# Young Democracies and Government Size: Evidence from Latin America<sup>\*</sup>

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#### Abstract

We empirically investigate the hypothesis that when democracies are young, or still fragile and unconsolidated, the size of government (in terms of consumption, debt and share to GDP) tends to increase (presumably in an attempt to somehow buy out the electorate, so that democracy becomes acceptable and 'the only game in town'). Our sample includes nine Latin American countries between 1970 and 2007 and the results, based on principal component and panel data analyses (POLS, Fixed Effects and SYS-GMM estimators), suggest that the young democracies of Latin America have been indeed associated with bigger governments. Furthermore, we test for the hypothesis that the old dictatorships also engaged in activities which would leave the young democracies with bigger bills to be repaid, therefore with justifiably bigger governments in their initial stages. This hypothesis is not confirmed by the analysis conducted here. Finally, there is some evidence that as democracies, and also the electorate, mature over time, the size of government decreases, or returns to a sort of steady state.

Keywords: Democracy, government, Latin America.

JEL Classification: H11, N16, O11, O54.

## I. Introduction and Motivation

Latin America, at least in its recent history, has been known for political transitions from dictatorships to more democratic regimes, macroeconomic instability (in terms of high rates of inflation), delayed stabilisation processes in the spirit of Alesina and Drazen (1991) (in some cases macroeconomic stabilisation took roughly ten years to be achieved), and no come back to less democratic regimes (democracy seems to be maturing in the continent). The region has also been known for a certain, rather above the average, degree of persistent economic inequality<sup>1</sup>.

Against this background, we test the hypothesis that governments in young democracies tend to consume more, generate higher debt and consequently increase their shares to GDP (or overall size) at the initial stages of these transitions to more democratic regimes. This might be because new regimes face many challenges; sometimes crumbling infrastructure, low wages of civil servants, or even the need to renovate the entire bureaucracy. In addition, the reason for this increase in size might be the high economic inequality prevalent in some countries in the region and the need for some sort of redistribution (Meltzer and Richard (1991)). Or it can also be that democracy in its infancy faces severe opposition, and therefore these new regimes try to buy out the electorate so that democracy becomes ideologically acceptable and literally 'the only game in town'.

Moreover, we investigate whether the last dictatorship in power engaged in activities which would leave those new democratic regimes with considerable debt to be repaid. That would explain the need for higher borrowing, and therefore higher debt when democracies are still young (Alesina and Tabellini (1990)). Finally, we check the hypothesis that democracies, even very young ones, mature over time, or that the electorate learn the nuts and bolts of the democratic game so that governments start being more responsible, and perhaps efficient, at least in terms of spending and debt generation.

To conduct the analysis we use data from nine Latin American countries which redemocratised at some point in the 1970s, 1980s or 1990s, and given data availability, we cover the period between 1970 and 2007. For the empirical analysis we make use of static and dynamic panel data models. More specifically, we use the Pooled Ordinary Least Squares, Fixed Effects and SYSTEM Generalised Method of Moments estimators.

In terms of results, firstly we find that governments indeed increased in size during the first two democratic terms and, in fact, during the whole democratic period. Secondly, we do not find any evidence that the outgoing dictatorships of the day engaged in some sort of bigger government activities and left the new democratic coalitions with significant debt to be repaid. Hence, this particular excuse for the need for higher government borrowing and debt in young democracies can be avoided. Thirdly, we are able to provide some evidence that democracies indeed mature over time, or that government size starts coming down as time after democratisation passes by.

The subject of electoral budget cycles has attracted attention for some time and the literature is clearly evolving over time in terms of explanations provided for the very existence of bigger governments. For instance, Rogoff and Sibert (1988), and Rogoff (1990) theoretically suggest that information is asymmetric, at least in the short run, and that governments doing a rather good job will actually try to signal to the electorate, via higher spending or lower taxes, their achievements. Following that lead, Gonzalez (2002) studies the case of Mexico, a sort of mature democracy, at least in Latin American terms, and finds out that even under a one-party democracy, which is the Mexican case, the government increases spending during *more* democratic periods within an already democratic regime. This is probably to avoid opposition within the governing coalition or even to signal particular good deeds.

