ideologies of democratically elected governments are less likely to be falsified or easily compromised than those of authoritarian regimes. This might be expected because democratically elected leaders are often accountable to an organized party apparatus and a mass support base. Both organized parties and their mass bases are united by commitment to a common ideology, and not merely by a desire to take and keep power for its own sake. Thus, it may be that *democratic ideological* alternation is more unfriendly to stable patron-client relations than ideological “rebranding” conducted by new authoritarian rulers.

Before discussing how we measure these types of alternation—particularly ideological alternation—it is necessary to set out a practical framework for understanding ideological change. Ideologies of governments are here understood in terms of the positions of ruling individuals, groups, or parties on the most salient policy issues. Following in 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 on economic ideology and policy, and the

other dimension captures differences on what are variously called cultural or identity-related policies.<sup>10</sup> We give more precise definitions of each policy dimension below, based on the specific ideological issues and policy challenges that faced the post-communist world in the first dozen years of the transition. In economic policy, the main issue was whether and how to make the transition from planned or socialized economies to market economies. In what we call “national identity” policy, the main ideological issues were how to define and protect the nation’s collective identity. The main policy issues concerned the status and treatment of internal ethnic minorities and of related ethnic minorities in neighboring countries.

For purposes of coding leaders and parties, we distinguish four intervals along each of the two ideology-cum-policy dimensions. Why don’t we distinguish more than four intervals on each dimension? Based upon party platforms, campaign statements, and secondary discussions by journalists and academics, we could not consistently discern finer distinctions in most of the countries. This two-dimensional, four-interval classification yields the 16-cell ideological space shown in Table 1.

Table 1. Ideological Classification Scheme for Parties Contesting Elections in Post-Communist Democracies

	Far Left	Moderate Left	Moderate Right	Far Right
Extreme Nationalist	14	7	8	15
Moderate Nationalist	6	1	2	9
Moderate Autonomist	5	4	3	10
Secessionist	13	12	11	16

<sup>10</sup> For more theoretical treatments, see Sartori (1976) and Tsebelis (1995).

The criteria for distinguishing cells (or columns) along the left-to-right economic policy dimension 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 only with 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 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 cells (rows) along top-to-bottom national identity policy dimension 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 some kind of federalization 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.

With this ideological classification as a baseline, we define the following variables:

*Cumulative leadership alternation (LEDARALT)*. This is the year-by-year sum of leadership alternations 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 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 only be overridden 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 say 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 a number of years (e.g., over more than one electoral cycle), a change is coded as having occurred in the year when the change in control becomes complete. To return to the last example, 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, one change is counted as having occurred in the current election as with Ukraine in 2002. Leadership change does not necessarily involve a change in the ideology of the ruling government, according to the scheme of Figure 1 (i.e., it is coded irrespective of what happens in the ideological space described above). Taking 2003 for an illustrative year, the mean number of leadership changes through that year was 2.24, and the median number 2. The maximum number of leadership changes—five—occurred in Estonia and Poland. The minimum number—zero—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 it began to wield effective authority in its Republic—either 1990 or 1991. Thus, 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.

*Cumulative ideological alternation* (IDEOALT). This 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, or to a party, or coalition of a different ideological persuasion, as defined by the 4-by-4 ideological classification of Figure 1. For this variable, therefore, a move from one cell of Figure 1 to another is necessary.

It is also necessary that the leadership entity has changed. Again, a country with a continuing communist-era authoritarian leader that “rebrands” 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—such as the Bulgarian Socialist Party in 1990 or the Mongolian People’s Revolutionary Party in 1990—this is counted as an ideological change. This is an important distinction: for ideological to have occurred, we require that holders of power physically change (different ruling party or different president) and that their ideology changes too. Continuation of the same personnel in power under the “rebranding” of party names does not qualify as alternation.

In democratic political systems, ideological control of all veto-wielding legislative houses must change. 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 control of all the relevant law-making institutions is completed over more than one electoral cycle, one change is coded as having occurred in the year when the change in control becomes complete. The mean number of ideological changes through 2003 was 1.76, and the median number 1. The maximum number of ideological changes—four—

occurred in Bulgaria, Hungary, Lithuania, and Poland. The minimum number—zero—occurred in Belarus, Kazakhstan, Tajikistan, Turkmenistan, and Uzbekistan. As would be expected, there were significantly fewer ideological changes than there were leadership changes.

As mentioned before, we also distinguish two other variants of cumulative ideological alternation. The first takes into account the extent of ideological change, by counting change in a given year as the number-of-cells distance moved in the two-dimensional space of Figure 1. Measured over the time-span since 1989, we call this *cumulative weighted ideological alternation*, where weights are distances between the ideologies of different ruling coalitions or parties (DISTIDEO\_ALT). In practice, over the years examined here, no country's government shifted by more than two cells. Interestingly, all of the two-cell changes were initial shifts from far-left to center-right governments. Most of these initial two-cell shifts occurred in the years 1989-92. The mean number of weighted ideological changes through 2003 was 2.41, and the median number 2. The maximum number of weighted ideological changes—five—occurred in Hungary, Lithuania, and Poland. The minimum number—zero—occurred again in Belarus, Kazakhstan, Tajikistan, Turkmenistan, and Uzbekistan.

Another measure can be constructed by counting only *democratic ideological changes*, i.e. by excluding ideological changes that occur by authoritarian means. This measure can be constructed both for the first, simple measure of ideological alternation and for the weighted measure of ideological alternation. The respective means for 2003 are 1.72 and 2.31. For simplicity, in the empirical analysis we use only the democratic variant for the simple measure of ideological alternation (DEMIDEO\_ALT). There is little difference with the ideological measure that counts all, including non-democratic, changes, because virtually all the ideological changes occurred by democratic means. The ideological alternation variables are much more strongly correlated with one another than any of them is with the leadership alternation variable. To take 2003 again, the correlations among the ideological alternation variables vary from 0.917 to 0.991, whereas the correlations between each of the ideological alternation variables and the

institutional alternation variable vary from 0.717 to 0.813. Results for other years are similar.

In order to know when an ideological alternation has taken place, we need to construct variables for the regime types of government in power at a given point in time (REGIME). Regime type is determined by the *economic ideology* of the ruling coalition or party. This is the type of economic ideology held by the government in a given year (as per our classification matrix).<sup>11</sup> We do not distinguish different types of ideology on the cultural or national identity dimension, because the only case of the ruling government having anything other than a moderate nationalist ideology was in Moldova from 2001-03 (the ruling, Slavic-dominated Communist Party is classified as a moderate autonomist regime, cell 5 in Table 1). In addition, there are no cases of ruling far right (libertarian) governments. To capture the three possibilities of far left (Communist), center-left, and center-right governments, we code two dummy variables for center-right and center-left governments. Again with the exception of Moldova in 2001-03, far-left governments are never able to return to power if they are fully dislodged. This is why, as discussed above, almost all alternations are to center-right or center-left governments.

Also as discussed above, it may be that ideological differences are less significant than whether the political system is democratic or autocratic. To capture this possibility, we interact the governing economic ideology variable with a dummy variable for democracy. Governments with Polity2 scores that are greater than or equal to  $-3$ , on a scale of  $-10$  to  $10$ , are classified as democratic.<sup>12</sup> This allows us to distinguish a given type of ideological regime (say, center-right) under democracy from one under authoritarianism. In practice, this means that we can distinguish six regime types: governments can have far left, center-left, and center-right ideologies, and each of the three types can rule under democratic or non-democratic conditions.

