

Does Type of Authoritarianism Affect the  
Prospects for Democracy?  
Exogenous Shocks and Contingent Democratization

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**Abstract:** In this paper we test the often asserted view that the prospects for democratization differ among different types of authoritarian regimes. To what extent do exogenous shocks—economic crisis, popular protest and democratic diffusion—impact on democratization differently among monarchies, one-party, military, and limited multi-party regimes? Drawing on cross-sectional time-series evidence from a global sample of countries in 1972-2002, we find that in particular limited multiparty, and to some extent military regimes, are more likely than one-party regimes to democratize in response to popular protest and economic performance.

## **Introduction**

The latest turn in the field of comparative democratization seems to be an increased attention paid to different types of authoritarianism. There is a growing literature on the dynamics of different forms of autocracies (Geddes 1999; Snyder and Mahoney 1999), including the “hybrid” regimes located in the grey zone in between democracy and autocracy (Diamond 2002; Levitsky and Way 2002; Schedler 2002b, 2006a; Epstein et al. 2006). In this paper we shall contribute to this body of knowledge by testing the extent to which exogenous shocks lead to different regimes responses in different types of authoritarian regimes. Our theoretical point of departure will be Geddes (1999, 2003) seminal treatment of the logic of military, one-party and personalist dictatorships. We are not interested in regime survival per se (cf. Geddes 2002; Ulfelder 2005), but will concentrate on one type of response to exogenous shocks: the tendency to democratize the regime (gradually or rapidly). Based on a refined authoritarian regime typology (Hadenius and Teorell 2006), our empirical inquiry covers 145 countries in the world from 1972–2002.

We first derive expectations on how types of authoritarian regimes respond to exogenous shocks. We then present our data and estimation strategy, followed by our findings. We conclude by stating the implications for theory and discussing what subjects for further inquiry lie ahead.

## **Types of Authoritarianism and Democratization**

Key to the understanding of military regimes, according to Geddes (1999, 2003), is the insight that officers favor survival and unity of the military as institutions over anything else, including the goal of remaining in office. As a result, factions within the military are locked in a coordination game where both intervening in and staying out of politics form self-sustainable equilibria as long as internal unity is upheld. This makes military regimes highly vulnerable to internal splits: since there is “life after democracy” for the military as institution, officers prefer to liberalize the regime and withdraw to the barracks when factional splits over policy or leaderships succession become threatening. Exogenous shocks that may propel such rivalries should thus have a discernible impact on military regimes’ tendency to democratize.

This scenario contrasts most clearly with the logic of single-party regimes, where party cadres according to Geddes simply prefer holding on to office. Rival factions within the ruling party have no incentives to break off from the regime, since the game they play vis-à-vis the

majority faction has a single equilibrium: that all factions remain united and in office. This makes single-party regimes impervious to the threat of factional splits, and hence more resistant to external shocks.

From this account we may elicit a first and clear theoretical expectation:

*H1: Military regimes are more likely than one-party regimes to democratize as a response to external shocks.*

In Geddes' own account this expectation is most explicitly spelled out with respect to the effect of economic performance: "Military governments are more vulnerable to economic downturns than are other authoritarianisms because poor economic performance is likely to precipitate or worsen splits in the officer corps. On average, military governments can survive only moderate amounts of economic bad news, whereas single-party governments are remarkably resilient in the face of disastrous economic performance" (Geddes 1999, 135; also see Haggard and Kaufman 1995, 13, 367). The same logic could however easily be extended to other kinds of exogenous shocks, such as popular protest and international pressure to reform.

While laying the theoretical foundation of our inquiry, at this point we must take issue with Geddes' account. As we have argue elsewhere (Hadenius and Teorell 2006), Geddes' neat tripartite division of types authoritarianism into military, single-party, and personalist regimes (as well as amalgams thereof) appear incomplete and in some senses too simplistic. To begin with, Geddes exclude two important types of authoritarianism: monarchies (Herb 1999) and the limited multiparty systems nowadays often referred to as "competitive" (Levitsky and Way 2002) or "electoral" (Schedler 2002b; Schedler 2006a) authoritarian regimes. Second, Geddes does not distinguish between truly one-party regimes (where no opposition is allowed) and "dominant" or "hegemonic" party regimes (where a single party rules yet leaves some room for opposition). Finally, we concur with Broker (2000, 37) in arguing that personalism is not a regime type in itself, but "only a secondary or supplementary feature of a regime". In other words, any kind of regime—military, one-party, monarchy or other—may display more or less concentration of power in the hands of a single leader.

In keeping with these points of criticisms, we will here rely on a typology of authoritarian regime types that, apart from one-party and military regimes, distinguishes between monarchies and limited multi-party systems, that within the latter group takes into account the degree of “dominant-ness” of the largest party, and that treats personalism as a continuous trait more or less present within all regime types. What expectations may we then derive with respect to these refined regime categories?

Starting with monarchies, one might first be tempted to infer that they should operate similar to the logic of “personalist dictatorships” (in Geddes’ terminology). Monarchies, unlike most personalist dictatorships, however, have established rules for leadership succession. As Michael Herb shows in his intriguing account of the monarchies in the Middle East, these rules may even prevent excessive “personalism” by relying on royal family consensus in picking the leadership successor, and by distributing the highest state offices among multiple family members who thereby hold their own power resources as a check on the absolutist whims of the ruler (Herb 1999).

Perhaps somewhat unexpectedly, we would instead like to point at two mechanisms that should make monarchies work more similar to the logic of military dictatorships. The first is the relative narrowness of their support base. As pointed out by Bueno de Mesquita et al. (2003, 51–5, 69–71), both monarchies and military regimes not only have small winning coalitions (the group of people whose support is essential if the incumbent is to remain in power), but also a small “selectorate”—that is, the pool of people holding the characteristics institutionally required to be part of the winning coalition (ibid., 38, 42). In military juntas the selectorate usually only includes the officer corps within the armed forces, and in monarchies the selectorate basically comprises the royal family. One-party regimes, by contrast, have a larger selectorate—since potential party members usually draw from most of the population. As a result, these regimes are more skilful at co-opting pressure to reform from potential opposition forces.