Woo (2003) formally introduces the role of inequality in the analysis, which some would argue to be an important factor in Latin America. He makes use of panel data and finds that inequality, and also finance, are related to bigger public deficits (probably via some sort of redistribution and easy access to finance). Akhmedov and Zhuravskaya (2004) investigate the case of a young democracy, Russia, to find out that fiscal cycles diminish with time, or as they put it, with a freer and better media, a less-myopic electorate, and better checks and balances governments become less frivolous in their spending activities. All in all, with time there is a learning process of the nuts and bolts of democracy. Brender and Drazen (2005) extend on this and suggest that in a large cross-section of countries fiscal cycles are driven by young democracies, since voters tend to be fiscal conservatives in more mature societies (OECD countries).

Woo (2005 and 2008) extend on his previous analysis and suggests that polarisation within the coalition in power might generate a fight for the common resources pool, which leads to higher deficits and consequently output collapse. Shi and Svensson (2006) also make use of panel data and suggests that in election years the deficit increases, particularly in developing countries in which corruption tends to be more prevalent. Brender and Drazen (2007) extend on the idea of young democracies being vulnerable and not entirely supported by the electorate, and indicate that higher spending during the first years of democratisation is a temporary solution to buy out the electorate so that democracy becomes 'the only game in town'.

Finally, Alesina, Tabellini and Campante (2008), also using panel data, suggest that fiscal pro-cyclicality in developing countries takes place because the electorate attempts to 'starve the Leviathan', or to make sure to extract, during booms, from the government all resources possible, before the coalition in power wastes those resources in more frivolous activities.

In essence, the literature clearly suggests that governments, not only in developing countries as well suggested by Rogoff (1990), tend to increase in size either before elections (for all sorts of reasons), or because, particularly in developing countries with young democracies, the new regime faces all sorts of challenges (inequality, corruption, ideological unacceptance), so the need to buy out the electorate. Furthermore, the literature suggests that young democracies do not stay 'forever young', they mature, and with maturity governments tend to become either more efficient with their spending, or more conservative and responsible in what they spend.

Given the above, the value added of this paper to the literature is that we make use of a sample of Latin American countries (all sharing some developing countries characteristics, but with their own idiosyncrasies), which democratised at some point in the last forty years or so. This is interesting in itself because with that sample we can disaggregate and further our knowledge on how governments in young democracies behave over the short *and* long run, and not only during electoral years, in terms of consumption, debt generation and overall government size. Furthermore, we construct a variable for government size based on principal component analysis that is believed to offer more explanatory power, and make use of a range of panel data estimators to make sure that our results are robust. It is therefore believed that we are able to provide some robust evidence to specifically understand the recent history of Latin America, instead of treating the region either as an outlier to be removed from the sample, or as a dummy variable.

The remainder of this paper is as follows: the next sections describe the data set, the empirical methodology used, and then it presents and discusses the main results obtained. We then conclude and offer some future research avenues that can be pursued from here.

#### II. Empirical Analysis

# A. A Look at the Data

The data set covers the period between 1970 and 2007, and nine Latin American countries which transitioned from political dictatorship to full democracy at some point in the late 1970s (Ecuador), 1980s (Argentina, Bolivia, Brazil, Chile, Peru and Uruguay), and early 1990s (Guyana and Paraguay).

The variables used to measure the size of government are the share of government to GDP (from the Penn World Table), government consumption (from the International Financial Statistics provided by the IMF), and the share of public debt to GDP (from the recently released Historical Public Debt Database, also provided by the IMF). With that sort of information we can then make use of principal component analysis and extract from the standardised data matrix the unobserved common factors of these three, and rather popular in the literature, variables for government. We therefore end up with a proxy for government size (GOV) which contributes to reduce model uncertainty and that is believed to present more explanatory power. In this particular case, the first principal component which roughly corresponds to the mean of the series—accounts for 52% of the variation in these three variables.

We then construct different sets of dummy variables to account for the role of democratisation on government size. The first one (NDEMOC), accounts for the fist two democratic terms (in which a positive and significant estimate indicates that the young democracies presented bigger governments); the second one (DEMOC) accounts for the whole democratic period (a positive estimate suggests that the size of government increases under more democratic regimes); the third one is for the last term of dictatorship (LDICTAT), in which a negative and significant estimate indicates that the last dictator did not engage in generating a bigger government, which would leave the new regime with significant levels of debt to be repaid in its initial stages; and finally a dummy which counts the number of years after democratisation (MDEMOC). In this case, a negative and significant estimate indicates that the size of government decreases with time, or alternatively that democracy, or the electorate, mature over time, or to put it another way, that governments become more responsible with a more mature electorate.

