Government Growth in the United States

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For American politicians, big government is a perennial issue. Scholars, however, have neglected it. In fact, systematic knowledge about the causes of government growth in the United States is virtually absent. Here we first formulate a "hybrid" model of government growth, borrowing from popular theories of public policy. Then, we estimate the model using annual time series data, 1932-80. In general, government size in the United States is viewed as a function of group demands, elite preferences, and mass support. In particular, government in the United States seems to have expanded in response to the influences of national defense commitment, foreign trade, economic hardship, demographic change, Democratic politicians, and a risk-aversive public. Of these influences, the international ones appear especially important. Overall, the ensemble of variables manages to predict the pattern of government growth in twentieth-century America quite well.

"Nothing is so rare as a shrinking government." (Nutter, 1978, p. 1)

"[W]e are convinced that government is too large and too powerful." (Meltzer and Richards, 1976, p. 111)

"[B]ig government . . . breeds dependency, which is bad for the moral fiber of the citizenry. It breaks down, which brings disrespect." (Wildavsky, 1979, p. 5)

Big government is a timely issue for both scholars and politicians. President Reagan, commenting on his 1980 victory, summed up a widespread sentiment: "Our government is too big, and it spends too much" (Reagan, 1981). The public has echoed his view. According to a recent Gallup

* The names of the authors appear in alphabetical order and imply that this paper is in every way a collaborative enterprise. Also, we wish to thank the anonymous reviewers for their helpful suggestions.
Poll, a large majority of Americans thought that government spending was too high at all levels (Gallup Poll, 1979, pp. 198–99). Further, other surveys show that the people go on to express support for actual spending cuts (ABC News/Harris Survey, 1980). Such a commitment to reductions is congruent with another majority opinion, which is that big government poses a much more serious threat to the nation than either big labor or big business (Gallup Poll, 1979, p. 252). Of course, fear of a large and growing government is not an attitude new to the American citizenry. On the contrary, as far back as the survey data go, Americans have indicated an aversion to big government. For instance, in 1938 Gallup asked: “Do you think the federal government is spending too much money, too little, or about the right amount?” The majority—61 percent—answered “too much” (Gallup Poll, 1972, p. 134).

The implication of the foregoing sampling of opinion is that government has gotten larger. But has it? Below, as a preliminary step, we consider the pattern of changes in government spending in the United States, focusing on the question: “Has government grown?” Then, we devote ourselves to explaining the growth pattern we uncover.

HAS GOVERNMENT GROWN?

The answer to this inquiry depends in part on how a government spending index is formulated. In the despairing view of one analyst, according to the expenditure measure chosen, “government size may be seen as expanding, stable, or decreasing” (Shariff, 1978, p. 27). For example, some researchers have concluded that the United States government has grown little, if at all, at least over the past thirty years (Beck, 1981; Pechman et al., 1981; Thomas, 1980). But others claim that the United States government has grown greatly over this period (Meltzer and Richard, 1976; Nutter, 1978; Wildavsky, 1979). Clearly, different indicators can yield contradictory conclusions about growth. For instance, if we compare total expenditures at all levels of government from 1950 (70 billion dollars) to those of 1980 (880 billion dollars), there appears to have been colossal growth over this time span. In contrast, if we examine federal expenditures as a share of Gross National Product (GNP), we observe a figure of 16.1 percent for 1950 and 22.0 percent for 1980, suggesting a pattern of slow growth.

These opposing assessments underline the need to be very definite about our measures and their meaning. First, since we want to determine public sector growth, we will include expenditures at all levels of government—federal, state, and local. To focus exclusively on federal expenditures, which is often done, ignores a major area of government involvement in society. In addition, such a focus provides a misleading picture of the overall growth trend, for national spending does not necessarily
move in tandem with other spending. Further, looking at total expendi-
tures alleviates the nettlesome problem of drawing the line between
federal and nonfederal spending. In 1975, for example, 24 percent of
state and local spending actually consisted of federal aid (Pogue and
Sgontz, 1978, p. 35). Second, we are interested in relative, not absolute,
growth. The common observation that government expenditures are
larger this year than last year is trivial. The salient issue is whether
government has gotten larger relative to the rest of society. A standard
economic measure of the "size" of society is GNP. By figuring total
government expenditures as a percentage of GNP, we arrive at our assess-
ment of government's relative size and growth. In figure 1, this annual
percentage is plotted for the United States during the twentieth century.
While government was rather small in 1900, about 8 percent of GNP, by
1980 it equaled 36.5 percent of GNP. Across these years, government ap-
pears to have experienced considerable growth.

**Figure 1**

**United States Government Size (GE/GNP) Plotted over Time (Years): 1900–80**

GE/GNP = Government Expenditures as a Percentage of Gross National Product

Should we settle for this conclusion, based on this percentage figure?
Before deciding to do so, several important measurement hurdles need to
be jumped. (Of course, if the reader is already satisfied with this
percentage measure, he or she can skip ahead to the next section.) These
problems involve how to measure the national product, whether to in-
clude transfer payments, and how to handle inflation. Let us look first at
the problem of the national product. The two routinely used measures of national wealth are Gross National Product (GNP) and Gross Domestic Product (GDP). These well-known indices provide similar dollar values for the total goods and services a nation produces, but GNP stresses the production of a nation's citizens and their property, while GDP emphasizes production within the geographical boundaries of a nation regardless of the nationality of the owners (Ruggles and Ruggles, 1956, pp. 112-13). Because of our concern with a nation's government activity as a share of the total economic activity of its citizenry, we choose to employ GNP.

The second measurement problem has to do with whether to include transfer payments as part of government expenditures. Public expenditures may be classified into two broad categories: government purchases of goods and services, and transfer payments (e.g., social security, unemployment benefits, welfare). The inclusion in the government expenditures column of these transfers, a large and growing component of government activity, provides a continuing debate in the public finance literature. On the negative side, the argument is that transfers do not divert resources from the private economy to government, as do purchases of goods and services. Rather, the government acts merely as an intermediary, redistributing income from one set of private individuals to another (Brown and Jackson, 1978, p. 86). Thus, counting transfer payments overstates government expenditures. On the positive side, the argument is that transfers impose a real cost on those who must pay the taxes to finance them. Indeed, this “is as much a real cost as direct outlay for tanks, planes, and paper clips” (Buchanan and Flowers, 1975, pp. 40-41). Further, the consumption made possible by the transfers is a product of government action (Rose and Peters, 1978, p. 26). That is, this redistribution of income represents a serious exercise of government influence. Therefore, since any valid measure of government size should correlate with government influence, we thought it essential to include transfer payments.

