

CONTENTS

Publisher's Announcement

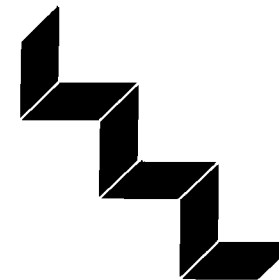
- S. Allen, D. McCrickard, P. Cartwright and C. Delorme, Jr., The use of inputs by the Federal Reserve System: An extended model 205
- M. Anam and E. Katz, Rent-seeking and second best economics 215
- A.G. Cuzán, S.D. Moussalli and C.M. Bundrick, Fiscal expansion and political instability in the Iberic-Latin region 225
- S.L. Feld and B. Grofman, Majority rule outcomes and the structure of debate in one-issue-at-a-time decision-making 239
- J.D. Reid, Jr. and M.M. Kurth, Public employees in political firms: Part A. The patronage era 253
- B. Yandle, Antitrust actions and the budgeting process 263
- A.R. Chowdhury, Expenditures and receipts in state and local government finances: Comment 277
- M.L. Marlow and N. Manage, Expenditures and receipts in state and local government finances: Reply 287

Reviews

- J. Eatwell, M. Milgate and P. Newman (Eds.), *The new Palgrave: A dictionary of economics* (Public choice is new, negligible and beyond mainstream economics – J.M. Buchanan) 291
- D. Lee and R. McKenzie, *Regulating government* (W.A. Niskanen) 294
- H. Nurmi, *Comparing voting systems* (G. Tullock) 296
- G.R. Parker, *Homeward bound: Explaining changes in congressional behavior* (P.L. Southwell) 297

- Index to Volume 59** 299

PUBLIC CHOICE



Fiscal expansion and political instability in the Iberic-Latin region*

ALFRED G. CUZÁN

*Department of Political Science, University of West Florida, 11000 University Parkway,
Pensacola, FL 32514–5751*

STEPHANIE D. MOUSSALLI and CHARLES M. BUNDRICK

The University of West Florida

1. Introduction

Recent research by public choice-oriented economists and political scientists points to a negative relation between fiscal expansion and voter support for the incumbents. Real per capita federal spending is negatively associated with the vote for the incumbent party's candidate in American presidential elections (Niskanen, 1979). There is a negative relation between increases in the percent of Gross National Product spent by the central government and incumbent party reelection to the White House and the British parliament (Cuzán and Heggen, 1984, 1985). Furthermore, the incumbent party's vote in American gubernatorial elections varies inversely with increases in the ratio of state general revenues to state personal income between elections (Peltzman, 1987).

Fiscal expansion is also associated with the overthrow of Latin American governments (Cuzán, 1986). Fiscally expansionist Latin American regimes – whether civilian governments or military juntas – tend to be overthrown, while democracies and dictatorships practicing fiscal restraint usually survive.

Together, these findings suggest that fiscal expansion costs the incumbent party a loss of political support, resulting in its being voted out or forced out of office. Since the stability of any government depends partly on support for the incumbents, it is hypothesized that, *ceteris paribus*, fiscal expansion is a cause of political instability. According to this hypothesis, fiscal expansion has a boomerang effect on the incumbents, increasing the likelihood that the party will lose executive office either by election or coup.

The purpose of this paper is twofold. One is to bring additional empirical

* Many thanks to Gordon Tullock for his encouragement and criticisms of an earlier draft. Thanks also to Dena Folmar for typing this manuscript.

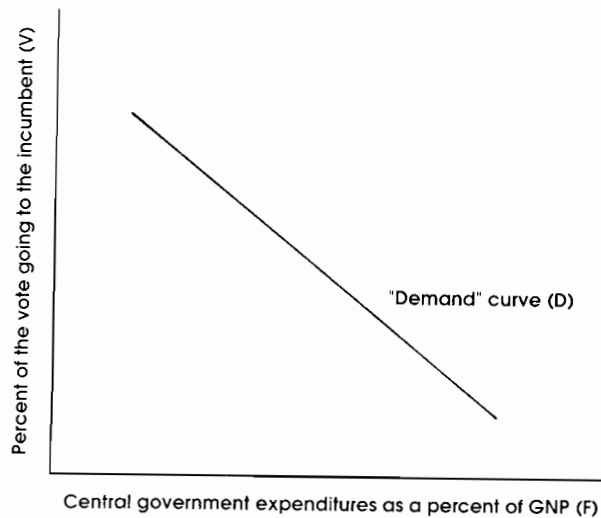


Figure 1. Incumbents' vote varies inversely with government spending

evidence to bear on the hypothesis that fiscal expansion causes political instability. Various multiple regression analyses test the hypothesis with data on 20 countries of the Iberic-Latin region. Secondly, the paper presents an economic explanation of the relation between fiscal expansion and political instability. The paper also compares our findings and interpretations with those of two non-public choice political scientists, T.R. Gurr and D.A. Hibbs Jr., noting congruencies and discrepancies between their conclusions and ours.

