THE STATE AS A POLITICAL ENTREPRENEUR
Technical Report No. 25

R. Joseph Monsen and Bruce M. Russett

October 31, 1973

Organizational Effectiveness Research Program, Office of Naval Research
Arlington, Va. 22217 (ANPA)
<table>
<thead>
<tr>
<th>KEY WORDS</th>
<th>LINK A</th>
<th></th>
<th>LINK B</th>
<th></th>
<th>LINK C</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>theory of the firm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>entrepreneur</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>economic theory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>national political performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>war-proneness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>income inequality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>economic growth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cross-national aggregate data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
THE POLITICAL ENTREPRENEUR: THE UTILITY OF SMALL POLYARCHIES?

R. Joseph Mensen and Bruce M. Russett
University of Washington and Yale University

Summary

This paper consists of two major sections:
1) a theoretical discussion of the political entrepreneur and the potentially different behavior of leadership in polyarchies or non-polyarchies, and
2) an empirical section which attempts to test our hypotheses about political entrepreneurship—particularly as they apply to different comparative political systems and most importantly (as it turned out) different sizes of bureaucratic systems.

Résumé

Cet article a été fait en deux parties principales:

1° une discussion théorique de l'entrepreneur politique et des différentes façons auxquelles la direction peut se comporter dans les Polyarchies et Non-polyarchies,

2° une partie empirique qui essaye de vérifier nos hypothèses concernant l'entrepreneur politique, en particulier comme ils s'appliquent aux différents systèmes comparatifs et, ça s'est montré important, aux différences grandeurs des systèmes bureaucratiques.
Introduction: Corporate Leadership

Corporate leaders usually act to maximize their own self-interest--which may or may not result in profit maximization for the corporation (Monsen and Downs, 1965). Similarly, it is well recognized that a particular political leader's interests differ from those of other leaders, and from any notion of "the national interest," in defining their own self-interests, will incorporate the interests of other members of the political system. Consequently, corporate structures are designed to produce different kinds of self-interested behavior by managers or owners, so it is commonly understood that different types of political structures will encourage their major political actors to define and pursue their self-interest in very different ways. We intend in this article to explore, theoretically and empirically, some propositions about the consequences of self-interested behavior on the part of leaders of different types of both firms and nations.

Our viewpoint on the motivation and behavior of heads of organizations is derived from empirical studies relating to the modern corporation. Monsen et al. (1968) have found that firm performance variations across firms vary significantly from year to year, and consistently so across long time span, to suggest that ownership has a motivational effect upon behavior of large corporations (Monsen, Chiu, and Cooley, 1968). Further studies have found similar differences between owner and manager controlled firms related to dividend payout policy (Monsen, Chiu, and Pullum, 1969) and to risk posture (Bordeaux, n.d.). (Risk in the latter case is defined in the usual financial analysis manner as variation in the price of the stock over time.) Thus, large owner-managed corporations tend to have higher rates of return on their investment, a smaller dividend payout history, and a record of greater risk variation than did large manager-controlled firms. If one analyzes the constraints and rewards under which each set of managers operate, these results are highly consistent. Risk and reward do not appear perfectly symmetrical for the two types of managers. The manager who effectively controls his firm (and in the great corporation this is possible often with ownership at least as 10% of the stock) finds that if he takes major risks and the outcome is successful, to him are subject to the non-owner manager, however, finds he may lose his job if the major decision is unsuccessful, and even if successful his reward is often only a bonus. Thus, the difference between risk and reward for owner managers and for non-owner managers is quite real. Under such circumstances it is reasonable to expect quite different kinds of decisions and corporate behavior--which indeed is empirically evident. The difference in dividend payout, for example, is also understandable. Since the non-owner manager must keep his various stockholder groups placated, and since he personally is not as concerned about the double taxation aspects of high dividends as is the owner manager, large non-owner managed firms have consistently higher dividend payouts than do owner-managed firms (Monsen, 1969).

The point of this discussion of the motivation and behavior of corporate managers is to suggest how some differences in the design of political leadership, and in the size of political organizations, may produce quite different behavioral patterns on the part of political leaders of polyarchies and non-polyarchies.

The problem of size is introduced because the larger the organization the more difficult it is for leadership to have effective access to undiluted information and effectively to see that orders are fully carried out. As well, in large bureaucratic organizations it is necessary to develop standard operating procedures to aid in making the decision. In the case of large organizations, such procedures may not operate well in any particular case and further, be difficult to change because of the size of the organization. Size also contributes to the independence of top managers from the citizenry, thus making any polyarchic institution less effective because of the difficulty of reaching a smaller number of voters is obviously greater.

We admit that it is difficult to determine whether specific policies of different types of leadership or sizes of systems actually maximize the welfare of the majority in a nation or simply maximize the ego, ideology, or personal interest of their nation's leaders. However, for our purposes here we can simply ask how policies differ in systems with various kinds and degrees of control over the leadership. Just as with stockholders who by a majority of their vote can determine the leadership of the corporation--so does major- ity voting in the polity help to solve a similar problem. The owner-controlled firm, however, is subject to a more similar in this regard to the non-polyarchic political system--where the leadership is not worried about being defeated at the polls generally and his actions may therefore show less concern about "public opinion."
Contrast in Leadership between Polyarchies and Command Systems

There are, of course, many types of political systems, with the differences often blurred. Nevertheless, it is sometimes useful to think in terms of the characteristics of certain ideal types.

In systems without open and free elections, or what we shall call "command" systems, leaders arrive at the top of the system in various ways. Some move up by simply associating themselves to someone else higher up who eventually assumes high leadership and they are able to take over in turn themselves. Others move up by eliminating rivals, by developing a personal clique, or by gaining control of some critical part of the organization and using it to gain power. Two or more of these techniques are commonly used to get to the top of an organization or nation.

What type of behavior do these techniques develop or require in leaders? A number could be mentioned. Seven stand out as particularly common:

(1) The ability to act rapidly in making decisions and seizing opportunities for command and leadership.

(2) The ability to act forcefully and often drastically -- the history of authoritarian rulers who have risen to power (such as Hitler in burning the Reichstag or Enver Hoxha in killing Beria) are replete with such examples.

(3) The ability to be secretive and to plot.

(4) The ability to eliminate opposition, which has seldom been pursued more vigorously in history than by Stalin -- which may partially account for his long tenure as a national leader.

(5) The ability to rely on intuition is characteristic of most successful national leaders. Those without it seldom make the history annual.

(6) The ability to develop one's own loyal subordinates. In business organizations leaders usually develop a number of subordinates upon whom they depend to carry out orders and to support them. In authoritarian regimes this is of equal, if not more, importance. Hitler depended upon Bormann, Goebbels and others of his entourage to maintain himself in power.

(7) The ability to understand where power is in an organization and how to seize it. Stalin's use of the secretariat of the Soviet Communist Party has by now become a classic case for other aspirants. At the time he took over the post, few others could have guessed that it could have been made into a position of such unequalled power. Stalin's early recognition of this made it possible for him to gain an early lead in succeeding Lenin.

