Workshop on

THE POLITICAL ECONOMY OF CONFEDERATION

PROCEEDINGS

Kingston, on November 8-10, 1978

The Institute of Intergovernmental Relations
Queen's University

Economic Council of Canada

PROCEEDINGS

OF THE

WORKSHOP ON THE POLITICAL ECONOMY OF CONFEDERATION

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and

Economic Council of Canada

The findings of the papers and the discussants' comments are the personal responsibility of the authors and, as such, have not been endorsed by Members of the Economic Council of Canada, or the Institute of Intergovernmental Relations.

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CONTENTS

FOREWORD

It is now over two years since the election of the Parti Québécois government. At that time a referendum was thought to be coming in two years' time, and it looked as though one of the most momentous decision points in our history was almost upon us. Many individuals and organizations felt an urgent need to communicate to the Quebec public, and to the Canadian public at large, and say what they thought it was important to know before Quebecers voted one way or the other. After a few months' lag there was a flurry of conferences; a National Unity Task Force was commissioned; work began within the Quebec government analysing forms of sovereignty-association and their implications; inside the federal government, in the Federal-Provincial Relations Office, the "Co-ordination" group was formed to develop a federal position; the C.D. Howe Research Institute started an ambitious program of about a dozen studies to be published *seriatim* over the coming months; Canada West Foundation set up a work program, as did many other individuals and groups around the country. Political scientists re-emphasized their already strong commitment to study of the political structure and dynamics of the federation.

The members of the Economic Council also felt that they wanted to contribute. It was obvious that the Council could not give a rounded view on the issues as a whole, since so many of the relevant questions in the national unity debate were outside of economics. But the Council felt that it could contribute some economic information, or economic intelligence, to help put the economics part of the debate on as good a factual basis as was possible in the nature of the case. A set of Confederation papers were prepared under the direction of Dr. Neal Swan.

Resources of finance and personnel, however, were limited, and it was not possible to attempt coverage of all the important economic aspects of Confederation in the time thought to be available. For this and other reasons the Council decided not to try to produce a publication of its own -- a "consensus" document. Instead, it decided that a workshop to discuss the findings of a number of research efforts would be a useful way for results to be made available. In this fashion each study could be seen in context and relation to others, and critical on-the-spot review could be given by other professionals working in the area.

After discussion with the Institute of Intergovernmental Relations at Queen's University it was decided that the format should be a joint workshop with them, to be held at Queen's University. This joint venture made it possible to take a broader perspective

on the questions relative to the debate on Confederation, by including a mixture of economic, historical and political science papers.

It should be emphasized that the choice of this method of dissemination of the research results was made at some risk that the individual researchers would draw conclusions from their analysis with which Council members of the Economic Council and the Institute of Intergovernmental Relations, or any other person for that matter, might legitimately disagree. Thus, the Council and the Institute do not necessarily subscribe to the findings of any of the papers in these proceedings, but present them in the interest of informing the general public of some of the issues at stake.

INTRODUCTION

This introduction has two purposes. One is to provide a background to the economics papers, since these tend to be rather more technical than the others, with a view to helping in understanding them and in assessing their relevance to the current debate on the future of Confederation in Canada. We consider matters such as: the appropriate selection of hypothetical future "scenarios"; reservations that could be made to the analyses because of their relative neglect of dynamic factors; the distinction between what is knowable about the economic future with greater or lesser clarity and certainty; the role and significance of assumptions in economic analysis for those who are not closely familiar with the methods that practising economists adopt; and the relative importance of economic versus non-economic factors. This part of the introduction draws heavily upon the address given by Dr. Ostry, Chairman of the Economic Council of Canada, in opening the workshop.

The second purpose is to provide some indication of the objectives of each of the papers individually, of the main conclusions reached, and occasionally of the path from the one to the other. Such a quasi-summarizing exercise should make it easier to capture the main messages of the workshop as a whole and will permit those who would prefer to study in depth only a limited number of the papers to make an appropriate selection among them.

Seven of the twelve papers in this volume are on economic questions. As stated in the foreword, these were intended by the Economic Council to provide economic information or "economic intelligence," in order to help put the economics part of the debate on an improved factual basis. It may be, however, that an assured factual basis is not possible for a broad range of economic issues because of the complexity of the forces in play, the imperfections of data, and the incomplete state of the science of economics. This is particularly so for large structural changes in economic arrangements for which comparative economic history provides some guidance, but only some.