---

<sup>11</sup> Where leaders, parties, or coalitions of two different ideological types were successively in power in the same year, the year is coded according to the ideology of those that ruled for the longest time.

<sup>12</sup> Polity2 scores are derived by subtracting a scale of autocracy (0 to 10) from a scale of democracy (0 to 10). The scores are taken from the Polity IV project dataset. The dataset and users' manual are available at <http://www.cidcm.umd.edu/inscr/polity/>.

The leadership and ideological alternation variables are illustrated in Table 2 using the well-known examples of Poland and Russia. Poland has not had a strong presidency. Poland's upper house also 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 June 1991 election, all of these leadership changes brought ideologically different governments to power.<sup>13</sup> Thus, four ideological alternations had occurred by September 2001. Turning to weighted ideological alternation, the first change in 1989 was from a far left to a center-right economic ideology—a change of two ideological cells. The subsequent changes were to center-left (1993), center-right (1997), and center-left (2001)—changes of only one ideological cell in each case. Last, since all ideological changes occurred democratically, there is no difference between the measures of ideological alternation and democratic ideological alternation.

Turning now to Russia, we have a strong presidency, so that changes must occur in both the presidency and the legislature. 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

---

<sup>13</sup> By October 1991, the popular front Solidarity movement that 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.

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 the Gorbachev's Communist Party of the Soviet Union. So the weighted ideological change in 1991 covered two cells. Last, despite imperfections in the democratic process, both the Yeltsin- and Putin-led governments were elected under reasonably democratic conditions. Therefore, there is no difference between democratic ideological alternation and ideological alternation.

Table 2. Various Government Alternations (counted cumulatively), and regime types 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
Democratic Ideological Alternation	1				2				3					4
Regime type	2	2	2	2	2	1	1	1	1	2	2	2	2	1
<b>Russia</b>														
Leadership Alternation			1								2			
Ideological Alternation			1											
Weighted Ideological Alternation			2											
Democratic Ideological Alternation			1								2			
Regime type	33	33	2	2	2	2	2	2	2	2	2	2	2	2

Note: Regime type: 33 = extreme left (authoritarian); 1 = center-left (democracy), 2 = center-right (democracy).

The upshot was that by 2002, Poland had experienced five leadership alternations vs. only two for Russia. Cumulative number of ideological alternations was four as against only one for Russia. While in 1989 and 1991, first Poland and then Russia abandoned Communism which gave each country two “points” on our scale of weighted ideological alternation, Russia has remained since with an ideologically the same

government and experienced only one leadership change. Poland, in contrast, experienced three ideological turnovers between the center-right and center-left governments.



#### 4. Empirical estimation

The reduced-form regression which embodies our hypothesis is given by (1).

(5)

$$GOV_{it} = \mathbf{b}0 + \mathbf{b}1 \ln Y_{it} + \mathbf{b}2 (\ln Y_{it})^2 + \mathbf{b}3 DEM_{it} + \mathbf{b}4 REGIME_{it} + \mathbf{b}5 ALT_{it} + \mathbf{b}6 Z_{it} + \mathbf{e}_{it}$$

Expression (5) shows that level of governance is associated with five types of variables: those representing income level, democracy, type of government in power (its economic ideology), other control variables (war), and the variable of particular interest to us, alternation in power. Note that the three political variables measure three distinct aspects of the political process and that in general we do not expect much correlation between the them. Democracy can coexist with infrequent alternation in power, as long rules of social democrats in Sweden (1936 to 1976) or liberal democrats in Japan (1955-1993) attest. Political regimes of left- or right-wing hues can be both democratic or not. Only in rather extreme cases, as under Communism, can we expect that lack of democracy and lack of (ideological) alternation would go hand in hand. Of course, here, as discussed in Section 1, because of the fact that democracy is rather young, we would expect somewhat greater correlation between alternation in power and level of democracy.

We focus on the role of alternation. First we need to define quite precisely our hypothesis. It is that the formerly Communist countries that have experienced greater number (more frequent) of government alternation in power between 1990 and the most recent year for which we have data (2002) will tend to have better governance indicators. This is based on the hypothesis that more power-alternation means less ability of the elites or business interests to capture the government and to impose policies which are in their narrow interest. We shall therefore expect to find different countries having different *levels* of quality of governance depending on the cumulative number of power alternations that have occurred. This, in turn, means (1) that we need to focus our attention to the formative stage of democracy during which the democratic rules of alternation have not been fully accepted and internalized by all political participants (that

is, there is still a non-zero likelihood that the incumbent party might try to stay in power either by ignoring the electoral results or by not accepting fair balloting), and (2) we do not expect the number of power alternations to keep on having the same marginal effect regardless of the passage of time.

These two points are important to underline. First, if we believed that an increased number of power alternations will always have a positive marginal effect on governance we would argue that countries like the UK, United States, or France should have achieved extremely high quality of governance and those levels should simply keep on getting better and better. This is clearly unrealistic: after a certain point when democratic rules of the game get sufficiently established, alternation in power is taken for granted, and its additional effect must be very small. The situation is different with the newly democratized countries where the observance of the official rules of the game cannot be taken for granted and where it is precisely several alternations in power that are needed—we argue—to have the actors believe that the new democratic rules have been established for good, and begin to change their behavior.<sup>14</sup> Political alternation plays the “signaling” function: it signals that the rules of the game have indeed changed, that power is not going to be held for an indeterminately long period, that current rulers can be replaced, and that the “sweet deals” with them may be rapidly undone—not by the caprice of the rulers but by the popular vote. In an autocracy, investor in influence has to worry about not offending the rulers, and making sure that both sides live up to their implicit bargain. But in a democracy, the bargain is not enforceable even if there is a good will on both sides: for it could happen that the rulers themselves are thrown out of office. Thus, with political alternation one set of beliefs and institutions would be created; without it, an “old” set of beliefs and institutions is much more likely to be validated and held.

Second, so long as the new rules have not been fully “internalized” there are basically two alternatives. Either the old elite is able to retain power although it observes

---

<sup>14</sup> This is nothing specific to post-Communist transition. The same uncertainty regarding the ultimate stability of democracy characterized for example Spanish transition (one may recall Tejero’s attempted coup), Portugal and Greece.

the form or (more rarely) even the substance of a democratic process, or the elite is replaced by a new one, which in turn may be replaced by a third and so forth. Nevertheless, once the turnover has happened several times, the expectation is established that there would be more power turnovers, and thus the incentive to invest a lot of resources in buying up politicians and influencing the political process is less— simply because the expectation of returns on such activity is less. There is thus a certain number of power alternations, say three or four or five, after which (if they have taken place over some reasonably short amount of time and following democratic procedures), further power changes are assumed and the positive effects of power alternation on governance must be smaller, or even nil. The newly democratic countries in Eastern Europe/ FSU were probably over the entire periods 1990-2002 in a situation where the positive effects of power alternation were non-negligible. It is only now that eight former transition countries have joined the European Union, that we can assume that for these countries, democratic alternation in power would be taken for granted and hence its future effects cannot be very large. (In other words, once one perceives that bribery is unlikely to pay off, one does not invest in it.)