A system, therefore, without open and free elections -- and free discussion of public issues -- develops authoritarian leaders who are necessarily both ruthless and forceful. The ground rules and the incentives of this type of system reinforce such behavior. Therefore, those individuals who are most adept at developing the above set of techniques get to the top.

In polyarchies, or political systems that have not only open and free elections, but open discussion of issues (where no referendum occurs without open discussion), quite different behavior and types of political leaders can be expected to emerge.

In such an environment leaders must develop techniques that will get them elected. Typically, such strategies are to develop or create popular issues. Such issues may be latent, but they somehow must be brought to the surface -- as Ralph Nader did with automobile safety, or as John F. Kennedy did by using the idea of a "missile gap" to help defeat Richard Nixon. Charity as a political tool has become increasingly important as television and communication have become more important in national elections.

Finding the popular mean of public opinion is a critical technique for a politician in an open system where opinion distributions are roughly normal, and the principal issues. Further, the successful politician in an open system with free elections needs to sense the direction of public opinion and go with that tide -- unless it is possible to manipulate public opinion to his advantage. Manipulation is always more difficult than following the tide. Thus, there are many more politicians who follow the party line than those who attempt to change it or go off in another direction. Needless to say, all attempts at manipulating public opinion must follow a strand of national ideology in some way or at least appear to do so. This explains a great deal of the
rhetoric in systems with free elections. Certain myths and ideologies are ritualized in the political process where open discussion and free elections occur.

If we ask, therefore, "Are there any particular leadership characteristics that these ground rules and incentives develop?" -- the answer is obviously "yes." Four major characteristics stand out as identifiable with leaders in systems having open and free elections:

1. Reliance upon public opinion. Leaders in systems with free elections must, of necessity, rely upon what they feel is public opinion as a basis for at least their public positions. In many instances, of course, the public and private position of such leaders have been quite opposite. Franklin D. Roosevelt's private preparations to aid the British were far in advance of his public statements. Leaders in systems with free elections are faced with the problem of not going beyond the limits of public opinion (at least far beyond the median position of the populace).

2. The avoidance of making enemies is particularly important in a political system where all views are controlled by another branch of the government--as with the Congress in the U.S. A leader in such a system can be blocked in his goals by a man otherwise much less powerful, who may be chairman of some particular committee that controls the release of funds or legislation.

3. A leader in an open system will frequently find it necessary to reconcile opposing interest groups to maintain a majority of votes in free elections. Therefore, a coalition of interest groups is usually necessary to insure elections--requiring that the leader mediate between interest groups.

4. In a system in which free elections are preceded by open discussion, successful leaders are usually also successful manipulators of public opinion. This has many facets ranging from the manner in which news is released, the issues publicized, etc.

What type of leader develops in an open system with free elections and discussions? The above characteristics tend to produce leaders who are cautious, moderators of public opinion, followers rather than leaders of public opinion (except in those relatively rare cases where a leader has great charisma and is skilled at manipulating public opinion). Otherwise, they will tend to make public gestures (such as Nixon did in shaking his finger at Khrushchev at the Moscow fair) which reflect public opinion's desire for firmness without any particular diplomatic content. Such symbolic gestures are very important for leaders in maintaining the type of image they wish to project to the electorate. Because of opposing interest groups of the polyarchy, however, such gestures often are devoid of specific content. Thus, a leader in such a system will attempt to portray himself as a vigorous leader (reflecting the trends of public opinion); but will, in effect, be cautious about becoming involved in conflict with opposing interest groups that might block his legislation or lose him votes.

Given this ideal description of a leader in a system with open discussion and free elections, one may ask, logically, how is it possible (aside from the problems of the Arrow paradox) for him not to maximize the majority desires of the electorate? Four answers to this question can be given, especially applicable to foreign policy behavior:

1. The leader lacks aptitude in international politics--either because of insufficient training or experience or because he lacks the basic characteristics for power politics.

2. Public opinion can change too fast for a leader to be able to reverse his course and hence policy lags behind public opinion.

3. In areas of public policy and foreign policy the moderating and compromising roles common to this type of leader may create ineffective policy and non-decisions.

4. A leader can become too caught up in and become too much a "true believer" in the national ideology despite the population's desire for more "pragmatic" solutions to public policy.

All told, then, the different ground rules and incentives of different types of political systems can be expected to produce different types of national leaders who exhibit quite distinct behavior and policy characteristics.

The leader's pursuit of his own self-interest, therefore, can cause consistent deviation from the pursuit of the majority's choice even in a system where the leader must follow public opinion to be elected. In systems without open and free elections, it is considerably more obvious how such deviation between the majority's interest, as they perceive it, and the leader's interest, as he perceives it, may occur.

1. A leader of a country in trying to maximize his own power, may do it with a strategy either to maximize control over his own national political system, or over a larger, perhaps global international system. Salazar took one route, Hitler another. Sweden took one route in the 18th Century, another in the 20th.
While the difference in decision-making under different types of leadership and under different types of political systems is apparent from studying the literature on Soviet and Western political systems, little theory has been developed to explain such differences. Indeed, since it is usually only among Soviet specialists that such information is common, the contrasts and comparisons have been largely ignored in the general literature beyond that of caricature. Caricature does indeed offer insights. Yet it has not given us any systematic theory about why certain "nonoptimal" political results are apt to happen—nor indeed why specific political decisions may result from a given type of political leadership.

If we look at the decision-making process in a non-pyramidal or "command" political system, what consequences develop from our assumption that the political leader wishes to maximize his own self-interest? He has to begin with the fear of public opinion unless threatened by a coup or revolution. In fact, he may not know what public opinion really is on most issues. (There is no close counterpart to the continuous poll that seems to occur in contemporary times by occupants of the White House.) Rather, he must know what the key power points in the system are, and keep control of them.

The command leader is faced with the decision whether to pursue policies of rapid economic growth (and perhaps military power) or to maintain a more cautious growth strategy to keep the status quo. In other words, does he pursue a Stalinist or a Salasist system? His ideology, in a word, will affect how he views his own self-interest. He may regard his self-interest as necessitating rapid economic growth, or he may see his position made precarious by change. This does not explain whether an action promotes the leader's self-interest as he sees it to be. Quite obviously, an ideology may actually be followed to the detriment of a leader's own self-interest because it leads to perceptions about which actions will satisfy self-interest. The degree to which an ideology may distort action when it affects only perceived "national" interest, not self-interest, depends on the type of political system itself. For instance, if convinced that capitalists are wildly aggressive, a communist leader will behave in ways also from perceived self-interest as well as from the perceived interest of his country. The leader of a polyarchy holds to the same. However, the leader of a command system is free to disregard ideology when the ideology would seem to dictate something against his self-interest—so long as he can in fact see that it is against his self-interest as he defines it.