An extremely important purpose of such economic intelligence work is presumably to inform voters in a Quebec referendum of relevant economic facts, as well as citizens in the rest of the country to the extent that their readiness to accept change in federalism might influence the relative attractiveness of the alternatives facing Quebec voters. The ideal technique is fairly clear. It would involve contrasting the expected economic performance of federalism with the expected performance of a fractured country, however each of these is defined. How do the alternatives look for Quebec? For

other parts of the country? A second purpose, mentioned in the Chairman's opening address as having been stressed by the Economic Council in commissioning its part of the work, was to analyse possible changes in those aspects of the Canadian economic system whose alleged malfunctioning might have been influential in bringing on the present crisis.

The first, "information providing," task requires some attempt to define relevant alternatives or scenarios. Two alternatives are federalism and separation. On the latter, fractured country alternative, the papers do not give extensive consideration to sovereignty with association. The reasons for this, given by Ostry in her opening address, were, first, that the economics research itself soon showed that "Rump Canada," in Clarence Barber's superbly inelegant phrase, would have little to gain over the long haul from association, so that the possibility of it's happening seemed vanishingly small; and, second, that the nature of the association concept was very difficult to pin down, especially during the first half of the P.Q. government's term, the time when the research was being done. Nevertheless, it should be emphasized that it is possible for those who wish to do so to make some applications of the analysis in the papers to the sovereignty-association alternative. Equally, Ostry added, the possibility of a *fédéralisme* that was radically *renouvelé* was considered most unlikely. But that did not mean that improvements were impossible in the economic sphere -- far from it. Nor did the improbability of sovereignty-association mean that no economic links whatsoever could exist. Indeed, one of the most important features of Canadian economic institutions and policies, particularly in federal-provincial roles and relations, has been their change over time in response to changing priorities and circumstances.

In considering alternative scenarios it was considered less useful to contrast alternatives for the system as a whole than to contrast alternatives for control over each of four economic variables that largely define how much economic "sovereignty," or "independence," a province or a nation has. Moreover, sovereignty in the economic sphere is not only multidimensional, it is also continuously variable, rather than being there or not there, in the four economic dimensions. These dimensions are the tax and expenditure system, the external trade system, the monetary system, and the conventions regarding factor mobility. The principal analysis is done for these four dimensions, but some analysis is also provided regarding the exercise of such other important kinds of policy as regulation, expenditure structure and non-tariff foreign trade policy. On the tax and expenditure system: the present federal arrangement gives Quebec a partial say on taxes and expenditure in Quebec and a partial say on taxes

and expenditure outside Quebec; independence, with or without association, would give Quebec full say within Quebec and no say outside; and a Swiss style confederation would fall in between. On external trade: Quebecers at present share power with others in Canada to decide upon a common external tariff and commercial policy; with independence, Quebec might gain zero extra sovereignty in this area (a Common Market agreement), or some extra sovereignty (a free trade area), or full extra sovereignty (no trade association at all). On the monetary system: the shared jurisdiction of Quebecers with other Canadians might be left as it is with no gain in sovereignty (monetary union), or there could be a partial increase in sovereignty by means of a separate currency but a fixed exchange rate, or a bigger increase by means of a separate and floating currency. On factor mobility: the Quebec government exercises no present control over movement of people and capital into Quebec from Canada, although the Quebec people share control with other Canadians over immigration from abroad. Independence could go with varying degrees of sovereignty here, depending on whether Quebec control on foreign immigration of people was supplemented by control over immigration from the rest of Canada or control over capital movements or both.

Thus, in doing research on a particular issue concerning change in constitutional arrangements it is only necessary to take into account those changes in each of the four dimensions of economic sovereignty that are relevant to the issue at hand. The papers need to be read with this is mind. For example, in studying the implications of changes in control over the tax and expenditure system for taxes paid by Quebecers it is not very important what one assumes about monetary union. But for trade flows a wider spectrum of changes in the economic components defining independence needs to be examined. Consequently the scenarios in the papers often vary according to the topic being looked at.

