Do Democratic Transitions Produce Bad Economic Outcomes?*

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Several influential commentators have suggested recently that democratization in developing countries produces political instability, ethnic conflict, and poor economic outcomes. For instance, Robert D. Kaplan (2000, p.62) states that "If a society is not in reasonable health, democracy can be not only risky but disastrous". Fareed Zakaria (2003, p.98) points out that "although democracy has in many ways opened up African politics and brought people liberty, it has also produced a degree of chaos and instability that has actually made corruption and lawlessness worse in many countries". Amy Chua (2002, p.124) argues that: "(…) in the numerous countries around the world with a market-dominant minority, (…) [a]dding democracy to markets has been a recipe for instability, upheaval, and ethnic conflagration".

These authors buttress their claims with examples of democratic reforms that led to economic chaos and eventually a collapse back into autocracy. Such anecdotal evidence can be problematic from two perspectives. First, it is not clear how universal the pattern is. Perhaps the vast majority of other countries have had more successful transitions. For example, we rarely hear in these accounts about Mauritius and Botswana, two long term African success stories that also happen to be democratic countries. Second, these anecdotal accounts leave the counterfactual unspecified. Perhaps countries would have been even worse off in the absence of democratic transitions.

Does social science back up the pundits' claims? We show in this paper that the data do not support the view that democratization is bad for economic performance. Our analysis reveals that major democratic transitions have, if anything, a *positive* effect on economic growth in the short

run. Contrary to the claims of Kaplan, Zakaria, and Chua, this is especially true for the poorest countries of the world and those that are marked by sharp ethnic divisions. Democratizations tend to follow periods of low growth rather than precede them. Moreover, democratic transitions are associated with a decline in growth volatility. Systematic analysis therefore uncovers a picture that is considerably more favorable to democratization.

1. Methodology and Data

The relationship between democracy and economic performance has been studied mostly using cross-national regression techniques.[1] The cross-country literature typically finds that democracies are associated with no statistically significant changes in economic growth, but with significant reductions in economic volatility. A serious shortcoming of this literature is that it only addresses long-run relationships: it does not directly answer what happens during and in the immediate aftermath of transitions to democracy.

In this paper, we use annual frequency data to examine the within-country effects of democratization on economic growth.[2] Panel data econometrics is ideally suited to address the question posed by our title. We include in our estimations time and country fixed effects, so that we can distinguish the impact of democratization per se from other determinants having to do with country characteristics or time effects. We also control for other types of regime transitions, and therefore are able to estimate the effect of democratic transition relative to the counterfactual of no regime change of any kind. Finally, we check how, if at all, the patterns differ in various subsamples, and in low-income countries in particular.

We identify democratic transitions (as well other regime changes) using Polity IV (2002) codes, distinguishing between the early phase of the transitions and the subsequent phase (assuming the transition is maintained) so that we can look into effects over different horizons. We define several dummy variables to capture various kinds of regime change. The dummy variable *New Democracy* takes on a value of 1 in the year(s) and subsequent 5 years of any major

democratization (as defined by Polity IV), unless the process is interrupted by another major regime change, in which case the dummy is coded as 1 until the interruption. The variable *Established Democracy* is defined similarly for years following the first 5 years of major democratic transitions. The sum of these two dummy variables is labeled *Democratic Transition* and takes on a value of 1 in all years following a major democratization episode, until it is interrupted by another major regime change. We define corresponding dummies *New Autocracy*, *Established Autocracy*, and *Autocratic Transition* for regime changes in the direction of autocracy. In addition, we use the dummy variables *State Failure* and *Small Regime Change* to capture, respectively, instances of complete collapse of a country's central political authority and of small changes in the Polity score that do not qualify either as major democratization or major moves towards autocracy. (Again, these definitions are those of Polity IV, not ours.) Our growth data come from the Penn World Tables, version 6.1, and they extend from 1950 to 2000 for up to 154 countries.

2. Full Sample Results

Table 1 displays the results of our fixed-effects regressions in the full sample. In column 1 we introduce only *Democratic Transition*. Its estimated coefficient is statistically indistinguishable from zero–which already bodes ill for the claim that democratizations bring about economic collapse. In the next column, we distinguish between new democracies (those within the first 5 years subsequent to the democratic transition) and established democracies (those that democratized more than 6 years prior). While neither estimated coefficient is significant, an interesting sign pattern emerges: the coefficient on the *New Democracy* dummy is positive while that on *Established Democracy* is small and negative. This once again contradicts the claim that the short run impact of democratic transitions is negative.

