

"If I may be pardoned a remark from my own experience, I will say that my interest in politics is not primary, but derived from my interest in the economic life; and that I hope from this point of approach ultimately to gain a better understanding of the economic life that I have succeeded in gaining hitherto."

Arthur Bentley, The Process of Government. The University of Chicago Press, 1908, p. 210.

## A Bentley's Approach to Public Policy. Some Empirical Support.

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### The Theory:

In 1908 Arthur Bentley proposed an economic approach to political behavior that focused on political pressure groups instead of voters, politicians and political parties;<sup>2</sup> under

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<sup>2</sup>The Bentley's approach can be illustrated by the following quotation:

" The phenomena of government are from start to finish phenomena of force...I prefer to use the word pressure instead of force, since it keeps the attention closely directed upon the groups themselves...Pressure, as we shall use it, is always a group phenomenon. It indicates the push and resistance between groups. The balance of the group pressures is the existing state of society. Pressure is broad enough to include all forms of the group influence upon group, from battle and riot to abstract reasoning and sensitive morality...It allows for humanitarian movements as easily as for political corruption. Groups exert their pressure, whether they find expression through representative opinion groups or whether they are silent, not indeed with the same technique, not with the same palpable results, but in just as real a way." (Arthur Bentley [1908], pp. 258-259).

this framework the economic policies have to be interpreted as equilibriums, given that they are the end product of a redistributive game; game which is highly influenced by the rules under which it is played.

Gary Becker (1983, 1985), developed a model of political competition among pressure groups which, as himself points out, follows the Bentley's approach to the subject.<sup>3</sup> The Becker's model provides an optimal framework in order to describe the role played by the rules of the redistributive game in the Bentley's proposal.

In any society there exists virtually an unlimited number of pressure groups which compete for government redistribution;<sup>4</sup> each of these groups exerts any available form of

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<sup>3</sup>The Bentley's ascendent over the Becker's work is clearly illustrated by the following quotation,

"Individuals belong to particular groups-defined by occupation, industry, income, geography, age and other characteristics-that are assumed to use political influence to enhance the well being of their members. Competition among these groups for political influence determines the equilibrium structure of taxes, subsidies, and other political favors." (Gary Becker, [1983], p.372)

<sup>4</sup>This is clearly illustrated by Bentley (1908), pp. 207-208,

"If we take all the men of our society, say all the citizens of the United States, and look upon them as a spherical mass, we can pass an unlimited number of planes through the center of the sphere, each plane representing some principle of classification, say, race, various economic interests, religion, or language . . . Now, if we take any of these planes and ignore the others, we can group the whole mass of the sphere by means of an outline or diagram traced upon the circle which the plane makes by its intersection with the sphere, and by partition walls erected on this outline at right angles to the circle...Similarly, by means of some other plane together with partition walls perpendicular to it, we can group the whole population on a different basis of classification: that is to say, for a different purpose. Assuming perhaps hundreds, perhaps thousands, of planes through the sphere, we get a great confusion of the groups. No one set of groups, that is, no set distinguished on the basis of any one plane, will be an adequate grouping on the whole mass... A classification into farmers, artisans, merchants, etc., will answer some purposes in studying our population but not others. A classification by race answer some purposes but not many."

political pressure ( $P_i$ ) in order to maximize the utility of its members. The pressure exerted by each group is translated into political influence through the so called "influence functions,"

$$I_i(P_1, \dots, P_i, \dots, P_n; X) = n_i R_{i,5} \quad i = 1, \dots, n$$

where  $R_i$  represents the redistributive outcome of each of the  $n_i$  identical members of the  $i^{\text{th}}$  group, and  $X$  represents any other relevant consideration that may affect the outcome of the redistributive game. The interaction between groups is modeled as a Cournot-Nash non-cooperative game in political pressure; so, the equilibrium is determined by the utility maximizing condition for each group with respect to its level of political pressure, taking as given the pressure exerted by any other group. The level of political pressure chosen by any group depends on variables like the size of the group, its efficiency producing political pressure, the effect of additional pressure on their influence, and the deadweight costs of taxes and subsidies (see Becker [1983]); but it also depends on the rules under which the different pressure groups compete, which I will summarize by the variable  $X$ .<sup>6</sup>

These rules are influenced by many factors, i.e., the basic laws of the country

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<sup>5</sup>Subject to the government budget constraint  $\sum_i R_i = 0$ . In order to simplify the exposition we are not taking into account the deadweight losses from taxes and subsidies (see Becker [1983], pp. 389-390, for a more complete exposition).

<sup>6</sup>"Suppose, for example, we take a modern battle, and note that it is fought, not with complete abandon, but under definite limitations which forbid certain cruelties, such as the poisoning of springs, the butchery of the wounded, firing upon Red Cross parties, the use of explosive bullets, or the use of balloon explosives. Or suppose we take a political campaign, and note that in one country the contestants use methods which are not used in another... There are rules of the game in existence, which form the background of the group activity" (Arthur Bentley [1908], p. 218).

(Constitution, Electoral Law, Judicial Traditions, etc.), the level of political participation (the extent that popular will is reflected at decision making institutions), the level of competitiveness of the political system (political parties may be forbidden, only one official party may be allowed, etc.), the level of civil and political liberties (anti-government demonstrations, strikes may be forbidden, etc.), etc. (see Arat, 1984).

The following example will help me to illustrate this point; a usual form of restricting the extent to which popular will is reflected in decision-making institutions consists of blocking access of the political process to part of the population; South Africa gives us a clear illustration of this practice. In South Africa a substantial part of the residents of the geographic area have no political rights;<sup>7</sup> the elimination of this form of political discrimination would sharply affect the rules of the redistributive game, being possible to predict changes in its outcome,

$$I_i(P_{1,r}, \dots, P_{i,r}, \dots, P_{n,r}; X_r) \dots I_i(P_{1,f}, \dots, P_{i,f}, \dots, P_{n,f}; X_f)$$

$$i = 1, \dots, n$$

where, the subscripts r and f indicate an scenario characterized by the existence of political restrictions, and full political rights, respectively. The expected change in the outcome of this

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<sup>7</sup>As Gordon Tullock (1987), pp. 4-14, states,

"Modern Israel and South Africa are also electoral, although in both cases a considerable number of the residents of the geographic area are not permitted to vote... The number is, of course, very much larger in South Africa than in Israel. Israel has a Jewish population of about 3.5 million, and an Arab population of about 1,650,000. Of the latter, about 1.15 million live in the area conquered by Israel in 1966 and cannot vote. There are about 5.4 million whites with full franchise, and about 18 million blacks and Asians with either restricted or no franchise in South Africa."

game is, from my point of view, the most critical factor in the white opposition to the complete elimination of political restrictions.

Another example is provided by a military coup d'etat that overthrows a democratic regime; this change of government will alter the rules of the redistributive game; the reason for this is that the immediate consequence of the overthrow of a democratic regime will be the establishment of a dictatorship, a situation which will drastically modify the structure of the political organization of society (i.e., the Parliament will be closed, the political parties forbidden, any Electoral Law ruled out, anti-government demonstrations and strikes forbidden, etc.). The change in the rules of the game embodied in a successful coup will bring up a new political-economic equilibrium, which will have associated changes in the redistributive success of the different groups,<sup>8</sup>

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<sup>8</sup>Gary Becker (1983) explicitly supports this hypothesis,

"All political systems, however, including dictatorial as well as democratic systems, have been subject to pressures from special interest groups that try to use influence to enhance their welfare. ...Since only weak restrictions are imposed on these functions, the basic implications of the analysis should be applicable to widely different political systems, including nondemocratic systems, although, of course, the influence of particular groups is often sensitive to the characteristics of a political system" (Becker [1983], p. 375).