Second, as the experience of constitutional monarchy in the West has taught us, there may actually be “life after democracy” for the monarchy as institution (much as for the military). The fact that ceremonial powers, popularity and prestige may be bestowed upon the king even after giving up the exclusive right to rule should facilitate piecemeal democratic reform. This point of fact is again borne out well by Herb (1999, 263): “It is the peculiar virtue of

monarchism—for gradual liberalization—that kings do not claim their offices by virtue of popular mandate...Kings are born to power, not elected to it. Monarchs can allow free elections and allow the people a voice in the conduct of the government without surrendering their thrones, or all of the power that goes with them. Other sorts of modern authoritarian rulers, by contrast, claim a popular mandate to rule; elections that express the will of the people threaten their power.”

For these reasons, we should expect monarchies to respond to exogenous pressure for democratization similarly to military regimes (i.e., being less resilient than one-party regimes), leading to the following hypothesis:

*H2: Monarchies are more likely than one-party regimes to democratize as a response to external shocks.*

Turning to limited multi-party regimes we may point at two reasons for expecting them to differ similarly from one-party regimes, depending on whether the “democratic” or “authoritarian” traits of these regimes are highlighted. First, we may expect limited multi-party regimes to be attentive to pressures for democratization for the very same reason that elites in well-established democracies are expected to be attentive to reform demands: they want to cling on to power and hence try to satisfy the preferences of their voters (see, e.g., Drazen 2000, 77–90). However, since the connection between voter’s preferences and electoral outcomes is mediated by electoral irregularities, and hence should be much weaker in limited multiparty systems (Schedler 2006b, 8), this responsiveness should of course be of a more diluted nature as compared to well-established democratic settings.

The second mechanism predicting the same outcome acknowledges the authoritarian nature of limited multiparty regimes, but depict their internal dynamics as a “nested game” in which incumbents and the opposition simultaneously “measure their forces in the electoral arena” and “battle over the basic rules that shape the electoral arena” (Schedler 2002a, 110). van de Walle (2006) describes the same dynamics as a “tipping game” in which strategic calculations on the returns of defection by regime incumbents affect the likelihood of opposition cohesion. This coalescence of the opposition is in turn considered critical to the chances of democratic regime change (see, e.g., Bratton and van de Walle 1997; Howard and Roessler 2006). What these dynamics entail is that the behavior of actors within limited multiparty regimes are

largely determined by their “perceptions about the viability of the regime” (van de Walle 2006, 86). Such perceptions should, it turn, be affected by exogenous shocks such as economic downturns, popular mobilization and pressure from abroad. As compared to one-party regimes, then, where minority factions are locked into a stable equilibrium of remaining loyal to the regime, multiparty regimes should be more sensitive to pressures for democratization:

*H3: Limited multiparty regimes are more likely than one-party regimes to democratize as a response to external shocks.*

From this difference in kind between one-party and limited multiparty regimes, however, should also follow a difference in degree. Namely, that the more the latter kind of authoritarian regime is dominated by a single party, the more it should behave similarly to one-party regimes. Thus, we may also derive a fourth implication from our theory of authoritarian regime types:

*H4: Within the group of multiparty regimes, the tendency to democratize as a response to external shocks should decrease with the relative size of the largest party.*

### **Data and Research Design**

We will test the hypotheses developed above using an extensive estimation sample of 2740 country years, covering 145 countries in the world from 1972–2002. Our *dependent variable* will be the “rate of democratization”, measured as annual change in the average Freedom House and Polity scores (both converted to a scale of 0–10).<sup>1</sup> Both Freedom House and Polity have their respective strengths and drawbacks (Munck and Verkuilen 2002), and we have argued elsewhere that the best response to this situation is to average the two (Hadenius and Teorell 2005b).

The fact that we rely on graded measures of democracy, and hence of democratic change, is critical to our inquiry. We are not trying to predict the demise of authoritarian regimes and their replacement by a “democratic” alternative. What we purport to do is to test the extent to

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<sup>1</sup> We have imputed missing values for 202 country year observations by regressing the average FH/Polity index on the FH scores, which have better country coverage than Polity.

which different types of authoritarian regimes respond to external shocks by implementing *gradual* democratic reforms—be they small or large in nature. In other words, some of the regime changes we try to predict may be very limited, such as lifting a minor ban on newspapers or reluctantly increasing the regime’s tolerance toward the organization of opposition groups. Other changes may however be of larger consequence, such as the opening of an elected parliament, the holding of competitive elections for the first time in a long period, or even the dismantlement of institutions that secured the rigging of elections. We believe this way of specifying our dependent variable is more in keeping with theoretical expectations. What the models of authoritarian regime types we developed above predict is authoritarian regime responses of various sorts, including minor shifts in the rules of the game, and *not* only the ways in which these regimes extricate themselves and hand over power to “qualitatively democratic” institutions.

There are also methodological reasons for our choice of a graded dependent variable, since we avoid imposing a more or less arbitrary threshold value at which regimes are considered “democratic”. Paradoxically, however, we cannot steer clear of this obstacle with respect to our key *independent* variable: the typology of authoritarian regime types. Being a typology of authoritarian, that is non-democratic, regimes, we need to distinguish this broad authoritarian “family”. This is of particular importance with respect to the limited multiparty regimes, since the only characteristic that makes these regimes different from “democracies” (as a regime type in its own) is a threshold located somewhere along a graded democracy scale. In order to minimize arbitrariness in where to establish this threshold, we estimate the mean cutoff point separating democracy from autocracy in five well-known categorical measures of democracy: those of Przeworski et al. (2000), Mainwaring et al. (2001), and Reich (2002), together with Freedom House’s and Polity’s own categorical thresholds for democracy. Along the 0–10 graded democracy scale, this estimated threshold is located at 7.5.<sup>2</sup>

We then classify regimes falling below this cutoff point into monarchies, military, one-party and limited multiparty regimes, mostly relying on updated and revised data from Banks

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<sup>2</sup> More precisely, two mean values of the FH/Polity-scale were computed for each of the five dichotomous measures: the mean democracy score in country years immediately following a transition from autocracy to democracy, and the mean democracy score in country years immediately preceding a transition from democracy to autocracy. The country-year weighted average of these ten means (covering the time period from 1972-2003) is 7.49 ( $n=387$ ).



