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# Political Constraints and Support for Reform\*

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## Abstract

There has been relatively little investigation of the effect of constitutional transformations on the economic transition in post-communist countries. We develop a simple signaling model in which constitutionalism—a commitment to limit political power and provide judicial defense of basic rights—reinforces the credibility of pro-market candidates’ electoral promises and boosts public support for economic reforms. These findings are tested using opinion poll data on public support for reform in Central and Eastern Europe, and in the former Soviet Union, in the 1990s. In a two stage procedure we show that public support for market reforms are higher in countries where incumbents have taken deliberate steps to increase political accountability and judicial independence. Public support also spurs actual economic reform. [*Keywords: Political Economy, Transition, Institutions, Signaling. JEL codes: D72, D73, P20, P26.*]

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# 1 Introduction

Reform trajectories in the formerly communist world—particularly in the nations of Central and Eastern Europe—followed a particular path in the 1990s. The collapse of central planning and the push for early market-oriented reforms were initially accompanied by widespread public support but that support tended to dwindle in subsequent years. These political developments suggest that popular support for market-oriented reform in transition economies rises and falls with unemployment and job creation. Empirically, however, the link between the economic effects of reforms and their level of popular support is tenuous. We submit, by contrast, that support for reform rises when voters believe that political leaders are less likely to steal from the public or become clients of privileged elites. That credibility is enhanced by constitutionalism, or the establishment of a stable set of rules that distribute power away from individual politicians, and enable voters to monitor, reward, and punish politicians—in other words, rules that make politicians and public officials more accountable to citizens and that shield courts and certain other bodies from political interference. In this regard, political enfranchisement will fail to improve credibility where it can be readily limited or reversed. The more effective credibility-enhancing measures, on the other hand, involve those structural changes to the political system that can be reversed only at high cost: improving the system of checks and balances, instituting judicial review, and increasing judicial independence.

The effects of constitutionalism on popular support for reform and on reform outcomes are only minimally understood. As the primary commitment device in a political system, effective constitutions place limits on discretionary powers of public officials, lay down basic rights for citizens, and stabilize expectations about state behavior (Elster 1984, 1995). For this reason, the development of constitutional constraints on the machinery of government is associated with the rise of modern capital markets (Weingast and North 1989). We argue below that constitutional constraints can also serve, for political leaders, as credible signals of their intent to pursue welfare-enhancing reforms, and can thus be instrumental in generating popular support.

The incompleteness of voter information and the credibility of pre-electoral promises can shape policy outcomes in two separate but related ways. First, variations in voter information influence levels of political participation—a finding dating back at least to studies of political behavior four decades ago showing that sophisticated voters tended to be the most active (Campbell, et al. 1960). Recent research has similarly shown that poorly-informed voters tend possess different "weights" in the political system, and consequently differ in their ability to hold politicians accountable (Strömberg 2004; Besley and Burgess 2002). Second, politicians who cannot credibly communicate with voters are prone to devising methods of enhancing that credibility, such as through reputation-building or by relying on intermediaries (e.g., Keefer and Vlaicu 2004). Following these approaches, we argue that, given unevenly informed voters, politicians can boost their credibility by building constitutional constraints on their own actions. We develop a simple voting model with adverse selection in which politicians differ in reform commitment

but cannot credibly communicate with voters. We show that greater constitutionalism not only decreases expected gains from corrupt practices, but also enables committed reformers to distinguish themselves, in the eyes of voters, from less committed reformers. The model also predicts that actual progress in policy reforms will be a function of the electoral support for a continuation of the reform process. We test these predictions on panel data from post-communist countries using survey results from the Central and Eastern Eurobarometer and find that political accountability and judicial independence are both positively correlated with public support for reform—to a greater extent than is democratization—and that support for reforms is positively correlated with reform implementation.

The paper is organized as follows. In the section that follows we examine the linkages between constitutionalism, policy reform, and reform popularity in transition economies. Our model is developed in section three. In section four we motivate our empirical strategy and present our results. The final section concludes.

## 2 Economic Transition and Constitutionalism

The conventional description of economic reforms is that the costs are concentrated up front, while the benefits are spread out over several subsequent years—the so-called "J-curve" of transition. For many years, therefore, the arguably central political challenge was one of overcoming resistance to reform from short term losers, to cross the "valley of transition" in order to climb the "higher hills" of reform (e.g. Przeworski 1991). Indeed, avoiding reform failure did not require accountability but its opposite: the insulation of reformers from the influence of a "myopic," restless public until a constituency large enough to sustain the reform process could emerge (e.g. Haggard and Kaufman 1995, and Williamson, 1994). A decade of reforms in transition economies has challenged this view, and has produced alternative explanations of progress in reform and of why support for reform waxes and wanes. But there has been relatively little investigation of the role of constitutionalism and constitutional transition on these matters.

### 2.1 Partial Reform and its Discontents

In Central and Eastern Europe, the classic reform backlash did not materialize. Although voters may have rejected radical reformers in early post-communist elections, the reform programs themselves endured and, in some cases, even intensified. As Hellman (1998) has argued, political dynamics in transition economies were not "dominated by the traditional short-term losers of economic transition—striking workers, resentful former state bureaucrats, impoverished pensioners, or armies of the unemployed." Rather than being blocked by short term losers, reforms tended to be derailed by groups that stood to gain from partial reform and from arbitrage and rent-seeking opportunities in an unevenly reformed economy—for example, an economy with partial price liberalization, or an economy in which state owned

enterprises had been privatized but without anti-trust regulation.

The emergence of a group of insiders with the ability to capture the reform process has contributed to an increasing concentration of wealth among the highest income groups (Milanovic, Lanjouw, and Santernostro 1998). We suggest that unconstrained insiders can create uncertainty among the general public regarding the long-term benefits of reform, and thus whether reforms deserve support. Where information about politicians—especially their willingness and ability to resist insider wealth and influence—remains costly or private information, then voters face an adverse selection problem, *viz*, they cannot distinguish committed reformers from those prone to capture by insiders (regardless of ideology). But this problem can be potentially resolved where politicians can send credible signals to voters, in particular, by implementing changes to "high-level" rules of the underlying system of policymaking—what Tommasi (2002) has termed the "deeper institutional determinants of the policymaking system"—as compared to changes in the actual policies themselves. Constitutional changes that make politicians more accountable to citizens, that mandate disclosure and review of legislation or executive decrees, that make courts, central banks, and regulatory agencies more independent, or that professionalize the civil service—unlike policy changes such as price or trade liberalization, privatization, and regulatory changes—are reversible only at a much higher cost. Not only do these high-level rules potentially constrain and challenge the authority of insiders, they also proscribe the nature of the relationship between politicians and their constituencies (rich or poor). In so doing, they generate (for politicians) costly signals to voters of true commitments of politicians to reform.

