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**POLITICAL PARTISANSHIP AND PUBLIC
POLICY-MAKING IN CANADA:
THE CANADA WORKS PROGRAM**

by

DARRELL J. BRICKER, M.A.

A thesis submitted to
the Faculty of Graduate Studies and Research
in partial fulfillment of
the requirements for the degree of
Doctor of Philosophy

Department of Political Science

Carleton University
Ottawa, Ontario
May 10, 1989

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Abstract

The dissertation is a quantitative case study of the relationship between political partisanship and distributive policy-making in Canada. The distributive policy considered is the federal Canada Works Program; specifically, riding allocations made under the Canada Works Program by the Liberal government in 1983 and the Progressive Conservative government in 1984. Political partisanship is represented in the dissertation by three test models -- patronage, vote maximization, and vote optimization. Political variables (e.g. electoral and incumbency) representing each model are used to analyze variation in the spatial distribution of Canada Works allocations for the years 1983 and 1984. The quantitative analysis presented reveals that riding allocations made by the Liberal government in 1983 are related to a patronage model of partisanship while riding allocations made in 1984 by the Progressive Conservative government are related to a vote optimization model of partisanship. Possible explanations for these findings are also explored.

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sine qua non. While many contributed to what is right in the dissertation, only I can take blame for what is left wanting.

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Chapter I: Introduction and Theoretical Perspective

1. Introduction

The purpose of Chapter One is to introduce the dissertation through an analysis of relevant theoretical questions and a review of the extant scholarly literature. Topics such as public policy as political science, policy-making theory (especially policy determinants analysis), flaws in previous policy determinants analysis, and the "individualist state" and policy-making are addressed. This is followed by a brief review of the analysis presented in the following Chapters.

2. Public Policy as Political Science

The dissertation is located in the branch of political science known generically as "public policy." Over the years, the concept of public policy has been defined by scholars in a number of ways. The definition that appears most popular among Canadian scholars at the moment (it is featured in two recent Canadian texts on public policy [1]) is the one posited by W.I. Jenkins. Jenkins defines public policy as:

A set of interrelated decisions taken by a political actor or group of actors concerning the selection of goals and the means of achieving them within a specified situation where these decisions should, in principle, be within the power of these actors to achieve. [2]

Jenkins' definition is particularly appropriate for the dissertation because it emphasizes the role of individual actors and groups of actors in the policy-making process. This position (i.e. the focus on actors) is one of the points of departure in the dissertation. Public policy, it is argued, is made by individual actors involved in the policy-making process. Therefore, an effective investigation of policy-making must focus on the relations between actors involved in government decision making and their collective impact on policy outcomes. The actors vary from policy area to policy area, but primarily they are bureaucrats and politicians. The dissertation addresses directly the role that the partisan motives of politicians play in the policy-making process.

As noted by Richard Simeon, scholarly investigation of public policy-making can be divided into two distinct classes of analysis -- policy theory, and, policy analysis. [3] For Simeon, policy theory is the explanation of why certain policy alternatives are chosen and others are not. [4] Policy analysis, on the other hand, represents advice to policy-makers on choosing the best policy alternatives. [5]

According to Simeon's definition of public policy studies, the dissertation is best described as an exercise in policy theory. Specifically, the analysis seeks to unravel the political motivations driving the spatial distribution of

a particular set of public expenditures. No effort is made to judge the appropriateness of the expenditures analyzed, and no advice is offered on how to improve the program in question.

From a theoretical perspective then, the position taken in the dissertation is that the purpose of political science is to build theory regarding the world of politics. [6] The same applies to the study of public policy theory, a subfield of political science. One of the goals of political scientists is to explain how and why governments chose to make the policies they do. One way to accomplish this goal is by deconstructing the larger vision of the policy-making process into smaller units of analysis through case studies. Thus, selective knowledge that explains how and why governments make policy can be incrementally reconstructed to provide general information concerning the larger world of public policy and politics. Given the focus on one specific federal expenditure program, the dissertation is a statistically-based case study of public policy-making in Canada. [7]

Currently, the study of public policy theory is at the stage of partial reconstruction or what Vickers has called "middle range theory." [8] The case study approach is amenable to middle range theory because case studies generally come to only limited conclusions about policy-making (i.e. the influence of a limited set of variables on a single policy or

policy area) in the broader political system. [9] Therefore, the dissertation builds incrementally upon the work of previous policy scholars by combining a number of their findings regarding the policy-making process and testing them using newly available data and a somewhat different, more specific, set of hypotheses.

The vehicle for analyzing the policy-making process in the dissertation is the federal Canada Works Program. According to Lowi's taxonomy of public policies (i.e. distributive, regulatory, redistributive and constituent policies), the Canada Works Program would be best described as a "distributive" policy. According to Lowi,

Distributive policies are characterized by the ease with which they can be disaggregated and dispensed unit by small unit, each unit more or less in isolation from other units and from any general rule. "Patronage" in the fullest meaning of the word can be taken as a synonym for "distributive." These are policies that are virtually not policies at all but are highly individualized decisions that only by accumulation can be called a policy. They are policies in which the indulged and deprived, the loser and the recipient, need never come into direct confrontation. Indeed, in many instances of distributive policy, the deprived cannot as a class be identified, because the most influential among them can be accommodated by further disaggregation of the stakes. [10]

The reason for selecting the Canada Works Program as the subject for analysis is that it ideally represents distributive policy (grants can be disaggregated in the manner noted in the previous definition). As such, one can glean

information (through inference based on detailed quantitative analysis of variation in program grants) about the influence of political partisanship on the policy-making process by examining constituencies that 'won' or 'lost' as a result of the spatial distribution of Canada Works allocations. In other words, one would expect the partisan preferences of the governing party to be reflected in its distributive policy decisions.

3. Policy-making in Theory

As noted above, the dissertation seeks to explore, to a limited extent, the influence of political partisanship on the policy-making process at the federal level in Canada. Before moving on to a discussion of how this is to be accomplished, a few points should be noted concerning previous attempts at similar analysis. We begin with a discussion of the policy-making system as described by Easton, which is followed by a review of the extant policy determinants literature. Shortcomings in previous policy determinants analyses are noted, and remedies relative to the dissertation are discussed.

The policy-making process has typically been described by scholars as an organic "system" in which specific policy "outputs" flow from political institutions as a consequence of specific "inputs" from the socio-economic

environment. The creation of the systems approach to policy-making is generally attributed to David Easton. [11] Figure 1 presents a diagram of Easton's basic systems model.

Figure 1
The Basic Systems Model

The systems approach to politics has proven useful as a framework for analyzing public policy-making. It brings a simple causal ordering of variables with a high degree of explanatory power to a complex field of study. However, there continues to be much debate among political scientists as to the proper ordering of determinant variables presented in the systems model. In fact, analysis of the ordering of determinant variables in policy-making has become almost a separate field of study in political science, with its own analytical techniques and body of literature. This field of study is

generally referred to as output or policy determinants analysis. [12]

The debate over which determinant variables should be viewed as most important in the policy-making process has spawned two contending schools of analysis. The first, termed here as the "politics matters" school, argues that certain broad aspects of the political system are the primary determinants of public policy outcomes. [13] The second, the "environment matters" school, holds that factors reflective of the socio-economic environment are the primary determinants of public policy outcomes. [14] Both schools of analysis grew out of the comparative analysis of policy outcomes among the American states.

The scholar generally cited as being the first to systematically address comparative policy output analysis was V.O. Key who analyzed variation in public expenditure priorities among the southern American states. [15] In his analysis, Key discovered that social welfare expenditures among governments in the southern states varied directly with each state's level of inter-party electoral competitiveness. Simply stated, Key found that the greater the level of inter-party competition in a state, the more liberal that state's social welfare expenditures would be. The reason for this, according to Key, was that governments in electorally competitive states required the support of lower income groups to win elections. Therefore, these governments engaged in

more generous social spending to win the support of lower income groups. This finding was later corroborated by Duane Lockard in his study of public spending in the New England states. [16]

Following the lead of Key and Lockard, several scholars produced studies further demonstrating the linkage between various aspects of the broad political environment and policy outcomes. The political factors (apart from interparty competition) most often cited in these studies as having an impact on policy outcomes include, the extent of political centralization in a state [17], the strength and influence of labour unions and socialist parties [18], the strength and influence of interest groups [19], elite values [20], the strength and influence of the bureaucracy [21], and the influence of the political-economic cycle. [22] Despite variation in the political variable touted as being most influential to a specific policy outcome, these studies all subscribe to the "politics matters" model of policy-making. Figure 2 shows a diagram of the politics matters model.

Figure 2

The "Politics Matters" Model

Scholars who advocate the primacy of the socio-economic environment in policy-making (i.e. the "environment matters" approach) use a similar model to characterize the policy-making process. However, in the environment matters model, public policy outcomes are assumed to be determined largely by the socio-economic environment, political factors are treated as irrelevant or spurious. A diagram of the environment matters model is presented in Figure 3.

Figure 3

The "Environment Matters" Model

The work of Richard Dawson and James Robinson [23], along with that of Thomas Dye [24], is representative of the environment matters approach. The point of departure for these researchers is disagreement with the Key/Lockard thesis that political variables best explain specific policy outcomes. They argue that supporting studies do not present a systematic analysis of the main political and economic linkages purported to activate specific policy outcomes. Dawson and Robinson, for example, observe that the Key/Lockard thesis is less than convincing if the hypothesized relationship between inter-party competition and state welfare expenditures is tested while controlling for environmental conditions which might cause both.

Dawson and Robinson's research (corroborated since by several other environment matters advocates) [25], by no means represents the last word on the relative impact of

environmental and political variables on policy-making. Political science, public policy, economics, and sociology journals contain a plethora of articles offering support for one school of analysis or the other. A review of the extant literature shows that neither school can be declared the winner at this point. In fact, if a conclusion can be drawn, it is that regardless of whether politics or the environment is found to matter most among policy determinants, the model corroborated generally depends upon the factors selected to serve as dependent and independent variables in the analysis. [2:] The following section reviews some of the flaws common to policy determinants analysis and suggests a solution for each that is incorporated in the dissertation.

4. Flaws in Policy Determinants Research

There are three flaws common to most existing policy determinants analysis, they are:

- o Limited theoretical content or relevance.
- o Imprecise definition of political variables.
- o Lack of importance given to the role of politicians in determining the content of policy outputs.

The following sections review each of the flaws and indicate a solution for each incorporated in the dissertation.

A. Limited Theoretical Content or Relevance

While Easton's model of the political system is rarely mentioned in output studies, it represents the theoretical foundation of policy determinants analysis. This point is made in a recent critique of output analysis by George Boyne. Boyne states that "most of the statistical results [of output studies] are unreliable because they are the product of testing models which are inconsistent with the underlying political theory." [27] Put simply, Boyne's argument is that most policy determinants analysis amounts to little more than a series of "fishing expeditions" in which random political and economic variables are linked in a causal order to satisfy statistical convenience rather than political theory.

According to Boyne, the principle reason for this oversight is a basic misunderstanding among researchers of the components of Easton's model. Specifically,

It is essential in discussing output studies to make the implicit direct effects model explicit. For this model underlies most of the results which indicate the relative importance of environmental and political variables, and their combined explanatory power...[h]owever the model is quite inconsistent with Easton's system theory, not only because it omits the indirect effect of the environment but also because it includes a direct effect of the environment on outputs. [28]

Stated another way, Easton's systems model makes little distinction between "environmental" and "political"

inputs to the political system. This, as noted earlier, is the major point of debate among policy determinants scholars. As noted by Boyne, this distinction is somewhat artificial because Easton's model clearly indicates that all environmental inputs to the policy-making process are mediated by the political system (refer back to Figure 1).

More important than the lack of clarity in previous distinctions between political and economic factors is the unstated assumption that the gross explanatory power of economic variables, and their influence on political variables, makes them preeminent. This is only true if we assign primary importance to the shaping of policies over long periods of time. If we do, then there can be no doubt that broad economic factors are highly related to many dependent variables (policy outputs) simply because they define the material constraints on so many kinds of government activity.

Yet, our primary concern might be the tactical (electoral) behaviour of governments over relatively short periods of time. When this is the case, it seems reasonable to examine political variables because they do reflect short term circumstances and political actors are aware that they are subject to change, in part, in the short term. For this reason, we have chosen to concentrate on what are conventionally termed "political" influences on public policymaking. The policy phenomena of interest is one which can fluctuate for tactical reasons in a short period of time. This is not

to deny the importance of economic influences. Rather, as political scientists we should focus first on political influences to see how sound an explanation they will support. Then, once an understanding of this is reached, we can begin to unravel the complex, historical effects of economic variables on both political and policy variables.

B. Imprecise Definition of Political Variables

The question here is the definition of political variables in policy determinants analysis. As noted earlier, the political factors used as independent or explanatory variables in policy determinants analysis are based on a broad notion of a political "environment." However, as mentioned in the previous section, Easton makes little distinction between a political and socio-economic environment -- there is roughly a single environment encompassing both variables.

This point is also made by Milton Friedman in his seminal work *Capitalism and Freedom*. Friedman argues that,

Historical evidence speaks with a single voice on the relation between political freedom and a free market. I know of no example in time or place in society that has been marked by a large measure of political freedom, and that has not also used something comparable to a free market to organize the bulk of economic activity. [29]

Put another way, Friedman's argument is that economic freedom is really the central element of political freedom and liberal democracy. Therefore, analysis of democracy and its institutions must begin with a study of capitalism. This argument is not exclusive to liberal scholars; scholars on the revolutionary left also argue that capitalism is the driving force of liberal democracy, and that together they constitute a single unit of analysis. This, of course, is the basis for the classic "definition of the state question" in Neo-Marxist scholarship. [30]

Clearly, there remains much debate on what can broadly be defined as the distinction between political and environmental variables. Therefore, the dissertation draws its explanatory variables from a much narrower view of politics that is more easily recognized as political. Explanatory variables included in the analysis focus exclusively on electoral indicators such as party incumbency and electoral competitiveness.

C. Lack of Importance Given to the Role of Politicians in Determining the Content of Policy Outputs

A significant flaw in most policy determinants studies is that they feature little of what policy makers would recognize as their day-to-day activity. The sophisticated "number-crunching" of researchers is rarely linked to relevant political events. In government, the individual

policy maker forms policies in order to accomplish specific goals within a limited political, bureaucratic, and economic context. For political scientists, exposing these goals answers the question of "why" a government implements one policy option over another. As Simeon observes,

[I]t is these decision-makers who actually make the formal decisions and carry them out. It is through them that the broader political forces operate. Their agenda and behaviour reflect the pressures of the environment, the play of political influences surrounding policy disputes, the norms, assumptions, and values found in the culture and the ideology, and the opportunities and constraints imposed by the institutions. The causal arrows do not jump straight from environment to legislation; power and influences are exercised and brought to bear on particular decision-makers; and assumptions, norms, and values must be made concrete. [31]

The position advocated in the dissertation is that analysis of public policy-making must begin with a clear understanding of the motives of those who make policy; specifically, in this instance, politicians. [32] Therefore, the dissertation focuses exclusively on explaining the motivations of politicians as determining factors in policy-making. This suggests that the dissertation has much to gain by incorporating insights from researchers who have previously studied the behaviour of politicians in the policy-making process. The next section of the Chapter reviews some relevant observations concerning the role of politicians in the policy-making process, and describes what one author has called the "individualist state." [33]

5. The Individualist State and Policy-making

The individualist view of the state and policymaking takes the work of utilitarians such as Jeremy Bentham [34] and John Stuart Mill [35] as its starting point in political science. The views of the utilitarians have spawned equivalents in the modern study of politics and economics. Scholars who subscribe to Bentham's emphasis on the maximization of individual utilities dominate the study of what is now referred to as welfare economics. [36] Conversely, students of John Stuart Mill's philosophy advocating individual economic and political liberty, currently refer to themselves as modern "liberals." [37] Both in their own way constitute a view of the state that is "individualist."

The central tenet of the individualist view of politics and the state is described in the following statement from James Buchanan,

In my vision of social order, individual persons are the basic component units, and 'government' is simply that complex of institutions through which individuals make collective decisions, and through which they carry out collective as opposed to private activities. 'Politics' is the activity of persons in the context of such institutions." [38]

As noted above, the individualist view of politics and the state holds that the individual rather than the group is the central element of political analysis. Politicians,

according to this view, act in the political system as "economic man" acts in the economic system -- to maximize what is in their personal self interest. Self interest, in the realm of politics, is defined in broader terms than it is in the study of economics. As Douglas Hartle notes, the political pursuit of self interest involves the maximization of "subjective net worth," which includes both "financial income" and "psychic income." The definition of financial income is self-evident. Psychic income is defined by Hartle as,

among other things: personal pride (self-esteem), which is determined by the individual's perception of the extent to which his own characteristics conform to his own standards; personal prestige (status), which is determined by the individual's perception of the perceptions of others about the extent to which his characteristics conform to their standards. (Prestige is a question of rank -- a zero sum game in which the winners displace the losers).
[39]

The position that actors in the political system seek to maximize their subjective net worth in the context of political markets, is generally attributed to a body of political scholarship known collectively as rational choice theory. [40] The tenets and methods of rational choice theory have been used fruitfully by researchers to investigate political phenomena such as the appropriate rules for decision making in democracies [41], the behaviour of individuals in interest groups [42], and the behaviour of voters [43], politicians [44], and bureaucrats [45] in democracies.

According to rational choice theory, the content of public policies in liberal democracies is determined to a certain extent by the fact that politicians must periodically seek re-election. Politicians, under these circumstances, use public policies as an instrument to induce policy takers (voters) to vote for them in the next election. As noted by one author,

It is a remarkable feature of politics that the policy makers have all the state's (unlimited!) resources at their disposal to manipulate and to provide incentives to their own supporters. Thus, changes in a policy reflects a process of exchange between the incumbent party and its future supporters. Benefits (or costs) from public policies are exchanged for support (or opposition) for the policies. I call this process 'political exchange.'
[46]

Despite the intellectual elegance of rational choice theory, and the mathematical sophistication with which its practitioners have examined various political hypotheses, there is still some doubt among scholars as to whether it accurately describes the behaviour of politicians in the policy-making system. [47] While it seems reasonable to assume that politicians are motivated to implement policies that will be to their partisan advantage on election day, it is not at all certain that the relationship of exchange described above is accurate. For such a relationship to exist, both policy makers and policy takers would have to be aware and approving of the exchange. This inaccurately

assumes perfect information among both parties involved in the exchange. [48]

A more accurate description of how politicians behave in the policy-making process involves the idea of investment. Politicians, in an effort to develop an exchange relationship with a winning voting coalition, make policy decisions to benefit certain electoral groups with the hope that on election day their policy will be remembered and members of the beneficiary group will support them. In other words, the government "invests" in certain constituencies with the belief that those who are assisted will reciprocate the favour on election day. [49]

One way to test for evidence of a specific government's election investment strategy is through analysis of the spatial distribution of funds from that government's distributive policies. In Canada, the first scholar to undertake such analysis was economist John Munro who was interested in the influence of political partisanship on the spatial distribution of provincial highway expenditures in British Columbia. [50] Munro's analysis demonstrates that both presence of a cabinet member in a riding and percentage of vote spread (i.e. electoral competitiveness) are related to spatial variation in the Government of British Columbia's highway building expenditures between 1954-1969. [51]

Following Munro's analysis, political scientist Donald Blake used similar quantitative methods to analyze the

relationship between political partisanship and the spatial distribution of constituency allocations under the federal government's Local Initiatives Program (LIP). [52] Blake's analysis indicates that a systematic political strategy appears to have been part of the calculus used by the Liberal government of the day to allocate LIP grants between 1972 and 1973. According to Blake,

while the major factors governing allocations in 1972-73 appears to have been economic need as we have measured it, the evidence suggests that something more than need was at work. Support for the Liberal party in the 1972 election seems to have been rewarded, and some attention seems to have been paid to the electoral perils facing certain Cabinet ministers and Quebec Liberal MPs. These findings are perhaps even more remarkable when it is remembered that the allocations were not made initially on a riding basis. [53]

One of the more sophisticated studies of the influence of political partisanship on distributive government policies was conducted by Bruce Macnaughton and Conrad Winn. [54] Macnaughton and Winn used quantitative techniques similar to those pioneered by Munro and Blake to examine allocations made by the federal Department of Regional Economic Expansion (DREE) in federal electoral districts between 1969 and 1974.

In their analysis, Macnaughton and Winn argue that a relationship can exist between distributive policy allocations and three different types of government vote investment strategies -- vote maximization, vote optimization, and

patronage. A government's investment strategy may not be as simple as rewarding its friends and hurting its enemies (i.e. patronage), it can take on other forms. For example, program allocations can also be distributed to either maximize or optimize the future re-election chances of the governing party. If vote maximization is the government's strategy, then program allocations are targeted disproportionately to those constituencies most certain to support them in the next election. If vote optimization is the government's strategy, then program allocations are disproportionately targeted at "swing" or marginal electoral districts. Macnaughton and Winn's analysis demonstrates that DREE expenditures were allocated with the intention of optimizing the re-election chances of the governing Liberal party prior to the 1980 election.

While scholars such as Munro, Blake, and Macnaughton and Winn, all recognize that the partisan intentions of politicians can influence policy outcomes, they still fall victim to the artificial politics/environment distinction noted earlier. Specifically, the underlying null hypothesis of all three studies (and other similar studies) is that economic need constitutes the major determinant of variation in the spatial distribution of the program expenditures analyzed. Therefore, according to the basic tenets of the scientific method, to prove the influence of political partisanship on the spatial distribution of program alloca-

tions (the test hypothesis), one has to disprove the existence of a relationship between economic need and program allocations (the null hypothesis).

The purpose of the research design utilized by Munro, Blake, and, Macnaughton and Winn, is to ensure that any variation in distributive program expenditures that can be explained by economic need is explained by economic need prior to testing for possible political explanations. While the design ensures that political explanations emerge separately from economic explanations, it also reduces the probability of political explanations becoming part of the analysis.

Given these observations, the dissertation adopts the position that the "politics versus environment" research design used for examining the relationship between environmental and political factors and variation in distributive policy expenditures, unnecessarily mutes the influence of political factors. In fact, as noted earlier, there is theoretical justification for assuming that political explanations are important in their own right. This justification emerges from the individualist view of politics and the state.

One aspect of the Macnaughton and Winn study that is particularly relevant to the dissertation is their taxonomy of political partisanship. As noted above, Macnaughton and Winn argue that governments can allocate distributive policy expenditures to satisfy one of three different partisan investment strategies -- vote maximization, vote optimization,

and patronage. The dissertation uses these three different types of political partisanship as the basis for analyzing the relationship between political partisanship and riding allocations made under the federal Canada Works Program in 1983 (controlled by a Liberal government) and 1984 (controlled by a Progressive Conservative government).

6. Research Strategy and Summary of Analysis

The dissertation utilizes various quantitative analytical techniques to analyze the relationship between the three models of political partisanship -- vote maximization, vote optimization, and patronage -- and the spatial distribution of expenditures made under the Canada Works Program. Each chapter in the dissertation presents an increasingly complex quantitative analysis of the relationship between political partisanship and the spatial distribution of Canada Works Program grants. The exception to this is Chapter II which provides a brief description of the "dependent variable" in the analysis; allocations made under the Canada Works Program. The Chapter opens with a short review of the political and economic climate that led to the creation of the Canada Works Program. This is followed by a brief discussion of the history of direct job creation programs in Canada. Further sections of the Chapter describe the Canada Works Program as conceived by the Liberal government in 1983, the

planned restructuring of Canada Works in under the Liberals in 1984, and the actual restructuring as implemented by the newly elected Progressive Conservative government in 1984. The Chapter concludes with a comparison of provincial allocations made under the Canada Works Program in 1983 and 1984. The comparison reveals that the Canada Works Program under the Liberals in 1983 concentrated funds in Central Canada (especially Quebec), where they would provide the Liberal party with the greatest electoral benefit. Conversely, Canada Works Program allocations made in 1984 under the Progressive Conservatives, shifted a proportion of funds away from Central Canada to Alberta and British Columbia where they would provide political benefit to the Progressive Conservative Party.

Chapter III introduces explanatory variables and test hypotheses to the analysis. The Chapter reviews the term "political partisanship" and defines it as either patronage, vote maximization, or vote optimization. In addition, the Chapter defines the independent political variables used in the quantitative analysis. Each variable is selected because of its ability to represent parsimoniously a specific property of political partisanship. The Chapter concludes by linking the three models of partisanship and specific independent political variables in a series of test and null hypotheses. The test and null hypotheses serve as the basis for the quantitative analysis presented in Chapters IV and V.

Chapter IV presents a univariate and bivariate analysis of the relationships between the three models of political partisanship and the spatial distribution of Canada Works grants in 1983 and 1984. Most notably, zero-order correlations between political variables and Canada Works allocations for 1983 indicate there is statistical support for the patronage and vote maximization models of partisanship. Similar analysis for the full array of 1984 Canada Works grants supports the test hypothesis for the vote optimization model of partisanship, while analysis of enhanced grants for 1984 support both the vote optimization and vote maximization models of partisanship.

The most complex quantitative analysis follows in Chapter V which presents multiple regression analysis of the relationship between the three models of political partisanship and Canada Works allocations in 1983 and 1984. The Chapter concludes by indicating that multiple regression analysis of the relationship between the models of political partisanship and 1983 Canada Works allocations provides support for both the patronage and vote maximization models of partisanship. Analysis of political partisanship and 1984 Canada Works allocations supports the vote optimization and vote maximization models of partisanship.

Chapter 1: Endnotes

1. See G.B. Doern and R. Phidd Canadian Public Policy: Ideas, Structure, Process (Toronto: Methuen, 1983) pp. 33-34; and, V.S. Wilson Canadian Public Policy and Administration: Theory and Environment (Toronto: McGraw-Hill Ryerson, 1981) p.7.

2. W.I. Jenkins Policy Analysis: A Political and Organisational Perspective (London: Martin Robertson, 1978) p.15.

3. R. Simeon "Studying Public Policy" Canadian Journal of Political Science 9:4 December 1976 p.548. See also A.P. Pross "From System to Serendipity: The Practice and Study of Public Policy During the Trudeau Years" Canadian Public Administration 25:4 Winter 1982 p.78.

4. A sample of "policy theory" includes T. Dye Understanding Public Policy 5ed. (Englewood Cliffs, New Jersey: Prentice-Hall, 1984); R. Goodin Political Theory and Public Policy (Chicago: University of Chicago Press, 1982); C. Ham and M. Hill The Policy Process in the Modern Capitalist State (Thetford: Wheatsheaf Books, 1984); C. Lindblom Politics and Markets (New York: Basic Books, 1977); R. Manzar Public Policies and Political Development in Canada (Toronto: University of Toronto Press, 1985); I. Sharkansky ed. Policy Analysis in Political Science (Chicago: Markham, 1970); G. Vickers The Art Of Judgment: A Study of Policy-Making (London: Chapman and Hall, 1965).