We use four definitions for alternation in power. As explained in Section 2, alternation can be ideological (with different types of parties coming to power) or leadership only (the same ideological group being in power but with a different leader). In principle, we would expect that the effect of ideological alternation will be stronger than the effect of leadership alternation. This does not have anything to do with ideology of the losing (or winning) side as such because that element is captured in the political regime variable, but rather with our expectation that the ideological shift (from left to right or right to left) will be more fundamental in destroying the connections and influence of business circles over politicians than a mere change from one to another leader supported by the same party coalition. In the latter case, we expect that the patronage network will be largely inherited and that those who have invested their resources in “buying” the politicians will not be disappointed. In the former case, their investments are much less likely to bear fruit. Consequently, more ideological turnovers will more fundamentally reduce the return in investment in influence, and the activity

will be more rarely undertaken. An extension of this view is that power alternations such that the new ruling coalition is quite different from the old ruling coalition will be even more likely to sever the existing links, and we would thus expect our politically-weighted alternation to be more strongly associated with quality of governance.

We include democracy in two different ways. First, directly, by measuring democracy through an index of electoral competitiveness of the legislature (Legislative Institutional Electoral Competitiveness, or LIEC) obtained from Database of Political Institutions (DPI). Second, by combining it with the definition of the political regime. The four-way classification of political regime types (extreme left, center-left, center-right, extreme right) is complemented by the PolityIV assessment of democracy. This means that there is an eight-way classification (each of the four regime-types under democracy and authoritarianism), but in practice there are only six regime types since there were no extreme right ruling parties. The two ways of including democracy have advantages and disadvantages. The advantage of using a direct measure of democracy like PolityIV is that it “grades” levels of democracy by providing ordinal rankings from 0 to 10. The advantage of combining democracy (which is now a binary 0-1 variable<sup>15</sup>) and regime type is that it allows us to distinguish between (say) right-wing and left-wing authoritarian regimes as well as left-wing and right-wing democratic regimes. PolityIV does not do that: if the two regimes are equally authoritarian, they are graded the same.

Democracy should be associated with better observance of rule of law and less corruption. The evidence for the role of democracy has been presented both in general and for the transition economies (see Treisman (2002) for transition economies; Goldsmith (1999) and Lipsett and Linz (1999) in general). As for the regime types, we formulate no hypothesis regarding their impact on governance.

For the role of level of development (GDP per capita), we assume, as is standard in the literature, a quadratic relationship. In principle the quadratic relationship is based

---

<sup>15</sup> It takes value of 1 (democracy) if PolityIV measure is greater than -3 on the authoritarianism-democracy scale that ranges from -10 to 10.

on a Kuznets type reasoning where increases in income first lead to an increase in inequality and later to a decline. It is unclear if the reverse relationship (at first, a deterioration and then improvement) should hold for governance. Whatever the general relationship—assuming there is one—does not have much bearing on our case where the sample is composed of transition economies alone whose range of incomes is much more narrow than in the standard cross-sectional analyses. Income may be also thought of controlling for other factors like e.g. average education level which may be thought to have an influence on observance of rule of law. For income we use GDP per capita income expressed in current US dollars.<sup>16</sup>

We also include as one of the controls, cumulative involvement in war which is defined as the proportion of time countries were involved in large-scale military conflict, counted over the number of years elapsed since 1989 or, for the former Soviet Republics, since August 1991. Minor conflicts, such as civil unrest or low-intensity violence, which do 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. For former Soviet Republics, occurrence of military conflict is measured only after effective independence was achieved in August 1991. Tajikistan was at war for the longest time—almost six and a half years. Bosnia, Croatia, Serbia, and Montenegro were all at war for about four years, and Armenia and Azerbaijan for almost three years. Moldova was at war for a year, Albania and Slovenia for only a few weeks, and the remainder of the countries not at all.

Table 3 gives some descriptive statistics. Correlation between different formulations of power alternation and democracy is about +0.4. The correlation between the ideological alternation measures and leadership alternation is fairly high at around +0.8. Even higher are the correlations between the three different ways to measure ideological alternation. Finally, the correlation between political regimes (scaled so that

---

<sup>16</sup> Due to the estimation problems of PPP rates for Eastern Europe and absence of recent direct International Comparison data (the latest available round covers the 1993-96 period), we use income expressed in current dollars.

more right-wing regimes take higher values), and democracy and alternation is positive even after we eliminate Communist (extreme left) regimes which by their very nature were not democratic.

Table 3. Correlation between political variables

	Democracy (LIEC)	Ideological alternation	Leadership alternation	Ideological alternation under democracy	Weighted ideological alternation
Ideological alternation	0.41 (0.00)				
Leadership alternation	0.42 (0.00)	0.80 (0.00)			
Ideological alternation under democracy	0.39 (0.00)	0.98 (0.00)	0.77 (0.00)		
Weighted ideological alternation	0.42 (0.00)	0.91 (0.00)	0.76 (0.00)	0.93 (0.00)	
Political regime	0.19 (0.00)	0.26 (0.00)	0.25 (0.00)	0.22 (0.00)	0.36 (0.00)

Note: Calculated across all year. p-values between brackets.

Tables 4-6 show the results of regressions like (5) with governance indicators on the left-hand side and the already explained RHS variables including the interacted democracy and political regime variable. (The results for when democracy is approximated directly by the LIEC variable are given in the Annex 1.<sup>17</sup>) We look at all six governance indicators provided by Kaufmann, Kraay and Mastruzzi (2003). As mentioned before, the KKM results are available for four years, 1996, 1998, 2000 and 2002. There are two formulations of each regression: pooled time and cross section, and the between-regression. The between regression is a panel regression run on averages of all the variables. Since our hypothesis is that the average level of governance will differ across the countries as a function of the cumulative number of power switches and that we should retrieve the long-run average effects of a unit change in the number of power alternations, the between-regression is appropriate. In other words, we regard the

---

<sup>17</sup> Because the data on democracy (DPI) are available only up to 2000, the inclusion of the democracy variable leads to a significant loss of the number of observations. The more up-to-date DPI variables should become available in the next few months.

countries as having “slotted” themselves over the period ranging from 1990 to today into better or worse governance regimes, depending on the number of alternations in power. The average level of governance over that period is therefore a function of the overall number of alternations in power and since alternations are counted cumulatively, there is an implicit “premium” on early alternations. In other words, if two countries have the same number of alternations in power by 2002, a country which has achieved them earlier will display a higher average cumulative number of alternations which precisely captures our view that early alternations during the formative stage of democratization are crucial.

The four sets of regressions show remarkable consistence in that all four definitions of alternation are contributing positively to all aspects of governance except political stability (where the effect is not statistically significant). Consider for example the rule of law indicator. For the set of transition economies, the KKM rule of law indicator takes 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 country in our sample is Slovenia where in 2002, the rule of law indicator amounted to more than 1.<sup>18</sup> The worst are Turkmenistan and Tajikistan where the indicator is inferior to  $-1$  in all four years. Now, as we see from Table 4, an additional ideological alternation in power (IDEO\_ALT) raises the rule of law indicator by about 0.14-0.16 points, which is about 1/6 of the world variance. Similar is the effect on the control of corruption. One additional ideological alternation (Table 4) improves control of corruption by 0.11 points. This is the difference in corruption between Russia (value of  $-0.9$  in 2002) and Belarus (value of  $-0.78$ ) or between Bulgaria ( $-0.17$ ) and Latvia ( $-0.09$ ). Very similar results are obtained regarding the impact of alternation in power on government effectiveness, regulatory quality, and voice and accountability.