Neither of these two regressions properly estimates the impact of democratization vis-à-vis a pure counterfactual of "no regime change," however, since the specification lumps together all

political "states" other than transitions to democracy. In column (3) we include dummy variables to control for other types of regime changes. The coefficients on democratic transition variables now capture the estimated effects of democratization *absent* other regime changes of any kind. Column (3) is therefore our baseline specification. The results are striking: the estimated coefficient on *New Democracy* is now positive and statistically significant at the 95% confidence level. Moreover, the magnitude of this effect is large: we find that new democracies grow 0.87 percentage points faster than countries experiencing no regime changes.[3] As expected, state failures bring about growth collapses. The results also reveal that small changes in regime (in either direction) are associated with higher growth, a somewhat surprising finding that is worth more analysis in future work.

Overall, Table 1 provides no support for the claim that democratic transitions bring about adverse economic consequences. On the contrary, the short-run effects of such transitions seem to be positive when compared to the baseline of no regime change.

3. Results: Selected Subsamples

It could be that the effects of democratic transitions are heterogeneous across countries, and that, for instance, poor or ethnically diverse countries such as those in Africa are particularly unsuited for democratic transitions. The quotes cited in our introduction apply precisely to this set of countries. The argument of Kaplan et al. is that democratic transitions are highly risky in low-income setting with poor institutions and ethnic divisions. In this section, we test these hypotheses formally. To do so, we examine three subsamples: countries with very low incomes, countries with high levels of ethnic fractionalization, and countries in Sub-Saharan Africa.

Table 2 presents the results. Column 1 considers only countries with per capita income lower than the sample mean.[4] The estimated coefficient on *New Democracy* is now doubled in magnitude and is much more significant statistically. This is true even if we do not control for the other regime change variables. In column 2, we isolate countries with levels of ethnic

fractionalization greater than the sample mean.[5] Again, the coefficient on *New Democracy* is increased in magnitude. Finally, column 3 includes only the subsample of countries in Sub-Saharan Africa. This time, the estimated coefficient on the *New Democracy* dummy rises to 2.8 percentage points, i.e. it is tripled relative to the benchmark specification of Table 1. In all these subsamples, moreover, the coefficient on *Established Democracy* becomes positive – although it remains insignificant.

To summarize, we find no evidence that democratization wreaks economic chaos in poor, ethnically diverse, African countries. Quite to the contrary, these countries seem to experience a short term boost in growth that exceeds the one in the broader sample. Our evidence directly contradicts the commentators' claims.

4. The Growth Experience of Democratizing Countries

In this section, we discuss in greater detail the growth experience of countries that underwent significant and sustained democratic transitions. Our goal is twofold. First, we seek to illustrate with specific examples the large-sample results discussed in sections 2 and 3. Second, we want to get a sense of the heterogeneity of individual country experiences around the large-sample means. For the purposes of this section, we restrict attention to 24 countries where the only experience with regime change over the period under consideration was a major democratization. These are countries that underwent major democratic transitions according to Polity IV, following a period of prolonged autocracy (of at least 9 years) and where the democratic transition was not reversed as of the end of our sample period (2000). We also require at least 9 years of data before and after democratization, to conduct meaningful comparisons of average growth rates. Twenty-four countries in our sample fit these criteria, and are listed in Table 3.

a. African Countries. We first consider the experience of Sub-Saharan African countries in this subsample, since Africa was the main focus of the commentators cited earlier. In Africa, three countries experienced episodes of democratization that began in the early 1990s and had not

been reversed as of 2000. They are Benin (1990), Mali (1991) and Madagascar (1991). Figure 1 displays the growth experience of these three countries in the 10 years before and after democratization. All three countries actually experienced increases in average growth rates in the period following democratization. In Benin, average per capita income growth in the ten years preceding 1991 was 0.28%. In the ten years following the first free elections in 1991, which marked the end of the dictatorship of Matthieu Kérékou, growth rose to 1.45%.[6] In Madagascar, the adoption of democratic institutions in 1991 and free elections in 1992 and 1993 put an end to seventeen years of a single party regime. Average per capita income growth was negative both before and after democratization, but growth rose more than one percentage point from an average of -1.87% before 1991 to -0.75% in the decade following democratization. Finally in Mali, where Alpha Konaré was elected to the presidency in 1992 after thirty years of dictatorship, per capita income growth rose from an annual average of -2.24% in the ten years before 1991 to 2.5% in the ten years that followed. As the large-sample results in Table 2 suggest, the experience of these countries appears to be representative of Sub-Saharan Africa's typical medium-run experience with democratization.