A *caveat* concerning all the papers given, and particularly stressed by Ostry in her opening address, is that some of the relevant economic facts cannot be uncovered by the current tools of economic analysis, powerful though they be. If these particular facts are important, in that they could seriously influence living standards and unemployment in Quebec or elsewhere, they would dwarf into insignificance the conventional facts in either this volume or the work of others such as the C.D. Howe Institute, the Parti Québécois and the federal government.

The Economic Council Chairman was referring to what Maynard Keynes called "the animal spirits" of entrepreneurs and to the

unpredictability of human reactions in crisis. These could play a key, albeit a questionably predictable role in the event of separation. If capital was withdrawn in large amounts from Quebec by businessmen and others, the impact on employment and income in Quebec -- and indeed in the rest of Canada -- could be more significant than any economic factor analysed at the workshop. Equally, if independence liberated a spirit of dynamic co-operation within Quebec, as some péquistes have argued, that could also be of dominating importance. Ostry's point was that there are dynamic factors whose impact is both potentially large and in practice unknowable. How does one allow for such dynamic uncertainties? She did not know, but felt a serious uneasiness about not being able to do so. Consequently, it is important to keep firmly in mind that the analyses presented in this volume are not the whole story. It is possible that they are less significant than the "undoable" analysis.

The inability to allow for dynamic factors, stressed by Ostry, is not the only caveat concerning the analyses at the workshop. In most of the economics papers the reader will observe that a number of assumptions are made, under which the analysis is carried on. They vary widely in plausibility. Does that mean that none of the results can be trusted?

It does not, but it does mean that proper interpretation of them needs great care, if one is not to be misled. Some examples will illustrate. In Glynn's paper, "The Net Provincial Expenditures Associated with Federal Government Expenditures, and Fiscal Autonomy," certain calculations are made about the increase in the taxes necessary to sustain an unchanged level of government services in an independent Quebec. Glynn assumes, for purposes of this calculation, that the unemployment rate would not be changed by separation from that ruling in the year to which his data relate. That seems to be an important assumption, because if separation brought a higher unemployment rate the consequent fall in tax collections and rise in unemployment insurance payments would mean an increased tax burden in Quebec greater than Glynn calculates, and conversely if separation brought a lower unemployment rate. What Glynn is doing is deliberately ignoring the influence on tax levels of the unemployment rate variable, despite the fact that he knows it to be important. He does this so that the effect of changes in the variable he is chiefly interested in -- the degree of control by the provincial government over the tax and expenditure system -- can be isolated for "inspection," as it were. This practice, of isolating the effect of one variable by assuming the other variables to be constant (the procedure of ceteris paribus in the jargon), is standard in economics

work, and is a substitute for what some natural scientists do in physically controlling the conditions under which they do their experiments. The conclusion that a lead ball and a goose feather accelerate under gravity at the same rate in a perfect vacuum is not made less useful by the fact that air resistance is "assumed to be zero," and Glynn's conclusions about tax levels are not made less useful by the fact that changes in the unemployment rate are "assumed to be zero."

Glynn also assumes that the tobacco tax is paid by consumers of tobacco. What that means is that any new extra tax on a pack of cigarettes, say of ten cents, would raise the price by the full amount of that tax, i.e., ten cents. It need not be so: tobacco producers might absorb some of the increase, either by not raising the price as much as ten cents, or by foregoing all or part of a price increase that they had been planning to implement in the absence of the new tax. This is a different kind of assumption from the previous one, since Glynn would undoubtedly have preferred to use an accurate estimate about how much an extra tax raises the price, rather than an assumption about it. Here is a second role for assumptions, to provide information about numbers whose size is unknown because the necessary research has not been done. Where different values for such unknown numbers ("parameter values," in the jargon) might make a big difference to the final answer, more than one assumption may be tried, as Glynn does for the number describing how much of the corporation tax is passed on in higher prices. This "information role" for assumptions need not always be numerical. In calculating changes in trade flows it makes a difference whether producers compete mainly on price or mainly on quality and brand. Empirical evidence exists on this, but it is not conclusive. Hazledine, in his paper "The Costs and Benefits of the Canadian Customs Union," makes different assumptions in this respect from those made by Auer and Mills in their paper "Confederation and Some Regional Implications of the Tariffs on Manufactures." This makes for differences in their results even when they study comparable separation scenarios.