The final measurement problem is created by inflation. Obviously, in current dollars, government will spend more this year than it did ten years ago. But that does not necessarily mean it will provide more, because prices have gone up. To get an estimate of the real dollar outlay by government we would have to deflate the current figure by an appropriate index. However, we do not seek an absolute estimate for government size, be it current or real dollars. Rather, our concern is government expenditures relative to the economy as a whole. Our measure, government expenditures as a percentage of GNP, makes automatic adjustments for price fluctuations, since rising prices for the total economy are reflected in rising prices to government (Herber, 1975,
Nevertheless, some have argued that these automatic adjustments are not enough to avoid inaccuracies (Beck, 1981; Peacock and Wiseman, 1967). For instance, Charles Schultze (1976, p. 330) contends that prices paid by government increase faster than the general price level, which would mean that government must spend more simply to maintain a steady share of real GNP. If this is so, it is worth considering the deflation of government expenditures and GNP with different indices before calculating our percentage measure (see especially Lowery and Berry, 1983). Little problem is posed for the latter, which could be corrected by the widely used GNP deflator. However, for the former there is no consensus on which index to use. (All those readily available—Consumer Price Index, Personal Consumption Index, Wholesale Price Index, GNP deflator—present serious problems when applied to government expenditures; see Hibdon, 1969, pp. 77–80.)

The issue becomes, then, whether to use our original unadjusted percentage or an adjusted percentage where the price correction for government expenditures is probably flawed. In a recent evaluation of this choice, Musgrave and Musgrave (1980, p. 149) conclude that “the unadjusted ratio gives a better picture of the public sector share in the value of total output, and of the share of private income which has to be paid into the public sector through taxation.” The suggestion is that, at least from a political science perspective, the unadjusted measure is preferable because it gives a better indication of government scope and power vis-à-vis the national economy. Moreover, with respect to the regression analysis which follows, the adoption of the unadjusted percentage is not particularly troublesome, for the greater inflation that may exist for government essentially reduces, statistically speaking, to constant error rather than systematic error, meaning that any estimation bias isolates itself in the intercept term.

On the basis of the foregoing considerations, we will continue to rely on the government size measure \( G_t \) employed in figure 1, i.e., total current annual government expenditures \( GE_t \) as a percentage of current annual GNP, \( G_t = \frac{GE_t}{GNP} \times 100 \). This percentage measure avoids simply looking at the raw level of government expenditures. While not perfect, it emerges from our discussion as the best available indicator. Government in the United States, as figure 1 shows, has experienced large size increases during this century. Why has such growth occurred? This question, the principal concern of our research, will receive the remainder of our attention.

**Explanations of Government Growth**

Several theories of government growth have been propounded (for a
review, see Larkey et al., 1981). However, most rest on underspecified explanatory models and inconclusive empirical evidence. The first problem refers to the pervasive presence of essentially unicausal models, i.e., models which emphasize a single explanatory variable in accounting for government growth. One such variable may be the existence of “uncontrollables” in the budget (Saunders et al., 1977; Pechman et al., 1981). Or, it could be the idea of “fiscal illusion,” whereby politicians hide costs from voters through indirect revenue-raising techniques (Buchanan and Wagner, 1977, p. 12; Downs, 1960, p. 558; Wilensky, 1975, p. 52). Perhaps it is “bureaucratic expansion,” with self-interested bureaucrats relentlessly pursuing bigger budgets (Niskanen, 1971; Wildavsky, 1974). Yet another possibility is Wagner’s (1958) “law,” which holds that industrialization inevitably leads to public sector growth. The difficulty with such essentially single-variable explanations is not so much that they may be wrong, as that they are undoubtedly incomplete. That is, they imply explanatory equations that are grossly misspecified owing to their exclusion of all other relevant independent variables.

The second problem plaguing these simple theories is their weak empirical support. Of all the theories, Wagner’s law is by far the most investigated, and these investigations have yielded little. The evidence on Wagner’s law, in the words of a leading public finance scholar, “remains puzzling” (Musgrave, 1969, p. 124). Further, because studies have predominantly employed a comparative cross-sectional design, empirical evidence on government growth in particular countries is almost nonexistent. Moreover, the reliance on cross-sectional analysis seems especially unfortunate since the inherent temporal nature of the growth process begs for the primacy of time series analysis. Nevertheless, only one time series study of government growth in the United States has been published (Lowery and Berry, 1983). In it, nine of these essentially unicausal explanations were identified and tested. According to their analysis, none of them helps explain government growth.

Regarding the explanations for government growth, then, we face many underdeveloped models that are unsubstantiated by empirical research. As Lowery and Berry (1983, p. 688) summarize the dilemma, “the existing literature consists of a large number of very simple and separate models . . . with little or no attention to theoretical integration.” And, these models do not stand up well to testing. Echoing their conclusion: “We are a very long way from understanding the process of government growth” (Lowery and Berry, 1983, p. 689). Below, our aim is to develop a modest theoretical framework for understanding government growth, integrating independent variables whose explanatory importance is demonstrated by standard statistical tests.

Obviously, government size is a product of public policies. Therefore,
general theories of the public policy process should help explain the
growth of government. Three in particular are suggestive: systems
theory, group theory, and elite theory. None of these, on its own, pro­
vides an adequate explanation. However, elements can be freely bor­
rowed from each and combined into a satisfactory hybrid model of
government growth, based on mass-group-elite interactions with
democratic institutions (see figure 2).

**FIGURE 2**

**THEORETICAL FRAMEWORK FOR EXPLAINING GOVERNMENT GROWTH**

Systems theory draws attention to the key role demands play in shaping
democratic public policy. The Eastonian paradigm is by now familiar
(Easton, 1965). Demands from the environment are inputs into the
political system, which transforms them into public policy outputs. The
"systems" idea seems a useful way to begin to think about government
growth; for example, government spending increases occur because
democratic politicians respond to demands placed on them. After grant­
ing the utility of this simple notion, we could level many criticisms at
systems theory, but we do not wish to repeat them all here (see Sorzano,
1975; Goldman, 1971; Mackenzie, 1967, p. 110). For our purposes, the
central questions which systems theory does not adequately answer are
the following: "what demands are relevant?" and "who makes demands?"
(e.g., individuals, groups, masses, or elites). With regard to the first
question, it is obvious that only certain kinds of demands will lead to
public policies which influence government size. Since our definition of
size is based on government expenditures as a percentage of GNP, the
demands of primary concern are those which aim to alter "allocative"
public policies, specifically government spending patterns (see Almond
and Powell, 1966, chap. 8). Thus, we ignore demands to change "con­
trol" policies (i.e., the legal regulation of individual and group behavior)
or to change "symbolic" policies (i.e., the provision of symbols for public
morale).
With regard to the second question, group theory provides one answer. According to it, public policy emerges exclusively from the competing demands of groups (Truman, 1951). As Earl Latham (1956, p. 239) describes the process: “The legislature referees the group struggle . . . and records the terms of the surrenders, compromises, and conquests in the form of statutes.” At any given moment, then, total government size is a product of the competition among groups for government dollars. Prime among the factors that determine the strength of a group is the number of individuals in the group. Thus, broad socioeconomic groups, which have a very large membership, would seem especially likely to have an enduring influence on public expenditures. Consider, for example, the noteworthy gains of the elderly with respect to the government provision of medical care and income assistance. (For instance, money and in-kind transfers have dramatically reduced the level of poverty among Americans 65 and over [IRP Focus, 1984].) These policy successes of the elderly no doubt occurred, in part, because the aged compose a large group with intensely felt needs which occupy a respected place on the list of national priorities. Besides the aged, the young (and their parents) would seem likely to make effective public policy demands in terms of their educational needs. Further, the unemployed are yet another sizable socioeconomic group that has demanded a good deal of attention from policymakers.