The control variables used are relatively standard in the literature and they are as follows: a measure for trade openness relative to GDP (OPEN), which is provided by the Penn World Table, and it is expected that more open economies tend to display lower debt, or smaller governments. Moreover, we use the share of the liquid liabilities to GDP (M2), which come from the World Development Indicators and are provided by the World Bank, and GDP and GDP growth (GDP and GROWTH), which also come from the Penn World Table. In those cases, it is expected that in economies with better developed financial sectors governments can acquire finance more easily, and economies growing relatively fast can display, via the automatic stabilisers, lower debt. The inflation rates (*INFLAT*), come from the World Development Indicators, and it is expected that higher inflation, via higher nominal interest rates, leads to higher, or even ballooning, debt, or bigger governments overall.

In addition, constraints on the executive (XCONST) come from the Polity IV data set, the urbanisation (URBAN) series are from the World Development Indicators, and the Gini coefficients for income inequality (INEQ) from the UNU-WIDER data base. What is expected from these more structural control variables is that more constrained executives tend to be more restrained in what they consume and consequently run lower debt, rapid urbanisation in developing countries leads to more spending in infrastructure, and higher inequality leads to some sort of redistribution (either via taxation or provision of particular public goods).

To briefly illustrate the behaviour of the government share to GDP (gshare) and government debt to GDP (gdebt), in Figure One below we plot both normalised series against time. This initial eyeball evidence suggests that these country averages increased considerably during the late 1970s and early 1980s, which roughly coincides with the implementation of more democratic regimes in the region (alternatively, it can also coincide with the end of those political dictatorships). On the other hand, both series present a reasonably consistent reduction from the 1990s onwards, which might suggest that some time after democratisation the sizes of those governments decreased (or returned to a sort of steady state).



Figure 1: Government Share to GDP (gshare) and Government Debt to GDP (gdebt), Latin America, 1970-2007. Source: Penn World Table and IMF.

Moreover, we provide the correlation matrix in Table One, and the statistical correlation between our proxy for government (GOV) and the dummy for the first two democratic terms (NDEMOC) is positive and significant at the 5% level. The correlation between GOV and the dummy for the whole democratic period (DEMOC) is positive, however not statistically significant, as well as the correlation between GOV and the dummy for the last term of those dictatorships (LDICTAT). Finally, the correlation between GOV and the dummy which counts the number of years after democratisation (MDEMOC) is negative and statistically significant at the 5% level.

Also of interest, the correlations among the government share to GDP (gshare), government consumption (gcon) and government debt (gdebt)—the variables used to construct the proxy GOV—with NDEMOC are all positive and mostly significant. On the other hand, the correlations among the government share to GDP, and government consumption and debt with MDEMOC are all negative and significant. Basically, these preliminary correlations (without implying any causation at this stage) suggest that the size of government increases during the first years of democratisation and then decreases in the long term, or that democracy—or the electorate—mature over time. Alternatively it could be argued, given the size of the correlations, that GOV returns to a sort of long-run steady state.

	GOV	GSHARE	GCON	GDEBT	NDEMOC	DEMOC	LDICTAT	MDEMOC
GOV	1							
GSHARE	0.867*	1						
GCON	0.810*	0.500*	1					
GDEBT	0.385*	-0.001	0.048	1				
NDEMOC	0.322*	0.162*	0.275*	0.090	1			
DEMOC	0.011	-0.110*	0.104	-0.055	0.426*	1		
LDICTAT	0.009	0.172*	-0.061	0.095	-0.163*	-0.417*	1	
MDEMOC	-0.336*	-0.300*	-0.162*	-0.134*	-0.186*	0.725*	-0.315*	1

Table 1: The Correlation Matrix: Latin America, 1970-2007.

Sources: Penn World Table, IMF, and Polity IV files. \* represents significance at the 5% level.

