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IMPACT OF REGIME TYPE ON ARGENTINEAN CENTRAL GOVERNMENT BUDGETARY PRIORITIES 1961-82: A TEST OF THE O'DONNELL THESIS

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ABSTRACT

A large body of literature on Argentina suggests that transitions from military to civilian regimes bring about fundamental changes in policy-making in general and in economic, social, and military priorities in particular. This view has been developed by O'Donnell in his path breaking thesis about the emergence o£ new forms of authoritarianism in Latin America. According to O'Donnell each successive government is an alliance of various distinct interest groups. Each alliance is imbued with a distinct sense of what should be done and at whose expense and translates the goals and interests of the members of the coalition into public policies.

The purpose of this paper is to test the O'Donnell thesis i.e., to determine the possible existence and nature of structural changes in the government's budgetary priorities associated with regime change. The empirical results yield considerable support to the general thesis that regime type in Argentina has a major impact on the amount and relative share of resources allocated to defense and socioeconomic activities.

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INTRODUCTION

A sharp change in general economic policies appears to be taking place in Argentina following the demise of the 1976-83 military regime and the restoration of democracy. The changes are apparently not merely ideological--a shift from neo-liberal macro-economic policies to more conventional Keynesian type policies-but also involve budgetary priorities with a shift in emphasis away from military and military related expenditures, towards social and welfare-related allocations. Clearly implied in this shift is the presumption that civilian regimes in Argentina tend to pursue markedly different economic policies than their military counterparts.

The purpose of this paper is to examine by means of statical analysis, the patterns of budgetary allocations associated with regime type in Argentina over the period 1961-82[1]. The main thrust of the analysis is to determine the possible existence and nature of structural changes in the government's budgetary priorities associated with regime change.

THE O'DONNELL THESIS

A wide body of literature on Argentina suggests that transitions from military to civilian regimes bring about fundamental changes in policy-making in general and economic-social priorities in particular. This view has been developed by O'Donnell[2] in his path breaking thesis about the emergence of new forms of authoritarianism in Latin America. According to O'Donnell, particular types of economic and social crisis tend to

- 1. be associated with each phase of modernization.
- bring a new dominant coalition to power and produce a distinct type of authoritarian rule.

A TEST OF THE O'DONNELL THESIS

Each alliance comes to power imbued with a distinct sense of what should be done at whose expense, consolidates its control, centralizes power and authority, seals off the arena to non-coalition members, exercises unconstrained control over the policy process and translates the goals and interests of the members of the coalition into public policies. Coalition members benefit from public policies; noncoalition members bear the costs. Authoritarianism in general and populist and bureaucratic authoritarianism in particular are seen as the response which different sets of elites take in reaction to crises engendered by different phases of modernization[3].

A causal relationship exists among economic stages, politics and public policies; the "elective affinity" is close. As a consequence, questions of possible conflicts between economics and politics, or between politics and policies never arise. Indeed, different types of authoritarianism are defined jointly on the basis of certain economic stages, coalitions and public policies[4].

The bureaucratic-authoritarian model as applied by O'Donnell has the following characteristics[5]:

- Economic State: capital/durable consumer goods, import substitution industrialization;
- Coalition: segments of the military, large and efficient domestic industrialists, foreign capital, technocrats in public sector;
- 3. Policies:
 - a) promotion of capital (basic) / durable consumer goods industries and modernization of their infrastructure;
 - b) conservative budgetary and restrictive monetary policies combined with efforts to increase tax revenues;
 - c) decreases in overall public spending;
 - d) decreases in public employment;
 - efforts to impose a rational calculus on policy-making;
 - f) efforts to stop or regress political redistribution of wealth to the popular

sector. Redistribution is seen as detrimental to the provision of sufficient investment capital;

- g) decreases in social welfare benefits;
- \bar{h}) efforts to demobilize and exclude the popular sectors both economically and politically, and
- increases in military spending to control actual or expected social unrest and threats to domestic security.

The critical variable identified by O'Donnell as bureaucraticdevelopment ٥f conditioning the authoritarianism is the level of perceived threat to the existing socioeconomic order generated by the precoup crisis[6]. The level of prior threat not only represents originating circumstance; in O'Donnell's of the shapes subsequent features it view, bureaucratic-authoritarian state and accounts for differences among cases. The economic and political crises that precede the bureaucratic-authoritarian administration have variations from one case to another that have repercussions on the specific characteristics of the government that results[7].

Of interest here is that O'Donnell also argues that threat levels explain variations in economic policies and economic performance. The short-term consequences of a higher threat level specifically include[8]:

- more careful adherence to orthodox economic policies;
- more immediate inflows of external public assistance to help stabilize the economy;
- more difficulty in reducing the rate of inflation to acceptable levels;
- 4. less capacity of the state to invest;
- less probability of rapidly restoring economic growth;
- 6. slower restoration of investor confidence, and
- by implication, less immediate success in attracting long-term private investment.

Clearly, the 1966 Argentine military regime was a low threat bureaucratic-authoritarian case, while the 1976 regime was a high-threat example.

O'Donnell has observed that the economic policies of the military incorporate fundamental components. Disinflation through fiscal-monetary orthodoxy is used. in part, to break the political mobilization of labor unions through the creation of additional slack in labor markets. Disinflation is also necessitated by the second characteristic of economic policy under military authoritarianism, а trend toward transnationalization of the production structure, particularly heavy industry. Because of the greater dependence of heavy industry on external sources of capital, stabilization is a necessary precondition for the extension of additional foreign loans; at the same time, the successive phases of import substitution require higher rates of capital accumulation because of the capital intensity of industry and consequent reductions in real wages[9].

The similarity of the orthodox economic policies introduced by authoritarian regimes in the 1970s has been well documented[10]. If, in fact, similar macroeconomic policies carry over to a similar approach towards budgetary allocations and priorities, the O'Donnell thesis would preduct cutbacks in social services and welfare in bureaucratic authoritarian regimes to aid the stabilization efforts with increased military expenditures to shore up domestic security. One would predict, therefore, based on the change in regimes from a high-threat bureaucratic-authoritarian to a civilian regime in 1984, a marked shift downward in military expenditures.

PREVIOUS EMPIRICAL EXAMINATIONS OF REGIME TYPE AND BUDGETARY PRIORITIES

This conclusion also has some empirical validity. In a recent examination of civilian and military

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regimes in ten Latin American countries, Diskson found that[11]:

- Military regimes appear to have been more fiscally conservative than their civilian counterparts;
- Civilian regimes appear to have been more developmentally oriented than military regimes;
- Military regimes were inclined to spend less and run lower deficits, even though they spent more on the military;
- 4. Military regimes also showed a lower rate of increase in the cost of living and maintained stronger international liquidity positions for the central bank, and
- Civilian regimes spent more, did more for educations and effected higher savings and investment ratios.

On the other hand, a number of empirical studies along these lines have provided little empirical support for the O'Donnell thesis, or for the general proposition that military regimes tend to expand military budgets over and above what one might predict a civilian regime would undertake. Most[12], for example, found little change in military expenditures or most other socioecnomic variables in Argentina during the post-1966 transition to bureaucraticauthoritarian rule from a civilian regime. Other studies also concluded that governments which are dominated by the military produce socioecnomic results by civilian guite similar to those produced regimes[13]. As P. Schmitter commented in summarizing this research[14]:

The conclusions have tended to be similar whether arrived at by statistical inference, from synchronic correlations across units, or descriptive evaluation based on diachronic counter-factual assumptions within units. We have been led to believe that the relatively constant features of ednological setting and underlying class interests and or the persistence of subtle machinations by informal cliques and patron-client dyads impose such narrow and fixed parameters upon performance that it makes no real difference if political structures are more or less centralized, more or less competitive, or more or less participatory. Such an overdetermined system (provided the three layers of determinism are self-reinforcing) will produce the same outputs and outcomes-i.e., benefit the same interests--in any case short of violent revolution.

A number of other studies have found the same pattern.

Jackman[15] examining seventy-seven Third World countries using co-variance analysis concluded that[16]:

military intervention in the politics of the Third World has no unique effects on social change, regardless of either the level of economic development or geographic region.