One could argue that the Pentagon Papers (especially as interpreted by Ellsberg, 1971) made clear how strongly a president followed short-term self-interest in Vietnam. That is, he felt he could not afford to "lose" because of public ideology and opinion and thus felt the necessity of postponing loss until out of office. This argues that the president perceived public opinion as sufficiently ideologically "national" as to self interest had to be modified accordingly. A leader of a command system would never have had to make such a concession to popular ideology.

In a polyarchy symbolic gestures are necessary for public opinion. In a command system such gestures, if made, are apt to be more influenced by the ego and personality of the leader. Many of the military decisions of Hitler or Stalin can only be explained on the basis of their own egos. Hitler's architectural plans for Berlin are expressions of his ego fantasies. In contrast, in Washington, D.C. architectural grandeur has been reserved mainly for monuments of dead presidents which serve so aptly as symbolic gestures of the virtues of the "Republic."

Indeed, in a polyarchy the ego of the leader must, of necessity, be kept less visible from the public and from those who aid him to make his decisions workable. In a command system the ego of the leader can be used to advantage to threaten, frighten, and to his subordinates into following orders. The ability to impose the outcome with the power or ego of the leader aids in maintaining the leader's invulnerability and is one of the oldest leadership tools mankind has known. Whether it be Moses or the Caesars, the subjection of the populace is a sign and ego of one man has inspired imitators for centuries. However, these techniques, which may work so well in a command system, tend to have negative feedback in a polyarchy.

External wars tend to expand the power of a leader in a command system—if risks are not too adverse. From a leader's position, it may be safer to expand war than economic growth—assuming it is not a big war and not lost. For such a war, it will create greater demands for change in the society than economic growth. Indeed, a "common" enemy can for a while bring the populace together to support even an unpopular leader. Because of means of control over decision-making and suppression of opposition, war is much less an internal risk for leaders of command systems than for those of polyarchies as Lyndon Johnson exemplified so vividly. Opposing interest groups that can be ignored (to a point) in a command system, can unseat a leader in a polyarchy. Since public opinion is so much more critical for a leader in a polyarchy, wars must be won rapidly to keep the opposition from gaining too much domestic
support—thereby unseating the polyarchial leader. This suggests that the risk and reward of wars (unless short and successful) are not symmetrical between leader and command system. A leader of a command system can regard the system more as his own property or personal fief—unlike a leader of a polyarchy with fixed tenure and more constraints. Thus, if a nation expand its power, this increase the power of the leader of the command system. A crucial incentive, then, is that there is often a symmetrical relationship for the command leader between risk and reward—the risk of war and expanding power is directly related to his own reward. For his own power is directly increased with more of the limitations on tenure that would plague the leader of a polyarchy. Indeed, the leader of a polyarchy has a much more asymmetrical relationship between risk-taking and his own long-term power and status.

Leaders of small and/or poorer command systems may find, however, a reservation to the above argument. Namely, that the option of war and coup against larger and more powerful neighbors presents a greater risk. Therefore, they may, like the papal allies and Sutherland of Portugal, prefer a smaller fief at home that can control easily. They were like the famous monopolist of economic theory—his greatest reward was his ability to become rich leading "the quiet life." To leaders of certain disposition and limited resources, as in the most appealing strategy, we have variations on this strategy, of course, Mussolini simply looked for smaller and weaker neighbors in Africa or across the Adriatic.

Nonetheless, the key point in our argument is that since risk and reward are symmetrical for the command leader—just as for the entrepreneur in capitalism—war may have more rational appeal. Not only is risk and reward symmetrical, but war will not confer risks for the leader than in a polyarchy. Hence the risks may be less and the rewards greater for a leader of a command system. These factors taken together suggest that a choice of a war policy is likely to be more deliberate in a command system and probably more accidental; though not necessarily less frequent—in a polyarchy, allowing relatively rational decision-making by leaders.

What are the main external checks on a command system? Conventionally we turn to the contrary (how Bolshevik leaders are blinded by their ideology and unable to see that the West is really non-aggressive, etc.) command leaders are free to evaluate situations in terms of their own power and are not constrained by ideology or external public opinion. This is illustrated by the 1939 pact between Hitler and Stalin—who could not get the support of the public to join Stalin against Hitler.

In polyarchies ideology is perhaps talked about less than in command systems, but may carry more weight in final decisions than the realities of the power situation. Leaders of polyarchies are swayed in their decisions by the waves of opinion that sweep over the public. Since command leaders can control communications and public opinion more effectively—and need not worry about free elections—ideological considerations need not play as heavily in their final decisions. Thus, contrary to conventional wisdom, command systems may be more pragmatic about power situations and give more weight to ideological considerations than leaders in polyarchies.

The two other main external checks on command systems are in this same pragmatic vein. They are the evaluation of their economic and military ability and the probability of defeat or victory in specific circumstances. Both these concerns then are non-ideological. But leaders concerned with power and the ability to win. In this regard, we would again expect the leaders of command systems to be more deliberate in their decisions regarding foreign affairs and war than are those of polyarchies.

The leader of a polyarchy, therefore, is at least as concerned with public opinion, and predicting its shifts, as with attempting to control the bureaucracy. Such concern is highly rational for him: it maximizes his power and his chances of being elected or reelected. Leaders in polyarchies may feel the necessity of making symbolic gestures—in essence to give evidence to their publics that they are steadfast in their support of commonly esteemed values and ideological. Such gestures may not be understood by other countries. This type of possible misunderstanding, therefore, increases the risks of war—particularly with command systems.

In certain circumstances polyarchies may be drawn into ideological wars. (This occurs most commonly between the ideological systems of fascism, communism, and democratic capitalism.) Leaders of polyarchies, therefore, may find that public opinion against an opposing ideology can draw them into conflicts that leaders of command systems would avoid, given a similar military position or potential gain.

2: It is true that previous empirical studies (e.g., Rummel 1968 and, with some reservations Heilgenfeldt 1972) have found little systematic relationship between political system type and war-proneness. The subject nevertheless is worth further examination here.
from even a successful outcome. This suggests, again, that leaders of polyarchies are not able to make decisions as easily or rationally based upon sheer power "profit and loss" calculations.

Polyarchies often appear unpredictable to command systems (and themselves, as well) because their policies may not be consistent. The leadership of a polyarchy bases many of its decisions upon the reading or prediction of public opinion. Therefore, a sudden change in public opinion can cause dramatic shifts in policy changes that leaders of command systems, used to thinking in more pragmatic power terms, find hard to understand. This is another circumstance that can create dangerous international problems. When two opposing leaders are playing foreign affairs by different sets of rules, unexpected conflicts are much more apt to occur.

A corollary to the above is that leaders of similar type systems, such as leaders of polyarchies or leaders of command systems, will have fewer wars than between different type systems. However, wars between different command systems are possible whenever one side can clearly or easily win without too great a cost. The crushing of Czechoslovakia and Hungary by the U.S.S.R. are typical examples.