5. Policy analysis, as described by Simeon, is generally referred to by policy scholars as "policy science." A sample of analysis reflective of this perspective includes D. Brewer and P. DeLeon The Foundations of Policy Analysis (Homewood: Dorsey, 1983); Y. Dror Public Policy-Making Re-examined (Scranton: Chandler, 1968); M. Greenberger Models in the Policy Process (New York: Russell Sage, 1976); H. Lasswell A Preview of Policy Sciences (New York: Elsevier, 1971); E. Stokey and R. Zeckhauser A Primer for Policy Analysis (New York: W.W. North, 1978); and, A. Wildavsky Speaking Truth to Power: The Art and Craft of Policy Analysis (Boston: Little, Brown, 1978).

6. See A. Kaplan The Conduct of Inquiry (San Francisco: Chandler, 1964); T. Kuhn The Structure of Scientific Revolutions 2ed. (Chicago: University of Chicago Press,

1970); and, K. Popper The Logic of Scientific Discovery (New York: Harper and Row, 1959).

7. On the subject of case studies and public policy analysis, Simeon suggests "[t]hey can provide a sense of richness, detail and complexity of the real world of policy-making, which those concerned with more abstract modelbuilding would do well to remember. While a single case can never confirm a theory, it is possible to design case studies which may falsify one...[c]ase studies may also suggest new hypotheses or generalizations which could be applied and tested later in other studies." see R. Simeon "Studying Public Policy" Canadian Journal of Political Science 9:4 December 1976 p.548.

8. See G. Vickers The Art of Judgment: A Study of Policy-Making (London: Chapman and Hall, 1965).

9. For examples of "policy areas" analysis, refer to G.B. Doern and P. Aucoin eds. The Structures of Policy-Making in Canada (Toronto: MacMillan, 1971); G.B. Doern and V.S. Wilson eds. Issues in Canadian Public Policy (Toronto: MacMillan, 1974); G. B. Doern and R. Phidd Canadian Public Policy: Ideas, Structure, Process (Toronto: Methuen, 1981).

10. T. Lowi "Four Systems of Policy, Politics and Choice" Public Administration Review 32 July/August 1972 p.300. Lowi's taxonomy of public policy classifies policies in terms of their "applicability of coercion" and "likelihood of coercion." The taxonomy is important to public policy analysis because it links specific policy outputs to the functions of the political system and, more specifically, to the motives of political actors.

11. See D. Easton The Political System (New York: A. Knopf, 1953); D. Easton A Framework for Political Analysis (Chicago: University of Chicago Press, 1964); and, D. Easton A Systems Analysis of Political Life (Chicago: University of Chicago Press, 1979).

12. Critiques of policy determinants analysis are available in G. Boyne "Review Article: Theory, Methodology and Results in Political Science -- The Use of Output Studies" British Journal of Political Science 15:4 1985 p.473; J. Fenton and R. Chamberlayne "The Literature Dealing With the Relationships Between Political Processes, Socioeconomic Conditions and Public Policies and the American States" Polity 1 Spring 1969 p.388; and, P. Sarangi "Determinants of Public Policy in a Comparative Perspective: A Review and a Suggestion" Indian Political Science Review 19:1-2 1985 p.61.

13. Analysis reflective of the "politics matters" school include: S. Bennett and D. Bricker "The Interaction of Technical and Political Factors in the Allocation of Canada Works Funds in Ontario: A Preliminary Assessment" in O.P. Dwivedi and R.B. Woodrow eds. Public Policy and Administrative Studies Vol.2 (Guelph: University of Guelph, 1985); N. Beck "Parties, Administrations, and American Macroeconomic Outcomes" American Political Science Review 76:1 1982 p.83; D. Blake "LIP and Partisanship: An Analysis of the Local Initiatives Program" Canadian Public Policy 2 Winter 1976 p.17; G. Broach "Interparty Competition, State Welfare Policies, and Nonlinear Regression" Journal of Politics 35 1973 p.737; J. Fairbanks "Religious Forces and Morality Policies in the American States" Western Political Quarterly 30 1977 p.411; J. Garand "Partisan Change and Shifting Expenditure Priorities in the American States, 1945-1978" American Politics Quarterly 13:4 1985 p.355; V. Gray "The Effect of Party Competition on State Policy, A Reformulation: Organizational Survival" Polity 7 Winter 1974 p.248; J. Havick "The Determinants of State Revenue Expenditures" Journal of Politics 37 1975 p.548; R. Hofferbert "The Relation Between Public Policy and Some Structural and Environmental Variables in the American States" American Political Science Review 60 1966 p.73; E. Jennings "Competition, Constituencies and Welfare Policies in the American States" American Political Science Review 73:1 1979 p.414; H. Keman "Politics, Policies and Consequences: A Cross-National Analysis of Public Policy-Formation in Advanced Capitalist Democracies (1967-1981)" European Journal of Political Research 12:2 1984 p.147; T. Lancaster "Electoral Structures and Pork Barrel Politics" International Political Science Review 7:1 1986 p.67; F. Lehner and K. Schubert "Party Government and the Political Control of Public Policy" European Journal of Political Research 12 1984 p.13; R. Lineberry "Politicians and the Distribution of Public Policies" Policy Studies Review 4:3 1985 p.407; C. Lockhart "Explaining Social Policy Differences Among Advanced Industrial Societies" Comparative Politics 16:3 1984 335; B. Macnaughton and C. Winn "Economic Policy and Electoral Self Interest: The Allocations of the Department of Regional Economic Expansion" Canadian Public Policy 7 Spring 1981 p.318; D. Mazmanian and P. Sabatier "A Multivariate Model of Public Policy Making" American Journal of Political Science 24 1980 p.439; M. McCubbins and T. Sullivan "Constituency Influence on Legislative Policy Choice" Quality and Quantity 18 1984 p.299; W. Mishler and D. Campbell "The Healthy State: Legislative Responsiveness to Public Health Care Needs in Canada, 1920-1970" Comparative Politics 10:4 July 1978 p.479; J. Munro "Highways in British Columbia: Economics and Politics" Canadian Journal of Economics 8 May 1975 p.192; A. Peacock "The Political Economy of Public Spending" Administration 34:1 1986 p.42; R. Plotnick and R. Winters "A Politico-Economic Theory of Income Redistribution" American Political

Science Review 79:2 1985 p.458; P. Schumaker and R. Getter "Responsiveness Bias in 51 American Communities" American Journal of Political Science 21 1977 p.247; P. Schumaker and R. Getter "Structural Sources of Unequal Responsiveness to Group Demands in American Cities" Western Political Quarterly 34 1983 p.7; I. Sharkansky "Economics and Political Correlates of State Government Expenditures: General Tendencies and Deviant Cases" Mid-Western Journal of Political Science 11 1967 p.173; I. Sharkansky "Regional Patterns in the Expenditures of American States" Western Political Quarterly 20 1967 p.955; L. Siegelman and R. Smith "Consumer Legislation in the American States: An Attempt at Explanation" Social Science Quarterly 61 1980 p.58; L. Siegelman et.al. "Social Service Innovation in the American States: Deinstitutionalization of the Mentally Retarded" Social Science Quarterly 61 1981 p.503; J. Thompson "Outputs and Outcomes of State Workman's Compensation Laws" Journal of Politics 63 1981 p.1129; E. Ulsaner and R. Weber "The Politics of Redistribution" American Politics Quarterly 3 1975 p.140; and, G. Wright "Interparty Competition and State Social Welfare Policy: When a Difference Makes a Difference" Journal of Politics 37 1975 p.796.

14. Examples of the "environment matters" school include: D. Baker and D. Colby "The Politics of Municipal Employment Policy: A Comparative Study of U.S. Cities" American Journal of Economics and Sociology 60 1981 p.475; C. Cunnude and D. McCrone "Party Competition and Welfare Policies in the American States" American Political Science Review 63 1969 p.858; J. Danziger and W. Dunton "Technological Innovation in Local Government: the Case of Computers" Policy and Politics 6 1977 p.27; R. Dawson and J. Robinson "Inter-Party Competition, Economic Variables and Welfare Policies in the American States" Journal of Politics 25 1963 p.265; T. Dye "Government Structure, Urban Environment and Education Policy" Mid-Western Journal of Political Science 11 1967 p. 353; T. Dye "Executive Power and Public Policy in the States" Western Political Quarterly 22 1969 p.926; T. Dye "Inequality and Civil Rights Policy in the States" Journal of Politics 31 1969 p.1080; T. Dye and J. Renick "Political Power and City Jobs: Determinants of Minority Employment" Social Science Quarterly 62 1981 p.475; P. Eisinger "Black Employment in Municipal Jobs: the Impact of Black Political Power" American Political Science Review 75 1982 p.380; P. Eisinger "The Economic Conditions of Black Employment in Municipal Bureaucracies" American Journal of Political Science 26 1982 p.754; E. Jennings "Urban Riots and the Growth of State Welfare Expenditures" Policy Studies Journal 9 1980 p.34; J. Lester "Hazardous Wastes, Politics and Public Policy: A Comparative State Analysis" Western Political Quarterly 36 1983 p.257; M. Lewis-Beck "The Relative Importance of Socio-economic and Political Variables for Public Policy" American Political Science Review 71 1977 p.559; W. Lyons and D. Morgan "The

Impact of Intergovernmental Revenue on City Expenditures: An Analysis Over Time" Journal of Politics 39 1977 p.1088; J. Rogers "State Policy Responses to the Energy Issue: An Analysis of Innovation" Social Science Quarterly 61 1980 p.44; I. Sharkansky and R. Hofferbert "Dimensions of State Politics, Economics and Public Policy" American Political Science Review 63 1969 p.867; J. Stonecash and S. Hayes "The Sources of Public Policy in the American States" Political Studies Journal 9 1981 p.681; and, G. Tompkins "A Causal Model of State Welfare Expenditures" Journal of Politics 37 1975 p.392.

15. V.O. Key Southern Politics in State and Nation (New York: A.A. Knopf, 1949).

16. D. Lockard New England State Politics (Princeton: Princeton University Press, 1959).

17. See K. Banting The Welfare State and Canadian Federalism (Montreal: McGill-Queen's University Press, 1982); G. Belanger et.al. Division of Powers and Public Policies (Toronto: University of Toronto Press, 1986); R. Broadway Fiscal Federalism (Toronto: University of Toronto Press, 1986); M. Chandler and W. Chandler Public Policy and Provincial Politics (Toronto: McGraw-Hill, 1979); T. Courchene Economic Management and the Division of Powers (Toronto: University of Toronto Press, 1986); S. Dupre et.al. Federalism and Policy Development (Toronto: University of Toronto Press, 1983); R. Simeon and K. Norrie The Political Economy of Canadian Federalism 1940-1984 (Toronto: University of Toronto Press, 1986); D. Smiley Canada in Question 3ed. (Toronto: McGraw-Hill, 1980); G. Stevenson Unfulfilled Union 2ed. (Toronto: Gage, 1982); and, H. Wilensky The 'New Corporatism': Centralization and the Welfare State (Beverly Hills: Sage, 1976).

18. Refer to D. Cameron "The Expansion of the Public Economy: A Comparative Analysis" American Political Science Review 73:4 1978 p.1243; W. Chandler "Canadian Socialism and Policy Impact: Contagion From the Left?" Canadian Journal of Political Science 10:4 1977 p.755; M. Duverger Political Parties (London: Methuen, 1954); D. Hibbs "Political Parties and Macroeconomic Policy" American Political Science Review 71 1977 p.1467; C. and, Winn and J. McMenemy Political Parties in Canada (Toronto: McGraw-Hill, 1976).

19. See T. Lowi The End of Liberalism: Ideology, Policy, and the Crisis of Public Authority (New York: W.W. Norton, 1969); K. Paltiel "The Changing Environment and the Role of Special Interest Groups" Canadian Public Administration 25:2 1982 p.198; A.P. Pross ed. Pressure Group Behaviour in Canadian Politics (Toronto: McGraw-Hill, 1975); F. Thompson and W. Stanbury The Political Economy of Interest Groups

(Ottawa: IRPP, 1979); and. H. Thorburn Interest Groups in the Canadian Federal System (Toronto: University of Toronto Press, 1986).

20. Examples include C.W. Mills The Power Elite (New York: Oxford University Press, 1956); C. Olsen The State Elite (Toronto: McClelland, 1980); J. Porter The Verticle Mosaic (Toronto: University of Toronto Press, 1965); R. Presthus Elite Accommodation in Canadian Politics (Toronto: MacMillan, 1973); and, R. Presthus Elites in the Policy Process (Cambridge: Cambridge University Press, 1974).

21. Refer to: J. Aberbath et.al. Bureaucrats and Politicians in Western Democracies (Cambridge: Harvard University Press, 1981); G. Allison Essence of Decision: Explaining the Cuban Missile Crisis (Boston: Little, Brown, 1971); M. Atkinson and W. Coleman "Bureaucrats and Politicians in Canada: An Examination of the Political Administration Model" Comparative Political Studies 18:1 April 1985; A. Breton and R. Wintrobe The Logic of Bureaucratic Conduct (Cambridge: Cambridge University Press, 1982); C. Campbell Governments Under Stress: Political Executives and Key Bureaucrats in Washington, London and Ottawa (Toronto: University of Toronto Press, 1983); C. Campbell and G. Szablowski The Superbureaucrats: Structure and Behaviour in Central Agencies (Toronto: MacMillan, 1979); A. Downs Inside Bureaucracy (Boston: Little, Brown, 1967); E. Etzioni-Halevy Bureaucracy and Democracy: A Political Dilemma (London: Routledge and Kegan Paul, 1983); R. Goodin "Rational Bureaucrats in Washington and Whitehall" Public Administration 60 Spring 1982 p.23; W. Niskanen Bureaucracy and Representative Government (Chicago: Aldine-Atherton, 1971); E. Nordlinger On the Autonomy of the Democratic State (Cambridge: Harvard University Press, 1981); F. Rourke Bureaucracy, Politics, and Public Policy 3ed. (Boston: Little, Brown 1984); and, G. Tullock The Politics of Bureaucracy (Washington: Public Affairs Press, 1965).

22. The question of whether a "politics-business cycle" exists is one of the most studied topics in political science. See, for example,: J. Alt and K. Crystal Political Economics (Berkely: University of California Press, 1982); V. Borooah and F. van der Ploeg Political Aspects of the Economy (London: Cambridge University Press, 1983); D. Golden and J. Poterba "The Price of Popularity: the Political Business Cycle Re-examined" American Journal of Political Science 24 1980 p.696; D. Hibbs and H. Fassbender eds. Contemporary Political Economy (Amsterdam: North-Holland, 1981); R. Johnston Public Opinion and Public Policy (Toronto: University of Toronto Press, 1986); U. Lachler "The Political Economy Cycle Under Rational Voting Behavior" Public Choice 44 1984 p.411; C. McCrae "A Political Model of the Business Cycle" Journal of

Political Economy 85 1977 p.239; K. Monroe "Econometric Analysis of Electoral Behavior" Political Behavior 1 1979 p.137; W. Nordhaus "The Political Business Cycle" Review of Economic Studies 42 1974 p.169; D. Rae and T. Eismair eds. Public Policy and Public Choice (Beverly Hills: Sage, 1979); B. Soh "Political Business Cycles in Industrialized Democratic Countries" Kyklos 39:1 1986 p.21; and, E. Tufte The Political Control of the Economy (Princeton: Princeton University Press, 1978).

23. See R. Dawson and J. Robinson "Inter-Party Competition, Economic Variables, and Welfare Policies in the American States" Journal of Politics 25 1963 p.265.

24. T. Dye Politics, Economics and the Public: Policy Outcomes in the American States (Chicago: Rand McNally, 1966); T. Dye "Government Structure, Urban Environment and Education Policy" Mid-Western Journal of Political Science 11 1967 p.353; T. Dye "Executive Power and Public Policy in the States" Western Political Quarterly 22 1969 p.926; and, T. Dye "Inequality and Civil Rights Policy in the States" Journal of Politics 31 1969 p.1080.

25. See Note 14.

26. This point is also made by G. Boyne in "Review Article: Theory, Methodology, and Results in Political Science -- the Use of Output Studies" British Journal of Political Science 15:4 1985 p.473.

27. Ibid. p.474.

28. Ibid. p.479.

29. M. Friedman Capitalism and Freedom (Chicago: University of Chicago Press, 1962) p.9.

30. See M. Carnoy The State and Political Theory (Princeton: Princeton University Press, 1984); R. Miliband The State in Capitalist Society (London: Quartet Books, 1964); J. O'Connor The Fiscal Crisis of the State (New York: St. Martin's Press, 1973); L. Panitch ed. The Canadian State (Toronto: University of Toronto Press, 1977); and, N. Poulantzas State Power, Socialism (London: New Left Books, 1978). An interesting critique of this perspective is F. Parkin Marxism and Class Theory: A Bourgeois Critique (New York: Columbia University Press, 1979).

31. R. Simeon "Studying Public Policy" Canadian Journal of Political Science 9:4 December 1976 p.576.

32. It is understood in the dissertation that policy-making involves many more actors than just politicians. A more comprehensive treatment of the subject of policy actors is presented in M. Trebilcock et.al. The Choice of Governing Instrument (Ottawa: Supply and Services Canada, 1982).

33. See P. Self Political Theories of Modern Government: Its Role and Reform (New York: Allen and Unwin, 1985). Refer to Chapter 3, "The Individualist State."

34. J. Bentham Principles of Morals and Legislation [Dolphin Reprint "The Utilitarians"] (New York: Dolphin, 1961).

35. J.S. Mill On Liberty and Utilitarianism [Dolphin Reprint "The Utilitarians"] (New York: Dolphin, 1961).

36. Good reviews of this perspective are available in R. Goodin Political Theory and Public Policy (Chicago: University of Chicago Press, 1982); E. Stokey and R. Zeckhauser A Primer for Policy Analysis (New York: W.W. Norton, 1978); and, R. Wagner The Public Economy (Chicago: Markham, 1973). Operationalized examples of this perspective include G. Calabresi and P. Bobbitt Tragic Choices (New York: W.W. Norton, 1978); and, J. Rawls Theory of Justice (Cambridge: Harvard University Press, 1971).

37. See M. Friedman Capitalism and Freedom (Chicago: University of Chicago Press, 1962); G. Gilder Wealth and Poverty (New York: Bantam, 1981); F. Hayek The Road to Serfdom (Chicago: University of Chicago Press, 1944); R. Nozick Anarchy, State and Utopia (New York: Basic Books, 1974); and, J. Schumpeter Capitalism, Socialism and Democracy (London: Harper and Row, 1942).

38. J. Buchanan "An Economists Approach to 'Scientific Politics'" in M. Parsons ed. Perspectives in the Study of Politics (Chicago: Rand McNally, 1968) p.78.

39. D. Hartle A Theory of the Expenditure Budget Process (Toronto: University of Toronto Press, 1976) p.58.

40. Reviews of rational choice theory are available in B. Barry Sociologists, Economists and Democracy (Chicago: University of Chicago Press, 1978); B. Barry and R. Hardin eds. Rational Man and Irrational Society? (Beverly Hills: Sage, 1982); N. Frohlich and J. Oppenheimer Modern Political Economy (Toronto: Prentice-Hall, 1978); and, D. Mueller Public Choice (Cambridge: Cambridge University Press, 1979).

41. See K. Arrow Social Choice and Individual Values (New York: John Wiley, 1951); J. Buchanan and G. Tullock The

Calculus of Consent (Ann Arbor: University of Michigan Press, 1962); W. Riker and P. Ordeshook An Introduction to Positive Political Theory (Englewood Cliffs, New Jersey: Prentice-Hall, 1973); and, W. Riker The Theory of Political Coalitions (New Haven: Yale University Press, 1962).

42. The seminal work on interest groups from a rational choice perspective is M. Olsen The Logic of Collective Action (Cambridge: Harvard University Press, 1965).

43. Refer to A. Breton The Economic Theory of Representative Government (Chicago: Aldine, 1974); and, A. Downs An Economic Theory of Democracy (New York: Harper and Row, 1957).

44. Ibid.

45. A. Breton and R. Wintrobe The Logic of Bureaucratic Conduct (Chicago: Aldine, 1974); A. Downs Inside Bureaucracy (Boston: Little, Brown, 1967); W. Niskanen Bureaucracy and Representative Government (Chicago: Aldine-Atherton, 1971); C. Parkinson Parkinson's Law and Other Studies in Administration (New York: Ballantine, 1971); and, G. Tullock The Politics of Bureaucracy (Washington: Public Affairs Press, 1965).

46. P. Sarangi "Determinants of Public Policy in a Comparative Perspective: A Review and a Suggestion" Indian Political Science Review 19:1-2 1985 p.62.

47. Good critiques of rational choice theory are B. Hindess "Rational Choice Theory and Political Action" Economy and Society 13:3 1985 p.255; and, P. Self Political Theories of Modern Government: Its Role and Reform (London: Allen and Unwin, 1985).

48. This point is noted in C. Winn "Ministerial Roles in Policy-Making: Vote Seeker, Shaman, and Other Incarnations" in A. Blais ed. Industrial Policy (Toronto: University of Toronto Press, 1986) p.233.

49. This is similar to, but not the same as, the exchange relationship between politicians and voters posited by rational choice theorists. Policy investments by politicians do not always induce the expected response from voters. In other words, the relationship may not be exactly reciprocal as assumed by some rational choice scholars.

50. J. Munro "Highways in British Columbia: Economics and Politics" Canadian Journal of Economics 8 May 1975 p.192.

51. See also D. Spafford "Highway Employment and Provincial Elections" Canadian Journal of Political Science 14:1 March 1981 p.135.

52. D. Blake "LIP and Partisanship: An Analysis of the Local Initiatives Program" Canadian Public Policy 2 Winter 1976 p.17.

53. Ibid. p.17.

54. B. Macnaughton and C. Winn "Economic Policy and Electoral Self Interest: The Allocations of the Department of Regional Economic Expansion" Canadian Public Policy 7 Spring 1981 p.318.

**Chapter II: The Dependent Variable:
Canada Works Allocations**

1. Introduction

The purpose of the Chapter is to briefly describe allocations made under the Canada Works Program; the dependent variable in the causal model at the core of this dissertation. The Chapter is divided into eight sections, each section describing a particular feature of the Canada Works Program. The Chapter opens with a brief review of the political and economic climate that spawned the Canada Works Program. This is followed by an overview of the history of direct job creation programs in Canada.

The middle sections of the Chapter review the Canada Works Program as conceived by the Liberal government in 1983. The sections describe the objectives, regulations and allocation methodology of the Canada Works Program circa 1983. In addition, the amended version of the Canada Works Program proposed by the Liberals for the fall of 1984 is reviewed. Of course, this version of the Program was never implemented due to the Progressive Conservative's victory in the general election of September, 1984.

The final sections of the Chapter analyze the 1984 version of the Canada Works Program implemented by the new Progressive Conservative government. The Chapter concludes with a comparison of provincial Canada Works allocations made under the Liberals in 1983 and the Progressive Conservatives 1984. The central finding of this comparison is that the

Liberals concentrated funds in Central Canada, especially Quebec, whereas the Progressive Conservatives shifted a portion of funds to Alberta and British Columbia.

Most of the information presented in the Chapter concerning specific features of the Canada Works Program, along with the views of various officials associated with the Canada Works Program, was derived from internal government documents obtained via application under the Access to Information Act and through confidential interviews with officials from Employment and Immigration Canada.

2. The Political and Economic Climate

The Canada Works program was created in 1983 when Canada was moving out of the trough of its deepest economic recession since the end of the Second World War. The impact of the persistent negative growth associated with the recession was heaviest on Canada's workers. The average unemployment rate for 1983 stood at 11.9% which translated into 1,448,000 jobless Canadians. In contrast, the average unemployment rate for 1980 was 7.5%. [1]

Figure 4

Canada's Annual Unemployment Rate*

<u>Year</u>	<u>Unemployment Rate</u>
1971	6.2%
1972	6.2%
1973	5.5%
1974	5.3%
1975	6.9%
1976	7.1%
1977	8.1%
1978	8.3%
1979	7.4%
1980	7.5%
1981	7.5%
1982	11.0%
1983	11.9%

* Statistics Canada, *The Canada Year Book: 1985* (Ottawa: Supply and Services Canada, 1985).

The federal Government, controlled at the time by the Liberal Party under Pierre Trudeau, appeared unable to deal with the domestic employment problems generated by the international recession. This situation represented a serious political liability for the federal government because voters were focussed on unemployment as the most important issue facing Canada. Public opinion polls taken during the 1982-83 period showed that unemployment was increasingly the most important issue on the public agenda. [2] The next election was expected to be held in 1984. Given the public's interest in the performance of the economy and unemployment in particular, the political party perceived by Canadians as being most

able to deal effectively with the unemployment issue would have a better opportunity than its opponents of winning the upcoming general election.

The relationship between a victory against unemployment (at least in public opinion terms) and victory in the election was not overlooked by the governing Liberals. [3] Minister of Employment and Immigration John Roberts initiated a major restructuring of federal employment policy in the spring and summer of 1983. [4] This restructuring of the direct job creation component of federal employment policy led to the creation of the Canada Works Program.

3. A Brief History of Direct Job Creation in Canada

The method of job creation program represented by the Canada Works Program has been a continuous part of federal and provincial employment strategies since the 1930s. During the Great Depression, both levels of government in Canada and the United States operated relief camps and job corps programs to provide unemployed workers with temporary work. [5] Later, the Government of Canada dealt with seasonal unemployment through the Winter Works Program. [6]

Through the 1950s and 1960s direct job creation initiatives such as Winter Works were of secondary importance to a federal employment strategy based on the manipulation of macroeconomic and fiscal levers. With the experience of

simultaneously high unemployment and high rates of inflation (later referred to as stagflation) during the later part of the 1960s, the use of expansionary macroeconomic policy instruments to control aggregate demand lost their capacity to produce the number of jobs desired by policy makers (the unemployment rate moved from 4.4% in 1969 to 6.2% in 1971). This caused the federal government to reassess its national employment strategy. [7]

In addition to the need for dealing with increasing unemployment, the federal government also perceived a growing public demand for policy initiatives that supported broader social justice and equity goals. Together, these changes inspired a new "personalized" (or microeconomic) approach to job creation programming which lead to a renewed emphasis on direct job creation programs. This process is described in the following passage from the Department of Employment and Immigration's 1981 report *Labour Market Development in the 1980s*, generally referred to as the *Dodge Report*,:

The introduction of direct job creation programs was made in a social, economic and political climate which was conducive to the active participation of government and the citizenry in an area traditionally left to the operation of the market and to broad-brush macroeconomic government policies... [j]ob creation initiatives exhibited the multiple objectives of equity considerations, short-term responses to unemployment rates and longer-term concerns regarding absorption of the "baby boom" cohorts into the labour force. [8]

New federal programs such as Opportunities for Youth (OFY, 1971) and the Local Initiatives Program (LIP, 1971) emerged from the policy environment described above. These programs relied on citizen participation and local leadership, as well as the unemployed themselves, to develop and implement projects sponsored by the new programs. [9]

To summarize, the federal Government's new direct job creation strategy for the 1970s was developed in a setting which demanded programs that both created jobs and were reflective of broader social policy objectives. Many of the social policy characteristics of these programs -- individual and community involvement in the resolution of employment problems, the use of local community groups and the participation of Members of Parliament in the process of selecting projects -- were perceived by decision makers as positive features of employment programming and, along with the labour intensive project orientation and the focus on short-term jobs, were retained throughout the 1970s as features of subsequent job creation programs.