Perhaps the most common general assumption in economic analysis, made in all the economic papers presented at the workshop and usually accepted without question in other contexts, is that of individualistic self-seeking behaviour by economic agents ("maximizing of profit and utility" in the jargon). Such behaviour is often equated by economists with "economic rationality." In the context of economic analysis of the possible separation of Quebec this may be a riskier assumption than usual. A particular example is the role of this assumption in the paper by Hazledine, and in

the main body of the analysis in the paper of Auer and Mills. In both cases it is supposed that separation would not be followed by a complete cessation of trade (a trade embargo) between Quebec and the rest of Canada. The implicit basis for this assumption is that a trade embargo would not be in the self-interest of either producers or consumers. With this assumption, the calculated employment changes are quite small. Without it, employment losses could be very much larger, as Auer and Mills show in a brief analysis of the trade embargo case. Analysts who implicitly or explicitly drop the assumption of self-seeking economic rationality will arrive at very different results for the impact of separation from those presented in this volume.

A final point, of surpassing importance, is testified to by the inclusion in this volume of six papers by historians and political scientists. The study of economic questions alone cannot give a rounded view of the issues in the debate on confederation. Many of the relevant issues are not economic, but lie in the realms of language, culture, political structure, and philosophical cleavage on whether the ideal country should coincide with a nation, or whether more than one nation can and perhaps should co-exist within a single country. The non-economic papers in the volume offer some perspective on these wider issues and an introduction to a number of key points related to them. Indeed, a careful reading of these proceedings as a whole may lead some to conclude that it would be better, on both theoretical and practical grounds, to switch the emphasis in the debate from economic to non-economic matters.

* * * * *

Dr. Hazledine, a staff member of the Economic Council of Canada, began the workshop with his paper: "The Costs and Benefits of the Canadian Customs Union." In retrospect, a title like "Certain Costs and Benefits of the Canadian Customs Union" rather than "The Costs..." would have conveyed the contents more accurately. Hazledine's basic purpose is to find out whether the fiscal independence and changes in tariff arrangements accompanying a departure of Quebec from Canada would significantly affect living standards there. He is not concerned with the effects on living standards of other changes that might accompany separation, e.g. any alterations in the flows of investment funds in and out of Quebec whose effects would have to be added to, or subtracted from, those estimated in the paper. He also poses the same questions regarding fiscal and tariff changes for each of four other regions. If Ontario left, and all the rest, including Quebec, stayed, how would Ontario living standards change? What if the Atlantic region left? the Prairie provinces? British Columbia?

The effect of the fiscal and tariff changes on living standards depends on the details of the scenario examined. Under Option 1, the scenario Hazledine treats most fully, a separate Quebec would impose the Canadian level of tariffs on imports from the rest of Canada, as would the rest of Canada on Quebec; a new Quebec currency would exist and would be devalued or revalued as necessary to achieve an acceptable balance of payments; Quebec would gain access to all federal tax sources but correspondingly lose all present federal expenditures; and government policies or market forces would be used to achieve some small degree of adjustment of wage levels in Quebec relative to post-separation Canada. An important "informational" type assumption is made by Hazledine; that companies typically sell in markets where competition is on the basis not just of price but also of product quality characteristics. These are not the only characteristics and assumptions of Hazledine's option 1, but they are probably the ones that are most important for determining the size of the living standard effects he finds. Those who feel, for example, that monetary union rather than devaluation of a new currency should be an element in a future scenario will find the results less interesting than those who believe that separation would involve a new currency.

Option 1 shows changes in living standards that are large by conventional standards in economics, though perhaps smaller than popular opinion might have suspected. Quebec's "real absorption" -- the total available economic pie -- drops by $1.5 billion, or about 5 per cent of gross domestic product. Option 1 for other regions gives respectively: in British Columbia a $0.7 billion loss, in the Prairies a $0.7 billion gain, in Ontario a $2.4 billion gain, and in Atlantic Region a $1.6 billion loss.

Hazledine also considers two other options in his work but presents only partial results (initial balance of payments and employment effects). One of these options is unilateral free trade; the other, done for Quebec alone, is a separation scenario in which Quebec and the rest of Canada maintain a free trade area, but Quebec keeps the present tariff levels on other countries, and the rest of Canada goes to free trade.

