

ECONOMIC DEVELOPMENT AND DEMOCRACY: CAN MODERNIZATION THEORY BE UPHELD IN CENTRAL AMERICA?

Jairo Acuña-Alfaro

jaacun@essex.ac.uk

“Where some people are very wealthy and others have nothing, the result will be either extreme democracy or absolute oligarchy, or despotism will come from either of those excesses”.

Aristotle, Politics bk. 4, 1296a 1-3

Introduction	1
SECTION 1: The modernization perspective	2
SECTION 2: Global and regional comparisons	3
SECTION 3: Central America	5
<i>Economic Development</i>	6
<i>Democracy</i>	7
<i>The econometric analysis</i>	9
Conclusions	12
Bibliography	13

Introduction

A considerable debate, among comparative scholars, about the relationship between economic development and democracy, has been developed in the last fifty years. Perhaps, Lipset's (1959) finding that democracy is related to economic development, “has generated the largest body of research on any topic in comparative politics” (Przeworski & Limongi 1997, p.156). The argument that the well to do a nation, the greater the chance that it will sustain democracy, has been split between two groups. Those supporting the link between economic development and democracy in a global basis (Lipset, 1959; Bollen, 1979; Burkhart & Lewis-Beck, 1994; Helliwell, 1994); and those that have proven at regional levels (and specially for Latin America), the relationship is not sustained (De Schweinitz, 1964; O'Donnell, 1979; Rueschmeyer et al, 1992; Landman, 1999).

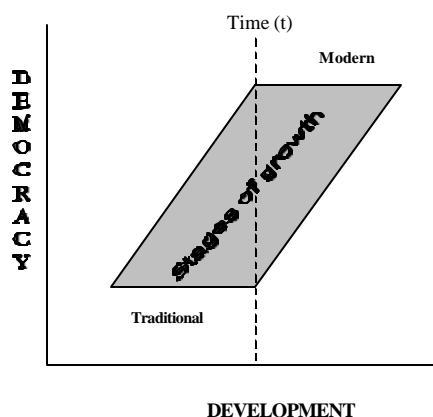
Theoretically speaking, the argument has been centred at the modernization theory claims, where a positive relationship between economic development and democracy is proposed, arguing that the former causes the latter. But, moreover, new theories and comparative research argues that this relationship cannot be sustained (i.e., post-modernization theory) at the regional level. Hence, having this in mind, the purpose of this paper is to answer the question of *what can the quantitative comparison of many countries tell us about the relationship between economic development and democracy?*

The paper is divided in three sections. First I summarize the theoretical approach of the relationship between economic development and democracy, based on the modernization and post-modernization claims and assumptions. The next section reviews a representative sample of the literature on this relationship, and sketch what the comparisons (statistically and qualitatively) say about it. Thus, it deals with the comparison of many countries (global and regional scales), which test the relationship of economic development and democracy. Finally, the third part deals with an econometric analysis of this relationship in the Central American countries. Since the comparison will be based on a small number of countries (5), the relationship is analysed through time-series data (1973-1999), studying the differences with the global comparisons. Hence, it proves the hypothesis that there is a relationship between economic development and democracy, even at this sub-regional level.

SECTION 1: The modernization perspective

The basic assumption of the modernization theory is that developing countries are on the way towards an ideal-type developmental model. This assumption has been proposed by a great number of social scientists, starting with Max Weber, who argued that cultural values, beliefs and interests distinguish two types of human beings, traditional and modern. The former is “anxious, suspicious, lacking of ambition, oriented towards immediate needs ... and clings to well-established procedures even when they are no longer appropriate”. Contrasting with the latter who is “adaptable, independent, efficient, oriented to long-term planning, sees the world as amenable to change and above all, is confident of the ability to bring change about” (Törnquist, 1999, p.45). Furthermore, a Parsonian view, assumes certain structures and patterns of behaviour, which translated in the economics arena have been proposed as the “stages of economic growth”. According to this view, the developmental pattern of all societies lies on five stages or categories, which develops consecutively: (i) the traditional society, developed within limited production functions; (ii) the preconditions for take-off, embracing societies in a transition process; (iii) the take-off, where growth becomes the normal condition in a society; (iv) the drive to maturity, when modern technology expands over the whole front of the economic, social and political activities; and finally (v) the age of high mass-consumption, in which a large number of persons gain command over consumption, transcending basic food, shelter and clothing (Rostow, 1960). Figure I provides a graphical explanation of the basic modernization claim.

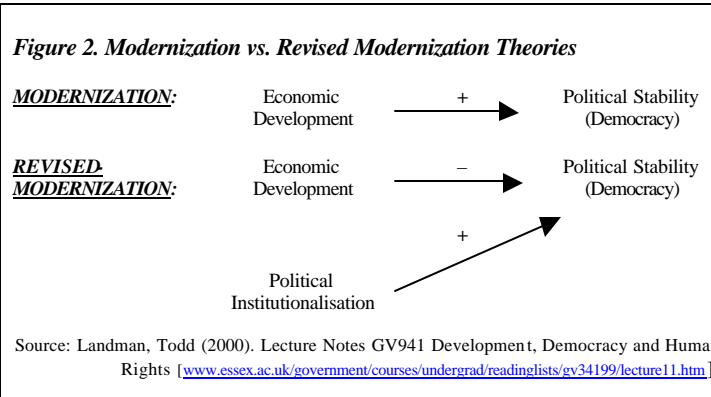
Figure I. The Modernization Theory



In that sense, the modernization theory consists “of a gradual differentiation and specialization of social structures that culminates in a separation of political structures from other sources and makes democracy possible” (Przeworski & Limongi, 1997, p.158). Hence, as can be seen, the modernization claim is inadequate,

both analytically and politically. It is based in “development models”, assuming a sequence of phases that all developing societies must undergo. Its method consist in forecast development patterns based on a society’s position at a given stage, but overlooking the social context in which development can be achieved.