In addition, we provide the OLS regression lines between government debt to GDP and the dummies for the first two democratic terms, the whole democratic period and the number of years after democratisation. What can be seen from this visual evidence is that there is a rather clear positive relationship between debt and young democracies, a positive, however weaker, relationship between debt and democracy, and finally a not entirely positive relationship (in fact, the relationship is weakly negative) between debt and the number of years after democratisation<sup>2</sup>.



Figure 2: OLS Regression Lines, Government Debt to GDP (gdebt) and Democracy, Latin America, 1970-2007. Sources: IMF and Polity IV.

In essence, the above preliminary evidence, with all its caveats, suggests that in one way or another the sizes of those governments, or consumption and consequently debt, increased during the first two democratic terms. Moreover, the evidence weakly suggests that democracy matures over time, or put it another way, that the size of overall government, or consumption and debt, have decreased as time after democratisation has gone by.

## B. Empirical Strategy

In terms of empirical strategy, since we have a panel of nine Latin American countries (N = 9) covering the period between 1970 and 2007 (T = 38), we follow the previous literature and make use of static and dynamic panel data analysis.

Initially we make use of the baseline Pooled Ordinary Least Squares (POLS), and of the Fixed Effects (FE) estimators for our static specifications. The POLS assumes homogeneity of intercepts and slopes, and it gives equal weight to the within  $(y_{it} - \bar{y}_i)$  and between  $(\bar{y}_i - \bar{y})$  variances in the data. The FE estimator (with robust standard errors for the correlation of residuals over time) assumes heterogeneity of intercepts, a reasonable assumption in such a diverse panel of countries, and it makes use only of the within  $(\bar{y}_i - \bar{y})$  variation in the data. Moreover, under the assumption of strict exogeneity of the regressors, the POLS and FE estimators provide unbiased estimates of the expected values of the coefficients in static models.

Secondly, in our dynamic specifications we first use the FE estimator—which via the within transformation above purges the correlation between the unobserved heterogeneity and the regressors—with robust standard errors. Essentially, the FE estimator under  $T \rightarrow \infty$ , not only minimises the Nickell bias present in short T dynamic panels, but also gives consistent estimates of the expected values.

Furthermore, although we attempt to use—given data availability—the most common control variables in the literature, one would argue that omitted variables, measurement error, and even some sort of (statistical or economic) endogeneity might be present. Thus, controlling for the number of instruments—and for what we instrument—to avoid overfitting (Bond (2002) and Roodman (2009)), we *carefully* make use of the Generalised Method of Moments (GMM) that also takes into account the fact that persistent series might lead to weak instruments (and to a non-negligible small sample bias)<sup>3</sup>. We therefore make use of the GMM estimator, with robust standard errors and the small-sample correction provided by Windmeijer (2005) to avoid 'too good to be true' standard errors, that combines the usual moment conditions for the first-difference GMM model ( $y_{it-2}, ..., y_{i1}$ ), with those extra conditions for the model in levels ( $\Delta y_{it-1}$ ), SYSTEM (SYS), or the SYS-GMM estimator proposed by Arellano and Bover (1995), and Blundell and Bond (1998).

All in all, the above-mentioned static and dynamic estimators take into account not only the fact that those countries in the sample share particular characteristics (all of them went through political transitions), but also the fact that such a panel is, no doubt, heterogenous (some of the countries in the sample are more developed than others, more or less unequal than others, or have been under democratic regimes for longer than others). Moreover, some of these estimators take into consideration the possibility of omitted variables and measurement error biases, and endogeneity issues, which is always an advantage for an estimator. The estimated differenced SYS-GMM dynamic equation is as follows,

$$\begin{split} \Delta GOV_{it} &= \alpha \Delta NDEMOC_{it} + \beta \Delta OPEN_{it} + \gamma \Delta M2_{it-1} + \delta \Delta GDP_{it-1} \\ &+ \epsilon \Delta GROWTH_{it} + \epsilon \Delta INFLAT_{it-1} + \zeta \Delta XCONST_{it} \\ &+ \eta \Delta URBAN_{it} + \theta \Delta INEQ_{it} + \vartheta \Delta GOV_{it-1} + \Delta v_{it}, \end{split}$$

where GOV is the proxy for government size which comprises the unobserved common factors among government share to GDP, government consumption and government debt, NDEMOC is the first set of dummies which accounts for the first two democratic terms, OPEN is a measure for trade openness, M2 are the liquid liabilities over GDP, GDPis the real GDP and GROWTH are the GDP growth rates, INFLAT are the inflation rates, XCONST accounts for constraints on the executive, URBAN is the share of urban population, and INEQ are the Gini coefficients for income inequality.