Robin Boadway, a discussant for Hazledine's paper, finds the results of this study "much as one would expect," given the existing trade flows among the regions. He comments on the sensitivity of the results to the particular formulation of the model and considers alternative techniques for modelling the problem.

Dr. Auer and Miss Mills (A and M) are interested in certain

aspects of the question: who are the gainers and losers from the present Canadian tariff? In posing such a question one has to specify the alternative state of the world against which the effects of the present tariff are to be measured. A and M choose four such alternatives. The first occupies the bulk of the paper and relates to a Canada that remains united. Once the general techniques have been established by analysis of this case, three other alternatives, all of which deal with variants of Quebec separation, are quickly dealt with.

A and M's first alternative is a Canada in which tariffs have been removed, and in which sufficient time has elapsed for companies affected by the resulting fall in selling prices to reduce their output (occasionally to the point of going out of business) and lay off workers, and for selling prices in the stores to have come down as a result of the lower customs duties. It is also assumed that the time period is too short for displaced workers to have found alternative jobs, and too short for devaluation or any other policy measures to be able to affect employment or price levels. A and M comment that defining their alternative in this way serves the useful function, ancillary to that of identifying gainers and losers from the present tariff, of highlighting the size of the adjustment problem in manufacturing, if free trade were to come.

In A and M's free trade world some people have lost their jobs for a while, but all people are paying lower prices for what they buy. The lower prices occur disproportionately, however, on food and clothing, tariffs on these being higher than average. That means that the poor, who spend a higher-than-average proportion of their income on food and clothing, are disproportionately benefited by tariff removal. In fact, one widely-used definition of the number of individuals in poverty is to count those who spend more than 70 per cent of their income on food, clothing and shelter. A and M show that the number of people in poverty, defined this way, declines considerably after tariff removal. Thus, tariff removal puts some people out of work but at the same time raises some people out of poverty; it is the comparison of these two effects that constitutes the heart of the paper.

The key results are in Table 10. It shows that free trade would raise more Canadians out of poverty than it would put out of work, and that this is true for eight of the ten provinces, including Quebec. The variation by province is such that the implicit "poverty cost" of the tariff relative to the temporary employment losses avoided is much lower in Ontario, Manitoba and Price Edward Island than in the other provinces.

A and M next examine three separation scenarios, giving numerical results in Table 11 for employment losses, but not for consumer gains. The hostile trade boycott scenario, a possible but perhaps unlikely eventuality, shows severe employment losses. What A and M call a "tit-for-tat" scenario is comparable to Hazledine's scenario 1 as regards the assumed tariff changes, though not in certain other respects. Here Quebec and Canada both impose the present Canadian tariffs not just on the rest of the world, but also on each other. A short-run job loss of 41,000 results in Quebec, and 23,000 in the rest of Canada. Under either of these two scenarios no consumer benefits would appear. The remaining scenario, the "mixed" policy, has Quebec putting tariffs on Canadian goods, as well as on those from the rest of the world, but Canada opting for complete free trade. Quebec suffers the same short-run employment loss of 41,000 as under "tit-for-tat," while Canada loses many more jobs, 165,000, but will now have substantial consumer gains as well.

Victor Corbo, the discussant for this paper, comments on certain methodological aspects of A and M's analysis. He feels it is dangerous to use the nominal tariff as an indicator of effective tariff protection to the provinces and, generally, questions Dr. Auer's attempt to extrapolate from Canadian to provincial data.

The third workshop paper, by Mr. Glynn, takes up an important consequence of separation that has received surprisingly little attention in the debate in recent months. In a separate Quebec, with or without association, either tax levels or the availability of government services, or both, would have to change. The same would be true for any other province that left the confederation. The neglected question is just how big such tax or expenditure changes would have to be. Since, as mentioned, they will occur even with association, they should be of great interest to both parties to the debate.

No one can answer this kind of question <u>exactly</u>, or for the long term. But one can get a reasonably good approximation for the short term, say during the first year or so after a separation.