Two cross-national aggregate studies by McKinlay and Cohan[17] based on an initial sample of 115 countries reached conclusions that were very similar to Jackman's. In the first of these studies, McKinlay and Cohan compared the performance of military and civilian governments over the 1951-70 period, using indicators of annual change in per capita GNP, cost of living, food production, exports, primary education, military spending, and military size. They found that military regimes performed significantly better than civilian in the poorest countries (although their evidence also suggests that in Latin American, military regimes perform somewhat better than their civilian counterparts). However, McKinlay and Cohan concluded that military regimes do not in the aggregate form a distinctive regime type in terms of performance. They found that the rate of growth of primary education was the only overall significant performance difference between military and civilian regimes.

The second study by McKinlay and Cohan covering the 1961-70 period used different data and statistical

A TEST OF THE O'DONNELL THESIS

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techniques to arrive at the same basic conclusion. In this study, McKinlay and Cohan found evidence that military regimes tend to occupy a weaker international trading position than their civilian counterparts, but that their economic performance rates, measured in terms of the rate of growth of per capita GNP cost of living and exports, compared favorably with noncivilian regimes only by their lower levels of political activity and higher levels of political change.

The most extensive study to date of the consequences of regime differences in Latin America, a study by P. Schmitter[18], partially confirms the findings of these cross-regional studies. Using both cross-sectional and longitudinal data, Schmitter concluded that no regime type was exclusively linked with developmental success as measured by such indicators of performance as average annual percentage increases in inflation, exports, industrial production and per capita GNP.

Military and non-competitive regimes were slightly more successful in curtailing inflation, increasing foreign exchange earnings and promoting economic growth, especially in industry; however, environmental factors, particularly dependence on foreign capital, aid and trade were more important in understanding the performance variations than were factors such as regime type.

Regime type only appeared relevant for understanding variations in governmental allocation outputs as distinct from system performance (outcomes). In particular, Schmitter found that military regimes in Latin America tend to spend less on social welfare, rely more heavily on indirect taxation as a source of government revenue, and extract fewer resources for the pursuit of public policies than civilian regimes. However, most correlations between regime type and policy outputs were weak, supporting the view that regime differences are relatively unimportant for understanding policy differences in Latin America.

A major study of Brazil also cast doubt on the relevance of regime differences. Margaret Daly Hayes[19]' detailed work on longitudinal changes in Brazilian national expenditures for example indicated that military and civilian regimes in Brazil have not differed extensively in their economic goals and policy outputs. Compared to their military counterparts, civilian governments in the 1950-67 period were more likely to spend money on social development and the civilian bureaucracy and less likely to spend funds on military equipment. However, all regimes in this period gave priority to national development with an emphasis on infrastructural development. Moreover, ecological constraints, particularly GDP, political conflict, primary export earnings, inflation and debt service explain a high proportion of the variation in expenditure patterns over time.

Finally, Ames and Goff have noted[20]

If students of Latin American politics were to inventory verified propositions regarding the performance of Latin American regimes, the resulting list might not exceed zero.

In summary while there is some evidence that the more recent bureaucratic-authoritarian regimes in Latin America tend to pursue similar macro-economic policies, recent research on budgetary priorities clearly suggests that underlying socioecnomic conditions may impose such severe constraints on political actors that it makes little difference whether they are civilian or military. Similar conclusions have been reached by

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studies employing very different units of analysis and research strategies.

Why do Latin Americanists argue that history has shown regime type to be irrelevant in affecting budgetary priorities In addition to the empirical work cited above, one line of argument stresses ecological constraints, and suggests that socioecnomic variables are more important in explaining policy differences than political variables. In particular, the dependency literature has emphasized the dynamics and structure of economic development in Latin America cannot be understood without taking into account factors such as imperial domination, foreign investment and technology, foreign aid, and export demand -factors that domestic policy makers cannot control directly[21]. A major variant on this argument suggests that civilian and military regimes do not even have different policy orientations, either because the civilian-military dichotomy is totally artificial, or because the same class, sectoral, or status group interests control the government (no matter who occupies the top positions).

Finally, the policy relevance of system level characteristics have been questioned on the grounds that factors such as operational systems and formal institutional arrangements which may account for policy variations are not systematically related to regime type or regime orientation[22].

Before concluding that Latin Americanists, who have expended considerable time and effort expanding the causes of regime variations, have been totally misguided, it should be noted that all of the abovementioned empirical studies suffer from a fundamental weakness[23]. By assuming that regime type has the same meaning across political units, time periods, and even cultural regions, existing studies of public policy have built thier conclusions into their questions. Obviously, military regimes do not form a homogenous group. Military governments are reformist as well as reactionary, populist as well as authoritarian, personalist as well as corporatist. By aggregating all types of military regimes, much of the research to date has ensured that differences in regime type will appear irrelevant. Moreover, the use of the civilian military dichotomy has obscured possible overlaps between civilian and military governments. Officers may exercise substantial influence even if civilians are in top positions and vice versa.

In short, the literature is deeply divided on the basic theoretical question: do the policies and performance records of military regimes differ from those of civilian regimes Much of the literature suggests that they do, but disagrees on the nature of the differences, while much of the literature suggests that they do not. In such a situation empirical tests taking into account some of the limitations noted above must ultimately be performed to throw additional light on the matter.

EMPIRICAL EVIDENCE FOR ARGENTINA

Is there some statistical evidence for Argentina linking the pattern of military expenditures to regime type Simple and multiple regression analyses were performed on time-series data on the level of real military expenditures to determine the significance of regime type in accounting for fluctuations in military expenditure over time[24].

The regime type variables were treated through the use of dummy variables. During the period under examination, four regimes governed[25]:

- 1. 1961-1965 -- period of democracy;
- 1966-1972 -- first military regime;
- 3. 1973-1976 -- Peronist regime;
- 4. 1977-1982 -- second military regime.

There is sufficient reason to believe that regime

type does not have the same meaning over time, i.e., the first and second military regimes might, in fact, have few similarities with regard to economic policy. The same could also be said for the elected Peronist civilian regime (1973-76) and the non-Peronist civilian regime (1961-65). At least eight logical representations of the 1961-82 regime types make sense (Table 1) with:

- DUMPB, representing the standard civilian military dichotomy;
- 2. DUMP, depicting structural shifts upwards over time between the 1960s regimes to the Peronists and finally the second military regime. If DUMP is statistically significant, the country would have experienced two sharp breaks upward in the amount of funds allocated to military activities during the 1961-82 period;
- BUMPA, similar to DUMP, with three upward structural shifts produced with regime changes, i.e., increased militarization over time in Argentina;
- 4. DUMPC assumes military regimes in Argentina to allocate significantly more resources to defense than their civilian counterparts, with the Peronists more inclined to increase defense than their civilian counterparts in the early 1960s;
- 5. DUMPD is similar to DUMPC, but with the first civilian regime assumed more prone to step up military spending than the Peronists;
- 6. DUMPE assumes the Peronists least likely to give priority to defense, followed by the first civilian regime, then the first military regime, with the second military regime most inclined to increased military spending;
- 7. DUMPF assumes no real change in military allocation priorities in the 1960s, a sharp fall off under the civilian Peronist regime, and a major shift upwards under the second military regime. This interpretation is often implicitly assumed in the qualitative literature; and
- DUMPG assuming again the Peronists least likely to undertake military expenditures, followed by



the first civilian regime. This dummy is used to test whether or not the first military regime was more inclined to allocate funds for defense purposes that their counterparts in the second military regime.

Again, by themselves, these dummy variables are used to test whether any structural shifts occurred with changes in regime type. Real Central Government revenues are used as a control variable to account for any movements in military expenditures that may have resulted simply from corresponding revenue increases or declines.

Regressions were performed for each dummy individually, and for three time periods:

- 1. 1961-75;
- 2. 1961-82; and
- 3. 1966-82.

to determine the extent to which the second military regime affected the pattern of military expenditures. The CochraneOrcuutt[26] iterative procedure was employed to correct for any serial correlation in the error terms.