## 2.2 Constitutionalism and Democracy

Constitutionalism involves a commitment to limitations on political power, and to a political process that seeks to protect individual and collective liberties against the authority of the state. The past decade of transition has emphasized that the economic reform process is but one component of a vast constitutional transformation (Sachs, Woo, and Yang 2000). Those transformations, as with the policy reforms themselves, have taken transition countries along very different paths. Of course, politicians can generally find ways of circumventing formal constraints on their behavior, potentially rendering constitutional design a futile exercise (Robinson 2003). But constitutionalism, in our analysis, is less important for how it actually changes the nature of political power than for the role that it plays as signal of political credibility, and for enabling committed reformers to convince voters of their intentions and thereby acquire necessary political support for continued policy reforms.

At the heart of the matter lies a dilemma that reform-oriented governments faced at the outset: should the transition process lead to the eventual adoption of a post-communist constitution, or is a new constitution indispensable to an economic break with the past? Indeed, early debates on the pace and sequence of reform addressed the trade-off between constitutionalism and the need for flexible executive power. Advocates of "shock therapy," for example, emphasized that efforts to engineer changes in

constitutional rules—a complicated and potentially protracted process—would risk institutionalizing state opportunism and corruption (Shleifer and Vishny 1998). By contrast, others argued that some minimum transition to a new constitutional order characterized by, above all, stable, ex ante constraints on state power reduces the risks of rent seeking (e.g., Roland 2000).

Yet there have been surprisingly few empirical investigations of the effects of constitutionalism on economic reform. Hellman (1996), finds that the timing of the adoption of post-communist constitutions had no effect on reform progress, but countries in which executive powers (either constitutionally or extra-constitutionally based) were more constrained had reformed faster than countries with more powerful executives. Most empirical investigations of the "dual transition" have tended to examine the impact of democracy—an imperfect indicator of constitutional transition. De Melo et al (1996, 1997) find a strong positive correlation between the level of democracy and economic liberalization when controlling for past liberalization, initial conditions, and regional tensions. Dethier et al. (1999) also find that political freedom facilitates economic liberalization. Fidrmuc (2000, 2003) similarly finds a positive relationship between democracy and reform implementation, even across political shifts in parties in office. Slantchev (forthcoming), finally, argues that the positive relationship between democracy and reform progress holds even in the face of economic distress and high unemployment.

For our purposes, however, democracy is a poor indicator of the type of constitutional transformations that are our central interest. It is certainly true that democracy and constitutionalism comprise equal parts of "democratic" liberalism, and that political liberties as well as open, contested elections are often enshrined in formal constitutions, and require constraints on political authority and defense by an independent judiciary (O'Donnell 2004). But it is also the case that several regimes in transition countries as well as around the world have succeeded in holding free elections but have amassed poor records with regard to limited government based on the rule of law (Plattner 1999). Democratization, as the past decade of regime transitions in Eastern Europe and the former Soviet Union has demonstrated, is more easily reversed than constitutionalism (King 2000). It is also unclear whether consolidating democracy will preserve electoral competition while strengthening constitutionalism, or whether constitutionalism can actually suffer because of hasty democratization (Linz and Stepan 1996; Zakaria 2003). It is important, therefore, for any analysis to separate the effects of democratic participation from those of the constitutional rules that promote accountability and protect rights.

In the following sections we formalize a specific channel through which constitutionalism affects economic reform implementation, i.e., through public trust in and support for the reformers. We then test our arguments by examining the links between specific measures of political accountability and judicial independence (alongside more conventional measures of democracy), public support, and policy reform.

### 3 A Simple Model

We assume that the relationships between politicians and two groups—voters and an "elite" (those who benefit from partial reform)—are subject to constitutional constraints of varying degrees, and that some authority (a constitutional court) is capable (again in varying degrees) of protecting and defending the basic rights of citizens by punishing corrupt or unaccountable leaders.<sup>1</sup> Politicians can be one of three types; a committed reformer ( $r$ ), a captive reformer ( $c$ ) and a non-reformer ( $n$ ).<sup>2</sup> We assume further that the economy is in a partially-reformed state, and that several policy reforms have yet to be completed. The committed reformer will chose full reform implementation, whereas the non-reformer will attempt to reverse reforms. The captive reformer, by contrast, will generate private benefits to elites (arbitrage opportunities and monopoly rents) in exchange for a share  $v$  of the elite's surplus  $S$ . We label the direction of reform  $R$  and let  $R \in \{-1, 0, 1\}$ , with  $-1$  indicating reversal,  $0$  indicating the status quo (no change in a partially-reformed economy), and  $1$  indicating further reform.

Constitutions everywhere are products of custom, choice, and political struggle. As Pitkin (1987) has argued, "constitutions are made, not found," and are continually reshaped through collective activity. Thus in addition to choosing economic policy reforms, we allow the political incumbent to chose a level of constitutionalism  $\lambda \in [0, 1]$  through amendment, statute, or formal-legal interpretation. By determining the level of political accountability and judicial independence, the level of constitutionalism will incur certain benefits for the incumbent (reputation, international recognition), but also certain costs (stricter limits on, and closer scrutiny of, incumbent activities). It is assumed that both types of reformers share a set of these benefits and costs, with the optimal trade-off between these corresponding to a level of constitutionalism given by  $\tilde{\lambda} \in (0, 1)$ . In addition, though, the captive reformer also carries the cost of a higher probability of being punished by a constitutional authority for illegal behaviour. For simplicity we assume that the probability of punishment is equal to  $\lambda$  and we normalize the politician's utility, if sanctioned, to zero. The expected payoff from corrupt actions for a captive reformer can then be written as

$$(1 - \lambda) vS. \tag{1}$$

Finally, voters will view the choice of the level of constitutionalism as a signal of the incumbent's "type," hence the incumbent's probability of getting reelected will also depend on  $\lambda$ . If reelected, politicians derive private benefits of size  $\Omega$ . The utility function of incumbent type  $j$  can now be formalized as

$$-\frac{(\lambda - \tilde{\lambda})^2}{2} + I_j (1 - \lambda) vS + Pr(\lambda) \Omega, \tag{2}$$

where the first term corresponds to the utility loss of choosing any  $\lambda \neq \tilde{\lambda}$ ,  $I_j$  is an indicator function that takes on the value of one for the captive reformer and zero for the committed reformer, and  $Pr(\lambda)$  corresponds to the probability that the incumbent is reelected, as derived below.