Mr. Glynn attempts to calculate, in effect, by how much a finance minister in a newly independent Quebec, or any other newly independent province, would have to change taxes or expenditures in the first budget after independence. He also attempts to convey the meaning of the necessary changes by pointing out how they would affect tax dollars paid by families at different income levels.

The methods used are standard and fairly uncontroversial in the sense that, though reasonable men can make different assumptions at many points in the analysis, much the same broad quantitative results come out. Glynn's baseline for comparison is an independence scenario in which the objective is to retain all government services that were available before independence. These services include, for example, old age pensions, unemployment insurance benefits, defence, the post office, agricultural subsidies, and so forth. In a province like Quebec a major part of the post-independence bill for providing these services could be met from the province's newly acquired access to previously federal taxes. But since the share of federal taxes collected in Quebec is less than Quebec's share of the value of federal services received, maintaining those services would require tax increases. Similarly, an independent Ontario could reduce taxes. Glynn works out the size of these tax changes.

An important result for Quebec is that total taxes would need to rise by about $2 billion a year (Table 6), or about a $1,000 rise in yearly taxes paid per family. Table 8 shows that total tax collections from three major sources, income tax plus general sales tax plus corporation taxes, come to about $4,000 per family in Quebec, so that the $1,000 increase is very substantial relative to current tax levels. Figures for what would happen if other provinces became independent are also given.

The distributional implications of the $1,000 tax change are shown in Table 8. Financing the increase in Quebec through the income tax leaves poor families with less than $6,000 a year not much affected, but the upper middle group, $15,000 - $20,000, would pay $1,650 more, and the over $20,000's over $4,340 more. Since these increases, as Glynn puts it, "far exceed what has normally been the practice of Ministers of Finance to adopt on their budgets," he closes by exploring a scenario for Quebec in which expenditures are cut substantially in order to keep tax increases within bounds. The results (in Table 11) show that this can be done, but that the result is a very marked increase in the regressivity of the tax/expenditure system as a whole, with the poor now bearing a much greater proportion of the adjustment burden.

David Perry, in discussing this paper, focusses his remarks on the technical aspects of Glynn's approach and argues that the distribution of federal revenues and expenditures was performed at a level of aggregation too high to yield precise results. He emphasises that these results, based upon information from a single year, will reflect the presence of certain institutional factors of a transitional

nature. He expresses his worry that the results, as presented, will be accepted by many readers as being completely accurate predictions.

* * * * *

A survey of the attitudes and opinions of 51 influential persons in Nova Scotia, conducted by two Queen's professors, G. Rawlik and G. Perlin, shows that these leaders are staunch Canadians and enthusiastic Maritimers. 80 per cent regard themselves as Canadians first, but as one respondent remarks, "this is accompanied by a very strong provincial identity."

Sixty-nine per cent of the group surveyed believes that Confederation has benefitted the provinces, citing in explanation the advantages Nova Scotia derives from being part of a country "as large, powerful and wealthy as Canada." In contrast, only 16 per cent feel that Confederation has a detrimental effect.

Belief in Confederation, however, does not prevent Nova Scotians from criticising national economic policies seen to be inappropriate for the Atlantic Region. A grievance commonly expressed is that Ottawa has not been energetic enough in fighting regional disparity, and that Federal economic policy continues to discriminate against the Atlantic Region. Many stress that more sensitive national policies in transportation, taxation, tariff rates and marketing are needed as a precondition for economic recovery in the Maritimes.

Indeed, 55 per cent of those questioned believe that the federal government actually understands the province's problems. Many of the respondents perceive the federal government as "a huge, very complicated and quite inaccessible machine." The provincial government, on the other hand, is regarded as "more accessible, much less complex and more humane." Over 70 per cent feel that the provincial government does a creditable job of communicating the province's problems to Ottawa, although frequently without success.

Many of the Nova Scotians surveyed are concerned by the Atlantic Provinces' dependence on federal equalization and transfer payments. They assert that this dependency "has to stop," and maintain that "the provincial economy is far too concentrated in the service sector, far too dependent on government money and not sufficiently productive." What Nova Scotians lack, in the eyes of those who form the province's elite, "is qualified and adventuresome entrepreneurs to accept the challenge" of making the province self-sufficient.