There is a basic difference in strategy for maximizing self-interest between leaders of polyarchies and those of command systems. In the former, leaders maximize self-interest by not testing their power. In other words, by avoiding confrontations with other politicians. And staying within the limits of public opinion, they avoid any possible loss of an election and their place in history. It is possible to confront other members of their party, crush them, and lead public opinion in a polyarchy, but it is risky to do so. Therefore, it is easier to keep within the limits of public opinion rather than risk political defeat or devote too far in any direction from the mean opinion. (President Lyndon B. Johnson found himself in this position over the Vietnam War—when public opinion changed and his policies had not.)

3. It should also be noted that all leaders must give concern for balancing the wishes of various groups—within the leadership ranks at least, if not among the populace. The difference in political balancing is essentially in the breadth and inclusiveness of the relevant parts of the political system. In a firm, the non-power manager has to worry not only about pressures from stockholders, but pressure from within his own managerial group. The difference is a matter of degree, of course. While Stalin could take greater risk in ignoring opposition than even Krushchev, in the later Soviet system, both could take greater risks than an American president.

Distortion of Information and Command Fulfilment in Polyarchies

Bureaucrats face leaders of both polyarchies and command systems with problems of distortion of information and command fulfilment and thereby a loss of control over the system. This loss of control tends systematically to prevent the goals and objectives of the top leadership from being fully realized. Further, the larger the bureaucracy the more acute these problems become. An example of this is seen in President Nixon's creating his own small foreign relations section within the White House in order to control his own foreign policy. Apparently, President Nixon felt the State Department had become so large that he could not rely on it fully following his orders, nor could he completely rely on the information being supplied him by that organization. Thus, the creation of his own separate "mini" State Department in the White House was his solution.

Deviation from the leader's goals is caused (1) by the fact that bureaucrats are motivated by the desire to enhance their own personal advancement and (2) because it is very difficult for superiors to check fully on the actions (or inactions) of their subordinates.

Bureaucrats at all levels of the organization tend to screen information so that only data favorable to them is passed upward to their superiors. If the bureaucratic hierarchy has many levels, the cumulative effect of this screening process may be substantial. While screening of information to lower levels is part of a bureaucrat's job, the suppression of some information (either consciously or unconsciously) distorts the view of reality received by the top leader. If in a five-level bureaucracy only 10% of the data that the top leader should know is suppressed at each level, then the leader at level 1 will receive only 50% of the important data fed into the pyramid at the E level (E.0 = .50). (Kerwin and Deines, 1965). Thus, the tendencies for bureaucrats to screen information may cause top leaders to be systematically misinformed through (a) failure to learn vital facts, especially those adverse to lower bureaucratic levels, and (b) a tendency to be told only what they want to hear. Similarly, large size may work in polyarchies to create barriers to representation, imposing intermediaries between a representative and his constituents (Dahl and Taffe, 1973, ch. 6).

Bureaucrats at every level of the organization tend to carry out only part of the orders given to them. Since the personnel of any organization are pursuing their own interests, then the leader's instructions to carry out any orders which would reduce their income, power, prestige,
or chances of advancement. Even if they cannot flatly refuse to carry out such orders, the vigor with which they execute them, their attention to proper follow-up procedures, and their interpretative application of these policies in new situations may be minimized without any actual insubordination. The technique of "kicking it around until it disappears" is a well-known bureaucratic technique.

Obviously, the cumulative effects of such partial failure to execute orders can be very great if the organization has many layers. In the case of the bureaucracy mentioned above, a failure to carry out only 8 per cent of the orders given by the leader at A level would result in only 81 per cent of the top leader's orders being carried out by the lowest level personnel (0.92^5 = 0.614). Furthermore, it would be highly unrealistic not to make some allowance for inefficiency in carrying out orders due to incompetence, inertia, and misunderstanding.

There are a number of techniques used by leaders to counteract the above inefficiencies and goal discrepancies. The Soviet union has developed a separate hierarchy of party members to check on the fulfillment of orders and to relay information. Spies within the organization, peer-group pressures, personal ties between top leadership and lower bureaucrats, routine instructions, ideology, and a host of other devices are used to produce closer conformance of subordinates' behavior to the desires and policies of top leaders. Experience indicates, however, that all these remedies are only partially successful in very large bureaucracies. As a result the inefficiencies described above cause large organizations to deviate systematically and significantly from the course of action that would, in fact, maximize attainment of the leader's objectives.  

In a polyarchy with a free press both the leadership and the bureaucracy are more responsible to public opinion than in command systems. The free press often performs the role of critic, censor, and expositor of corruption, inefficiency, and deviation from public values. The role of the Jack Andersons in polyarchies is a critical one. It is one of the major factors that lead to force leadership in such systems to pay more than lip service to public opinion and ideology. Leadership is always fearful that bureaucrats will expose deviation from publicly expressed goals to the free press. Indeed, this type of exposure to the press in polyarchies is a favorite technique of bureaucrats to keep all levels of leadership in line with publicly-announced ideology.

In a command system without a free press and with control of communications, such exposures are seldom possible—except for bureaucrats reporting on superiors who are not following top leadership's policies. Thus, the command system can build into itself—particularly with party members at all levels as in the U.S.S.R.—a checking system to see that management is fulfilling top leadership's orders. In polyarchies with a free press the system of exposure works instead to see that the leadership itself is in line with public opinion and public ideology. This is a critical difference. Indeed, it is a difference that makes for greater flexibility of policy in command systems than in free press polyarchies.

Both leaders in polyarchies and command systems face a common problem of trying to make the bureaucracy responsive to their orders. As mentioned, in such a command system as the U.S.S.R., party members at all levels of the bureaucracy act as checks upon other bureaucrats to see if indeed the orders of the leaders are being carried out. In polyarchies no such system is common. Indeed, the leader of a polyarchy faces a particularly difficult problem where the bureaucracy has a civil service tenure system. With only a relatively few positions in the bureaucracy at his disposal, the polyarchy leader faces a less responsible bureaucracy than the leader of a command system.

Both leaders, however, face the common problem of getting their bureaucracies to follow the goals set down for them and to act rapidly and flexibly. In a polyarchy a major fear of the bureaucracy is an official investigation which would produce evidence for reform or change. But top leadership in a polyarchy is reluctant to use this tool freely for fear it would reflect on itself and might bring the affairs of government to a halt in the area under investigation.

The inefficiencies described here are inherent in all large organizations. The larger the organization, the more the leader must yield discretion over the bureaucracy to those whose goals are, as discussed, not necessarily identical with his own. The leader of a large political system must delegate authority to others (that is, permit the screening of information and give some discretion to his subordinates in carrying out his orders) because his own personal capacity to handle information and decisions is limited at a level below the amount of information necessary to cope with problems generated by the organization. This is a function of size. Inefficiency arises whenever such delegation of authority leads to results other than those which are optimal from the viewpoint of the political leader.