<sup>1</sup>Membership in the elite is assumed to be small enough to carry a negligible weight in the electoral outcome.

<sup>2</sup>Other recent examples of adverse selection in voting models can be found in Besley and Burgess (2002), Besley (forthcoming), and Desai and Olofsgård (forthcoming).

### 3.1 Voters, Incumbents, and Incomplete Information

Voters constitute a continuum between zero and one and vote sincerely for the incumbent reformer (of uncertain type) or the non-reformer. We assume that voters are better off with full implementation of economic reform than with reform reversal, but that a captured reform process harms voters the most:

$$u(1) > u(-1) > u(0). \quad (3)$$

Voters, elites, and incumbents interact in the following sequential electoral game. In the first period, the incumbent chooses whether to amend in favor of greater constitutionalism. On that basis, voters update their beliefs about the incumbent's type and vote for or against reelection. In the second period, following elections, captive reformers will engineer transfers of public resources to an elite in exchange for a bribe, while the committed reformer will implement further reforms.<sup>3</sup> Before payoffs are realized, a constitutional authority investigates whether bribes have been collected, and punishes the captive reformer with probability  $\lambda$ . The game is solved for a perfect Bayesian equilibrium. The actions in period two are already given by the players' preferences, so the focus of the analysis is on the electoral game between the incumbent and the voters.

There are two principal sources of uncertainty. First, voters do not know the incumbent's type. The ex ante probability that an incumbent is a committed reformer is  $\rho \in [0, 1]$ . Voters, however, can observe the choice of constitutionalism and use that as a signal to form updated beliefs, given by  $\tilde{p}(\lambda)$ . We also add a "valence" characteristic to the voters' preferences to capture other dimensions influencing their voting decision—dimensions that are orthogonal to the incumbent's type and that politician's cannot deliberately influence, such as ideological bias, nostalgia, etc. We follow Lindbeck and Weibull (1987) and model this as a bias against the incumbent measured by one factor common to all voters,  $z$ , and one individual-specific factor,  $\beta_i$ . The individual-specific bias is uniformly distributed between  $[-1, 1]$ , while the collective bias is drawn from a cumulative distribution function  $G(z)$ . It follows that voter  $i$ 's expected utility, after updating beliefs, will be

$$U_i(\cdot) = \begin{cases} \tilde{p}(\lambda) u(1) + (1 - \tilde{p}(\lambda)) u(0) - z - \beta_i & \text{if the incumbent is reelected} \\ u(-1) & \text{if the incumbent is defeated} \end{cases} \quad (4)$$

The second source of uncertainty stems from the assumption that the incumbent does not know the realization of the common shock  $z$ .<sup>4</sup> From a representative voter's preferences we can derive the incumbent's perceived probability that he will win the election as a function of his choice of constitutionalism. Voter  $i$  will vote for the reform candidate if

$$\tilde{p}(\lambda) u(1) + (1 - \tilde{p}(\lambda)) u(0) - z - \beta_i \geq u(-1). \quad (5)$$

From equation (5) we can derive a threshold level of the individual-specific bias  $\beta$ , denoted as  $\tilde{\beta}$ , below

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<sup>3</sup>Note that politicians can derive private benefits, such as campaign funding, in exchange for transferring resources to elites (or other constituents for that matter). Our chief interest, however, is in explicitly illegal exchanges.

<sup>4</sup>As in all probabilistic voting models, the mapping from the choice of policy to the electoral outcome is uncertain.



which voters will support the reform candidate, and above which voters will support the non-reformer.

$$\tilde{\beta} \equiv \tilde{p}(\lambda) u(1) + (1 - \tilde{p}(\lambda)) u(0) - z - u(-1). \quad (6)$$

Following the assumption that  $\beta$  has a uniform distribution between  $[-1, 1]$ , the number of voters supporting the incumbent is  $(\tilde{\beta} + 1) / 2$ . It follows that the chances of the incumbent winning the election is given by the probability that  $(\tilde{\beta} + 1) / 2$  is greater than or equal to  $1/2$  (since the size of the electorate is normalized to one). Whether or not this will be true will depend on the realization of  $z$  and voters' beliefs about the type of the incumbent. Rearranging terms, the chances of an incumbent electoral victory is determined by the probability that

$$z \leq \tilde{p}(\lambda) u(1) + (1 - \tilde{p}(\lambda)) u(0) - u(-1), \quad (7)$$

which can be represented by

$$G(\tilde{p}(\lambda) u(1) + (1 - \tilde{p}(\lambda)) u(0) - u(-1)). \quad (8)$$

### 3.2 Optimal Constitutional Reform

Based on the derivation of voting behavior we can now specify an incumbent reformer's optimal choice of constitutional reform as given by the following optimization problem.

$$\underset{\lambda}{Max} - \frac{(\lambda - \tilde{\lambda})^2}{2} + I_j (1 - \lambda) vS + G(\tilde{p}(\lambda) u(1) + (1 - \tilde{p}(\lambda)) u(0) - u(-1)) \Omega. \quad (9)$$

The solution to this problem depends upon how voter expectations are shaped by the incumbent's choice of constitutionalism. As expectations are not a continuous function of constitutional choices (elaborated below) we cannot rely on a first order condition. For comparative purposes, however, it is instructive to analyze a benchmark case in which the probability of reelection is exogenous, rather than a function of  $\lambda$ . In this case we can represent optimal constitutional reform by the following first order condition:

$$-(\lambda - \tilde{\lambda}) - I_j vS = 0. \quad (10)$$

Solving for  $\lambda$  yields<sup>5</sup>

$$\lambda_j^* = \tilde{\lambda} - I_j vS \quad (11)$$

It is straightforward to see that  $\lambda_c^* < \lambda_r^*$  since the captive reformer bears an additional cost of amending in favor of greater constitutionalism, given by the loss in the expected value of bribes or other private benefits.

By contrast, where the probability of reelection is a function of  $\lambda$  the chances of reelection for any type of incumbent, is an increasing function of the credibility voters attach to him of being a committed reformer. Hence, captive politicians will have incentives to mimic true reformers while true reformers

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<sup>5</sup>We assume throughout that parameter values are such that an interior equilibrium exists.

will try to distinguish themselves from the captive reformer. Both incentives work in the direction of greater constitutionalism than that given by the first order condition in equation (11). Depending on the parameters of the model, it is possible to identify two different outcomes: a separating equilibrium in which the two types choose different levels of constitutional reform and voters, being able to anticipate this, can tell the types apart; and a pooling equilibrium in which the captive reformer mimics the genuine reformer who, in turn, finds it too costly to separate himself, forcing voters to base their decision on their prior expectations.