(2002).<sup>3</sup> Although amalgams of these regime types exist—most notably limited multi-party monarchies, military multi-party and military one-party regimes—we have in this paper chosen to concentrate on “pure” types for simplicity. In viewing monarchical and military institutions in these amalgams as more fundamental than the structure of the party system, we have in effect treated all monarchical amalgams as monarchies, and all military amalgams as military regimes. There is a small residual category of “other” authoritarian regimes comprising less than 2 percent of the estimation sample. Finally, there are all regimes passing the 7.5 threshold criterion, accordingly labeled “democracies”. Figure 1 shows the distribution of these regime types within the estimation sample.

We operationalized the concept of “exogenous shocks” by focusing three generic types of events explicitly discussed by Geddes (1999, 131): economic crisis, popular protest and external pressure. We measure economic performance as the annual growth rate of GDP per capita in fractions, based on data from WDI (2004). As our measure of popular protest we employ Banks’ (2002) data on the yearly number of peaceful anti-government demonstrations involving at least 100 people. Our proxy for external pressure, finally, is a measure of democratic diffusion: the annual change in the level of democracy (again using the FH/Polity average) among neighboring countries.<sup>4</sup> Admittedly this is a crude proxy, since democratization in the near abroad does not necessarily in itself exert any perceptible “pressure” for regimes to reform. Other types of events, such as military intervention and economic sanctions would be far more suitable (Geddes 2002), but these alternatives had to be dropped due to lack of data.

All three measures fulfill a statistical condition for being interpreted as “shocks” to a national system of government: they vary considerably more within countries over time than across countries at a singular point in time. Whereas the mean number of peaceful anti-government demonstrations per year in the estimation sample is .73, the within-country standard deviation is 1.62—almost twice as large as the cross-country deviation of .89. A similar pattern emerges

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<sup>3</sup> For details on coding rules and sources for these classifications, see Hadenius and Teorell (2006). There is a fifth basic type of authoritarian regime in our typology called a *no-party* regime, the distinguishing feature of which is that elections are held to the highest office of state but only individual candidates, not political parties, are allowed to participate. Due to missing data, however, there are no such regimes in our estimation sample.

<sup>4</sup> Neighbors are defined as countries separated by a land or river border, or by 400 miles of water or less, using Stinnett et al.’s (2002) direct contiguity data. The rationale behind the water contiguity distance is that 400 miles is the maximum distance at which two 200-mile exclusive economic zones can intersect (ibid., 62).

for growth, with a sample mean of 1.40 %, a within-country standard deviation of 4.61 % and a cross-country deviation of 2.57 %. With respect to neighbor democratization, with a mean at .08 (on a scale ranging from -10 to +10), the within-country standard deviation (.33) even more heavily dominates the cross-country deviation (.11).

Having a continuous (or at least semi-continuous) dependent variable, our estimation strategy will be to use OLS regression with three lagged dependent variables and panel-corrected standard errors to correct for panel heteroskedasticity, spatial and temporal autocorrelation (Beck and Katz 1995, 1996). We start with a basic model (1) only including control variables, the exogenous shock variables and the nominal regime types entered as dummies.<sup>5</sup> The controls comprise a wide range of hypothesized determinants of democratization, including colonial background, religious composition, societal fractionalization, country size, modernization, resource wealth, and international dependence (for details, see Teorell and Hadenius 2006). For reasons more specifically tailored to the study of regime types, we also control for two continuous ancillary regime characteristics: the degree of party domination (measured as the fractional size of the largest party in parliament), and the degree of personalism (measured as the mean executive turnover computed across each entire regime spell).

In the next model (2), in order to test our theoretical expectations on the contingent effects of regime types, we incorporate interaction effects between each exogenous shock, lagged one year, and the regime dummies. According to hypotheses 1–3, we should expect significantly larger effects of the exogenous shocks among monarchies, military, and multiparty as compared to one-party regimes.

We then try to deal with a complication that arises from the fact that the exogenous shock variables may be expected to have a varying impact depending on the level of democracy in the country where they take place. This complication is most clearly seen in some of the earlier findings on how economic performance affects the probability of transition from authoritarianism to democracy, on one hand, and the probability of democratic survival on the other. The pattern seems to be that whereas growth is *negatively* related to transitions to

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<sup>5</sup> For technical reasons, we also need to include the democracies in this analysis, since leaving them out would constrain the variance in the dependent variable and thus bias our results.

democracy, it seems to be *positively* related to democratic survival (Gasiorowski 1995; Przeworski et al. 2000; Bernard et al. 2001). The simple reason for this is that both authoritarian and democratic regimes tend to fall under the pressure of economic crisis (or, inversely, that both regimes' survival are boosted by well-performance). These results do not translate easily into contexts where graded measures of democracy are being used. They could however imply that the coefficients for economic performance should be differently signed at different levels of the democracy scale. The more authoritarian a country, in other words, the more negative an effect of good economic performance should we expect. Or, inversely, the more democratic a country, the more positive an effect.

It could well be that popular anti-government protest works in a similar fashion, having a destabilizing effect on more democratic and more authoritarian regimes alike. With respect to democratic diffusion, although we should never expect a negative effect on democratization, there is again the possibility that the effect varies with the level of democracy already achieved. In order to accommodate for this possibility, we add a model (3) including the interaction effect between each exogenous shock variable, respectively, and the level of democracy at  $t-1$  (cf. Hadenius and Teorell 2005a, where this technique is used to test the modernization hypothesis).

Finally, we test hypothesis 4 by adding yet another interaction effect: between exogenous shocks and the degree of party domination (i.e., the size of the largest party). This hypothesis would be supported if we find the same relative (and statistically significant) difference in the effects of exogenous shocks between more or less one-party dominated multiparty regimes as we find between multiparty and one-party regimes.