Non-optimal results may occur because the goals of the
persons to whom the leader has delegated authority are

5. How do leaders attempt to circumvent these bureaucratic
different from his own. If these subordinates had goals
problems? We have mentioned examples of ways by which
precisely identical to his own, then they would act as
political leaders attempt to cope with the problems of goal
to some behavior which is non-optimal from
viewpoint of the leader arises because of both size and
leadership. Large size is what requires him to dele-
the leader's viewpoint. In the first place, size and goal
torinate his authority in the first place, but goal divergence
many recent literature, however (most notably Allison, 1971), makes
unites with the second effects of size to increase non-
that this seldom happens.

non-optimality of the results (non-optimal, that is, as far as
the goals of the political leader are concerned). 5

A leader in a command system relies generally on three
other main strategies to circumvent the problems of the

(1) He may create a whole new bureaucracy staffed with
in-house men. In this way he would hope that the agency
would follow his own goals and policies.

(2) He may utilize a horizontal solution, that is, give
new group the power of decisions when unable to reform
or eliminate the old bureaucracy. (An example used
earlier was the development of a powerful white house
staff to replace the power of the state department as
foreign policy formulators.)

(3) He may utilize the free press to learn what the
bureaucracy really is doing and if it is efficient in
following his policies.

A leader in a command system relies generally on three

(1) He may fill all key positions with men loyal to
himself. Unlike leaders of democratic polyarchies, a
leader of a command system can usually replace anyone
he wishes--having to contend with a conformed civil
service. Thus, the command system leader attempts to
build an organization whose key men he hopes are loyal
to him.

(2) Without a free press, it is much harder for the
leader of a command system to hear about what is going
on in various parts of the government bureaucracy.

continued on next page
Internal security forces per 1000 population, coding it, however, so that systems with low ratios are assumed to be polyarchic and assigned high values.

A three-point scale of "press freedom," with the high scores assumed to represent polyarchy.

An index of party fractionalization for seats in the legislature. This measure is 10 when virtually all the seats are held by a single party, and high when many parties are represented without any one approaching a majority. It is clear that little fractionalization indicates little polyarchic control over the executive, but high fractionalization does not necessarily indicate greater polyarchy than does moderate fractionalization. For example, France in the Fourth Republic had a highly fragmented distribution of party strength in the National Assembly, and shifting coalitions contributed to greatly weakening the power of the premier. As a result, on many matters effective power passed to the top civil servants, not to the elected parliament. We shall deal with this simply by dichotomizing the initial interval scale of party fractionalization into two categories, no partisan or no more than nominal fractionalization, and "some," whether moderate or high.

A three-point electoral regularity scale, with high as polyarchic. These three-four variables are operationalized with the relevant data from Taylor and Hudson (1972).

A so-called "tonic" score, from a schema devised and coded by Fred Riggs (1970 and personal communication). This index is intended to measure the degree of control of various sorts over the ten executives. Such control need not be by multiple parties and free elections; rather, a political chief might be balanced against a quite autonomous bureaucracy or single-party organization; the bureaucracy may be open and responsive. Shall we use this as an additional two-point scale, omitting ambiguous cases and making high values consistent with substantial control over the executive.

All five of these variables, and especially the first four, are highly intercorrelated. The preliminary analysis will examine the apparent effect of each singly, and then allow us to concentrate on the one that seems most powerful.

We have four measures to tap aspects of bureaucratization. The first three are taken from the published edition of Taylor and Hudson (1972), and the fourth from their publicly available computer tape.

Size of political system as measured by population logged to the base 10.

Size of economic system, as measured by Gross National Product (GNP) logged to the base 10. In this, as for the previous variable, it is assumed simply that, ceteris paribus, a larger system requires a larger bureaucracy.

Age in years of the policy's institutional form as of 1965. Here we used Taylor and Hudson's index for year of independence except for those countries undergoing fundamental political and social change (e.g., Communist countries, Spain in 1956, the Mexican revolution, Germany after World War II). The coding difficulties are severe, but as a crude indicator of role specification over time, for separating long-entrenched bureaucracies from those recently installed or vigorously shaken up, it may have some value.

Government consumption as a proportion of GNP, thus measuring the relative importance of the public bureaucracy within the policy.

Finally, we have several different measures of possible desired outputs of political systems as dependent variables:

Peace, or its absence. We assume that peace may be desired for its own sake, or perhaps as avoiding risk to the integrity of the political system. No operations like this with data on the number of international "wars" (defined here as armed conflicts with a total of at least 100 dead on both sides) a state was involved in during the period 1946-67, using and extending the data of Russett (1967, p. 197) while it would be desirable on theoretical grounds to count only those wars the state initiated (or on-going wars the state joined as an additional belligerent), in practice this distinction is virtually impossible to make in more than a purely formal way. But particularly in the case of several states which engaged in three or more wars this difficulty may not be too serious since cases of pure aggression or victimization are relatively rare. In addition to suggesting a ranking of values that does not put peace as high as some other factor, frequent involvement in violent conflict may indicate a somewhat greater readiness to take risks, in view of the known disabilities that may accrue even to wartime "victors."

6. All pre-1900 constitutions coded as 65, since very great age should not make much difference.

7. This does not include public enterprises. Communist countries arbitrarily coded at .50, a level well above that given for any other state.
Economic growth. This might be measured either as growth of GNP or GDP, or as growth in the national wealth, or by other means. While these may be fairly highly correlated, they remain both analytically and empirically distinct. We shall measure each, one of them a short period of time (approximately 1688-1963), and over a longer period (approximately 1660-1663).

Relative equality of returns among individual citizens, here we shall use the alternative indexes which are only slightly correlated with each other. The former is the measure of sectoral income inequality, calculated by comparing the income of each major occupational sector of the economy (agriculture, industry, etc.) with the income of other sector's in the economy's total employment and its share in the domestic product. The second is a measure reported by Brown and Smith (1964), whereby each nation is ranked from 1 to 10 on the availability of certain "luxuries" in this care television sets per 1000 population, and on an index known to show relatively high distribution of welfare throughout the system, such as a favorable infant mortality rate. By subtracting each nation's ranking on the second variable from that on the first, one obtains a new index with positive scores suggesting equality, negative one suggesting inequality. To contrast with the sectoral income inequality index, we shall call this one simply an index of equality. We shall test on course to prefer to work with less crude indexes than either of these, such as data on inequality of income distribution by households, but such data still do not exist for enough countries, such the growth and inequality data used here are from Taylor and Hudson (1973).

We make no prior assumptions as to which of the above three dimensions—peace, growth, or equality—will be valued more, or that in general the more a system is responsive to the needs of its citizens the more it would seek all three. It is, of course, quite conceivable that most members of a political system might value one so highly as to accept a very low return on one or either of the other dimensions, for example sacrificing peace for growth.

Drawing on and extending the discussion in the first part of this paper, hypotheses are:

Systems with accountable executives (that is, polyarchies or systems with other effective controls over the executive) will have

H1.1 More war, and
H1.2 More equality than will systems with relatively less-accountable executives.