2. An economic hypothesis of political instability

The rationale for the hypothesis that fiscal expansion causes political instability is shown in Figure 1. The horizontal axis measures F , the percent of Gross National Product spent by the central government. On the vertical axis, V measures the percent of the vote going to the incumbent party in a free election for executive office, such as the presidency. An election is considered to be free if more than one party competes for votes and the electorate is informed by an unfettered press (Downs, 1957; Becker, 1958; Schumpeter, 1950).

In a democracy, V offers a direct measure of support for the incumbent party. In a dictatorship, the lack of free elections does not allow support for the incumbent to be measured at the polls, so it has to be inferred from other behavior, as discussed below.

F and V vary inversely, as shown by a downward-sloping 'demand curve,' D . It is assumed that voting for the incumbent party's candidate reflects the

electorate's demand for another term in office for the incumbents. If F rises between elections, the percent of the electorate willing to return the incumbent party to the office of the executive falls. This is because F represents something like a fiscal 'price' which government charges the economy for its policies and services. When this price goes up, voters-cum-consumers search for a substitute. While there is no substitute for government, there being one sovereign state in every country, there are substitutes for the party or person controlling the central government.

Thus, it is expected that, *ceteris paribus*, fiscal expansion results in a loss of support for the incumbent party. In a well-established democracy, this loss of support is manifested in a drop in the percent of the vote going to the incumbent party in elections for executive office. In fragile democracies and in authoritarian regimes, fiscal expansion has more dire consequences, ranging from collective protests and armed attacks on the government to the forcible removal of the incumbent by coup or revolution.

The hypothesis that fiscal expansion costs the incumbent political support is subject to several important qualifications. One concerns the theoretically interesting situation in which a government is created where there was none before. In that case, one would expect the D curve to rise from the origin steeply until it touches the upper left hand point shown in Figure 1, at some level of F sufficient to finance the basic infrastructure of government, i.e., to pay for the salaries and expenses of the constitutional offices of the new state. Beyond that small level of F , the D curve would become downward-sloping. George Washington's unopposed reelection of 1792 may have been a case of a new government operating in the upward-sloping segment of the D curve. By the end of Washington's second term, however, the incumbent party no longer enjoyed a free ride, its candidate, John Adams, winning election by a margin of only three votes in the electoral college. This is admittedly a highly speculative example, yet illustrative of an important qualification to Figure 1: although, for simplicity's sake, it is not shown, there is reason to believe that there is an upward-sloping segment of the D curve, rising from the origin steeply for a small distance as F goes up from zero to a small amount sufficient to finance the constitutional offices of a newly established state. (For a related idea, that there is a curvilinear relationship between government spending and popular votes for the candidate of the incumbent party, see Niskanen, 1975.)

Another important qualification has to do with war, in the midst of which, if it is popular or viewed as necessary for national survival, the electorate is willing to pay a much higher fiscal price than normal, reelecting the incumbents despite fiscal expansion. Franklin D. Roosevelt's 1944 reelection is a case in point.

Two other qualifications concern improvements in the quality of government services and increases in income. As the quality of government services

improves over time, the electorate reelects incumbents at a level of spending that, in years past, would have caused voters to reject the incumbents. Similarly, the electorate's willingness to pay for government services, and hence to reelect the incumbents at higher levels of spending, goes up as wealth rises. Together, better public services and growing wealth combine to shift the demand curve to the right over time. Therefore, in the *long run*, say a generation or more, the observed relation between F and V could well be positive. In the *short run*, however, that is, between elections, fiscal expansion is expected to cause a loss support for the incumbent.

In summary, it is hypothesized that, in the short run, fiscal expansion costs the incumbent party controlling the executive a loss of political support. In fragile democracies and in authoritarian governments, this loss of support is frequently manifested in non-electoral events such as protests, riots, and coups. Therefore, it is hypothesized that in these regimes fiscal expansion is a factor contributing to political instability.