He also supports it implicitly in his (1985) paper,

"If special interest groups are crucial to the political process, political systems would be largely defined by their activities and opportunities. Democracies have competition among groups with relatively equal political strength, while totalitarian and other nondemocratic systems have restricted competition among groups with highly unequal strength...In democracies so defined, a few groups cannot easily obtain very large subsidies, since I have shown that large subsidies stimulate countervailing pressure by those taxed to finance the subsidies. In totalitarian systems, on the other hand, a few groups can more readily use the state to raise substantially their well being because other groups are not permitted to form effective opposition" (Becker [1985], p. 345).

$$I_i(P_{1,c}, \dots, P_{i,c}, \dots, P_{n,c}; X_c) \dots I_i(P_{1,d}, \dots, P_{i,d}, \dots, P_{n,d}; X_d)$$

$$i = 1, \dots, n$$

where from now on the subscripts c and d refer to a military and a democratic regime, respectively.

Actually, these considerations will only be relevant in a military coup d'etat that overthrows a democratic regime; they are basically non-existent in a coup that replaces one military government with another. In this type of coup, although it replaces the military head of the state and some of the government officials, it does not modify the political organization of society<sup>9</sup> (i.e., the Parliament has been closed since the overthrowing of the democratic regime, the political parties forbidden, the Electoral Law ruled out, etc.).

This hypothesis is supported by Arat (1984), who has estimated, for a sample which oscillates from 64 countries in 1948 to 131 in 1971, an index of democraticness based in the mentioned characteristics (the estimated scores, which are ranked in the 0-20 interval, fluctuate between 0.55 and 18.91; the higher the rank, the higher the degree of

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<sup>9</sup>As Ramon Cao Garcia (1983), p. 78, states,

"On the basis of the intentions of the plotters, two types of coups d'etat can be distinguished: (a) "changing of the guard" coups, and (b) "structural" coups. A changing of the guard coup intends to change the head of the state and some of the government officials without any change in the basic government policies or the political organization of society. The structural coup, on the other hand, is one where the plotters aim not only to exclude some government officials from their offices, but also intend to drastically modify the existing government policies and change the political organization of society...A changing of the guard coup can only be possible in dictatorships, because in democracies all coups are of structural variety. The reason is that the immediate consequence of a coup d'etat is the establishment of a dictatorial regime and, if the political institutions of society before the coup were democratic, a coup would drastically change the structure of the political organization."

democraticness). From his estimated time series it is possible to verify important changes in the estimated value of the index after a military coup d'etat which overthrows a democratic regime but not after a coup which only replaces a military ruler by another one (the time series of the index of democraticness estimated by Arat are reported in the Appendix).

Consequently, given the fact that the rules of the redistributive game remains basically unaltered after a coup that only replaces a military ruler by another one, there is no reason to expect that the outcome of the redistributive game will be greatly affected by the change of military ruler. This asymmetry will prove to be of great utility in order to provide empirical support to the Bentley's approach to public policy.

### The Evidence:

I will devote this section to provide evidence in support of the Bentley's approach to public policy by evaluating the plausibility of the hypothesis that a military coup d'etat which overthrows a democratic regime will produce significant changes in the outcome of the redistributive game (induced by the change in the rules of the game embodied in the coup) which will not be verified either after a coup that only replaces a military ruler by another one, or after a democratic presidential transition.

In order to further this goal I will make use of an indicator of macroeconomic rent seeking proposed by Eliakim Katz and Jacob Rosenberg(1989). Katz and Rosenberg (1989) present quantitative measures of the proneness of different countries to respond to pressure groups in determining the composition of their spending. To do so, the authors measure the



budget related rent seeking activity based on the data regarding the various categories in the government's budget (assuming that every change in the proportion of the government's budget spent for a given purpose occurs as a result of rent seeking activity by pressure groups.<sup>10</sup>)

I will use a similar methodology since in this terms, my hypothesis predicts that the budget-related rent seeking activity will increase after a change of political regime but not after simply a change of ruler.

The following measure, which I will call the Bentley Index, captures the rent seeking for budgetary allocation as a proportion of the overall government spending,

$$\text{Bentley Index}_t = \sum_{i=1 \dots n} |S(t)_i - S(t-1)_i|$$

where  $S(t)_i$ ,  $S(t-1)_i$  are the proportions of the budget going to purpose  $i$  in years  $t$  and  $t-1$  respectively and the number  $n$  is equal to the number of categories in the budget. Then, the Bentley Index represents the total sum of the absolute changes in the proportion allocated to different categories in year  $t$  over year  $t-1$ .<sup>11</sup>

I will build up time series of the Bentley Index for different countries. The Statistical Yearbook of the United Nations provides a complete and similar desegregation of the total

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<sup>10</sup>For the purposes of measurement Katz and Rosenberg take into account the change in a given category in the budget (and not the overall size of the category) to represent rent seeking activity; given that rent seeking battles to alter the structure of property rights over the budget takes place at the margin.

<sup>11</sup>In order to avoid double counting Katz and Rosenberg divide the value of this Index by 2. For my goal it will not be necessary to do so, since I am not concerned with the specific value of the Index but with its first differences.

expenditures of the different governments since 1976; but for my purposes, I am interested in data from the fifties, sixties and the beginning of the seventies, when most of the coups have been verified. Then, I will make use of the data provided by the Statistical Yearbook since 1976; an alternative, but complete, desegregation provided by the International Financial Statistics (IMF) for the early seventies; and for the fifties and sixties the different desegregations available for the different countries provided by the Statistical Yearbook of the United Nations.

Under this caveat  $n$  will represent the number of available categories in an specific country, and  $S(t)_i$ ,  $S(t-1)_i$ , the proportions of the basket of the  $n$  available categories going to purpose  $i$  in years  $t$  and  $t-1$  respectively. I will also build time series of an alternative version of the Bentley Index, excluding the allocation to "defence."

In the rest of the section I will examine the behavior of the time series of the different versions of the Bentley Index built for the different countries. I will define that the information provided in an specific case supports the proposed hypothesis if:

A) The Bentley Index in the year when a change of regime was verified (if it was verified before October 1), or in the following year (if it was verified after October 1), exceeds the mean of the series by at least one standard deviation.

B) The Bentley Index in the year when a change of ruler was verified (if it was verified before October 1), or in the

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following year (if it was verified after October 1), does not exceed the mean of the series by at least one standard deviation.

Otherwise, I will determine that it rejects the proposed hypothesis.

I will classify an event as a change of regime if:

- A military coup d'etat overthrows a democratic regime.
- A democratic regime is restored.
- There is a mass revolution.

I will classify an event as a change of ruler if:

- There is a non democratic transition (i.e. a military government is replaced by another one).
- There is a democratic transition (i.e. a democratic presidential transition).

I will examine 32 events; from them 14 represent changes of regimes and 18 changes of rulers.

### Changes of regimes

A) Military Coups d'etat which Overthrow Democratic Regimes:

- Argentina: 1966 (General Ongania replaced President Arturo

Illia), 1976 (General Roberto Rafael Videla replaced President Maria Estela Martinez de Peron).