Furthermore, Huntington, in his controversial critic to the modernization theory and the requisites for democracy, argues that contrary, economic development causes political instability and what are needed instead are stronger political institutions. He distinguishes that the “most political distinction among countries concerns not their form of government but their degree of government” (1968, p.1). In that sense, the important democracy constrain is the effective exercise of coercion in the political system. Contrasting the political systems of the advanced countries from the governments which exist in most of the modernizing countries of Asia, Africa and Latin America, where the latter lack many things, from real shortages of food, literacy, education and wealth, to income, health and productivity. Hence, Huntington’s analysis of economic development and political instability concludes that “economic development increases economic inequality at the same time that social mobilization decreases the legitimacy of that inequality. Both aspects of modernization combine to produce political instability” (1968,p.58-59). Figure 2 assess the differences among these theories.



SECTION 2: Global and regional comparisons

Having understood the modernization theory approach to the relationship between economic development and democracy, let us now turn to the empirical evidences about this controversial relationship. Basically, Lipset’s pioneering study shows that using per capita income, telephones per 1,000 persons, percentage of people employed, literacy rates and population living in cities of different sizes as indicators of development, reveal a positive relationship, thus linking democracy to development. In his own words “perhaps the most widespread generalization linking political systems to other aspects of society has been that democracy is related to the state of economic development” (Lipset, 1959, p.75)

In this avenue, a recent global study relating regime transitions, observes that “in poor countries the value of becoming a dictator is greater and the accumulated cost of destroying capital stock is lower. In wealthy countries ... the gain from getting all rather than a part of total income is smaller and the recuperation from destruction is slower” (Przeworski & Limongi, 1997, p.166), arguing that democracies are more stable than dictatorship in wealthier societies, and proving that democracies are better at promoting economic development than non-democratic regimes. Supporting the declaration that economic crisis represents one of the most common threats to

democratic stability. Moreover, Cutright and Wiley (1969) concluded that “the positive association between social and economic development and democracy hold for all four decades, and the data suggest a causal priority especially for economic development”¹. In addition, Rueschemeyer, Stephens and Stephens, argued that “capitalism and democracy go hand in hand is a widely held belief” (1992, p.1), and that “quantitative cross-national comparisons of many countries have found consistently a positive correlation between development and democracy” (p. 3) in the world.

Furthermore, Burkhart & Lewis-Beck, statistically proved that the causal arrow runs from economic development to democracy, but going one step further, arguing that “for every tenfold increase in per capita energy consumption, the nation could expect about two-and-a-half point rise on the democracy scale” (1994, p.907)², proving that on balance, economic development improves democratic performance. To boot, Helliwell, using cross sectional and pooled data for 125 countries from 1960 to 1985, proves empirically a robust and positive relationship, concluding that “the data ... support strongly the notion that countries at higher income levels are more likely to have democratic forms of government ... confirm[ing] a robust positive relationship between the level of per capita income and the adoption of democracy” (1994, p.245 and 246).

In another comparative statistical study, among 130 contemporary states with populations over one million, Ersson & Lane concluded that it is important to clarify the meaning of development in order to test the contended relationship. According to their study they found “only one robust relationship³ ... and that concerns democracy and human development”. They argue that democracy tends to go together with human development and that the former “is not an obstacle to economic growth or a fair income distribution” (1996, p.66-67). Additionally, they found a weak evidence of positive relation between democracy and economic development only for certain measures and periods of time, but they did not find any stable relationship of democracy and economic growth or with the degree of income inequality.

Having said that, it is interesting to note at the regional level, that this relationship cannot be sustained with empirical evidence. In a study of the modernization claims applied to the South American countries, the author concludes that “in certain countries, which have achieved the social differentiation characteristic of high modernization, there is a strong tendency toward the emergence of a new type of political authoritarianism –“bureaucratic authoritarianism” (O’Donnell, 1998, p.198). In this sense, Landman (1999) shows that the statistical relationship among economic development and democracy are largely independent processes, and may not be applied for the Latin American region. Hence rejecting the positive association of democracy and economic development in the regional level.

Consequently, at the regional level “comparative historical studies that emphasize qualitative examination of complex sequences tend to trace the rise of

¹ Quoted from Rueschemeyer et al, 1993, p.16. The decades used in their test are from 1926 to 1936, from 1937 to 1946, from 1947 to 1956 and from 1957 to 1966.

² Moreover, Burkhart & Lewis-Beck, state emphatically that according to “Granger tests, economic development “causes” democracy”, but democracy does not “cause” economic development (p.903).