---

<sup>18</sup> That is, taking the world sample, 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 presents the results when alternation is approximated by leadership alternation (LEADALT) only. The effect is about the same, or even slightly stronger than in the case of ideological alternation. The strength of LEADALT is especially strong in the case of voice and accountability which are, under leadership change, improved more than under other types of alternations. The effect of alternation under democratic conditions (DEMIDEO\_ALT) is practically undistinguishable from the effect of alternation in general since the underlying data barely differ at all and, in order to save space, we do not show them here. Finally, as expected, the weighted alternation (DISTIDEO\_ALT) has, on average, somewhat stronger positive impact on governance indicators than a simple measure of ideological alternation. The differences between the various formulations of alternation are however very small but they do suggest that more significant ideological shifts—since they almost by definition involve more thorough personnel overhaul—are associated with somewhat stronger positive effects on governance.

Since all KKM measures of governance are scaled in the same way (with the mean of 0 and standard deviation of 1) we can compare the effects of alternation across different governance categories. The effect of alternation is the strongest for voice and accountability, followed by regulatory quality. In both cases an additional alternation in power is associated with a “gain” in the governance indicator equal to about one-fourth of the standard deviation. This means that if we compare two countries such that one has these two governance indicators exactly at the world median, while the other country, otherwise identical except for one additional power alternation, will have its voice and accountability and regulatory quality indicators superior to 60 percent of the countries.<sup>19</sup>

That the effects of alternation on the governance indicators are similar is not surprising since the indicators are strongly correlated among themselves. The linear correlation coefficients are—as we have seen—between 0.76 and 0.98 (see Table 3).

---

<sup>19</sup> Further one moves from the median, the smaller the effect of a given point improvement on the country's ranking because normal distributions at the tails are thin.



What is perhaps more unexpected is that political alternation of either type, ideological or leadership, has about the same effect in improving governance.

While the effect of alternation is throughout positive, the effect of political regime under democracy (whether center-left or center-right) is insignificant throughout (see the last line in all the tables). These two regimes (center-right or center-left under democracy) cover more than 70 percent of total cases (country/years) in the sample and thus a difference between their governance performance would have been of potential practical relevance. Compared to Communism (which is the omitted category among the political regimes), other regimes—whether under democratic conditions or not—matter only for selected governance aspects. However, Communism here is really a dummy variable for Belarus which is considered as the only Communist country in the sample (of course, after 1996 when our other data kick in). Thus Belarus is not inferior to other countries in terms of corruption and political stability, but is inferior in the other four governance aspects.

Level of income matters in more than half of all the cases. It consistently does not matter for political stability and regulatory quality. When it matters (as in the case of control of corruption), income charts a U-shaped curve with worst governance indicators (among the transition countries) at some middle levels of income. It would be wrong, however, to extend this finding regarding the impact of income level to all the countries in general since the income range for the transition countries is much narrower than for the world as a whole. When we drop income from regressions, the coefficients on alternation invariably increase (in most cases, double) and alternation becomes statistically significant even for governance indicators like political stability where it was not so before.<sup>20</sup>

Finally, the effect of war, as expected, matters (negatively) for political stability and rule of law, but is otherwise not significant.

---

<sup>20</sup> The results are available from the authors on request

One might think that the number of alternations may in reality work as a proxy for the split between the Commonwealth of Independent States (CIS) and the rest of Eastern Europe. Indeed, the average number of ideological alternations (IDEO\_ALT) is 1.6 in Eastern Europe (including Baltics) vs. 0.6 in CIS; as for leadership alternation, the numbers are 1.7 vs. 0.6. However, when we include a CIS dummy variable, the results for alternation come out even more strongly, and nothing of substance is changed.<sup>21</sup>

In Annex 2, we show the results when controlling for dependence on gas and oil exports. It has been argued (Pritchett, BM: BM: references) that governance tends to be worse in countries where there are significant natural-resource “point” exports. “Point” exports are natural resources that can be physically easily controlled and whose exploitation is relatively easy and does not depend on activities of many independent actors (e.g. oil wells as opposed to coffee growers). The temptation to appropriate income from exports of these resources is analogously high—particularly so since government are often actively involved in their exploitation. Some casual evidence regarding the role that privatization of oil and gas has had in furthering corruption in Russia, Azerbaijan and Central Asian republics lends further credence to this view. The value of fuel exports/GDP variable ranges from negligible for most transition countries (Albania, Hungary, Latvia, Moldova, Poland etc.) to about 15 percent (over the entire period 1990-2002) for Russia, Azerbaijan and Kazakhstan, and even a third of GDP for Turkmenistan. The overall average is about 5 percent. The results in Annex 2 show that gas and oil exports are indeed negatively and strongly associated with several governance indicators. Each percentage point increase in fuel exports/GDP is associated with 0.01 to 0.03 points decrease in rule of law, government effectiveness, regulatory quality and voice and accountability. Political alternation, however, remains significant in all but one cases as before and the coefficient practically do not change. Moreover, the level of significance of political alternation often goes up. Although one might have expected that this would not happen because countries with high fuel exports/GDP ratio tend also to

---

<sup>21</sup> The results are available from the authors on request.

have low frequency of political alternation,<sup>22</sup> and thus some of the effect of the former could have been ascribed to political alternation, this did not happen. The introduction of the fuel exports/GDP reinforces our hypothesis by showing how important political alternation is, including in oil and gas rich countries.

<sup>22</sup> Countries with fuel exports/GDP ratio higher than 10 percent in 2002 had up to that date an average of 0.29 and 0.86 respectively ideological and leadership alternations. For the sample as a whole, the average is 1.7 and 2.2.