The sample group that participated in the Queen's survey was

also questioned on various possible reforms. The answers here again prove to be interesting. For example, a slight majority, 51 per cent, state that they are in favour of some regionalization of administrative services, but 59 per cent are opposed to decentralization of jurisdictions. Almost half feel the provinces should take an active role in the establishment of monetary policies, and 57 per cent support provincial policy and the federal budget. However, Perlin and Rawlik stress that "at no time did respondents give the impression that they sought the aggrandizement of provincial powers at the expense of the federal sphere."

When dealing with Quebec and the possibility of separation, the Nova Scotia leaders reveal a strong desire to avoid the partition of Canada. Eighty-eight point two per cent of the group fear that Quebec's separation will have a somewhat or very harmful effect on Nova Scotia. In the eventuality of an independent Quebec, 89 per cent of those surveyed are of the opinion that their province will have no choice other than to remain within Confederation.

Peter Gunther, discussant for the above paper, emphasises the coexistence of a strong national allegiance among Maritimers along with a definite sense of regionalism, of what is Maritime. These two characteristics of the Maritime population, reflected in the response of a selected sample to the P & R survey, constitutes for Gunther "the Canadian irony."

* * * * *

It is often argued that important savings can be made in the cost of providing government services when two or more countries merge to form one. The resulting single department of external affairs, for example, may be less costly than the previous two or more; an amalgamated defence force may not be as expensive as the sum of the two or more pre-existing forces. Similarly, the break-up of a country is often argued to lead to important additional costs in providing government services. In the fifth paper, Mr. MacDonald investigates these arguments, asking: if Quebec separated, what would be the change in the cost of providing the present level of government services?

The problem turns out to be far more difficult than one would have thought. In tackling it, Mr. MacDonald finds it helpful to make a fourfold classification of federally provided public services, and an understanding of this classification is the key to following his treatment of some very complex issues.

First, the need for expenditure on some services can be shown to increase in a fairly regular way with the number of individuals served, whereas this is not so for other services. MacDonald calls

the first group the "regionalized" services, since they are very often characterized by considerable expenditures at the regional level and they account for the great bulk of federal service expenditures. An example is the processing and administering of unemployment insurance claims for which expenditures are larger, the larger the number of claimants served. Within the regionalized services it is important for analytical purposes to treat separately expenditures at "head office" and expenditures "in the field." MacDonald calls the second, minority group of services "unregionalized." An example is the National Research Council where the need for expenditures is only dimly related to whatever population one considers to be served, whether or not the ability to provide the services is so linked.

The fourfold classification is obtained by dividing each of the regionalized and unregionalized services into two groups, according to whether Quebec already spends more than a token amount on providing provincial services of a similar type (but never identical; outright duplication is assumed not to exist, though the implications if it did are briefly discussed), or whether it does not. An example of the former is agriculture, of the latter, Statistics Canada.

For the regionalized services MacDonald estimates the impact on unit costs of the amount of service provided. The work is done separately for head office and field costs, and it is found that unit costs generally decline in both cases as output rises, though not at a rapid rate. For a service where Quebec already has a head office and field operations providing services similar to the federal ones, the increased scale attainable after the takeover of federal services following separation means that unit costs can be lowered, and money saved. There is a corresponding but smaller increase in costs at the federal level as the scale of operation there is reduced. But for a service where Quebec has no existing similar service, the need to provide an inefficiently small head office to replace functions formerly available from a federal head office raises costs in Quebec; there is also a cost increase in the rest of Canada.

For unregionalized services, most have Quebec equivalents, no change in cost would be expected after a hypothetical separation. The unregionalized services that do not presently exist in Quebec have to be analysed one by one for technical reasons. What would happen to Quebec's spending on this minority group of services turns out to be very much a judgment call in each case. MacDonald examines in detail two fairly large types of service in this group, related to external affairs and to research respectively, and leaves the others for future research.

MacDonald's final estimates of the cost saving implied by having the federal government provide services, as compared with a situation where these services would have to be provided independently by a separate Quebec, appear in Table 6-2. The savings are very small and could even be negative under certain assumptions. His middle-of-the-road estimate is a saving of about $180 per capita per annum. He notes that gains under the federal system from avoiding negative externalities (spillovers) or losses from outright duplication of services might easily be much larger.