³ By “robust relationship”, Ersson & Lane meant “a relationship that is stable over time and valid irrespective of reliable measures” (1996, p.66).

democracy to a favourable historical constellation of conditions in early capitalism” (Rueschemeyer et al, 1992, p.3). Hence, their conclusions are radically bleak about the positive relationship between economic development and democracy and reject the modernization claim stated in section 1. Here, De Schweinitz stated clearly the fail of the modernization theory, arguing, “the development in the nineteenth century was a function of an unusual configuration of historical circumstances which cannot be repeated. The Euro-American route to democracy is closed. Other means must be devised for building new democratic states”⁴.

Last but not least, Landman’s vigorous empirical evaluation of the relationship between democracy and economic development, using time-series data for the Latin American countries, provides a robust conclusion. His statistical analysis (N=408) shows that the positive correlation is not upheld in Latin America where “appears to be no direct relationship between the level of economic development and democracy”, and consequently, “the universal aspirations of modernization theory are very limited indeed” (1999, p.624). Ironically, this conclusion is drawn using the same economic development indicators (energy consumption, urban wages, per capita GDP), as well as the viable measures of democracy (Arat, Banks, Gastil, Polity III, Poe and Taste & Vanhanen), widely used for global comparisons (see i.e. Burkhart & Lewis-Beck, 1994 and Helliwell, 1994). As follows, O’Donnell’s and Landman’s conclusions can be explained linking democratic performance to the existence of values and interests, among elite and mass citizens, that assures that in “Latin America ... states are characterized by cycles of democracy and authoritarianism” (Weingast, 1997, p. 254). Constituting a fundamental difference with respect to the wealthy and democratic advanced societies.

SECTION 3: Central America

After this concise review of literature, now its turn to prove whether, the modernization theory, applies to the Central American countries, including Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua⁵. Hence the analysis will be made according to the “most similar system design” (MSSD) in comparative politics⁶. The data range is from 1973 to 1999, thus making it the most up-dated comparison for the Central American sub-region, as well as the only one testing the modernization approach at this sub-regional level using regression analysis with time-series models and ordinary least squares. However, some scholars have tried to demonstrate that in the sub-region the relative progress, although unevenly distributed and comparatively modest, “reflects both increased production and the *consolidation of some allied characteristics of modernization*” (Dunkerley, 1988, p. 171, emphasis added). Nevertheless, as this section suggests, one may be more cautious and thoughtful when analysing the economic development in these five countries. Thus, this section, besides testing the modernization approach, goes a step further demonstrating why this kind of conclusions are biased and misleading for the Central American context.

⁴ Quoted from Rueschemeyer et al, 1992, p.20.

⁵ Geographically, Central America is composed of these five countries plus Belize and Panama. The exclusion of the latter is based on the argument that they do not share the same colonial history as the former, which obtained independence from Spain in 1821, then were ruled as one country in the Central American Federation until 1838, when each declared its independence as separate republics (Bulmer, 1987, p.338). Belize obtained its independence in 1981 from British rule and Panama in 1903 from Colombia.

⁶ The MSSD is used to compare systems that share some common characteristics, and thus compensate differences while highlighting others. For a description of the MSSD see Faure, A.M., 1994.

Economic Development

Even though there is a great debate among scholars about the definition of economic development, for the purpose of this paper it will be operationalized as a *multidimensional process* involving major changes in social structures, popular attitudes, and national institutions. Consequently it pursues the acceleration of economic growth, the reduction of inequality, and poverty alleviation (Todaro, 2000), with some basic goals, such as growth and equity (economics), democracy and stability (politics) (Huntington, 1987). Furthermore, the indicators collected for the present empirical analysis, which are widely used to identify economic development, are real gross domestic product per capita (current international prices), literacy rates and life expectancy (see table 2).

In this sense the panorama for economic development in Central America during the 1980s was not positive. Indeed, during the period of most intensive conflict in the sub-region, the GDP per capita fell by 15%. And with the exception of Costa Rica, the sub-region embarked upon the process of democratisation with indices of infant mortality, life expectancy at birth, access to potable water, malnutrition, illiteracy and persons per doctor that were worse than those for Latin America (Dunkerley, 1994). However, it may be said that according to “social indicators”, besides the “lost decades” of the 70-80s, the Central American countries managed to rise (although unevenly) the living conditions of its citizens. Regarding literacy rates, the average in 1970 of persons who could read and write was 61%; in 1980 and 1990 this rate increased by 5% each one, reaching a considerable 74% in 1999⁷. At the other hand, the number of years people live also have moved up in the sub-region, meanwhile in 1972 the mean life expectancy was of 58 years, in 1999 it was almost 70 years, meaning an increase of 12 years of longevity.

Besides this positive “social” development, the 1970s and 1980s are considered as the worst of times for the Central American countries in economic terms. Indeed if one just look at the growth rates (and this is one of the reason I cannot accord with Dunkerley), it can be noticed that since early 1970s the economic performance of these countries was very unstable, starting a dangerous peak decline in 1977 which reached its lowest rate in 1982 (6.4 GDP per capita and -3.6 GDP). See graph below. Also, the cruel confrontation and civil wars (El Salvador, Guatemala and Nicaragua) characterised this period of history in the sub-region, led in the 1980s more than 150,000 people killed and around 2.5 million people displaced. Indeed 1979 has been identified as the historical momentum which marked a watershed in the sub-region’s development and the beginning of the worst economic crisis, even deeper than the 1930s. Finally, it can be noted that it is not until 1987 that the region tends to stabilize its growth at modest, but “positive” scores. A phenomenon that can be correlated with the signing of Esquipulas II –the peace treaty which began the true pacification for the sub-region and hence initiated the democratic transition.