## C. Results and Discussion

In Table Two below we report the static and dynamic estimates of the dummy covering the first two democratic terms. More specifically, in columns (1) and (2) the static POLS and FE estimates of NDEMOC on GOV are positive and statistically significant. These estimates suggest that during the first two democratic terms GOV indeed increased in size. The cyclical and structural control variables present roughly the expected signs against GOV; OPEN is positive, although not entirely significant, M2 is positive, which indicates that deeper financial sectors ease the burden of finance on governments, GDP and GROWTHpresent the expected negative estimates (economies growing faster present lower debt, via the automatic stabilisers), and INFLAT, presumably via higher nominal interest rates, presents positive estimates, although not significant.

About the structural controls, *XCONST* presents negative estimates (more constrained executives have less room to engage in larger spending), *URBAN* presents positive estimates,

although not significant, and finally INEQ is the control presenting somehow non-expected negative estimates (one would expect that high inequality, prevalent in some Latin American countries, leads to higher spending and transfers, or redistribution of some kind).

Moving to our preferred dynamic specifications, in columns (3) and (4) we present the FE and SYS-GMM estimates of NDEMOC against GOV. Both estimators deliver the same, and statistically significant, story of bigger governments during the first two democratic terms. The controls are also consistent with the static estimates (financial depth facilitates bigger governments), fast growing economies are able to reduce debt, more constrained executives tend to spend less, and higher inequality is not really leading to higher spending, as one would expect in Latin America. Finally, the Arellano and Bond  $m^2$  test for secondorder serial correlation suggest that we can not reject the null hypothesis and the Sargan test does not indicate that the instrument set is invalid (in this case the instruments are not correlated with the residuals in the first-differenced equation).

	Static and Dynamic Models					
GOV	POLS	$\mathrm{FE}$	FE	SYS-GMM		
NDEMOC	.472 (3.31)	.230 (1.78)	.141 (4.12)	.141 (3.94)		
OPEN	.000 (.28)	.007 (4.49)	.000 (0.30)	.000 (0.29)		
M2	.473 (2.87)	.201 (0.95)	.302 (3.19)	.302(3.05)		
GDP	000 (-1.28)	000 (-2.38)	000 (-2.92)	000 (-2.80)		
GROWTH	032 (-2.76)	030 (-7.71)	030 (-8.19)	030 (-7.84)		
INFLAT	.125(1.49)	.061 (0.91)	.024 (0.62)	.024 (0.59)		
XCONST	113 (-3.96)	030 (-0.68)	027 (-2.36)	027 (-2.26)		
URBAN	.000 (0.03)	.025(0.98)	.005 (1.12)	.005(1.08)		
INEQ	006 (-0.73)	032 (-1.75)	006 (-2.80)	006 (-2.68)		
$\mathrm{GOV}_{-1}$			.775 (14.80)	.775 (14.17)		
F test	5.99					
m2				0.37		
Sargan $(p)$				0.00		

Table Two: POLS, FE and SYS-GMM Estimates

T-ratios in parentheses. Number of observations: NT = 342. GOV is the proxy for government size, NDEMOC is the dummy for the first two democratic terms, OPEN is a measure for trade openness, M2 are the liquid liabilities over GDP, GDP is the real GDP and GROWTH are the GDP growth rates, INFLAT are the inflation rates, XCONST the constraints on the executive, URBAN is the share of urban population, and INEQ are the Gini coefficients for income inequality. POLS is the Pooled Ordinary Least Squares, FE is the Fixed Effects and SYS-GMM is the System Generalised Method of Moments.

In Table Three we report the estimates of the dummy covering the whole democratic period, DEMOC, against GOV. In columns (1) and (2) the static estimates of DEMOC are not entirely clear cut (the POLS presents negative, although not significant, and the FE presents positive, and just marginally significant, estimates). The control variables present consistent estimates with the ones reported above (more open and financially developed

economies can engage in higher consumption and debt, although those estimates are not entirely significant, fast growing economies have the ability to reduce debt, and higher inequality is not behind bigger governments in Latin America).