- Chile: 1973 (General Agustin Pinochet replaced President Salvador Allende).
- Ecuador: 1963 (A Military Junta replaced President Julio Arosemena Monroy).
- Panama: 1968 (A Provisional Junta of Government replaced President Arnulfo Arias).
- Uruguay: 1973 (After a military coup d'etat President Jose Maria Bordaberry was allowed to remain in office but only as a figurehead).

#### B) Democratic Regimes which are Restored:

- Argentina: 1963 (Arturo Illia assumed the government after the non democratic ruling of Jose Maria Guido), 1973 (Hector Jose Campora assumed the government after 7 years of military ruling).
- Dominican Republic: 1966 (Joaquin Balaguer won the July election, the first after the USA 1965 invasion).
- Greece: 1974 (The military rulers called Constantine Karamanlis to form a caretaker government preparatory to return to civilian rule).
- Peru: 1956 (Manuel Prado is elected President in the first free elections since 1945).
- Spain: 1977 (Prime Minister Adolfo Suarez moved energetically to advance the reform program of the political system).
- Venezuela: 1958 (Romulo Betancourt, leader of Accion Democratica, won the presidential election, the first free one after the General Perez Jimenez dictatorship).

C) Mass Revolutions:

- Iran: 1979 (On February, the religious leader, Ayatollah Ruhollah Khomeini came back to Iran and formed a Revolutionary Council; two months later an Islamic Republic was proclaimed).

Change of RulersA) Non Democratic Transitions:

- Argentina: 1970 (General Ongania is replaced by General Marcelo Levingston), 1971 (General Levingston is replaced by General Alejandro Lanusse), 1981 (General Viola is replaced by General Galtieri), 1982 (General Galtieri is replaced by General Bignone).
- Dominican Republic: 1962 (Joaquin Balaguer installed a 7-man Council of State with himself as President after the resignation, in November 1961, of General Hector Trujillo).
- Uruguay: 1976 (Juan Maria Bordaberry was finally deposed. The Council of the Nation designated after 3 months Dr. Aparicio Mendez as President).

B) Democratic Transitions:

- Chile: 1958, 1964 and 1970 (Jorge Alessandri, independent, rightist candidate; Eduardo Frei, Democracia Cristiana Party; and Salvador Allende, leftist candidate, were elected President).
- Ecuador: 1956 and 1960 (Jose Camilo Ponce Enriquez, Conservative Party; and Jose Maria Velazco Ibarra, charismatic leader who had also been elected President in 1934, 1944 and 1952, were elected President).
- France: 1981 (Francois Mitterrand, Socialist contender, defeated the incumbent President, Valery Giscard d'Estaing, candidate of the Gaullist-allied Independent Republicans).

- Israel: 1977 (The opposition Likud party arrived to the government for the first time since the establishment of the state, after the stunning electoral upset of the Israel Workers' Party).
- Spain: 1982 (The ruling of the Democratic Center Party ended on December, when Felipe Gonzalez, leader of the Socialist Workers' Party, was inaugurated as the first left-wing chief executive since 1936).
- United Kingdom: 1974 and 1979 (Harold Wilson, leader of the Labor Party; and Margaret Thatcher, leader of the Conservative Party, were designated Prime Minister).
- United States: 1977 and 1981 (James Carter, Democrat candidate; and Ronald Reagan, Republican candidate, became President).

In the Appendix, I report the time series of both versions of the Bentley Index for each case, as well as a brief summary of the political history of each country in the relevant periods. Tables 1 and 2 summarize the information provided by these time series.

TABLE 1

## BENTLEY INDEX. SUMMARY OF THE RESULTS

Country	Change of Regime		Change of Ruler but not of the Regime	
	Support	Reject	Support	Reject
Argentina (63-79)	2	2	2	0
Argentina (77-83)	0	0	2	0
Chile	1	0	2	1
Dominican Republic	1	0	1	0
Ecuador	1	0	2	0
France	0	0	1	0
Greece	1	0	0	0
Iran	1	0	0	0
Israel	0	0	1	0
Panama	1	0	0	0
Peru	1	0	0	0
Spain	0	1	1	0
United Kingdom	0	0	1	1
United States	0	0	2	0
Uruguay	1	0	1	0
Venezuela	1	0	0	0
Total	11	3	16	2
Percentage	79	21	89	11

TABLE 2

## BENTLEY INDEX WITHOUT "DEFENCE." SUMMARY OF THE RESULTS

Country	Change of Regime		Change of Ruler but not of the Regime	
	Support	Reject	Support	Reject
Argentina (63-79)	2	2	2	0
Argentina (77-83)	0	0	2	0
Chile	1	0	2	1
Dominican Republic	1	0	1	0
Ecuador	0	1	2	0
France	0	0	1	0
Greece	1	0	0	0
Iran	1	0	0	0
Israel	0	0	1	0
Panama	0	1	0	0
Peru	1	0	0	0
Spain	0	1	1	0
United Kingdom	0	0	1	1
United States	0	0	1	1
Uruguay	1	0	1	0
Venezuela	0	0	0	0
Total	8	5	15	3
Percentage	62	38	83	17



SummaryTable 1

- A) Total number of observations: 160
- B) Number of observations that exceed the mean of the series by at least one standard deviation: 27
- C) Number of observations at the time of a change of regime that exceed the mean of the series by at least one standard deviation: 11 (41%)
- D) Number of observations at the time of a change of ruler that exceed the mean of the series by at least one standard deviation: 2 (7%)

Table 2

- A) Total number of observations: 154
- B) Number of observations that exceed the mean of the series by at least one standard deviation: 30
- C) Number of observations at the time of a change of regime that exceed the mean of the series by at least one standard deviation: 8 (27%)
- D) Number of observations at the time of a change of ruler that exceed the mean of the series by at least one standard deviation: 3 (10%)

The evidence provided by the behavior of the Bentley Index supports the proposed hypothesis in 79 percent of the changes of regimes (11) and 89 percent of the changes of rulers (16); by the same token, if I do not take into account the change in the

government expenditures in "defence," the behavior of the Bentley Index supports the proposed hypothesis in 62 percent of the changes of regimes (8) and 83 percent of the changes of rulers (15).

There exist many factors which appear to hinder the probability of obtaining evidence in support of my hypothesis (or of any other one) by using the estimated time series of the Bentley Index. For example:

A) The fact that government spending by exact purpose or by very desegregated data is not available for most countries. Even for the countries where we have the complete desegregation of the total expenditures of the government, the data is highly aggregated (7 or 8 categories); to the extent that rent seeking takes place between sub-departments, the very aggregated data are likely to lead to underestimates of the rent seeking taking place for government spending.<sup>12</sup>

B) The fact that the available categories represent in some cases as few as 30

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<sup>12</sup>As Katz and Rosenberg (1989) indicated for the nine categories that they have utilized,

"The purposes here are taken as equivalent to the very broadly defined nine categories of spending by government departments described above. To the extent that most (or at least considerable) rent seeking takes place between sub-departments or purposes, these very aggregated data are likely to lead to underestimates of the rent seeking taking place for government spending."

percent of the budget; which implies that there may be important changes between the rest of the categories which are not taken into account by our index.

Under these conditions the fact that the behavior of both versions of the Bentley Index in 15 different countries--during different periods of time, and under different available budget desegregations--does not seem to reject the hypothesis that the budget related rent seeking activity increases after a change of political regime but not after a change of ruler alone represents, from my point of view, an important support for the Bentley's approach to public policy.