⁷ However, the contrast in literacy rates is evident among countries, while Costa Rica rank the best rates at 88%, 92%, 94%, 95% respectively, Guatemala lays far behind with 46%, 49%, 55%, and 64% respectively.

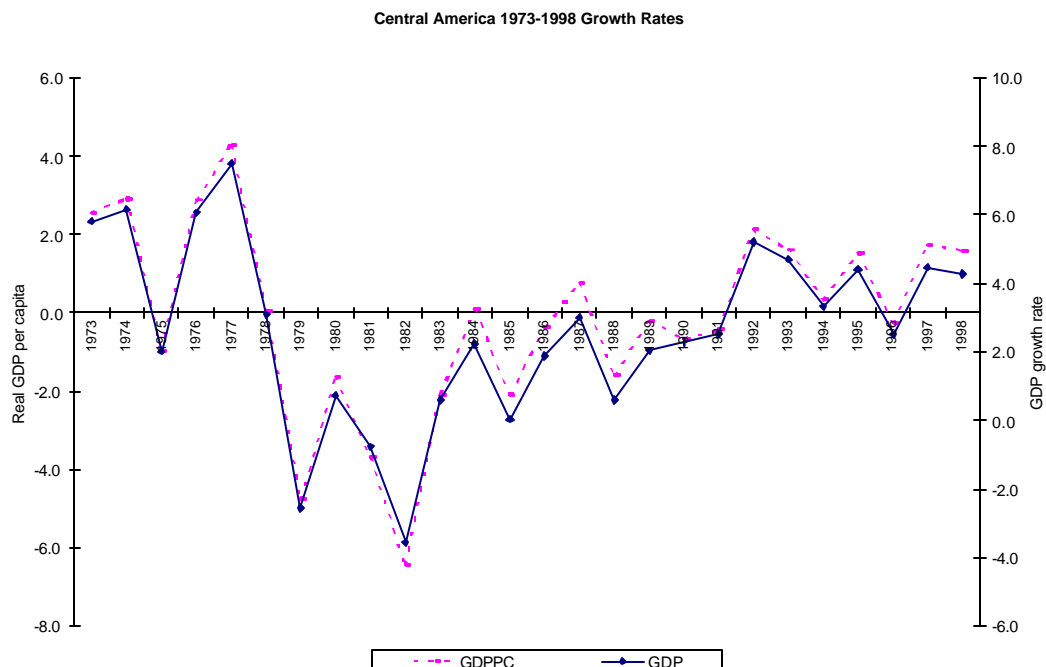


Table 1 shows a bivariate correlation matrix among the operationalized measures of development used in this paper and described above. It can clearly be noticed that the three indicators are highly correlated at the 0.01 level. But before starting making precipitate conclusions, we need to analyze the democracy dependent variable and then run some regression analysis.

Table 1. Bivariate correlation of development indicators

	GDP per capita	Life Expectancy	Literacy rate
GDP per capita	-	.752** (82)	.606** (64)
Life Expectancy			.862** (55)
Literacy rate			