On the other hand, in columns (3) and (4) the preferred dynamic FE and SYS-GMM estimates clearly suggest that governments indeed increased in size during the whole democratic period. The controls follow similar patterns as before, with financial depth being positively related to GOV, fast growing economies displaying lower debt, constraints on the executive restraining spending, and inequality once again not displaying any effect on larger governments. The Arellano and Bond, and Sargan tests do not suggest that the instrument set is in anyway invalid.

	Static and Dynamic Models					
GOV	POLS	$\mathrm{FE}$	$\rm FE$	SYS-GMM		
DEMOC	343 (-1.37)	.471 (1.63)	.243 (3.94)	.243 (3.77)		
OPEN	.002 (0.88)	.007~(6.26)	$.000 \ (0.59)$	.000 (0.57)		
M2	.495 (2.86)	.267(1.35)	.340 (3.54)	.340 (3.39)		
GDP	000 (-1.04)	000 (-16.99)	000 (-3.97)	000 (-3.80)		
GROWTH	024 (-2.02)	031 (-6.46)	031 (-8.72)	031 (-8.35)		
INFLAT	.219 (2.68)	.068 (1.09)	.029 (0.76)	.029 (0.72)		
XCONST	037 (-0.72)	050 (-1.56)	034 (-3.91)	034 (-3.74)		
URBAN	001 (-0.17)	009 (-0.28)	014 (-2.11)	014 (-2.02)		
INEQ	007 (-0.83)	033 (-1.86)	007 (-2.38)	007 (-2.28)		
$\mathrm{GOV}_{-1}$			.772 (17.48)	.772 (16.74)		
F test	4.60					
$m^2$				0.27		
Sargan $(p)$				0.00		

Table Three: POLS, FE and SYS-GMM Estimates

T-ratios in parentheses. Number of observations: NT = 342. GOV is the proxy for government size, DEMOC is the dummy for the whole democratic regime, OPEN is a measure for trade openness, M2are the liquid liabilities over GDP, GDP is the real GDP and GROWTH are the GDP growth rates, INFLAT are the inflation rates, XCONST the constraints on the executive, URBAN is the share of urban population, and INEQ are the Gini coefficients for income inequality. POLS is the Pooled Ordinary Least Squares, FE is the Fixed Effects and SYS-GMM is the System Generalised Method of Moments.

In Table Four we run a simple exercise for the fact that perhaps the outgoing dictatorships engaged in activities that would leave the young democracies of Latin America with significant debt to be repaid, therefore the need for higher borrowing in the initial stages of democracy. In columns (1) and (2) the static estimates of LDICTAT against GOV do not present any clear cut picture. The control variables present similar patterns as before, financial depth facilitates bigger governments, fast growing economies are able to reduce the debt, more constrained executives are not able to spend freely, and inequality, once more going against the conventional wisdom, presents negative estimates on GOV.

On the other hand, our preferred FE and SYS-GMM dynamic specifications clearly suggest that at least the last dictator in power did not engage in higher consumption nor debt, therefore not leaving the young democracies of the day with huge bills to be repaid, so this particular excuse for bigger governments, or borrowing, during the first years of democracy can be somehow avoided. About the controls, the liquid liabilities keep their importance in financing higher debt, as well as economic growth in reducing debt, and inequality still does not play any role in terms of bigger governments. Once again, the specification tests do not detect any sign of second-order serial correlation or overidentification.