## APPENDIX

### 1. Argentina, 1963-1983

#### The Political History

- On 1962 the Constitutional President, Arturo Frondizi, was overthrown, assuming the Presidency Jose Maria Guido who was at that time Provisional President of the Senate (first in the line of succession). Guido, following the military pressures intervened all the Provinces, annulled the elections of December of 1961 (which result has precipitated the fall of Frondizi), and dissolved the Congress.

- On 1963 Arturo Illia, candidate of the Union Civica Radical Party, triumphed in the Presidential election, taking office in July.

- Illia was overthrown by a military coup d'etat on June 1966. The new President, General Ongania, was overthrown by another coup in June 1970 being succeeded by General Marcelo Roberto Levingston.

- General Levingston ruled the country for only 8 months, being overthrown on February 1971.

- His successor, General Alejandro Agustin Lanusse exerted the Presidency until the return of democracy in 1973.

- In May 1973 assumed the Presidency Hector Jose Campora, candidate of an alliance based on the Justicialista Party. He resigned after only two months in order to enable the return to the presidency of the leader of the Justicialista Party, General Juan Domingo Peron.

- Finally in November, Juan Domingo Peron, assumed the Presidency for a third time. Peron died in July 1974, being succeeded by the Vicepresident, Maria Martinez (Peron's wife).

- On March 1976 Martinez is overthrown by a military coup d'etat; the military Junta designated the Commander in Chief of the Army, General Roberto Rafael Videla, as President until 1981.

- On March 1981 Videla was succeeded by General Roberto Viola. This transition was not a coup but an institutionally planned transfer of office. Viola resigned on December,

being replaced by General Galtieri.

- General Galtieri was overthrown on June 1982, after the defeat in the Falklands War, being succeeded by General Bignone who remained in power until the return of democracy on December 1983.

Tables 3 and 4 report the time series of the Bentley Index during the relevant periods. I also include for reference the time series of the index of democraticness estimated by Arat.

TABLE 3

## BENTLEY INDEX: ARGENTINA, 1963-1979

Year	Index of Democratic	Bentley Index	Bentley Index Without "Defense"	Type of Event
1963	9.23	2.40	2.25	D*M (A)
1964	9.18	7.60	7.96	
1965	9.36	5.00	5.20	
1966	2.19	5.60	5.24	M*D (B)
1967	2.35	2.40	2.41	
1968	2.26	3.20	2.13	
1969	2.39	3.40	3.32	
1970	2.51	2.80	2.54	M*M (C)
1971	2.57	3.20	3.23	M*M (D)
1972	2.62	5.60	5.41	
1973	13.37	8.66	8.68	D*M (E)
1974	13.66	8.46	8.33	
1975	13.40	5.72	5.22	
1976	2.50	14.29	14.25	M*D (F)
1977	2.42	4.81	4.48	
1978	n.d.	6.12	6.49	
1979	n.d.	7.27	7.18	

Source: Own elaboration; based on data from Erogaciones del Sector Publico Argentino, Ministerio de Economia, 1982, and from Zehra Fatma Arat, The Viability of Political Democracy in Developing Countries, University of New York at Binghamton, 1984.



Notes:

D \* M = A military regime is replaced by a democratic one.

M \* D = A democratic regime is replaced by a military one.

M \* M = A military regime is replaced by another military one.

Items (8): General Administration, Defense, Security, Health, Culture and Education, Development of the Economy, Social Welfare, and Service of the Public Debt.

- The eight items represented over 99 percent of the total expenditures. We are not taking into account a ninth item "Science and Technology" because it presents a value different from zero for the first time in 1972; this appears to be a change in the criteria of desegregation of the expenditures.

Bentley Index:

Mean of the series: 5.68

Standard deviation: 2.93

Events which support the proposed hypothesis: C, D, E and F.

Events which reject the proposed hypothesis: A and B.

Bentley Index without "defense":

Mean of the series: 5.54

Standard deviation: 3.03

Events which support the proposed hypothesis: C, D, E and F.

Events which reject the proposed hypothesis: A and B.



TABLE 4

## BENTLEY INDEX: ARGENTINA, 1977-1983

Year	Index of Democratic	Bentley Index	Bentley Index without "Defense"	Type of Event
1977	n.i	14.18	13.95	
1978	n.i	13.47	12.92	
1979	n.i	13,63	14.01	
1980	n.i	24.00	24.65	
1981	n.i	17.37	17.58	M*M (A)
1982	n.i	12.12	11.68	M*M (B)
1983	n.i	9.12	9.13	

Source: Own elaboration; based on data from the Statistical Year-book (various numbers), United Nations.

## Notes:

Items (8): General Public Services, Defense, Education, Health, Social Security and Welfare, Housing and Community Affairs, Economic Affairs, Other.

- The eight items taken into account to build the Bentley Index represent 100 % of the total expenditures.

Bentley Index:

Mean of the series: 14.84

Standard deviation: 4.38

Events which support the proposed hypothesis: A and B.

Events which reject the proposed hypothesis: None.

Bentley Index without "defense":

Mean of the series: 14.85

Standard deviation: 4.65

Events which support the proposed hypothesis: A and B.

Events which reject the proposed hypothesis: None.

2. Chile, 1956-1976

The Political History

- General (Army retired) Carlos Ibañez del Campo (former President, 1927-1931) was elected President in 1952 by a substantial plurality, as the candidate of the Agrarian Laborites, the Popular Socialists and a large number of "Ibañista" parties.

- Ibañez was succeeded by Jorge Alessandri, an independent, rightist candidate, who won the September 1958 Presidential election, supported by the Liberal and the United Conservative parties.

- Alessandri was replaced in November of 1964 by Eduardo Frei who had won the September Presidential election; he was succeeded six years later by Salvador Allende, leftist candidate, the winner of the 1970 election.

- In September of 1973 Salvador Allende was ousted by a military coup d'etat; since that date General Agustin Pinochet has ruled the country.

TABLE 5

## BENTLEY INDEX: CHILE, 1956-1976

Year	Index of Democratic	Bentley Index	Bentley Index Without "Defense"	Type of Event
1956	18.50	6.43	3.47	
1957	18.44	4.87	7.96	
1958	18.45	9.65	8.79	
1959	19.43	19.57	16.94	D*D (A)
1960	15.48	5.07	4.61	
1961	19.43	1.25	1.27	
1962	19.38	2.50	2.23	
1963	19.46	10.05	9.89	
1964	19.40	10.69	13.76	
1965	19.42	3.11	0.62	D*D (B)
1966	19.49	3.66	4.05	
1967	19.38	3.40	3.64	
1968	19.44	3.67	4.67	
1969	19.44	1.64	2.25	
1970	19.36	5.70	0.13	
1971	19.32	11.61	1.61	D*D (C)
1972	19.68	3.06	3.55	
1973	2.78	21.96	13.27	M*D (D)
1974	2.42	15.39	13.59	
1975	2.31	6.07	9.59	
1976	2.35	10.84	16.89	

Source: Own elaboration; based on data from the Statistical Yearbook (various numbers), United Nations and from Zehra Fatma Arat, The Viability of Political Democracy in Developing Countries, University of New York at Binghamton, 1984.

Notes:

Items (3): Defense, Education, Social Services.

- The three items represented from 30 percent to 47 percent of the total expenditures.