b. The path of growth around 24 democratizations. Figure 2 displays the typical path of growth around democratization in all 24 countries in the subsample, partialing out country-specific intercepts and year effects.[7] A note of caution is in order: in one important respect, this selected subsample is not representative of the broader sample on which we based our earlier regressions: here, there appears to be no discernible surge in growth in the 5 years immediately following democratization. Thus, inferences from this subsample should be drawn cautiously.[8] However, there is still value in displaying the simple before-after path of growth in a set of countries with democratizations that were particularly clear-cut, and where there is enough data before and after to clearly assess medium term growth differences.

What the graph shows clearly is that democratizations tend to follow rather than precede declines in growth. In a typical country, growth falls rather precipitously in the 4th year preceding

democratization. Moreover, there appears to be no growth decline on average after these large and sustained democratizations. Growth trends slightly upwards in the ten years that follow as countries recover from pre-democratization crises.

Another noteworthy characteristic of these experiences with democratization is the sharp fall in the standard deviation of growth after democratization: in a typical country in this subsample, the standard deviation of growth falls from 5.29 to 3.37 percentage points – and this 1.92 percentage points decline is statistically significant at the 95% level. This observation confirms in a within-country context a finding of the cross-country literature: the volatility of growth tends to be lower in democracies (Rodrik, 2000).

c. The heterogeneity of country experiences with democratization. Table 3 displays average growth in the 10 years before and after democratization in the 24 countries in the subsample. Interesting lessons emerge from this table. First, there is tremendous heterogeneity in countries' experience. The differences in growth before and after democratization range from a 7.19 percentage point drop in the (ten-year) average annual growth rate following Ecuador's 1979 democratization to a 4.75 percentage point rise in Mali. Obviously, many idiosyncratic factors besides democratization account for these differences. Second, the number of countries experiencing higher growth is the same as that experiencing reduced growth—12 in each case. Not surprisingly, therefore, a regression based on this set of countries produces an effect of democratic transitions on growth that is statistically indistinguishable from zero.[9] Third, the overwhelming majority (8 out of 12) of the countries that underwent growth declines are Latin American countries, the other four being Romania, Spain, Portugal and Hungary, which were already upper-middle income countries at the time of their democratization. African and Asian countries appear exclusively in the list of countries having undergone positive effects. These include Bangladesh and Nepal, two low-income countries that clearly did not experience collapses in growth post-democratization.

5. Concluding Remarks

The hypothesis that democratization is followed by bad economic performance, particularly in poor, fractionalized countries, is not supported by our analysis of the within-country variation. Claims that democratization leads to disappointing economic results are often used to justify calls to delay political reforms in poor, ethnically divided countries until they become "mature enough" for democracy. Commentators often suggest that wealth leads to democracy rather than the other way around. They argue that this justifies tolerance for autocratic regimes on the grounds that they are best able to grow the economy to the point where it is "ready" for democracy. The problem with this view is that it presupposes that autocracies deliver better performance than democracies. We have shown this hypothesis to be false. Democratization surely yields benefits—in terms of individual freedom and empowerment—that are valued independently of their consequences for material wealth. In the average country in our sample, democratization comes at no discernible cost in terms of growth, and with likely benefits in the form of a short-run boost in growth and reduction in economic volatility. Thus, a priori arguments or casual empiricism cannot be used to justify the postponement of political reform in developing countries on economic grounds. On the other hand, the heterogeneity in countries' growth experiences following democratization suggests that further analysis of the factors conducive to successful political transitions would constitute a fruitful line of inquiry.

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[1] See for instance Robert Barro (1995), Dani Rodrik (1999 and 2000) and José Tavares and Romain Wacziarg (2001).

[2] Elias Papaioannou and Gregorios Siourounis (2004) also look at within-country variation. However, they use slightly different methods and reach different conclusions than we do for reasons that we have not been able to identify.

[3] Column 5 allows the error term to be autocorrelated (AR1); the results do not change.

[4] We retained 73 countries for which log per capita income, averaged over available years of data, was less than 8.21.

[5] We use the measure of ethnic fractionalization from Alberto Alesina et al. (2003). Its sample mean is 0.44.