## **Results**

For ease of exposition, we present the results for each exogenous shock separately. Starting with popular protest, Table 1 shows that the average effect of peaceful demonstrations across all nominal regime types is positive and statistically significant. The estimated increase in the rate of democratization is .039 per demonstration. In line with theoretical expectations, however, this impact is not similar in magnitude across different regime types. In one-party regimes, which are used as reference category in all analyses, the effect is, quite consistent with theory, close to zero (-.006 and insignificant). In monarchies, military and limited multiparty regimes, by contrast, there is a positive impact of demonstrations on the rate of

democratization, although this impact according to model (2) is only significantly larger than one-party regimes in limited multiparty systems.

[Table 1 about here]

Here it proves useful, however, to control for the effect of demonstrations conditional on the initial level of democracy (model 3). As the negative and statistically significant interaction effect of  $-0.029$  shows, the importance of peaceful demonstrations for democratic change is decreasing with the initial level of democracy in a country. Once this conditional effect has been controlled for, the differences across regime types is accentuated. Most importantly, the magnitude of the difference in effect between one-party and multiparty regimes is almost tripled, and the coefficient for military regimes is doubled and now statistically significant.

The intricate interplay between initial level of democracy, regime type and the effects of peaceful demonstrations is illustrated in figure 1. Due to the negative interaction effect with level of democracy at  $t-1$ , the slopes for all regime types reach their maximum in the most authoritarian regime and then progresses toward zero, for some regime types even turning negative, as the previous level of democracy increases. At all levels, however, the rate of democratization in military and, in particular, in multiparty regimes is significantly more positively affected as compared to one-party regimes. The hypothesized similarity of military regimes and monarchies also holds true, although the difference between monarchies and one-party regimes never prove statistically significant (probably due to the relatively small number of monarchies).<sup>6</sup>

[Figure 2 about here]

Turning to the conditional effect of size of the largest party within multiparty regimes in model (4), the coefficient is signed according to expectations (showing that the effect of

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<sup>6</sup> The only twist in these results is the pattern of effects among regimes around half-way between perfect autocracy and perfect democracy (i.e., around 5 and beyond). Here it would at first sight appear as if one-party regimes are more vulnerable to the exogenous shock of popular protest, but in the reverse direction—more demonstrations leading to decreasing levels of democracy. This pattern is however an artifact of extrapolation beyond the empirical reach of the data, since there exists no one-party regimes at this level of democracy (the maximum level of democracy for any one-party regime is at 3.75 in the estimation sample).

peaceful demonstrations decreases with the degree of party “dominant-ness”), but not statistically significant.

In Table 2 we report the results with respect to economic growth. As could be seen in model 1, the unconditional effect of growth on the rate of democratization is weakly negative, but clearly not statistically significant. This result is actually in line with previous studies of growth using graded (as compared to categorical) measures of democracy.<sup>7</sup> Looking at the varying effect of growth within different regime types in model 2 produces coefficients signed according to expectations, of particular magnitude for military regimes, but nonetheless never statistically significant. We again need to compare growth effects conditional on the previous level of democracy in order to produce any discernible patterns. As shown in model 3, there is a positive and statistically significant interaction effect between the level of democracy at  $t-1$  and the growth rate. This means that growth is bad news for democratization within highly authoritarian regimes. But as the initial level of democracy increases, so does the effect of growth. More importantly, and in line with the theoretical argument put forward in this paper, there is a sizeable and statistically significant difference between the effect of growth among one-party and multiparty regimes.

[Table 2 about here]

Again we need to use a graphical display in order to convey the intricacies of these dynamic patterns. As shown in Figure 3, monarchies, military and one-party regimes respond very similarly to shocks in economic performance. At low previous levels of democracy, growth has a negative impact, implying that economic crises propels democratization. For one-party regimes, as the coefficient for growth in model 3 indicates, this effect at zero level of democracy is  $-2.81$  and statistically significant. But then, with rising levels of democracy, the effect waivers off, and for most one-party regimes (the median one-party regime in the estimation sample has a level of democracy at 1.5, and the maximum level is at 3.75) growth has no effect on democratization. At similar levels of democracy, however, the situation with multiparty regimes is starkly different. These regimes are much more vulnerable to economic crisis at low levels of democracy: the negative impact of growth is as much as  $-6.26$  lower

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<sup>7</sup> Using the same democracy index (Polity), but different controls, Londregan and Poole (1996) found a negative but small short-term impact of growth on democratization, whereas Li and Reuveny (2003) found no such effect.

than for one-party regimes. Moreover, multiparty regimes respond differently, as expected, to economic crisis at higher levels of democracy (roughly above 6 on the democracy scale), now by *positively* responding to growth (or, inversely, negatively to crisis). Although there is an estimated effect of this kind for one-party regimes as well, this “effect” is merely due to extrapolation from the trends among one-party regimes at lower levels of democracy: there simply are no one-party regimes at these higher levels!<sup>8</sup>

[Figure 3 about here]

We may also note that among multiparty regimes, the same tendency is present. The positive and (this time) marginally significant interaction between size of largest party and growth in model 4 indicates that multiparty regimes more dominated by a single party are more resilient to exogenous shocks in their economic performance. Once this difference among multiparty regimes has been controlled for, moreover, the difference between limited multiparty and one-party regimes even increases somewhat.

Finally, we must concede that no hypothesized patterns appeared with respect to neighbor diffusion (Table 3). Although neighbor diffusion in itself has a significant (and positive) impact on the incidence of democratization, this effect does not vary across regime types. Neither is it contingent on the previous level of democracy, or on the size of the largest party. In the absence of better data, we are unable to conclude whether these results are due to poor measurement or would in fact reappear had we been able to include others measures of international pressure.