In general the results (Table 2) indicate that:

- Regime type is highly important in explaining the pattern of Argentine military expenditures over time (based on the high statistical significance of the dummy variable);
- Military regimes are much more inclined (given Central Government revenues) to allocate funds for defense (high statistical significance and positive sign for dummy variables in 1961-75, and 1966-82 sub-periods;
- The Peronists were clearly the least likely to allocate funds for defense (high statistical significance of DUMPD and DUMPE for the 1961-75 period);
- 4. There has not been a progressive upward shift in military expenditures over time (statistical significance of DUMPA);
- Military allocations are not based simply on the dichotomy between civilian and military regimes (statistical significance of DUMPB over the 1961-82 period), and

																			1 on ;	
2.40	1.22	1.49		1.89	1.33	1.49		1.89	1.33	1.49		1.94	1.32	1.26		2.03	1.25	1.42	al correlat	(1974 = 100)
26.64	2.26	20.62		97.14	9.16	20.62		97.14	9.16	20.62		29.86	11.39	3.51		98.26	4.16	11.10	for seri	e index
0.842	0.201	0.774		0.951	0.504	0.774		0.951	0.504	0.774		0.856	0.558	0.369		0.951	0.316	0.649	to correct	nsumer pric
(-0.73)	(0.98)	(0.01)		(06.0-)	(-1.72)	(0.01)		(06.0-)	(-1.72)	(0.01)		-0.39	(-3.17)	(-0-)		(-0.85)	(0.34)	(-3.96)	on procedure	eflated by co
(-4.21)	(1.33)	(4.53)		(3.16)	(2.63)	94.53)		(3.16)	(2.63)	(4.53)		(5.51)	(2.26)	(1.24)		(0.69)	(2.27)	(4.46)	t iterative estimation	fense expenditures de
(1.57)	(0.49)	(4.50)	DUMPD	(14.47)	(2.37)	(4.50)	DUMPE	(14.47)	(2.37)	(4.50)	DUMPF	(8.02)	(2.55)	(1.28)	DUMPG	(14.55)	(1.52)	(3.24)	ide using Cochrane-Orcui	enditures are nominal de
75	82	82		75	82	82		75	32	82		75	32	32		75	32	82	Estimates me	Defense expe

-1961 -1961 1966-

961-966-

A TEST OF THE O'DONNELL THESIS

1.04 3.57 2.44

0.172 0.285 0.289

(0.61) (0.63) (0.26)

1.08) 2.18) 2.17)

961-75 961-82 966-82 961-75 961-82 966-82

961-996

0.856 0.218 0.289

5.51) 2.04) 2.17) 71.75 3.57 20.62

000

-0.79) (0.34) (10.2)

6

EXPENDITURES

DEFENSF

LFVFL OF 1982

CHANGE ON THE ANAL YSIS 1961-

POLITICAL SHIFT A

P

IMPACT :

ARGENTINA:

TABLE 2

Statistics

12

B

Government Revenues

Political Shift Variable

> Period Jefense Expenditures

961-75 961-82 966-82

= t statistic

Central

TABLE

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6. It is not clear whether the second military regime was more inclined to allocate funds for defense than the first military regime (as suggested by the generally lower t values for 1961-1982 period than for either sub-period and insignificant t value for DUMPF for the 1966-82 sub-period).

A structural shift in defense expenditures (a shift in the intercept of the regression equation) is one possible way to test for changing military priorities of alternative regime types. Another test would be to determine whether the propensity to spend out of revenues differed by regime type, ie., whether the slope of the regression line was statistically different for alternative regimes. To test for this possible phenomenon, an interaction variable[27] was created by multiplying each dummy variable defined above by the level of real Central Government revenues. The result is depicted by an X at the end of each dummy, i.e., DUMPX. Here, these variables are referred to as modification variables.

When each modification variable was regressed together with the Central Government revenues, the results indicated that (Table 3):

- Again, regime type was highly important in accounting for the observed fluctuations over time in military expenditures;
- For the period as a whole, the rankings in ascending order of propensity to spend on defense are Peronists, first civilian regime, first military regime, and second military regime (high significance of DUMPEX for the period as a whole);
- 3. The first military regime was less inclined to increase military expenditures with revenues than the first (insignificant value of DUMPGX for the period as a whole), and
- The country has not been more inclined over time to allocate existing funds for defense (insignificance of DUMPX and DUMPAX).

Finally, tests were performed to determine whether

regime change was more effective in influencing

	Political Modification	Government		Stat	is tics	F
Evanditimas =	Variable	Kevenues	KHU	L	-	UK .
	DIMPX					
1961-75	(17-7-1	(2.96)	(0.50)	0.876	35.63	1.77
1961-82	(-0.37)	(1.51)	(1.05)	0.192	2.15	1.27
1966-82	(-0.77)	(1.76)	(0.42)	0.257	2.08	1.48
	DUMPAX					
1961-75	(<u>-7.89</u>)	(2.60)	(2.02)	0.444	3.93	1.85
1961-82	(-0.54)	(1.38)	(0.98)	0.203	2.29	1.29
1966-82	(-0.11)	(1.76)	(0.42)	0.257	2.08	1.48
	DUMPBX				11	
c/-l961	(12.94)	(-3.06)	(-0.40)	0.939	77.59	2.34
1961-82	(2.00)	(0.75)	(-0.91)	0.433	0.370	1.28
1966-62	(5.29)	(2.67)	(0.10)	0.822	27.71	1.47
	DUMPCX			1		
1961-75	(8.83)	(-5.70)	(0.463)	0.878	36.21	2.58
1961-82	(1.03)	(0.44)	(0.20)	0.251	3.02	1.23
1966-82	(5.29)	(2.67)	0.10	0.522	27.71	1.47
36 1301		106 01	10 001	0.016	73.15	
C/-TO6T	(/6.21)	10.36	(cn.u)	0.230	12.10	1.71
28-1961	(3.64)	(1.42)	(-5.68)	0.6/1	18./8	1.36
1966-82	(5.29)	(2.67)	(0.01)	0.822	11.71	1.47
22 1301		100 01	10 01	9000	11 15	50,
		(70.0)	100.01	0,220		11
1961-82	(1.20)	(0.57)	(0.01)	0.884	66.57	1.63
1966-82	(6.38)	(0.67)	(0.01)	0.868	39.53	1.62
	DUMPFX					
1961-75	(8.77)	(2.84)	(0.50)	0.833	35.63	1.77
1961-82	(3.20)	(0.95)	(-5.81)	(0.638)	15.86	1.32
1966-82	(3.21)	(0.16)	(0.01)	(0.670)	12.19	1.38
	DUMPGX					
1961-75	(13.31)	(96.0-)	-0.17	0.942	82.12	2.04
1961-82	(1.83)	(1.62)	(-0.03)	0.369	5.28	1.68
1966-82	(3.32)	(3.55)	(-4.21)	0.658	11.58	1.44

ŧ

military expenditures through shifting the regression line while keeping the propensity to spend out of revenues constant, or shifting the regression line with no structural shift in the pattern of defense expenditures, or some combination of both.

The results indicate (Table 4):

- 1. A general tendency to increase the propensity of military expenditure with the second military regime (the consistently higher t values for the modification variables for the 1961-1982 period over the 1961-1975 period);
- 2. The interaction variable, in general, is more indicative of structural change with regime type (than the dummy shift variable), i.e., there appears to be more of an inclination for the propensity to increase military expenditure to growth larger as regimes shift from civilian to military (the generally higher t values for the modification variables compared with the shift variables), and
- 3. Political changes appear more important in affecting military expenditures than changes in government revenues, particularly when the second military regime is included in the analysis (as indicated by the generally insignificant t values for government revenues for the period as a whole).

Clearly, if in fact regime change is so important in accounting for movements in the level of military expenditure, the share of the public sector budgetary allocations to defense ought to depict the same general pattern. Using government expenditure as a percent of gross domestic product as a control variable, regressions were performed using the political shift dummy. Again three time periods were considered: (a) 1961-1975; (b) 1961-1982, and (c) 1966-1982.