4. The Canada Works Program

The Canada Works Program was created as part of another major reshuffling of federal direct job creation programs in September 1983 to meet the economic and political challenges described in Section Two of the Chapter. As well,

internal analysis by Employment and Immigration officials indicated that the Department's direct job creation programs for the early 1980s, which were essentially the same as the programs for the 1970s, were no longer meeting the needs of unemployed workers. Specifically, programs like LIP and CCDP (the Canada Community Development Program) only dealt with the problem of cyclical unemployment and appeared to create dependencies in some disadvantaged communities. [10] In addition, administrative difficulties experienced in coordinating larger federal-provincial job creation efforts such as the NEED (New Employment Expansion and Development) program, led policy-makers to look for alternative programming ideas. [11]

The new job creation program structure, unveiled in September 1983, consolidated 12 existing job creation programs in four new programs: the Canada Works Program, the Local Employment Assistance and Development Program (LEAD), Job Corps, and Career Access (see Figure 5). The new programs were designed to meet three broad objectives: counter-cyclical labour market stabilization; human resource development; and local employment growth. [12] The counter-cyclical stabilization objective was to be met through the Canada Works Program. Job Corps and Career Access were concerned with human resource development, while LEAD dealt directly with the local employment growth objective. Of the four programs, Canada Works had the largest budget, it was targeted to

receive \$612.7 million in 1983-84 and \$137.6 million in 1984-85 for a two year total budget of \$750 million. The other programs had two year budgets of \$199.2 million (LEAD), \$66.7 million (Job Corps) and \$211.3 million (Career Access) [13].

Figure 5

Previous Job Creation Programs Consolidated Under 1983 Program Restructuring

1. The Canada Works Program

Objective: To create incremental productive term employment for unemployed persons.

Consolidated Programs

- o New Employment Expansion and Development (NEED).
- o Job creation under section 38 of the Unemployment Insurance Act.
- o Canada Community Development Projects (CCDP).
- o The Community Employment Program (CEP).
- o Summer Canada.

2. Local Employment Assistance and Development Program (LEAD)

Objective: To increase permanent jobs in communities with high chronic unemployment.

Consolidated Programs

- o Local Economic Assistance Program (LEDA).
- o Components of CCDP.

3. Job Corps

Objective: To provide severely employment disadvantaged individuals with the necessary preparation and employment-related skills leading to labour market readiness.

- o Components of the Local Employment Assistance Program (LEAP).
- o Youth Job Corps.

4. Career Access

Objective: To stimulate the provision of employment opportunities for persons whose participation in the labour market may be enhanced by such measures.

- o The Program for the Employment Disadvantaged (PED).
- o The Portable Wage Subsidy (PWS).
- o The New Technology Employment Program (NTEP).
- o Summer Canada Internships.
- o Canada Community Services Program (CCSP).

As shown in Figure 5, the Canada Works Program replaced previous job creation initiatives such as the federal-provincial NEED program, elements of CCDP, the Community Employment Program (CEP) and job creation spending under Section 38 of the Unemployment Insurance Act. As such, the Canada Works Program was designed to be a comprehensive initiative providing incremental employment assistance within a local or community orientation in a fashion similar to the programs of the 1970s. [14] The objectives and sub-objectives of the Canada Works Program are arrayed in Figure 6.

Figure 6

Objectives of the Canada Works Program

- Objective To create incremental, productive term employment for unemployed persons.
- Sub-Objectives
1. To create immediate term employment for unemployed persons during periods of economic downturn;
 2. To create interim, alternate employment in response to labour market dislocations such as unexpected plant/industrial shut-downs or a natural disaster;
 3. To utilize income maintenance provisions under Section 38 of the Unemployment Insurance Act to provide employment for the maintenance and continued utilization of skills of workers during periods when they are laid off and without alternative productive activity.
 4. To provide term employment for designated groups of workers during a period of adjustment in a particular community, area or sector identified for assistance under a broader assistance program;
 5. To provide summer employment to returning students;
 6. To support locally prioritized activities which are relevant to broader federal and regional objectives for economic recovery and employment growth. [15]

Organizationally, Canada Works had two major components differentiated on the basis of their source of revenue. Part One of the Canada Works Program used funds designated for job creation under Section 38 of the U.I. Act along with \$50 million from the Consolidated Revenue Fund. Allocation of funds under Part One of the Canada Works Program

was based on the regional distribution of U.I. recipients. Part Two of the Canada Works Program utilized funds exclusively from the Consolidated Revenue Fund and allocations were made on the basis of level of "Labour Surplus" by electoral constituency. Part Two of the Canada Works Program had a budget of \$110.9 million for constituency allocation in 1983. It is Part Two of Canada Works that the dissertation addresses due to its focus on federal electoral districts as units of distribution. [16]

5. Canada Works Fund Allocation: 1983

Unlike several of its predecessor programs, the allocation of funds under the Canada Works Program in 1983 was not project driven. [17] Funds were allocated to each federal constituency by the national headquarters staff of the Department of Employment and Immigration according to an allocation formula. Decisions on which specific projects were to be funded were not made until after each constituency had received its program allotment from Ottawa. The decision on the final values used in the formula was taken by the Minister of Employment and Immigration, John Roberts, based on suggestions from CEIC officials. [18] The key variable in the allocation formula was the constituency "Labour Surplus Rate." The Labour Surplus Rate was similar to, but not exactly the

same as an unemployment rate; it was defined by Employment and Immigration as:

the number of unemployment insurance recipients in a riding, excluding those who are receiving maternity leave benefits, sickness benefits or training allowances under the National Training Act. [19]

Based on the formula, all constituencies received a base level allocation of \$100,000 under the Canada Works Program. Funds remaining after the initial \$100,000 allocation, were distributed by constituency according to a Labour Surplus Rate "trigger" of 8%. The purpose for the Labour Surplus Rate and an explanation of how the "trigger" mechanism worked is provided in the following excerpt from a confidential Employment and Immigration Canada memo obtained through application under the Access to Information Act:

There are no actual unemployment rate statistics available at the level of constituencies. Therefore, a proxy was developed, the "labour surplus rate," which uses U.I. beneficiary data as well as a complicated process for estimating the size of the labour force by constituency. If the labour surplus rate is over a set figure, the so-called "trigger level," the constituency would be eligible for additional funds over a floor level. This additional allocation is based on the number of U.I. beneficiaries...[t]he whole point of the use of this "trigger mechanism" in the formula is to ensure that the allocation of funds is not overly determined by the absolute number of unemployed, which would particularly favour larger urban areas, relative to others. The result is that more funds flow to smaller, rural, eastern constituencies, where it was felt that Canada Works funding could be put to best use. Virtually any simplification that does not utilize the concept of a trigger tends to work

in the opposite direction due to the concentration of the labour force in central Canada. [20]

The first round of constituency allocations under Canada Works was made by the Minister of Employment and Immigration on September 12, 1983.

6. Canada Works Allocations, 1984 (Proposed)

Although the second round of Canada Works allocations was made by the newly elected Progressive Conservative government in the fall of 1984, the process for implementing a second round of allocations was started with Liberal Minister of Employment and Immigration John Roberts and his Deputy Minister Gaetan Lussier in the spring of 1984. Therefore, the allocations announced in October 1984 by Progressive Conservative Minister of Employment and Immigration, Flora MacDonald, should be viewed as the end of a Liberal employment strategy rather than the start of a Tory one. [21]

Official discussion about a second round of Canada Works allocations began with a confidential memorandum from Deputy Lussier, dated March 14, 1984, to Minister Roberts entitled "Implementation of a Second Round of Canada Works for the Fall of 1984." In the memo, Lussier provides the initial arguments for a second round of Canada Works allocations. An

appendix to the memo notes three options regarding Canada Works funding for the Minister's consideration, they were:

Option 1

Total announced program value would be \$200 million. After accounting for administrative costs (7% of this figure), the \$186 million available for contribution funding would create 24,890 jobs. This compares with total contribution funding of \$233,650 million under the present round of the program.

\$186 million would be enough to provide constituency funding to the levels now approved (\$172,650 million) with a small reserve available to meet other needs, including those of the Native community.

Option 2

Total announced program value would be \$250 million with \$232.5 million in contribution funds to create 31,110 jobs.

This compares favorably with the monies presently available, which consist of \$172.650 million in constituency-based funding, \$21 million for natives, \$15 million for Fisherpersons and a reserve of \$25 million.

Option 3

Total announced program value would be \$300 million with \$279 million in contribution funds to create 37,330 jobs.

This would show an increased commitment to short-term job creation over the funding announced in the fall and early winter of 1983.

Following the Lussier memo, no communication regarding the Canada Works Program appears on the available record until August 2, 1984, when Lussier wrote a lengthy memo to Roberts concerning the different methods of fund allocation available for the proposed 1984-85 round of allocations. In

the interim period between March and August 1984, it is reasonable to assume that approval for the second round of allocations was granted by the appropriate Cabinet Committee and Treasury Board. Unfortunately, documents that would elaborate on this process are deemed Cabinet confidences and are exempt from public release under the Access to Information Act. [22]

The August memo from Lussier to Roberts shows that if the Liberals had won the September 1984 federal election, \$300 million would have been available under the Canada Works Program for constituency allocation. Like the 1983-84 round, all four options for the 1984-85 round provided for a minimum allocation and a maximum allocation, and distributed the remainder of the funds based on the estimated labour surplus in each constituency in excess of 8%. An important point to note is that in the interim period between the 1983 allocations and the planned 1984 allocations, Statistics Canada made available to Employment and Immigration Canada data from the 1981 Census to be used for calculating the Labour Surplus Rate by constituency. This generated a new set of labour surplus figures. According to the Lussier memo, the effect of the new data was,

a set of labour force estimates that provide a more accurate reflection of the distribution of labour force across the country. It does have the effect of influencing the allocation of funding to a number of specific constituencies compared to the 1976 based statistics, reflecting the fact of substantial

increase or decrease in their labour forces between 1976 and 1981. However, the overall provincial distribution of funding is not changed. [23]

The four allocation options enumerated in the August 1984 memo provided different patterns for fund distribution. The following is a brief description of each option and a review, based on Employment and Immigration Canada's internal analysis, of how the second round of allocations would compare to the 1983 round of allocations on a constituency basis depending on the option selected. All four options were based on changing two variables in the allocation formula, the trigger point of Labour Surplus and the level of minimum and maximum allocation. Generally, a higher trigger rate moved funds to Eastern Canada; a lower trigger rate moved funds to Western Canada. Increasing the minimum allocation moved funds to the West, while abandoning the cap on maximum funding per constituency increased the funding to Newfoundland with minimal impact on the other provinces.

Option One

The first option duplicated the specifications of the formula used in the 1983 round of allocations:

- o a basic allocation for each constituency of \$100,000;
- o a maximum of \$3 million for any constituency; and
- o a trigger rate of 8%.

This option would have increased funding to all provinces in absolute terms while Prince Edward Island, Nova Scotia, Quebec, Alberta, and British Columbia would receive increases in proportional terms as well. Option One had the following impact on constituency funding,

[t]his option leaves 35 constituencies receiving less funding than for Canada Works in 1983-84. Provincially there is one constituency in Nova Scotia; seven in Quebec; 23 in Ontario; two in Manitoba and one each in Saskatchewan and Alberta.

Option Two

Option Two was a repeat of Option One but with an increase in the maximum allocation from \$3 million to \$5 million. The major change in the distribution of funds would have been an absolute and proportional increase in the allocation for Newfoundland and New Brunswick which, in fact, received less than their due in 1983 because of the \$3 million cap on maximum allocations. According to Employment and Immigration Canada,

Using this Option, 40 constituencies receive less funding than in 1983-84. Provincially there is one in Nova Scotia; 10 in Quebec; 24 in Ontario; three in Manitoba and one each in Saskatchewan and Alberta.

Options Three and Four

Options Three and Four repeated the specifications for Options One and Two but increased the basic allocation to each constituency from \$100,000 to \$200,000. Option Three,

produces 20 constituencies whose allocation is a decrease from the previous round. There are three in Quebec; 14 in Ontario and one each in the Prairie provinces.

Option Four,

results in 28 constituencies receiving less than in 1983-84. There are seven in Quebec; 18 in Ontario and one each in Manitoba, Saskatchewan and British Columbia.

Minister Roberts instructed his officials to proceed with Option One.

7. Canada Works Allocations, 1984 (Actual)

With the defeat of the Turner Government on September 4, 1984, plans to proceed with the Canada Works Program allocation methodology approved by Liberal Minister John Roberts were scuttled. In a memo to the new Minister of Employment and Immigration, the Hon. Flora MacDonald, dated September 27, 1987, Deputy Minister Gaetan Lussier re-started the process by providing a new set of allocation options for

consideration. The memo appears to have been written in response to a request from the Minister for a simpler allocation formula. Based on Lussier's memo, the Minister decided not to stop the planned second round of Canada Works allocations but instead required that it be based on a new allocation formula. [24]

In the September 27 memo, six options for allocation formulas were outlined. They were broken down in the following manner. The first set of three options provided for:

- o a basic or minimum allocation of \$100,000 for each constituency;
- o a maximum allocation to any one constituency of \$3 million and;
- o a range of trigger rates of 6%, 8% and 10%.

The second set of options provided for:

- o no basic or minimum allocation;
- o a maximum allocation to any one constituency of \$3 million and;
- o a range of trigger rates of 6%, 8% and 10%.

The effect of Option One, which used a trigger of eight percent, would have been to give the basic \$100,000 allocation to 128 constituencies and the maximum \$3 million allocation to each of 14 constituencies. This formula closely followed the 1983 pattern of allocations with the exception of a six percent drop in funding for Ontario. Option

Two used a trigger rate of six percent which would have increased allocations to Ontario, the Western provinces and British Columbia at the expense of the Maritime provinces and Quebec. Under this option, 75 constituencies would receive the minimum allocation and four the maximum. Option Three was based on a trigger rate of 10%. A 10% trigger would have increased funding in the Maritime provinces and Quebec while lowering funding in Ontario, the Prairies and B.C. when compared to 1983 allocations. The number of constituencies that would receive the basic \$100,000 allocation was 183, while 30 constituencies would receive the \$3 million maximum.

The second set of options, Options Four, Five and Six, allowed for no minimum allocation and a maximum allocation of \$3 million. This would have automatically increased funds to Quebec, the Maritimes, and B.C. while decreasing funds to the other provinces. In a secret memo to the Director of the Canada Works Program, D.A. Haslegrave from Dale Stevenson, Chief of CEIC's Labour Market Policy Analysis Unit dated September 24, 1984, the net impact of the last three options would have been the following,

the biggest area of gain is Quebec, while the largest loss is in Ontario. One province, Saskatchewan, receives no funding at all under Options 4 and 6. The Options also result in more constituencies receiving the maximum allocation, because it provides a larger pool of money to be distributed, since many constituencies get no funding. [25]

In a memo from Deputy Lussier to Minister MacDonald dated October 4, 1984 the Minister selected Option Two as the formula to be used for the second round of Canada Works allocations. Option Two used a trigger of six percent to determine basic and enhanced allocations and limited maximum allocations to \$3 million. A list of second round allocations by constituency was released by the Minister's Office on October 26, 1984.

8. Comparison of Allocations

Table 1 shows a comparison of actual and percentage Canada Works allocations by province and territory for both 1983 and 1984 rounds. These data indicate that while Quebec was the major benefactor under the Canada Works Program in both 1983 and 1984, the change in allocation formulas in 1984 moved funds away from Central Canada to the East and West. Alberta and British Columbia benefitted most from switching the allocation trigger point in 1984. British Columbia's percentage of Canada Works allocations rose from 11.9% in 1983 to 14.2% in 1984 (up 2.3%) while Alberta's share of Canada Works funds in 1984 was double its share in 1983 (up 2.4%). Conversely, Quebec (down 2.1%) and Ontario (down 2.1%) were hurt most by the change.

Taken together, these data indicate that in 1983 Canada Works funds were concentrated in Central Canada where the governing Liberal Party was strongest. In 1984, however, funds appear to have been moved West (where the recently

elected Progressive Conservatives were traditionally strongest) at the expense of Central Canada. From a political perspective, the change in the allocation pattern of Canada Works funds between 1983 and 1984 can be explained as part of a regional political strategy to concentrate program funds in those provinces most important to the governing party's re-election. In 1983 the Liberals appear to have perceived Central Canada (particularly Quebec) as most important to their re-election in 1984, and therefore concentrated Canada Works allocations for the previous year in Central Canada. The Progressive Conservatives, on the other hand, appear to have amended the allocation formula in 1984 to move more Canada Works funds to Alberta and British Columbia -- two of their areas of strength. While not a constituency-based example of political partisanship, these data show that political motives may have been behind the broad provincial allocations made under the Canada Works Program in both 1983 and 1984.

Table 1

Canada Works Allocations by Province

		1983		1984		Change	
		<u>(\$'000)</u>	<u>%</u>	<u>(\$'000)</u>	<u>%</u>	<u>(\$'000)</u>	<u>%</u>
Province							
Nfld.		9,927	8.9	18,698	9.3	+8,771	+ .4
N.S.		6,276	5.7	12,543	6.3	+6,267	+ .6
P.E.I.		2,751	2.5	3,607	1.8	+856	- .7
N.B.		8,334	7.5	16,252	8.1	+7,918	+ .6
Quebec		46,626	41.1	78,645	39.0	+32,016	-2.1
Ontario		17,533	15.8	27,364	13.7	+9,831	-2.1
Manitoba		2,106	1.9	3,219	1.6	+1,113	- .3
Sask.		1,417	1.3	1,683	.01	+266	-1.3
Alberta		2,325	2.0	8,739	4.4	+6,414	+2.4
B.C.		13,225	11.9	28,442	14.2	+15,217	+2.3
N.W.T.		100	*	317	*	+217	*
Yukon		373	*	491	*	+118	*
Total		110,993		200,000		+89,007	

Note: * represents a value below 1%.

Source: 1983 Canada Works Data, Parliament of Canada
Ministerial Inquiry #5033, September 19, 1983.

1984 Canada Works Data, Minister of Employment and
Immigration Canada News Release 84-32 October 26, 1984.

9. Conclusion

The Chapter provides a review of the political and economic climate that led to the creation of the Canada Works Program in 1983, along with a description of the Canada Works Program as it was conceived by the Liberal government in 1983 and amended by the Progressive Conservative government in 1984. Perhaps the most interesting information brought out in the Chapter relates to the formula used for allocating program funds. There is evidence to indicate the formula was used by both the Liberal and Progressive Conservative governments to distribute Canada Works funds at the provincial level in a politically advantageous manner.

The following Chapter posits three models of political partisanship -- vote maximization, vote optimization, and patronage -- and links the three models with constituency allocations made under the Canada Works Program in 1983 and 1984 in a series of constituency-based test hypotheses.

Endnotes

1. Unemployment data are from Statistics Canada The Canada Year Book: 1985 (Ottawa: Supply and Services Canada, 1985).

2. According to the Decima Quarterly Report, unemployment replaced inflation as the most important issue facing Canadians in February, 1982. Public opinion data used in the dissertation was made available by Decima Research. See Decima Quarterly Reports, 1980-1984.

3. The relationship between solving the unemployment problem and electoral victory in 1984 was not lost on the Progressive Conservative Party either. In fact, the slogan "Jobs, Jobs, Jobs" is now synonymous with the Tory's winning 1984 election strategy. A discussion of the 1984 election campaign and the Progressive Conservative Party's strategy can be found in R. Graham One-Eyed Kings: Promise and Illusion in Canadian Politics (Toronto: Collins, 1986). See Section Four entitled "Triumph of the Wily".

4. The beginning of the re-organization of federal direct job creation policy can be traced back, using Employment and Immigration Canada documents, to approval for a proposed policy framework for direct job creation programming for the 1980s granted by the Cabinet Committee on Social Development (CCSD), April 18, 1983. The Cabinet Document 180-80 CD, although referred to in several internal memoranda, was not made available under the Access to Information Act. The document was deemed to be a Cabinet confidence.

5. See Labour Market Development in the 1980s (Ottawa: Supply and Services Canada, 1981) p. 133. and S. Peitchinis The Canadian Labour Market (Toronto: Oxford University Press, 1975).

6. R. Burns and L. Close The Municipal Winter Works Incentives Program (Toronto: Canadian Tax Foundation, 1971).

7. This period of economic transition and departmental development is described in R.W. Phidd and G.B. Doern The Politics and Management of Canadian Economic Policy (Toronto: Macmillan, 1978) Chapter 10 "The Role of the Commission and Department of Employment and Immigration." See also Labour Market Development in the 1980s (Ottawa: Supply and Services Canada, 1981) Chapter 2 "Labour Market Conditions in the 1960s and 1970s and the Labour Market Policy Response", and Chapter 7 "Influencing the Structure of Demand for Labour: Indirect Intervention."

8. Labour Market Development in the 1980s (Ottawa: Supply and Services Canada, 1981) pp. 133-134.

9. Ibid., see Chapter 8 "Influencing the Structure of Demand for Labour: Direct Employment Programs." Refer also to R.S. Best "Youth Policy" in G.B. Doern and V.S. Wilson eds. Issues in Canadian Public Policy (Toronto: Macmillan, 1974).

10. See internal CEIC memo "Direct Job Creation for the 1980s: Outline, Draft 3, January 7, 1983."

11. In May 1983, the Government of Quebec introduced a Bill prohibiting municipal corporations from accepting any funds from the federal government for job creation programs. This situation created a difficult environment for funding job creation activities with municipalities in Quebec. An agreement between Quebec and Ottawa was not reached on this issue until March 16, 1984 when Alain Marcoux, Quebec Minister of Municipal Affairs, and John Roberts signed an agreement covering the Canada Works and LEAD programs. Experiences such as this led federal policy makers to look with favour towards federal-only job creation initiatives.

12. See the Special Edition of Panorama (the staff newspaper of Employment and Immigration Canada) "A New Job Creation Strategy" August 1983, for a discussion of the new programs and their objectives. See also D.A. Smith "The Development of Employment and Training Programs" in A.M. Maslove ed. How Ottawa Spends 1984: The New Agenda (Toronto: Methuen, 1984).

13. Expenditure data from Panorama "Special Edition."

14. Canada Works: Operations Manual p. 1.

15. The Canada Works Program was designed to work as a project-based initiative -- individual projects were to be from six to 52 weeks in length. Under the program, funds were provided to defray project costs including wages up to an average of \$325 per work-week with a ceiling of \$125 per work-week for costs other than wages. Groups eligible to submit applications for projects included:

- o organizations.
- o businesses.
- o individuals.
- o municipalities.
- o provincial and territorial governments.
- o federal government departments and agencies.

Provinces, territories and federal Government departments and agencies were required to designate a third party to act as the direct employer. Workers eligible to participate in Canada Works projects included the general unemployed, defined as:

- o laid-off workers.
- o U.I. recipients and exhaustees.
- o public assistance recipients.
- o students intending to return to school.
- o unemployed persons in areas designated by broader labour adjustment initiatives.
- o destitute individuals who were eligible to work in Canada but who were not eligible for any other type of social assistance.

Under the Canada Works Program, participants received either wages, through which they could build up insurable earnings and Unemployment Insurance eligibility; or, U.I benefits under Section 38 of the U.I. Act, in which case they used up their U.I. entitlement while on the project but received an enhanced benefit rate and an extended duration in benefits. Under the Canada Works Program, wages and benefits could be no less than the provincial territorial minimum wage and no more than the local prevailing wage for the relevant occupation.

Source: Treasury Board Minute 789136, July 14, 1983.

16. Ibid.

17. For a discussion of project driven allocations see D. Bricker "The Effect of Political Partisanship on the Allocation of Funds for Job Creation in the Province of Ontario" M.A. Thesis, Wilfrid Laurier University, 1984. A program that was project driven was LIP, see D. Blake "LIP and Partisanship: An Analysis of the Local Initiatives Program" Canadian Public Policy 2 Winter 1976 for a description.

18. A description of this process is provided in a number of Employment and Immigration Canada internal documents.

19. News Release Office of the Minister of Employment and Immigration, October 26, 1984.

20. Memo from Gaetan Lussier to Flora MacDonald "Canada Works Constituency Allocations" September 27, 1987 pp. 1-2.

21. This is supported by a series of documents obtained through the Access to Information Act that discuss

in detail how the Turner Government planned to allocate Canada Works funds in the fall of 1984.

22. This decision making route is supported by various data provided in the Canada Works Operations Guide and other Employment and Immigration Canada internal documents.

23. Memo from Lussier to Roberts "Canada Works 1984-85 Allocation Options" August 2, 1984 p. 2.

24. This is based on several Employment and Immigration internal documents.

25. Memo from Dale Stevenson to D.A. Haselgrave September 24, 1987 p. 2.

Chapter III: Hypotheses and Variables

1. Introduction

As noted in Chapters I and II, the dissertation seeks to determine the relationship (if any) between expenditures made under the Canada Works Program and political partisanship. To this end, Chapter III establishes appropriate hypotheses for determining the quantitative relationship between Canada Works allocations and political partisanship.

The Chapter is divided into five sections with each section providing additional refinement to the principal question asked in the dissertation (i.e. what is the relationship between political partisanship and the spatial distribution of Canada Works allocations?). The first section of the Chapter establishes our research design. The traditional approach to explaining variation in public expenditures is discussed and then rejected because of its inadequate representation of politics as an explanatory variable. A modified approach emphasizing political explanations of public expenditures is then posited as our research design.

The second section of the Chapter discusses definitions of the term "political partisanship." The section indicates that three distinct definitions or models of political partisanship are appropriate to the dissertation -- vote maximization, patronage, and vote optimization. Descriptions of the three models are provided.