So, let us assume such socioeconomic groups, through their public policy demands, influence the size of government. Why might government size change over time? Because, following group theory, the strengths of the influential groups change. Specifically, government size could increase when, other things being equal, a key demand-making group increases its relative numbers in the population. For example, an increase in the relative size of the elderly population, even given steady demands for medical care and income assistance, would necessarily cause an expansion of the public sector. In like manner, increases in the relative size of the youth or unemployed populations would be expected to bring about government growth (Kelley, 1976; Wilson, 1981; Gupta, 1967, pp. 427–28).

Clearly, other groups exercise policy influence besides these socioeconomic ones, which represent leading sources of domestic public policy demand. Government size is shaped by international demands as well. An obvious area of influence here is defense policy. In this regard, Ripley and Franklin (1980) distinguish “structural” policies, which deal with military organization, and “strategic” policies, which deal with the implementation of military policy. Internal groups—for example, veterans, arms manufacturers, the Pentagon—would have more influence on the first, while foreign groups—for example, terrorists, guerrillas, in-
vading armies — would have more influence on the second. Increased de-
mand from either locus, internal or external, could divert more private
resources to the military, resulting in an expansion of the public sector.
The dramatic example here is the effect of a major war. Government size
burgeons during wartime, as can be easily seen for the World War II
years in figure 1. Peacock and Wiseman (1967), in their time series study
of Great Britain, claim that World War II had a substantial, lasting im-
 pact on government size in that country. Further, we must emphasize
that it is not simply “hot” war which can cause government to grow.
Periods of “cold” war, or international tension generally, generate
demands for a larger defense establishment which, other things being
equal, inevitably swell government.

Compared to war, the area of foreign trade is a less obvious source of
international pressure for government expansion. However, recent work
has confirmed a connection between the dependency of businesses on in-
ternational markets and the growth of the public sector (Cameron, 1978;
Lindbeck, 1975, 1976). The greater this foreign trade dependency, the
greater the demands on government to maintain economic stability by
strategic increases in spending. For example, local workers unemployed
because of international economic changes might press for payment of
special benefits. Or, the firms may solicit substantial funds to weather
these fluctuations. Although Cameron (1978) did include the United
States as one of the cases in his pioneering research on this “open
economy” hypothesis, he restricted himself to a cross-sectional design.
And, subsequently, no supporting time series evidence has yet appeared.

Thus far, we have considered the role of group demands in shaping the
public policies which together compose government size. To test
whether these influences are actually operating, it is necessary to provide
specific measures of these group variables. The indicators of the strength
of the domestic socioeconomic groups are straightforward. To assess the
strength of the old and young age groups, we simply create a
demographic index, $A_r$, the annual ratio of young (ages 0–24) and old
(ages 65 and over) to the total population. To estimate the strength of the
unemployed, we merely utilize the annual unemployment rate, $U_r$. With
regard to international demands, the measures must be less direct. As
noted, there are multiple group influences on military organization and
policy. In order to capture the overall strength of these diverse sources,
we employ a global indicator, $W_r$, the annual total number of military
personnel. Similarly, to judge the final weight of the multitude of
business and labor groups in international markets, we turned to the an-
nual real dollar value of exports and imports, $T_r$.

Before including these variables in any statistical analysis, the model
specification needs further improvement. As suggestive as group theory
is, it does not exhaust the possible causes of government growth. To some extent, public policy seems shaped by the preferences of political elites, independent of the wishes of groups or masses. Two preferences, in particular, would seem especially likely to lead to spending increases by politicians: (1) the quest for reelection; and (2) the desire to implement their ideology. Let us first evaluate the potential influence of a reelection bid. An incumbent who is running for another term could promise more programs in order to best the opponent (Buchanan and Wagner, 1977; Brittan, 1975, pp. 139–40; Downs, 1957, 1960; Nordhaus, 1975). Therefore, government spending should rise just before an election, as the incumbent tries to buy votes. (And, this effect ought to be detectable in the regression coefficient of a dummy variable, $R_e$, scored $1 = \text{presidential election year}, 0 = \text{other years}$.)

What about the impact of the ideological preferences of political elites? Cameron (1978, p. 1253) found that the leftist composition of government was an important determinant of public sector growth. Nevertheless, his essentially European evidence may have little bearing on the case of the United States, where major parties divide into Democrat and Republican rather than Left and Right. Further, in the American context there is the perennial controversy over whether these parties are tweedledum and tweedledee with respect to policy. However, Tufte’s (1978, pp. 72–76) thorough analysis of party platforms suggests the differences are very real: “It is clear that even what many consider to be the ideologically bland political parties of the United States display the classic differences between Left and Right on fundamental issues of economic policy, [e.g.,] the proper scope and cost of government.” More pointedly, Davis, Dempster, and Wildavsky (1966) conclude that the size of budget increases for the United States bureaus is caused partly by the strength of Democrats in Congress. On the basis of these investigations, then, we would predict that, as the total percentage of Democratic seats in the Congress ($M_d$) increases, government consumes a larger share of the nation’s economic activity.

While group and elite theory identify some potential determinants of government growth, they neglect the direct policy formation role of the masses. We believe that the American masses have come to provide a political culture of support for big government. Thus, we return to systems theory, which reminds us that policy inputs into the political system consist of supports as well as demands. In our view, changing public values create a climate in which government expansion is encouraged or discouraged. Impressionistically, since the 1930s the public has become more accepting of government intrusion into the economy. The belief that American capitalism is self-regulating would appear to sway fewer and fewer people. Although the Reagan years may mark a
change, it seems that, increasingly, governments are expected to correct market failure, smooth out the business cycle, and redistribute income. The difficult question for research is how to track these supposedly shifting attitudes about the appropriate role of government, in the absence of direct, repeated survey measures over time. One possibility is that mass attitudes toward government intervention are highly correlated with the annual percentage of Democratic party identifiers, $I_1$, which thereby serves as a surrogate measure.