3. Data, methodology, and specification

In order to test empirically the hypothesis that fiscal expansion causes political instability, 20 countries were chosen for analysis from what is called the Iberic-Latin region (Coulter, 1975; Peeler, 1985). Eighteen are Latin American countries, the remaining two being Spain and Portugal. These 20 countries make up a cultural region where the meaning and intent of certain types of collective action – e.g., a demonstration or a coup – are very similar in all cases. This makes it a convenient region to analyze statistically without fear that differences in political culture across countries would invalidate parameter estimation. (On the benefits of regional analysis of instability, see Sanders, 1978.)

Cuba and Haiti are excluded from the analysis. Cuba is excluded because it has a Communist regime which is significantly different from indigenous Spanish American dictatorships; and Haiti because it is not an Iberoamerican country, having more characteristics in common with the Franco-African region than with the Iberic-Latin.

Regression analysis permits testing the hypothesis that fiscal expansion causes political instability in the Iberic-Latin region. In order to measure political stability, we took six variables from the *World Handbook of Political and Social Indicators* (Taylor and Hudson, 1983) and constructed two others from observations reported in the *Europa Yearbook*. The six measures taken from the *Handbook* include four variables estimating the extent of opposition to the incumbents (protests, strikes, riots, and armed attacks) and two variables measuring the incidence of government changes (irregular executive transfers and executive adjustments). We will describe the variables constructed by using the *Europa Yearbook* later in the paper.

Table 1. Symbols and summary statistics for data set on Iberic-Latin region, 1968–1977 – (N = 20)

Variable:	Symbol	Mean	Standard deviation
Population ^a	POP	16.1	23.6
Annual population growth, percent	POPR	2.4	2.1
Government spending as a percent of GNP	F	17.9	6.5
Annual growth rate in government spending as a percent of GNP	FR	2.7	11.9
Gross National Product per capita ^b	GNPPC	1648	1004
Annual growth in GNP per capita, percent	GNPPCR	2.9	3.9
Military personnel per 1,000 inhabitants	M	5.3	5.1
Annual growth in military personnel per 1,000 inhabitants, percent	MR	.8	11.8
Protests	PROTST	3.6	13.1
Political strikes	POLSTR	1.6	5.9
Political riots	RIOTS	3.4	10.2
Armed attacks	ARMATK	5.1	10.9
Irregular executive transfers	IRGXTR	.1	.4
Executive adjustments	XADJMT	1.3	2.2

^a Population, in millions.

^b In constant, 1982 dollars.

Sources: Calculated from data in United States Arms Control and Disarmament Agency, *World Military Expenditures and Arms Transfers*. Washington, DC: 1977 and 1983. C.L. Taylor and D.A. Jodice, *World Handbook of Political and Social Indicators*, third edition. New Haven: Yale University Press, 1983.

Each instability measure taken from the *Handbook* is separately regressed on eight explanatory variables, two each measuring distinct dimensions of government expenditures, population, the economy, and the military. In each pair of independent variables, one measures absolute or relative size and the other measures annual rate of growth. Thus, for the fiscal dimension, both central government expenditures as a percent of Gross National Product (F), and the annual rate of growth of that variable (FR) are used. Similarly, the absolute size of population (POP) and its rate of growth (POPR), per capita GNP in 1982 dollars (GNPPC) and its rate of growth (GNPPCR), and the number of military personnel per 1,000 inhabitants (M) and its rate of growth (MR) are included in the regressions. Descriptive statistics for all the variables are shown in Table 1. These data span the years 1968 through 1977.

Theoretical expectations concerning the data are as follows. We hypothesize that the variable measuring fiscal expansion, FR, is positively associated with political instability in whatever way the latter is measured. This is the principal hypothesis being tested in this paper.

political instability. The faster central government expenditures relative to GNP grow in any given year, the higher the incidence of protests, strikes, riots, and armed attacks. This finding supports our principal hypothesis: fiscal expansion appears to cause a loss of political support for the incumbent government in the Iberic-Latin region. (It should be noted that in the case of political strikes and fiscal expansion, the relation, though it is in the expected direction, is not significant.)

A very different, though, as discussed earlier, not unexpected, finding is the negative relation between fiscal size and political instability. The relation between F and each of the instability measures is negative and significant. This negative relation between fiscal size and instability can be interpreted in several ways. One interpretation was discussed in Section 2: the demand schedule shown in Figure 1 is not static, but migrates to the right in the long run as the wealth and quality of government services increases over time.