Section Three of the Chapter further refines the dependent variable (Canada Works allocations) by dividing program allocations for both 1983 and 1984 into two segments each for a total of four segments. The division is made according to the level of discretion used in determining the size of program grants. Specifically, grants are divided according to whether they were allocated to ridings with labour surplus rates above or below the labour surplus trigger point for the appropriate year. The purpose of the segmentation is to facilitate more detailed analysis of those Canada Works grants for which government discretion was most important (i.e. grants larger than \$100,000).

Section Four of the Chapter defines the independent political variables used in the quantitative analysis. Each variable was selected because of its ability to represent parsimoniously a specific property of political partisanship. A brief description is provided of each political variable.

The Chapter concludes by linking the three models of partisanship and specific independent political variables in a series of appropriate test and null hypotheses. The test and null hypotheses outlined serve as the basis for the quantitative analysis presented in Chapters IV and V.

2. A Note on Research Design

As noted in Chapter I, scholars investigating the influence of political partisanship on public expenditures have typically followed a single research design. The research design uses a number of economic and political indicators to explain various aspects of public expenditures such as variation in their timing, mix or spatial distribution. [1] These explanations are usually derived from either bivariate or multivariate correlational analyses in which indicators representative of objective economic conditions (i.e. level of unemployment, poverty etc.) are correlated with expenditures from a specific government program to determine their respective influence on program outcomes. Political variables are only added to the analysis to explain residual variation in program expenditures not accounted for by the objective economic indicators. [2]

The purpose of this type of research design is to ensure that any variation in program expenditures that can be explained by economic indicators is explained by these indicators prior to testing for possible political explanations. While the design ensures that political explanations emerge separately from economic explanations, it also reduces the probability of political explanations becoming part of the analysis. This is due to the typically high degree of

collinearity among economic and political variables used in this type of analysis. [3]

Given these observations, the dissertation is based on the position that the traditional research design used for analyzing the relationship between economic and political factors and variation in government expenditures unnecessarily mutes the influence of political factors. In fact, there is justification for assuming that political explanations are important in their own right. [4]

The importance of political explanations can be understood from the perspective of various "rational actor" theories of political behaviour. The *sine qua non* of rational actor theory in liberal-democratic politics is that governments are greatly motivated by the desire to win re-election. [5] Government policies and expenditures are vehicles through which governments try to effect their re-election. Therefore, the search for an explanation of variation in government expenditures should begin with a thorough investigation of political explanations rather than economic explanations. Finally, political variables tell us more about the proximate tactical and strategic considerations which will influence how policy relates to elections. Economic factors may tell us more about the constraints on policy over long periods of time.

This theoretical position serves as the point of departure for the research design used in the dissertation.

Specifically, as noted in Chapter I, the dissertation seeks to test the validity of each of the three models of political partisanship relative to expenditures made under the Canada Works Program. Thus, independent political variables representative of each model of partisanship are correlated with Canada Works allocations for 1983 and 1984 to determine whether or not any of the three models adequately accounts for variation in the spatial distribution of program funds.

3. Models of Political Partisanship

For the purposes of the quantitative analysis, political partisanship is operationalized according to the three different types of partisanship defined by McNaughton and Winn. [6] Specifically, political partisanship is defined in the dissertation as vote maximization, patronage, and vote optimization. The validity of each individual model is tested using Canada Works allocations from 1983 and 1984 as the dependent variable. What follows is a brief description of each of the three models of partisanship.

A. Vote Maximization

Vote maximization is best described by comparing it to its more familiar analogue in microeconomics -- profit maximization. In microeconomics, a market is deemed to be

operating "efficiently" when all individuals, households and firms in the market behave "rationally" by seeking to maximize their marginal utility or profits. [7] If votes are treated as a political party's profits, then a party can only maximize its marginal utility by maximizing its electoral support. [8]

Therefore, the vote maximization model assumes that a government would behave rationally only if its policies (or public expenditures in this instance) are allocated for the purpose of maximizing its vote in the next election. [9] In the specific example of the Canada Works Program, this would require the government to allocate the greatest proportion of Canada Works funds to those constituencies that provided the strongest support to the governing party in the most recent general election. The motivation for this type of partisan allocation is that the best way to ensure a government's re-election is to "go to strength" and reward those voters who provided the strongest support in the most recent election. Nonetheless, it should be noted that past electoral support is only one indicator of where strength may be concentrated. Polls and other sources of strategic information may also be relevant.

B. Patronage

Patronage is generally described as a government taking care of its friends at the expense of its enemies. [10]

Beyond the baser examples brought forward in most popular discussions of patronage (typically the partisan allocation of government appointments and contracts), patronage can be defined more broadly to include the allocation of public monies under general government assistance programs. [11] Consequently, patronage would also include the government rewarding its supporters by directing disproportionate amounts of government funds and services to ridings that elected government members in the last election.

In the dissertation, the patronage model of partisanship can be said to have operated if government-held ridings systematically received larger grants under the Canada Works Program than opposition-held ridings. In addition, government ridings with cabinet ministers should be in an even more advantageous position.

C. Vote Optimization

Vote optimization is the most "strategic" model of partisanship tested in the dissertation. This is because vote optimization is the one model that is sensitive to the fact that winning over marginal voters in competitive ridings is more important to electoral victories than retaining core voters (an assumption common to both patronage and vote maximization models). [12]

Therefore, an "optimal" distribution of public expenditures would require that electoral competitiveness determine which ridings receive the largest share of program funds. The object for the government, according to the vote optimization model, is to win over marginal voters in marginal constituencies rather than maximize support by rewarding already friendly voters or punishing opponents.

D. Summary of Partisanship Models

The three models of political partisanship noted above -- vote maximization, patronage, and vote optimization -- represent the independent or explanatory factors tested in the dissertation. Therefore, all independent political variables used in the dissertation represent specific elements of one of the three models.

4. The Dependent Variable: Canada Works Allocations

As indicated in Chapter II, the general allocation of funds under the Canada Works Program in 1983 and 1984 constitutes the dependent variable in the dissertation. Also indicated earlier, discretionary Canada Works allocations were made by Employment and Immigration Canada on the basis of a "trigger-mechanism" within the Labour Surplus Rate -- constituencies with Labour Surplus Rates above 8% in 1983 and 6% in

1984 received additional funds beyond the basic \$100,000 allocation proportionate to their greater labour surplus. This indicates that the discretionary element of allocating Canada Works funds operated only on grants greater than \$100,000.

Since discretionary decisions were restricted to ridings with Labour Surplus Rates greater than the trigger point in 1983 and 1984, our dependent variable, for the purposes of analysis, is divided into four different segments. [13] Specifically, the statistical analysis separates Canada Works grants into:

- o Canada Works 1983 (all cases, N=282).
- o Canada Works 1983 (>\$100,000, N=169).
- o Canada Works 1984 (all cases, N=282).
- o Canada Works 1984 (>\$100,000, N=207).

The segmentation facilitates testing for partisanship among total allocations for both 1983 and 1984 as well as testing for partisan bias among discretionary allocations in both years.

5. The Independent Political Variables

To test the relationship between Canada Works allocations and the three models of partisanship described

above, a number of "political" factors essential to partisan calculus are used as independent or explanatory variables in the dissertation. All political variables were calculated separately for both the 1980 (the Liberal round of allocations in 1983) and the 1984 (the Progressive Conservative round of allocations in 1984) general elections. The political variables used as independent variables in the analysis include:

A. Party Incumbency

A series of "dummy" variables (scored zero, one) differentiated on the basis of individual ridings and the political party of the incumbent M.P. [14] This variable is the clearest indicator of which ridings would be treated as supporters or opponents by the government for the purpose of partisan program allocations.

B. Percentage of Party Vote

The actual percentage of votes garnered by each of the three major political parties, calculated by constituency. The percentage of vote by riding illustrates the relative strength of support or opposition for each political party in each riding.

C. Percentage Difference

The percentage of votes by constituency separating the vote for the party that eventually won the general election (overall) and their next closest competitor in that riding. This variable provides a rough indication of how competitive the governing party is in a specific riding through calculating their margin of victory or defeat in the most recent general election. An example of how "Percentage Difference" is derived is provided below for riding "X".

Figure 7

Percentage Difference: Riding X (1980 election)

<u>Party</u>	<u>Actual Votes</u>	<u>Percentage of Votes</u>
PCs =	10,000	(43%)
Liberals =	8,000	(34%)
NDP =	5,000	(22%)
Total Vote =	23,000	

Percentage Difference (9%) = Liberal vote (34%) minus PC vote (43%).

D. Rae's Index of Vote Fractionalization

Rae's Index of Vote Fractionalization is used to measure the overall electoral competitiveness of a specific riding. [15] Originally created to measure the level of "democracy" in multiparty political systems, Rae's Index is

interpreted in the dissertation on a continuum ranging from 0 for a single party dominated (uncompetitive) constituency to 1 for a multi-party (competitive) constituency. The formula from which Rae's Index is derived is:

Figure 8

Rae's Index of Vote Fractionalization

$$Fe = 1 - \left(\sum_{i=1}^n T_i^2 \right)$$

Fe = Rae's Index of Vote Fractionalization.
 n = The number of parties.
 T = Each party's share of the popular vote.

E. Cabinet Member

Ridings in which a Cabinet Minister is the incumbent have a symbolic importance to the government because their loss in a general election is often interpreted on election night as a decrease in the government's electoral momentum. In addition, the administrative abilities of some specific Cabinet members could be viewed by the government as being important to their ability to govern post-election.

Presence of a Cabinet member is scored as a dummy variable by constituency -- one if the incumbent is a Cabinet minister, zero if not.

F. Party Change

The most direct indicator of a riding's electoral volatility or competitiveness is whether it changed hands as a result of the last election. Party change in the dissertation is scored as a dummy variable -- 1 if the riding changed hands, 0 if there was no change. So, in one instance we see 1983 relative to change between the 1979 and 1980 general elections. In the other instance, we see 1984 relative to change between 1980 and 1984.

6. Hypotheses

To test the appropriateness of each of the three models of partisanship outlined previously, general hypotheses for each of the three models are presented below. Apart from the general hypotheses, specific statistical expectations based on the general hypotheses will be outlined for each of the three models.

A. Vote Maximization: Hypotheses

For the vote maximization model to be valid, we would expect to find that there is a statistically significant positive relationship between Canada Works allocations and the percentage of votes cast by riding for the governing party in the most recent general election. In other words, according

to the vote maximization definition of partisanship, those ridings in which the highest percentage of Liberal votes were cast in 1980 should have received the largest grants under Canada Works in 1983. For vote maximization to be valid for the 1984 allocation, ridings that cast the highest percentage of votes for the Progressive Conservative Party in 1984 should have received the largest Canada Works allocations in 1984.

The political independent variable most appropriate for testing these hypotheses is "Percentage of Party Vote." For vote maximization to be statistically valid, we must validate our test hypothesis by invalidating the following two null hypotheses repeated for both the 1983 and 1984 rounds of allocations:

1983 Canada Works Grants

i. Null Hypotheses: Percentage of Party Vote

Ho1. = There is a significant negative relationship between percentage of Liberal Party votes cast by riding in the 1980 general election and the spatial distribution of 1983 Canada Works grants. In other words, as the percentage of Liberal votes increases, the value of Canada Works grants decreases.

Ho2. = There is no significant relationship between Liberal votes cast by riding in the 1980 general election and the spatial distribution of 1983 Canada Works grants.

ii. Test Hypothesis: Percentage of Party Vote

H1 = There is a statistically significant positive relationship between percentage of Liberal votes cast by riding in the 1980 general election and the spatial distribution of 1983 Canada Works grants. In other words, as the percentage of Liberal votes

increase in individual ridings, so does the value of Canada Works grants.

1984 Canada Works Grants

The same null and test hypotheses as for the 1983 grants with percentage of Progressive Conservative votes in the 1984 general election substituted for Liberal votes in 1980, and 1984 Canada Works allocations substituted for 1983 allocations.

B. Patronage: Hypotheses

For the patronage model of partisanship to be valid, Canada Works grants must be shown to have been allocated to benefit ridings held by the governing party. The political independent variables most appropriate to this test are "Party Incumbency" and "Presence of a Cabinet Minister."

As noted earlier, Cabinet Ministers are electorally important to the governing party because their defeat early on election night may be interpreted as a loss of momentum which could negatively effect later voting patterns. In addition, individual ministers may be viewed by the government as important to their performance following the election.

For the patronage model to be valid, analysis must prove the test hypothesis by invalidating the appropriate null hypotheses. The null and test hypotheses for the patronage model are as follows:

1983 Canada Works Grants

i. Null Hypotheses: Party Incumbency

- Ho1. = There is a significant negative relationship between the incidence of ridings held by the Liberal Party following the 1980 general election and the spatial distribution of 1983 Canada Works grants. Put another way, Liberal ridings received smaller grants overall under the Canada Works program in 1983 than ridings held by opposition parties.
- Ho2. = There is no significant relationship between the incidence of ridings held by the Liberal Party following the 1980 general election and the spatial distribution of 1983 Canada Works grants.

ii. Test Hypothesis: Party Incumbency

- H1 = There is a significant positive relationship between the incidence of ridings held by the Liberal Party following the 1980 general election and the spatial distribution of 1983 Canada Works grants.

iii. Null Hypotheses: Cabinet Minister

- Ho3. = There is a significant negative relationship between presence of a Liberal Cabinet Minister and the spatial distribution of 1983 Canada Works grants.
- Ho4. = There is no significant relationship between presence of a Liberal Cabinet Minister and the spatial distribution of 1983 Canada Works grants.

iv. Test Hypothesis: Cabinet Minister

- H2 = There is a significant positive relationship between presence of a Liberal Cabinet Minister and the spatial distribution of 1983 Canada Works grants.

1984 Canada Works Grants

The same null and test hypotheses as for the 1983 grants with presence of a Progressive Conservative incumbent following the 1984 general election substituted for Liberal

incumbent, presence of a Progressive Conservative cabinet minister substituted for Liberal cabinet minister, and 1984 Canada Works allocations substituted for 1983 allocations as the dependent variable.

C. Vote Optimization: Hypotheses

Vote optimization is the most complex of the partisanship models addressed in the dissertation and is tested using the largest number of independent political variables. As noted earlier, the essence of the vote optimization model is that program funds are allocated strategically for the purpose of winning the support of marginal voters in marginal ridings in the next electoral contest.

In its simplest form, vote optimization requires the government to allocate public funds disproportionately to the most electorally competitive or volatile constituencies. Therefore, independent political variables sensitive to electoral competitiveness must be used to evaluate the relationship between the spatial distribution of Canada Works grants and the vote optimization model.

The independent political variables used to assess the degree of relationship between vote optimization and the spatial distribution of Canada Works grants are "Percentage Difference in Vote," "Rae's Index of Vote Fractionalization,"

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MicroD

and "Party Change." Appropriate test and null hypotheses for each variable are noted below.

1983 Canada Works Grants

i. Null Hypotheses: Percentage Difference

- Ho1. = There is a significant positive relationship between the size of the margin of victory or defeat by riding for the Liberals in 1980 and the spatial distribution of 1983 Canada Works grants.
- Ho2. = There is no significant relationship between the size of victory or defeat by riding for the Liberals in 1980 and the spatial distribution of 1983 Canada Works grants.

ii. Test Hypothesis: Percentage Difference

- H1 = There is a significant negative relationship between the margin of victory or defeat by riding for the Liberals in 1980 and the spatial distribution of Canada Works grants in 1983. Simply stated, the smaller the margin of victory or defeat for the Liberals in 1980 (i.e. the more competitive the riding), the larger the expected Canada Works grant in 1983.

iii. Null Hypotheses: Rae's Index

- Ho3 = There is a negative relationship between Rae's Index calculated by riding for the 1980 general election and the spatial distribution of Canada Works grants in 1983.
- Ho4 = There is no significant relationship between Rae's Index calculated by riding for the 1980 general election and the spatial distribution of 1983 Canada Works grants.

iv. Test Hypothesis: Rae's Index

- H2 = There is a significant positive relationship between Rae's Index calculated by riding for the 1980 general election and the spatial distribution of 1983 Canada Works grants. In other words, those riding's scoring highest on Rae's Index received the largest Canada Works grants.

v. Null Hypotheses: Party Change

- Ho5 = There is a significant negative relationship between the incidence of party change as a result of the 1980 general election and the spatial distribution of 1983 Canada Works grants.
- Ho6 = There is no significant relationship between the incidence of party change as a result of the 1980 general election and the spatial distribution of 1983 Canada Works grants.

vi. Test Hypothesis: Party Change

- H3 = There is a significant positive relationship between the incidence of party change as a result of the 1980 general election and the spatial distribution of 1983 Canada Works grants. Put another way, ridings that switched hands in the 1980 general election should have received larger Canada Works grants in 1983.

1984 Canada Works Grants

The same null and test hypotheses as for the 1983 grants with the appropriate political variables for 1984 substituted and 1984 grants used as the dependent variable.

7. Conclusion

The Chapter defines the terms and hypotheses necessary for a quantitative investigation of the central question in the dissertation. The next Chapter presents a univariate description of the data used in the dissertation and a bivariate correlational analysis of the various test and

null hypotheses. The following tables summarize the various test hypotheses.

Table 2

Summary of Test Hypotheses: 1983 Canada Works Allocations

	1983 All <u>Grants</u>	1983 Enhanced <u>Grants</u>
	Predicted	Predicted
<u>Model and</u> <u>Variable</u>		
Vote Maximization		
Liberal Vote	+	+
Patronage		
Liberal Incumbent	+	+
Liberal Cabinet	+	+
Vote Optimization		
% Vote Diff.	-	-
Rae's Index	+	+
Party Change	+	+

Note: "Predicted" equals the predicted direction of the relationship.

Table 3

Summary of Test Hypotheses: 1984 Canada Works Allocations

<u>Model and Variable</u>	1984 All <u>Grants</u>	1984 Enhanced <u>Grants</u>
	Predicted	Predicted
Vote Maximization		
PC Vote	+	+
Patronage		
PC Incumbent	+	+
PC Cabinet	+	+
Vote Optimization		
% Vote Diff.	-	-
Rae's Index	+	+
Party Change	+	+

Note: "Predicted" equals the predicted direction of the relationship.

Chapter 3: Endnotes

1. Bibliographical essays on policy output literature provide several examples of the traditional research design. Refer to J. Fenton and R. Chamberlayne "The Literature Dealing With the Relationships Between Political Processes, Socio-economic Conditions and Public Policies in the American States." Polity 1 Spring 1969 p.388; and, G. Boyne "Review Article: Theory, Methodology and Results in Political Science -- the Use of Output Studies." British Journal of Political Studies 15:4 1985 p.473; P. Sarangi "Determinants of Public Policy in a Comparative Perspective: A Review and a Suggestion" Indian Political Science Review 19: 1-2 1985 p.61. See the following for specific examples of policy output analysis: N. Beck "Parties, Administrations and American Macroeconomic Outcomes" American Political Science Review 76:1 1982 p.83; D. Blake "LIP and Partisanship: An Analysis of the Local Initiatives Program" Canadian Public Policy 2 Winter 1976 p.17; G. Broach. "Interparty Competition, State Welfare Policies, and Non-linear Regression" Journal of Politics 35 1973 p.737; C. Cnudde and D. McCrone "Party Competition and Welfare Policies in the American States" American Political Science Review 63 1969 p.858; R. Dawson and J. Robinson "Inter-party Competition, Economic Variables, and Welfare Policies in the American States" Journal of Politics 25 May 1963 p.265; T. Dye ed. Politics, Economics, and the Public: Policy Outcomes in the American States (Chicago: Rand McNally, 1966); T. Dye and V. Gray eds. The Determinants of Public Policy (Lexington: D.C. Heath, 1980); V. Gray "The Effect of Party Competition on State Policy, A Reformulation: Organizational Survival" Polity 7 Winter 1974 p.248; R. Hofferbert "The Relation Between Public Policy and Some Structural and Environmental Variables in the American States" American Political Science Review 60 1966 p.73; E. Jennings "Competition, Constituencies and Welfare Policies in the American States" American Political Science Review 73:1 1979 p.414; J. Munro "Highways in British Columbia: Economics and Politics" Canadian Journal of Economics 8 May 1975 p.192; I. Sharkansky and R. Hofferbert "Dimensions of State Politics, Economics, and Public Policy" American Political Science Review 63 1969; D. Spafford "Highway Employment and Provincial Elections" Canadian Journal of Political Science 14:1 March 1981 p.135; and, G. Wright "Interparty Competition and State Welfare Policy: When a Difference Makes a Difference" Journal of Politics 37 1975 p.796.

2. A recent example of this research design in operation is my own analysis "The Effect of Political Partisanship on the Allocation of Funds for Job Creation in the

Province of Ontario." M.A. Thesis, Wilfrid Laurier University, 1984.

3. For a discussion of this issue refer to B. MacNaughton "Public Finance for Political Profit: The Politics of Social Security in Canada 1942-1977." Ph.D Dissertation, Carleton University, 1980. See Chapter 4.

4. For a more thorough treatment of this question see S. Bennett and D. Bricker "The Interaction of Technical and Political Factors in the Allocation of Canada Works Funds in the Province of Ontario: A Preliminary Assessment." in O.P. Dwivedi and R. B. Woodrow eds. Public Policy and Administrative Studies Vol.2 (Guelph: Department of Political Studies, University of Guelph, 1985). The paper argues that administrative rules designed to account for economic considerations in program expenditures may themselves be influenced by political considerations.

5. Refer to Chapter I, notes 40-45, for sources on rational actor theories and politics.

6. B. MacNaughton and C. Winn "Economic Policy and Electoral Self Interest: The Allocations of the Department of Regional Economic Expansion" Canadian Public Policy 7 Spring 1981 p.318.

7. Introductions to this topic are available in R. Heilbroner and L. Thurow Economics Explained (Englewood Cliffs, New Jersey: Prentice-Hall, 1982); see chapter 15 "How Markets Work;" E. Mansfield Microeconomics: Theory and Application 3ed. (New York: W.W. Norton, 1979); and, E. Stokey and R. Zeckhauser A Primer for Policy Analysis (New York: W.W. Norton, 1978); see Chapter 15 "Achieving Desirable Outcomes."

8. The question of votes as the profits of liberal-democratic politics is discussed in R. Amacher et.al. eds. The Economic Approach to Public Policy (Ithaca: Cornell University Press, 1976); D. Hartle A Theory of the Expenditure Budget Process (Toronto: University of Toronto Press, 1976); M. Laver The Politics of Private Desires (Middlesex: Penguin, 1981); C. Schultze The Politics and Economics of Public Spending (Washington: The Brookings Institute, 1968); and, M.J. Trebilcock et.al. The Choice of Governing Instrument (Ottawa: Supply and Services Canada, 1982).

9. This position is by no means new to the study of politics. Seminal works that use this thesis as their point of departure from traditional political theory include A. Breton The Economic Theory of Representative Government (Chicago: Aldine, 1974); A. Downs An Economic Theory of Democracy (New York: Harper and Row, 1957); and, W. Niskanen

Bureaucracy and Representative Government (Chicago: Aldine-Atherton, 1971).

10. An excellent, comprehensive treatment of the issue of patronage from a Canadian perspective is J. Simpson Spoils of Power: The Politics of Patronage (Toronto: Collins, 1988). For analysis of "pork-barreling" (the term used to describe patronage in the United States) refer to J. Ferejohn Pork Barrel Politics (Stanford: Stanford University Press, 1974); T. Lancaster "Electoral Structures and Pork Barrel Politics" International Political Science Review 7:1 1986 p.67; K. Shepsle and B. Weingast "Political Preferences for the Pork Barrel: A Generalization" American Journal of Political Science 25:1 1981 p.96; D. Stockman "The Social Pork Barrel" The Public Interest 39 1975 p.3; and A. Wildavsky The Politics of the Budgetary Process (Boston: Little, Brown, 1964).

11. This broader definition of patronage is adopted from S.J.R. Noel "Leadership and Clientelism" in D. Bellamy et.al. eds. The Provincial Political Systems (Toronto: Methuen, 1976). Noel defines patronage as a form of "clientelism." Clientelism, according to Noel, "...delineates a general type of relationship between individuals that is often important, and sometimes even central, to the functioning of their society -- namely, a relationship based upon the roles of patron and client. Individuals in these roles are of unequal status and in control of unequal resources, yet are related through a personal understanding concerning certain mutually beneficial transactions. These typically involve the bestowal of material rewards or advantages, security, or access to opportunities, on the part of the patron, in return for his client's reciprocal bestowal of loyalty or service, not abstractly but in some specific context where these constitute exchangeable goods, as in politics, where they take the form of political support -- voting, persuading, campaigning, organizing for the patron or the patron's candidate." p.197. See also S. Borins and L. Brown Investments in Failure: Government Enterprises That Lost the Canadian Taxpayers Billions (Toronto: Methuen, 1986).

12. This position is based on arguments presented in M.J. Trebilcock et.al. The Choice of Governing Instrument (Ottawa: Minister of Supply and Services, 1982). Trebilcock et.al argue that political rationality relative to the choice of governing instruments can be explained as follows..."First, political rationality dictates that instruments be favoured that concentrate the benefits of policies on marginal voters and do not dispense those benefits over infra-marginal voters who are either so committed to the party in question or so alienated from it that the benefits have no effect on voting behaviour. Second, political rationality also dictates that

instruments be favoured that impose the costs of policies on infra-marginal voters, so that, again, the choice of instrument would not affect voting behaviour." p.29.

13. This approach was also used in the only other analyses of Canada Works allocations. See S. Bennett and D. Bricker "The Interaction of Technical and Political Factors in the Allocation of Canada Works Funds in the Province of Ontario: A Preliminary Assessment" in O.P. Dwivedi and R. B. Woodrow eds. Public Policy and Administrative Studies Vol.2 (Guelph: Department of Political Studies, University of Guelph, 1985); and, D. Bricker "The Effect of Political Partisanship on the Allocation of Funds for Job Creation in the Province of Ontario." M.A. Thesis, Wilfrid Laurier University, 1984.

14. "Dummy variables" are used in the dissertation to operationalize certain nominal level political properties essential to the analysis that normally would be inappropriate for higher-order multivariate research methods such as multiple regression. For a discussion of dummy variables and their use in multiple regression refer to E. Pedhazur Multiple Regression in Behavioral Research: Explanation and Prediction 2ed. (New York: Holt, Rinehart and Winston, 1982). See pp. 274-329.

15. D. Rae The Political Consequences of Electoral Laws (New Haven: Yale University Press, 1967). p.56.

Chapter IV: Univariate and Bivariate Analysis

1. Introduction

Chapter IV presents a univariate and bivariate analysis of the relationships between the three models of political partisanship -- vote maximization, patronage, and vote optimization -- and the spatial distribution of Canada Works grants in 1983 and 1984. The purpose of the Chapter is to lay groundwork for the more sophisticated multivariate analysis of these relationships presented in Chapter V.