[Table 3 about here]

## **Conclusion**

In this paper we have developed and tested four hypotheses on how different authoritarian regimes affect democratization differently. We are now in a position to summarize our

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<sup>8</sup> Another way to perform this comparison would be to compare the share of each regime type for which there is a statistically significant effect of growth. Preliminary results indicate that there is such an effect in about 20 percent of the 183 country years of one-party regimes present in the estimation sample. The corresponding figure among the 582 country years of multiparty regimes is around 75 percent.

findings. With respect to H1, we have found that military regimes are more prone to democratize than one-party regimes as a response to popular protest, measured as the yearly number of large peaceful anti-government demonstrations. We do not however find any support for this hypothesis with respect to the other two exogenous shocks: growth and democratic diffusion. This must be interpreted as fairly limited support to Geddes' theoretical account for the differences in internal dynamics between one-party and military regimes.

What explains this failed expectation is open for speculation. With respect to democratic diffusion, we have already raised the concern that this is a poor measure of international pressure. After all, we find no significant differences in the effect of neighbor diffusion among any regime types. As far as economic performance is concerned, the lack of support for H1 is more unexpected. It could be that military regimes do not split over economic policy quite to the extent hypothesized in the literature. It could also be that one-party regimes are more vulnerable to economic performance than expected. As figure 3 shows, some one-party regimes actually do respond to economic mismanagement. To disentangle these interpretations would be worth further inquiry.

Turning to H2, monarchies behave as expected in response to popular protest, but the difference to one-party regimes is not statistically significant. With respect to growth and democratic diffusion, expectations are not borne out. Interestingly, however, the conjecture that monarchies should behave similarly to military regimes finds support in our data. Although we did not compute the estimates in Tables 1–3 in a manner amenable to testing this, the response to exogenous shocks by monarchies is in effect statistically indistinguishable from that of military regimes in all models. With respect to both peaceful demonstrations and growth, by contrast, monarchies behave significantly different (in terms of the coefficients for the interaction terms) from multiparty regimes. There thus seem to be an actual “family resemblance” among monarchies and military regimes.

H3 is the most well-supported hypothesis. Limited multiparty regimes democratize to a larger extent than one-party regimes in response to both popular protest and short-term economic performance. Although less statistically discernible, among these regimes the tendency is similar: the more a multiparty regime is dominated by one “hegemonic” party, the less they democratize as a response to these exogenous shocks (H4). Adding to this the tendency of limited multiparty systems to drift toward democracy independent of perturbations by any

exogenous shocks (as the basic model 1 makes clear; also see Hadenius and Teorell 2006), these are clearly the regimes most easily amenable to democratization.

Why is this the case? In the theoretical section above, we stressed two possible ways of understanding limited multiparty regimes, one based on democratic “responsiveness” to voters, the other on “nested games” intra-regime dynamics. We have no way of distinguishing these two models in our data. It bears noting, however, that our nominal category of “democracies” (i.e., regimes that have passed the estimated 7.5 threshold on the democracy scale) respond to shocks similarly to limited multiparty systems, only that response is stronger (see Table 1–2). Thus, democracies for example respond positively to peaceful demonstrations, but even more positively than multiparty regimes. Limited multiparty regimes thus appears to behave like bleak versions of more fully democratic countries. Had this not been the case, we could with some certainty have dismissed the “responsiveness to voters” mechanism, since that mechanism as a minimum requirement should be the one operating in more democratic countries. Nevertheless, we are not in a position to reject the “nested games” mechanism either. It could be that competition for votes only starts operating as a constraint on office holders once a certain threshold of competition has been reached. Below this threshold, the strategic struggle between regime and opposition could account for the expected behavior. In other words, our findings are consistent with both mechanisms. Trying to pit them against each other would be another worthy subject for further inquiry.

## References

- Banks, Arthur (2002) *Cross-National Time Series Data Archive*. New York: Databanks International.
- Beck, Nathaniel and Jonathan Katz (1995) “What to do (and not to do) with time-series cross-section data”, *American Political Science Review* 89(3):634-647
- Beck, Nathaniel & Jonathan Katz (1996) “Nuisance vs. Substance: Specifying and Estimating Time-Series Cross-Section Models”, *Political Analysis* 6(1):1-36.
- Bernard, Michael, Christopher Reenock and Timothy Nordstrom (2001) “Economic Performance, Institutional Intermediation, and Democratic Survival”, *Journal of Politics* 63(3):775-883.
- Bratton, Michael and Nicholas van de Walle (1997) *Democratic Experiments in Africa: Regime Transitions in Comparative Perspective*. Cambridge: Cambridge University Press.



- Brooker, Paul (2000) *Non-Democratic Regimes: Theory, Government & Politics*. New York: St. Martin's Press.
- Bueno de Mesquita, Bruce, Alastair Smith, Randolph Siverson, and James Morrow (2003) *The Logic of Political Survival*. Cambridge: The MIT Press.
- Diamond, Larry (2002) "Thinking About Hybrid Regimes", *Journal of Democracy* 13(2): 21–35.
- Drazen, Allan (2000) *Political Economy in Macroeconomics*. Princeton. Princeton University Press.
- Epstein, David, Robert Bates, Jack Goldstone, Ida Kristensen and Sharyn O'Halloran (2006) "Democratic Transitions", *American Journal of Political Science* 50(3): 551–569.
- Gasiorowski, Mark (1995) "Economic Crisis and Political Regime Change: An Event History Analysis", *American Political Science Review* 89(4):882-897.
- Geddes, Barbara (1999) "What Do We Know about Democratization after Twenty Years?", *Annual Review of Political Science* 2: 115–44.
- Geddes, Barbara (2002) "The Effect of Foreign Pressure on the Collapse of Authoritarian Regimes", Paper presented to the Annual Meeting of the American Political Science Association, Boston, 2002.
- Geddes, Barbara (2003) *Paradigms and Sand Castles: Theory Building and Research Design in Comparative Politics*. Ann Arbor: The University of Michigan Press
- Hadenius, Axel and Jan Teorell (2005a) "Cultural and Economic Prerequisites of Democracy: Reassessing Recent Evidence", *Studies in Comparative International Development* 39(4): 87–106.
- Hadenius, Axel and Jan Teorell (2005b) "Assessing Alternative Indices of Democracy", *C&M Working Papers* 6, IPSA, August 2005 ([http://www.concepts-methods.org/working\\_papers/20050812\\_16\\_PC%206%20Hadenius%20&%20Teorell.pdf](http://www.concepts-methods.org/working_papers/20050812_16_PC%206%20Hadenius%20&%20Teorell.pdf)).
- Hadenius, Axel and Jan Teorell (2006) "Authoritarian Regimes: Stability, Change, and Pathways to Democracy, 1972–2003", University of Notre Dame, Kellogg Institute Working Paper Series, forthcoming.
- Haggard, Stephan and Robert Kaufman (1995) *The Political Economy of Democratic Transitions*. Princeton: Princeton University Press.
- Herb, Michael (1999) *All in the Family: Absolutism, Revolution, and Democracy in the Middle Eastern Monarchies*. Albany: State University of New York Press.
- Howard, Marc Morjé and Philip Roessler (2006) "Liberalizing Electoral Outcomes in Competitive Authoritarian Regimes", *American Journal of Political Science* 50(2): 365–81.
- Levitsky, Steven and Lucan Way (2002) "The Rise of Competitive Authoritarianism", *Journal of Democracy* 13(2): 51–65.
- Li, Quan and Rafael Reuveny (2003) "Economic Globalization and Democracy: An Empirical Analysis", *British Journal of Political Science* 33:29-54.
- Lindberg, Staffan. 2006. "The Surprising Significance of African Elections", *Journal of Democracy* 17(1): 139–151.