Table 4: Ideological alternation

	Control of corruption		Government effectiveness		Political stability		Regulatory quality		Rule of law		Voice and accountability	
	pooled	Between	pooled	Between	Pooled	Between	pooled	between	pooled	between	pooled	between
Lngdppc	-2.788 (0)	-2.608 (0.022)	-1.951 (0)	-2.305 (0.026)	-1.233 (0.105)	-0.460 (0.754)	-1.142 (0.103)	-1.560 (0.338)	-2.455 (0)	-2.618 (0.008)	-1.760 (0)	-2.023 (0.072)
Lngdppc2	0.220 (0)	0.209 (0.008)	0.163 (0)	0.190 (0.009)	0.115 (0.028)	0.070 (0.483)	0.108 (0.025)	0.138 (0.217)	0.193 (0)	0.208 (0.003)	0.143 (0)	0.164 (0.035)
Alternation (cumulative)	0.111 (0.033)	0.129 (0.122)	0.075 (0.033)	0.098 (0.193)	0.040 (0.506)	0.079 (0.488)	0.211 (0)	0.249 (0.057)	0.136 (0)	0.165 (0.026)	0.227 (0)	0.249 (0.007)
War_cum	-0.058 (0.048)	-0.044 (0.306)	-0.037 (0.057)	-0.049 (0.209)	-0.184 (0)	-0.164 (0.012)	-0.027 (0.384)	-0.044 (0.499)	-0.066 (0)	-0.071 (0.060)	-0.022 (0.301)	-0.029 (0.507)
Center-left (democracy)	0.090 (0.715)	0.089 (0.82)	0.667 (0)	0.490 (0.185)	0.327 (0.263)	0.197 (0.721)	1.461 (0)	1.304 (0.043)	0.644 (0)	0.458 (0.181)	0.996 (0)	0.813 (0.056)
Center-right (democracy)	0.198 (0.418)	0.131 (0.714)	0.766 (0)	0.772 (0.029)	0.344 (0.233)	0.230 (0.649)	1.589 (0)	1.513 (0.013)	0.669 (0)	0.676 (0.037)	0.961 (0)	1.006 (0.013)
Extreme left (democracy)	-0.103 (0.838)	0.818 (0.6)	0.727 (0.035)	1.497 (0.302)	0.678 (0.256)	3.199 (0.157)	1.840 (0.001)	2.961 (0.227)	0.668 (0.037)	2.441 (0.078)	0.765 (0.042)	2.024 (0.214)
Center-left (dictator)	-0.085 (0.733)	-0.082 (0.817)	0.341 (0.044)	0.359 (0.277)	0.259 (0.377)	0.443 (0.38)	0.870 (0.002)	0.883 (0.119)	0.343 (0.03)	0.381 (0.215)	0.211 (0.252)	0.234 (0.521)
Center-right (dictator)	-0.075 (0.854)	0.002 (0.998)	0.618 (0.026)	0.812 (0.27)	0.059 (0.902)	1.602 (0.161)	1.766 (0)	1.805 (0.15)	0.307 (0.231)	0.269 (0.687)	0.423 (0.16)	0.228 (0.777)
Constant	7.866 (0.001)	7.110 (0.081)	4.361 (0.008)	5.494 (0.136)	2.585 (0.357)	-0.737 (0.892)	0.584 (0.821)	2.010 (0.736)	6.398 (0)	6.773 (0.053)	3.906 (0.028)	4.694 (0.246)
F value	22.34 (0)	12.15 (0)	50.74 (0)	14.93 (0)	18.82 (0)	7.78 (0)	37.45 (0)	9.86 (0)	60.45 (0)	18.45 (0)	70.93 (0)	19.74 (0)
No of obs	101	101	101	101	101	101	101	101	101	101	101	101
R <sup>2</sup> adjusted	0.65	0.87	0.82	0.89	0.62	0.81	0.76	0.85	0.84	0.91	0.86	0.92
Center-right= center-left	1.06 (0.305)	0.02 (0.88)	1.99 (0.16)	1.1 (0.31)	0.02 (0.89)	0.01 (0.94)	1.28 (0.26)	0.21 (0.65)	0.14 (0.71)	0.76 (0.39)	0.21 (0.65)	0.41 (0.53)

Table 5: Leadership Alternation

	Control of corruption		Government effectiveness		Political stability		Regulatory quality		Rule of law		Voice and accountability	
	pooled	Between	pooled	Between	Pooled	Between	pooled	between	pooled	between	pooled	between
Lngdppc	-2.468 (0)	-2.125 (0.061)	-1.549 (0)	-1.752 (0.065)	-1.051 (0.176)	-0.094 (0.95)	-0.456 (0.515)	-0.589 (0.717)	-1.957 (0)	-1.981 (0.037)	-0.913 (0.031)	-0.893 (0.315)
Lngdppc2	0.199 (0)	0.176 (0.027)	0.135 (0)	0.151 (0.024)	0.102 (0.056)	0.045 (0.664)	0.062 (0.196)	0.071 (0.526)	0.160 (0)	0.164 (0.014)	0.086 (0.003)	0.085 (0.167)
Alternation (cumulative)	0.109 (0.033)	0.140 (0.104)	0.135 (0)	0.162 (0.03)	0.061 (0.299)	0.107 (0.363)	0.233 (0)	0.282 (0.036)	0.168 (0)	0.185 (0.014)	0.286 (0)	0.330 (0)
War_cum	-0.058 (0.047)	-0.042 (0.325)	-0.033 (0.068)	-0.043 (0.228)	-0.183 (0)	-0.161 (0.013)	-0.026 (0.394)	-0.039 (0.537)	-0.064 (0)	-0.068 (0.063)	-0.018 (0.314)	-0.020 (0.564)
Center-left (democracy)	0.183 (0.436)	0.248 (0.491)	0.663 (0)	0.567 (0.072)	0.337 (0.222)	0.278 (0.581)	1.609 (0)	1.603 (0.008)	0.721 (0)	0.656 (0.038)	1.117 (0)	1.073 (0.002)
Center-right (democracy)	0.288 (0.212)	0.175 (0.61)	0.757 (0)	0.729 (0.02)	0.352 (0.194)	0.228 (0.636)	1.732 (0)	1.583 (0.007)	0.741 (0)	0.724 (0.019)	1.074 (0)	1.010 (0.002)
Extreme left (democracy)	-0.146 (0.775)	0.071 (0.965)	0.502 (0.121)	0.571 (0.676)	0.593 (0.323)	2.606 (0.264)	1.677 (0.003)	1.445 (0.559)	0.506 (0.096)	1.449 (0.29)	0.476 (0.144)	0.202 (0.879)
Center-left (dictator)	0.046 (0.854)	0.063 (0.857)	0.461 (0.004)	0.499 (0.104)	0.318 (0.276)	0.543 (0.28)	1.132 (0)	1.169 (0.04)	0.522 (0.001)	0.570 (0.063)	0.512 (0.002)	0.545 (0.071)
Center-right (dictator)	0.118 (0.767)	0.320 (0.682)	0.748 (0.003)	1.120 (0.102)	0.129 (0.782)	1.822 (0.111)	2.133 (0)	2.433 (0.053)	0.544 (0.022)	0.682 (0.299)	0.818 (0.002)	0.912 (0.165)
Constant	6.531 (0.009)	5.223 (0.2)	2.789 (0.072)	3.395 (0.315)	1.861 (0.516)	-2.143 (0.701)	-2.237 (0.389)	-1.768 (0.768)	4.381 (0.003)	4.294 (0.202)	0.480 (0.757)	0.348 (0.914)
F value	22.35 (0)	12.39 (0)	59.39 (0)	18.51 (0)	19.03 (0)	8.00 (0)	39.55 (0)	10.47 (0)	69.71 (0)	19.88 (0)	99.55 (0)	32.58 (0)
No of obs	101	101	101	101	101	101	101	101	101	101	101	101
R <sup>2</sup> adjusted	0.65	0.87	0.84	0.91	0.62	0.82	0.77	0.85	0.86	0.92	0.89	0.95
Center-right= cente-lefft	1.03 (0.31)	0.06 (0.81)	2.04 (0.15)	0.43 (0.52)	0.01 (0.903)	0.01 (0.904)	1.23 (0.27)	0.00 (0.96)	0.10 (0.75)	0.08 (0.78)	0.42 (0.52)	0.07 (0.79)