The Chapter opens with a review of notable aspects of the Canada Works data itself. Univariate analysis reveals that Canada Works was a more generous program in 1984 when it was controlled by the Progressive Conservatives, than in 1983 when it was controlled by the Liberals. The Chapter also notes that the Progressive Conservative government's generosity occurred despite information indicating national unemployment had declined between 1983 and 1984.

Additional univariate analysis provides a preliminary illustration of the relationships between various independent political variables and the four segments of Canada Works data. Analysis of the logical (as opposed to statistical) relationship between relevant independent political variables and 1983 Canada Works grants is shown to support all three models of partisanship. Similar analysis of 1984 Canada Works allocations provides logical support for

two of the three partisanship models -- patronage and vote optimization.

Bivariate correlational analysis in the Chapter provides the first statistical test of the null and test hypotheses noted in Chapter III. Zero-order correlations between political variables and Canada Works allocations for 1983 indicate that both segments of 1983 Canada Works data support test hypotheses for the patronage and vote maximization models of partisanship. Similar analysis for the full array of 1984 Canada Works grants supports the test hypothesis for the vote optimization model, while analysis of enhanced grants for 1984 supports the vote maximization and vote optimization models. The Chapter concludes with tables illustrating the results of the bivariate analysis relative to the various test hypotheses.

2. Univariate Analysis

A. Introduction to Univariate Analysis

Analysis of the univariate distribution of variables used in the dissertation provides detailed information about their distribution and composition in addition to preliminary data regarding the logical validity of the various test and null hypotheses. [1] As noted earlier, inferences are made concerning the logic of the various null and test hypotheses.

These inferences are based on the distribution of the independent political variables according to the four categories of Canada Works data outlined previously. While technically founded in a rudimentary form of bivariate analysis, these inferences are logical rather than statistical and should not be interpreted as statistical tests of hypotheses.

B. Univariate Analysis: Canada Works Data

As shown in Table 4, there are a number of noteworthy differences in the univariate distribution of the specified segments of Canada Works data. First, the 1984 version of Canada Works under the Progressive Conservatives was a much richer program overall than Canada Works under the Liberals in 1983. Overall, the mean Canada Works grant per riding increased from \$392,635 in 1983 to \$732,400 in 1984 (up \$339,765).

Second, a larger number of ridings were eligible for enhanced Canada Works allocations in 1984 than in 1983. In 1983, 169 (59.9%) ridings received grants larger than the minimum \$100,000, while 207 (73.4%) were eligible in 1984. This represents an increase of 38 (13.5%) ridings from 1983 that received enhanced Canada Works grants in 1984.

Third, enhanced grants allocated to eligible ridings in 1984 were more generous than the enhanced grants allocated in 1983. Specifically, the mean 1983 enhanced grant was

\$588,302 while the mean enhanced grant for 1984 was \$949,257 (up \$360,955). Also worth noting, there was less variation among Canada Works grants for 1983 (standard deviation = \$739,866) than Canada Works grants for 1984 (standard deviation = \$744,272).

Taken together, these data indicate that the Canada Works Program was more generous in 1984 to a greater number of ridings than in 1983, and was particularly generous to those ridings eligible for enhanced grants.

The reason for the increased generosity of the Canada Works Program in 1984 over 1983 was twofold. First, the total constituency allocation component for Canada Works was considerably increased between 1983 and 1984. In 1983, \$129,608,000 was made available by the Liberal government for riding allocation compared to the \$180,811,000 (up \$51,203,000) made available by the Progressive Conservative government in 1984. Second, as noted earlier, the Labour Surplus Rate "trigger" was lowered from 8% in 1983 to 6% in 1984, so that more constituencies became eligible for enhanced Canada Works grants in 1984. [2]

An additional point concerning the distribution of Canada Works expenditures by riding, the increase in Canada Works constituency allocations in 1984 occurred even though the relative employment situation in Canada was improving. A comparison of the mean Labour Surplus Rates for 1983 (10.7%) and 1984 (9.8%) shows that mean Labour Surplus Rate overall

had dropped by nearly 1% during the period between Phase One and Two of Canada Works allocations. Moreover, Statistics Canada data indicate that the official unemployment rate in Canada dropped from 11.9% in 1983 to 11.3% in 1984. [3] These data show that there was either a perverse or nonexistent relationship between overall funding for the Canada Works Program and the objective needs of unemployed Canadians (in the aggregate). However, an alternative interpretation might be that the Progressive Conservative government was simply more sensitive to the needs of the unemployed than their Liberal predecessors.

Table 4
Univariate Distribution of Canada Works Grants

	1983 All (N=282)	1983 Enhanced (N=169)	1984 All (N=282)	1984 Enhanced (N=207)
Mean	392,635	588,302	732,400	949,257
Maximum	2,140,000	2,140,000	6,735,000	6,735,000
Minimum	100,000	103,000	100,000	111,000
Range	2,040,000	2,037,000	6,635,000	6,624,000
Standard Deviation	394,919	405,895	739,866	744,272

Source: 1983 Canada Works Data, Parliament of Canada
Ministerial Inquiry #5033, September 19, 1983.

1984 Canada Works Data, Minister of Employment and
 Immigration Canada *News Release 84-32* October 26, 1984.

C. Univariate Distribution of Political Variables

The univariate distribution of political variables, as arrayed in Table 5, indicates the distribution of each political variable used in the analysis based on the four segments of Canada Works allocations. The most interesting variations in distribution patterns emerge from a comparison of the total allocations and enhanced allocations by riding for both 1983 and 1984. These data provide some preliminary insight into the validity of the three partisanship models.

However, while some interesting information can be gleaned from this first stage of analysis, it should be noted that no correlational analytical techniques have been applied to the relationships indicated. These tests will be included as part of later bivariate and multivariate analysis of variations in Canada Works allocations.

i. Univariate Analysis of Political Variables
 and 1983 Canada Works Grants

Univariate analysis of relevant political variables and 1983 Canada Works allocations provides logical (as opposed to statistical) support for all three models of partisanship. The analysis considers the distribution of political variables across the two segments of Canada Works data for 1983.

As shown in Table 5, there is logical support for the vote maximization model because ridings qualifying for enhanced Canada Works allocations in 1983 on average cast a higher percentage (5.6% higher) of Liberal votes than ridings not qualifying for enhanced grants. There is also support for the patronage model because a greater percentage of Liberal ridings (73%) received enhanced grants compared to Progressive Conservative ridings (45%) and NDP ridings (50%). Furthermore, a majority (60%) of ridings held by Liberal cabinet ministers received enhanced as opposed to minimum grants.

Finally, as shown in Table 5, the model of partisanship that receives the weakest support from the analysis is

vote optimization. The subset of ridings that qualified for enhanced Canada Works grants in 1983 tended to be less competitive in the 1980 general election than ridings overall -- Rae's Index is lower (.01 lower for subset ridings, indicating less competitiveness overall) and the percentage of votes separating the Liberal Party from its closest rival in a specific riding tended to be larger (3.1% larger for subset ridings). However, one hypothesis of the three posited for optimization appears to be supported at the univariate level -- a majority (57%) of ridings that changed hands as a result of the 1980 general election received enhanced Canada Works grants in 1983.

ii. Univariate Analysis of Political Variables
and 1984 Canada Works Grants

Turning to the distribution patterns of relevant political variables and 1984 Canada Works grants, test hypotheses for two of the three models of partisanship are supported by the univariate distribution of political data -- vote optimization and patronage.

Vote optimization receives the strongest support of the three models from the data arrayed in Table 5. Ridings qualifying for enhanced Canada Works grants in 1984 were more competitive overall in the 1984 general election than ridings generally. This is indicated by a higher Rae's Index score (.01 higher) and a lower margin of victory or defeat (.6% lower) by riding for the governing party. More importantly,

however, a substantial majority (81%) of ridings that changed hands as a result of the 1984 general election received enhanced Canada Works grants in 1984.

In addition to vote optimization, the patronage model garners partial support from the data presented in Table 5. A majority (69%) of ridings held by Progressive Conservative cabinet ministers were eligible for enhanced Canada Works allocations in 1984. However, contrary to the other test hypothesis posited for the patronage model, a larger proportion of Liberal held ridings (85%) compared to Progressive Conservative (72%) and NDP (70%) ridings received enhanced grants in 1984.

Finally, the vote maximization model is not supported by the univariate distribution for 1984 data shown in Table 5. Ridings that received more than \$100,000 under Canada Works in 1984 cast on average a lower (4% lower) percentage of Progressive Conservative ballots in 1984 than other ridings.

Table 5

Univariate Distribution of Political Variables

	1983 All (N=282)	1983 Enhanced (N=169)	1984 All (N=282)	1984 Enhanced (N=207)
<u>Variable</u>				
Percentage Difference	%	%	%	%
Mean	27.2	30.3	20.8	20.2
Maximum	74.0	74.0	75.0	66.0
Minimum	0.0	0.0	0.0	0.0
Range	74.0	74.0	75.0	66.0
Std.Dev.	21.3	22.5	15.7	14.8
Rae's Index	Score	Score	Score	Score
Mean	.57	.56	.60	.61
Maximum	.70	.69	.76	.76
Minimum	.05	.05	.36	.38
Range	.65	.64	.40	.38
Std.Dev.	.86	.42	.66	.59
Liberal Vote	%	%	%	%
Mean	44.5	50.1	28.2	29.1
Maximum	95.0	95.0	57.0	57.0
Minimum	5.0	5.0	7.0	7.0
Range	90.0	90.0	50.0	50.0
Std.Dev.	20.2	21.0	11.1	11.1
PC Vote	%	%	%	%
Mean	33.1	27.0	52.9	48.9
Maximum	81.0	81.0	80.0	57.0
Minimum	3.0	3.0	10.0	10.0
Range	78.0	78.0	70.0	47.0
Std.Dev.	18.0	17.0	11.2	12.2

TABLE 5 CONTINUED...

	1983 All (N=282)	1983 Enhanced (N=169)	1984 All (N=282)	1984 Enhanced (N=207)
NDP Vote	%	%	%	%
Mean	20.0	19.6	18.9	18.2
Maximum	57.0	57.0	54.0	54.0
Minimum	0.0	0.0	2.0	2.0
Range	57.0	57.0	52.0	52.0
Std.Dev.	12.4	13.3	12.4	12.7
Liberal Ridings	#	#	#	#
Seats	146	106	40	34
Percent	51.8%	62.7%	4.2%	16.4%
PC Ridings	#	#	#	#
Seats	104	47	212	152
Percent	36.9%	27.8%	75.1%	73.4%
NDP Ridings	#	#	#	#
Seats	32	16	30	21
Percent	11.3%	9.5%	10.6%	10.1%
Party Change	#	#	#	#
Seats	49	28	118	95
Percent	17.4%	16.6%	41.8%	45.9%
Cabinet Ministers	#	#	#	#
Ministers	35	21	39	27
Percent	12.4%	12.4%	13.8%	13.0%

iii. Summary of Univariate Analysis

The univariate analysis of Canada Works allocation data shows that Canada Works was a more generous program in 1984 under the Progressive Conservatives than in 1983 under the Liberals. Notably, the increased generosity occurred in the face of reduced unemployment nation-wide. In other words, more ridings benefitted to a greater extent under Canada Works in 1984 than 1983 despite greater unemployment in 1983.

The univariate distribution of independent political variables according to the four segments of Canada Works data provides logical support for several of the test hypotheses. For 1983 Canada Works data, there is logical support for all three models of partisanship. For 1984 Canada Works data, there is support for two of the three models of partisanship -- patronage and vote optimization. The next section of the Chapter addresses these relationships using bivariate (i.e. correlational) analysis.

3. Bivariate Analysis

A. Bivariate Analysis: Introduction

To determine initially the degree of statistical relationship between the spatial distribution of Canada Works grants and the three models of partisanship, bivariate

correlational analysis was undertaken. [4] For more information on statistical techniques associated with bivariate analysis refer to Appendix A.

As noted in the discussion of univariate data, the relationships indicated between political variables and the distribution of Canada Works grants were not tested in terms of actual correlation. The following analysis indicates the degree of association between the independent political variables and segments of Canada Works allocations, the direction of the relationship (i.e. positive or negative), and whether or not the relationship is statistically significant. Again, the analysis is based on the null and test hypotheses for each of the three models of partisanship. The following are the test hypotheses for each of the models of partisanship (the matching null hypotheses are found in Chapter III).

o Vote Maximization:

H1 = There is a significant positive relationship between percentage of votes cast by riding for the party that won the previous election and the spatial distribution of Canada Works grants. In other words, as percentage of votes for the winning party increases, so should Canada Works allocations.

o Patronage:

H1 = There is a significant positive relationship between the incidence of ridings held by the governing party and the spatial distribution of Canada Works grants.

H2 = There is a significant positive relationship between the presence of a cabinet minister in a riding and the spatial distribution of Canada Works grants.

o Vote Optimization

- H1 = There is a significant negative relationship between the margin of victory or defeat by riding for the government party and the spatial distribution of Canada Works grants.
- H2 = There is a significant positive relationship between Rae's Index calculated by riding and the spatial distribution of Canada Works grants.
- H3 = There is a significant positive relationship between the incidence of party change and the spatial distribution of Canada Works grants.

B. Bivariate Analysis of 1983 Canada Works Grants and Political Variables

As shown in Table 6, zero-order correlational analysis of the relationships between individual political variables and the entire array of Canada Works allocations made in 1983, supports test hypotheses for both the vote maximization and patronage models of partisanship. These data do not support the test hypotheses for the vote optimization model.

The strongest support among the data presented in Table 6 is for the vote maximization model. Table 6 shows that a significant positive relationship ($R = .369$) exists between the percentage of votes cast for the Liberal Party in the 1980 general election and the spatial distribution of Canada Works grants for all ridings in 1983. In other words, as the percentage of Liberal votes increased in a riding, so did the size of its Canada Works allocation.

Additionally, Table 6 provides support for one of the test hypotheses for the patronage model. There is a

significant positive relationship between incidence of Liberal incumbency and the spatial distribution of total Canada Works allocations for 1983 ($R = .358$). These data also show that a significant negative relationship exists between the incidence of ridings held by the Progressive Conservative Party and the distribution of Canada Works grants in 1983 ($R = -.356$).

Also adding support to the patronage model, but not noted in the formal hypotheses, are the negative relationships between percentage of votes for the Progressive Conservatives ($R = -.339$), percentage of votes for the NDP ($-.326$), and 1983 constituency allocations. These data indicate that the higher the percentage of either Progressive Conservative or NDP votes in a riding in 1980, the lower its Canada Works allocation in 1983.

Finally, data in Table 6 support the various null hypotheses for the vote optimization model. There are no significant relationships between incidence of Liberal cabinet members and 1983 Program allocations, or incidence of party change and Program allocations. Moreover, while there are statistically significant relationships between percentage difference and the spatial distribution of 1983 allocations, and Rae's Index and 1983 allocations, both relationships are consistent with the null hypotheses.

Table 6

Zero-order Correlation: Political Variables 1980
and 1983 Canada Works Grants (All Ridings) [5]

<u>Variable</u>	<u>R</u>
Liberal Vote	.369*
Liberal Incumbent	.358*
P.C. Vote	-.339*
P.C. Incumbent	-.326*
Percentage Difference	.230*
Rae's Index	-.195*
NDP Vote	-.174*
NDP Incumbent	-.068
Cabinet Member	.096
Party Change	.006

Note: * equals $P < .05$

The data presented in Table 7 are zero-order correlations between independent political variables and enhanced Canada Works allocations for 1983. As with the full array of 1983 grants, correlational data for the independent political variables and enhanced grants for 1983 support test hypotheses for both the patronage and vote maximization models, and support the null hypotheses for the vote optimization model. However, unlike the full array of 1983 allocations, the spatial distribution of enhanced grants for 1983 provides stronger support for the patronage model than

the vote maximization model. Evidence supporting the patronage model results from the continued positive relationship between the incidence of Liberal incumbency and the distribution of enhanced grants (.329, down .029 from all grants), and is buttressed by the now significant positive relationship between the incidence of Liberal cabinet ministers and the distribution of enhanced grants (.156, up .060 from all grants). Additionally, the previous negative relationship between Progressive Conservative incumbency and Canada Works allocations is maintained for the enhanced grants (essentially unchanged).

Providing additional, but not hypothesized, evidence of the relationship between the patronage model and the spatial distribution of enhanced 1983 grants, are the significant negative relationships between enhanced 1983 grants and percentage of votes cast for the Progressive Conservative Party and NDP in 1980. These data indicate that the lower the opposition vote in a riding in 1980, the higher that ridings enhanced Canada Works grant in 1983.

Turning to the support for the vote maximization model, Table 7 shows the strength of the positive relationship between the percentage of votes cast by riding for the Liberal Party in the 1980 election and the distribution of enhanced grants in 1983 has weakened but remains statistically significant (.257, down .112 from all grants).

Finally, as for the full array of 1983 grants, the null hypotheses for the vote optimization model are supported by the correlational analysis. The relationship between the spatial distribution of enhanced grants for 1983 and both Rae's Index and percentage difference are in the direction predicted for the null hypotheses. In addition, there is no statistically significant relationship between incidence of party change in 1980 and the distribution of enhanced grants.

Table 7

**Zero-order Correlation: Political Variables 1980
and Canada Works Allocations 1983 (Enhanced)**

<u>Variable</u>	<u>R</u>
Liberal Incumbent	.329*
P.C. Incumbent	-.327*
Liberal Vote	.257*
NDP Vote	-.233*
Percentage Difference	.189*
P.C. Vote	-.167*
Cabinet Member	.156*
Rae's Index	-.150*
NDP Incumbent	-.042
Party Change	.036

Note: * equals $P < .05$

**C. Bivariate Analysis of 1984 Canada Works Grants
and Political Variables**

Table 8 illustrates the relationships between the independent political variables for the 1984 general election and the full array of 1984 Canada Works grants. Unlike data for the 1983 Canada Works grants, there are few statistically significant relationships for these data adhering to the test hypotheses. In fact, the correlational analysis presented in Table 8 supports only the vote optimization model.

Support for the vote optimization model is provided by the significant positive relationship between incidence of party change in 1984 and 1984 Canada Works allocations ($R = .174$). In other words, ridings that switched hands during the 1984 general election tended to receive higher Canada Works grants in 1984 than ridings that did not switch hands.

One other finding worth noting is the strong negative relationship between percentage of NDP votes cast in the 1984 federal election and variation in the spatial distribution of 1984 Canada Works grants ($R = -.273$). These data indicate that ridings that cast a higher percentage of NDP votes in 1984 systematically received lower Canada Works grants for the same year. This suggests that NDP ridings either had better employment situations than other ridings or they may have been punished by the Progressive Conservative government for voting NDP.

Table 8

Zero-order Correlation: 1984 Political Variables
and 1984 Canada Works Allocations (All Ridings)

<u>Variable</u>	<u>R</u>
NDP Vote	-.273*
Rae's Index	-.225*
Liberal Vote	.196*
Party Change	.174*
P.C. Vote	.088
NDP Incumbent	-.087
Liberal Incumbent	.060
Percentage Difference	-.042
Cabinet Member	.034
P.C. Incumbent	.021

Note: * equals $P < .05$

Table 9 presents correlational analysis of the relationships between the selected independent political variables and enhanced Canada Works allocations for 1984. As with the correlational analysis of the full array of 1984 grants, there are few statistically significant relationships between the dependent variable and the independent political variables. Moreover, one of the three significant relationships is in a different direction than predicted by the test hypotheses.

Taken together, the data presented in Table 9 support to some extent the vote maximization and vote optimization models of partisanship. Supporting the vote maximization model is the significant positive relationship between percentage of Progressive Conservative votes by riding and the spatial distribution of enhanced Canada Works grants ($R = .144$, up $.056$ from all grants). Supporting the vote optimization model is the continuing positive relationship between incidence of party change and variation in the distribution of enhanced Canada Works grants for 1984 ($R = .140$, down $.030$ from all grants).

Finally, the relationship between NDP vote and Canada Works grants for 1984 persists ($R = -.295$, up $-.022$), while the remaining data presented in Table 9 is either not statistically significant or indicates a relationship between an independent variable and the dependent variable that runs opposite to what was predicted by the test hypotheses.

Table 9

**Zero-order Correlation: 1984 Political Variables
and 1984 Canada Works Allocations (Enhanced)**

<u>Variable</u>	<u>R</u>
NDP Vote	-.295*
Rae's Index	-.291*
Liberal Vote	.177*
P.C. Vote	.144*
Party Change	.140*
NDP Incumbent	-.090
Cabinet Member	.073
P.C. Incumbent	.045
Liberal Incumbent	.019
Percentage Difference	-.011

Note: * equals $P < .05$

D. Summary of Bivariate Analysis

Tables 10 and 11 summarize the correlational analyses presented above and relate these data to the test and null hypotheses stated in Chapter III. Briefly, the correlational analysis for both segments of 1983 Canada Works allocations supports test hypotheses for the vote maximization and patronage models of partisanship. Analysis of both segments of 1984 grants supports test hypotheses for the vote

optimization model (total grants) and both vote optimization and vote maximization (enhanced grants).

Table 10

**Summary of Bivariate Correlational Analysis
For 1983 Total and Enhanced Canada Works Grants**

	1983 All (N=282)			1983 Enhanced (N=169)		
	P	O	Impt	P	O	Impt
Model and Variable						
Vote Maximization						
Liberal Vote	+	+	1	+	+	2
Patronage						
Liberal Incumbent	+	+	2	+	+	1
Liberal Cabinet	+	NS	--	+	+	3
Vote Optimization						
% Vote Difference	-	+	--	-	+	--
Rae's Index	+	-	--	+	-	--
Party Change	+	NS	--	+	NS	--

Note: P = Predicted Direction of Relationship.
O = Observed Direction of Relationship.
Impt = Relative Importance of Predicted Relationship to Explaining Variation in Dependent Variable.
NS = Not Statistically Significant

Table 11

Summary of Bivariate Correlational Analysis
For 1984 Total and Enhanced Canada Works Grants

Model and Variable	1984 All (N=282)			1984 Enhanced (N=207)		
	P	O	Impt	P	O	Impt
Vote Maximization						
PC Vote	+	NS	--	+	+	1
Patronage						
PC Incumbent	+	NS	--	+	NS	--
PC Cabinet	+	NS	--	+	NS	--
Vote Optimization						
% Vote Difference	-	NS	--	-	NS	--
Rae's Index	+	-	--	+	-	--
Party Change	+	+	1	+	+	2

Note: P = Predicted Direction of Relationship.
 O = Observed Direction of Relationship.
 Impt = Relative Importance of Predicted Relationship
 to Explaining Variation in Dependent Variable.
 NS = Not Statistically Significant

4. Conclusion

Chapter IV presents a univariate and bivariate statistical analysis of the relationships between Canada Works allocations for 1983 and 1984, and the three models of political partisanship. The univariate analysis, while not statistically conclusive, highlights some interesting features of the data. First, the Canada Works Program was more generous to a greater number of ridings when it was controlled by the Progressive Conservatives in 1984 than when it was controlled by the Liberals in 1983 -- despite decreased unemployment. Second, univariate analysis of 1983 Canada Works data provides logical support for all three models of partisanship while analysis of 1984 Canada Works grants logically supports only the patronage and vote optimization models.

The bivariate correlational analysis of the degree of association between the three models of partisanship and variation in Canada Works allocations indicates results similar to those noted in the univariate analysis. Specifically, the bivariate analysis concludes by noting that there are significant relationships between the vote maximization and patronage models of partisanship and variation in 1983 grants and significant relationships between variation in 1984 grants and the vote optimization model (total grants), and vote optimization and vote maximization models (enhanced grants).

In the following Chapter, the relationships between Program grants and political partisanship are examined in more detail using appropriate multiple regression models.

Endnotes: Chapter 4

1. For a discussion of univariate analytical techniques refer to S. Bennett The Quantitative Approach to Political Science: An Introduction (Queenston: The Edwin Mellen Press, 1986). See Chapter 7 "Univariate Analysis."

2. The ramifications of this change for the spatial distribution of Canada Works grants along with a discussion of possible political motives for the change are presented in S. Bennett and D. Bricker "The Interaction of Technical and Political Factors in the Allocation of Canada Works Funds in Ontario: A Preliminary Assessment." in O.P. Dwivedi and R. B. Woodrow eds. Public Policy and Administrative Studies Vol.2 (Guelph: Department of Political Studies, University of Guelph, 1985.)

3. Financial Post Report on the Nation 1988-89 p.94.

4. See S. Bennett The Quantitative Approach to Political Science: An Introduction (Queenston: The Edwin Mellen Press, 1986) pp. 314-317; and F. Kerlinger Foundations of Behavioral Research 3ed. (New York: Holt, Reinhart and Winston, 1986) pp.63-63. For a discussion of the computer techniques used in the bivariate analysis refer to N. Nie et.al. Statistical Package for the Social Sciences (New York: McGraw-Hill, 1975) see Chapter 18.2 "Subprogram Pearson Corr: Pearson Product Moment Correlation Coefficients" pp. 280-286.

5. Variation for the variables presented in Table 6, and later in Table 7, is approximately the same. This also applies for variables presented in Tables 8 and 9.

Chapter V: Multivariate Analysis

1. Introduction

Chapter V presents multiple regression analysis of the relationship between the three models of political partisanship tested in the dissertation and Canada Works allocations in 1983 and 1984. The Chapter begins with the presentation of a series of test multiple regression equations representing the various hypotheses outlined in Chapter III. This is followed by multiple regression analysis of the various test hypotheses. The Chapter concludes by indicating that multiple regression analysis of the relationship between the three models of political partisanship and 1983 Canada Works allocations provides support for both the patronage and vote maximization models of partisanship. Analysis of political partisanship and 1984 Canada Works allocations supports the vote optimization and vote maximization models of partisanship.

2. Test Regression Models

The purpose for using multiple regression in the dissertation emerges from the understanding that the relationship between political partisanship and public expenditures is complex and multivariate in nature. This complexity was the initial inspiration in the dissertation for creating three separate and distinct models of political partisanship.

Multiple regression, in this instance, allows us to assess the ability of individual and grouped independent political variables to explain the political motives (if any) behind the geographic variation, or spatial distribution, of Canada Works allocations.

In the following analysis, each model of political partisanship is tested using a multiple regression equation with Canada Works allocations as the dependent variable and a series of political indicators as independent or explanatory variables. However, while multiple regression represents the primary quantitative method of analysis in the dissertation, collinearity among the various independent political variables distorts some of the regression findings. Therefore, the interpretation of multiple regression results is clarified by removing one collinear independent political variable from the regressions in which collinearity is a concern. [1] The regressions in which collinearity most distorts the results are for the patronage and vote maximization models. For the patronage regressions, the variable "NDP incumbent" was removed from the analyses. For the vote maximization regressions, "percentage of NDP vote" was removed.