We would expect the first hypothesis to be confirmed on the supposition that, ceteris paribus, the citizens will want peace. Furthermore, leaders may perceive that the negative payoffs that will be imposed on them by the citizens (loss of office) for losing are likely to be greater than the prospective rewards to the leaders for winning. Sometimes even the leader's short-run payoffs for winning a war may be negative, as for example Winston Churchill in 1945. The more accountable a leader, the more he will anticipate negative payoffs from any participation in war. Similar negative associations between accountability and risk-taking have been identified in firms: Where corporate managers think to perceive the shareholders as more likely to punish them for costly failures than to reward them for successful risk-taking (Bumol, 1972).

The equality hypothesis is not quite self-evident, since some non-accountable executives may enforce relative egalitarianism in order to reach other goals (e.g., to gain support for the sacrifices of rapid growth of the national power base). Nevertheless, on the whole one would expect systems with broadly accountable executives to be more egalitarian.

The third hypothesis concerns growth. We expect systems with accountable executives to have some growth, but as a class to exhibit less growth than do the non-accountable. That is, we hypothesize that the existence of a "golden mean" rate of growth that will be widely considered as satisfactory, encouraged by most or all of those governments which are accountable to their populations. The citizens presumably will prefer some mixture which combines potential growth with current income (including an element of quality and other non-economic benefits). Non-accountable executives, however, may differ sharply in their policies. In some, such as the traditional societies, the executive will try to maintain his government in power by preventing economic change that would rock the social and political boat. In others, such as modernizing or relatively modern states, the executive may perceive economic change as a means of further suppressing the opposition (e.g., the old aristocracy) as a means of building the national power base. In the latter instance, if the non-accountable executive feels well in command of his policy, increasing its power base may be a means of increasing his own. Hence we expect to find:

H1.3 More variation, from stagnation to rapid growth, among non-accountable polities than among accountable polities.

All the above hypotheses concern the ability of the citizens to influence or avoid high congruence between their own goals and those of the managers. By contrast, our bureau-
-21-

cratiation hypotheses concern the ability of managers to implement their own policies, whether or not those policies are congruent with the citizens'. Thus we hypothesize that the bigger the system:

H2.1 The more war it will have. We hypothesize that creating a bigger bureaucracy results, ceteris paribus, in less flexibility and greater difficulties in achieving fine-tuned control. In international crisis or other war-prone situations, flexibility and good control may be essential to avoid war, thus regardless of the amount of war the top management of the system will be more likely to occur if the government is heavily bureaucratized. (Big systems also may have more war simply because of their greater role in the international system, a variable not included in our theory and impossible to distinguish empirically in this analysis from the effects of bureaucratization.)

H2.2 The less equality the system will have. We might assume that a typical economic system, left to itself without political interference, will tend to become more egalitarian (e.g., the rich get richer and the poor get poorer, possibly a la Marx). A very big bureaucracy, we hypothesize, working at cross-purposes and inefficiently, will have the effect of leaving the economic system essentially alone, regardless of how many chief executive wants to produce. One may find examples in instances where a big but new war, as a bureaucracy specifically intended to promote equality, is created and is later discovered to have had little effect. The famous American "war on poverty" generally fits the description. There are, however, persuasive counter-hypotheses on this matter that we shall discuss shortly.

H2.3 The less growth the system will have. The reasoning here is similar to that just above. We hypothesize that in the context of economic growth requires pretty good political control—though not necessarily through a centralized bureaucracy—over socio-economic conditions. Such control must be exerted to restrain inflation which would discourage saving and distort investment, and to stimulate production and employment during periods of diminished demand. Thus big systems will show lower growth rates than smaller systems, regardless of the amount of growth desired by the top executives, because of organizational inefficiencies.

The above three hypotheses are most plausible concerning those aspects of bureaucratization we would measure through indexes of absolute size, that is total population and total GNP. Big systems will evidence less control. But they may well have much less well for the relative size of the bureaucratization within a policy; that is, the measure of bureaucratization is government consumption as a proportion of GNP. A viewpoint such as that suggested by Deutsch (1966) and Huntington (1968) says that a bigger bureaucracy relative to policy size would give more control over the non-governmental parts of the systems, that is, high G/GNP would be associated with:

H3.1 Less war,
H3.2 More equality, and
H3.3 More growth.

Another of our measures of bureaucratization was that of age of the political system, or specifically of the constitutional form. Arg, as a measure of role-specification or rigidity of bureaucracy, should thus by our theory be associated with:

H4.1 More war (See also Norton, 1967, for hypotheses on the relative rigidity of old states leading them to war.)
H4.2 Less equality, and
H4.3 Less growth.

Alternative hypotheses, however, (especially those of Huntington, 1968) stress the difficulty of producing fundamental change in a society without first building new political institutions. By this perspective, a charismatic leader of a post-independent third world country could do little by the way of permanently transforming the system without a good civil service. Competence of the civil service is likely to come only, with time (though very old systems may lose much of their capability). A competent, though not necessarily large, bureaucracy would also be an asset in controlling foreign policy so as to avoid war. This perspective would lead us to expect one to be associated with:

H5.1 Less war,
H5.2 More equality.

This latter positive relationship between age and equality might, of course, turn up for either or both of the other reasons not accounted for by the last hypothesis. One reason is that it may take a long period of bureaucratic effort to change income very much. (It certainly is true that in "normal" politics income distribution responds very slowly indeed to governmental policy; in the other hand it is precisely those revolutionary systems, with newly-reconstituted bureaucracies pursuing vastly different policies from their predecessors, that seem to be most effective in producing drastic income redistribution.) The other reason, perhaps more plausible, would be simply that in the global sample of nations we shall employ, the new states
are typically poor ones, where inequalities are usually great for a variety of possible reasons quite un-related to our theories here. For similar reasons one would hypothesize that older systems would have:

H8.3 More growth.

Note that for particular states our bureaucratization hypotheses will often work in opposite directions from our hypotheses about polyarchy. We noted, for example, on the value of a free press in assisting chief executives to control, the need to promote or impede. By reasoning, an insensitive, uncritical bureaucracy. Thus polyarchy may be more equal (or have less inequality) than an equivalent-sized non-polyarchy. Empirically it will be difficult to separate these two possible effects (control and self-interest) relating polyarchy to growth. Alternatively, in a high polyarchy the bureaucracy may become a means of insulating the top executive from public control, thus in some degree freeing him to pursue his own goals. This is consistent with the literature on firms, where shareholder control is facilitated; in any case, the distinction requires us to look for possible interaction between the polyarchy and bureaucratization variables, and specifically to analyze the effect of bureaucratization in polyarchies and non-polyarchies separately.

Results

Given the above hypotheses and operational indices, we shall see how most of our hypotheses through stepwise multiple regression analyses. We have complete data as of 1965 on most of the variables for over 60 countries. The list of countries examined is given in the appendix. It is in some sense a random sample of the universe of national political systems, and the underdeveloped countries are underrepresented because of missing data. Nevertheless virtually all types of countries are present in some degree, and the "sample" is not grossly unrepresentative. In the following analysis we shall, according to widely observed custom, report only those equations where the t-test indicates at least one independent variable in the equation is statistically significant at at least the .10 level. In so doing we make no strong assumptions about the meaning of statistical significance in such a context, but only the convention to focus attention on those equations explaining a "substantial" portion of the variance. With small samples (as especially occur among the non-polyarchies) that procedure seems more appropriate to us than does focusing on a proportion of variance level that is identified without any reference to sample size.