The results indicate (Table 5):

- 1. The long-run trend is for military expenditures to decline as government expenditures increase relative to overall gross domestic product (the consistently negative sign on the control variable);
- 2. The general pattern of structural shift upward in defense expenditures when regimes change from

1961-75 (-7.35) (5.12) (7.74) (0.22) 0.936 28.90 1.87 1961-75 (-1.185) (1.45) (0.98) (0.09) 0.388 3.17 1.51 1961-75 (1.165) (-7.37) (-2.78) (0.22) 0.936 4.7 2.32 1961-75 (1.55) (-7.37) (-2.78) (-2.78) (0.02) 0.936 4.7 2.32 1961-75 (1.55) (-3.23) (-2.13) (-2.13) (-2.64) 0.201 11.72 1.40 1961-75 (0.73) (-3.23) (-2.13) (-1.317) (0.22) 0.940 47.40 1.91 1961-75 (0.73) (-3.25) (-1.37) (-2.13) (-1.915) (0.01) 0.863 32.20 1.52 1961-75 (0.73) (-2.25) (-1.137) (0.01) 0.869 4.70 1.91 1961-82 (0.73) (-2.25) (-1.137)		DUMPAX	DUMPA					
1961-R2 (-1.85) (1.45) (0.98) (0.09) 0.388 3.17 1.51 1961-75 (1.65) (-2.78) (-2.71) (-2.78) (-2.71) (-2.71) (-2.71) (-2.71) (-2.71) (-2.71) (-2.71) (-2.71) (-2.71) (-2.213) (-2.211)	1961-75	(-7.35)	(5.12)	(7.74)	(0.22)	0.936	28.90	1.87
DUMPEX DUMPE DUMPEX DUMPEX DUMPE 1961-75 (1.65) (-3.45) (-2.78) (0.22) 0.936 44 7 2.32 1961-75 (1.65) (-3.45) (-1.08) 0.01 0.851 18.69 1.47 1961-75 (1.56) (-3.12) (-2.13) (-2.2) 0.0892 24.02 2.61 1961-75 (0.787) (0.730) (-2.13) (-2.213) (-5.64) 0.201 1172 140 1961-75 (0.787) (0.30) (0.39) (-1.37) (-2.13) (-5.64) 0.201 1172 140 1961-75 (0.787) (0.30) (-2.55) (-1.37) (-1.915) (-9.46) 191 157 1961-82 (0.87) 0.787 (0.720) (0.39) 47.40 191 157 1961-82 (0.87) 0.740 191 167 0.191 125 124 125	1961-82	(-1.85)	(1.45)	(0.98)	(60.0)	0.328	3.17	1.51
1961-75 (1.63) (-0.37) (-2.78) (0.22) 0.936 44 2.32 1961-75 (1.69) (1.69) (-3.45) (-1.08) 0.01 0.851 18.69 1.47 2.32 1961-75 $(1.4.69)$ (-3.22) 0.899 24.02 2.61 1961-75 $(1.3.73)$ (-3.23) (-2.13) (-2.13) (-22) 0.899 24.02 2.61 1961-75 (1.37) (-3.23) (-3.23) (-3.13) (-1.37) (0.01) 0.863 24.02 2.61 1961-75 (0.87) (0.729) (0.39) (-1.37) (-1.37) $(-1.91.5)$ $(-1.91.6)$ (-1.51) $(-1.2.51)$ (-1.37) $(-1.91.6)$ $(-1.91.6)$ (-1.51) $(-1.91.6)$ $(-1.91.6)$ $(-1.91.6)$ $(-1.91.6)$ $(-1.91.6)$ $(-1.91.6)$ $(-1.91.6)$ $(-1.91.6)$ $(-1.91.6)$ $(-1.91.6)$ $(-1.91.6)$ $(-1.91.6)$ $(-1.91.6)$ $(-1.91.6)$ $(-1.91.6)$ $(-1.91$		DUMPBX	DUMPB					
1961-82 (4.69) (-3.45) (-1.08) 0.01 0.851 18.69 1.47 1961-75 0.001 0.851 18.69 1.47 1961-75 0.001 0.851 18.69 1.47 1961-75 0.001 0.201 11.72 1.40 1961-75 0.000 0.201 11.72 1.40 1961-75 0.000 0.201 11.72 1.40 1961-75 0.000 0.201 11.72 1.40 1961-75 0.000 0.201 0.203 38.22 1.52 1961-75 0.000 0.201 0.001 0.863 38.22 1.52 1961-82 0.001 0.863 38.22 1.52 0.940 47.60 1.91 1961-82 0.001 0.001 0.863 38.25 0.560 1.86 1961-82 0.001 0.001 0.999 44.71 1.57 1961-82 0.0001	1961-75	(1.65)	(15.0-)	(-2.78)	(0.22)	0.936	44 7	2.32
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1961-82	(4.69)	(-3.45)	(-1.08)	0.01	0.851	18.69	1.47
1961-75 (3.730) (-2.12) (-5.09) (0.22) 0.889 24.02 2.61 1961-82 (3.73) (0.37) (0.30) (-3.13) (-5.64) 0.201 11.22 1.40 1961-75 (0.87) (0.30) (0.39) (-1.37) $(-1.9.15)$ 0.940 47.40 1.91 1961-75 (0.87) (0.730) (0.39) (-1.37) $(-1.9.15)$ 0.940 47.40 1.91 1961-75 (0.87) (0.720) (0.39) (-1.37) (-0.91) 0.863 38.22 1.52 1961-82 (0.87) (0.79) (0.79) (0.39) -0.15 0.940 47.60 1.91 1961-82 (0.88) (-1.10) (-0.56) (0.01) 0.899 44.71 1.57 1961-82 (2.08) (-1.10) (-0.20) (0.67) 0.895 2.60 1.84 1961-75 $(1.3.08)$ (-1.47) (-1.47)		DUMPCX	DUMPC					
1961-82 $(3,73)$ (-3.23) (-2.13) (-5.64) 0.201 11.72 1.40 1961-75 $0.0MPDX$ $DUMPX$ $DUMPX$ 0.040 47.40 1.91 1961-75 (0.37) (-2.55) (-1.37) (0.01) 0.863 38.22 1.52 1961-75 (0.37) (-2.55) (-1.37) (0.01) 0.863 38.22 1.52 1961-75 (0.37) (-2.56) (-1.37) (0.01) 0.863 38.22 1.52 1961-75 (0.87) (0.729) (0.39) (-0.15) 0.940 47.71 1.57 1961-75 (0.01) 0.895 25.60 1.84 1.47 1.29 1961-75 (3.08) (-1.81) (-1.47) (-2.355) 0.660 9.73 1.29 1961-75 (2.08) (-1.81) (-1.47) (-2.355) 0.660 9.73 1.29 1961-75 (2.08) (-1.61) <td>1961-75</td> <td>(3.30)</td> <td>(-2.12)</td> <td>(-5.09)</td> <td>(0.22)</td> <td>0.889</td> <td>24.02</td> <td>2.61</td>	1961-75	(3.30)	(-2.12)	(-5.09)	(0.22)	0.889	24.02	2.61
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1961-82	(3.73)	(-3.23)	(-2.13)	(-5.64)	0.201	11.72	1.40
1961-75 (0.37) (0.30) (0.39) (-19.15) 0.940 47.40 1.91 1961-82 (3.60) (-2.55) (-1.37) (0.01) 0.863 38.22 1.52 1961-75 (0.787) (0.729) (0.39) -0.15 0.940 47.60 1.91 1961-75 (0.787) (0.729) (-1.10) (-0.56) (0.01) 0.863 38.22 1.52 1961-75 (0.748) (-1.10) (-0.56) (0.01) 0.899 44.71 1.57 1961-75 (2.48) (-1.10) (-0.20) (0.67) 0.895 25.60 1.84 1961-75 (2.08) (-1.81) (-1.47) (-2.35) 0.660 9.73 129 1961-82 (2.34) (-2.44) (-1.47) (-3.55) 0.946 53.50 2.05 1961-82 (2.34) (-2.44) (-1.10) (-0.29) 0.946 53.50 2.05 <td></td> <td>XOMPOX</td> <td>DUMPD</td> <td></td> <td></td> <td></td> <td>•</td> <td></td>		XOMPOX	DUMPD				•	
1961-82 (3.60) (-2.55) (-1.37) (0.01) 0.863 38.22 1.52 1961-75 DUMPEX DUMPE (0.73) (0.29) (0.01) 0.863 38.22 1.52 1961-75 (0.87) (0.729) (0.39) -0.15 0.940 47.60 1.91 1961-75 (2.84) (-1.10) (-0.56) (0.01) 0.895 44.71 1.57 1961-75 (3.08) (-1.41) (-0.20) (-0.67) 0.895 25.60 1.84 1961-82 (2.08) (-1.81) (-1.47) (-3.55) 0.660 9.73 1.29 1961-82 (0.87) (0.737) (-0.20) (-0.29) (-3.55) 0.666 9.73 1.29 1961-82 (0.84) (-1.47) (-1.47) (-2.64) (-1.10) (-2.66) 0.701 11.72 1.37 1961-82 (2.84) (-2.44) (-1.10) (-2.66) <t< td=""><td>1961-75</td><td>(0.87)</td><td>(0.30)</td><td>(0.39)</td><td>(-19.15)</td><td>0.940</td><td>47.40</td><td>1.91</td></t<>	1961-75	(0.87)	(0.30)	(0.39)	(-19.15)	0.940	47.40	1.91