The reason for dropping the NDP variables from the analysis is that in both the 1983 and 1984 election campaigns the NDP were neither the government nor the government's major opposition. Therefore, the adjustment allows us to assess the maximum importance of incumbency and vote for the two major

parties without suffering the negative consequences of collinearity among independent variables. A full analysis of collinearity among all independent variables is provided in Appendix A of the dissertation. The individual test multiple regression models are presented in the following tables.

Table 12

**Test Multiple Regression Models
for 1983 Canada Works Allocations (All Grants)**

Vote Maximization Model

$$Y = a + b_1 x_1 + b_2 x_2 + e$$

where:

- o Y = All 1983 Canada Works allocations by riding.
- o a = Constant.
- o $b_1 x_1$ = Percentage of Liberal votes in 1980 general election.
- o $b_2 x_2$ = Percentage of Progressive Conservative votes in the 1980 general election.
- o e = Error term.

Patronage Model

$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + e$$

where:

- o Y = All 1983 Canada Works allocations by riding.
- o a = Constant.
- o $b_1 x_1$ = Liberal incumbent.
- o $b_2 x_2$ = Liberal cabinet member.
- o $b_3 x_3$ = Progressive Conservative incumbent.
- o e = Error term.

Vote Optimization Model

$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + e$$

where:

- o Y = All 1983 Canada Works allocations by riding.
- o a = Constant.
- o $b_1 x_1$ = Percentage difference.
- o $b_2 x_2$ = Rae's Index.
- o $b_3 x_3$ = Party change in 1980.
- o e = Error term.

Table 13

**Test Multiple Regression Models
for 1983 Canada Works Allocations (Enhanced Grants)**

Vote Maximization Model

$$Y = a + b_1 x_1 + b_2 x_2 + e$$

where:

- o Y = Enhanced 1983 Canada Works allocations by riding.
- o a = Constant.
- o $b_1 x_1$ = Percentage of Liberal votes in 1980 general election.
- o $b_2 x_2$ = Percentage of Progressive Conservative votes in the 1980 general election.
- o e = Error term.

Patronage Model

$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + e$$

where:

- o Y = Enhanced 1983 Canada Works allocations by riding.
- o a = Constant.
- o $b_1 x_1$ = Liberal incumbent.
- o $b_2 x_2$ = Progressive Conservative incumbent.
- o $b_3 x_3$ = Liberal cabinet member.
- o e = Error term.

Vote Optimization Model

$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + e$$

where:

- o Y = Enhanced 1983 Canada Works allocations by riding.
- o a = Constant.
- o $b_1 x_1$ = Percentage difference.
- o $b_2 x_2$ = Rae's Index.
- o $b_3 x_3$ = Party change in 1980.
- o e = Error term.

Table 14

**Test Multiple Regression Models
for 1984 Canada Works Allocations (All Grants)**

Vote Maximization Model

$$Y = a + b_1 x_1 + b_2 x_2 + e$$

where:

- o Y = All 1984 Canada Works allocations by riding.
- o a = Constant.
- o $b_1 x_1$ = Percentage of Liberal votes in the 1984 general election.
- o $b_2 x_2$ = Percentage of Progressive Conservative votes in the 1984 general election.
- o e = Error term.

Patronage Model

$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + e$$

where:

- o Y = All 1984 Canada Works allocations by riding.
- o a = Constant.
- o $b_1 x_1$ = Liberal incumbent.
- o $b_2 x_2$ = Progressive Conservative cabinet member.
- o $b_3 x_3$ = Progressive Conservative incumbent.
- o e = Error term.

Vote Optimization Model

$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + e$$

where:

- o Y = All 1984 Canada Works allocations by riding.
- o a = Constant.
- o $b_1 x_1$ = Rae's Index.
- o $b_2 x_2$ = Party change in 1984.
- o $b_3 x_3$ = Percentage difference.
- o e = Error term.

Table 15

**Test Multiple Regression Models
for 1984 Canada Works Allocations (Enhanced Grants)**

Vote Maximization Model

$$Y = a + b_1 x_1 + b_2 x_2 + e$$

where:

- o Y = Enhanced 1984 Canada Works allocations by riding.
- o a = Constant.
- o $b_1 x_1$ = Percentage of Liberal votes in the 1984 general election.
- o $b_2 x_2$ = Percentage of Progressive Conservative votes in the 1984 general election.
- o e = Error term.

Patronage Model

$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + e$$

where:

- o Y = Enhanced 1984 Canada Works allocations by riding.
- o a = Constant.
- o $b_1 x_1$ = Progressive Conservative cabinet member.
- o $b_2 x_2$ = Progressive Conservative incumbent.
- o $b_3 x_3$ = Liberal incumbent.
- o e = Error term.

Vote Optimization Model

$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + e$$

where:

- o Y = Enhanced 1984 Canada Works allocations by riding.
- o a = Constant.
- o $b_1 x_1$ = Rae's Index.
- o $b_2 x_2$ = Party change in 1984.
- o $b_3 x_3$ = Percentage difference.
- o e = Error term.

3. Multiple Regression Analysis of the Relationship Between Canada Works Allocations and Models of Partisanship

A. Multiple Regression Analysis of 1983 Canada Works Allocations (All Grants)

Table 16 shows multiple regression analysis of the three models of partisanship for the full array of Canada Works grants in 1983. Taken together, these data indicate there is support for the patronage and vote maximization models of partisanship.

As shown by the portion of Table 16 labelled "Patronage Model", "Liberal Incumbent" accounts for a significant amount of variation in the total array of Canada Works grants for 1983. This indicates that ridings held by the Liberal Party in 1983 tended to receive higher Canada Works allocations overall than ridings held by Progressive Conservative Party incumbents. Additionally, the section of Table 16 labelled "Vote Maximization Model" shows a significant relationship between "Percentage of Liberal Vote" and the spatial distribution of Canada Works grants. This indicates that ridings that cast a higher percentage of Liberal votes in 1980 also received larger Canada Works grants in 1983. Taken together, these data are linked to the same phenomenon -- support for the Liberal Party in the 1980 general election.

Turning to the "Vote Optimization" portion of Table 16, the only significant relationship appears to be between

"Percentage Difference" and Canada Works allocations. However, this relationship is in the opposite direction to the one hypothesized. However, the overall regression, as with the patronage and vote maximization regressions, is statistically significant.

To summarize, multiple regression analysis of the three models of partisanship relative to the spatial distribution of the full array of Canada Works grants for 1983, leads us to accept the test hypotheses for the patronage and vote maximization models. Conversely, we must accept the null hypotheses for the vote optimization model.

Table 16

Multiple Regression Analysis of
1983 Canada Works Allocations (All Grants)

Patronage Model

<u>Variable</u>	<u>Beta</u>	<u>T Test</u>	<u>Sig T</u>
Liberal Cabinet	-.0393	-.657	.5119
Liberal Incumbent	.2820	3.002	.0029
Conservative Incumbent	-.1144	-1.251	.2118
<hr/>			
Constant (Intercept)		4.866	.0000
 $R^2 = .1347$			
$P = < .05$			

Table 16 Continued ...

Vote Optimization Model

<u>Variable</u>	<u>Beta</u>	<u>T Test</u>	<u>Sig T</u>
Rae's Index	-.0265	-.275	.7837
Party Change	.0992	1.596	.1116
Percentage Difference	.2438	2.448	.0150
<hr/>			
Constant (Intercept)		1.082	.2801
R ² = .0619			
P = <.05			

Vote Maximization Model

<u>Variable</u>	<u>Beta</u>	<u>T Test</u>	<u>Sig T</u>
PC Vote	-.1213	-1.306	.1927
Liberal Vote	.2714	2.922	.0038
<hr/>			
Constant (Intercept)		1.712	.0880
R ² = .1411			
P = <.05			

B. Multiple Regression Analysis of 1983 Canada Works Allocations (Enhanced Grants)

Table 17 illustrates the results of multiple regression analysis of the relationship between the three models of partisanship and the spatial distribution of enhanced Canada Works grants for 1983. The results of this analysis support the test hypothesis for the vote maximization model and the null hypotheses for the vote optimization and patronage models. For the vote maximization model "Liberal Vote" is significantly related to enhanced Canada Works allocations for 1983. Again, this indicates that ridings that cast a higher percentage of Liberal votes in the 1980 election later received higher Canada Works allocations than other ridings.

Table 17
Multiple Regression Analysis of
1983 Canada Works Allocations (Enhanced Grants)

Patronage Model

<u>Variable</u>	<u>Beta</u>	<u>T Test</u>	<u>Sig T</u>
Cabinet Member	.0656	.861	.3906
liberal Incumbent	.1670	1.334	.1842
PC Incumbent	-.1776	-1.445	.1503
<hr/>			
Constant (Intercept)		5.585	.0000

$R^2 = .1230$

$P = < .05$

Vote Maximization Model

<u>Variable</u>	<u>Beta</u>	<u>T Test</u>	<u>Sig T</u>
PC Vote	.1135	.9000	.3693
Liberal Vote	.3483	2.762	.0064
<hr/>			
Constant (Intercept)		.905	.3666

$R^2 = .0705$

$P = < .05$

Table 17 Continued ...

Vote Optimization Model

<u>Variable</u>	<u>Beta</u>	<u>T Test</u>	<u>Sig T</u>
Rae's Index	-.0103	-.088	.9299
Party Change	.1164	1.436	.1528
Percentage Difference	.2221	1.837	.0680
<hr/>			
Constant (Intercept)		1.361	.1754
 $R^2 = .0478$			
$P = <.05$			

C. Multiple Regression Analysis of 1984 Canada Works Allocations (All Grants)

Table 18 shows multiple regression analysis of the three models of partisanship for all 1984 Canada Works allocations. The overall regressions for all three models are statistically significant, and there are also significant relationships between individual political variables and Canada Works allocations in all three regressions. These data support the test hypothesis for the vote optimization model, provide contradictory results for the vote maximization model, and support the null hypothesis for the patronage model.

The vote optimization portion of Table 18 shows both a significant negative relationship between "Percentage Difference" and Canada Works allocations, and a significant negative relationship between "Rae's Index" and Canada Works allocations. These data validate one of the test hypotheses for the vote optimization model and invalidate another. Additionally, the relationship between Canada Works allocations for 1984 and "Party Change" is nearly statistically significant which further supports the vote optimization model.

The significant negative relationship between Canada Works allocations and "Percentage Difference" indicates that higher grants went to riding's that in 1984 were won or lost by the Progressive Conservatives by a smaller margin of votes. In other words, the closer the vote between the Progressive

Conservatives and their next closest competitor in a riding, the higher that ridings Canada Works allocation in 1984. This indicates that the most competitive ridings for the Progressive Conservatives received higher Canada Works grants than other ridings in 1984. In addition, ridings that changed hands as a result of the 1984 election also appear to have received somewhat higher Canada Works allocations. However, the significant negative relationship between "Rae's Index of Vote Fractionalization" and Canada Works allocations for 1984, indicates that a riding's overall competitiveness is a negative predictor of that riding's Canada Works allocation. Simply stated, ridings that were less competitive overall in 1984 tended to receive higher Canada Works allocations. [2]

For the vote maximization model regression, it is interesting to note that the spatial distribution of 1984 Canada Works allocations is significantly related to both "Percentage of Progressive Conservative Votes" and "Percentage of Liberal Votes." These data are contradictory in that ridings that cast a higher percentage of either Liberal or Progressive Conservative votes tended to receive higher Canada Works allocations. While these data technically support the test hypothesis for the vote maximization model, they must be interpreted with caution because they may simply reflect the relationship noted in the vote optimization regression. In other words, ridings that were won by smaller margins may have split their votes between the Progressive Conservatives and

Liberals with the NDP a distant third. Indeed, this appears to have been the case in Quebec. A review of election returns for Quebec in 1984 indicates that the NDP consistently won less than ten percent of the votes in almost all of the province's 75 ridings. Indeed, east of Ontario the NDP ran a poor third to the Progressive Conservatives and Liberals.

In summary, these data support the null hypothesis for the patronage model and the test hypotheses for the vote maximization model and one element (nearly two) of the vote optimization model.

Table 18
Multiple Regression Analysis of
1984 Canada Works Allocations (All Grants)

Patronage Model

<u>Variable</u>	<u>Beta</u>	<u>T Test</u>	<u>Sig T</u>
PC Cabinet	.0331	.543	.5878
Liberal Incumbent	.1460	1.753	.0806
PC Incumbent	.1153	1.373	.1709
<hr/>			
Constant (Intercept)		4.015	.0001

$R^2 = 0.135$

$P = <.05$

Vote Maximization Model

<u>Variable</u>	<u>Beta</u>	<u>T Test</u>	<u>Sig T</u>
Liberal Vote	.2990	4.628	.0000
PC Vote	.2247	3.478	.0000
<hr/>			
Constant (Intercept)		-1.860	.0639

$R^2 = .0825$

$P = <.05$

Table 18 Continued...

Vote Optimization Model

<u>Variable</u>	<u>Beta</u>	<u>T Test</u>	<u>Sig T</u>
Rae's Index	-.5467	-6.550	.0000
Party Change	.1140	1.949	.0523
Percentage Difference	-.4139	-4.758	.0000
<hr/>			
Constant (Intercept)		7.431	.0000
 $R^2 = .1599$			
$P = < .05$			

D. Multiple Regression Analysis of 1984 Canada Works Allocations (Enhanced Grants)

Table 19 provides the results for the multiple regression analysis of the three models of partisanship and enhanced Canada Works grants for 1984. These data closely resemble the relationships noted for the full array of 1984 grants in that they support the null hypotheses for the patronage model, and support the test hypotheses for the vote maximization model and one element of the vote optimization model.

As with the multiple regression analysis of all 1984 Canada Works grants, the full regression for the patronage model, while not statistically significant, supports the null hypotheses. On the other hand, multiple regression analysis of the vote optimization model indicates that both "Percentage Difference" and "Rae's Index" are negatively related to the spatial distribution of enhanced Canada Works grants. Finally, regression analysis of the vote maximization model shows significant relationships between Canada Works allocations and percentage of Progressive Conservative and Liberal vote.

Notably, however, when enhanced grants for 1984 are examined on their own, there is increased association with Rae's Index ($\beta = -.5790$, up $.0323$ from all grants) and decreased association with Percentage Difference ($\beta = -.3996$, down $.0143$ from all grants). This suggests that

competition between the Progressive Conservative Party and their next closest competitor in individual ridings has less explanatory power relative to the enhanced grants for 1984 than it does for the full array of 1984 grants. While this may be the case, the regression analysis still supports one of the test hypotheses for the vote optimization model of partisanship.

For the vote maximization model, the results noted for the total number of 1984 grants continue to apply. However, the relationship between "Percentage Progressive Conservative Vote" and Canada Works allocations has declined slightly, while the relationship between "Percentage Liberal Vote" and Canada Works allocations has increased slightly. As noted previously, this phenomena is best explained in terms of competitiveness between the two major parties in ridings in which the NDP ran a distant third.

Table 19
Multiple Regression Analysis of
1984 Canada Works Allocations (Enhanced Grants)

Patronage Model

<u>Variable</u>	<u>Beta</u>	<u>T Test</u>	<u>Sig T</u>
PC Cabinet	.0699	.982	.3273
PC Incumbent	.1187	1.144	.2541
Liberal Incumbent	.1186	1.149	.2519
<hr/>			
Constant (Intercept)		4.569	.0000

$R^2 = .0128$

$P = >.05$

Vote Maximization Model

<u>Variable</u>	<u>Beta</u>	<u>T Test</u>	<u>Sig T</u>
PC Vote	.2746	3.696	.0003
Liberal Vote	.2977	4.006	.0001
<hr/>			
Constant (Intercept)		-1 4.129	.1595

$R^2 = .0921$

$P = <.05$

Table 19 Continued...

Vote Optimization Model

<u>Variable</u>	<u>Beta</u>	<u>T Test</u>	<u>Sig T</u>
Rae's Index	-.5790	-6.410	.0000
Party Change	.0858	1.305	.1933
Percentage Difference	-.3996	-4.311	.0000
<hr/>			
Constant (Intercept)		7.530	.0000
R' = .1850			
P = <.05			

4. Conclusion

Tables 20 and 21 provide a summary of the results for the multiple regression analysis relative to the three models of partisanship and independent political variables within each of the models. Taken together, the tables indicate that multiple regression analysis of the relationship between the models of political partisanship and 1983 Canada Works allocations provides support for both the patronage and vote maximization models of partisanship. Analysis of political partisanship and 1984 Canada Works allocations supports the vote optimization and vote maximization models of partisanship. The following Chapter concludes the dissertation by noting the implications of these findings relative to the Canada Works Program as discussed in Chapter Two, and the theoretical discussion presented in Chapter One.

Table 20

**Summary of Multiple Regression Analysis
for 1983 Total and Enhanced Canada Works Grants**

Model and Variable	1983 All (N=282)		1983 Enhanced (N=169)	
	<u>P</u>	<u>O</u>	<u>P</u>	<u>O</u>
Vote Maximization				
Liberal Vote	+	+	+	+
Patronage				
Liberal Incumbent	+	+	+	NS
Liberal Cabinet	+	NS	+	NS
Vote Optimization				
Percentage Difference	-	+	-	NS
Rae's Index	+	NS	+	NS
Party Change	+	NS	+	NS

Note: P = Predicted direction of relationship.
 O = Observed direction of relationship.
 NS = Not statistically significant.

Table 21

**Summary of Multiple Regression Analysis
for 1984 Total and Enhanced Canada Works Grants**

Model and Variable	1984 All (N=282)		1984 Enhanced (N=207)	
	<u>P</u>	<u>O</u>	<u>P</u>	<u>O</u>
Vote Maximization				
PC Vote	+	+	+	+
Patronage				
PC Incumbent	+	NS	+	NS
PC Cabinet	+	NS	+	NS
Vote Optimization				
Percentage Difference	-	-	-	-
Rae's Index	+	-	+	-
Party Change	+	NS	+	NS

Note: P = Predicted direction of relationship.
 O = Observed direction of relationship.
 NS = Not statistically significant

Chapter 5: Endnotes

1. See P. Kennedy A Guide to Econometrics 2ed. (Cambridge: MIT Press, 1985). Chapter Five "Violating Assumption Five: Multicollinearity."

2. Rae's Index of Vote Fractionalization is a somewhat distorted measure of electoral volatility in the Canadian situation given its sensitivity to the "overall" competitiveness of the political unit being examined. As noted in Chapter III, Rae's Index is sensitive to both the number of parties competing in an election and their relative share of the vote. In the Canadian situation, this means that Rae's Index mostly measures the competitiveness of third parties in ridings. Therefore, situations in which the first and second parties in a riding are in a tight race but the third party is well behind, produce a lower Rae's Index score (i.e. not competitive). Conversely, situations in which the second and third parties are competitive with each other but the first party is winning by a large margin, would generate a higher Rae's Index score (i.e. competitive). This indicates that, in a practical sense, Rae's Index is an inadequate measure of an individual riding's security for the governing party. For a more detailed discussion of this issue see D. Gross "Units of Analysis and Rae's Fractionalization Index" Comparative Political Studies 15:1 1982 p.85.

Chapter VI: Conclusions

1. Introduction

The Chapter reviews the main arguments presented in the dissertation, reiterates our major research findings, discusses the implications of these findings, and suggests some directions for future research. In summary, the dissertation shows that political partisanship is related to the spatial distribution of expenditures made under the Canada Works Program in 1983 and 1984. Specifically, under a Liberal government in 1983, the spatial distribution of Canada Works allocations is related to a political investment strategy based on patronage. Under a Progressive Conservative government in 1984, the spatial distribution of Canada Works allocations is related to a political investment strategy based on vote optimization. In both cases, a secondary strategy of vote maximization appears to be linked to the major strategy.

2. Review of Analysis and Findings

As stated in Chapter I, the purpose of the dissertation was to analyze statistically the relationship between political partisanship and allocations made under the federal Canada Works Program in 1983 and 1984. As such, Chapter I positioned the dissertation in the field of political science as a statistically-based case study of public policy-making

in Canada. This was accomplished through a review and critique of the relevant political science and public policy literature.

In addition, Chapter I critically discussed traditional methods of analyzing the public policy-making process. The Chapter noted that analysis of the policy-making process has typically focussed on the linkage between a specific (and variable) set of policy determinants (political, socio-economic, or both) and a policy output or outputs. This type of policy analysis normally pits economic variables and political variables against one other to determine their relative ability to explain variation in policy outputs. Chapter I noted there are three flaws common to this method of policy analysis, limited theoretical content or relevance, imprecise definition of political variables, and a general lack of importance attributed to the role of politicians in determining the content of policy outputs.

To deal with the first flaw (limited theoretical content or relevance), Chapter I indicated that, as political scientists, our primary concern should be to focus first on theories based on political determinants to see how sound an explanation of policy-making they will support. Then, once an understanding of the relationship between politics and policy is reached, we can start to unravel the complex, historical effects of economic variables on both political and

policy variables. The dissertation focussed on the first stage of this research agenda.

The solution to the second problem (imprecise definition of political variables) is dealt with in Chapter I by adopting a narrow view of politics that is more easily recognized as political. Specifically, explanatory variables included in the statistical analysis of spatial variation among Canada Works expenditures focussed exclusively on electoral indicators such as party incumbency and electoral competitiveness.

The third problem (lack of importance attributed to the role of politicians in determining the content of policy outputs) was addressed in Chapter I by noting that analysis of policy-making must begin with a clear understanding of the motives of those who make policy; specifically, in this instance, politicians. Therefore, the dissertation adopted an "individualist" view of the state and politics.

While the dissertation accepted much of what is contained in the individualist view of politics, Chapter I also indicated that the individualist perspective does not completely describe the behaviour of politicians in the policy-making process. A more accurate description of how politicians behave involves the idea of investment. Politicians, in an effort to develop an exchange relationship with a winning voting coalition, make policy decisions to benefit certain electoral groups with the hope that on election day

their policy will be remembered and members of the beneficiary groups will support them. In other words, the government "invests" in certain constituencies in the belief that those who are assisted will reciprocate the favour on election day. This concept of political investment was a central feature of the dissertation.

To test for the existence of various political investment strategies relative to the allocation of grants under the Canada Works Program in 1983 and 1984, the dissertation adopted the taxonomy of political partisanship outlined by Macnaughton and Winn. Each type of political partisanship noted by Macnaughton and Winn -- vote maximization, vote optimization, and patronage -- constituted a specific political investment strategy for investigation. The dissertation used these three political investment strategies as the basis for analyzing the relationship between political partisanship and allocations made under the Canada Works Program in 1983 and 1984.

As noted at the end of Chapter I, the dissertation used various quantitative analytical techniques to test the relationship between the three models of political partisanship and the spatial distribution of grants made under the Canada Works Program. Each Chapter in the dissertation presented an increasingly complex quantitative analysis of the relationship between political partisanship and the spatial distribution of Canada Works grants. The exception to this

was Chapter II, which provided a brief description of the dependent variable in the analysis; expenditures made under the Canada Works Program. Chapter II opened with a short review of the political and economic climate that led to the creation of the Canada Works Program. This was followed by a brief discussion of the history of direct job creation programs in Canada. Further sections of Chapter II described the Canada Works Program as conceived by the Liberal government in 1983, the planned restructuring of Canada Works under the Liberals in 1984, and the actual restructuring as implemented by the newly elected Progressive Conservative government in 1984. The Chapter concluded with a comparison of allocations made under the Canada Works Program in 1983 and 1984 broken out by province. The comparison indicated the Canada Works Program under the Liberals in 1983 concentrated funds in Central Canada where they would provide the Liberal Party with the greatest electoral benefit. Conversely, Canada Works allocations made in 1984 under the Progressive Conservatives moved funds away from Central Canada to Alberta and British Columbia where they would provide political benefit to the incumbent Progressive Conservative Party.

Chapter III introduced explanatory variables and test hypotheses to the dissertation. The Chapter reviewed the term "political partisanship" and defined it as either patronage, vote maximization, or vote optimization. In addition, the Chapter introduced the independent political

variables used in the quantitative analysis. Each variable was selected for the analysis because of its ability to represent parsimoniously a specific property of political partisanship. Chapter III concluded by linking the three models of political partisanship described and specific independent political variables in a series of test and null hypotheses. The test and null hypotheses served as the basis for the quantitative analysis presented in Chapters IV and V.

Chapter IV presented a univariate and bivariate analysis of the relationships between the three models of political partisanship and the spatial distribution of Canada Works grants in 1983 and 1984. Most notably, zero-order correlations between political variables and Canada Works allocations for 1983 indicated there was statistical support for the patronage and vote maximization models of partisanship. Similar analysis for the full array of 1984 Canada Works grants supported the vote optimization model of partisanship, while analysis of enhanced grants for 1984 supported both the vote optimization and vote maximization models of partisanship.

The most complex quantitative analysis undertaken in the dissertation followed in Chapter V which presented multiple regression analysis of the relationship between the three models of political partisanship and Canada Works allocations in 1983 and 1984. Chapter V concluded by indicating that multiple regression analysis of the relationship

between the models of political partisanship and 1983 Canada Works allocations provides support for both the patronage and vote maximization models of partisanship. Analysis of political partisanship and 1984 Canada Works allocations supports the vote optimization and vote maximization models of partisanship.

3. Implications of Findings

Taken together, quantitative results presented in the dissertation indicate that different political investment strategies fit the different political situations of the Liberal and Progressive Conservative governments. In 1983, Canada Works allocations were made by a Liberal government approaching the end of its election cycle and running behind its major opposition in public support. In this situation, it appears the Liberals opted for a political investment strategy for the Canada Works Program based on patronage. Specifically, ridings held by Liberal incumbents were rewarded for their support by receiving larger Canada Works allocations than ridings held by opposition parties. In addition, ridings that cast a higher percentage of ballots for the Liberal Party in 1980 also received larger Canada Works allocations. Together, these data are linked to the same phenomenon -- support for the Liberal Party in the 1980 general election.

Conversely, in 1984, the Progressive Conservative government had just come to power with the largest majority in Canadian history. During the honeymoon period that traditionally follows an election victory, the Mulroney government appears to have opted for a political investment strategy for Canada Works allocations based on vote optimization. Ridings won or lost by the Progressive Conservatives in the 1984 general election by a smaller margin of votes received larger Canada Works allocations than other ridings. Stated another way, ridings that were more competitive in the 1984 election benefitted disproportionately more under the Progressive Conservative's version of the Canada Works Program than ridings that were less competitive. In addition, ridings that cast a higher percentage of either Progressive Conservative or Liberal votes also tended to receive higher Canada Works allocations. As noted earlier, these data are reflective of the relationship noted in the vote optimization regression. Ridings east of Ontario that were won by smaller vote margins tended to split their votes between the Progressive Conservatives and Liberals with the NDP a distant third choice.