** Correlation is significant at the 0.01 level (2-tailed). N in parenthesis.

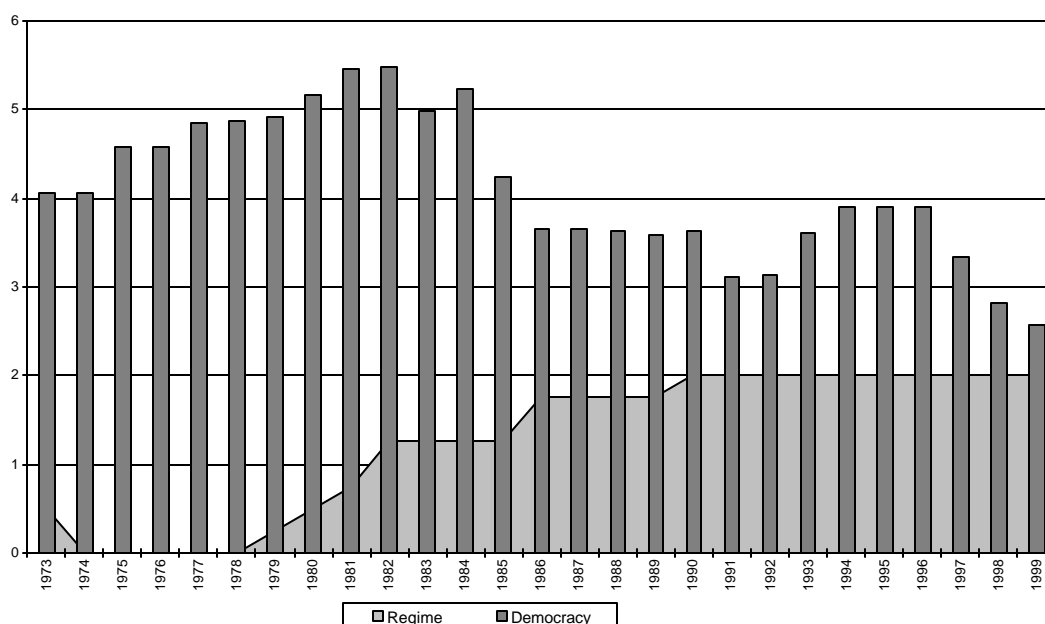
Democracy

As well as with the development concept debate, democracy is a contestable term among scholars, whose definitions have evolved over time. Perhaps Linz and Stepan's operational definition has become the more widely accepted, assuming the existence of democracy when: (i) a sufficient agreement has been reached about political procedures to produce an elected government; (ii) a government comes to power as result of free and popular elections; (iii) the newly elected government *de facto* has the authority to generate new policies; and (iv) the executive, legislative and judiciary does not have to share power with the other bodies *de jure*. Hence, when all of these conditions are met and work as the "only game in town", then democracy is established and consolidated (Linz and Stepan, 1996).

In that sense, there are numerous ways and indexes to measure democracy that have evolved in the last years. They can be divided among those that measure institutions (Banks, Polity III, and Vanhanen); institutions and rights (Arat, Poe and Tate 2) and those

that measure rights protection (Gastil or Freedom House, Poe and Tate 1, and 2)⁸. Furthermore, since Gastil (and later Freedom House) index can be identify as the most popular and widely used in comparative politics, it will be used as the measure for democracy in this paper. This index comprises two scales, political and civil rights⁹, rating countries from 1 (democratic) to seven (non-democratic) controlling for the largest quantity of variables of all indexes. The other variable used to control for democratic performance in Central America will be one that labels the type of regime of the five countries, as military, civilian-military or civilian (see table 2). The following graph plots the mean of each of these measures from 1973 to 1999, excluding Costa Rica¹⁰. Showing that from 1975 to 1985 the sub-region ranked the less democratic in the Gastil index (columns). It can also be noted, that from 1990 onwards, the region achieve some kind of “normality” in the type of regime (democratic in the shadow background), and from 1986 onwards the mean democracy scores has tended to stabilized at the partly-free score, reaching, for the first time, a considerable free score in 1999.

El Salvador, Guatemala, Honduras and Nicaragua: Democratic Performance



⁸ Landman, 1999, provides a good survey of all these seven democracy indexes.

⁹ **The political rights checklist** includes: (i) free and fair elections for executive and legislative; (ii) fair electoral laws, equal campaigning opportunities, fair polling, and honest tabulation of ballot; (iii) endowment of freely elected representatives; (iv) right to organize in different political groupings, (v) significant opposition vote, de facto opposition power, (vi) freedom from domination by the military, foreign powers, totalitarian parties, religious hierarchies, economic oligarchies, or any other powerful group, (vii) reasonable self-determination, self-government, autonomy, for minority groups. **The civil liberties checklist** includes: (i) free and independent media and other forms of cultural expression, (ii) free religious institutions, (iii) freedom of assembly, demonstration, and open public discussion, (iv) freedom of political or quasi-political organization; (v) free trade unions and peasant organizations, and effective collective bargaining; (vi) independent judiciary; (vii) rule of law prevail; (viii) protection from political terror, unjustified imprisonment, exile, or torture; (ix) freedom from extreme government indifference and corruption, (x) property rights; (xi) equality of opportunity. Source: Freedom House Organization. www.freedomhouse.org/survey99/method.

¹⁰ The reason for excluding Costa Rica, is because since the early fifties, it has been one of the most stable democratic regimes in the world, and as such it can bias and disguise the results for the true un-democratic and repressive Central America of the 1970s and 1980s. Indeed, if one include Costa Rica in the graph, it can be noted, a better ranking in the democracy score (never above the 5 point for un-democratic), and it is not until 1998 that the region reached the free minimum score in the Gastil index.

Finally, as done with the development measures, a bivariate correlation among the two democratic measures used in this paper, shows a negative correlation (-0.570) at the 0.01 level, with 135 observations.

The econometric analysis

As shown previously, it can be summarized that in the time period studied (1973-1999) the 1980s were the worst of times for Central America, in measures, both of economic development and democracy. Consequently, we can start inferring the results of the statistical analysis that follows, which using OLS in a linear relationship, test the null hypothesis that **democracy does not depend on the level of economic development**. Hence testing the modernization theory claim that there is a positive relationship between economic development and democracy at the sub-regional level. Table 2 summarises the different variables used, both for development and democracy, as well as shows an overall description of its statistics.