Before proceeding to the regression analyses, let us first test the hypothesis relating polyarchy to growth. As indicated in hypothesis H8.3, we expect unusually high or unusually low growth rates, but rather that as a group polyarchies would show less variation than would non-polyarchies. The non-polyarchic top executive, under less control than his polyarchic counterpart, would be less likely to equate his self-interest with that of the populace. Hence he would be more likely to want either faster or slower growth than would be generally desired by the populace. We test this hypothesis simply by using each of our five political system measures, dichotomizing such into categories signifying greater and lesser control over the top executive, and comparing the standard deviation in the two categories. We expect, of course, to find the systems with high control over the executive to have the smaller standard deviations. In Table 1 we see that this is indeed the case so that the high-control systems appear in the upper row.

| Table 1: Political Systems with Much Control Over the Executive Show Less Variation in Growth Rates Than Do Systems with Little Control |

<table>
<thead>
<tr>
<th>Political System</th>
<th>N</th>
<th>Δ GNP 50-65</th>
<th>Δ GNP 60-65</th>
<th>Δ GNPpc 50-65</th>
<th>Δ GNPpc 60-65</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Press Freedom</td>
<td>47</td>
<td>1.65</td>
<td>1.77</td>
<td>1.53</td>
<td>1.58</td>
</tr>
<tr>
<td>Low Press Freedom</td>
<td>21-22</td>
<td>1.75</td>
<td>2.03</td>
<td>2.07</td>
<td>1.99</td>
</tr>
<tr>
<td>High Pop/Internal Security</td>
<td>33-55</td>
<td>1.37</td>
<td>1.70</td>
<td>1.65</td>
<td>1.57</td>
</tr>
<tr>
<td>Low Pop/Internal Security</td>
<td>27</td>
<td>1.94</td>
<td>2.16</td>
<td>2.29</td>
<td>2.01</td>
</tr>
<tr>
<td>High Electoral Regularity</td>
<td>39</td>
<td>1.65</td>
<td>1.62</td>
<td>1.69</td>
<td>1.54</td>
</tr>
<tr>
<td>Low Electoral Regularity</td>
<td>37</td>
<td>1.69</td>
<td>2.10</td>
<td>2.29</td>
<td>1.98</td>
</tr>
<tr>
<td>High Party Fractionalization</td>
<td>50-52</td>
<td>1.48</td>
<td>1.59</td>
<td>1.68</td>
<td>1.39</td>
</tr>
<tr>
<td>Low Party Fractionalization</td>
<td>26</td>
<td>1.91</td>
<td>2.26</td>
<td>2.42</td>
<td>2.17</td>
</tr>
<tr>
<td>High Tonic Scores</td>
<td>45</td>
<td>1.47</td>
<td>1.79</td>
<td>1.85</td>
<td>1.50</td>
</tr>
<tr>
<td>Low Tonic Scores</td>
<td>14-15</td>
<td>1.90</td>
<td>2.23</td>
<td>2.64</td>
<td>2.06</td>
</tr>
</tbody>
</table>

* N varies slightly for different growth rates

8. This is more appropriate than using the F-test for the whole equation, since we are interested primarily in identifying particular variables which have an effect.
This hypothesis is very strongly confirmed. In every one of the 10 separate tests, using different measures of growth as different measures of political system type, the high control systems evidence approximately .01 variation. Such uniformity of results would occur with a probability of less than .001 by chance. It is important to note that the differences are about the same whether one considers growth better operationalized here as improvement in individual welfare (GDP per capita) or the national base (total GNP).

Moving to the regression analyses, the attempt is to predict each of various outputs (war, equality, growth) for various measures of political system type and bureaucratic setting. The two different indicators of political system type are all highly intercorrelated, so if we are to see which is the best predictor we can use only one in any single equation. The bureaucratization measures, however, are not highly intercorrelated, and generally each measures quite a separate dimension. Thus we can use age, G/GNP, and a measure of size all in the same equation without suffering the effects of multicollinearity. It is only impossible to use GNP and population, each measures of size, in the same equation, since they are very highly correlated with each other. Therefore our basic equation is of the form

\[ \text{Output} = A + B_1(\text{Pol}) + B_2(\text{Age}) + B_3(\text{G/GNP}) + B_4(\text{Size}) + e \]

where \( A \) is the estimated intercept or constant term, \( B \) in the regression coefficient, and \( e \) is the error term. Initially this equation was run in ten different forms for each dependent variable, using each of the five different political system measures for Pol and both GNP and population (in different equations) for size. Since we have seven different measures for the dependent variable (one for war, two for equality, and four for growth), 70 different equations are at issue. We will not burden the reader with all these results here. It becomes clear in our analysis that for most forms of the equation the variable electoral regularity score was marginally the best predictor among the political system indices. Since it perhaps taps the single conceptually most important dimension of polyarchy, and the one for that indicator was also high (22 for war), to keep the presentation manageable we shall report only equations using it. But we shall report separately the equations using various forms of the dependent variable, as well as those using different forms (GNP or population) for size. Only those variables identified as statistically significant at at least the .10 level are shown. Regression coefficients are given in Table 2, with the t-ratios in parenthesis beneath each coefficient.

\[ \text{Table 2 here} \]

Our efforts to explain war involvement were only moderately fruitful. Only bureaucratization as indexed by size of political system showed a significant association. The direction was as hypothesized (H2.1) and was stronger than GNP rather than population was used as the measure of size, but the proportion of variance accounted for is quite modest. The other hypotheses attempting to explain war involvement are rejected.

Our efforts to explain equality proved more successful. Polyarchy (as measured by electoral regularity) is not associated with either the income equality or index of equality measures, but the bureaucratization measures have complex results. Age is not significantly associated with the income equality index, but is negatively associated in both the equations with the index of equality. Older systems therefore tend to have less equality, rejecting hypothesis H3.2 derived from Huntington and confirming hypothesis H4.2 derived from our own theories. With government consumption as a fraction of GNP (G/GNP) we find a positive association in the income equality equations, thus providing moderate support for hypothesis H5.2, as derived from Deutsch and Huntington. No significant relationship appears, however, in the index of equality equations. Finally, there is an association between equality and absolute size of political system, but the sign varies depending on which equality measure is employed. With the income equality measure, bigger economic systems (GNP) tend to have more equality, leading us to reject hypothesis H2.2. But with the index of equality bigger systems, whether bigger in terms of economic productivity or simply total population, tend to have less equality, leading us to accept hypothesis H2.2. The results are inconclusive. And in only one of the four equality equations is the proportion of variance explained as high as .30.