The major question that emerges from these findings concerns the different political investment strategies selected by the Liberals and Progressive Conservatives. In other words, why did the Liberals adopt a patronage strategy relative to the Canada Works Program and the Progressive

Conservatives adopt a vote optimization strategy? Possible explanations point to two additional independent variables that could be included in future explanatory models of the policy-making process. The first explanation relates to experience in government, the second relates to the electoral cycle.

The first explanation, experience in government, suggests that incumbent parties have a better understanding of how to use the public resources available to them (e.g. discretionary public expenditures, government contracts, and appointments to government bodies) to ensure their re-election. The Trudeau Liberals, who were in power essentially uninterrupted between 1968 and 1984, clearly had more experience in government when they made their Canada Works allocations than the neophyte Progressive Conservatives. When it came to distributive policy-making (e.g. the Canada Works Program), our quantitative analysis shows the Liberals adopted a patronage investment strategy. On the other hand, the Progressive Conservatives, who had been in office for only a month when they made their decision about Canada Works allocations, opted for a vote optimization investment strategy. Together, these data indicate that a patronage investment strategy may be the choice for experienced governments while less experienced governments may prefer a vote optimization strategy.

The second possible explanation for our results relates to the electoral cycle. In the context of the Canada Works Program, this suggests that because the Liberals were at the end of their electoral cycle and the Progressive Conservatives were at the start of their cycle, different political investment strategies marked the spatial distribution of Program allocations. This indicates that governments nearing an election may adopt a different political investment strategy relative to distributive policy-making than newly elected governments.

In summary, our findings suggest two independent variables for future policy output models. An investigation of the influence of experience in government and stages in the electoral cycle on policy outputs would provide additional information on how political investment strategies influence public policy-making.

4. Limitations of the Research and Challenges for Future Research

Specific limitations to the current research constitute, in addition to what was mentioned above, a future research agenda. As such, the following represents both a recognition of areas where the dissertation may fall short, and a challenge to those interested in future research on a similar topic.

The first limitation is one that has plagued all researchers interested in systematically analyzing public policy-making -- a lack of quantifiable data. In this regard, the dissertation has benefitted in large measure from serendipity. A Minister's response to a question in the House of Commons and a press release from another Minister provided the data necessary to create our dependent variable.

However, data for the independent variables used in the quantitative analysis was limited to annual reports from Elections Canada. While these data provided some indication of the partisan political factors that may influence a government's decision-making, they furnish a limited picture of the strategic material (e.g. private polling data, focus group analysis, reports from regional and local party organizers) that generally fits into a party's electoral strategy. In fact, the nearer a government gets to the end of its election cycle, the less likely it is to use information from the previous election as the basis for its electoral strategy. This suggests the political factors used in the dissertation may have been more representative of the strategy of the 1984 Progressive Conservative government than they were of the strategy for the 1983 Liberal government.

Apart from difficulties with the independent variables used in the dissertation, there are at least two additional sets of independent variables (beyond those already mentioned) that might be included in future policy output

research. The first set of variables are those representative of socio-economic factors that influence policy-making. As noted in Chapter I, while socio-economic variables provide limited information about the motivations of those making policy, they do represent over the longer-term the boundaries within which public policy is made. For example, the recent shift toward deficit reduction in the United States has had a profound impact on policy-making in Canada. Factors such as these shape the longer-term nature of policy outputs in Canada. [1]

The second set of independent variables that might be included in future policy outputs research represent the influence of the other important actors in the policy-making process -- bureaucrats. Bureaucrats play an important role in the policy-making process because they advise politicians on policy options and implement all policy decisions. As noted in Chapter I, scholars who subscribe to the individualist view of the state also believe that bureaucrats pursue their own self-interested agenda (e.g. expansion of their department's budget and prestige) in policy-making. As such, the pursuit of bureaucratic influence in policy-making suggests a set of explanatory variables that has seldom been pursued by policy-scholars.

The obstacle blocking further investigation of bureaucratic hypotheses is a lack of quantifiable data. At least one scholar has attempted to address this problem but

was limited to proxies of the bureaucratic agenda such as evidence of incrementalism in non-military government expenditures. [2] We approached this issue in the dissertation by providing through documentary evidence some insight into the administrative decision-making process surrounding the Canada Works Program (see Chapter II). This, however, did not permit bureaucratic variables to be used in the quantitative analysis. As such, a systematic investigation of the influence of the bureaucratic agenda on policy-making also constitutes an important challenge for future research.

5. Conclusion

In the final analysis, the dissertation raises more questions about the policy-making process in Canada than it answers. Nonetheless, the dissertation does provide insight into the influence of political partisanship on a limited set of policy outputs. Specifically, our quantitative analysis indicates that political partisanship is related to the spatial distribution of allocations under the Canada Works Program in both 1983 and 1984. Under the Liberals in 1983, the spatial distribution of Canada Works allocations is related to a political investment strategy based on patronage. Under the Progressive Conservatives in 1984, the spatial distribution of Canada Works allocations is related to a political investment strategy of vote optimization. In both

cases, a secondary strategy of vote maximization appears to be linked to the major strategy cited. Together, these findings indicate that partisan political factors did, in at least two instances, play a role in federal policy-making.

Endnotes: Chapter VI

1. There is also some justification for including socio-economic variables that may themselves be quasi-political in nature. An example of this relative to the Canada Works Program is the "Labour Surplus Rate" which was used to calculate the actual program allocations for individual ridings. The position taken in the dissertation is that the inclusion of such variables in the current analysis may mask important political relationships in the same fashion as other socio-economic variables. Therefore, "Labour Surplus Rate" was excluded from the formal regressions discussed in the dissertation.

Nonetheless, inclusion of "Labour Surplus Rate" in the regression analysis yields some interesting results:

1983 Canada Works Allocations:

- o Even with the inclusion of Labour Surplus in the various regressions, statistical support for the vote optimization models emerges.

1984 Canada Works Allocations:

- o There is a significant negative relationship between "Liberal Vote Percentage" and Canada Works allocations. This may indicate the presence of a "punishment" model of political partisanship.

Again, these results are worthy of future investigation and as such constitute, in addition to the variables previously mentioned, a challenging research agenda.

2. D. Swank "The Political Economy of Government Domestic Expenditures in the Affluent Democracies" American Journal of Political Science 32 1988 p.1120.

Appendix A: Statistical Methods

1. Bivariate Analysis

Bivariate correlational analysis in the dissertation utilizes Pearson's Product-Moment Correlation Coefficient, or Pearson's r . Pearson's r is typically used to indicate the degree of zero-order correlation between two variables prior to engaging in more sophisticated multivariate analysis such as multiple regression. The formula from which Pearson's r is derived is presented below.

Figure 9

Pearson's Product-Moment Correlation Coefficient [1]

$$r = \frac{\sum_{i=1}^N (X_i - \bar{X})(Y_i - \bar{Y})}{\left\{ \left[\sum_{i=1}^N (X_i - \bar{X})^2 \right] \left[\sum_{i=1}^N (Y_i - \bar{Y})^2 \right] \right\}^{1/2}}$$

where X_i = i th observation of variable X
 Y_i = i th observation of variable Y
 N = number of observations
 $\bar{X}$ = $\sum_{i=1}^N X_i / N$ = mean of variable X
 $\bar{Y}$ = $\sum_{i=1}^N Y_i / N$ = mean of variable Y

Pearson's r , which is calculated based on ordered pairs of results between two variables, is interpreted on a continuum ranging between +1 and -1. A Pearson's r of +1 indicates that two variables have perfect positive relation, 0 indicates no discernable relation, and -1 indicates perfect negative relation. [2]

Analysis of the statistical significance of Pearson's r in the dissertation is based on the Student's t distribution generated in the following manner. [3]

Figure 10

Student's T Test of Statistical Significance [4]

$$t = r \sqrt{\frac{n - 2}{1 - r^2}}$$

In accordance with accepted practice, a relationship is considered statistically significant if the Student's t test indicates that $P < .05$. The T test shown in Figure xx is a two-tailed T test.

2. The Use of Significance Tests in the Dissertation

In quantitative research, tests of statistical significance enable the researcher to test the "significance" of his results. In other words, significance tests allow us to discover whether the results emerging from our analysis depart sufficiently from chance expectation to warrant the belief that it is in fact a "statistically significant finding."

In most circumstances, tests of statistical significance are used to evaluate how accurately the behaviour of a sample of cases reflects the behaviour of the universe of cases. In the dissertation this is not necessary because the Canada Works allocation data analyzed represents a complete universe of cases. Nonetheless, tests of statistical significance are noted for all bivariate and multivariate relationships presented in the dissertation. This fits the more conventional procedure for presenting statistical data. [5]

3. Multiple Regression Analysis

As noted in Chapter V, the primary instrument for assessing the validity of the various test hypotheses in the dissertation is multiple regression analysis. [6] Multiple regression analysis is derived from the "Ordinary Least Squared" (or OLS) method of determining the linear relationship between two or more variables. [7] In essence, OLS is based on the principle that the most appropriate method of summarizing the linear relationship between two or more variables is to define a line that minimizes the sum of squared errors around itself. Figure 11 presents the OLS method algebraically.

Figure 11
Ordinary Least Squared Formula [8]

$$\min \sum_{i=1}^n e^2_i$$

where:

min = minimization operator.

n = summation operator over the squared residuals of all cases.

E

i=1

e^2_i = square of the error or residual term for a specific case.

To understand the statistical properties of OLS multiple regression analysis, one should first be comfortable with regression analysis in its bivariate form. The formula presented below is the algebraic configuration for simple bivariate regression.

Figure 12
Bivariate Regression Formula

$$Y = a + b_1 x_1 + e$$

where:

Y = Observed values of the dependent variable.

a = The constant or Y intercept of the regression line.

b₁ = The unstandardized regression coefficient. The coefficient indicates the degree to which Y changes on average when x₁ changes by 1 unit.

x₁ = Values of the independent variable.

e = Error or residual term.

In terms of interpretation, the b_1 , or the beta value in a regression equation, which can be presented as either a standardized or unstandardized coefficient (the dissertation presents standardized beta weights [9]), simply answers the question: when x_1 changes by one unit, how much does Y change? The answer is b_1 (unstandardized beta) units. The reason for presenting standardized beta coefficients in the dissertation is that comparisons are not made between the various multiple regression models tested. Unstandardized betas -- which show the magnitude of relationship between an independent variable and dependent variable in real units -- are therefore not relevant to the analysis presented.

To determine the statistical significance of beta in a regression equation, a T test is conducted. The T test presented in the dissertation is derived by dividing each individual beta weight by its standard error. This significance test is particularly appropriate for regression equations containing dummy independent variables. [10]

Figure 13

Formula for Regression Coefficient [11]

$$b_1 = \frac{E(X - \bar{Y})(Y - \bar{Y})}{E(X - X)} = \frac{SP_{xy}}{SS_x}$$

where:

- o SP_{xy} equals the sum of cross products for X and Y .
- o SS_x the sum of squares of X .

Figure 14

Formula for Standardized Regression Coefficient [12]

$$B_{yx} \text{ (unstandardized)} = B_{yx} \text{ (standardized)} \left(\frac{S_x}{S_y} \right)$$

where:

- o S_x is the standard deviation of x .
- o S_y is the standard deviation of y .

Multiple regression is very similar to bivariate regression. The major difference is that a multiple regression equation contains more than one explanatory variable. Algebraically, a model multiple regression equation is:

Figure 15

Multiple Regression Formula

$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + e$$

Symbols in the above equation are the same as those used in the bivariate regression equation with the exception of $b_2 x_2$ and $b_3 x_3$, which represent two additional explanatory variables. It is the inclusion of these additional explanatory variables that makes the regression "multiple."

Stated simply, multiple regression analysis allows the researcher to estimate the relative weights of the regression coefficients to be attached to independent variables, taking into account the relations (or correlations) between each independent variable and the dependent variable, and among the independent variables themselves. Therefore,

the beta weights (standardized in this instance) are in a sense partial correlation coefficients describing the relationship between individual independent variables and a dependent variable taking into account the interrelationships among all variables in the equation.

Apart from the beta weights, the other measure usually derived from a multiple regression equation to indicate its explanatory power is the "coefficient of multiple determination," or R^2 . [13] In the simplest terms, R^2 is the maximum amount of variance in a dependent variable accounted for by all of the independent variables included in the multiple regression equation. R^2 is derived by dividing explained variation by total variation as presented in the following equation:

Figure 16

Formula for the Coefficient of Multiple Determination [14]

$$R^2 = \frac{E(\hat{Y}_i - \bar{Y})^2}{E(Y_i - \bar{Y})^2}$$

To determine the statistical significance of R^2 the standard F test is used. The F statistic is derived from the ratio of explained variance to unexplained variance multiplied by the ratio of residual degrees of freedom to regression degrees of freedom. [15] This is presented in the following formula:

Figure 17

Formula for the F Test of Significance [16]

$$F_{k,n-k-1} = \frac{R^2}{1 - R^2} \frac{n - k - 1}{k}$$

- o where $F_{k,n-k-1}$ is a symbol representing an F statistic with k regression degrees of freedom and n-k-1 residual degrees of freedom.

4. Collinearity Among Independent Variables

One of the principle assumptions of OLS multiple regression is that there are no exact linear relationships between independent variables. While exact linear relationships are rare, it is quite possible to have approximate linear relationships among independent variables. Indeed, such relationships are common among political and economic variables. This phenomena is referred to as collinearity.

While the OLS estimator in the presence of collinearity remains unbiased and is still BLUE (Best Linear Unbiased Estimates [17]), the R^2 statistic is unaffected. The major difficulty created by collinearity is that the variances of the OLS estimates of the parameters of the collinear variables are large. These high variances arise because in the presence of collinearity the OLS estimating process is not given enough independent variation in a variable to calculate with confidence the effect it has on the dependent variable. As noted by one author,

the consequences of this undesirable feature of the sample are indistinguishable from the consequences of inadequate variability of the regressors in a data set, an interpretation of multicollinearity which has unfortunately not been well understood by practitioners. [18]

In the dissertation, collinearity is a problem in the multiple regressions containing more than one "dummy" variable. The recommended correction under these circumstances is to drop one of the collinear independent variables from the regression equation. This correction is applied to relevant regressions in the dissertation. This is noted in the discussion of multiple regression results presented in Chapter V. The following tables present zero-order correlations between all of the independent variables utilized in the dissertation.

Table 22

**Zero-Order Correlations Among Political Variables:
All 1983 Canada Works Allocations (N=282)**

	<u>Lib</u> <u>Inc</u>	<u>PC</u> <u>Inc</u>	<u>NDP</u> <u>Inc</u>	<u>Lib</u> <u>Vt%</u>	<u>NDP</u> <u>Vt%</u>	<u>PC</u> <u>Vt%</u>	<u>Rae</u>	<u>%Dif</u>	<u>Cbt</u>	<u>Change</u>
Lib Inc										
PC Inc	-.79*									
NDP Inc	-.37*	-.27*								
Lib Vt%	+.78*	-.57*	-.37*							
NDP Vt%	-.39*	-.04	+.68*	-.54*						
PC Vt%	-.66*	+.72*	-.06	-.80*	-.01					
Rae	-.40*	+.27*	+.28*	-.56*	+.51*	-.80*				
%Dif	+.31*	-.23*	-.14*	+.45*	-.37*	-.31*	-.80*			
Cbt	+.36*	-.28*	-.14*	+.32*	-.14*	-.29*	-.23*	+.18*		
Change	+.18*	-.29*	+.16*	-.06	+.12*	-.02	+.26*	-.35*	.03	

Note * = $P < .05$

Table 23

**Zero-Order Correlations Among Political Variables:
Enhanced 1983 Canada Works Allocations (N=169)**

	<u>Lib</u> <u>Inc</u>	<u>PC</u> <u>Inc</u>	<u>NDP</u> <u>Inc</u>	<u>Lib</u> <u>Vt%</u>	<u>PC</u> <u>Vt%</u>	<u>NDP</u> <u>Vt%</u>	<u>Rae</u>	<u>%Dif</u>	<u>Cbt</u>	<u>Change</u>
Lib Inc										
PC Inc	-.81*									
NDP Inc	-.42*	-.20*								
Lib Vt%	+.76*	-.57*	-.39*							
PC Vt%	-.65*	+.69*	+.24*	-.81*						
NDP Vt%	-.50*	+.12*	.64*	-.65*	+.15					
Rae	-.54*	+.42*	+.25*	-.70*	+.54*	+.48*				
%Dif	+.46*	-.41*	-.12*	+.60*	-.50*	-.41*	-.76*			
Cbt	+.29*	-.23*	-.12	+.29*	-.30*	-.12	-.29*	+.25*		
Change	+.08	-.17*	+.13*	+.06	+.11	+.25*	-.35*	-.35*	+.07	

Note * = $P < .05$

Table 24

Zero-Order Correlations Among Political Variables:
All 1984 Canada Works Allocations (N=282)

	<u>Lib</u> <u>Inc</u>	<u>PC</u> <u>Inc</u>	<u>NDP</u> <u>Inc</u>	<u>Lib</u> <u>Vt%</u>	<u>PC</u> <u>Vt%</u>	<u>NDP</u> <u>Vt%</u>	<u>Rae</u>	<u>%Dif</u>	<u>Cbt</u>	<u>Change</u>
Lib Inc										
PC Inc	-.70*									
NDP Inc	-.15*	-.60*								
Lib Vt%	+.59*	-.30*	-.23*							
PC Vt%	-.47*	+.69*	-.43*	-.46*						
NDP Vt%	-.10*	-.40 *	+.68*	-.45*	-.51*					
Rae	+.21*	-.34*	+.21*	+.31*	-.79*	+.39*				
%Dif	-.29*	+.39*	-.21*	-.50*	+.76*	-.28*	-.74*			
Cbt	-.17*	+.21*	-.11*	-.16*	+.30*	-.17*	-.22*	+.26*		
Change	-.33*	+.35*	-.14*	+.27*	-.02	-.25*	+.12*	-.30*	-.07	

Note: * = $P < .05$

Table 25

Zero-Order Correlations Among Political Variables:
Enhanced 1984 Canada Works Allocations (N=207)

	<u>Lib</u> <u>Inc</u>	<u>PC</u> <u>Inc</u>	<u>NDP</u> <u>Inc</u>	<u>Lib</u> <u>Vt%</u>	<u>PC</u> <u>Vt%</u>	<u>NDP</u> <u>Vt%</u>	<u>Rae</u>	<u>%Dif</u>	<u>Cbt</u>	<u>Change</u>
Lib Inc										
PC Inc	-.74*									
NDP Inc	-.15*	-.56*								
Lib Vt%	+.60*	-.34*	-.24*							
PC Vt%	-.51*	+.67*	-.40*	-.44*						
NDP Vt%	-.08	-.38*	+.65*	-.50*	-.50*					
Rae	+.26*	-.35*	+.19*	+.27*	-.77*	+.39*				
%Dif	-.34*	+.41*	-.19*	-.48*	+.73*	-.24*	-.70*			
Cbt	-.17*	+.20*	-.08	-.15*	+.30*	-.16*	-.27*	+.28*		
Change	-.38*	+.40*	-.12*	+.22*	-.08	-.29*	+.07*	-.23*	-.04	

Note: * = $P < .05$

Appendix A: Endnotes

1. N. Nie et. al. Statistical Package for the Social Sciences (New York: McGraw-Hill, 1975) p.280.

2. For a discussion of some of the problems and assumptions of Pearson's r , refer to S. Bennett The Quantitative Approach in Political Science: An Introduction (Queenston: The Edwin Mellen Press, 1986) pp. 318-319.

3. See W. Hays Statistics 3ed. (New York: Holt, Reinhart and Winston, 1981) pp. 314-319.

4. Op. Cit., p.319.

5. Ibid., see "A Brief Review of Concepts of Inference" p. 256-278.

6. For more on multiple regression analysis refer to S. Bennett The Quantitative Approach to Political Science (Queenston: The Edwin Mellen Press, 1986) Chapter 9; W. Hays Statistics 3ed. (New York: Holt, Reinhart and Winston, 1981) Chapters 10-14; F. Kerlinger Foundations of Behavioral Research 3ed. (New York: Holt, Reinhart and Winston, 1986) Chapters 33-34; F. Kerlinger Behavioral Research: A Conceptual Approach (New York: Holt, Reinhart and Winston, 1979) Chapter 11; P. Kennedy A Guide to Econometrics 2ed. (Cambridge, Massachusetts: The MIT Press, 1985); M. Lewis-Beck Applied Regression: An Introduction (Beverly Hills, California: Sage Press, 1986); N. Nie et.al. Statistical Package for the Social Sciences (New York: McGraw-Hill, 1975) Chapters 20-21; E. Pedhazur Multiple Regression in Behavioral Research: Explanation and Prediction (New York: Holt, Reinhart and Winston, 1982; E. Tufte Data Analysis for Politics and Policy (Englewood Cliffs, New Jersey: Prentice-Hall, 1974).

7. OLS carries with it a series of assumptions concerning the nature of the data and variables being analyzed. An excellent review of the assumptions of OLS, the consequences of violating the assumptions, and remedies for cases in which the assumptions must be violated, is available in P. Kennedy A Guide to Econometrics 2ed. (Cambridge, Massachusetts: The MIT Press, 1985). Kennedy defines the five most common violations of OLS assumptions as: specification errors; non-zero expected disturbances; non-spherical disturbances; measurement errors and autoregression; simultaneous equations; and multicollinearity. See also S. Chatterjee and F. Wiseman "Use of Regression Diagnostics in Political Science" American Journal of Political Science 27:3 1983 p.601; M. Lewis-Beck "Stepwise Regression: A Caution" Political Methodology 5:2 1978 p.213; and, J. Williams "Internal Exploration of Regression Data" Political Methodology 8:4 1982 p.107.

8. See S. Bennett The Quantitative Approach to Political Science (Queenston: The Edwin Mellen Press, 1986) pp. 331-333; and F. Kerlinger Foundations of Behavioral Research 3ed. (New York: Holt, Reinhart and Winston, 1986) p. 533.

9. The SPSS User's Guide advises using standardized beta weights in presenting multiple regression analysis. Their rationale is as follows " while [the standardized beta weight] does not enable one to estimate the Y value in the original raw value units, the standardized regression coefficient is more convenient to use in a number of contexts. Working with beta weights enables one to simplify the linear regression equation, since the constant A (the Y intercept) is always equal to zero and therefore can be omitted. Furthermore, when there are two or more independent variables measured on different units (such as income in dollars and education in years), standardized coefficients may provide the only sensible way to compare the relative effect on the dependent variable of each independent variable." see N. Nie et.al. Statistical Package for the Social Sciences (New York: McGraw-Hill, 1975) p.325.

10. On the use of T tests in regression analysis see E. Pedhazur Multiple Regression in Behavioral Research: Explanation and Prediction (New York: Holt, Reinhart and Winston, 1982) p. 287-289.

11. N. Nie et.al. Statistical Package for the Social Sciences (New York: McGraw-Hill, 1975) p.323.

12. Ibid., p.325.

13. See S. Bennett The Quantitative Approach to Political Science (Queenston: The Edwin Mellen Press, 1986) p.340.

14. E. Tufte Data Analysis for Politics and Policy (Englewood Cliffs, New Jersey: Prentice-Hall, 1974) p.137.

15. Op. Cit., p.340.

16. Ibid., pp. 340-341.

17. S. Bennett The Quantitative Approach in Political Science: An Introduction (Queenston: The Edwin Mellen Press, 1986) p.343; and, P. Kennedy A Guide to Econometrics 2ed. (Cambridge: MIT Press, 1985) p.14-15.

18. P. Kennedy A Guide to Econometrics 2ed. (Cambridge: MIT Press, 1985) p. 147.

Selected Bibliography

Chapter IV: Univariate and Bivariate Analysis

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Aberbath, J. et.al. Bureaucrats and Politicians in Western Democracies Cambridge: Harvard University Press, 1981.

Adie, R. and P. Thomas eds. Canadian Public Administration: Problematical Perspectives Scarborough: Prentice-Hall, 1982.

Albo, G. "The State and Restructuring: Recent Job Strategies in Canada" paper presented at the annual meeting of the Canadian Political Science Association, Winnipeg, 1986.

Albrow, M. Bureaucracy London: Pall Mall, 1970.

Allison, G. Essence of Decision: Explaining the Cuban Missile Crisis Boston: Little, Brown, 1971.

Alt, J. and K. Crystal Political Economics Berkely: University of California Press, 1982.

Amacher, R. et.al. Economic Approaches to Public Policy Ithica: Cornell University Press, 1976.

Arrow, K. Social Choice and Individual Values New York: John Wiley and Sons, 1951.

Atkinson, M. "The Bureaucracy and Industrial Policy" in A. Blais ed. Industrial Policy Toronto: University of Toronto Press, 1986.

----- and W. Coleman "Bureaucrats and Politicians in Canada: An Examination of the Political Administration Model" Comparative Political Studies 18:1 April, 1985.

Bachrach, P. and M. Baratz Power and Poverty: Theory and Practice New York: Oxford University Press, 1970.

Baker, D. and D. Colby "The Politics of Municipal Employment Policy: A Comparative Study of U.S. Cities" American Journal of Political Science 60 1981 p.475.

Banting, K. The Welfare State and Canadian Federalism Montreal: McGill-Queens's University Press, 1982.

Barry, B. Sociologists, Economists and Democracy Chicago: University of Chicago Press, 1978.

----- and R. Hardin Rational Man and Irrational Society? Beverly Hills: Sage, 1982.

Beck, N. "Parties, Administrations, and American Macroeconomic Outcomes" American Political Science Review 76:1 1982 p.83.

Belanger, G. et.al. Division of Powers and Public Policy Toronto: University of Toronto Press, 1986.

Bennett, S. The Quantitative Approach in Political Science: An Introduction (Queenston: The Edwin Mellen Press, 1986).

----- and D. Bricker "The Interaction of Technical and Political Factors in the Allocation of Canada Works Funds in Ontario: A Preliminary Assessment" in O.P Dwivedi and R. B. Woodrow eds. Public Policy and Administrative Studies Vol. 2 Guelph: Department of Political Studies, University of Guelph, 1985.

Bentham, J. Principles of Morals and Legislation [Dolphin Reprint] New York: Dolphin, 1961.

Blake, D. "LIP and Partisanship: An Analysis of the Local Initiatives Program" Canadian Public Policy 2 Winter 1976 p.17.