The equilibrium of the game is separating if there exists a  $\lambda^{**} > \lambda_r^*$  such that the following two conditions are satisfied (single stars denote solutions to equation (11), double stars represent an optimal deviation where credibility and its impact on reelection matter):

$$\begin{aligned}
(1) \quad & -\frac{(\lambda^{**}-\bar{\lambda})^2}{2} + G(u(1) - u(-1))\Omega > \\
& -\frac{(\lambda_r^*-\bar{\lambda})^2}{2} + G(\rho u(1) + (1-\rho)u(0) - u(-1))\Omega, \\
& \text{and} \\
(2) \quad & -\frac{(\lambda_c^*-\bar{\lambda})^2}{2} + (1-\lambda_c^*)vS + G(u(0) - u(-1))\Omega > \\
& -\frac{(\lambda^{**}-\bar{\lambda})^2}{2} + (1-\lambda^{**})vS + G(\rho u(1) + (1-\rho)u(0) - u(-1))\Omega.
\end{aligned} \tag{12}$$

If no such  $\lambda^{**}$  exists, then the only equilibrium is a pooling equilibrium in which both types choose  $\lambda_r^*$  and face a probability of reelection given by

$$G(\rho u(1) + (1-\rho)u(0) - u(-1)). \tag{13}$$

Two implications of the outcome in the separating equilibrium are salient. First, the existence of a potentially captive reformer leads, paradoxically, to greater constitutionalism in equilibrium, since the committed reformer is induced to endorse additional constitutional reform in order to create credible signals of policy reform intentions. Second, constitutionalism can help genuine reformers credibly separate themselves from less effective reformers, and that early and decisive constitutional change can secure future support for economic reforms.

## 4 Data, Methods, and Results

There are, consequently, two empirical predictions from the model that we aim to test. First, constitutional reforms that increase accountability, transparency, and judicial independence should increase support for economic policy reforms among the population. Second, increased support for economic policy reforms should lead to more actual reform implementation by making reforms politically feasible.

### 4.1 Data and Measurement

To measure political support for reforms we use survey data, covering sixteen post-communist transition countries in the years 1990 to 1997, from the EU's Central and Eastern Eurobarometer (CEEB),

which monitored attitudes towards reform, markets, democratic change, and the EU.<sup>6</sup> Following Kim and Pirttilä (2003), we define support for reform (*Reform*) as the share of respondents who answered “right” less the share of respondents who answered “wrong” to the question, “Do you personally feel that the creation of a free-market economy, that is, one largely free from state control, is right or wrong for our country’s future?” Our dependent variable is thus based on average responses by country.

Following the model, we assume that public support rises and falls with changes in the institutional and judicial variables that signify greater constitutional limits on the exercise of political power. As we have argued, most analysts have relied on measures of democracy to measure constitutionalism. But whether democratic features—voting rights, selection and recruitment of political leaders, electoral contestation, and political competition—enhance support for reform remains an empirical question. Among our control variables, then, we include two common indices of democracy among our independent variables. First, we include the Polity Project’s measure of democracy and autocracy (*Polity*). The Polity index scores countries on the basis of openness and competition in the recruitment and selection of the executive, and is a commonly used indicator of regime type (Marshall and Jaggers 2000). Second, we include an index used by Freedom House to measure electoral contestation and voting rights (*Political Rights*).<sup>7</sup> Although the Freedom House index is meant to discern regimes that are “free” and “not free” while the Polity index attempts to quantify the formal nature of political authority in a state, the two indices are highly similar (their correlation coefficient is 0.65 in our sample) and we use them in separate estimations.<sup>8</sup> But even these indices of electoral democracy do not measure one of the results of democratic participation, that is, *actual* political competition in policy making, as opposed to the procedures that permit competition. We include, therefore, a measure of the dispersion of political power (*Fractionalization*) that is a Herfindahl index of political parties based on the percentage of seats each party holds in the lower house of the legislature. This measure also approximates the likelihood than any two legislators drawn at random come from different political parties (Beck *et al.* 2000).

As previously mentioned, however, indices of democratic participation and competition are imperfect (or noisy) measures of the deliberate constitutional actions that may signal credibility. They may partially reflect the nature of constitutions, of course, but they do not explicitly deal with the nature of the formal constraints on political power, and of the veto players in the political system. Henisz (2000) provides alternative measures. The *Political Constraint* index measures the effective number of veto points within the political system. It relies upon a simple spatial model of political interaction to derive the extent to which any one political actor or the replacement for any one actor—e.g., the executive or a chamber of the legislature—is constrained in his or her choice of future policies. This measure has been further

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<sup>6</sup>The countries are: Armenia, Belarus, Bulgaria, the Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Latvia, Lithuania, Poland, Romania, the Russian Federation, Slovakia, Slovenia, and Ukraine. The surveys before 1992 in the former USSR, and before 1993 in the former Czechoslovakia, were conducted in their constituent republics, obviating the need to combine and split the survey results according to the breakup of these two countries.

<sup>7</sup>We do not use the other sub-index, civil rights, which measures freedom of expression, religion, association, etc., as our principal interest lies in understanding the effects of the formal-procedural components of democratic government.

<sup>8</sup>Freedom House’s political rights indices range from 1 (most free) to 7 (least free), so we rescale this measure as  $(7 - \text{political rights})/6$ . The Polity index ranges from -10 to 10, which we rescale as  $(10 + \text{Polity})/20$ . Thus both of our re-scaled measures of democracy range from 0 (least democratic) to 1 (most democratic).

modified to take into account diminishing marginal returns to the addition of subsequent veto points (Tsebelis 2000). In addition to *Political Constraint*, we also use a simple binary measure of judicial independence (*Judiciary*) scored 1 if the country in a given year maintains politically independent courts, zero otherwise.<sup>9</sup> Figure 1 shows the unconditional relationship between the average political constraint index between 1990 and 1997, and a "state capture" index derived from enterprise surveys in 1996. The unconditional correlation of these sixteen observations is -0.35 ( $p = 0.0000$ ), supporting our model's assumption that greater constitutionalism limits the degree of state capture in an economy.<sup>10</sup>

On the assumption that public support is a function of past personal losses/gains as well as expectations about the future, we include the following as controls: change in real GDP per capita (*Growth*), the level of unemployment (*Unemployment*), the log of inflation (*Inflation*), and the Gini coefficient of income inequality (*Gini*). In addition to these indicators of the current economic situation, Kim and Pirttilä (2003) show that the popularity of reform depends on the public's expectations of their future financial situation. We therefore also include the average household response from CEEB on a question about the households' expected change in economic welfare in the next year (*Future*). Responses range from 1 (get a lot better) to 5 (get a lot worse). Descriptive statistics of these variables are given in Table 1. Figure 2 depicts changes in our dependent variable between 1990 and 1997 across the sixteen countries for which CEEB data are available. Note that in most countries support for reform declines in the first half of the 1990s. For this reason, we also include a time trend in our basic specifications.