Table 6. Weighted ideological alternation

	Control of corruption		Government effectiveness		Political stability		Regulatory quality		Rule of law		Voice and accountability	
	pooled	Between	pooled	Between	Pooled	between	pooled	between	pooled	between	Pooled	between
Lngdppc	-2.707 (0)	-2.401 (0.026)	-1.873 (0)	-2.127 (0.029)	-1.195 (0.116)	-0.355 (0.809)	-1.000 (0.153)	-1.234 (0.447)	-2.369 (0)	-2.405 (0.014)	-1.607 (0.001)	-1.695 (0.123)
Lngdppc2	0.212 (0)	0.191 (0.011)	0.155 (0)	0.174 (0.011)	0.111 (0.034)	0.062 (0.541)	0.095 (0.048)	0.111 (0.320)	0.186 (0)	0.191 (0.006)	0.129 (0)	0.137 (0.072)
Alternation (cumulative)	0.121 (0.021)	0.170 (0.046)	0.112 (0.001)	0.148 (0.054)	0.055 (0.367)	0.085 (0.476)	0.213 (0)	0.264 (0.055)	0.129 (0)	0.172 (0.026)	0.228 (0)	0.266 (0.006)
War_cum	-0.063 (0.029)	-0.047 (0.243)	-0.040 (0.033)	-0.051 (0.162)	-0.186 (0)	-0.167 (0.010)	-0.038 (0.226)	-0.053 (0.408)	-0.073 (0)	-0.077 (0.041)	-0.033 (0.117)	-0.038 (0.373)
Center-left (democracy)	0.004 (0.986)	-0.062 (0.873)	0.533 (0.002)	0.330 (0.356)	0.268 (0.381)	0.153 (0.792)	1.338 (0)	1.174 (0.077)	0.586 (0.001)	0.377 (0.288)	0.865 (0)	0.676 (0.117)
Center-right (democracy)	0.082 (0.754)	-0.102 (0.788)	0.603 (0.001)	0.544 (0.127)	0.271 (0.382)	0.140 (0.803)	1.414 (0)	1.243 (0.056)	0.579 (0.001)	0.504 (0.151)	0.775 (0)	0.730 (0.085)
Extreme left (democracy)	-0.276 (0.599)	0.656 (0.659)	0.487 (0.157)	1.340 (0.324)	0.572 (0.356)	3.136 (0.166)	1.576 (0.007)	2.770 (0.257)	0.532 (0.114)	2.320 (0.094)	0.485 (0.214)	1.829 (0.256)
Center-left (dictator)	-0.109 (0.662)	-0.130 (0.702)	0.299 (0.069)	0.310 (0.318)	0.241 (0.412)	0.427 (0.399)	0.838 (0.003)	0.837 (0.140)	0.329 (0.041)	0.353 (0.254)	0.176 (0.340)	0.186 (0.606)
Center-right (dictator)	-0.244 (0.565)	-0.306 (0.692)	0.410 (0.142)	0.528 (0.454)	-0.036 (0.943)	1.465 (0.212)	1.492 (0.002)	1.385 (0.277)	0.156 (0.565)	-0.002 (0.998)	0.131 (0.676)	-0.197 (0.811)
Constant	7.687 (0.002)	6.569 (0.089)	4.233 (0.007)	5.047 (0.143)	2.517 (0.369)	-1.031 (0.850)	0.246 (0.924)	1.093 (0.854)	6.183 (0)	6.172 (0.075)	3.544 (0.046)	3.773 (0.342)
F value	22.63 (0)	13.67 (0)	54.93 (0)	17.27 (0)	18.94 (0)	7.80 (0)	37.51 (0)	9.91 (0)	58.90 (0)	18.40 (0)	71.00 (0)	20.23 (0)
No of obs	101	101	101	101	101	101	101	101	101	101	101	101
R <sup>2</sup> adjusted	0.66	0.88	0.83	0.91	0.62	0.81	0.76	0.85	0.84	0.91	0.86	0.92
Center-right= center-left	0.55 (0.46)	0.02 (0.88)	1.04 (0.31)	0.72 (0.41)	0.00 (0.98)	0.00 (0.97)	0.44 (0.507)	0.02 (0.88)	0.01 (0.92)	0.26 (0.62)	1.36 (0.24)	0.03 (0.86)

Note:  $R^2$  for between regressions is only the between  $R^2$ . Governance indicators from Kaufmann-Kraay-Masstrozzi (KKM) database.  
Note: Center-left and center-right and dummy variables. The omitted category is extreme-left regime. Statistically significant coefficients (at less than 5 percent level) are shaded

## 5. Conclusions

If investing in influence—an activity that is broader than mere bribery or corruption, but includes also implicit deals that cannot be strictly speaking ruled illegal—is regarded like any other economic activity, it is clear that entrepreneurs will engage in it more if the returns are high. There are indeed many examples, and many countries, where it is a common knowledge that paying off influential politicians and buying legislation is much more lucrative than obeying the stricture of the law. The “weak link” in the chain that goes from those who buy influence to those who dispense favors is that the latter cannot be always around to “deliver” on their part of the deal. They may be gone because they lose political power. And when this happens, the returns on investment in influence decline and eventually fewer people engage in it. Democracy and alternation in power thus play a key role in creating the situation when the implicit contract cannot be executed although there is goodwill on both sides—buyers of influence and politicians. We have explored this hypothesis on the sample of transition countries during the formative stage of democracy when routinized political alternation was not taken for granted and where accordingly the fact that it did happen or fail to occur was a powerful signal sent both to those who invest in influence and to politicians.

We find that increased political alternation—which we have defined to cover both alternations in leaders and in ideologies of the ruling parties or coalition—leads to, or is associated with, better governance indicators. This finding persists when we control for a number of other plausible variables like income level, democracy, type of political regime in power, membership in the CIS, exposure to war, or dependence on gas and oil exports.

Now, our conclusions and approach differ sharply in at least two respects with some of the earlier literature on governance in general, and political transition from Communism. Regarding the former, we view frequent changes in power not as some politically detrimental instability or as a log-jam on the decision-making process but as a



way to reduce returns on investment in influence and improve governance. One can visualize the presence of a trade-off where a strong and unified government and a friendly legislature are needed to push painful economic reforms through but where the persistence of this situation may eventually lead to the corrosion of these reforms due to widening corruption and decline in quality of governance. The negative long-term effects may turn out to be more important than the short-term concern with effecting the reform. Continuing along the same line, one could argue that the best outcome for a country is that the governments that have been instrumental in jump-starting the reforms are also thrown out of office, so long as their reforms survive. This insures that the possible links that have been created between the reformers and the influential business circles (who are also likely to benefit from the reforms) are severed, and that the continuation of the reforms proceeds along a more level playing field.

Regarding the transition from Communism, we view the power alternation that took place in the early 1990's in several East European countries when the former Communists came back to power on the groundswell of popular rejection of the "shock therapy" as a fortunate development that improved governance and strengthened democracy. One is the reason we just sketched above. Another is that former Communists had a strong interest—having once already lost power and having their commitment to democracy being questioned by many—to be keen to stick to the principle of alternation in power. This was their way of showing that they had indeed become "democrats." But they were helped in this too by their experience of having been "in the cold" for several years, and of having come back. With such a background of having lost and regained power, they were more aware, we believe, of its transience. This may be in contrast to some former oppositionists, who once they reached power, might have believed that it was now their turn to rule without an obvious time limit and might have in this replicated in substance—if not in appearance—the approach of the Communists whom they overthrew.

## REFERENCES

- Dawisha, Karen and Bruce Parrott, eds. (1997a) *Conflict, Cleavage, and Change in Central Asia and the Caucasus*. Cambridge: Cambridge University Press.
- Dawisha, Karen and Bruce Parrott, eds. (1997b) *The Consolidation of Democracy in East-Central Europe*. Cambridge: Cambridge University Press.
- Dawisha, Karen and Bruce Parrott, eds. (1997c) *Democratic Changes and Authoritarian Reactions in Russia, Ukraine, Belarus, and Moldova*. Cambridge: Cambridge University Press.
- Dawisha, Karen and Bruce Parrott, eds. (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 and ....
- 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.
- Kaufmann, Daniel, Aart Kraay, and M. Mastruzzi (2003), "Governance Matters III: Governanve 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. 222-79.

Lipsett, Seymour and Gabriel Linz (1999), "Corruption culture and markets", George Mason University Working Paper.