Other explanations are possible. Gurr (1971: 298) argues that central spending as a percent of GNP measures 'the physical resources' available 'for enhancing regime institutional control' and reports a negative correlation (-0.34) between spending and civil violence across the world in the 1961-1963 period. Hibbs (1973: 99-102) treats general government expenditures as a percent of Gross Domestic Product as one of six variables collapsed in an index of sociopolitical institutionalization varying inversely with collective protest, internal war, and coups. Gurr's and Hibbs' institutionalization hypothesis assumes that the more resources the central government controls, the more it is able to channel the country's politics into regularized patterns, diffusing discontent by giving potential protest leaders government careers and other opportunities for fulfilling political ambitions.

Another, perhaps less sanguine explanation is that as F increases, the resources available for protest shrink. The more government spends relative to GNP, the fewer resources are outside political control, in private hands which can put them to use in opposition to the incumbents. As long as government retains unity of command, protesting requires that there be resources not under government control. As government spends more of GNP, the material means available to challenge its authority diminish. In this view, the more government spends, the more it becomes something of a Leviathan, fiscally gobbling up resources that could have been used against it.

Turning now to the non-fiscal determinants of political instability, all but one of our expectations were confirmed. Per capita economic growth and expansion of the military are both inversely related to each of the instability measures. On the other hand, the size of the population, per capita GNP, and the relative size of the military are all positively related to instability. All variables except population are significant in at least three of the equations.

The only real surprise in the regression results concerns population growth,

Table 3. OLS regression estimates of irregular executive transfers and executive adjustments in Iberic-Latin region, 1968-1977 - (t-statistics in parenthesis)

	IRGXTR	XADJMT
F	-.006 (-1.24)	.004 (.17)
FR	.002 (.88)	.01 (.84)
POP	-.001 (-.72)	.003 (.47)
POPR	-.03* (-1.99)	-.33** (-4.44)
M	.004 (.74)	.08** (2.62)
MR	.003 (1.47)	-.06** (-4.99)
GNPPC	-.00 (-.03)	.00 (.98)
GNPPCR	-.02* (-2.43)	-.21** (-5.29)
Intercept	.34	1.89
R ²	.07	.30
N	191	191

* significant at .05 level.

** significant at .01 level.

which varies inversely with instability. This finding flies in the face of conventional wisdom regarding the political consequences of population growth. Although Hibbs (1973) found no relation between population growth and mass political violence, Wiarda and Wiarda (1987) assume that population growth is a source of political instability in Latin America. The regressions show that, far from being destabilizing or having no political effect, population growth in the Iberic-Latin region is actually associated with less political instability. This findings cries out for an explanation, but that is beyond the scope of this paper.

Proceeding to instability variables measuring changes in government, Table 3 presents the OLS regression estimates of irregular executive transfers and executive adjustments. The results are similar to those of Table 2, except that fewer variables are statistically significant. The most important difference for our purposes is that fiscal expansion, though positively associated with executive changes, is not statistically significant. Economic, population, and military factors are better predictors of annual changes in the executive than fiscal expansion.

Table 4. OLS regression estimates of total executives and coups in Iberic-Latin region during 1967–1983 – (t-statistics in parenthesis)

	COUPS	EXECS
AVF	-.06 (-.90)	-.10 (-.82)
AVFR	.25** (2.51)	.51** (2.83)
AVPOP	-.02 (-1.06)	-.03 (-.97)
AVPOPR	-.94 (-1.70)	-2.07* (-2.07)
AVM	-.02 (-.14)	-.14 (-.51)
AVMR	-.18 (-1.37)	-.15 (-.65)
AVGNPPC	-.00 (-1.15)	-.00 (-.11)
AVGNPPCR	-.32 (-.96)	.29 (.49)
Intercept	5.94	12.14
R ²	.68	.62
Adjusted R ²	.44	.35
N	20	20

* significant at .10 level.

** significant at .05 level.

These results should be contrasted with those obtained with two other measures of government change shown in Table 4: the total number of coups and the total number of executives during the period 1967–1983. These two measures were constructed by the authors from observations reported in the *Europa Yearbook*. It is assumed that unstable Iberic-Latin regimes have a larger number of both executives and coups than stable regimes during this 17 year period. Indeed, the two variables are directly and strongly correlated (Spearman $r = .81$).