Finally, to measure reform implementation (*Liberalization*) we use an index compiled by the World Bank, that has been widely used in analyses of reform progress (De Melo *et al.* 1996, Fischer *et al.* 1997, Kim and Pirttilä 2003). This index is a weighted average of three indicators of cumulative liberalization: (i) internal market liberalization (liberalization of domestic prices and abolition of state trading monopolies), (ii) external market liberalization (liberalization of the foreign trade regime and currency convertibility); and (iii) private sector liberalization (privatization of state owned enterprises and banking reform).<sup>11</sup> In the reform implementation regressions we use predicted values (rather than actual survey responses) of the support for reform from the first set of regressions to mitigate endogeneity problems.

## 4.2 Results

Our basic results are presented in Table 2. Results from the first four columns are generated using the ordinary least-squares (OLS) estimator with two-way fixed effects to capture the effect of both time-invariant factors such as initial conditions and country-specific historical legacies, as well as con-

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<sup>9</sup>Scores for the final measure of *Political Constraint* range from zero (most hazardous) to one (most constrained). See Heinisz (2000) and Heinisz and Zellner (2003). The *Judiciary* measure is independent of the *Political Constraint* variable, but comes from the same source.

<sup>10</sup>The "state capture" index, taken from the World Bank/EBRD Business Environment and Enterprise Performance Survey (BEEPS) conducted in 1996, is based on the average percentages of firms in each country responding, in the affirmative, when asked whether legislation, executive decrees, the central bank, and commercial courts are "captured" by private interests.

<sup>11</sup>We also used reform indicators based on a composite of the European Bank for Reconstruction and Development's progress-in-reform indicators, which yielded identical results in all respects.

temporaneous, common shocks across countries. The last two columns use OLS with errors corrected for contemporaneous correlation (panel-correct standard errors) across panels (Beck and Katz 1996). We also model the error term in these last two regressions as an AR(1) process to control for serial correlation.

Column 1 presents a basic economic model of support for reform, essentially replicating Kim and Pirttilä's (2003) benchmark estimations. We find that pessimism sharply lowers the level of support for reform, as does greater inequality. Other economic variables, however, play no significant role. In columns 2 – 4 we add our measures of constitutional checks and balances, democracy, and fractionalization. Expanding the degree of constitutionally-based constraints on governmental action, as hypothesized, significantly increases support for reform across different specifications. Note that we generate these results using a two way fixed effects model, i.e. we look at variation within countries over time. This means that this result cannot be attributed to the effect of differences in the outset of the transition, such as a more developed civil society or a more recent experience with democracy, that may drive both constitutional choices and support for reform. Rather, the results show that, as the model predicts, constitutionalism is responsible for increasing public support for reform over time. The correction of errors for contemporaneous and serial correlation does not substantially change the sign or magnitude of the effect of political constraint on support for reform. The effect of procedural democracy and political fragmentation, by contrast, is highly sensitive to specification and, in the case of democracy, to the particular index used. Only the Polity index registers a positive value, in column 4, that is statistically significant (at the 90% interval) Fractionalization, on the other hand, is consistently positive, but it is also only significant in one of the regressions. These initial results suggest that explicit accountability mechanisms put in place through checks and balances in the constitution, more than either the procedural components or electoral consequences of democracy, consistently boosts public support for reform.

The previous results are repeated in Table 3 in which we substitute the binary judiciary variable for the measure of political constraint. As expected, greater judicial independence has a similarly consistent, significant, positive effect on the level of public support for market reform, although the magnitude of the effect is approximately one-half that of the effect of political constraints. The different democracy measures do not perform any better in this set of regressions; the Polity index, again, carries the only significant coefficient, and only in the panel-corrected estimation in column 4. Meanwhile political fractionalization once again enters the two-way fixed effects equations with a positive coefficient, but this effect disappears when we change how the error term is modeled.

As Kim and Pirttilä (2003) found, pessimism appears to lower sharply popular support for transition reforms. Among the economic variables, inequality, unemployment, and to a lesser extent, economic growth seem to shape reform popularity. As expected, greater inequality lowers support for reform. Meanwhile, wherever unemployment and growth are significant, their terms carry positive and negative signs, respectively, indicating that unemployment and recession actually raise reform support. It may be the case that high unemployment and sharp drops in income mobilized populations in these countries

toward greater support for reform programs. Alternatively, it is possible that countries that reformed rapidly under conditions of favorable support initially experienced higher unemployment and growth collapses as a consequence.

This last possibility—alluded to in some of the “dual transition” analyses of post-communist economic reform examined above—suggests that support for economic reforms may also influence political, as well as economic, outcomes, including greater momentum for democratization processes, greater political competition, as well as constitutional changes. OLS does not satisfactorily address this potential reverse causality. To deal with this we reestimate our regressions using a system GMM estimator developed by Arellano and Bover (1995) and Blundell and Bond (1998). This model resolves one of the problems with the differenced-GMM estimator developed by Arellano and Bond (1991), namely, its poor finite-sample properties, and the resulting imprecision of the estimator when the lagged levels of the series are only weakly correlated with subsequent first differences.<sup>12</sup> The system GMM estimator, by contrast, has been shown to possess superior finite-sample properties. This estimator uses a stacked system of  $T - 2$  equations in first-differences and  $T - 2$  equations in levels, corresponding to periods 3, ...,  $T$  for which instruments are observed. The system GMM estimator thus combines the standard set of equations in first-differences using lagged levels as instruments with an additional set of equations in levels using lagged first differences as instruments.