Above, we have explored various theoretical perspectives in the study of public policy, with the aim of developing a theoretical framework for the understanding of government growth. We decided that government size in the United States is a function of three broad categories of variables: group demands, elite preferences, and mass support (see sketch in figure 2). Below, we turn to estimation of this hybrid model.

**The Statistical Modeling of Government Growth**

In estimating a structural explanation for the temporal growth of government in the United States, one must cope with the special problems posed by time series data. These difficulties stem, of course, from the self-dependence that time series observations almost invariably have. For example, in any given year government size will usually be pretty close to what it was the year before. With time series regression equations, this dependence manifests itself in correlated error terms, which violate classical regression assumptions (Lewis-Beck, 1980, pp. 26–28). If, in the face of this autocorrelation, ordinary least squares (OLS) is applied, then the significance tests will be biased. Since autocorrelation is typically positive and often large, this bias frequently works to exaggerate greatly the statistical significance of the coefficients. Practically speaking, this means that, with OLS estimates of time series regression models, there is a clear risk of concluding effects exist when they do not. The standard econometric approach to this problem is: (1) to establish whether significant autocorrelation is present, for example, by application of the Durbin-Watson statistic; and (2) if significant autocorrelation is present, to transform the variables to correct for it, for example, by application of the Cochrane-Orcutt procedure.

Recently, some analysts have proposed an alternative to this standard approach. That is, the observed time series variables are detrended and the dependent components removed using Box-Jenkins ARIMA modeling procedures (Box and Jenkins, 1976; Pierce, 1977; Pindyck and Rubinfeld, 1976; McCleary and Hay, 1980; McDowall et al., 1980). Then, these "prewhitened" time series serve as the variables for the structural analysis of cause and effect. This prewhitening strategy does have appeal, par-
particularly because of the pervasive nature of the autocorrelation problem with time series data. Unfortunately, it is flawed in that it tends to "throw the baby out with the bath water," as several econometricians and statisticians have demonstrated (Geweke et al., 1979; Nelson and Schwert, 1982; Freeman, 1983). In particular, such prewhitening often leads analysts to the conclusion of "no effects," when in fact there are. (Put another way, a problem of bias exists in the opposite direction from that with OLS estimates in the presence of autocorrelation.)

Thus, to avoid making it either "too easy" or "too difficult" to find effects, we decided to adopt the standard econometric approach to modeling the government growth process. This strategy seemed to work rather well. As shall be seen below, while a plausible substantive explanation for government growth is obtained, not every variable we considered was found to be statistically significant. Further, the model developed exhibits no significant autocorrelation. Finally, the model does a good job of tracking the fluctuations in government growth, clearly bettering the fit provided by nonsubstantive models based on a time trend or an autoregressive process.

As we noted in our theoretical discussion above, government growth is a function of three broad categories of variables: group demands, elite preferences, and mass support. Initially, we proposed the following measures for selected variables within these categories: for socioeconomic group demands, the share of young and old in the population ($A_t$) and the unemployment rate ($U_t$); for international demands, the total number of military personnel ($W_t$) and the per capita real dollar value of exports and imports ($T_t$); for elite preferences, the percentage of Democratic congressional seats ($M_t$) and the presence of an election year ($R_t$); for mass support, the percentage of Democratic party identifiers in the voting population ($I_t$). The hypothesis was that each of these variables has an independent, positive, significant effect on government size, i.e., $H : b > 0$. However, in fact, only three of these seven variables were found to be statistically significant at .05 ($t > 1.68$). These three variables and their coefficients are reported in equation 1, estimated from annual data on these variables beginning in 1932. (The years prior to 1932 are plagued with missing data problems. The estimates are with OLS, since no significant autocorrelation was present, a point soon pursued more fully.)

\[
\hat{G}_t = -.045 + .002W_t + .015T_t + .38A_t, \quad (1)
\]

\[
(-.01) \quad (15.38) \quad (7.65) \quad (2.33)
\]

$R^2 = .88 \quad N = 49 \quad D-W = 2.02$

where $G_t =$ total current annual government expenditures as a percent-
age of current annual GNP, $W_t$, $T_t$, $A_t$, are defined as in the above paragraph (the precise measures for these and subsequent variables appear in table 1); figures in parentheses are $t$-ratios; $R^2$ = the coefficient of multiple determination; $N$ = number of observations (1932-80); $D-W$ = the Durbin-Watson statistic. The data were gathered from *Statistical Abstract of the United States*, United States Department of Commerce, Washington, D.C., various volumes.

Of all the variables examined in this study of government growth, the most robust are these three: the commitments to national defense ($W_t$), to foreign trade ($T_t$), and to the young and old ($A_t$). Let us consider each. The statistical significance of the socioeconomic group variable, age composition ($A_t$), is quite understandable. Any increase in the relative size of a dependent population creates additional service demands which must expand the public sector, ceteris paribus. A rise in the proportion who are young, perhaps as the result of a baby boom, heightens the need for further educational expenditures. A jump in the proportion who are elderly, perhaps as the result of improved health practices, requires more medical and income support from government. Taken together, a 1 percent increase in the young and old population share produces somewhat less than one-half of a percent increase in government size, according to the slope estimate in equation 1 ($b = .38$). Clearly, such demographic shifts are responsible, in part, for government growth in the United States.

Turning to the other variables, let us look initially at the effects of the defense commitment. First, for the United States, the positive effect of actual military conflict on government expansion is obvious. Observe, in figure 1, the marked growth spikes occurring during war years, for example, 1942-45, 1951-52. But war has consequences beyond these years of open hostility. Even in peace, the fear of war generates demands for military preparedness. And, the strength of our defense posture varies depending on whether the hawks or the doves hold sway. It is mistaken, then, to view the commitment of resources to defense as a dichotomy that is either present during times of armed combat or absent otherwise. Rather, the variable is continuous, ranging from the maintenance of a modest security force to the creation of a peerless military machine. This continuous variable, captured in our index of total military personnel, has a relationship to government size which is highly significant ($t = 15.38$). War, in its broad as well as its narrow aspects, emerges as an important determinant of public sector growth in twentieth-century America.

In addition to military matters, the international issue which clearly appears to influence the magnitude of government is trade. For those accustomed to thinking of the United States economy as essentially self-reliant, the statistically significant impact of foreign trade must be sur-
prising. However, America has become quite dependent on world markets. At the beginning of our time series, in 1932, the real dollar value of exports and imports per capita was little more than fifty dollars; by 1980, this figure had risen to over eight hundred dollars. C. Fred Bergsten (1980, p. 11) sums up the current picture: “Over 20 percent of U.S. industrial output is now exported. One of every six U.S. manufacturing jobs produces for export. Almost one-third of the profits of American corporations derive from their exports and foreign investments. Imports meet more than one-half of U.S. demand for 24 of the 42 most important industrial raw materials.”