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1961-82	(3.60)	(-2.55)	(-1.37)	(0.01)	0.863	38.22	1.52
1961-75 (0.87) (0.729) (0.39) -0.15 0.940 47.60 1.91 1961-82 (2.48) (-1.10) (-0.56) (0.01) 0.899 44.71 1.57 1961-75 0.040 7.460 1.91 (-1.51) (-0.20) (0.67) 0.895 25.60 1.84 1961-82 (7.08) (-1.81) (-1.47) (-2.20) (0.67) 0.895 25.60 1.84 1961-82 (2.08) (-1.81) (-1.47) (-3.55) 0.660 9.73 1.29 1961-82 (2.08) (-1.81) (-1.02) (-0.29) (-0.39) 0.946 53.50 2.05 1961-82 (2.08) (-1.81) (-1.10) (-0.29) (-0.39) 0.946 53.50 2.05 1961-82 (2.08) (-1.4) (-1.10) (-2.29) (-2.39) 0.946 53.50 2.05 1961-82 (2.84) (-2.44)		DUMPEX	DUMPE					
1961-82 (2.48) (-1.10) (-0.56) (0.01) 0.899 44.71 1.57 1961-75 DUMPFX DUMPF (0.67) 0.895 25.60 184 1961-75 (13.08) (1-1.51) (-0.20) (0.67) 0.895 25.60 184 1961-82 (12.08) (1-1.81) (-1.47) (-3.55) 0.660 9.73 129 1961-82 DUMPGX DUMPG (-1.47) (-1.47) (-3.55) 0.666 9.73 129 1961-82 (0.034) (-0.29) (-0.29) (-0.39) 0.946 53.50 2.05 1961-82 (2.84) (-1.10) (-0.29) (-0.39) 0.946 53.50 2.05 1961-82 (2.84) (-1.10) (-3.55) 0.701 11.72 1.37 1961-82 (2.84) (-1.10) (-5.66) 0.701 11.72 1.37 1961-82 (2.84) (-2.244) (-1.10) 1.5.66 0.701 11.72 1.37	1961-75	(0.87)	(0.29)	(0.39)	-0.15	0.940	47.60	1.91
DUMPFX DUMPFX DUMPE $1961-75$ (3.08) (-1.51) (-0.20) (0.67) 0.895 25.60 1.84 $1961-82$ (3.08) (-1.51) (-0.20) (0.67) 0.895 25.60 1.84 $1961-82$ 0.000 (-1.81) (-1.47) (-3.55) 0.660 9.73 1.29 $1961-82$ 0.004 (-0.37) (-0.28) (-0.39) 0.946 53.50 2.05 $1961-82$ (2.84) (-2.44) (-1.10) (-5.66) 0.701 11.72 1.37 $1961-82$ (2.84) (-2.44) (-1.10) (-5.66) 0.701 11.72 1.37 $1961-82$ (2.84) (-2.44) (-1.10) (-5.66) 0.701 11.72 1.37 $1961-82$ (2.84) (-2.44) (-1.10) (-5.66) 0.701 11.72 1.37 $1961+167$ 10.76 10.76 10.76 10.74	1961-82	(2.48)	(-1.10)	(-0.56)	(0.01)	0.899	44.71	1.57
1961-75 (3.08) (-1.51) (-0.20) (0.67) 0.895 25.60 1.84 1961-82 (2.08) (-1.81) (-1.47) (-3.55) 0.660 9.73 1.29 1961-75 $0.0MPGX$ $0.0M6$ 0.73 (-1.28) (-0.39) 0.946 53.50 2.05 1961-82 (0.84) (-7.44) (-1.10) (-3.56) 0.946 53.50 2.05 1961-82 (2.84) (-2.44) (-1.10) (-5.66) 0.701 11.72 1.37 S: Regressions made using Cochrane-Orcutt iterative estimation procedure to correct for serial correlation variable formed by multiplying respective political variable by the level of central government revenues in constant 1980 prices. 0.761 and 10.74 ± 10.0 Defense expenditures are monicial defense extenditures deflated by consumer or ics index (1974 = 10.0) 0.666 and 0.73 and 0.000 0.73 and 0.000		DUMPEX	DUMPE					
1961-82 (2.08) (-1.81) (-1.47) (-3.55) 0.660 9.73 1.29 1961-75 $0.0MPGX$ $0.0MPG$ 0.73 (-0.37) (-0.28) (-0.39) 0.946 53.50 2.05 1961-75 (-0.34) (-2.244) (-1.10) (-5.66) 0.701 11.72 1.37 S: Regressions made using Cochrane-Orcutt iterative estimation procedure to correct for serial correlation $pointical wariable by the level of central government revenues in constant 1980 prices. Defense excenditions are monital defense excenditures deflated by consumer price findex (1974 = 100) Defense revenditures are monital defense excenditures deflated by consumer price findex (1974 = 100) $	1961-75	(3.08)	(-1.51)	(-0.20)	(0.67)	0.895	25.60	1.84
$\begin{array}{llllllllllllllllllllllllllllllllllll$	1961-82	(2.08)	(-1.81)	(-1.47)	(-3.55)	0.660	9.73	1.29
<pre>1961-75 (0.84) (-0.28) (-0.28) (-0.39) 0.946 53.50 2.05 1961-82 (2.84) (-2.44) (-1.10) (-5.66) 0.701 11.72 1.37 S: Regressions made using Cochrane-Orcutt Iterative estimation procedure to correct for serial correlation Political modification variable formed by multiplying respective political variable by the level of central government revenues in constant 1980 prices. Defended by Constitues deflated by constant or procedure to correct for a 100. Defence expenditures are constant defence expenditures deflated by constant review 1974 = 100.</pre>		DUMPGX	DUMPG					
1961-82 (2.84) (-2.44) (-1.10) (-5.66) 0.701 11.72 1.37 S: Regressions made using Cochrane-Orcutt Iterative estimation procedure to correct for serial correlation Political modification variable formed by multiplying respective political variable by the level of central government revenues in constant 1980 prices. Defined by consumer price index (1974 = 100) Defense expenditures are mominal defense expenditures defiated by consumer price index (1974 = 100)	1961-75	(0.84)	(10.37)	(-0.28)	(-0.39)	0.946	53.50	2.05
S: <u>Regressions made using Cochrane-Orcutt ite</u> rative estimation procedure to correct for serial correlation Political modification variable formed by multiplying respective political variable by the level of central government revenues in constant 1980 prices. Defence evend times are nominal defence evend(itures deflated by consumer unice index (1974 = 100).	1961-82	(2.84)	(-2.44)	(-1.10)	(-5.66)	0.701	11.72	1.37
Political modification variable formed by multiplying respective political variable by the level of central government revenues in constant 1980 prices. Defense expenditures deflated by consumer price (1974 = 100)	S: Regress	ions made using Coch	irane-Orcutt iterati	ve estimation procedur	re to correct fo	or serial	correlat [.]	fon
government revenues in constant 1980 prices Defense expenditures are nominal defense expenditures deflated by consumer nrice index (1974 = 100)	Politic	al modification vari	able formed by mult	iplying respective pol	litical variable	s by the l	evel of (central
Defense expenditures are nominal defense expenditures deflated by consumer price index (1974 = 100)	gover	'nment revenues in co	wstant 1980 prices.	- - -				
	Defence	exhand tures are no	winal defence evnen	ditures deflated by cr	neumer nrine is	May (1074	= 1001	