- Londregan, John and Keith Poole (1996) “Does High Income Promote Democracy?”, *World Politics* 49:1-30.
- Mainwaring, Scott, Daniel Brinks and Aníbal Pérez-Liñán (2001) “Classifying Political Regimes in Latin America, 1945–1999”, *Studies in Comparative International Development*, 36(1): 37–65.
- Munck, Gerardo L and Jay Verkuilen (2002) ”Conceptualizing and Measuring Democracy: Evaluating Alternative Indices”, *Comparative Political Studies*, 35(1):5-34.
- Przeworski, Adam, Michael Alvarez, José Antonio Cheibub, & Fernando Limongi (2000) *Democracy and Development: Political Institutions and Well-Being in the World, 1950–1990*. Cambridge: Cambridge University Press.
- Reich, Garry (2002). “Categorizing Political Regimes: New Data for Old Problems”, *Democratization* 9: 1–24.
- Schedler, Andreas (2002a) “The Nested Game of Democratization by Elections”, *International Political Science Review* 23(1): 103–22.
- Schedler, Andreas (2002b) “The Menu of Manipulation”, *Journal of Democracy* 13(2): 36–50.
- Schedler, Andreas, (ed., 2006a) *Electoral Authoritarianism: The Dynamics of Unfree Competition*. Boulder & London: Lynne Rienner.
- Schedler, Andreas, (2006b) “The Logic of Electoral Authoritarianism”, in Schedler, A., ed., *Electoral Authoritarianism: The Dynamics of Unfree Competition*. Boulder & London: Lynne Rienner.
- Snyder, Richard and James Mahoney (1999) “The Missing Variable: Institutions and the Study of Regime Change”, *Comparative Politics* 32(1): 103–22.
- Stinnett, Douglas, Jaroslav Tir, Paul F. Diehl, Philip Schafer and Charles Gochman (2002) “The Correlates of War (COW) Project Direct Contiguity Data, Version 3.0”, *Conflict Management and Peace Science* 19(2):59-67.
- Teorell, Jan and Axel Hadenius (2006) “Determinants of Democratization: Taking Stock of the Large-N Evidence”, mimeo., Department of Political Science, Lund University.
- Ulfelder, Jay (2005) “Contentious Collective Action and the Breakdown of Authoritarian Regimes”, *International Political Science Review* 26(3): 311–34.
- Van de Walle, Nicolas (2006) “Tipping Games: When Do Opposition Parties Coalesce?”, in Schedler, A., ed., *Electoral Authoritarianism: The Dynamics of Unfree Competition*. Boulder & London: Lynne Rienner.
- WDI (2004), *World Development Indicators Database Online*. The World Bank Group. Available for subscriber online at: [publications.worldbank.org/WDI/](http://publications.worldbank.org/WDI/).

**Table 1. The Contingent Effect of Peaceful Demonstrations on Democratization**

	Model			
	(1)	(2)	(3)	(4)
Demonstrations	.029*** (.009)	-.006 (.023)	.023 (.024)	.021 (.024)
Regime type:				
Monarchy	.103 (.079)	.093 (.080)	.074 (.079)	.079 (.079)
Military	.044 (.073)	.032 (.077)	.008 (.078)	.001 (.078)
Multiparty	.711*** (.101)	.686*** (.106)	.615*** (.106)	.601*** (.107)
Democracy	1.56*** (.159)	1.58*** (.163)	1.42*** (.166)	1.41*** (.166)
Other	.694*** (.141)	.678*** (.145)	.651*** (.145)	.651*** (.144)
Regime type interactions:				
Monarchy × Demonstrations	—	.041 (.086)	.063 (.086)	.067 (.086)
Military × Demonstrations	—	.038 (.032)	.084** (.083)	.094*** (.034)
Multiparty × Demonstrations	—	.054** (.027)	.166*** (.036)	.193*** (.040)
Democracy × Demonstrations	—	.021 (.025)	.230*** (.051)	.251*** (.053)
Other × Demonstrations	—	.042 (.040)	.098** (.041)	.115*** (.043)
Demonstrations × Level of Democracy at $t-1$	—	—	-.029*** (.005)	-.028*** (.006)
Mean Executive Turnover	.411*** (.084)	.405*** (.084)	.402*** (.083)	.404*** (.083)
Size of Largest Party	-.132** (.063)	-.128** (.063)	-.120* (.064)	-.091 (.067)
Size of Largest Party × Demonstrations	—	—	—	-.054 (.033)
Adjusted R <sup>2</sup>	.256	.257	.266	.266
Root mean squared error	.591	.591	.587	.587

\* significant at the .10-level. \*\* significant at the .05-level. \*\*\* significant at the .01-level.