- We have chosen the 1959, 1965 and 1971 observations as the relevant ones because the presidential transitions were verified in November of the previous years.

Bentley Index:

Mean of the series: 7.63

Standard deviation: 5.64

Events which support the proposed hypothesis: B, C and D.

Events which reject the proposed hypothesis: A.

Bentley Index without "defense":

Mean of the series: 5.32

Standard deviation: 6.80

Events which support the proposed hypothesis: B, C and D.

Events which reject the proposed hypothesis: A.

### 3. Dominican Republic, 1961-1974

The Political History

- Generalissimo Rafael Trujillo Molina was President of the Dominican Republic for the terms 1930-1934, 1934-1938, 1942-1947, and 1947-1952. In 1952 he decided to support the election of his brother, General Hector Trujillo Molina.

- Hector Trujillo resigned on November 1961 (his brother being assassinated in May). The Vice-president Joaquin Balaguer installed a seven-man Council of State on January

1, 1962, with himself established as president.

- In January 1962 a coup overthrew the council, but two days later it was reinstated by a counter-coup which installed Rafael Bonnelly as its President.

- In February 1963 Juan Bosch is installed in office after having been triumphant in the free elections which were conducted in September 1962. Bosch was overthrown by a military coup d'etat in September, which installed a provisional Triumvirate.

- On April 1965 the Triumvirate is overthrown by another coup. A conflict over the formation of a new government erupted between those who supported the return of Bosch and those who proposed a military Junta committed to early general elections; this political conflict led to an outbreak of hostilities and civil conflict. At the end of April USA forces invaded the island.

- In September a provisional government is installed which runs the country until the presidential election of June 1966. Joaquin Balaguer (the ousted 1962 President of the council) won the election, taking office in July, and subsequently being reelected in 1970 and 1974.

TABLE 6

## BENTLEY INDEX: DOMINICAN REPUBLIC, 1961-1974

Year	Year of Democratic	Bentley Index	Bentley Index Without "Defense"	Type of Event
1961	5.29	9.68	9.92	
1962	3.42	9.18	13.86	M*M (A)
1963	2.16	6.93	5.13	
1964	2.36	13.09	12.14	
1965	2.29	27.27	24.88	
1966	13.66	24.90	17.63	D*M (B)
1967	13.27	7.19	8.38	
1968	13.48	12.34	14.71	
1969	13.43	4.61	3.58	
1970	14.47	5.81	4.20	
1971	14.39	2.34	0.65	
1972	14.45	1.68	1.30	
1973	14.38	2.01	2.56	
1974	13.39	11.47	6.66	

Source: Own elaboration; based on data from the Statistical Yearbook (various numbers), United Nations and from Zehra Fatma Arat, The Viability of Political Democracy in Developing Countries, University of New York at Binghamton, 1984.

Notes:

Items (5): Education, Health and other Social Welfare, Agriculture, Public Works and Communications, and Defense.

- The five items represented from 29 % to 65 % of the total expenditures.

- We haven chosen the 1966 observation as the relevant one following Arat, but in fact the change of political regime may be fairly associated with the installation of the provisional government after the USA invasion in September 1965. In any case, the two versions of the Bentley Index estimated for 1965 also satisfy the proposed hypothesis.

Bentley Index:

Mean of the series: 9.89

Standard deviation: 7.53

Events which support the proposed hypothesis: A and B.

Events which reject the proposed hypothesis: None.

Bentley Index without "defense":

Mean of the series: 8.97

Standard deviation: 6.75

Events which support the proposed hypothesis: A and B.

Events which reject the proposed hypothesis: None.

#### 4. Ecuador, 1956-1967

##### The Political History

- June 1956, Camilo Ponce Enriquez is elected for a four-year term, supported by a coalition of the Conservative and the Social Christian Parties. Enriquez, the first conservatively oriented President in 61 years, succeeded Jose Maria Velazco Ibarra; a charismatic individual who was elected President of Ecuador five times (1934, 1944, 1952, 1960, 1968) and overthrown four (1935, 1947, 1961, 1972).
- Ponce Enriquez was succeeded in 1960 by Jose Maria Velazco Ibarra, who won the Presidential election with the largest majority in Ecuadorean history. In November 1961, following anti-government rioting and mass resignation of the Cabinet he resigned once again, having been replaced by the Vice-president Carlos Julio Arosemena Monroy.
- Monroy was overthrown by a military coup d'etat in July 1963; being replaced by a Military Junta.
- Finally, a Constituent Assembly was elected in October 1966, which nominated an interim President, Otto Arosemena Gomez, who ruled the country until the 1968 elections when Velazco Ibarra was elected once again.



TABLE 7

## BENTLEY INDEX: ECUADOR, 1956-1967

Year	Index of Democrat.	Bentley Index	Bentley Index Without "Defense"	Type of Event
1956	13.37	1.95	3.11	D*D (A)
1957	13.41	1.40	2.77	
1958	13.41	7.50	2.31	
1959	13.36	12.69	14.19	
1960	15.42	9.87	11.67	D*D (B)
1961	15.39	9.53	5.94	
1962	15.46	9.25	7.22	
1963	2.36	15.13	8.55	M*D (C)
1964	2.37	5.74	3.15	
1965	2.44	9.69	14.68	
1966	3.46	12.60	17.97	
1967	3.46	6.25	9.72	

Source: Own elaboration; based on data from the Statistical Yearbook (various numbers), United Nations, and from Zehra Fatma Arat, The Viability of Political Democracy in Developing Countries, University of New York at Binghamton, 1984.

Notes:

Items (4): Social Welfare, Public Health, Education, National Defense.

- The four items represented from 26 % to 43 % of the total expenditures.

Bentley Index:

Mean of the series: 8.47

Standard deviation: 3.98

Events which support the proposed hypothesis: A, B and C.

Events which reject the proposed hypothesis: None.

Bentley Index without "defense":

Mean of the series: 8.44

Standard deviation: 5.07

Events which support the proposed hypothesis: A and B.

Events which reject the proposed hypothesis: C.

## 5. France, 1977-1982

The Political History

- In May 1974, after President Pompidou's death, Valery Giscard d'Estaing, of the Gaullist-allied Independent Republicans, defeated Francois Mitterrand in a runoff balloting, with 50.7 percent of the vote and assumed the presidency for a seven years term.

- At the end of his period, Giscard d'Estaing prevailed over Mitterrand in the first round of the 1981 presidential election, but was narrowly defeated by the Socialist contender at the runoff by a 3.5 percent margin.

- Francois Mitterrand was inaugurated on May 27, and re-elected in May 1988 for the 1988-1995 period.



TABLE 8

## BENTLEY INDEX: FRANCE, 1977-1982

Year	Index of Democratic.	Bentley Index	Bentley Index Without "Defense"	Type of Event
1977	n.i	5.48	5.78	
1978	n.i	4.01	4.01	
1979	n.i	2.24	1.92	
1980	n.i	3.28	3.03	
1981	n.i	2.84	3.00	D*D (A)
1982	n.i	2.01	1.95	

Source: Own elaboration; based on data from the Statistical Yearbook (various numbers), United Nations.

## Notes:

Items (8): General Public Services, Defense, Education, Health, Social Security and Welfare, Housing and Community Affairs, Economic Affairs, and Other.

- The eight items taken into account to build the Bentley Index add to the 100 percent of the total expenditures.

Bentley Index:

Mean of the series: 3.31

Standard deviation: 1.17

Events which support the proposed hypothesis: A.