1.81

25.60 5.00

895 500

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(0.67)

6.18) 0.76)

1961-75 1961-82 Period

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Statistics

IMPACT OF POLITICAL CHANGE ON THE LEVEL OF DEFENSE EXPENDITURES SHIFT AND MODIFICATION ANALYSIS, 1961-1982

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1ndex (1974 price consumer à deflated expendi tures defense nominal are expend1 tures Je fense

ARGENTIMA: IMPACT OF POLITICAL CHANGE ON THE SHARF OF DFFENSE EXPENDITURES In the total central government buidget, shift analyses, 1961-82

() = t statistic						1
		Government Expenditures				
Budge tary	Political Variable	as a % of Gross Domestic Product	RHO	14 21	FUCS	5
Defense Share of Central						
Government Budget		130 51	(2 56)	0.405	8.18	1.58
1961-75		(00.7-)	(4.96)	0.271	60.7	1.21
1961-82		(-3.32)	(10.1)	0.440	11 03	1.04
20-0061	0 MID					
36 1301		(1.22)	(1.86)	0.535	5.76	1.81
C/-1461	(1) 571	(00)	(3.87)	.350	4.85	1 38
29-1061	135 11	(-3.42)	(4.84)	0.475	5.43	1.21
79-0061						
:		1 0 201	(3.40)	0.392	3.23	1.46
1961 - 75	(0.73)			0.442	7.13	1.42
1961-82	(2.36)	(-3.//)		375.0		12
1966-82	(1.35)	[-3.42]	(+0.+)			
	DUMPB		100 01	0 623	5 49	1.74
1961-75	(1.89)	(2.58)			90 2	35
1961-82	(2.61)	(-2.99)	(4.49)	0.409	20.4	10
1966-82	(1.64)	(-2.52)	4.80	0.503	10.0	
	DUMPC			263 0	E 77	1 61
1961-75	(2.18)	(-3.07)	(3.54)	0.530		20.1
1961-82	(2.56)	(-3.29)	(2.31)	0.468	5 5. /	
1966-82	(1.64)	(-2.52)	(4 80)	0.503	0.0	.44
	DUMPD					
1961-75	[1] 61)	(-2.03)	(2.54)	0.520	2	
1961-82	(2.53)	(-2.68)	(3.78)	0.453	/ /	<u>.</u>
1965-82	(1.64)	(-2.52)	(4.80)	5.03	9.0/	1.49
	DIMPE					
1961-75		(-2.03)	(2.54)	0.520	24-5	6/-1
1061_82	(3.02)	(-3.39)	(3.00)	0.501	60.6	1.75
1066-82	(5.45)	(-3.83)	(-0.36)	0.727	16.01	1.56
10000	DIMPE					
1061.75	11.26	(-1 22)	(1.86)	(0.535)	5.76	1.80
C/-TOET	(2 42)	(-3.88)	(1.84)	0.536	10.43	1 75
79-1061 79-1061		(-4.92)	(-0.50)	0.758	18.84	1.61
79-0061	106.01					
36 1301		(-2.25)	(2.73)	0.519	5.41	1.78
C/-1051		(34 0.)	(A. 80)	0.419	6.05	1.49
1961 82	(51.2)		(5.89)	0.484	5.63	1.33
1966-82	(17.20)	164.7-1				
		wative technique fo correct fo	· serial cor	relation		
NOTE Regressions made using t	OCHTARE UFCUIL ! LE	Lative technique in conversion				

A TEST OF THE O'DONNELL THESIS

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civilian to military is confirmed (the positive signs on the shift variable);

- 3. The second military regime appears to have had the highest inclination to increase the share of the budget going to defense, followed by the second military regime, the first civilian regime and finally the Peronists (the high statistical significance of DUMPE for the 1961-1982 period);
- 4. There may be little difference between the first civilian regime and the first military regime in allocating expenditures for defense (the high overall significance for DUMPF), and
- 5. The most dramatic increases in government share occurred with the shift in regimes from Peronist to second military (the very high t value for DUMPF and DUMPE for 1966-82, compared with an insignificant value for 1961-75).

In general, therefore, analysis of the share of government allocations going to defense confirm all the patterns discovered from the above analysis of total military expenditures.

As with the level of military expenditures, regressions were performed to determine whether the slope of the regression line[28] changed with regime.

The results (Table 6) confirm that regime changes have a strong impact on the manner in which the Central Government allocates funds for defense. In general:

- There is a strong propensity to increase military expenditures when a shift from civilian to military regime takes place and vice versa (the statistically significant and positive t values for the 1961-1982 period in all cases);
- The shift towards an increased propensity to spend was fairly weak and perhaps insignificant for the first change from civilian to military regime (the values of t slightly under 2.0 for the dummy variables for the 1961-1975 period);
- 3. A strong shift in the propensity to increase military expenditures under the second military regime existed (the high and positive t values for the 1966-1982 period);
- 4. In terms of an increased tendency to spend on defense, the second military regime was most inclined, followed by the first military regime, the first civilian regime, and finally the Peronists, and

t statistic	001343Cal	Government				
	Modification	Expendi tures		Stat	istics	Ē
Period	Variable	as a % of GDP	RHO	2		
	XdWnD	(0 61)	(101)	0.613	7.93	1.84
1961-75	(-2.06)		112.1	0 402	6 06	1.59
1961-82	(2.11)	(- 5 - 4 /)	(00.0)	0.100	200.7	1 66
1966-82	(2.05)	(-3.70)	(3.81)	c1c.U	00	cc.1
	DIMPAX				;	
1061 76	(02.01	(-1.43)	(2.83)	0.387	3.61	
C/-T06T	(2.45)	-3.80	(3.81)	0.445	7.23	1.75
78-1961	101.21	- 3.57	(3.80)	0.496	5.91	1.62
1966-82	106.11					
	NUMPBX	(2 EQ)	(10 01)	0.510	5.20	1.83
1961-75	(1.78)	(nc·7-)			10 50	10
1961-82	(3.31)	(16.5-)	(05.0)		15 63	1 60
1966-82	(5.28)	(-3.33)	(72.0)	77/10	70.01	60.1
	DUMPCX					26 1
1961-75	(1.62)	(-3.01)	(3.23)	0.4/8	4.04	0/1
	(3, 00)	(-3.84)	(-4.59)	0.522	9.83	1.9.1
1066-02	(6.03)	(-4.58)	(-0.20)	0.765	19.60	1.83
70-00 CT						
10.35	11 13	(-2.23)	(2.60)	0.493	4.88	1.82
C/-1061	(3 25)	(-3.42)	(3.22)	0.528	10.08	1.92
79-1961		(-3,33)	(0.22)	0.722	15.62	1.69
1966-82						
		1 2 231	(12.60)	0.493	4.88	1.82
1961-75	(74.1)		(2.52)	0.589	12.91	1.99
1961-82	(3.32)	(11:1-)		0 810	27.24	1.70
1966-82	(1.19)	(6/-9-)	114.0-1	110.0		9 - - 1
	DUMPEX		101 01	0.486	4 73	1.78
1961-75	(1.02)	(16.1-)	(61.2)	104.00	15 42	1 03
1961-82	(4.48)	(-5.10)	(/9.1)	100.0		
1066-82	(2.09)	(-6.32)	(-0.19)	0.81/	70.02	1.13
1700-0F	DIMPGX					
1061 76	11-54	(-2.33)	(2.74)	0.498	4.97	1.83
C/-TOAT	(1) (1)	(-2.74)	(4.32)	0.467	7.90	1.74
1961-82	(10.7)	(-2.41)	(4.92)	0.514	6.36	1.64
1966-82	(7/1)		+ton procedure	to corre	oct for	serial correlation.
NOTES: Regres	sions made using Cocnrane-	Jrcutt iterative estimated and the second se	severtive pol-	itical var	-iable b	v the level of
Politi	cal modification variable	rormed by multiply affect	copercive por			
cent	tral government revenues in	CONSTANT (1200) PLAN				

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TABLE

A TEST OF THE O'DONNELL THESIS

5. Again, there is not strong evidence that the first civilian and first military regimes had statistically different propensities to spend on defense (statistically significant DUMPX for 1961-1975 and generally insignificant dummys for 1961-1975).