Borins, S. and L. Brown Investments in Failure: Government Enterprises That Cost the Canadian Taxpayers Billions Toronto: Methuen, 1986.

Born, R. "Strategic Politicians and Unresponsive Voters" American Political Science Review 80:2 1986 p.599.

Brooah, V. and F. van der Ploeg Political Aspects of the Economy London: Cambridge University Press, 1983.

Boyne, G. "Review Article: Theory, Methodology and Results in Political Science -- The Use of Output Studies" British Journal of Political Science 15:4 1985 p.473.

Breton, A. The Economic Theory of Representative Government Chicago: Aldine, 1974.

----- and R. Wintrobe The Logic of Bureaucratic Conduct Cambridge: Cambridge University Press, 1982.

Brewer, D. and P. DeLeon The Foundations of Policy Analysis Homewood: Dorsey, 1983.

Bricker, D. "The Effect of Political Partisanship on the Allocation of Funds for Job Creation in the Province of Ontario" M.A. Thesis, Wilfrid Laurier University, 1984.

Broach, G. "Interparty Competition, State Welfare Policies, and Nonlinear Regression" Journal of Politics 35 1973 p.737.

Broadway, R. Fiscal Federalism Toronto: University of Toronto Press, 1986.

Buchanan, J. "An Economists Approach to 'Scientific Politics'" in M. Parsons ed. Perspectives in the Study of Politics Chicago: Rand McNally, 1968.

----- and G. Tullock The Calculus of Consent Ann Arbor: University of Michigan Press, 1962.

Burns, R. and L. Close The Municipal Winter Works Program Toronto: Canadian Tax Foundation, 1971.

Calabresi, G. and P. Bobbit Tragic Choices New York: W.W. Norton, 1978.

Cameron, D. "The Expansion of the Public Economy: A Comparative Analysis" American Political Science Review 73:4 1978 p.1243.

Campbell, C. Governments Under Stress: Political Executives and Key Bureaucrats in Washington, London, and Ottawa Toronto: University of Toronto Press, 1983.

----- and G. Szablowski The Superbureaucrats: Structure and Behaviour in Central Agencies Toronto: MacMillan, 1979.

Caplan, G. et.al Election: The Issues, The Strategies, The Aftermath Scarborough: Prentice-Hall, 1989.

Carnoy, M. The State and Political Theory Princeton, New Jersey: Princeton University Press, 1984.

Castles, F. "How Does Politics Matter?: Structure or Agency in the Determination of Public Policy Outcomes" European Journal of Political Research 9 1981 p.119.

Chandler, W. "Canadian Socialism and Policy Impact: Contagion From the Left?" Canadian Journal of Political Science 10:4 1977 p.755.

----- and M. Chandler Public Policy and Provincial Politics Toronto: McGraw-Hill, 1979.

Chatterjee, S. and F. Wiseman "Use of Regression Diagnostics in Political Science Research" American Journal of Political Science 27:3 1983 p.601.

Cnudde, C. and D. McCrone "Party Competition and Welfare Policies in the American States" American Political Science Review 63 1969 p.858.

Courchene, T. Economic Management and the Division of Powers Toronto: University of Toronto Press, 1986.

Dahl, R. and C. Lindblom Politics, Economics and Welfare New York: Harper, 1953.

Danziger, J. and W. Dunton "Technological Innovation in Local Government: The Case of Computers" Policy and Politics 6 1977 p.27.

Dawson, R. and J. Robinson "Inter-Party Competition, Economic Variables, and Welfare Policies in the American States" Journal of Politics 25 May 1963 p.265.

Doern, G. B. and P. Aucoin eds. The Structures of Policy Making in Canada Toronto: MacMillan, 1971.

----- and V.S. Wilson Issues in Canadian Public Policy Toronto: MacMillan, 1974.

----- and R. Phidd Canadian Public Policy: Ideas, Structures, Process Toronto: Methuen, 1983.

Doerr, A. The Machinery of Government in Canada Toronto: Methuen, 1981.

Downs, A. An Economic Theory of Democracy New York: Harper and Row, 1957.

----- Inside Bureaucracy Boston: Little, Brown, 1967.

Dror, Y. Public Policy-Making Reexamined Scranton: Chandler, 1968.

Dunleavy, P. and H. Wrad "Exogenous Voter Preferences and Parties With Static Power: Some Internal Problems of Economic Theories of Party Competition" British Journal of Political Science 11:3 1981 p.351.

Duverger, M. Political Parties London: Methuen, 1954.

Dwivedi, O.P. ed. The Administrative State in Canada: Essays for J.E. Hodgetts Toronto: University of Toronto Press, 1982.

Dye, T. ed. Politics, Economics, and the Public: Policy Outcomes in the American States Chicago: Rand McNally, 1966.

----- "Government Structure, Urban Environment, and Education Policy" Mid-Western Journal of Political Science 11 1967 p.353.

----- "Executive Power and Public Policy in the United States" Western Political Quarterly 2 1969 p.926.

----- "Inequality and Civil Rights Policy in the United States" Journal of Politics 31 1969 p.1080.

----- Understanding Public Policy 5ed. Englewood Cliffs, New Jersey: Prentice-Hall, 1984.

----- and Virginia Gray eds. The Determinants of Public Policy Lexington: D.C. Heath, 1980.

----- and J. Renick "Political Power and City Jobs: Determinants of Minority Employment" Social Science Quarterly 62 1981 p.475.

Easton, D. The Political System New York: A. Knopf, 1953.

----- A Framework for Political Analysis Englewood Cliffs, New Jersey: Prentice-Hall, 1965.

----- A Systems Analysis of Political Life Chicago: University of Chicago Press, 1979.

Eisinger, P. "Black Employment in Municipal Jobs: The Impact of Black Political Power" American Political Science Review 75 1982 p.380.

----- "The Economic Conditions of Black Employment in Municipal Bureaucracies" American Journal of Political Science 26 1982 p.754.

Etzioni-Halevy, E. Bureaucracy and Democracy: A Political Dilemma London: Routledge and Kegan Paul, 1983

Fairbanks, J. "Religious Forces and Morality Policies in the American States" Western Political Quarterly 30 1977 p.411.

Falcone, D. and M. Whittington "Output Change in Canada: A Preliminary Attempt to Open the 'Black Box'" paper presented at the annual meeting of the Canadian Political Science Association, Montreal, 1972.

Feldman, S. "Economic Self-Interest and Political Behavior" American Journal of Political Science 26:3 1982 p.446.

Fenton, J. Politics in the Border States New Orleans: Hauser Press, 1957.

----- Midwest Politics New York: Holt, Rinehart and Winston, 1966.

----- and R. Chamberlayne "The Literature Dealing With the Relationships Between Political Processes, Socioeconomic

Conditions and Public Policies in the American States" Polity 1 Spring 1969 p.388.

Ferejohn, J. Pork Barrel Politics Stanford: Stanford University Press, 1974.

Ferguson, T. and J. Rogers The Political Economy: Readings in the Politics and Economics of American Public Policy New York: M.E. Sharpe, 1984.

Finacial Post Report on the Nation 1988-1989.

French, R. and R. Van Loon How Ottawa Decides: Planning and Industrial Policy Making 1968-1984 2ed. Toronto: Lorimer, 1984.

Friedman, M. ed. Essays in Positive Economics Chicago: University of Chicago Press, 1953.

----- Capitalism and Freedom Chicago: University of Chicago Press, 1962.

Frohlich, N. and J. Oppenheimer Modern Political Economy Toronto: Prentice-Hall, 1978.

----- "Post Election Redistributive Strategies of Representatives: A Partial Theory of the Politics of Redistribution" Public Choice 42:2 1984 p.113.

Galbraith, J. K. The New Industrial State London: Harrish Hamilton, 1967.

Galeotti, G. and A. Breton "An Economic Theory of Political Parties" Kyklos 39:1 1986 p.47.

Garand, J. "Partisan Change and Shifting Expenditure Priorities in the American States, 1945-1978" American Politics Quarterly 13:4 1985 p.355.

Gilder, G. Wealth and Poverty New York: Bantam, 1981.

Golden, D. and J. Poterba "The Price of Popularity: The Political-Business Cycle Re-examined" American Journal of Political Science 24 1980 p.696.

Goodin, R. "The Logic of Bureaucratic Back Scratching" Public Choice 21 1975 p.53.

----- The Politics of Rational Man New York: John Wiley, 1976.

----- "Rational Politicians and Rational Bureaucrats in Washington and Whitehall" Public Administration 60 Spring 1982 p.23.

----- Political Theory and Public Policy Chicago: University of Chicago Press, 1982.

Graham, R. One-Eyed Kings: Promise and Illusion in Canadian Politics Toronto: Collins, 1986.

Gray, V. "The Effect of Party Competition on State Policy, a Reformulation: Organizational Survival" Polity 7 Winter 1974 p.248.

Greenberger, M. Models in the Policy Process New York: Russell Sage, 1976.

Gross, D. "Units of Analysis and Rae's Fractionalization Index" Comparative Political Studies 15:1 1982 p.85.

Ham, C. and M. Hill The Policy Process in the Modern Capitalist State Thetford: Wheatsheaf Books, 1984.

Hartle, D. A Theory of the Expenditure Budget Process Toronto: University of Toronto Press, 1976.

Haurin, D. and L. Gill "The Spatial Distribution of Public Services: A Structural Model of Voting, Educational Production, and the Government's Allocation of Educational Inputs" Public Choice 44 1984 p.481.

Havick, J. "The Determinants of State Revenue Expenditures" Journal of Politics 37 1975 p.548.

Hayek, F. The Road to Serfdom Chicago: University of Chicago Press, 1944.

Hays, W. Statistics 3ed. New York: McGraw-Hill, 1981.

Heilbroner, R. and L. Thurow Economics Explained Englewood Cliffs, New Jersey: Prentice-Hall, 1982.

Hettich, W. "Bureaucrats and Public Goods" Public Choice 21 Spring 1975 p.15.

Hibbs, D. "Political Parties and Macroeconomic Policy" American Political Science Review 71, 1977 p.1467.

----- and H. Fassbender Contemporary Political Economy Amsterdam: North-Holland, 1981.

Hicks, A. and D. Swank "On the Political Economy of Welfare Expansion: A Comparative Analysis of 18 Advanced Capitalist Democracies, 1960-1971" Comparative Political Studies 17:1 1984 p.81.

Hindess, B. "Rational Choice Theory and the Analysis of Political Action" Economy and Society 13:3 1984 p 75.

Hodgetts, J.E. The Canadian Public Service: A Physiology of Government, 1867-1970 Toronto: University of Toronto Press, 1973.

Hofferbert, R. "The Relation Between Public Policy and Some Structural and Environmental Variables in the American States" American Political Science Review 60 1966 p.73.

Hogau, J. "Social Structure and Public Policy" Comparative Politics 4 July 1972 p.477.

Hull, C.H. and N. Nie SPSS Update 7-9 New York: McGraw-Hill, 1981.

Jennings, E. "Competition, Constituencies and Welfare Policies in American States" American Political Science Review 73:1 1979 p.414.

----- "Urban Riots and the Growth of State Welfare Expenditures" Policy Studies Journal 9 1980 p.34.

Johnston, R. Public Opinion and Public Policy Toronto: University of Toronto Press, 1986.

Kaplan, A. The Conduct of Inquiry San Francisco: Chandler, 1964.

Keman, H. "Politics, Policies and Consequences: A Cross-National Analysis of Public Policy-Formation in Advanced Capitalist Democracies (1967-1981)" European Journal of Political Research 12:2 1984 p.147.

Kennedy, P. A Guide to Econometrics 2ed. Cambridge: The MIT Press, 1985.

Kerlinger, F. Behavioral Research: A Conceptual Approach New York: Holt, Reinhart and Winston, 1979.

----- Foundations of Behavioral Research 3ed. New York: Holt, Reinhart and Winston, 1986.

Kernaghan, K. ed. Canadian Public Administration: Discipline and Profession Toronto: Butterwoths, 1983.

----- ed. Public Administration in Canada: Selected Readings 5ed. Toronto: Methuen, 1985.

Key, V.O. Southern Politics in State and Nation New York: A.A. Knopf, 1949.

Kramer, G. "The Ecological Fallacy Revisited: Aggregate Versus Individual Level Findings on Economics and Elections, and Sociotropic Voting" American Political Science Review 77:1 1983 p.92

Kuhn, T. The Structure of Scientific Revolutions Chicago: University of Chicago Press, 1970.

Lachler, U. "The Political Business Cycle Under Rational Voting Behavior" Public Choice 44 1984 p.411.

Lancaster, T. "Electoral Structures and Pork Barrel Politics" International Political Science Review 7:1 1986 p.67.

Laswell, H. A Preview of the Policy Sciences New York: Elsevier, 1971.

Laver, M. The Politics of Private Desires Middlesex: Penguin, 1981.

Lehner, F. and K. Schubert "Party Government and the Political Control of Public Policy" European Journal of Political Research 12 1984 p.131.

Lester, J. "Hazardous Wastes, Politics and Public Policy: A Comparative State Analysis" Western Political Quarterly 36 1983 p.257.

Lewis-Beck, M. "The Relative Importance of Socio-economic and Political Variables for Public Policy" American Political Science Review 71 1977 p.559.

----- "Stepwise Regression: A Caution" Political Methodology 5:2 1978 p.213.

----- Applied Regression: An Introduction Beverly Hills: Sage Press, 1986.

Lindblom, C. "The Science of Muddling Through" Public Administration Review 19:2 Spring 1959 p.79.

----- The Intelligence of Democracy New York: Free Press, 1965.

----- Politics and Markets New York: Basic Books, 1977.

----- "Still Muddling, Not Yet Through" Public Administration Review November/December 1979 p.517.

Lineberry, R. "Politicians and the Distribution of Public Policies" Policy Studies Review 4:3 1985 p.407.

Lockard, D. New England State Politics Princeton: Princeton University Press, 1959.

----- The Politics of State and Local Government New York: MacMillan, 1963.

Lockhart, C. "Explaining Social Policy Differences Among Advanced Industrial Societies" Comparative Politics 16:3 1984 p.335.

Lowery, D. et. al. "From Stable Disparity to Dynamic Equity: The Spatial Distribution of Federal Expenditures, 1971-1983" Social Science Quarterly 67:1 1986 p.98.

Lowi, T. "Distribution, Regulation, Redistribution: The Functions of Government" in R.B. Ripley Public Policies and Their Politics New York: W.W. Norton, 1966.

----- The End of Liberalism: Ideology, Policy, and the Crisis of Public Authority New York: W.W. Norton, 1969.

----- "Four Systems of Policy, Politics and Choice" Public Administration Review 32 July/August 1972 p.300.

Lyons, W. and D. Morgan "The Impact of Intergovernmental Revenue on City Expenditures: An Analysis Over Time" Journal of Politics 39 1977 p.1088.

Macnaughton, B. "Public Finance for Political Profit: The Politics of Social Security in Canada 1941-1977" Ph.D Dissertation, Carleton University, 1980.

----- and C. Winn "Economic Policy and Electoral Self Interest: The Allocations of the Department of Regional Economic Expansion" Canadian Public Policy 7 Spring 1981 p.718.

Mahon, R. "Canadian Public Policy: The Unequal Structure of Representation" in L. Panitch ed. The Canadian State Toronto: University of Toronto Press, 1977. p.165.

Manheim, J. and R. Rich Empirical Political Analysis: Research Methods in Political Science 2ed. New York: Longmans, 1986.

Mansfield, E. Microeconomics: Theory and Application 3ed. New York: W.W. Norton, 1979.

Manzer, R. "Public Policy-Making as Practical Reasoning" Canadian Journal of Political Science 17:3 (September) 1984 p.577.

----- Public Policies and Political Development in Canada Toronto: University of Toronto Press, 1985.

Marris, R. The Economic Theory of Managerial Capitalism New York: Free Press, 1964.

Martin, P. et.al Contenders: The Tory Quest for Power Toronto: Prentice-Hall, 1983.

Maslove, A., M. Prince and G. B. Doern Federal and Provincial Budgeting Toronto: University of Toronto Press, 1986.

May, F. "Politics and Policy Analysis" Political Science Quarterly 101:1 1986 p.109.

Mazmanian, D. and P. Sabatier "A Multivariate Model of Public Policy-Making" American Journal of Political Science 24:3 1980 p.439.

McAllister, J. "The Fiscal Analysis of Policy Outputs" Canadian Public Administration 23:3 Fall 1980 p.458.

McCrae, C. "A Political Model of the Business Cycle" Journal of Political Economy 85 1977 p.239.

McCubbins, M. and T. Sullivan "Constituency Influence on Legislative Policy Choice" Quality and Quantity 18 1984 p.299.

McGregor, E. "Politics and the Career Mobility of Bureaucrats" American Political Science Review 68 1974 p.18.

Michels, R. Political Parties (translation) New York: The Free Press, 1962.

Miliband, R. The State in Capitalist Society London: Quartet Books, 1964.

Mill, J.S. On Liberty and Utilitarianism [Dolphin Reprints] New York: Dolphin, 1967.

Mills, C.W. The Power Elite New York: Oxford University Press, 1956.

Mishler, W. and D. Campbell "The Healthy State: Legislative Responsiveness to Public Health Care Needs in Canada, 1920-1970" Comparative Politics 10:4 July 1978 p.479.

Monroe, K. "Econometric Analysis of Electoral Behavior" Political Behavior 1 1979 p.137.

Mueller, D. Public Choice Cambridge: Cambridge University Press, 1979.

Munns, J. "The Environment, Politics and Policy Literature: A Critique and Reformulation" Western Political Quarterly 8:4 December 1975 p.658.

Munro, J. "Highways in British Columbia: Economics and Politics" Canadian Journal of Economics 3 May 1975 p.192.

Nie, N. et.al. Statistical Package for the Social Sciences New York: McGraw-Hill, 1975.

Niskanen, W. Bureaucracy and Representative Government Chicago: Aldine-Atherton, 1971.

----- Bureaucracy: Servant or Master? London: The Institute of Economic Affairs, 1973.

Noel, S.J.R. "Leadership and Clientelism" in David Bellamy et. al. eds. The Provincial Political Systems Toronto: Methuen, 1976.

Nordhaus, W. "The Political Business Cycle" Review of Economic Studies 42 1974 p.169.

Nordlinger, E. On the Autonomy of the Democratic State Cambridge: Harvard University Press, 1981.

Nozick, R. Anarchy, State, and Utopia New York: Basic Books, 1974.

O'Connor, J. The Fiscal Crisis of the State New York: St. Martin's Press, 1973.

Olsen, C. The State Elite Toronto: McClelland, 1980.

Olson, M. The Logic of Collective Action Cambridge: Harvard University Press, 1965.

Paltiel, K. "The Changing Environment and the Role of Special Interest Groups" Canadian Public Administration 25:2 1982 p.198.

Panitch, L. ed. The Canadian State Toronto: University of Toronto Press, 1977.

Parkin, F. Marxism and Class Theory: A Bourgeois Critique New York: Columbia University Press, 1979.

Parkinson, C. N. Parkinson's Law and Other Studies in Administration New York: Ballantine, 1957.

Peacock, A. "The Political Economy of Public Spending" Administration 34:1 1986 p.42.

Pedhauzer, E. Multiple Regression in Behavioral Research New York: Holt, Reinhart and Winston, 1982.

Peitchinis, S. The Canadian Labour Market Toronto: Oxford University Press, 1975.

Phidd, R. and G.B. Doern The Politics and Management of Canadian Economic Policy Toronto: Macmillan, 1978.

Plotnick, R. and R. Winters "A Politico-Economic Theory of Income Redistribution" American Political Science Review 79:2 1985 p.458.

Popkin, S. et.al. "Comment: What Have You Done For Me Lately? Toward an Investment Theory of Voting" American Political Science Review 70:2 1976 p.779.

Popper, K. The Logic of Scientific Discovery New York: Harper and Row, 1959.

Porter, J. The Verticle Mosaic Toronto: University of Toronto Press, 1965.

Poulantzas, N. State Power and Socialism London: New Left Books, 1978.

Presthus, R. Elite Accomodation in Canadian Politics Toronto: MacMillan, 1973.

----- Elites in the Policy Process Cambridge: Cambridge University Press, 1974.

Pross, A.P. ed. Pressure Group Behaviour in Canadian Politics Toronto: McGraw Hill, 1975.

----- "From System to Serandipity: The Practice and Study of Public Policy in the Trudeau Years" Canadian Public Administration 25:4 Winter 1982 p.78.

Rae, D. The Political Consequences of Electoral Laws New Haven: Yale University Press, 1967.

----- and T. Eismeir eds. Public Policy and Public Choice Beverly Hills: Sage, 1979.

Rapoport, A. Two Person Game Theory: The Essential Ideas Ann Arbor: University of Michigan Press, 1966.

----- and A. Chammah Prisoner's Dilemma Ann Arbor: University of Michigan Press, 1965.

Riker, W. The Theory of Political Coalitions New Haven: Yale University Press, 1962.

----- and P. Ordeshook An Introduction to Positive Political Theory Englewood Cliffs, New Jersey: Prentice-Hall, 1973.

Rogers, J. "State Policy Responses to the Energy Issue: An Analysis of Innovation" Social Science Quarterly 61 1980 p.44.

Rourke, F. Bureaucracy, Politics, and Public Policy 3ed. Boston: Little, Brown, 1984.

Saranghi, P. "Determinants of Public Policy in a Comparative Perspective: A Review and a Suggestion" Indian Political Science Review 19:1-2 1985 p.61.

Schneider, F. "Political Attitudes Toward Economic Conditions and Their Impact on Government Behavior" Political Behavior 6:3 1984 p.211.

Schlesinger, J. "A Two-Dimensional Scheme for Classifying the States According to Degree of Inter-Party Competition" American Political Science Review XLIX:4 1955 p.1120.

Schultze, C. The Politics and Economics of Public Spending Washington: The Brookings Institute, 1968.

Schumaker, P. and R. Getter "Structural Sources of Unequal Responsiveness to Group Demands in American Cities" Western Political Quarterly 34 1983 p.7.

Schumpeter, J. Capitalism, Socialism and Democracy London: Harper and Row, 1942.

Sears, D. and R. Lau "Inducing Apparently Self-Interested Political Preferences" American Journal of Political Science 27:2 1983 p.223.

Self, P. Political Theories of Modern Government: Its Role and Reform London: Allen and Unwin, 1985.

Sharkansky, I. "Economics and Political Correlates of State Government Expenditures: General Tendencies and Deviant Cases" Mid-Western Journal of Political Science 11 1967 p.173.

----- "Regional Patterns in the Expenditures of American States" Western Political Quarterly 20 1967 p.173.

----- ed. Policy Analysis in Political Science Chicago: Markham Publishing, 1970.

----- and R. Hofferbert "Dimensions of State Politics, Economics, and Public Policy" American Political Science Review 63, 1969.

Shepsle, K. and B. Weingast "Political Preferences for the Pork Barrel: A Generalization" American Journal of Political Science 25:1 1981 p.96.

Siegelman, L. and R. Smith "Consumer Legislation in the American States: An Attempt at Explanation" Social Science Quarterly 61 1980 p.58.

----- et.al. "Social Service Innovation in the American States: Deinstitutionalization of the Mentally Retarded" Social Science Quarterly 61 1981 p.503.

Simeon, R. "Studying Public Policy" Canadian Journal of Political Science 9:4 December 1976 p.548.

----- and K. Norrie The Political Economy of Canadian Federalism 1940-1984 Toronto: University of Toronto Press, 1986.

Simon, H. Administrative Behavior: A Study of Decision-Making Processes in Administrative Organization 2ed. New York: The Free Press, 1957.

Simpson, J. Spoils of Power: The Politics of Patronage Toronto: Collins, 1988.

Smiley, D. Canada in Question 3ed. Toronto: McGraw-Hill, 1980.

Smith, D. "The Development of Employment and Training Programs" in A. Maslove ed. How Ottawa Soends 1984: The New Agenda Toronto: Methuen, 1984.

Soh, B. "Political Business Cycles in Industrialized Democratic Countries" Kyklos 39:1 1986 p.31.

SPSS Inc. SPSSX User's Guide New York: McGraw-Hill, 1983.

Spafford, D. "Highway Employment and Provincial Elections" Canadian Journal of Political Science 14:1 March 1981 p.135.

Stevenson, G. Unfulfilled Union 2ed. Toronto: Gage, 1982.

- Stockman, D. "The Social Pork Barrel" Public Interest 39 1975 p.3.
- Stokey, E. and R. Zeckhauser A Primer for Policy Analysis New York: W.W. Norton, 1978.
- Stonecash, J. and S. Hayes "The Sources of Public Policy in the American States" Political Studies Journal 9 1981 p.681.
- Trebilcock, M.J. et. al. The Choice of Governing Instrument Ottawa: Supply and Services Canada, 1982
- Thompson, F. and W. Stanbury The Political Economy of Interest Groups Ottawa: IRPP, 1979.
- Thompson, J. "Outputs and Outcomes of State Workman's Compensation Laws" Journal of Politics 63 1981 p.1129.
- Thorburn, F. Interest Groups in the Canadian Federal System Toronto: University of Toronto Press, 1986.
- Tompkins, G. "A Causal Model of State Welfare Expenditures" Journal of Politics 37 1975 p.392.
- Tufte, E. Data Analysis for Politics and Policy Englewood Cliffs, New Jersey: Prentice-Hall, 1974.
- The Political Control of the Economy Princeton, New Jersey: Princeton University Press, 1978.
- Tullock, G. The Politics of Bureaucracy Washington: Public Affairs Press, 1965.
- Ulsaner, E. and R. Weber "The Politics of Redistribution" American Politics Quarterly 3 1975 p.140.
- Vickers, G. The Art of Judgment: A Study of Policy-Making London: Chapman and Hall, 1965.
- Wagner, R. The Public Economy Chicago: Markham, 1973.
- Weingast, B. et.al. "The Political Economy of Benefits and Costs: A Neo-Classical Approach to Distributive Politics" Journal of Political Economy 89:4 1981 p.642.
- Weschler, L. "Public Choice: Methodological Individualism in Politics" Public Administration Review May/June 1982.
- Wildavsky, A. The Politics of the Budgetary Process Boston: Little, Brown, 1964.

----- Speaking Truth to
Analysis Boston: Little

Wilensky, H. The 'New
Welfare State Beverly Ma

Williams, J. "Internat
Political Methodology & 1

Wilson, V.S. Canadian Pol
and Environment Toronto

Winn, C. "Ministerial R
Shaman, and Other Incarr
Policy Toronto: Universit,

----- and J. McMenemy P
McGraw-Hill, 1976.

Wittman, D. "Parties as U
cal Science Review 67:1 19

Wright, G. "Interparty Com
Policy: When a Difference
Politics 37 1975 p.796.

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