In response to this foreign dependency, the government has increasingly intervened to shape the direction and content of trade. As Robert Strauss (1982), a former special trade representative for President Carter, recently observed: “Trade is a political problem.” The United States government is active in imposing or maintaining barriers to the entry of key agricultural commodities and major industrial goods, such as automobiles and steel. Further, it extends generous subsidies to exporting firms. Separate figures on the amount of government dollars aimed exclusively at helping American industry best its foreign competition are not available. However, it is known that, for all business, government subsidies per capita (in real dollars) went from four dollars in 1951 to thirty-two dollars in 1980. These subsidies have gone disproportionately to large firms, which are precisely the ones more likely to be engaged in foreign trade. Of course, business is not the only group government has aided. In addition, workers in industries hard-hit by international competition, such as those laid off in the auto industry, have received benefits.

The growing American dependency on world trade has worked indirectly, as well as directly, to increase government expenditures. Cameron (1978, p. 1256) concludes that economic openness alters “certain structural characteristics” of capitalist systems, which leads to government expansion. In brief, he argues that economic openness stimulates industrial concentration, which conduces to strong unions, leftist governments, and spending increases for income supplements. While this process is most clearly chartered in the small, open economies of Western Europe, something of it can certainly be seen in the United States. During the period under study, concentration of the economy, at least in the aggregate, has steadily increased (Lewis-Beck, 1979, pp. 174–75). Further, labor unions have grown in strength and cemented their alliance with the Democratic party which, as we shall see below, actually can expand government when in power. In sum, the link between economic openness and government growth established in equation 1 is not, upon reflection, at all implausible.
Revisions of the Initial Model

What is the meaning of the lack of statistical significance for the other initial variables—unemployment rate \((U_i)\), percentage of Democratic congressional seats \((M_i)\), presence of an election year \((R_i)\), percentage of Democratic party identifiers in the voting population \((I_i)\). To begin, we consider the findings for the elite preference variables, \(R_i\) and \(M_i\). The insignificant coefficient for the election year variable implies that, after all, politicians do not try to buy votes through government spending increases. This implication may be correct, or the model may suffer from specification error. That is, perhaps government spending increases after the election as the winner delivers on campaign promises. To test this possibility, we created a postelection dummy \((1 = \text{year after a presidential election, } 0 = \text{other})\). The coefficient of this second variable showed no significant postelection government growth, and it even had a negative sign. Perhaps these dummy variable measures are simply too crude to detect the subtleties of such electoral cycles. However, these null findings for the United States are paralleled in Cameron's (1978, p. 1253) comparative effort. Our tentative conclusion is that, contrary to theoretical expectations, government growth in the United States follows no electoral cycle.

More bothersome was the apparent absence of a significant partisan effect \((M_i)\), which related empirical work had indicated should exist. This troubling finding led us to a more careful consideration of how partisanship actually should work to influence government size in the United States. First, a cursory review of congressional history reveals that the Democrats were in the majority in most Congresses across this period. Therefore, from Congress to Congress, change in the absolute balance of power is small, in itself providing little incentive for Democrats to heighten further the spending for their favorite programs. But, what might provide Democrats with a spending "mandate" are sudden, immediate increases in party strength from one election to the next. For example, suppose one House of Representatives is 50 percent Democrat, and after the next election this jumps to 65 percent Democrat. Such a burst of support could be perceived by party leaders as a call—and an opportunity—to pursue vigorously Democratic programs, especially if they were showing strength in the Senate as well. We incorporate this logic into a revised measure of partisanship. Before doing so, however, it is necessary to consider a second reason why a partisanship measure based solely on the Democratic composition of the House and Senate might not go far in accounting for changes in government size.

Our index of government size, it should be recalled, is built from state and local, as well as from federal, expenditures. Therefore, the degree of
Democratic strength at these lower governmental levels ought somehow to be brought into the measure of partisanship in order to assess fully its impact. Given that the data are aggregate times series, the measurement possibilities here are limited. Our strategy was to build an index which, in addition to the congressional measure discussed above, took into account Democratic governorships. This Democratic change index, $D_t$, indicates the relative increase of total Democratic strength in the Congress and the statehouses from the previous year. Below, we examine the effect of this altered partisanship variable in the context of a fuller model of government growth.

Why is one of our measures of socioeconomic demands, the unemployment rate ($U_t$), not significantly related to government growth? This puzzle is solved if government expansion actually depends less on the objective severity of the unemployment problem than on the subjective perception of it. For example, supposing the unemployment rate is 5 percent, then a recommendation for government spending would rest partly on whether one accepts a traditional definition of a “full employment” economy (e.g., a rate of no more than 4 percent) or a revisionist definition (e.g., a rate of no more than 6 percent). In this instance, perception of a problem is requisite to action. Speaking generally, perhaps economic problems must be perceived as such, in order for them unambiguously to influence government growth. Guided by this possibility, we turned to a perceptual measure of economic conditions. For each year of our study, the Gallup Poll asked a national sample of the American public: “What is the most important problem facing the country?” Utilizing the responses to this item, we created an annual index of perceived national economic hardship ($E_t$) based on the number and rank of the economic problems cited (see below).

Our sole measure of mass support for government intervention, the percentage of Democratic party identifiers, also yielded a statistically insignificant coefficient. Therefore, we reasoned that what may count is not the percentage of progovernment citizens per se but, rather, the percentage of such citizens who actually vote. For example, the working class, which is disproportionately Democrat, is less likely to vote than the middle class. A lower voting turnout, reflecting reduced working-class participation, will decrease the pressure for social welfare programs, according to Hendershott and Villani (1978). To examine this alternative, we regressed government growth on aggregate voter turnout; again, the coefficient failed to attain statistical significance. The failure of these turnout and party identification variables forced us to think harder about how to tap the concept of a public attitude in favor of government economic intervention. It could be correlated with the desire to avoid financial risk. Due (1969) and Greene (1973) advance a “risk-aversion”
explanation for swelling government expenditures, viewing much of it as "insurance-type activities." The argument is that as nations advance economically, "the electorate becomes relatively more risk-averse, since they now have greater wealth endowments to protect" (Amacher, 1975, p. 110). If, indeed, voters become more risk-averse as they possess greater wealth, then the attitude should vary with the amount of savings they have. Therefore, for each year in the time series we calculated average household savings as a percent of real disposable personal income, $S_t$, to serve as a proxy variable for risk aversion. The hypothesis tested below is that savings increases, which reflect greater risk aversion, are positively associated with government growth.