The efforts to explain growth rates were also moderately successful, though again the \( r^2 \) is never high. As a measure of size, GNP is somewhat positively associated with per
Table 2: Significant Variables for All Equations Using the Absolute Measure of Political System Type, with Regional Regularity as Measure of Political Inequality

| Independent Variables | GNP | Age | Female | Size | Counties
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Pop, not sig.</td>
<td>.74</td>
<td>.61</td>
<td>.47</td>
<td>.74</td>
<td>52</td>
</tr>
<tr>
<td>Log GNP</td>
<td>.74</td>
<td>.61</td>
<td>.47</td>
<td>.74</td>
<td>52</td>
</tr>
<tr>
<td>Log Pop, not sig.</td>
<td>.74</td>
<td>.61</td>
<td>.47</td>
<td>.74</td>
<td>52</td>
</tr>
<tr>
<td>Log GNP</td>
<td>.74</td>
<td>.61</td>
<td>.47</td>
<td>.74</td>
<td>52</td>
</tr>
</tbody>
</table>

Table 3: Significant Variables for All Equations Using the Absolute Measure of Political System Type, with Regional Regularity as Measure of Political Inequality

| Independent Variables | GNP | Age | Female | Size | Counties
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Pop, not sig.</td>
<td>.74</td>
<td>.61</td>
<td>.47</td>
<td>.74</td>
<td>52</td>
</tr>
<tr>
<td>Log GNP</td>
<td>.74</td>
<td>.61</td>
<td>.47</td>
<td>.74</td>
<td>52</td>
</tr>
<tr>
<td>Log Pop, not sig.</td>
<td>.74</td>
<td>.61</td>
<td>.47</td>
<td>.74</td>
<td>52</td>
</tr>
<tr>
<td>Log GNP</td>
<td>.74</td>
<td>.61</td>
<td>.47</td>
<td>.74</td>
<td>52</td>
</tr>
</tbody>
</table>

Table 3 strengthens some of the findings reported in Table 2. Among polyarchies (states evidencing high electoral regularity) the hypothesized (H.1) association of war involvement with size (both as measured by population and by GDP) increases substantially, accounting for one-fifth or more of the total variance. Thus the effects of size are compounded by polyarchies, but are relative unimportant within the non-polyarchies (no significant relationships). Big polyarchies are more likely than small polyarchies, and more likely than non-polyarchies of any size, to become involved in war.

Similarly, the control for system type strengthens most of the relationships we initially found for equality. Within the group of polyarchies the association of income equality
Conclusion

This paper consists of two major sections: (1) a theoretical discussion of the political entrepreneur and the potentially different behavior of leadership in polyarchies or non-polyarchies, and (2) an empirical section which attempts to test our hypotheses about political entrepreneurship—particularly as they apply to different comparative political systems and most importantly (as it turned out) different sizes of bureaucratic systems.

At this point in our empirical calculations, we do not have the same corroboration in the political sphere of two distinct behavior patterns that exist in the economic sphere of corporate behavior. We do have, however, some interesting empirical results relating to the effect of size of the organization upon the political entrepreneur. More specifically, these results have strong implications for the current debate about the effectiveness of large polyarchies. In contrast to the heyday of enthusiasm for democratic theory, polyarchy recently has come into substantial criticism for its alleged inability to achieve major goals. Much of this criticism is particularly centered on the polyarchy that is the United States of America, in light of that system's "manifest" failures at home and abroad.

To summarize our empirical results: We have looked at the effects of bureaucratization (measured by size or role) and type of political system (in terms of degree and type of control over or participation) as affecting the pursuit of three values widely sought by peoples around the world: namely, peace, equality, and economic improvement. More research is needed; our measures are too crude to give more than tentative results, and various third variables may be affecting our results. But the criticism of polyarchy seems to find little support in the results of our analysis here. We found no negative relations between polyarchy and either peace or equality, and pretty consistently found that polyarchies were more likely than non-polyarchies to be characterized by moderate rates of growth.

We also found that bureaucratization had important effects, some of them in "desirable" directions, some not. Never systems, presumably less subject to the rigidity of bureaucratization role specification, evidence somewhat more equality than do older systems. On the other hand, polyarchies where the government sector is large relative to the rest of the economy also tend to have greater equality than do systems where the governmental sector is small. Systems with relatively large public sectors among the non-polyarchies seem to show somewhat more rapid growth. Most important and most disconcerting, while big polyarchies (big in population or

10. An extensive review of theory, and some data, on questions other than those covered here is Dahl and Tuft (1973). They conclude there is no particular optimal size for a polyarchy, but do not offer empirical results on outputs such as we have examined.
## Appendix

Countries Included in Analysis
(Not all countries in each test)

<table>
<thead>
<tr>
<th>Albania</th>
<th>Guatemala</th>
<th>Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>Honduras</td>
<td>Portugal</td>
</tr>
<tr>
<td>Australia</td>
<td>Hungary</td>
<td>Romania</td>
</tr>
<tr>
<td>Austria</td>
<td>Iceland</td>
<td>Sierra Leone</td>
</tr>
<tr>
<td>Belgium</td>
<td>India</td>
<td>South Africa</td>
</tr>
<tr>
<td>Bolivia</td>
<td>Indonesia</td>
<td>Spain</td>
</tr>
<tr>
<td>Brazil</td>
<td>Iran</td>
<td>Sudan</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>Iraq</td>
<td>Sweden</td>
</tr>
<tr>
<td>Cambodia</td>
<td>Ireland</td>
<td>Switzerland</td>
</tr>
<tr>
<td>Canada</td>
<td>Israel</td>
<td>Syria</td>
</tr>
<tr>
<td>Cayman</td>
<td>Italy</td>
<td>Tanzania</td>
</tr>
<tr>
<td>Chile</td>
<td>Jamaica</td>
<td>Thailand</td>
</tr>
<tr>
<td>China</td>
<td>Japan</td>
<td>Togo</td>
</tr>
<tr>
<td>Colombia</td>
<td>Jordan</td>
<td>Trinidad &amp; Tobago</td>
</tr>
<tr>
<td>Congo (K)</td>
<td>North Korea</td>
<td>Tunisia</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>South Korea</td>
<td>Turkey</td>
</tr>
<tr>
<td>Cyprus</td>
<td>Luxembourg</td>
<td>United Arab Republic</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>Mexico</td>
<td>U.S.S.R.</td>
</tr>
<tr>
<td>Denmark</td>
<td>Mongolia</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td></td>
<td>United States</td>
</tr>
<tr>
<td>Ecuador</td>
<td>Mozambique</td>
<td>Uruguay</td>
</tr>
<tr>
<td>El Salvador</td>
<td>Nicaragua</td>
<td>Venezuela</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Norway</td>
<td>North Vietnam</td>
</tr>
<tr>
<td>Finland</td>
<td>Oman</td>
<td>South Vietnam</td>
</tr>
<tr>
<td>France</td>
<td>Pakistan</td>
<td>Yugoslavia</td>
</tr>
<tr>
<td>East Germany</td>
<td>Panama</td>
<td>Zambia</td>
</tr>
<tr>
<td>West Germany</td>
<td>Paraguay</td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>Peru</td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>Philippines</td>
<td></td>
</tr>
</tbody>
</table>