Events which reject the proposed hypothesis: None.

Bentley Index without "defense":

Mean of the series: 3.28

Standard deviation: 1.33

Events which support the proposed hypothesis: A.

Events which reject the proposed hypothesis: None.

## 6. Greece, 1973-1981

### The Political History

- Greece was ruled between 1949 and 1964 by a succession of conservative governments. In 1964 a left center coalition, led by George Papandreou, achieved a parliamentary majority. Disagreements with King Constantine on military issues led to the dismissal of Papandreou in 1965, and culminated two years later in a military coup d'etat with the establishment of a military junta. The King left the country in December 1967.

- In 1973 the King was formally deposed and a republic proclaimed; the prime minister Col. George Papadopoulos scheduled elections for early 1974, but he was ousted in November by a conservative military group under the leadership of Brig. Dimitrios Ioannides. The new regime canceled the elections and restored curbs on civil liberties.

- In July 1964 the increased restless and growing inflation forced the military rulers to reverse their decision and to request that Constantine Karamanlis form a caretaker government which would prepare to revert to civilian rule. Karamanlis was confirmed prime minister following a parliamentary election in November, remaining in this position until May 1980 when he resigned following his designation as President. George Rallis was appointed prime Minister, being replaced in October 1981 by Andreas Papandreou, who formed a socialist government after the electoral success of the Panhellenic Socialist Movement.

TABLE 9

## BENTLEY INDEX: GREECE, 1973-1981

Year	Index of Democratic.	Bentley Index	Bentley Index Without "Defense"	Type of Event
1973	1.55	12.32	9.16	
1974	18.07	16.16	12.82	D*M (A)
1975	18.43	12.94	6.47	
1976	18.67	9.96	9.33	
1977	19.24	6.04	6.05	
1978	n.i	14.00	17.16	
1979	n.i	4.54	1.22	
1980	n.i	11.22	5.60	
1981	n.i	5.10	2.43	

Source: Own elaboration; based on data from Supplement on Government Finance, International Financial Statistics, International Monetary Fund, 1986 and from Zehra Fatma Arat, The Viability of Political Democracy in Developing Countries, University of New York at Binghamton, 1984.

Notes:

Items (7): Defense, Education, Health, Social Security and Welfare, Housing and Community Amenities, Economic Services, and Others.

- The seven items taken into account to build the Bentley Index add to the 100 percent of the total expenditures.

Bentley Index:

Mean of the series: 10.25

Standard deviation: 3.92

Events which support the proposed hypothesis: A.

Events which reject the proposed hypothesis: None.

Bentley Index without "defense":

Mean of the series: 6.58

Standard deviation: 4.67

Events which support the proposed hypothesis: A.

Events which reject the proposed hypothesis: None.

7. Iran, 1977-1983

The Political History

- In January 1979, the Shah Reza Pahlavi left the country on what was termed an extended vacation, after both political and religious opposition had intensified.

- On February 1, amid widespread popular acclaim, the religious leader, Ayatollah Ruhollah Khomeini, who had lived in exile since mounting a series of street demonstrations against the 1963 economic and social reforms (the so called white revolution), returned to Iran and announced the formation of a provisional government under a revolutionary Council. Two months later a referendum approved the proclamation of an Islamic Republic by a reported 97 percent majority.

TABLE 10

## BENTLEY INDEX: IRAN, 1977-1983

Year	Index of Democratic.	Bentley Index	Bentley Index Without "Defense"	Type of Event
1977	n.i	16.99	17.50	
1978	n.i	20.65	10.60	
1979	n.i	30.77	31.72	Mass Rev. (A)
1980	n.i	29.77	28.59	
1981	n.i	31.86	33.96	
1982	n.i	8.81	7.95	
1983	n.i	10.53	7.92	

Source: Own elaboration; based on data from the Statistical Yearbook (various numbers), United Nations.

## Notes:

Items (8): General Public Services, Defense, Education, Health, Social Security and Welfare, Housing and Community Affairs, Economic Affairs, and Other.

- The nine items taken into account to build the Bentley Index add to the 100 % of the total expenditures.

Bentley Index:

Mean of the series: 21.32

Standard deviation: 8.98

Events which support the proposed hypothesis: A.

Events which reject the proposed hypothesis: None.



Bentley Index without "defense":

Mean of the series: 21.18

Standard deviation: 9.96

Events which support the proposed hypothesis: A.

Events which reject the proposed hypothesis: None.

## 8. Israel, 1975-1983

### The Political History

- The internal governmental structure of modern Israel emerged from institutions established by the British administration and the Jewish community during the mandate. For three decades after Israeli independence a series of multi-party coalitions built around the Israel Workers' Party governed the country.

- In April 1977 the Prime Minister Yitzhak Rabin, who remained in office in a caretaker capacity pending a general election, was forced to resign his party post in the wake of revelations that he and his wife has violated Israeli law concerning overseas bank deposits. His successor as party leader and acting Prime Minister, Shimon Peres, was unable to reverse popular dissatisfaction with the deteriorating economy and evidence of official malfeasance.

- In May 1977, in a stunning electoral upset, a new reform party, the Democratic Movement for Change, captured much of Labor's support while the opposition Likud party, having obtained a sizable legislative plurality, formed the nucleus of a coalition government under Menachen Begin.

- Begin was inaugurated in June and ruled the country until his resignation on August 1983; he was succeeded by the newly elected leader of the Herut, Likud core party, Yitzhak Shamir.

TABLE 11

## BENTLEY INDEX: ISRAEL, 1975-1983

Year	Index of Democratic.	Bentley Index	Bentley Index Without "Defense"	Type of Event
1975	19.38	13.40	14.37	
1976	19.49	8.82	10.13	
1977	19.58	14.10	14.87	D*D (A)
1978	n.i	18.42	29.55	
1979	n.i	10.26	10.25	
1980	n.i	5.92	13.97	
1981	n.i	19.86	14.43	
1982	n.i	10.00	13.73	
1983	n.i	17.22	4.75	

Source: Own elaboration; based on data from Supplement on Government Finance, International Financial Statistics, International Monetary Fund, 1986; and from Zehra Fatma Arat, The Viability of Political Democracy in Developing Countries, University of New York at Binghamton, 1984.

## Notes:

Items (7): Defense, Education, Health, Social Security and Welfare, Housing and Community Amenities, Economic Services, and Others.

- The seven items taken into account to build the Bentley Index add to 100 percent of the total expenditures.

- The high values of both versions of the Bentley's Index verified in 1978 suggest that the 1977 event would actually reject the proposed hypothesis.

Bentley Index:

Mean of the series: 13.11

Standard deviation: 4.47

Events which support the proposed hypothesis: A.

Events which reject the proposed hypothesis: None.

Bentley Index without "defense":

Mean of the series: 14.01

Standard deviation: 6.30

Events which support the proposed hypothesis: A.

Events which reject the proposed hypothesis: None.

9. Panama, 1965-1973

The Political History

- On October 1964 Marcos Robles was installed as President for a four year term after the May election.

- He was succeeded on October 1, 1968 by Arnulfo Arias, who had been elected in the May election. Arias had already been twice elected and twice deposed (1941 and 1951).

- Arias immediately initiated a shake up of the National Guard, a body that constitutes a combined army and police force. As a consequence, he was overthrown by the Guard 10 days later.