The combined effects (Table 7) of the dummy (shift in slope) and modification (change in slope) were also tested to determine the overall manner in which changes in political regime impacted on defense expenditures. In general:

- The major impact of political change appears to be in affecting the propensity to spend on military activities (the modification variable tends to be statistically significant while the political shift variable is not);
- Again, the results show no real secular trend upward or downward in the propensity to change military expenditures from regime to regime (insignificance of DUMPA, DUMPAX for 1961-1982);
- 3. The highest t value for the 1966-1985 period was obtained assuming both military regimes having the same propensity to spend on defense (DUMPDX), but slightly higher t values for the period as a whole were obtained assuming a higher propensity on the part of the second military regime (DUMPEX, DUMPFX), and
- 4. The first military regime and first civilian regime were quite similar in their propensity to spend on defense (statistical significance of DUMPX, 1961-1975, DUMPFX, 1961-1982), particularly when the 1961-1975 period was examined. The first military regime did tend to have a higher propensity than the first civilian regime to spend on defense in the context of the period as a whole (statistical significance of DUMPBX, DUMPEX).

Beginning in 1972, the share of government budget allocated to servicing the public sector's debt increased dramatically from 0.1 percent in 1971 to 4.4 percent in 1972. This share continued to increase to 11.5 percent in 1976, 16.3 percent in 1980, and 37.1 percent in 1982. It must be argued that this rapid increase in debt service payments tended to affect the share οf defense in government's the budget, irrespective of regime type, thus producing a

	TOTAL CENTRAL GO	VERNMENT BUDGET SHIFT	AND MOUTE LCALLON MAN				
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Vertod	Yarido le	rariaule	2 41 6424	NHX.			
	dMDQ	XdMDQ	10 161	(2.85)	0.661	5.87	1.61
1961-75	(1.95)	(-2.60)		(3,09)	0.418	3.59	1.66
1961-82	(-0.56)	(1.36)	(-2.54) (2 53)	(3.53)	0.520	4.34	1.64
1966-82	(-0.40)	(1.20)	100.0-1				
	DUMPA	DUMPAX	(0 66)	(3.62)	0.596	4.43	1.27
1961-75	(22.42)	(-2.28)		(4.25)	0.459	4.25	1.64
1961-82	(0.75)	(0.78)		(00 2)	0.499	3.98	1.57
1966-82	(0.93)	(0.21)					
	DUMPB	DUMPBX		13 00)	0.529	3.37	1.64
1961-75	(0.60)	(-0.31)		(0.57)	0.585	7.05	2.17
1961-82	(-1.32)	(2.26)	(-0.53)	(0.60)	0.769	13.38	1.97
1966-82	(-1.97)	(3.27)	116.6-1				
1700 OL.	DUMPC	DUMPCX		13 58)	0.594	4.39	1.30
1061-75	(4-11	(-1 20)	(90.2-)	() , JC)	0.523	5.49	1.99
1061-82	(-0.27)	(1.51)	(-3./3)		0 761	12.78	1.89
70-1061	(-0.19)	(2.66)	(-3.38)	(-0.121	10		
70-00 A T	UIMDU	DUMPDX		110 01	O EEO	3 67	1.70
	10 001	(1-0.61)	(-1.66)	(cc.2)	0000	00.4	205
c/-1961	10.361	/1 03)	(-3.53)	(3.02)	/00.0	00	
1961-82	(-0-)	(26.7)	(-3 97)	(0.60)	0.769	13.38	1.9/
1966-82	(-1.97)	(3.2/)		•			
	DUMPE	DUMPEX	1 1 561	(2.35)	0.550	3.67	1.70
1961-75	(0.92)	(19.0-)	(DO-T-)	(2.47)	0.609	7.81	2.08
1961-82	(06.0-)	(2.03)		(0.38)	0.803	16.27	1.95
1966-82	(-1.34)	(2.8/)	101.6-1				
	DUMPF	DUMPFX		102 11	0 545	3.59	1.80
1061-75	(0.63)	(-0.18)	(0.54)	(10.1)	0 627	8.43	1.99
C/-1061	(-0.85)	(2.09)	(-4.61)	(16.1)	1002	15.03	1 07
70-1061		(2.65)	(-5.67)	(06.0)	661.0	n	
1960-82		DUMPGX			0 643	3 55	1.66
	170 07	(-0.57)	(-2.08)	(19.2)			1 00
G/-1961		(1 73)	(-2.99)	(3.74)	0.499	4 . 4 7 0 0	1 06
1961-82	(60.1-)	(3 47)	(-2.98)	. (0.86)	0.11	2.40	1.90
1966-82	1/6.2-)	Pachasno-Onclutt 1t	erative estimation pr	<pre>-ocedure to co</pre>	rrect for :	Serial	
	erressions made usi						

CHANGE ON THE SHARE OF DEFENSE EXPENDITURES IN Chief and Multi-Lation Analysis, 1961-1992 1 111 1 IC'NI 눋

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y multiplying respective political variable t (1980) prices.

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systematic bias in the results, presumably underestimating the impact of the second military regime on defense allocations.

To determine whether the results presented above were significantly affected by the rapid build-up of debt service obligations, regressions were run with defense share computed as the percent of the budget that was not related to debt servicing. Again, three sets of regressions were estimated: (a) the shift in military expenditures with regime change, (b) the modification of the propensity to increase defense expenditures with regime change, and (c) a combined shift-modification analysis.

The results of the shift analysis (Table 8) again show:

- 5. There is no trend upwards or downwards with regime change;
- 6. The pattern of increase in military expenditures with changes from civilian to military regimes is much clearer than was the case when government debt servicing was included in the budget for computing the share of defense (much higher t values and r2--especially in the 1966-1982 period);
- 7. The ranking (DUMPE) of second military, first military, first civilian, and Peronist in terms of inclination to spend on defense is extremely strong statistically, but is contradicted by DUMPF which assumes no difference in the first military and first civilian regimes, and
- 8. The increase in military expenditures by the second military regime is particularly striking when the 1966-1982 period is considered.

The same general results were obtained from the modification (Table 9) and combined modification and shift analysis (Table 10).

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t statistic						
	43143 1	Government Coopeditures		Sta	tistics	
Period	Variable	as a t of GDP	RHO	2	PL	F
	DUMP	1900/	(15 1)	0 445	4.01	1.70
1961-75	(-1.03)		(10.1)	0.160	1.71	1.62
1961-82		((13.05)	0.367	3.94	1.50
1966-82	(00.0)	121221				
10 100		(-1.64)	(2.18)	0.331	2.48	1.53
c/-1961		(-1.99)	(6.03)	0.229	2.67	1.60
28-1961	(0) 56)	(-2.72)	(13.05)	0.367	3.94	1.50
70-006 T	DIMPR					
36 1301	(<u> </u>	(-2.13)	(2.33)	0.403	3.38	1.57
60 1901	(2.54)	(-1.66)	(10.24)	0.373	5.36	1.87
1046.02	(7.30)	(5.15)	(0.93)	0.855	35.39	1.64
TOUC-CF.						
10 11		(=2.48)	(2.77)	0.407	3.44	1.48
c/-1961	(20.1)	0 101	(13.15)	0.352	4.90	1.56
1961-82	(2.23)	(51.3)	(-0.03)	0.855	35,39	1.64
1966-82	(7.30)	(61.6)				
		(-1 66)	(1.93)	0.409	3.46	1.63
1961-/5			17.94	0.360	5.07	2.11
1961-82	(60.7)			0 BEE	35 30	1 .64
1966-82	(7.30)	(61.6)	106.0-1			
	DUMPE		100.11	0 400	3 46	1.63
1961-75	(1.15)	(-1.60)	(26.1)	0.460	48	2.36
1961-82	(3.85)	(/1.0-)	1/1.01		106 00	1.68
1966-82	(16.83)	(4.49)	(-3.89)	006.0	100.30	00.1
	DUMPF			2440	10.4	1 70
1961-75	(20.1)	(-0.87)	(1.31)	0.440	1.1.1.1	
1961-82	(7.41)	(-0.29)	(60.0)	0./88	10.00	
1966-82	(17.81)	(0.62)	(-3.74)	0.972	208.98	2.03
	DUMPG					3
1961-75	(1.22)	(-1.85)	(5.09)	0.405	3.40	10.1
1061_82	(2.27)	(-1.65)	(13.50)	0.360	9.00	1.61
10-101	(12.1)	(-1.76)	(11.49)	0.460	5.00	2.01
1900-04 11011 C 00405	Clane made using Cochrane-O	routt iterative estima	ation procedure	e to corre	ect for	serial correlation.
NULES: REGIES	to the completed at the pro-	ortion of the governm	ment budget ex	cluding de	ebt serv	ice payments.
Derem	e Sidre cumputed as the Field	oution of the second second		•		
Seerte	ext for definition of puricu	Cal variabilitas				

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A TEST OF THE O'DONNELL THESIS

The general picture that emerges from the last three sets of regressions (Tables 8,9,10) is that DUMPF provides the best depiction of military regimes, particularly over the whole (1961-1982) period.