Sergey Markov (2004) in Lyudmila Uvarova, "An ideology of hyperloyalty is being formed", *Nezavisimaya Gazeta* May 24, 2004. Reported on Johnson Russia List, May 24, 2004.

Przeworski, Adam (BM: ) *Democracy and the Market : Political and Economic Reforms in Eastern Europe and Latin America*,

Stoner-Weiss, Kathryn. *Local Heroes*. Princeton, NJ: Princeton University Press, 1997.

Sartori, Giovanni. (1976) *Parties and Party Systems: A Framework for Analysis*. Cambridge: Cambridge University Press.

Treisman, Daniel (2002), "Postcommunist corruption" , mimeo.

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

**ANNEX 1. Including democracy variable directly**

**[TO BE ADDED]**

**ANNEX 2. Including fuel exports/GDP variable**  
Ideological alternation

	<b>Control of corruption</b>		<b>Government effectiveness</b>		<b>Political stability</b>		<b>Regulatory quality</b>		<b>Rule of law</b>		<b>Voice and accountability</b>	
	pooled	Between	pooled	Between	Pooled	Between	pooled	between	pooled	between	pooled	between
Lngdppc	-2.804 (0.001)	-2.749 (0.009)	-1.776 (0.001)	-1.978 (0.017)	-1.82 (0.019)	-1.186 (0.356)	-0.437 (0.573)	-1.449 (0.307)	-2.366 (0)	-2.210 (0.008)	-1.276 (0.022)	-1.906 (0.064)
Lngdppc2	0.220 (0)	0.219 (0.003)	0.152 (0)	0.171 (0.004)	0.152 (0.004)	0.117 (0.188)	0.061 (0.243)	0.132 (0.177)	0.187 (0)	0.182 (0.002)	0.111 (0.003)	0.157 (0.029)
Alternation (cumulative)	0.124 (0.039)	0.133 (0.107)	0.063 (0.10)	0.056 (0.39)	0.067 (0.243)	0.098 (0.373)	0.176 (0.003)	0.179 (0.148)	0.139 (0)	0.148 (0.031)	0.233 (0)	0.259 (0.007)
War_cum	-0.079 (0.034)	-0.077 (0.102)	-0.048 (0.044)	-0.068 (0.076)	-0.147 (0)	-0.145 (0.03)	-0.048 (0.180)	-0.067 (0.331)	-0.064 (0.005)	-0.072 (0.06)	-0.041 (0.11)	-0.036 (0.444)
Fuel_gdp	-1.161 (0.087)	-1.524 (0.143)	-0.979 (0.026)	-1.974 (0.026)	0.766 (0.237)	1.137 (0.413)	-2.497 (0)	-3.231 (0.047)	-0.976 (0.016)	-1.705 (0.047)	-1.533 (0.001)	-2.307 (0.042)
Center-left (democracy)	-0.057 (0.843)	-0.108 (0.771)	0.636 (0.001)	0.408 (0.188)	0.293 (0.301)	0.187 (0.715)	1.743 (0)	1.492 (0.017)	0.637 (0)	0.430 (0.16)	1.026 (0)	0.729 (0.077)
Center-right (democracy)	0.090 (0.756)	0.048 (0.888)	0.775 (0)	0.895 (0.006)	0.337 (0.229)	0.265 (0.578)	1.949 (0)	2.021 (0.001)	0.693 (0)	0.771 (0.013)	1.032 (0)	1.056 (0.01)
Extreme left (democracy)	-0.271 (0.625)	0.840 (0.571)	0.724 (0.046)	1.979 (0.113)	0.535 (0.318)	2.835 (0.175)	2.187 (0)	3.441 (0.137)	0.655 (0.049)	2.741 (0.032)	0.824 (0.034)	2.142 (0.18)
Center-left (dictator)	-0.035 (0.907)	0.042 (0.905)	0.419 (0.037)	0.609 (0.047)	0.179 (0.543)	0.262 (0.59)	1.393 (0)	1.511 (0.012)	0.499 (0.007)	0.668 (0.029)	0.461 (0.032)	0.629 (0.104)
Center-right (dictator)	-0.143 (0.795)	-0.134 (0.897)	0.596 (0.096)	0.961 (0.264)	-0.685 (0.197)	1.867 (0.204)	2.213 (0)	1.868 (0.245)	0.421 (0.197)	0.337 (0.685)	0.449 (0.238)	-0.091 (0.933)
Constant	8.10 (0.008)	7.745 (0.037)	3.76 (0.052)	4.243 (0.142)	4.807 (0.095)	1.974 (0.676)	-2.219 (0.446)	1.412 (0.785)	6.083 (0.001)	5.238 (0.071)	2.117 (0.302)	4.274 (0.246)
F value	16.33 (0)	12.03 (0)	39.81 (0)	19.53 (0)	14.85 (0)	7.28 (0)	34.69 (0)	10.87 (0)	46.64 (0)	19.63 (0)	57.95 (0)	18.1 (0)
No of obs	86	86	86	86	86	86	86	86	86	86	86	86
R <sup>2</sup> adjusted	0.64	0.89	0.82	0.93	0.62	0.84	0.79	0.88	0.84	0.93	0.87	0.93
Center-right= center-lefft	1.72 (0.19)	0.31 (0.58)	3.65 (0.06)	4.61 (0.05)	0.16 (0.68)	0.04 (0.84)	3.47 (0.06)	1.56 (0.23)	0.70 (0.405)	2.33 (0.15)	0.01 (0.94)	1.24 (0.28)