We repeat our basic regressions from Table 2 and Table 3 using the system GMM estimator. The results are reported in Table 4, and confirm our general expectations from previous results. In column 1 we show the results from a full, dynamic specification, including all independent variables. None of the controls except *Future* are significant, and we remove these in subsequent estimations. Fractionalization is nowhere significant, and political rights is significant only in the estimations with judicial independence. Political constraint, on the other hand, once again exerts a positive and significant effect on support for reform, as does judicial independence. In columns 2 and 4 we eliminate all insignificant variables and are left with basic political models of reform support that show a positive effect of constitutionalism on reform support, even when allowing for the endogeneity of constitutionalism, democracy, and electoral competition.

In Table 5, finally, we show the effect of support for reform on actual reform implementation. To mitigate potential problems of endogeneity, we generate predicted values of reform support based on our previous regressions using *Political Constraint* and *Judiciary* respectively. As control variables we use standard measures of macroeconomic imbalances and performance: the level of unemployment, inflation, and growth rates, and a time trend. We also include a measure of the balance in the consolidated central government budget (*Fiscal Balance*), positive if in surplus, negative if in deficit. As seen in Table 5, reform support enters consistently with a statistically significant and positive effect. An increase in support for reform of one standard deviation, based on the estimation in column 1 of Table 5, for example, produces

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<sup>12</sup>Simulation results reported in Blundell and Bond (1998) show that first-differenced GMM estimator may be subject to downward finite-sample bias where the time series is persistent and the number of time periods is small.

an increase of 16% in the liberalization index, equivalent to the difference in liberalization between the Russian Federation and the Czech Republic in 1996.

## 5 Conclusions

Problems of credibility lie at the heart of a central political dilemma in transition countries, i.e., how to convince citizens that promises to restrain malfeasance and corruption will be kept. Democratization—the conventional mechanism of restraint—does not adequately resolve this credibility problem due to the relatively low cost of restricting or reversing political participation and competition.

We argue that a possible alternative available to committed reformers is through constitutional reforms that expand the formal-legal constraints on political power, and that enhance the independence of the judiciary. We formalize this argument in a model in which voters with imperfect information face an adverse selection problem in that they cannot distinguish committed reformers from rent seekers. Committed reformers can endogenously implement constitutional changes as a signal of their type to voters, and as a means of distinguishing themselves from rent-seeking politicians. Analysis of panel data from sixteen transition economies, supports the claim that constitutionalism can boost support for economic reform, and consequently enhance the likelihood of reforms being implemented.

Now it is certainly true that "formal" rules may bear little resemblance to reality; the 1936 Soviet constitution famously guaranteed citizens' individual liberties—the adoption of which coincided with a ruthless wave of Stalinist repression. But our claim is not that constitutional reforms will always improve the nature of market-oriented policymaking. Rather, we have shown how changes to constitutions—due to their high cost and irreversibility—can help committed reformers signal their intentions and thereby gain political support. Governments willing to strengthen constitutional checks and balances in an environment in which they are binding, moreover, can serve as signals to voters that the benefits of reforms will be widely shared.

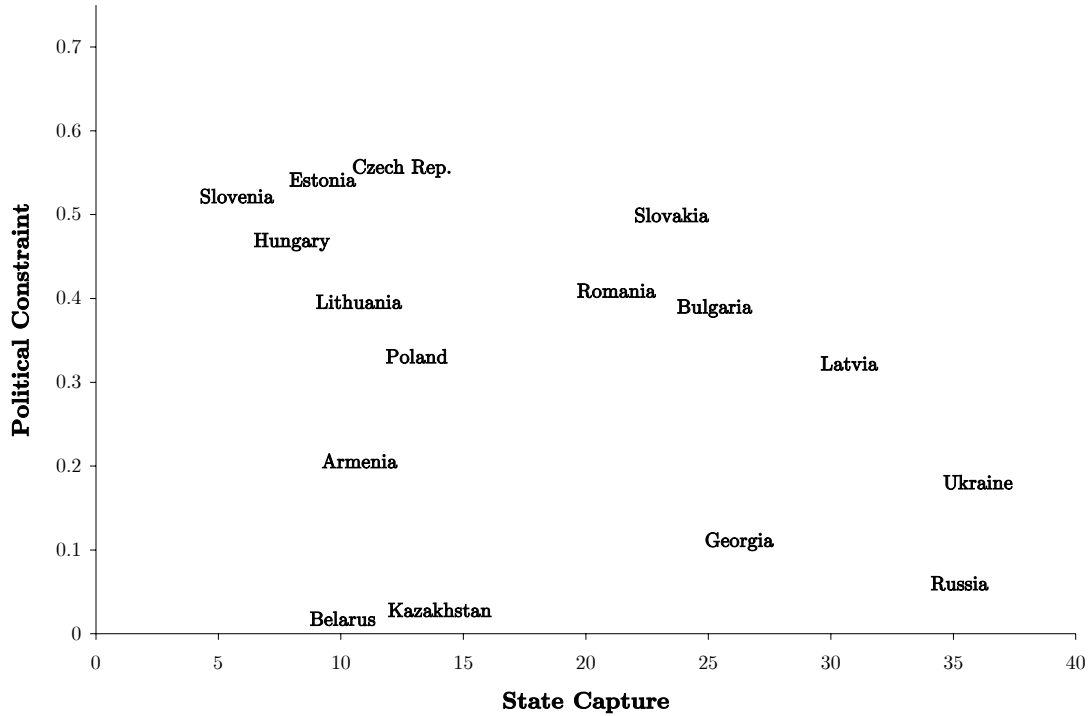
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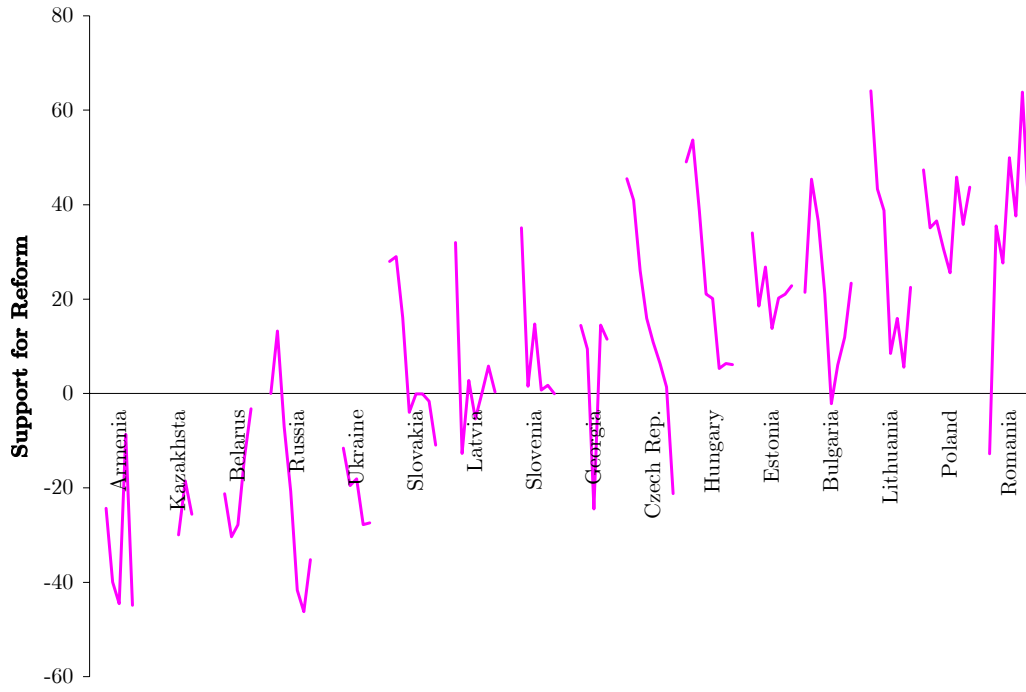