Table 2. Descriptive statistics of democracy and development in Central America, 1973-99

<i>Variables</i>	<i>Description</i>	<i>Mean</i>	<i>Standard deviation</i>
Democracy (Dependent)	Gastil / Freedom House Index for Political and Civil Rights	3.50	1.74
D _{t-1}	Democracy score lagged by one year	3.55	1.75
GDPPC	Per capita gross domestic product	2174.45	1130.87
LIFEEXP	Life Expectancy (at birth)	65.94	5.60
LITERACY	Literacy rate (15 years an older)	72.00	13.55
TREGIME	Dummy Variable for type of regime coded 0 for civilian, 1 for civilian-military and 2 for military	1.41	0.86
ELS	Dummy variable coded 1 for El Salvador and 0 for all other countries	0.20	0.40
GUA	Dummy variable coded 1 for Guatemala and 0 for all other countries	0.20	0.40
HON	Dummy variable coded 1 for Honduras and 0 for all other countries	0.20	0.40
NIC	Dummy variable coded 1 for Nicaragua and 0 for all other countries	0.20	0.40
LNPCGDP	Natural log of per capita gross domestic product	7.57	0.46
DEV FACTOR	Development index comprising (i) per capita gross domestic product; (ii) literacy rate, and (iii) life expectancy at birth)	9.80	1.00

Since the number of countries is only five, in a middle-level of abstraction, the analysis is done using time-series data (26 years), increasing the number of observations to 135. The regression analysis, is made based on the assumption that democracy is a function of democracy lagged by one year, the level of economic development, the type of regime and dummy variables for each country to control for unit effects and the Costa Rican outlier case. Hence the estimated model is as follow (signs above the variables are the expected for the coefficients in the regression results):

$$D_t = f(D_{t-1}, ED_t, \text{Country Dummies}, TG_t)$$

Hence, the equation to be estimated is

$$D_t = \hat{\alpha}_0 + \hat{\alpha}_1 D_{t-1} + \hat{\alpha}_2 ED_t + \hat{\alpha}_3 ELS + \hat{\alpha}_4 GUA + \hat{\alpha}_5 HON + \hat{\alpha}_6 NIC + \hat{\alpha}_7 TG_t + \hat{\alpha}$$

Where D is democracy at time t ; ED is the level of economic development at a given time; TG is a dummy variable reflecting the type of government at time t ; ELS , GUA , HON and NIC are dummy variables for each country and $\hat{\alpha}$ is the error term; $\hat{\alpha}$, $\hat{\alpha}_1$, $\hat{\alpha}_2$, $\hat{\alpha}_3$, $\hat{\alpha}_4$, $\hat{\alpha}_5$, $\hat{\alpha}_6$ and $\hat{\alpha}_7$ are the parameters to be estimated. As Landman (1999) test for Latin America, the relationship is examined using various measures of economic development (outlined above) and Gastil's democracy score as the dependent variable. In that sense, table 3 shows the parameter estimates for democracy, with the different measures of development, and the dummy variables for each country. As can be seen in this table, the key finding of this paper is that there is no relationship between economic development and democracy at the Central American level. Hence, the disclosures of the modernization theory at the global level of comparison, do not appear to hold up at this level of analysis, as either in Latin America.

Furthermore, it can also be seen in table 3, and as could have been already inferred, the lagged values of democracy have a significant positive effect on the democracy score. A result that can be interpreted as that democracy at a given time has a strong influence in the future democratic performance in the Central American countries sampled¹¹.

Moreover, analysing the t -values (in parenthesis), one cannot reject the null hypothesis that democracy does not depend on economic development. Because, according to statistical standards regarding the t -distribution we have;

$$\text{Reject } H_0 \text{ if } t > t_c$$

and with the degrees of freedom in our models, and a 5% level of significance, the critical value of t equals 1.671. However, before jumping to precipitate and impulsive conclusions, a word of caution should be taken when analysing these results. According to the Durbin-Watson d test¹², which applies to some of the models tested (V, VI and VIII, IX, XI and XII where is tested he lagged variable), one cannot find no serial correlation ($d = 2$).

Last but not least, in models IX to XIII, when incorporating the country dummy variables an additional picture is drawn. In models XI and XII, Nicaragua and Guatemala ranked the highest t -values regressed with the development factor and the natural log of per capita GDP. A result that can be interpreted by the evident lack of development and growth of these two countries, especially Nicaragua declared by the IMF and the World Bank as one of the most indebted and impoverished countries in the world. Furthermore, when regressed with D_{t-1} , Guatemala and Nicaragua, ranked worst. An interpretation of this in the case of Guatemala can be found in the cruel and oppressive regime the military overtook since 1950 to 1986 when they ruled the country, especially, General García's period (1978-1982), which has been catalogued

¹¹ Two clear examples of this point are (i) the failed *self coup d'etat* made in 1993 in Guatemala, when president Serrano Elias tried to closed down the legislative and judiciary, and was replaced by the human rights procurator De León Carpio, the transition of power in 1990 in Nicaragua.

¹² For a good explanation on the Durbin -Watson d test, its uses and examples, see Studenmund, 1997.