- Col. Jose Maria Pinilla and Col. Bolivar Urrutia were installed at the head of a Provisional Junta Government; however, the real power was exercised by the high command of the National Guard Col. Omar Torrijos and Col. Boris Martinez. Martinez was exiled in February 1969 leaving Torrijos as the sole leader.

- In December 1969 Pinilla and Urrutia attempted to depose Torrijos; they failed and were subsequently replaced by civilians, Demetrio Basilio Lakas and Arturo Sucre respectively, with the real and total power remaining in hands of Torrijos.

TABLE 12

## BENTLEY INDEX: PANAMA, 1965-1973

Year	Index of Democratic.	Bentley Index	Bentley Index Without "Defense"	Type of Event
1965	13.42	1.70	1.09	
1966	13.50	8.96	10.92	
1967	13.41	6.39	7.89	
1968	4.61	8.66	5.06	
1969	4.34	40.38	7.47	M*D (A)
1970	4.45	7.75	10.32	
1971	4.44	11.87	12.00	
1972	4.42	16.36	3.47	
1973	4.41	7.61	5.60	

Source: Own elaboration; based on data from the Statistical Yearbook (various numbers), United Nations and from Zehra Fatma Arat, The Viability of Political Democracy in Developing Countries, University of New York at Binghamton, 1984.

## Notes:

Items (6): Interest on Public Debt, Education, Other Social Services, Agriculture, Commerce and Industry, Public Works, and Other Expenditures.

- The six items taken into account to build the Bentley Index add up to 100 percent of the total expenditures. Since this discrimination does not specify "defense" we have subtracted "other expenditures, where "defense" is included.

- We haven't chosen the 1969 observation as the relevant one because the coup d'etat

was verified in October of the previous years.

Bentley Index:

Mean of the series: 12.19

Standard deviation: 10.64

Events which support the proposed hypothesis: A.

Events which reject the proposed hypothesis: None.

Bentley Index without "other expenditures":

Mean of the series: 7.09

Standard deviation: 3.42

Events which support the proposed hypothesis: None.

Events which reject the proposed hypothesis: A.

10. Peru, 1954-1959

The Political History

- Since 1948 Peru was ruled by a military government which had overthrown the Constitutional President Jose Luis Bustamante y Rivero.

- The Military Board of Government was headed by the leader of the coup General Manuel Odria until June 1950 when he resigned to become Presidential candidate in the July election; an election in which no opposition candidate was found to be qualified.

- Finally in the 1956 Presidential election, the first free ones to take place since 1945, Manuel Prado, former president (1939-1945), was elected once again, assuming office on July 28. His first governmental act was to restore political freedom in Peru and to legalize once more the left-wing opposition party (APRA).

TABLE 13

## BENTLEY INDEX: PERU, 1954-1959

Year	Index of Democratic.	Bentley Index	Bentley Index Without "Defense"	Type of Event
1954	6.40	3.62	3.34	
1955	6.41	2.58	6.59	
1956	15.20	26.08	54.59	D*M (A)
1957	15.41	25.93	51.81	
1958	15.43	20.36	25.86	
1959	15.38	10.42	34.88	

Source: Own elaboration; based on data from the Statistical Yearbook (various numbers), United Nations and from Zehra Fatma Arat, The Viability of Political Democracy in Developing Countries, University of New York at Binghamton, 1984.

## Notes:

Items (3): Defense, Education, and Public health.

- The three items represented from 21 % to 33 % of the total expenditures.

Bentley Index:

Mean of the series: 14.83

Standard deviation: 9.79

Events which support the proposed hypothesis: A.

Events which reject the proposed hypothesis: None.

Bentley Index without "defense":

Mean of the series: 29.51

Standard deviation: 19.91

Events which support the proposed hypothesis: A.

Events which reject the proposed hypothesis: None.

11. Spain, 1974-1983The Political History

- General Francisco Franco ruled the country from the end of the civil War (1938) until his death on November 1975; in accordance with the 1947 Law of Succession Juan Carlos de Borbon was sworn in as king. In July 1976, Carlos Arias Navarro, Prime Minister since 1973, resigned at the king's request, following criticism of his somewhat cautious approach to promised reform of the political system.

- His successor, Adolfo Suarez Gonzalez, moved energetically to advance the reform program, securing approval by both the National Council of the National Movement and the Cortes. The National Movement was abolished in April 1977 and in June a balloting took place for a new bicameral Cortes, with Prime Minister Adolfo Suarez' Union of the Democratic Center obtaining a substantial majority in both houses.

- The ruling of the Union of the Democratic Center, first by Adolfo Suarez and since January 1981 by Leopoldo Calvo y Sotelo ended in December 1982 when Felipe Gonzalez, leader of the Socialist Workers' Party, was inaugurated as the first left-wing chief executive since 1936, after obtaining a comfortable majority in the October election.

TABLE 14

## BENTLEY INDEX: SPAIN, 1974-1983

Year	Index of Democrat.	Bentley Index	Bentley Index Without "Defense"	Type of Event
1974	3.00	2.46	3.14	
1975	3.00	4.24	4.24	
1976	3.77	2.06	2.27	
1977	17.04	5.20	0.79	D*M (A)
1978	n.i	7.18	7.53	
1979	n.i	5.44	2.57	
1980	n.i	3.98	4.40	
1981	n.i	7.64	8.49	
1982	n.i	6.42	2.01	
1983	n.i	6.72	6.49	D*D (B)

Source: Own elaboration; based on data from Supplement on Government Finance, International Financial Statistics, International Monetary Fund, 1986 and from Zehra Fatma Arat, The Viability of Political Democracy in Developing Countries, University of New York at Binghamton, 1984.

## Notes:

Items (7): Defense, Education, Health, Social Security and Welfare, Housing and Community Amenities, Economic Services, and Others.

- The seven items taken into account to build the Bentley Index add to the 100 percent of the total expenditures.

- We haven't chosen the 1983 observation as the relevant one because Felipe Gonzalez



took office in December 1982.

Bentley Index:

Mean of the series: 5.13

Standard deviation: 1.84

Events which support the proposed hypothesis: B.

Events which reject the proposed hypothesis: A.

Bentley Index without "defense":

Mean of the series: 4.19

Standard deviation: 2.42

Events which support the proposed hypothesis: B.

Events which reject the proposed hypothesis: A.

12. United Kingdom, 1973-1979

The Political History

- In 1970 the Conservative Party defeated the Labor Party with Edward Heath designated as Prime Minister. Four years later (February 1974) the Conservatives outpolled Labor once again but fell three seats short of a majority in Parliament, returning Harold Wilson (Prime Minister 1964-1970), leader of the Labor Party, to head the first minority government since 1929. Eight months later Labor recovered by winning a majority of three seats.

- In April 1976, Wilson, who had earlier signaled his intention to redesign, was succeeded as Prime Minister by James Callaghan following the latter's election to leadership of the Parliamentary Labor Party.

- James Callaghan remained in office until May 1979 when the Conservatives obtained 339 seats (a majority of 44) in the House of Commons; Margaret Thatcher (designated leader of the Conservative Party four years earlier) became the first female Prime Minister in European history. Thatcher remained in office until November 1990.