[6] Kérékou was returned to power in 1996 and again in 2001 – but by means of elections.

[7] The figure plots the coefficients on fixed effects estimates of dummies for each of 10 years before and after democratization. 95% confidence intervals are based on the standard errors of these coefficients. The regressions include country and year effects. A constant, equal to the mean growth rate across countries and years was added to all coefficients so the graph depicts the growth path of a "typical" country in this subsample.

[8] A noteworthy aspect of the selection of this subsample is the focus on countries that had not reverted to autocracy as of 2000. One might presume that this would lead to selecting countries that had particularly good growth performances post-democratization, if poor economic performance is conducive to the return of autocracy. Yet this does not seem to be the case: the post-democratization growth rate of these countries does not experience the short term boost seen in the broader sample, and their growth experiences do not appear any different at longer horizons.

[9] The fixed effects coefficient on the *Democratic Transitions* dummy for this subsample is -0.354 with a t-statistic of 0.31.

Table 1 – Fixed-effects estimates of the regime transition specification
Dependent variable: Growth of per capita real GDP, PPP.

	(1)	(2)	(3)	(5)
Democratic Transition	0.216			
	(0.67)			
New Democracy		**0.425**	**0.866**	**0.890**
		(1.17)	**(2.07)****	**(2.11)****
Established Democracy		-0.203	-0.200	-0.140
		(0.45)	(0.43)	(0.30)
New autocracy			0.220	0.171
			(0.49)	(0.37)
Established Autocracy			-0.109	-0.227
			(0.24)	(0.49)
State failure dummy			-6.169	-6.137
			(6.46)**	(6.45)**
Small regime change			0.938	0.940
			(3.40)**	(3.36)**
Constant	0.832	0.801	0.674	1.633
	(1.03)	(0.99)	(0.84)	(2.06)**
# Observations (# countries)	5619 (154)	5619 (154)	5619 (154)	5465 (154)

Absolute value of t statistics in parentheses; * significant at 10%; ** significant at 5%
Column 5 allows for serially correlated (AR1) disturbances.

Table 2 – Fixed effects estimates of the regime transition specification - subsamples
Dependent variable: Growth of per capita real GDP, PPP.

	(1)	(2)	(3)
	Low income countries	**Ethnically diverse countries**	**Sub-Saharan Africa**
New Democracy	**1.596**	**1.194**	**2.811**
	(2.43)**	**(1.96)***	**(2.73)****
Established Democracy	0.382	0.530	2.603
	(0.46)	(0.68)	(1.00)
New Autocracy	0.191	0.043	0.166
	(0.30)	(0.07)	(0.18)
Established Autocracy	-0.137	0.076	-0.049
	(0.21)	(0.12)	(0.05)
State failure dummy	-6.993	-6.216	-5.757
	(5.63)**	(4.74)**	(3.69)**
Small regime change	1.360	0.786	2.330
	(3.15)**	(1.88)*	(3.60)**
Constant	0.631	0.904	-0.022
	(0.39)	(0.70)	(0.01)
# Observations (# countries)	2792 (73)	2786 (74)	1743 (43)

Absolute value of t-statistics in parentheses; * significant at 10%; ** significant at 5%.

Table 3 – Average Growth 10 Years Before and 10 Years After Democratization in 24 Countries

Country	Year of democratization	Average growth before	Average growth after	Growth Difference
Ecuador*	1979	6.764	-0.425	-7.189
Romania	1989	4.174	-2.424	-6.598
Portugal	1974	7.022	1.222	-5.800
Spain	1975	5.430	0.313	-5.117
El Salvador	1979	1.809	-3.112	-4.920
Bolivia	1982	1.694	-1.969	-3.664
Hungary	1988	2.354	-0.668	-3.022
Dominican Republic	1978	4.364	1.628	-2.736
Honduras	1980	2.256	-0.080	-2.336
Peru	1978	1.685	-0.107	-1.792
Brazil	1985	1.441	1.199	-0.242
Paraguay	1989	1.424	1.204	-0.220
Bangladesh	1991	2.725	2.757	0.032
Nicaragua	1990	-3.738	-3.091	0.646
Nepal	1990	1.559	2.568	1.009
Rep. of Korea	1987	5.841	6.857	1.016
Philippines	1986	-0.126	0.931	1.057
Panama	1989	0.886	1.952	1.066
Madagascar	1991	-1.871	-0.754	1.117
Benin	1990	0.277	1.449	1.172
Poland*	1989	-0.795	1.783	2.578
Uruguay	1985	-0.022	3.739	3.761
Chile	1988	1.589	5.797	4.208
Mali	1991	-2.243	2.504	4.746

* Only 9 years of data available before democratization.