Thus, according to our initial estimates, four ($U_t$, $R_t$, $M_t$, $I_t$) out of the original seven independent variables were statistically insignificant. On the assumption that measurement error may have produced these insignificant findings, we reformulated these indicators. These revised indicators generally give better results. As equation 2 in table 1 shows, Democratic change ($D_t$), perceived economic hardship ($E_t$), and risk aversion ($S_t$) have statistically significant coefficients, along with the earlier variables of $W_t$, $T_t$, and $A_t$ (.05 level, one-tail, $t > 1.68$). Let us briefly review these additional results, beginning with the risk-aversion measure just discussed above. The significant coefficient for $S_t$ indicates that a five percentage point rise in savings accompanies a one percentage point jump in government size. When voters are more financially secure, then, they appear to press successfully for more government "insurance." While this effect is modest, it is suggestive. Certainly, it is plausible that mass attitudes toward the proper role of government should influence the scope of the public sector, while remaining quite independent of other factors. Undoubtedly, the risk-aversion hypothesis and the savings proxy variable do not capture all the theoretical and empirical connections here. Still, they would appear to reveal one important linkage between public attitudes and government expansion.

What about the impact of perceived economic hardship, $E_t$? It appears that public recognition of economic problems can translate into sharp increases in the magnitude of government. For instance, when several economic problems are perceived to be highly important (e.g., inflation, unemployment, and declining income rank first, second, and third in the poll), then the expectation is that the government share of GNP will be about three percentage points greater than when economic problems are of little concern (e.g., inflation is ranked tenth, the only economic problem to make the list). In sum, as national economic difficulties intensify in the public mind, politicians are pushed to solve them with fiscal and monetary policies, which have as one of the outcomes the broadening of the public sector.
Table 1
A Model of Government Growth

\[ G_t = b_0 + b_1W_t + b_2P_t + b_3T_r + b_4A_r + b_5E_r + b_6D_r + b_7C_r + b_8S_r + e, \]  

(2)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Slope</th>
<th>t-Ratio</th>
<th>Beta Weight</th>
</tr>
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<tr>
<td>Defense (W,)</td>
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<td>.61</td>
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<tr>
<td>Postwar Adjustment (P,)</td>
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<td>4.79</td>
<td>.21</td>
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<tr>
<td>Foreign Trade (T,)</td>
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<td>8.12</td>
<td>.39</td>
</tr>
<tr>
<td>Age Distribution (A,)</td>
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<td>4.17</td>
<td>.25</td>
</tr>
<tr>
<td>Economic Problems (E,)</td>
<td>.054</td>
<td>2.17</td>
<td>.16</td>
</tr>
<tr>
<td>Democratic Party (D,)</td>
<td>.13</td>
<td>1.80</td>
<td>.08</td>
</tr>
<tr>
<td>Supreme Court (C,)</td>
<td>2.89</td>
<td>2.22</td>
<td>.16</td>
</tr>
<tr>
<td>Personal Savings (S,)</td>
<td>.21</td>
<td>1.78</td>
<td>.16</td>
</tr>
</tbody>
</table>

Constant = −25.14  \( R^2 = .94 \)  Durbin-Watson = 2.27  \( N = 49 \)

Source: The data were gathered from various volumes of the Statistical Abstract of the United States, United States Department of Commerce, Washington, D.C.

Note: \( W_t \) = the annual total number of military personnel in thousands; \( P_t \) = a postwar years dummy variable scored 1 for 1946, 1947, 1954, 1974, and 0 otherwise; \( T_r \) = the annual per capita real dollar value of exports and imports; \( A_r \) = the ratio of young (ages 0–24) and old (ages 65 and over) to the total population; \( E_r \) = a perceived national economic problems index derived from the annual Gallup Poll list of the top ten national problems (i.e., if an economic problem is number 1, it is weighted 10, if it is number 2, it is weighted 9, and so on; then the total score on the index is the weight of the economic items taken as a percentage of the total possible weight of all 10 items, which is 55); \( D_r \) = an index of changing Democratic party strength (i.e., the Democratic percentage of the House, the Senate, and the governorships is summed and the difference from one year to the next calculated; the value of 100 is added to eliminate negative signs, after which it is multiplied by 1 if Democrats control both houses, and 0 if they do not); \( C_r \) = a dummy variable for the Supreme Court scored 0 before 1939 and 1 thereafter; \( S_r \) = annual average household savings as a percentage of real disposable personal income.

Next, consider the impact of the Democratic composition of government, using the revised measure, \( D_r \). Suppose, for example, that Democrats take control of both chambers of Congress and register a five percentage point average gain in the Senate, House, and gubernatorial races over the past election year. Then, according to the slope estimate in equation 2, government would be expected to grow about one and one-half percentage points as a share of GNP. In the United States,
ideological differences between major party leaders are small, at least by European standards. For instance, there is virtual consensus among Democrat and Republican party leaders on the value of the capitalist, free-market system. By way of contrast, the large Socialist and Communist parties of Western Europe do not hold such a fundamental value in common with their rivals. Nevertheless, the policy preferences of Democrats and Republicans are not identical. Democratic politicians have been more likely than Republicans to favor social welfare, unemployment compensation, economic and environmental regulation, deficit financing, corporate taxation, and easy consumer credit. According to our evidence, when the Democrats experience relative gains in their political strength, they use this strength to expand these favored programs, which together work to extend the public sector.

In equation 2 of table 1, there are two other independent variables included: $P_t$ and $C_t$. The presence of these two "bonus" variables really affects neither the apparent impact of the other variables nor the overall explanatory power of the model. However, they are suggestive of other factors operating on government size. These variables were introduced after inspection of the residuals from equation 1. It was observed there that, for the years immediately following a war—for example, 1946—actual government size was larger than its predicted postwar value. Writing on the British case, Peacock and Wiseman (1967) call this a "displacement effect," and explain that it occurs because the necessities of war raise the peoples' tolerance for taxes, which allows spending to remain high after the conflict (see also Herber, 1975). However, careful examination of the residuals revealed that these postwar spending deviations, at least in the United States case, really only appear in the year or two immediately after cessation of hostilities, which suggests they are due to a "demobilization lag" rather than a change in "tax tolerance." That is, at the end of the fighting, the war apparatus and all the supporting bureaus are not instantly dismantled; it simply takes a little time to redirect these resources to civilian pursuits. In order to account for the short-term influence of this postwar adjustment, we introduced a dummy variable, $P_t$, into our model (scored 1 for a postwar year and 0 otherwise). As the estimates of equation 2 demonstrate, the coefficient for this variable is positive and statistically significant.