Having reduced changes in government to one value each for executives and coups during the 1967–1983 period, it is necessary to convert all the fiscal and other independent variables used in previous regressions into single measures, also. As before, two variables each are computed for expenditures, wealth, population, and the military. One variable in each pair represents the mean value during the years 1968–1983, and the other represents the rate of growth for this period. For example, government spending as a percent of GNP is mea-

Table 5. Symbols and summary statistics for data set on Iberic-Latin region, 1967–1983 period averages – (N = 20)

Variable: ^a	Symbol	Mean	Standard deviation
Population, in millions	AVPOP	17.2	25.8
Annual population growth, percent	AVPOPR	2.4	.9
Government spending as a percent of GNP	AVF	19.9	6.4
Annual growth rate in government spending as a percent of GNP	AVFR	3.4	3.9
Gross National Product per capita ^b	AVGNPPC	1706	1027
Annual growth in GNP per capita, percent	AVGNPPCR	1.5	1.5
Military personnel per 1,000 inhabitants	AVM	5.3	3.8
Annual growth in military personnel per 1,000 inhabitants, percent	AVMR	1.6	3.7
Executives ^c	EXECS	5.8	3.1
Coups ^d	COUPS	1.3	1.9

^a All variables are averages computed for the 1967–1983 period.

^b In constant, 1982 dollars.

^c Total number of chief executives during 1967–1983 period. Depending on the country, the office of chief executive may be filled by a president, a prime minister, or a head of military junta.

^d Total number of coups during 1967–1983 period.

Sources: Calculated from data in United States Arms Control and Disarmament Agency, *World Military Expenditures and Arms Transfers*. Washington, DC: 1977 and 1983. *The Europa Yearbook: A World Survey*. London: Europa Publications Limited, various years.

sured both as a period average, AVF, and as an average rate of growth, AVFR, during the period. These averages were obtained across the data available for each country. All independent variables in Table 4 were obtained in the same manner, yielding one observation per variable for each of the 20 countries in the Iberic-Latin region. Descriptive statistics for all the variables appearing in Table 4 are shown in Table 5.

The OLS regression estimates of executives and coups show that AVFR, which measures fiscal expansion, is positively and significantly associated with government changes. The only other variable that is significant in Table 4 is AVPOPR, the average rate of population growth, which, as with other instability measures, varies inversely with the number of executives.

No other variable is statistically significant. This is surprising, especially the lack of a significant relationship between economic growth and the total number of executives or coups. These results contrast with those of Table 3, where economic variables are better predictors of government change than fiscal expansion. Perhaps economic variables are better predictors of marginal gov-

ernment changes on a year to year basis while fiscal expansion is a better predictor of larger changes over a longer time period.

5. Summary and conclusions

Summing up the results, fiscal expansion is positively associated with political instability in the Iberic-Latin region. The faster the rate of growth in the ratio of central government expenditures to Gross National Product, the more demonstrations, riots, armed attacks, coups, and executives are observed in the 20 countries of the region.

On the other hand, the relative size of the 'fisc' varies inversely with instability. This finding is consistent with those reported by Gurr and Hibbs. Several explanations of this finding are plausible. One is that a larger fisc provides better quality of public services for which voters are willing to pay. Another explanation is that the more government spends of GNP, the more it can institutionalize political action, reducing opposition to the incumbents. A third, less sanguine, interpretation of this result is that, the more a government spends of GNP, the fewer the resources left for political protest, inasmuch as protests necessitate material means independent of central government control.

As expected, political instability varies directly with population, wealth, and the relative size of the armed forces, and inversely with economic growth and expansion of the military. One surprising finding is that instability is negatively related to population growth. Contrary to conventional wisdom, 'the population explosion' in Latin America is associated not with more but with less instability. In a perplexing way, population growth may dampen opposition to the government. This confounding finding cries out for an explanation.

Probably of greater interest to the economists who read *Public Choice* is the finding that wealth and economic growth have opposite effects on political instability. There are fewer protests, riots, strikes, armed attacks, and irregular changes of government in years of fast economic growth than in years of stagnation or economic contraction. Thus, economic growth per capita seems to reward incumbents in the Iberic-Latin region with the same coin as in the United States, i.e., with longer tenure in office and greater popularity.