Leadership Alternation

	Control of corruption		Government effectiveness		Political stability		Regulatory quality		Rule of law		Voice and accountability	
	pooled	Between	pooled	Between	Pooled	Between	pooled	between	pooled	between	pooled	between
Lngdppc	-2.453 (0.003)	-2.243 (0.033)	-1.428 (0.003)	-1.460 (0.039)	-1.558 (0.042)	-0.664 (0.606)	0.156 (0.836)	-0.648 (0.647)	-1.858 (0)	-1.543 (0.042)	-0.467 (0.31)	-0.691 (0.395)
Lngdppc2	0.197 (0)	0.184 (0.013)	0.127 (0)	0.133 (0.009)	0.134 (0.010)	0.079 (0.371)	0.021 (0.673)	0.757 (0.439)	0.153 (0)	0.135 (0.013)	0.056 (0.070)	0.071 (0.207)
Alternation (cumulative)	0.115 (0.045)	0.134 (0.117)	0.143 (0)	0.145 (0.018)	0.098 (0.073)	0.142 (0.203)	0.211 (0)	0.216 (0.086)	0.186 (0)	0.179 (0.008)	0.292 (0)	0.329 (0)
War_cum	-0.079 (0.036)	-0.071 (0.133)	-0.042 (0.058)	-0.057 (0.076)	-0.144 (0)	-0.136 (0.036)	-0.044 (0.204)	-0.055 (0.403)	-0.058 (0.003)	-0.062 (0.074)	-0.035 (0.106)	-0.019 (0.613)
Fuel-gdp	-1.216 (0.073)	-1.472 (0.160)	-0.953 (0.018)	-1.790 (0.018)	0.760 (0.234)	1.254 (0.356)	-2.545 (0)	-3.096 (0.05)	-1.000 (0.006)	-1.592 (0.044)	-1.587 (0)	-2.083 (0.024)
Center-left (democracy)	0.047 (0.864)	0.077 (0.822)	0.601 (0)	0.442 (0.072)	0.312 (0.242)	0.301 (0.512)	1.843 (0)	1.724 (0.003)	0.694 (0)	0.621 (0.024)	1.143 (0)	1.057 (0.002)
Center-right (democracy)	0.191 (0.488)	0.107 (0.749)	0.729 (0)	0.793 (0.003)	0.350 (0.184)	0.245 (0.581)	2.039 (0)	2.048 (0.001)	0.739 (0)	0.792 (0.005)	1.134 (0)	1.075 (0.001)
Extreme left (democracy)	-0.302 (0.592)	0.070 (0.965)	0.432 (0.194)	1.003 (0.357)	0.401 (0.453)	1.949 (0.363)	1.989 (0)	2.145 (0.362)	0.433 (0.147)	1.660 (0.166)	0.521 (0.109)	0.148 (0.911)
Center-left (dictator)	0.117 (0.700)	0.169 (0.628)	0.538 (0.004)	0.680 (0.011)	0.279 (0.335)	0.363 (0.436)	1.634 (0)	1.689 (0.004)	0.698 (0)	0.815 (0.006)	0.785 (0)	0.890 (0.007)
Center-right (dictator)	0.066 (0.902)	0.266 (0.801)	0.684 (0.034)	1.326 (0.079)	-0.581 (0.258)	2.258 (0.123)	2.50 (0)	2.486 (0.123)	0.642 (0.026)	0.851 (0.279)	0.824 (0.009)	0.839 (0.346)
Constant	6.628 (0.028)	5.789 (0.122)	2.405 (0.172)	2.35 (0.338)	3.757 (0.186)	0.011 (0.998)	-4.649 (0.102)	-1.644 (0.753)	4.027 (0.012)	2.696 (0.310)	-1.180 (0.491)	-0.345 (0.907)
F value	16.25 (0)	11.90 (0)	49.23 (0)	28.58 (0)	15.41 (0)	7.82 (0.003)	37.81 (0)	11.67 (0)	60.37 (0)	23.59 (0)	86.79 (0)	29.56 (0)
No of obs	86	86	86	86	86	86	86	86	86	86	86	86
R <sup>2</sup> adjusted	0.62	0.89	0.85	0.95	0.63	0.84	0.81	0.89	0.87	0.94	0.91	0.95
Center-right= cente-lefft	1.61 (0.21)	0.01 (0.92)	3.75 (0.05)	3.21 (0.09)	0.13 (0.72)	0.02 (0.88)	3.35 (0.07)	0.59 (0.45)	0.58 (0.45)	0.65 (0.43)	0.02 (0.88)	0.01 (0.94)

Weighted ideological alternation

	Control of corruption		Government effectiveness		Political stability		Regulatory quality		Rule of law		Voice and accountability	
	pooled	Between	pooled	Between	Pooled	between	pooled	between	pooled	between	Pooled	between
Lngdppc	-2.804 (0.001)	-2.748 (0.009)	-1.776 (0.001)	-1.978 (0.017)	-1.820 (0.019)	-1.185 (0.356)	-0.437 (0.573)	-1.449 (0.307)	-2.365 (0)	-2.210 (0.008)	-1.276 (0.022)	-1.906 0.064
Lngdppc2	0.220 (0)	0.219 (0.003)	0.152 (0)	0.171 (0.004)	0.152 (0.004)	0.117 (0.188)	0.061 (0.243)	0.132 (0.177)	0.187 (0)	0.182 (0.002)	0.111 (0.003)	0.157 0.029
Alternation (cumulative)	0.124 (0.039)	0.133 (0.107)	0.063 (0.100)	0.055 (0.390)	0.067 (0.243)	0.097 (0.373)	0.176 (0.003)	0.179 (0.148)	0.138 (0)	0.148 (0.031)	0.233 (0)	0.259 0.007
War_cum	-0.079 (0.034)	-0.076 (0.102)	-0.048 (0.044)	-0.068 (0.076)	-0.147 (0)	-0.145 (0.030)	-0.048 (0.18)	-0.067 (0.331)	-0.063 (0.005)	-0.072 (0.06)	-0.041 (0.110)	-0.036 0.444
Fuel_gdp	-1.161 (0.087)	-1.523 (0.143)	-0.979 (0.026)	-1.973 (0.026)	0.766 (0.237)	1.137 (0.413)	-2.497 (0)	-3.231 (0.047)	-0.975 (0.016)	-1.705 (0.047)	-1.533 (0.001)	-2.307 0.042
Center-left (democracy)	-0.057 (0.843)	-0.107 (0.771)	0.636 (0.001)	0.408 (0.188)	0.293 (0.301)	0.186 (0.715)	1.743 (0)	1.492 (0.017)	0.637 (0)	0.430 (0.16)	1.026 (0)	0.729 0.077
Center-right (democracy)	0.090 (0.756)	0.048 (0.888)	0.775 (0)	0.894 (0.006)	0.337 (0.229)	0.264 (0.578)	1.949 (0)	2.021 (0.001)	0.693 (0)	0.771 (0.013)	1.031 (0)	1.056 0.01
Extreme left (democracy)	-0.271 (0.625)	0.839 (0.571)	0.723 (0.046)	1.979 (0.113)	0.535 (0.318)	2.834 (0.175)	2.187 (0)	3.441 (0.137)	0.655 (0.049)	2.741 (0.032)	0.824 (0.034)	2.142 0.18
Center-left (dictator)	-0.035 (0.907)	0.0421 (0.905)	0.419 (0.037)	0.609 (0.047)	0.179 (0.543)	0.262 (0.590)	1.393 (0)	1.511 (0.012)	0.499 (0.007)	0.668 (0.029)	0.461 (0.032)	0.629 0.104
Center-right (dictator)	-0.143 (0.795)	-0.134 (0.897)	0.596 (0.096)	0.961 (0.264)	-0.685 (0.197)	1.867 (0.204)	2.213 (0)	1.868 (0.245)	0.421 (0.197)	0.337 (0.685)	0.449 (0.238)	-0.091 0.933
Constant	8.10 (0.008)	7.745 (0.037)	3.76 (0.052)	4.243 (0.142)	4.807 (0.095)	1.973 (0.676)	-2.219 (0.446)	1.412 (0.785)	6.083 (0.001)	5.238 (0.071)	2.117 (0.302)	4.274 0.246
F value	16.33 (0)	12.03 (0)	39.81 (0)	19.53 (0)	14.85 (0)	7.28 (0.0005)	34.69 (0)	10.87 (0)	46.64 (0)	19.63 (0)	57.95 (0)	18.1 (0)
No of obs	86	86	86	86	86	86	86	86	86	86	86	86
R <sup>2</sup> adjusted	0.64	0.89	0.82	0.93	0.62	0.84	0.79	0.88	0.84	0.93	0.87	0.93
Center-right= center-lefft	1.72 (0.19)	0.31 (0.58)	3.65 (0.06)	4.61 (0.05)	0.16 (0.68)	0.04 (0.84)	3.47 (0.06)	1.56 (0.23)	0.70 (0.40)	2.33 (0.15)	0.01 (0.94)	1.24 (0.28)

Note:  $R^2$  for between regressions is only the between  $R^2$ . Governance indicators from Kaufmann-Kraay-Masstrozzi (KKM) database.  
Note: Center-left and center-right and dummy variables. The omitted category is extreme-left regime. Statistically significant coefficients (at less than 5 percent level) are shaded



WB13527

C:\Branko\alternance\altergov.doc

June 5, 2004 5:32 PM