No. of observations = 2740; No. of countries = 145; Mean years observed per country = 18.9

*Note:* Entries are unstandardized regression coefficients, with panel-corrected standard errors within parentheses. The dependent variable is yearly change in the average FH/Polity-scores 1972–2002, with missing values imputed from the FH-scores. One-party regimes are treated as the reference category for regime type. In all models, the first three one-year lags of the dependent variable is entered in order to purge the standard errors from serial autocorrelation, and the following control variables, lagged one year (where appropriate), are included: British, French, Spanish, Portuguese, and Belgian/Italian/Dutch colonial background; the proportion of Protestants, Orthodox Christians, Christians of other denomination, Buddhists, Hindus, Muslims, Nonreligious and of Other denomination; ethno-linguistic and religious fractionalization; the log of the population; a composite index of socio-economic modernization; oil and minerals; trade and capital flows; democratic diffusion at the level of neighboring states, within regions, and globally; growth and inflation; strikes and riots.

**Table 2. The Contingent Effect of Growth on Democratization**

	Model			
	(1)	(2)	(3)	(4)
Growth	-.129 (.263)	-.580 (.785)	-2.81*** (.874)	-2.86*** (.876)
Regime type:				
Monarchy	.103 (.079)	.106 (.081)	.098 (.079)	.099 (.079)
Military	.044 (.073)	.032 (.075)	.044 (.077)	.046 (.077)
Multiparty	.711*** (.101)	.710*** (.102)	.749*** (.099)	.756*** (.099)
Democracy	1.56*** (.159)	1.57*** (.159)	1.65*** (.151)	1.66*** (.151)
Other	.694*** (.141)	.745*** (.141)	.777*** (.141)	.780*** (.140)
Regime type interactions:				
Monarchy × Growth	—	.229 (1.14)	-.857 (1.22)	-.958 (1.22)
Military × Growth	—	1.51 (.930)	.458 (.971)	-.034 (1.34)
Multiparty × Growth	—	.249 (1.01)	-6.26*** (1.28)	-7.25*** (1.40)
Democracy × Growth	—	-.410 (.864)	-13.2*** (1.87)	-14.2*** (1.94)
Other × Growth	—	2.65 (1.62)	1.13 (1.64)	.973 (1.64)
Growth × Level of Democracy at $t-1$	—	—	1.72*** (.216)	1.75*** (.216)
Mean Executive Turnover	.411*** (.084)	.423*** (.082)	.415*** (.081)	.413*** (.081)
Size of Largest Party	-.132** (.063)	-.133** (.063)	-.125** (.061)	-.139** (.062)
Size of Largest Party × Growth	—	—	—	1.59* (.933)
Adjusted R <sup>2</sup>	.256	.259	.287	.287
Root mean squared error	.591	.590	.579	.579

\* significant at the .10-level. \*\* significant at the .05-level. \*\*\* significant at the .01-level.

No. of observations = 2740; No. of countries = 145; Mean years observed per country = 18.9

Note: See Table 1, except that demonstrations are now in the control model (whereas growth is not).

**Table 3. The Contingent Effect of Diffusion on Democratization**

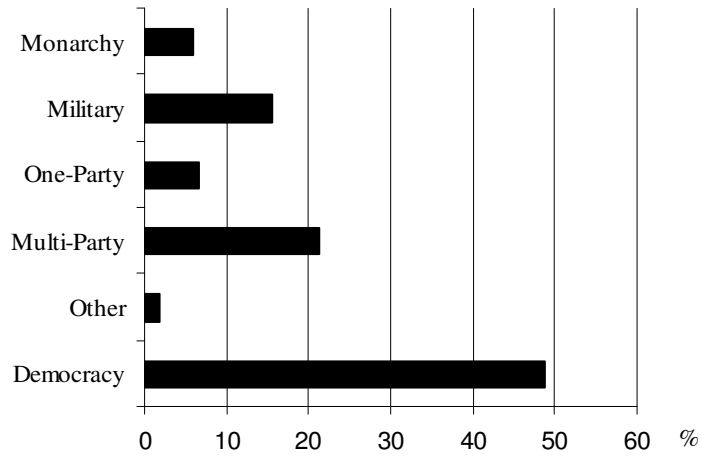
	Model			
	(1)	(2)	(3)	(4)
Neighbor democratization	.099*** (.036)	.080 (.118)	.017 (.127)	.026 (.127)
Regime type:				
Monarchy	.103 (.079)	.093 (.081)	.102 (.083)	.103 (.083)
Military	.044 (.073)	.036 (.075)	.040 (.075)	.034 (.076)
Multiparty	.711*** (.101)	.713*** (.103)	.728*** (.104)	.719*** (.104)
Democracy	1.56*** (.159)	1.57*** (.160)	1.60*** (.162)	1.59*** (.162)
Other	.694*** (.141)	.628*** (.148)	.637*** (.150)	.635*** (.150)
Regime type interactions:				
Monarchy × Neighbor democratization	—	.019 (.208)	-.068 (.209)	-.042 (.211)
Military × Neighbor democratization	—	.099 (.145)	.075 (.143)	.143 (.163)
Multiparty × Neighbor democratization	—	.007 (.151)	-.107 (.171)	.037 (.203)
Democracy × Neighbor democratization	—	-.031 (.124)	-.330 (.257)	-.186 (.278)
Other × Neighbor democratization	—	.386 (.327)	.339 (.336)	.388 (.332)
Neighbor democratization × Level of Democracy at $t-1$	—	—	.041 (.030)	.035 (.030)
Mean Executive Turnover	.411*** (.084)	.400*** (.085)	.398*** (.084)	.398*** (.084)
Size of Largest Party	-.132** (.063)	-.133** (.062)	-.133** (.063)	-.119* (.064)
Size of Largest Party × Neighbor democratization	—	—	—	-.204 (.145)
Adjusted R <sup>2</sup>	.256	.256	.257	.257
Root mean squared error	.591	.591	.591	.591

\* significant at the .10-level. \*\* significant at the .05-level. \*\*\* significant at the .01-level.