TABLE 15

## BENTLEY INDEX: UNITED KINGDOM, 1973-1979

Year	Index of Democratic.	Bentley Index	Bentley Index Without "Defense"	Type of Event
1973	19.10	5.26	5.06	
1974	18.47	7.96	9.24	D*D (A)
1975	18.88	6.78	2.28	
1976	18.86	5.92	10.67	
1977	18.98	4.62	6.24	
1978	n.i	2.60	3.70	
1979	n.i	1.74	1.88	D*D (B)

Source: Own elaboration; based on data from Supplement on Government Finance, International Financial Statistics, International Monetary Fund, 1986 and from Zehra Fatma Arat. The Viability of Political Democracy in Developing Countries, University of New York at Binghamton, 1984.

## Notes:

Items (7): Defense, Education, Health, Social Security and Welfare, Housing and Community Amenities, Economic Services, and Others.

- The seven items taken into account to build the Bentley Index add to the 100 percent of the total expenditures.

- We are not taking into account the 1976 event since both Harold Wilson and James Callaghan represented the Labor Party. For the sake of completeness the following holds true: while the information provided by the Bentley Index satisfies the proposed hypothesis, the information provided by the Index without "defense" rejects it.

Bentley Index:

Mean of the series: 4.98

Standard deviation: 2.05

Events which support the proposed hypothesis: B.

Events which reject the proposed hypothesis: A.

Bentley Index without "defense":

Mean of the series: 5.58

Standard deviation: 3.12

Events which support the proposed hypothesis: B.

Events which reject the proposed hypothesis: A.

13. United States, 1975-1984

The Political History

- In August 1974 Gerald Ford assumed the presidency after the resignation of Richard Nixon. On November 1976 the Democratic candidate, former Georgia Governor Jimmy Carter, defeated President Ford, the first incumbent since 1932 to fail in a bid for a second term. Carter took office in January 1977.

- Carter also became a one-term president. On November 1980 he was defeated by the Republican candidate Ronald Reagan, who assumed the Presidency on January 1981. The 1980 outcome was hailed as a "mandate for change" unparalleled since the Roosevelt landslide of 1932. Reagan moved quickly to address the nation's economic problems by a combination of across-the-board fiscal retrenchment and massive tax cuts, with only the military establishment receiving significant additional funding. Ronald Reagan was reelected in 1984, beginning his second term in office in January 1985.

TABLE 16

## BENTLEY INDEX: UNITED STATES, 1975-1984

Year	Index of Democratic.	Bentley Index	Bentley Index Without "Defense"	Type of Event
1975	19.91	7.50	2.26	
1976	19.19	6.42	3.44	
1977	19.38	5.44	5.76	D*D (A)
1978	n.i	3.90	4.51	
1979	n.i	2.02	1.58	
1980	n.i	3.38	3.51	
1981	n.i	2.18	2.60	D*D (B)
1982	n.i	3.88	2.90	
1983	n.i	2.12	2.24	
1984	n.i	6.50	4.49	

Source: Own elaboration; based on data from Supplement on Government Finance, International Financial Statistics, International Monetary Fund, 1986 and from Zehra Fatma Arat, The Viability of Political Democracy in Developing Countries, University of New York at Binghamton, 1984.

## Notes:

Items (7): Defense, Education, Health, Social Security and Welfare, Housing and Community Amenities, Economic Services, and Others.

- The seven items taken into account to build the Bentley Index add to the 100 percent of the total expenditures.

Bentley Index:

Mean of the series: 5.33

Standard deviation: 1.91

Events which support the proposed hypothesis: A and B.

Events which reject the proposed hypothesis: None.

Bentley Index without "defense":

Mean of the series: 3.33

Standard deviation: 1.22

Events which support the proposed hypothesis: B.

Events which reject the proposed hypothesis: A.

14. Uruguay, 1973-1984

The Political History

- In November 1971 Juan Maria Bordaberry (Colorado Party) was elected president, facing a growing economic crisis, rising unrest among workers, and increasing activity by Tupamaro guerrillas.

- The continuing economic and political instability culminated in a military intervention in February 1973. After the coup Bordaberry was allowed to remain in office, but only as a figurehead. The military presented a 19 point program which emphasized economic reform and greater military participation in political life. A National Security Council was created to oversee the administration, the Congress was dissolved and replaced by a Council of State, and municipal and local councils were supplanted by appointed bodies.

- In June 1976 Bordaberry was finally deposed and after a 3 month interim rule by the Vice-President Alberto Demichelli, the Council of the Nation designated Dr. Aparicio Mendez as President for a five year term. At the end of this period the Council named Retired General Gregorio Alvarez as his successor; Alvarez exerted the Presidency until the return of democracy in 1985.

TABLE 17

## BENTLEY INDEX: URUGUAY, 1973-1984.

Year	Index of Democratic.	Bentley Index	Bentley Index Without "Defense"	Type of Event
1973	2.75	27.66	22.03	M*D (A)
1974	2.38	29.64	7.96	
1975	2.39	20.12	4.87	
1976	2.39	8.70	4.98	M*M (B)
1977	2.41	14.38	12.23	
1978	n.i	17.58	10.31	
1979	n.i	13.12	9.21	
1980	n.i	19.04	15.37	
1981	n.i	11.06	8.76	
1982	n.i	7.44	5.08	
1983	n.i	9.62	2.58	
1984	n.i	16.32	3.04	

Source: Own elaboration; based on data from Supplement on Government Finance, International Financial Statistics, International Monetary Fund, 1986 and from Zehra Fatma Arat, The Viability of Political Democracy in Developing Countries, University of New York at Binghamton, 1984.

Notes:

Items (7): Defense, Education, Health, Social Security and Welfare, Housing and Community Amenities, Economic Services and Others.

- The seven items taken into account to build the Bentley Index add to the 100 percent of the total expenditures.

Bentley Index:

Mean of the series: 16.22

Standard deviation: 6.79

Events which support the proposed hypothesis: A and B.

Events which reject the proposed hypothesis: None.

Bentley Index without "defense":

Mean of the series: 8.87

Standard deviation: 5.39

Events which support the proposed hypothesis: A and B.

Events which reject the proposed hypothesis: None.

15. Venezuela, 1957-1960

The Political History

- On November 1948, in a coup ousting the Accion Democratica Government, the Venezuelan armed forces took power and established a three member Military Junta.
- The Military Junta presented its resignation to the Venezuelan Armed Forces on December 1952 and the Armed Forces appointed General Perez Jimenez, member of the Junta, as Provisional President. In December of 1957 Perez Jimenez ran unopposed for another term of five years, and the 130 members of the Chamber of Deputies were approved on a one party list.
- Perez Jimenez was overthrown by a coup in January of 1958. It was succeeded by a Junta which pledged itself to return the country to Constitutional government.
- In December 1958, Romulo Betancourt, leader of Accion Democratica, won the presidential election and was inaugurated in January 1959.

TABLE 18

## BENTLEY INDEX: VENEZUELA, 1957-1962

Year	Index of Democratic.	Bentley Index	Type of Event
1957	4.38	4.50	
1958	2.46	8.21	
1959	17.34	25.90	D*M (A)
1960	17.16	11.65	
1961	17.37	11.12	
1962	17.16	10.33	

Source: Own elaboration; based on data from the Statistical Yearbook (various numbers), United Nations and from Zehra Fatma Arat, The Viability of Political Democracy in Developing Countries, University of New York at Binghamton, 1984.

Notes:

Items (2): Education, and Defense.

- The two items represented from 14 percent to 18 percent of the total expenditures.

Bentley Index:

Mean of the series: 11.95

Standard deviation: 6.68

Events which support the proposed hypothesis: A.

Events which reject the proposed hypothesis: None.



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