SUMMARY

In summary, the analysis presented above indicates that either DUMPE or DUMPF perform best in differentiating Argentine regimes, with respect to their propensities to spend on defense. Overall, it appears that:

- With regard to the level of military expenditures (Table 2), DUMPE is the superior shift dummy, particularly with respect to the 1966-1982 period and also (Table 3) the superior modifying dummy;
- Explanations of the share of defense in the government budget including debt servicing show little difference between DUMPE and DUMPF for either the shift (Table 5) or modification variables (Table 6);
- 3. The share of defense in the non-debt service items of the budget shows that DUMPF outperforms DUMPE on the shift (Table 8) of military expenditures with regime change, but on the modification of military expenditures (Table 9), it only out-performs DUMPE for the 1961-82 period, with DUMPE superior for the 1966-1982 period;
- 4. Using DUMPE for explaining the level of military expenditures, it appears that the modification influence of regime change is stronger (Table 4) than a structural shifting of defense expenditures to a higher level of revenues; that is, military regimes have stronger propensity to spend out of changes in revenues over time than their civilian counterparts, but not necessarily to spend a higher portion of existing revenues, and
- 5. Again using DUMPE for depicting political change, it appears (Table 10) that military regimes after 1966 not only produced a structural shift upwards in the share of the budget allocated to defense, but, in addition, increased the share of defense budget as government expenditures to defense increased.

0.354

C.394

0.354

0.914

0.362

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0.391 0.365

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0.655

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(13.09)

(2.27)

(5.59)

(2.26)

(9.68)

(1.92)

(4.06)

(-1.42)

(1.92)

(2.83)

(1.60)

(1.35)

(-1.61)

(-2.15)

(-1.02)

(-1.42)

3.28

3.25 4.93

63.96

2.83 3.46

36.71

3.22

5.18

63.96

3.22

8.68

3.29

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92.21

121.26

1.34

1.61

2.16

1.77

1.66

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2.01

1.64

2.25

1.77

1.64

2.31

1.96

1.66

2.10

1.93

300013010	Political Modification	Government Expenditures		Sta	tistics	
Period	Variable	as a % of GDP	RHO	r ^z	F	DW
	DUMPX				E E7	1 60
1961-75	(-1.87)	(-0.14)	(1.52)	0.52/	5.5/	1.00
1061 92	(1.60)	(-1.23)	(4.28)	0.131	1.36	1.08
1901-02	(0.10)	(-2 65)	(12.77)	0.351	3.25	1.47
1900-02	(0.197	(-2:00)				
	DUMPAX	10.051	(1.10)	0 610	5 40	1 60
1961-75	(-1.58)	(0.25)	(1.10)	0.519	5.40	1.00
1961-82	(0.43)	(92)	(11.75)	· 0.172	1.89	1.5/
1301-02		1 0 001	(12.00)	0 354	3 28	1.34

(-2.58)

(-2.11)

(-0.98)

(3.92)

(-2.47)

(-1.95)

(1.37)

(-1.90)

(-0.37)

(3.92)

(0.98)

(-0.69)

(-1.57)

(-1.18) (-1.16)

(0.62)

ARGENTINA: IMPACT OF POLITICAL CHANGE ON THE SHARE OF DEFENSE EXPENDITURES IN THE NON DEBT SERVICE

0.390 3.20 1.64 (-1.97) 92.06) 1961-75 1961-82 (1.07) 0.340 4.65 1.99 (10.87) (2.25) (-1.52) 15.86 (0.14) 0.725 1.88 (3.97)(4.97) 1966-82 NOTES: Regreessions made using Cochrane-Orcutt iterative estimation procedure to correct for serial correlations. Defense share computed as the proportion of the government budget excluding debt service payments. Political modification variables formed by multiplying respective political variable by the level of central government revenues in constant (1980) prices.

(-0.18)

DUMPBX

(1.22)

(2.94) (9.85)

(0.92)

(1.85)

(7.42)

DUMPDX

(0.98)

(3.20)

(9.85)

DUMPE X

(-1.90) (4.12)

(13.58)

DUMPEX

(0.72)

(5.47)

(11.87) DUMPGX

DUMPCX

1966-82

1961-75

1961-82

1966-82

1961-75

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1961-75 1961-82

1966-82

1961-75

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1966-82

TABLE 10

ARGENTINA: IMPACT OF POLITICAL CHANGE ON THE SHARE OF DEFENSE EXPENDITURES IN THE NON-DEBT SERVICE CENTRAL GOVERNMENT BUDGETARY ITEMS, SHIFT AND MODIFICATION ANALYSIS, 1961-82

) = t statistic Political Political Government Shift Modification **Expenditures** Statistics r2 DW Period Variable Variable 1 of GDP RHO T DUMP DUMPX (2.77) 1961-75 (-3.40)(0.36)0.688 (2.60)6.62 1.52 (-0.32) (-0.57) (-1.44) (-2.55) (5.69) (12.77) 0.163 1961-82 (0.97) 0.97 1.55 (0.78) 1966-82 2.48 1.26 DUMPA DUMPAX 1961-75 (2.86) (-3.23) (-0.80) (0.28) (2.24) 0.67 6.13 1.26 1961-82 (1.77 (-1.95)1966-82 (1.02) (-0.86) (-2.45) (12.14) 0.398 2.65 1.14 DUMPB DUMPBX (-0.25) (-0.36) (1.08) 1961-75 (-2.08) (-0.82) (2.31) (4.97) 0.411 0.355 2.09 1.50 1961-82 2.21 (-0.21) (2.38) 1966-82. (2.25) (-1.36)0.913 42.10 1.81 DUMPCX (-1.57) DUMPC (1.94) 1965-75 0.525 (-1.98)(2.78)3.32 1.23 1965-82 0.363 (1.28)(-0.40)(-0.40)(14.66)2.86 1.39 1966-82 (1.91) (1.93) (2.47) (-1.65) 0.908 39.78 1.76 DUMPD DUMPDX 1961-75 (0.85) (-1.20) 0.440 0.363 (-0.63)(1.86)2.36 1.61 (0.17) (0.76) (-0.30) 1961-82 (4.23) 2.84 2.26 1961-82 (0.21) (2.38) (-2.25) (-1.36) 0.913 42.10 1.81 DUMPE DUMPE X (-0.63) 1961-75 (-1.20)0.440 1.61 (1.86)12.36 1961-82 (0.36) (-0.47) (2.83) 0.494 4.89 (0.85) 2.35 (2.27) DUMPFX 142.80 1966-82 (2.05) (1.41) (-3.69)0.972 1.82 DUMPF 1961-75 (0.78)(-0.40) (-0.44) (1.10) 0.447 2.74 1.73 1961-82 1966-82 (1.69) (2.89) (0.29) (-0.38) (0.24) 0.778 0.972 17.60 2.04 (0.64) (0.05)(-3.55)141.03 2.04 DUMPG DUMPGX (0.79) 1961-75 (-0.60) (-1.61) (1.99)0.43 2.27 1.54 1961-82 (0.43) (0.13)(-1.58)(12.93)0.358 2.78 1.86 1966-82 (-1.47)(1.88) (-0.24) 0.797 15.78 (2.72) 1.90 NOTES: Regressions made using Cochrante-Orcutt iterative estimation procedure to correct for serial correlation. Defense share computed as the proportion of the government budget excluding debt service payments. Political modification variables formed by multiplying the respective political variables by the level of central government revenues in constant (1980) prices.

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CONCLUSIONS

The empirical results presented above yield considerable support to the general thesis that regime type in Argentina has a major impact on the amount and share of resources devoted to defense. Military regimes consistently outspent their civilian counterparts on defense, and increased the share of defense in the Central Government budget.

With respect to the O'Donnell thesis, the results lend strong support to the theory that the degree of threat preceding the assumption of power by a military regime influences its overall defense expenditures; all authoritarian regimes are not alike in the priority they place on defense (as evidenced by the second military regime's outspending of the first military regime on defense).

The results do not, however, give a sharp delineation between the first civilian and first military regimes with respect to their budgetary priorities for defense.

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