No. of observations = 2740; No. of countries = 145; Mean years observed per country = 18.9

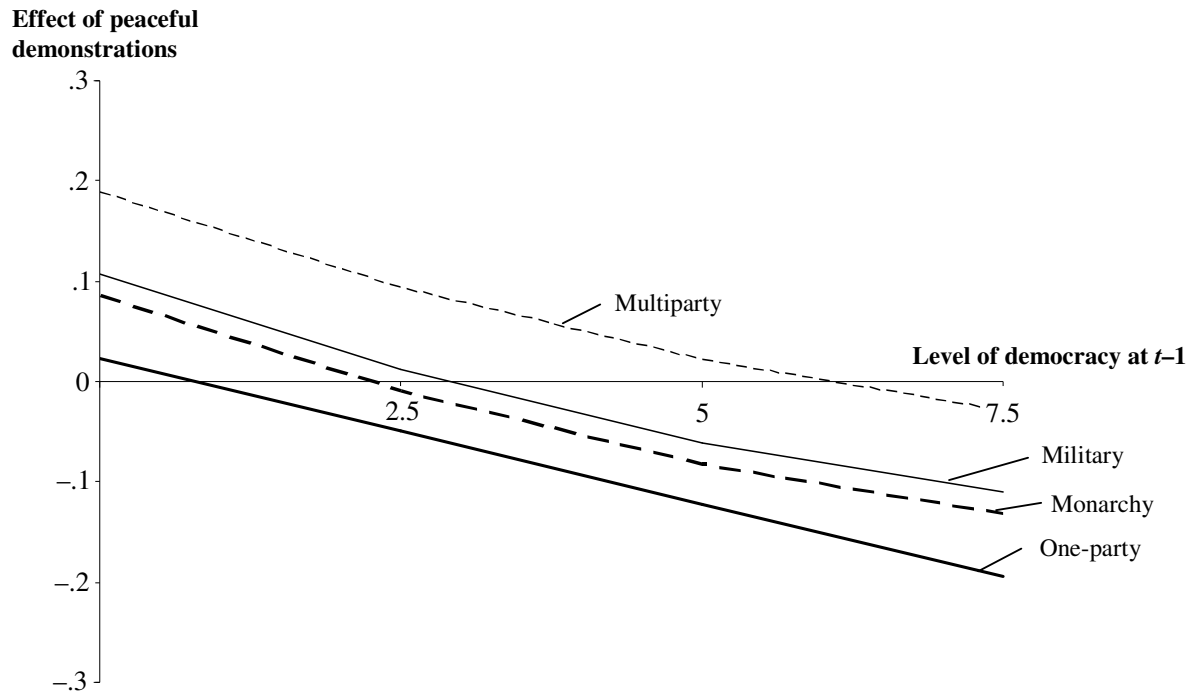
*Note:* See Table 1, except that demonstrations are now in the control model (whereas neighbor democratization is not).

**Figure 1. The Distribution of Regime Types, 1972–2002**



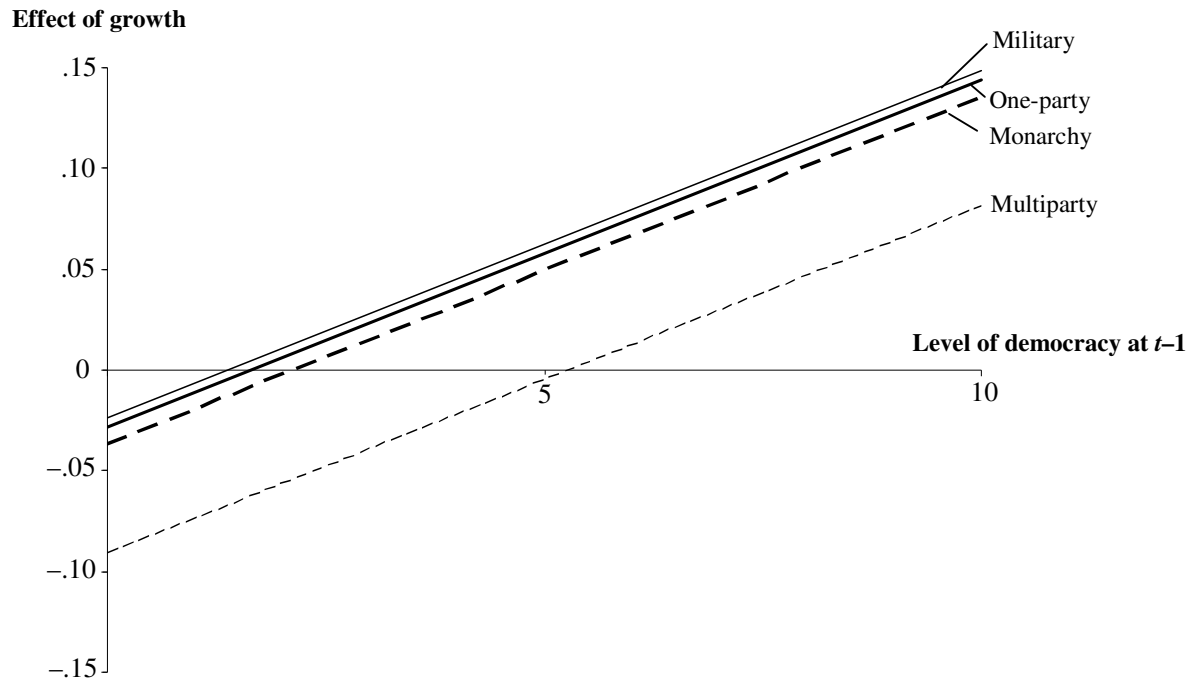
*Note:* The figure depicts the share of country years classified into each regime category within the estimation sample of 2740 country years.

**Figure 2. Conditional Effects of Peaceful Demonstrations**



*Note:* The figure depicts the predicted increase in the rate of democratization following a unit change in the number of peaceful demonstrations occurring in a country, conditional on the level of democracy at  $t-1$  and the authoritarian regime type ( $n=2740$  country years).

**Figure 3. Conditional Effects of Growth**



*Note:* The figure depicts the predicted increase in the rate of democratization following a percentage unit change in the growth rate, conditional on the level of democracy at  $t-1$  and the authoritarian regime type ( $n=2740$  country years).