Table 3. Parameter estimates for democracy with different development measures

<i>Independent Variables</i>	<i>Models</i>												
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII
Constant	18.653 (8.858)	2.884 (26.080)	12.420 (5.997)	15.341 (7.350)	2.287 (1.978)	0.851 (3.185)	0.942 (1.643)	0.876 (4.384)	0.840 (4.184)	0.185 (1.452)	0.895 (2.565)	0.719 (1.727)	8.668 (3.642)
D _{t-1}					0.885 (24.647)	0.692 (8.159)		0.850 (24.980)	0.757 (15.899)	0.838 (18.280)		0.563 (4.545)	
LNPCGDP	-2.000 (-7.206)		-0.597 (-1.942)	0.447 (1.099)	-0.253 (-1.781)								-0.930 (-3.184)
LITERACY			-6.52E-02 (-6.148)										
LIFEEXP				-0.236 (-7.458)									
TREGIME							1.007 (3.438)	-0.271 (-3.886)	-0.282 (-4.072)				
DEVFACTOR		-0.821 (-7.361)				-0.270 (-2.557)	-0.972 (-8.779)				0.155 (0.837)	-0.117 (-.573)	
ELS									0.449 (2.394)	0.385 (1.938)	2.312 (5.341)	0.529 (0.977)	1.756 (4.856)
GUA									0.526 (2.571)	0.537 (2.471)	2.917 (5.633)	0.874 (1.369)	2.645 (7.918)
HON									0.302 (1.535)	0.251 (1.206)	1.855 (4.185)	0.423 (0.821)	1.840 (4.484)
NIC									0.449 (2.761)	0.558 (2.279)	3.039 (6.805)	0.762 (1.244)	3.167 (8.468)
R ²	0.281	0.506	0.563	0.565	0.880	0.837	0.597	0.890	0.898	0.885	0.765	0.848	0.587
DF	134	54	63	81	129	52	54	129	129	129	54	52	134
F	51.926	54.192	39.345	51.232	466.652	128.077	38.539	515.247	181.149	190.162	31.834	42.869	36.609
DW	0.242	0.805	1.076	0.968	1.627	1.891	0.918	1.776	1.747	1.602	1.197	1.810	0.414

Unstandardized co-efficients reported, t-values in parentheses.

DF = Degree of Freedom

DW = Durbin-Watson *d* test

as the most brutal in terms of violations to human rights and its engagement in a large-scale furious counterinsurgency military campaign. This military ruled-period was accompanied by a thirty-six year civil war, which in fair and conservatives estimates led around 200,000 people dead (an average of 15 killings per day). Likewise, Nicaragua, even in a lesser extent, have had since 1950, around 35 years of military rule (either right or left wing), which did not changed until 1990 with the election of Barrios de Chamorro; and the civil war of late 1970s and 1980s led by the US sponsored “contras” *guerrilla*. Finally, the case of Honduras seems to be different in the last four models. In all of them, it scored the lowest t-scores, which can be interpreted with the type of regimes (alternance among military and civilian, except in the 1970s), as well as with the absence of civil war, allowing for more investments in social development.

Conclusions

After reviewing this sample of representative studies on the relationship between economic development and democracy, at the global and regional levels, as well with the statistical test for the sub-regional level, a question still last. How can so many different –quantitative and qualitative– studies deviate so greatly about this relationship? The results of the econometric analysis on this paper, shed light on the modernization claims application at the sub-regional level raised by Landman and Ersson & Lane, the latter related to the measure of development. Hence, several interpretations can be made. First, the difference of results can be explained in the nature itself of comparative analysis. We may not forget that global research tends to make generalizations that do not apply to lower level of analysis, and the level of development of industrialized countries, such North America and western Europe, and their equivalent of democratisation, bias the results. Furthermore, besides so much progress, social sciences still lacks of models to predict medium and long run effects on the societies developments, because “our theories are like grasshoppers, jump about terrain. It is quite impossible to determine in which direction (or when) they will jump next” (Apter, 1969, p.422). In that sense, the modernization theory is a clear example of the social sciences challenge, forecasting.

Another reason why there is no positive relationship among development and democracy in Central American can be explained by the core of democracy itself. Democracy is more than an economic system, it comprises social, political and cultural aspects, and thus there lies the difficulty of assessing this unidirectional relationship. This sub-region, as have been proved, underwent a period of stagnant economic growth (1960s-70s), which lead to economic and social diversification, increased inequality and unemployment in rural and urban areas. This situation, motivated that newly emerging groups met with repressive military regimes that restricted democracy in all the countries, except Costa Rica. Moreover, the “lost decade” of the 1980s for Central America evidenced contradictory situations. First the sub-region experienced the most violent and repressive of all prior regimes, accompanied by economic deterioration and negative rates of economic growth, but suddenly, and what can be considered as an internal factor, the signing of Esquipulas II in 1987, a new process of pacification and democratic consolidation started. Also, contrary to the modernization approach. Hence, at this point, the avid reader still should be wondering “why has democracy, which for so long has been an orphan in

this region, suddenly begun to find a home? And why would it pick this time, a period of economic crisis and civil unrest, to do so?" (p.168).

Again, several interpretations can be added to answer this question, but certainly the modernization perspective has no one. Perhaps, a valid argument can be found in the core of democracy itself, and a persuasive answer to this question lies in the nature of the democratic hope, which as Weingast (1997) summarized, it is "citizen attitudes, values and behaviour" which determine democracy and not the level of development. Democracy in itself is not a guarantee to development, as either it emerges only in wealthy societies. But what is clear is that at least democracy, as a societal system, allows a society to choose, openly and freely, its path to development. Consequently, the challenge for the social and economic sciences in the future is to determine then, which attitudes, values and behaviours are better promoting and achieving development, and furthermore, how could we start to build indicators, indexes and models to measure them¹³. This paper did not have an answer to this matter, and certainly it goes beyond its scope, but at least has shed light in the task to understand that democracy can be built among underdeveloped societies and further, we can start to infer, as a widely held belief, that within a democratic system, development can be more self-sustained.