A version of this table computing averages over all available years of data (rather than 10 years before and after) is very similar and available upon request.

Figure 1 − Three African Examples

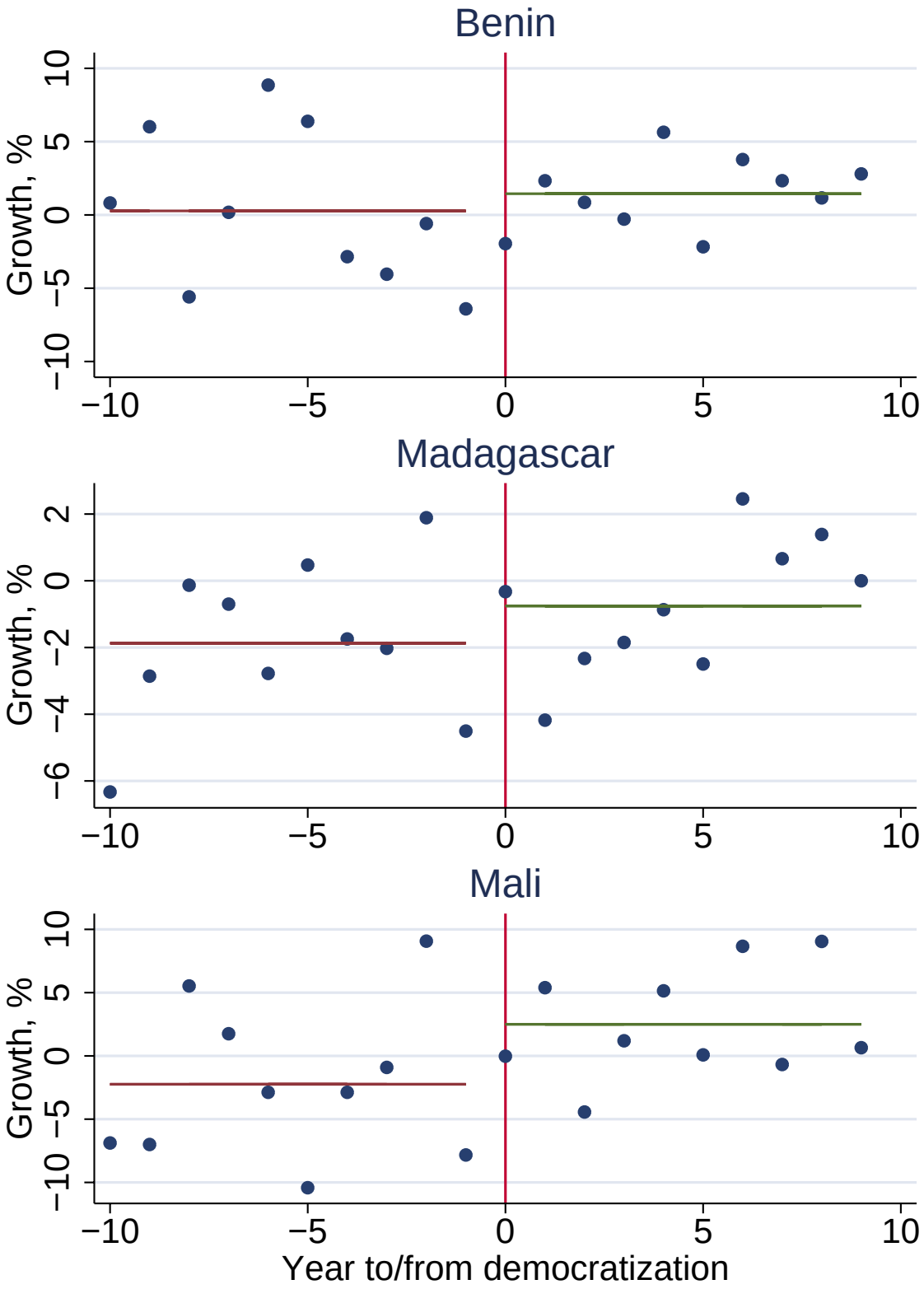

Figure 2 - Typical Path of Growth around Democratization, Subsample of 24 Countries (country and year effects partialled out, 95% conf. int. included)