The inspection of residuals also showed that, for the mid-1930s especially, government growth was not as great as expected. Of course, many things were happening during this complex period of the New Deal which might be responsible. To help decide which of these might be more important, we asked: "What forces were acting to hold back implementation of the relatively costly New Deal program?" We found one answer in conservative Republicanism, particularly as expressed in the
courts. To quote some leading historians of that era: "Outnumbered in Congress, humiliated at the polls, the Republicans lifted their eyes to the Supreme Court. The G.O.P. 'retired into the judiciary as a stronghold' " (Morison et al., 1969, p. 511). The Supreme Court swiftly invalidated an enormous amount of New Deal legislation. Here is a partial list of what it struck down: the NRA, the AAA, the railroad retirement plan, the Bituminous Coal Act, farm mortgage protection, the Municipal Bankruptcy Act, and state minimum wage acts. The Court, as Morison et al. (1969, p. 512) observed, "had taken upon itself the responsibility of nullifying the electoral verdicts of 1932 and 1934 and of negating in advance any consequences of a comparable verdict in 1936." In our view, this conservative judicial assault on the New Deal could partly account for actual government growth being somewhat less than expected during the period. In equation 2 we entered a dummy variable, $C_r$, to capture this different expectation. The significant coefficient is compatible with the notion that, at least for a time, the actions of a conservative Court did manage to slow government expansion.

**Evaluation of the Model**

In evaluating the model represented in equation 2, we want to look at three general problems: issues of time series analysis, alternative model specifications, and the relative importance of the independent variables. Let us begin with the first. All the coefficients in equation 2 appear statistically significant (.05, one-tail, $t > 1.68$). However, because the data are time series, it is necessary to examine seriously the possibility that this significance is spurious, due to the presence of autocorrelation. Is there, then, a significant correlation of the error terms for the equation 2 model? We were unable to detect any. To start off, observe that the Durbin-Watson statistic is very close to 2.00, indicating the absence of first-order autoregression. (Indeed, the fact that the Durbin-Watson statistic is slightly above 2.00 means that there is even a slight bias against finding statistical significance.) But, as the Box-Jenkins (1976) work has made clear, other kinds of error processes besides the first-order autoregressive (AR1) are possible. For example, a moving average process might be operating, or perhaps a higher order autoregressive process. Therefore, we subjected the residuals of equation 2 to extensive ARIMA modeling with careful inspection of the autocorrelation and partial autocorrelation functions (Pindyck and Rubinfeld, 1976, chap. 15). No significant autoregressive or moving average processes, of any order, could be uncovered. Hence, we conclude that the coefficients of equation 2 are, in fact, significant.

In addition to statistical significance, we are concerned with the predictive performance of the model. Over the time span under study
total government expenditures have ranged from 19.1 percent to 52.3 percent of GNP, indicating a considerable variation in government size. How accurately can equation 2 predict the size of government in a given year? As an example, look at 1980, where the model predicts that government expenditures will be 35.1 percent of GNP. The actual figure for 1980 puts government expenditures at 36.5 percent of GNP, giving a prediction error (residual) of 1.4 percentage points. As it turns out, this small error is quite close to an average prediction error of only 1.3 percentage points for all forty-nine observations in the series. (Of course, the expected error for out-of-sample predictions is inevitably somewhat larger, as the standard error of estimate for $G_t$ of 1.9 percentage points demonstrates.) The high predictive performance of the model is illustrated in figure 3, where fitted and actual values are plotted. The fitted values closely track the actual. This fit is doubly striking, considering that government growth follows a path with noteworthy twists and turns. The extreme goodness-of-fit of the model is expressed as well in an $R^2 = .94$ (or, adjusted for degrees of freedom, $R^2 = .92$).

**Figure 3**

**Actual and Fitted United States Government Size: 1932–80**

![Graph](image)

The $R^2$ is impressively large. But perhaps this is merely because the data are time series. Is the model actually capitalizing on trends common to such data? Could simple, nonstructural models predict government size just as well? Obviously, it is difficult to exhaust the forecasting
possibilities raised by this question. Nevertheless, we can look at some standard possibilities. The first is that government growth is a simple linear function of time \((Y_i): G_i = f(Y_i)\). An OLS regression of \(G\), on a time counter variable \((1932 = 1, 1933 = 2, \text{and so on})\) yields a low \(R^2 = .28\). Clearly, viewing government size as the product of a time trend leads to poor predictions. A second possibility is the perspective of government growth as an incremental process, with government size in one year as a function of government size in the previous year: \(G_i = a + bG_{i-1}\). Estimating this model with OLS yields \(R^2 = .72\). Such an incremental model certainly predicts government growth better than the time trend model; however, neither does nearly as well as the model of equation 2. The implication is that substantive structural models, such as equation 2, offer more accurate predictions of government growth than nonexplanatory forecasting models which extrapolate past trends.

Let us now turn to the general problem of model specification. Thus far, in the testing that has been carried out, the variables of equation 2 have survived. Still, the specification of equation 2 is not necessarily to be preferred. Perhaps other variables, or other time lags, would perform even better. To begin with, consider the naive lag structure of the model, i.e., for the independent variables \(t = 0\). Should a sophisticated lag structure be specified? The dearth of substantive theory coupled with the complexities of the statistical modeling argue that the formulation of a distributed lag model of government growth would be premature (for a good introduction to such models, see Kelejian and Oates, 1974, pp. 145–58). However, simple lags like \(t - 1\) are certainly worth investigation. Therefore, we lagged all the variables in equation 2 by one year (except for the dummies, \(C\), and \(P\)). The results generally sustained equation 2. But, there was a slight erosion of the \(R^2\), and three out of the eight variables no longer generated statistically significant coefficients. Thus, with regard to the lag structure, we favor remaining with the original formulation of equation 2.

What about the impact of other variables? Although we have not been able to find them, there are no doubt other variables directly affecting government growth. One which appears conspicuously absent from equation 2 is the political variable of presidential influence. No matter how we measured the presidential variable, it failed to register statistical significance alongside the other variables in the model. For instance, entry of a presidential dummy \((PD_i, \text{where } 1 = \text{Democratic years, } 0 = \text{Republican years})\) produced an ill-signed coefficient, far from statistical significance \((b = -.6, t = -.9)\). Of course, this does not necessarily mean that the president has no influence over government size. Measurement issues aside, it suggests rather that presidents exercise
indirect power through their influence over the other variables in the model, such as the magnitude of the military establishment or the Democratic composition of the legislature.

The president, in addition to having an indirect effect on government size, may also have an interaction effect. In particular, the impact of economic hardship, $E$, on government size may depend on presidents and their parties, with Democratic presidents being much more likely to respond to economic downturn by pushing for government spending increases. To test this possibility, we included an interaction term ($E \times PD$) in the full model. The slope was virtually zero, and the t-ratio far from significant ($b = -0.0008, t = -0.9$). Clearly, this interaction hypothesis is not supported. Furthermore, the results were equally discouraging when, following the same argument, $E$ was interacted with the Democratic composition variable, $D$. Our conclusion is that, at least for these variables, their simple additive representation in equation 2 is to be preferred.