In sum, democracy is rooted in a series of propositions that have been underlined by Rustow (1970), and tested in this paper. They are (i) the factors that keep democratic stability may not be the same that brought it into existence; (ii) not all causal links run from social and economic to political factors; (iii) not all causal links run from beliefs and attitudes to actions; (iv) the genesis of democracy is not uniform, there are many roads to democracy; and finally (v) empirical data in support of a genetic theory must cover a time period from just before until just after the advent of democracy.

Bibliography

Apter, David (1969). *The Politics of Modernization*. The University of Chicago Press. Chicago and London.

Booth, John & Seligson, Mitchel (eds.) (1989). *Elections and democracy in Central America*. The University of North Carolina Press. Chapel Hill and London.

Burkhart, Ross & Lewis-Beck, Michael (1994). Comparative Democracy: The Economic Development Thesis. *American Political Science Review*. Vol. 88, No. 4. p. 903-910.

Center for Latin American Studies (various years). *Statistical Abstract of Latin America*. University of California.

¹³ Douglass North (1990) work is an excellent and provocative one on this direction. In his analysis of what factors influence economic performance, he grasps the cultural determinants, such as customs, traditions and codes of conduct which determines the level of economic development. And concludes that "effective traditions of hard work, honesty, and integrity simply lower the costs of transacting and make possible complex, productive exchange" (p.138), and hence increase the level of development in a society. However, the problem, once again, is that he is not able to determine how to measure "cultural" indicators.

Dominguez, Jorge & Lindenberg, Marc (eds.) (1997). *Democratic transitions in Central America*. University Press of Florida. Gainesville.

Dunkerley, James (1988). *Power in the Isthmus: A Political History of Modern Central America*. Verso. London and New York.

Dunkerley, James (1994). *The Pacification of Central America: Political Change in the Isthmus, 1987-1993*. Verso. London and New York.

Ersson, Svante & Lane, Jan-Erik (1996). Democracy and Development: A Statistical Exploration, in Leftwich, A. (ed.) *Democracy and development: theory and practice*. Polity Press. Cambridge.

Faure, Andre M. (1994). Some Methodological Problems in Comparative Politics. *Journal of Theoretical Politics*. Vol. 6. No. 3. p.307-322.

Freedom House Organization (2000). *Freedom in the World: Annual Survey of Political Rights and Civil Rights*. [www.freedomhouse.org/survey99]

Helliwell, John (1994). Empirical Linkages Between Democracy and Economic Growth. *British Journal of Political Science*, Vol. 24. p.225-248.

Heston, Alan & Summers, Robert (1991) The Penn World Table (Mark 5): An Expanded Set of International Comparisons, 1950-1988 *Quarterly Journal of Economics*, May, pp.327--368. [<http://datacentre.chass.utoronto.ca/pwt/index.html>]

Huntington, Samuel P. (1968). *Political Order in Changing Societies*. Yale University Press. New Haven and London.

Huntington, Samuel P. (1987). “The Goals of Development” in Weiner, M. & Huntington, S. (eds.) “*Understanding Political Development: An Analytical Study*”. Little, Brown and Company. Boston and Toronto.

Kirk, John & Schuyler, George (eds.) (1988). *Central America: democracy, development, and change*. Praeger. New York.

Landman, Todd (1999). Economic Development and Democracy: the View from Latin America. *Political Studies*. Vol. 48. p. 607-626.

Linz, Juan J. & Stepan, Alfred (1996). *Problems of Democratic Transition and Consolidation: Southern Europe, South America and Post-Communist Europe*. The John Hopkins University Press. Baltimore and London.

Lipset, Seymour Martin (1959). Some Social Requisites of Democracy: Economic Development and Political Legitimacy. *American Political Science Review*. Vol. 53. p.69-105.

North, Douglass (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge University Press. Cambridge.

O'Donnell, Guillermo (1998). Modernization and Bureaucratic-Authoritarianism: Studies in South American Politics. University of California at Berkeley.

Przeworski, Adam & Limongi, Fernando (1997). Modernization: Theories and Facts. World Politics. Vol. 49. p.155-183

Rueschemeyer, D., Stephens E.H. & Stephens, J.D. (1992). Capitalist Development and Democracy. Cambridge University Press. Cambridge.

Rustow, Dankwart (1970). Transitions to Democracy: Toward a Dynamic Model. Comparative Politics. Vol. 2. No. 3. p.337-363.

Seligson, Mitchel (1987). Development, Democratization, and Decay: Central America at the Crossroads. In Malloy, J. & Seligson, M (eds.). Authoritarians and Democrats: Regime Transition in Latin America. University of Pittsburgh Press.

Studenmund, A.H. (1997). Using Econometrics: A Practical Guide. Addison Wesley, Inc.

Todaro, Michael (2000). Economic Development. Seventh Edition. Addison Wesley Longman, Inc. New York.

Törnquist, Olle (1999). "Politics and Development: A Critical Introduction". London, Thousand Oaks and New Delhi: SAGE Publications.

United Nations (UN). Statistical Yearbook (various years). United Nations. New York.

United Nations Development Programme (UNDP). Human Development Reports 1990-1999. United Nations, New York. [www.undp.org/hdro.htm]

Weingast, Barry (1997). The Political Foundations of Democracy and the Rule of Law. American Political Science Review. Vol. 91, No. 2. p.245-263.