	Static and Dynamic Models					
GOV	POLS	$\rm FE$	FE	SYS-GMM		
LDICTAT	.111 (0.57)	182 (-1.40)	142 (-4.49)	142 (-4.30)		
OPEN	.002 (0.90)	.008 (8.17)	.001 (0.95)	.001 (0.91)		
M2	.520 (3.00)	.253(1.21)	.335 (3.39)	.335(3.25)		
GDP	000 (-1.05)	000 (-16.61)	000 (-4.06)	000 (-3.89)		
GROWTH	024 (-2.04)	030 (-5.20)	029 (-7.94)	029 (-7.60)		
INFLAT	.227 (2.76)	.076(1.18)	.031 (0.73)	.031 (0.70)		
XCONST	087 (-2.65)	.001 (0.02)	013 (-0.86)	013 (-0.82)		
URBAN	001 (-0.18)	.001 (0.04)	010 (-2.28)	010 (-2.18)		
INEQ	008 (-0.92)	034 (-1.81)	007 (-2.53)	007 (-2.42)		
$\mathrm{GOV}_{-1}$			.778 (18.47)	.778 (17.68)		
F test	4.36					
m2				0.68		
Sargan $(p)$				0.00		

Table Four: POLS, FE and SYS-GMM Estimates

T-ratios in parentheses. Number of observations: NT = 342. GOV is the proxy for government size, LDICTAT is the dummy for the last dictatorship, OPEN is a measure for trade openness, M2 are the liquid liabilities over GDP, GDP is the real GDP and GROWTH are the GDP growth rates, INFLATare the inflation rates, XCONST the constraints on the executive, URBAN is the share of urban population, and INEQ are the Gini coefficients for income inequality. POLS is the Pooled Ordinary Least Squares, FE is the Fixed Effects and SYS-GMM is the System Generalised Method of Moments.

Finally, in Table Five we report the estimates of our dummy that counts the number of years after democratisation (*MDEMOC*), and the static POLS and FE estimates are not particularly clear cut. The control variables presenting significant estimates are openness and financial depth (positive), growth (negative) and inequality (negative), which somehow confirms the previous estimates reported above.

In contrast, our preferred dynamic FE and SYS-GMM estimates significantly suggest that democracy matures over time, or that as time goes by, the size of governments actually decreases in Latin America. Alternatively, we could say that GOV is in fact returning to its long-run steady state. On the controls, finance is again an important source of debt, higher growth works via the automatic stabilisers in reducing debt, and inequality (against all odds) presents negative and significant effects on GOV. About the validity of the instrument set, the Arellano and Bond, and Sargan tests again do not detect any evidence of invalidity or proliferation of instruments.

	Static and Dynamic Models				
GOV	POLS	$\mathrm{FE}$	FE	SYS-GMM	
MDEMOC	035 (-4.20)	.018 (1.10)	009 (-2.07)	009 (-1.98)	
OPEN	.000 (0.20)	.008 (6.60)	.000(0.61)	$.000 \ (0.58)$	
M2	.468 (2.92)	.229 (1.15)	.325(2.87)	.325(2.75)	
GDP	000 (-1.48)	000 (-10.41)	000 (-2.49)	000 (-2.39)	
GROWTH	030 (-2.70)	030 (-5.58)	030 (-6.76)	030 (-6.47)	
INFLAT	.109(1.35)	.084 (1.27)	.027~(0.58)	.027 (0.56)	
XCONST	016 (-0.49)	.014 (0.24)	006 (-0.46)	006 (-0.44)	
URBAN	.000 (0.07)	019 (-0.52)	.006~(0.86)	.006(0.82)	
INEQ	004 (-0.48)	035 (-1.84)	005 (-2.08)	005 (-1.99)	
$\mathrm{GOV}_{-1}$			.806 (27.77)	.806 (26.59)	
F test	7.02				
m2				0.78	
Sargan (p)				0.00	

Table Five: POLS, FE and SYS-GMM Estimates

T-ratios in parentheses. Number of observations: NT = 342. GOV is the proxy for government size, MDEMOC is the dummy which counts the years after democratisation, OPEN is a measure for trade openness, M2 are the liquid liabilities over GDP, GDP is the real GDP and GROWTH are the GDP growth rates, INFLAT are the inflation rates, XCONST the constraints on the executive, URBANis the share of urban population, and INEQ are the Gini coefficients for income inequality. POLS is the Pooled Ordinary Least Squares, FE is the Fixed Effects and SYS-GMM is the System Generalised Method of Moments.

All in all, we present evidence which suggests that young democracies do indeed indulge themselves in higher consumption, debt and consequently higher government share in the GDP. This might be because of the many challenges that young democracies face from the outset (demand for some sort of redistribution, fierce opposition to democracy by particular groups in its early stages and consequently the need to buy out the electorate so that democracy becomes 'the only game in town')<sup>4</sup>.