Notes: Political constraint is average Heinisz index, 1990-1997. State capture index is based on the World Bank/EBRD Business Environment and Enterprise Performance Survey (BEEPS) conducted in 1996. The state capture index above average percentages of firms in each country responding in the affirmative to whether legislative bodies, executive decrees, the central bank, and commercial courts were “captured” by private interests.

**Figure 1:** Constitutionalism and State Capture.

Variable	Mean	Std. Dev.			Min	Max	N	n	T(ave.)
		Overall	Within	Between					
<i>Reform</i>	9.32	26.02	15.39	22.64	-46.26	64.10	103	16	6.44
<i>Inflation</i>	4.10	1.75	1.43	1.06	1.69	9.30	103	14	7.36
<i>Income</i>	7.84	0.82	0.17	0.62	6.53	9.23	112	14	8.00
<i>Future</i>	0.60	0.38	0.24	0.31	-0.66	1.32	89	16	5.56
<i>Unemployment</i>	7.23	4.81	2.98	3.87	0.00	16.40	104	14	7.43
<i>Gini</i>	30.56	7.24	3.77	6.37	17.76	48.30	99	14	7.07
<i>Growth</i>	-3.27	8.98	8.28	3.64	-41.76	10.62	108	14	7.71
<i>Political Constraint</i>	0.31	0.24	0.15	0.19	0.00	0.67	107	16	6.69
<i>Judiciary</i>	0.30	0.46	0.17	0.43	0.00	1.00	187	26	7.19
<i>Fractionalization</i>	0.59	0.29	0.18	0.26	0.00	0.93	135	25	5.40
<i>Polity</i>	0.64	0.31	0.09	0.30	0.05	1.00	185	27	6.85
<i>Political Rights</i>	0.61	0.29	0.21	0.20	0.00	1.00	128	16	8.00
<i>Liberalization</i>	0.59	0.25	0.19	0.17	0.04	0.90	112	14	8.00

**Table 1:** Descriptive Statistics of Variables Included in Regressions.



Notes: Each line shows support for market-oriented reforms less opposition to market reforms based on *Central and Eastern European Eurobarometer* surveys between 1990 and 1997 for each country. Countries are ranked by median of support for reforms.

**Figure 2:** Support for Reform in the Transition, 1990 – 1997.

	(1)	(2)	(3)	(4)	(5)	(6)
	Two-way fixed effects	Two-way fixed effects	Two-way fixed effects	Two-way fixed effects	OLS-PCSE	OLS-PCSE
<i>Future</i>	-38.8870*** (10.1774)	-43.8300*** (9.6864)	-36.6814*** (9.8371)	-42.5613*** (10.1056)	-25.7624*** (6.9711)	-24.8017*** (3.9327)
<i>Inflation</i>	0.9184 (2.2095)	3.2165 (2.4932)	2.4540 (2.4210)	4.0679 (2.8398)	1.5323 (2.3240)	1.2105 (2.4391)
<i>Income</i>	13.0408 (19.3115)	-1.2760 (18.6823)	25.0112 (24.1244)	12.4067 (24.6126)	-7.1282 (6.4100)	-8.9927* (4.8495)
<i>Unemployment</i>	0.7381 (1.2824)	2.5247 (1.5268)	3.3011** (1.5702)	3.0568* (1.6452)	1.3072*** (0.4707)	1.4151*** (0.2718)
<i>Gini</i>	-1.4782* (0.7851)	-1.4732** (0.6929)	-1.3696* (0.7219)	-1.2688* (0.7246)	-0.8920* (0.4946)	-0.8905** (0.3990)
<i>Growth</i>	-0.2604 (0.4644)	-0.6378 (0.4135)	-0.9696** (0.4475)	-0.8780* (0.4990)	-0.3189 (0.3439)	-0.2897 (0.3243)
<i>Political Constraint</i>		31.1969*** (10.3933)	30.9684** (11.8016)	29.7493** (13.1746)	33.7188*** (11.1658)	21.4555* (11.7256)
<i>Fractionalization</i>			32.0538* (18.7206)	28.8602 (24.1330)	0.2858 (15.9363)	8.5888 (20.0809)
<i>Political Rights</i>			-32.5495 (26.9857)		8.4882 (15.9765)	
<i>Polity</i>				-23.7230 (25.3832)		28.0301* (16.1317)
<i>Trend</i>	-2.5994 (4.0646)	1.4552 (2.1817)	2.0542 (2.5676)	0.9336 (2.2012)	-4.1548* (2.1249)	-3.1605** (1.6008)
Observations	74	63	59	58	64	62
Countries	14	14	14	14	14	14
F-Test/Wald $\chi^2$ (prob.)	3.81 (0.0004)	5.11 (0.0001)	4.41 (0.0003)	4.46 (0.0003)	284.62 (0.0000)	65.52 (0.0000)
$\rho$					0.4349	0.4603
R <sup>2</sup>	0.4878	0.6239	0.6655	0.6756	0.5268	0.5255

Notes: Dependent variable is support for market reforms. Standard errors (two-way fixed effects) and panel-corrected standard errors (OLS-PCSE) are shown in parentheses. Intercepts, and time and country dummies (in two-way fixed effects regressions) are not reported.