On the other hand, the higher the absolute value of GNP per capita, the more political instability. This may be because more wealth means more resources in private hands, outside political control, available for expressing discontent, and also because, as poverty recedes, expectations for better policies and public services grow faster than government can meet them, at least up to a point. Thus, wealth may both generate a greater demand for protests and changes in government and supply the resources for carrying them out.

The relation of the military to instability is probably of greater interest to the political scientists reading this journal. A larger military relative to the population appears to fuel protests against the regime, but the yearly growth of this ratio has a dampening effect on mass political violence. These findings are consistent with those reported by T.R. Gurr. A growing military seems to discourage protests but a large military appears to provoke them. The dampening effect of an expanding military on instability seems rational and supportive of the conclusion that '[i]f politicized discontent is so intense and pervasive that the existence of the regime is threatened, the only coercive response likely to be functional for the regime is to increase rapidly to high levels either or both threats and sanctions.' (Gurr, 1971: 241.) Less intuitive is the positive relation between the relative size of the military and protests, a finding which is also consistent with Gurr's research results. He suggests that there is a curvilinear relation between government coercion and mass violence such that 'small, efficient military and security forces are more effective than any but the largest ones' (Gurr, 1971: 248.) Perhaps there are large diseconomies of scale in the military part of the state, turning very large armies into 'paper tigers.' However, other factors may be at work having less to do with the inefficiency of the very large military than with its provocative effect on people prone to political protest.

One last general finding deserves brief comment. In most of the regressions, the absolute or relative size of the independent variables has the opposite effect on political instability than the variables' annual rate of growth. This pattern suggests that studies of political instability measuring the independent variable as either an absolute value or as a rate of growth, but not both ways, are missing something important regarding the relation of the presumed causal factor with political instability.

References

- Becker, G.S. (1958). Competition and democracy. *Journal of Law and Economics* 1 (October): 105-109.
- Coulter, P. (1975). *Social mobilization and liberal democracy*. Lexington: Heath.
- Cuzán, A.G. (1986). Fiscal policy, the military, and political stability in Iberoamerica. *Behavioral Science* 31 (4): 226-238.
- Cuzán, A.G., and Heggen, R.J. (1985). Expenditures and votes: In search of downward-sloping curves in the United States and Great Britain. *Public Choice* 45 (1): 19-34.
- Downs, A. (1957). *An economic theory of democracy*. New York: Harper & Row.
- The Europa yearbook: A world survey*. (various years). London: Europa Publications Limited.
- Hibbs, D.A., Jr. (1982). On the demand for economic outcomes: Macroeconomic performance and mass political support in the United States, Great Britain, and Germany. *Journal of Politics* 44 (2): 426-462.
- Hibbs, D.A., Jr. (1973). *Mass political violence: A cross-national causal analysis*. New York: Wiley.

- Niskanen, W.A. (1979). Economic effects on the popular vote for president. In D.W. Rae and T.J. Eismeier (Eds.), *Public policy and public choice*. Beverly Hills: Sage.
- Niskanen, W.A. (1975). Bureaucrats and politicians. *Journal of Law and Economics* 18 (3): 617–643.
- Peeler, J.A. (1985). *Latin American democracies*. Chapel Hill: The University of North Carolina Press.
- Peltzman, S. (1987). Economic conditions and gubernatorial elections. American Economic Association: *Papers and proceedings of the 99th annual meeting* 7: 293–297.
- Schumpeter, J.A. (1950). *Capitalism, socialism, and democracy*. New York: Harper & Row.
- Sanders, D. (1978). Away from a general model of mass political violence: Evaluating Hibbs. *Quality and Quantity* 12 (1): 103–129.
- Taylor, C.L. and Jodice, D.A. (1983). *World handbook of political and social indicators*, third edition. New Haven: Yale University Press.
- Tufte, E.R. (1978). *Political control of the economy*. Princeton: Princeton University Press.
- United States Arms Control and Disarmament Agency. (1983). *World military expenditures and arms transfers*. Washington, DC.
- United States Arms Control and Disarmament Agency. (1977). *World military expenditures and arms transfers*. Washington, DC.
- Weiner, M. (1971). Political demography: An inquiry into the political consequences of population change. In *Rapid population growth: Consequences and policy implications*, Volume II: 567–617. Baltimore: Johns Hopkins.
- Wiarda, H.J., and Wiarda, I.S. (1986). Population, internal unrest, and U.S. security in Latin America. In John Saunders (Ed.), *Population growth in Latin America and U.S. national security*, 151–182. Boston: Allen & Unwin.