On the other hand, we present some evidence that suggests that those young democracies of Latin America cannot put the blame on the last dictator of the day for the higher debt incurred in the early stages of democracies to repay the bills elusively left by the last dictatorship. Finally, there is also some evidence indicating that democracy, and the electorate, mature over time (better media, better dissemination and acquisition of information, or more experience in dealing with the democratic process), so that those governments engage less in spending and higher debt. Alternatively, we could argue that after this process of maturing, governments return to a sort of long-run steady state.

In terms of the control variables used, access to finance M2 plays an important role in providing governments with financial resources which are probably used to reissue and generate new government consumption and debt, and the automatic stabilisers seem to be at work via faster economic growth. In addition, one important cyclical control variable that is rarely significant in the analysis is inflation. This is probably because some of those countries engaged in interest rate controls (financial repression), which would artificially reduce the impact of higher nominal interest rates on debt, while others had completely indexed economies during their episodes of hyperinflation. It seems that overall both effects are cancelling each other out.

Finally, an old determinant of redistribution, or bigger governments, inequality, does not play, as suggested by Woo (2003, 2005 and 2008), its expected role in the region. This is perhaps because, although Latin America is known for being rather unequal, in fact not all those countries are actually that unequal (Argentina, Chile and Uruguay, to mention a few, do not present very high Gini coefficients of their own, and Brazil has presented decreasing inequality recently). Alternatively, some would argue that new democratic coalitions coming into power, even when from the left, will try to disguise themselves and avoid engaging in leftist redistribution (Acemoglu, Egorov and Sonin (2010)), which might be a mitigating factor of the effect of inequality on  $government^5$ .

# **III.** Concluding Observations

In this paper we have investigated the hypotheses that governments tend to increase in size during periods of democratisation, and also that democracies, and the electorate, mature over time. The evidence, based on a sample of Latin American countries that have recently democratised in the last forty years or so, and on panel data analysis, is suggestive of the fact that young democracies indeed engage in larger spending, debt and consequently end up with a larger share of the GDP. Furthermore, the evidence points to the fact that democracies become more responsible, and perhaps more conservative, in terms of consumption, debt and overall government size as time passes by, or that there is a learning process within democracies and a return to a sort of long-run steady state.

The importance of this study is that we have been able to specifically study the Latin American case, with all its idiosyncrasies, without having to treat the region either as a dummy or as an outlier to be removed from the sample. With that we have obviously furthered our understanding of the recent history of the region in terms of government size and dynamics during political transitions, which might be of some use to understand the new wave of democratisation affecting the world as we speak.

Future research can be extended to even further disaggregations and comparisons. For instance, on one hand the Brazilian case is of some interest and quite illustrative in the sense that it has democratised in the 1980s and then suffered severe bursts of macroeconomic instability for ten years or so (the so-called 'lost decade'). On the other hand, South Africa which is a young democracy being governed by a very broad political coalition has so far not displayed any sign of ballooning debt nor macroeconomic instability.

Perhaps the lesson from above is that ideally young democracies inherit, or implement right away, an institutional framework which includes particular economic institutions such as central bank independence and fiscal responsibility laws, institutions that help to constraint the executive and which were absent in Brazil in 1985, but already present in South Africa in 1995. All in all, it seems that democracy matures with time as well as the democratisation processes themselves.

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#### Notes

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<sup>1</sup>Although there are signs that inequality is actually decreasing in some places, see Bittencourt (2011) for a recent analysis of the Brazilian case.

<sup>2</sup>The same sort of pattern arises when we graph the OLS regression lines between other variables for government and the dummies. Available on request.

<sup>3</sup>Basically we instrument with the lagged dependent variable with levels dated t - 2 and earlier, a standard assumption, and then for M2 and INFLAT (some would argue that higher debt is behind higher inflation), and GROWTH (the growth literature suggests that big governments are detrimental to GDP growth).

<sup>4</sup>We also have some evidence which suggests that governments increase in size during the first democratic term, however the evidence is somehow weaker. This is probably because young democracies are still living under a budget which was decided by the last dictatorship in power. Available on request.

<sup>5</sup>It must be said that inequality data are rather fragmented, with some countries, for instance Guyana, not presenting very consistent series.

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