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

**Table 2:** Support for Reform and Political Constraints.

	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
	<b>Two-Way Fixed Effects</b>	<b>Two-Way Fixed Effects</b>	<b>OLS-PCSE</b>	<b>OLS-PCSE</b>
<i>Future</i>	-41.7909*** (9.5510)	-39.3549*** (9.9568)	-35.9867*** (7.0190)	-33.4936*** (4.0904)
<i>Inflation</i>	2.8432 (2.1174)	1.4209 (2.7830)	-0.2339 (1.8368)	-0.9557 (2.2462)
<i>Income</i>	4.8213 (24.0126)	22.3807 (26.6620)	-2.0714 (6.1580)	-4.1785 (4.3212)
<i>Unemployment</i>	3.5633*** (1.2796)	3.3075** (1.5330)	0.7228 (0.5040)	0.7808** (0.3453)
<i>Gini</i>	-0.7608 (0.7550)	-1.0161 (0.7688)	-0.5312 (0.5814)	-0.3282 (0.5501)
<i>Growth</i>	-0.9164** (0.4496)	-1.1432** (0.5251)	-0.6567** (0.2617)	-0.6167*** (0.2068)
<i>Judiciary</i>	17.9666** (7.6192)	14.9036* (7.6950)	15.9530*** (4.8387)	15.9341*** (3.7246)
<i>Fractionalization</i>	49.3835** (18.7634)	63.2675*** (21.6793)	8.8193 (15.5674)	16.1326 (21.8313)
<i>Political Rights</i>	7.4754 (24.3704)		9.5543 (14.4115)	
<i>Polity</i>		12.6335 (20.9287)		25.0675* (13.8166)
<i>Trend</i>	-3.3828 (2.2682)	-2.0736 (2.1912)	-3.7737** (1.8362)	-3.8699** (1.8239)
Observations	64	62	66	64
Countries	14	14	14	14
F-Test/Wald $\chi^2$ (prob.)	4.85 (0.0001)	4.62 (0.0001)	585.66 (0.0000)	59.40 (0.0000)
$\rho$			0.5372	0.4128
R <sup>2</sup>	0.6534	0.6557	0.5461	0.5619

Notes: Dependent variable is support for market reforms. Standard errors (two-way fixed effects) and panel-corrected standard errors (OLS-PCSE) are shown in parentheses. Intercepts, and time and country dummies (in two-way fixed effects regressions) are not reported.

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

**Table 3:** Support for Reform and Judicial Independence

	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
<i>Future</i>	-23.1362 (13.1952)	-27.1484*** (8.7629)	-42.9510*** (12.7043)	-35.4803*** (8.8098)
<i>Inflation</i>	1.9801 (2.6039)		1.5482 (2.0344)	
<i>Income</i>	-4.8508 (8.6038)		1.3952 (7.4310)	
<i>Unemployment</i>	0.9600 (0.7730)		0.2353 (1.0236)	
<i>Gini</i>	-0.0810 (0.7025)		0.0338 (0.5598)	
<i>Growth</i>	-0.2202 (0.4555)		-0.6763 (0.4289)	
<i>Political Constraint</i>	48.2712** (19.9032)	37.4958* (18.6499)		
<i>Judiciary</i>			18.7691** (7.2173)	17.7711* (8.7413)
<i>Fractionalization</i>	25.7401 (24.6499)	2.1837 (11.9648)	34.8358 (21.6372)	8.9744 (11.7468)
<i>Political Rights</i>	24.9359 (19.3689)	11.2639 (14.2663)	28.8360* (14.4292)	16.2314 (13.8973)
Observations	63	71	65	73
Countries	14	16	14	16
Hansen $\chi^2$ (prob.)	0.00 (1.0000)	8.09 (1.0000)	0.00 (1.0000)	6.89 (1.000)
m1 (prob.)	-2.34 (0.019)	-2.13 (0.033)	-2.00 (0.045)	-1.89 (0.059)
m2 (prob.)	1.45 (0.147)	0.94 (0.350)	0.45 (0.651)	0.45 (0.651)

Notes: Time dummies are included in all equations (not reported). Coefficients are generated using a one-step system GMM estimator, with asymptotic standard errors robust to cross-section and time-series heteroskedasticity in parentheses. Intercepts are estimated but not reported. The Hansen  $\chi^2$  test is for the null of over-identifying restrictions from the two-step estimator. The m1 and m2 tests are Arellano-Bond tests for nulls of, respectively, no first- or second-order autocorrelation in first differences. GMM Instrument set includes all lags of the dependent variable (dated  $t - 2$  and earlier) and of Future, Judiciary, and Political Rights variables (dated  $t - 1$  and earlier), in both levels and differences.

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

**Table 4:** Institutional Constraints: System GMM Results

	(1) Two-Way Fixed Effects	(2) Two-Way Fixed Effects	(3) OLS-PCSE	(4) OLS-PCSE
<i>Reform</i>	0.0024** (0.0010)	0.0022*** (0.0008)	0.0013** (0.0006)	0.0016*** (0.0004)
<i>Unemployment</i>	0.0015 (0.0088)	0.0056 (0.0076)	0.0090 (0.0057)	0.0074 (0.0054)
<i>Fiscal Balance</i>	-0.0001 (0.0023)	0.0002 (0.0016)	-0.0018 (0.0018)	-0.0009 (0.0016)
<i>Growth</i>	-0.0030 (0.0025)	-0.0024 (0.0022)	-0.0041 (0.0026)	-0.0026 (0.0022)
<i>Inflation</i>	-0.0526*** (0.0153)	-0.0419*** (0.0107)	-0.0745*** (0.0185)	-0.0561*** (0.0136)
<i>Trend</i>	0.0183 (0.0116)	0.0196* (0.0097)	-0.0054 (0.0099)	0.0018 (0.0093)
<i>Observations</i>	57	61	57	61
<i>Countries</i>	14	14	14	14
<i>R</i> <sup>2</sup>	0.6769	0.6771	0.7311	0.7447
<i>F-test/Wald <math>\chi^2</math></i> <i>(prob.)</i>	5.09 (0.0001)	5.15 (0.0000)	90.47 (0.0000)	118.78 (0.0000)
<i><math>\rho</math></i>			0.3814	0.3929

Notes: Dependent variable is cumulative liberalization. Reform is the predicted value generated as follows: in (1) and (3) above from the regression using the political constraint index in table 2, col. 4, and in (2) and (4) above from the regression using judicial independence in table 3 col. 2. Standard errors (two-way fixed effects) and panel-corrected standard errors (OLS-PCSE) are shown in parentheses. Intercepts and time and country dummies (in two-way fixed effects regressions) are not reported.

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

**Table 5:** Progress in Economic Reform.