Finally, we would like to arrive at some assessment of the relative importance of the independent variables in equation 2. With any multivariate explanation, it is always tempting to ask which variables are the more important determinants. This question is more complicated than it may seem (Lewis-Beck and Mohr, 1976). First, the issue of multicollinearity must be confronted. If the level of intercorrelation among the independent variables is too high, the slope estimates can be unreliable, making comparisons of their relative magnitude risky. One clue to the existence of problematic multicollinearity is coefficients which appear, unexpectedly, to be statistically insignificant. In equation 2, all the coefficients achieve statistical significance (.05, one-tail, $t > 1.68$); this indicates that multicollinearity is not severe. Further, when the level of multicollinearity is directly assessed by regressing each independent variable on all the others, none of the resulting $R^2$s approximates unity. In fact, these $R^2$s are clearly below the $R^2$ for equation 2, which again indicates that multicollinearity is not a problem (Farrar and Glauber, 1967). Hence, we have some confidence that the coefficients are reasonably stable and can profitably be compared in order to evaluate relative effects.

By looking at these regression coefficients, which estimate the direct effects of the variables, we can get an idea of their relative importance as determinants of government growth. However, since the variance and measurement of the variables differ, we need to compare the standardized coefficients (Lewis-Beck, 1980, p. 64). These "beta weights" (BETA) are reported in table 1. In a review of the magnitude of these beta weights, what stands out is the dominant influence of international factors on government size. The beta weights for the variables assessing
national defense commitment \((W)\) and foreign trade \((T)\) are much the larger; respectively, BETA = .61 and BETA = .39. For those who believe that the United States government reacts mostly to internal cues, independent of events overseas, these results may be unexpected. Nevertheless, the implications of the coefficients are evident. American government has grown in response to demands, first, for military preparedness to fight “hot” and “cold” wars, and, second, for the management of foreign trade and its domestic dislocations. A maxim of American politics is that peace and a prosperous economy elect presidents. We would add another: war and an open economy expand government.

While our model, because of its single-equation form, confines us to the evaluation of direct effects, it is still more complete than other available explanations which, as noted, tend to limit themselves to single theories or variables. In fact, the only useful multivariate comparison to equation 2 comes from the comparative, cross-sectional results of Cameron (1978). According to the beta weights he reports from his multiple regression analysis, the variable he finds most important is foreign trade, BETA = .58. This is especially interesting because it reinforces our general United States finding that international forces have the biggest impact on government size. Further, this coefficient is intriguing because it is larger than the comparable United States coefficient for foreign trade (BETA = .39). Cross-study comparisons of standardized coefficients can be tricky. However, a smaller foreign trade coefficient for the United States would be expected since the American economy, despite much change, is still less open than the European economies that Cameron investigated. Unfortunately, Cameron does not examine the impact of our other international variable, commitment to defense. This variable, when viewed as a continuum running from no defense commitment to major war, could easily be incorporated into contemporary cross-sectional studies by employing our measure, number of military personnel. While the defense burden probably has caused more government growth in the United States than in Europe, we do not doubt that it has had a significant influence on public sector size in many of these nations, especially the NATO nations.

The variable which Cameron (1978, p. 1254) found to be the second most important influence on government size was partisanship (BETA = .34). By way of contrast, in our United States investigation the partisanship variable \((D)\) only yielded a BETA = .08. Thus, in the United States, partisan conflict appears to affect public sector growth less than in other advanced industrial nations. Such a difference in partisanship coefficients is quite believable, for it would seem to reflect the differing degree of division commonly observed between the parties when com-
paring the United States with European nations. Simply put, leftists and rightists are ideologically more different from each other than are Republicans or Democrats. Hence, when leftists control a European government, they expand it more than do Democrats.

**Summary and Conclusions**

Big government is an issue which usually figures in American political campaigns, and the 1980 contests were no exception. The heightened attention of citizens and politicians to big government is solidly grounded on real changes in American politics. Government in the United States has in fact grown, at least by our measure. That is to say, total government expenditures as a percentage of total economic activity (GNP) are clearly larger than they used to be. Why has the United States government grown? To date, this question has received inadequate answers. Past efforts on the topic have been extremely weak, both theoretically and empirically. We propose to make amends.

On the theoretical plane, we view government size as a public policy outcome (or collection of outcomes) produced by the combined influence of certain group demands, elite preferences, and mass support. Our empirical results, derived from the estimation of single-equation time series regression models, sustain this general outlook. Specifically, we find that the strictly domestic demands on behalf of key socioeconomic groups—the aged, the young, the economically disadvantaged—can lead to significant increases in the size of government. Further, with regard to the international arena, demands from diverse foreign and domestic groups can trigger a military buildup or a trade intervention, both of which act to expand the public sector. As far as elites are concerned, a major influence comes from the expansionist preferences of Democratic members of Congress and governors. In the face of undoubted electoral advances, these Democrats will push successfully for more spending on their favored social programs. The role played here by the undifferentiated mass of American voters is partly cultural, for they create a climate in which risk-reducing social spending is tolerated, even encouraged. Taken together, these variables compose an explanatory model which manages to trace rather well the growth pattern of American government in the twentieth century.

We see no reason why this model of government growth, although developed out of the United States experience, would not be applicable in its essentials to other advanced capitalist democracies. For example, in Western European nations, our expectation is that the counterparts to the variables in the United States case would all be significant influences on government size, although their relative importance may vary from coun-
try to country. Clearly, testing the model of equation 2 in other nations would appear to be the next item on the government growth research agenda.

We introduced this paper with a discussion of public concern over big government. Current organized efforts to curb big government usually seek to check spending. Leading proposals include a constitutional amendment to balance the budget, the imposition of a freeze on government spending, and a ceiling on the ratio of government expenditures to GNP. Our findings imply that such direct assaults on aggregate spending are not likely to be effective, for they fail to alter the causes of growth. In order actually to change the scope of government, it would seem necessary somehow to manipulate the forces identified in equation 2. For example, instead of going after the entire federal budget, perhaps concerned citizen groups should work to diminish cold war tensions and thereby ultimately reduce our defense commitment, by far the most important variable affecting government size. Of course, this difficult prescription holds for leaders as well as for citizens. President Reagan was elected, in part, because of his attacks on big government. Thus, it is no small irony that he has overseen the doubling of the defense budget during his first three years in the White House. According to our model, this military expansion virtually precludes the attainment of his more general goal of reduced government size.

REFERENCES