In discussing this paper, Dan Usher compares MacDonald's attempt to construct his cost functions - a technical problem in measuring scale economies - with the endeavor to "build bricks without straw," given the poor numbers available to work with. He feels that MacDonald makes untenable assumptions in order to circumvent this 'numbers' problem, although the nature of the task at hand may have weighed against any better alternative approach.

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What are the roots of discontent as a political scientist sees them? Evenson and Simeon (E and S) answer that our political institutions are presently unable to successfully harmonise the aspirations of three groups of people, "nation-builders," "province builders," and "Quebec-nation builders." The solution to the crisis, if there is one, lies in re-engineering our political institutions so that they can come closer to achieving what each of these three groups wants.

E and S believe that the fundamental social and economic order of Canadian society is not in question in the present crisis which is rather a problem of the relation of governments to one another in the federal system. Regional and national interests, as expressed through provincial and federal governments, are in constant conflict, and the present informal arrangements for resolving disagreements are failing at the task. Three conventional theories of why conflicts arise exist. One focuses on cultural differences among Canadian provinces. A second stresses competition between federal and provincial political and bureaucratic leaders. A third sees the development of Canadian resources as leading to a pattern of regional disparities that produces interregional frictions. E and S's approach, with its concept of the three forces, nation-building, province-building, and Quebec nation-building, cuts across these theories, and gives a new perspective on the present crisis. In E and S's terminology, the crisis can be described as a weakening of the first force relative to the other two.

Country-building began with the BNA Act and was continued with the transcontinental railway system and industrialization behind the tariff. Between World War II and the late 1960s it took the form of developing through federal leadership a pan-Canadian system for security against poverty and sickness, of widening access to higher education, and of attempting to apply Keynesian economic policies to keep unemployment low. Since 1968 federal concern has turned to direct regulation and the centralization of power. Country-builders have always seen the federal government and national institutions as the chief architects of national development.

Weaknesses of country-building have appeared, with a national view of economic policy proving too narrow in such a regionally diversified economy. Federal political institutions, such as the party caucuses, the electoral system, the cabinet, and party discipline, permit neither adequate representation of provinces and regions, nor integration of their diverse views. The representative function has been undertaken by provincial governments, and the integrative one by the federal-provincial conference. Any country-building strategy for reform would have to allow a greater regional voice in the internal processes of federal policymaking.

Province-building forces stem from a sense of regional community strengthened by the growing responsibility and fiscal clout of the provinces. Ironically, federal institutional policy has led to resource-fueled growth in provincial power and to north-south links that weaken provincial ties to Central Canada. Furthermore, the power of the provinces has been enhanced by virtue of the fact that they have constitutional responsibility for the fastest recent growth areas in government -- health, education, and social welfare. At the same time, the federal government has lost legitimacy from its failure to cope with regional disparities, notably unemployment, and from its inability, given the difficulty of achieving constitutional change, to implement even popularly demanded centralization measures. The politicians and civil servants who most strongly expound the cause of province-building have also argued that there is popular regional discontent with federal policies that affect the regions in areas such as transportation, resources, agriculture and fisheries, and that provincial influence on federal decisions in these areas is weak or non-existent.

What province-builders want is more of the taxpayers' money distributed to provincial governments, less federal interference in provincial affairs, and more provincial say in federal actions that affect provinces. At the limit, they see the national interest as the sum of provincial interests and come very close to espousing the concept of a con-federal state.

The third force at work is Quebec nation-building. This force poses a much more fundamental challenge to the federal system than either the weakening of country-building or the strengthening of province-building. The election of a separatist government in Quebec is its latest manifestation, radically transforming the debate, but every Quebec government since 1960 has pressed for fundamental changes in the federal system. The federal response has been to give more powers to the provinces generally, to implement changes such as the Official Languages Act to accommodate French Canadians, and to accept various forms of special status to accommodate the Quebec provincial government.

The grievances of French Canadians have been economic, in that francophones in Quebec have had lower average incomes than anglophones inside and outside Quebec and considerably higher unemployment, and in that economic power in Quebec has been concentrated in the hands of the anglophone minority. The grievances have been cultural, in that francophones inside and outside Quebec feel the danger of being assimilated to the English majority and culture, and those outside Quebec have often been denied French language services. And finally, the grievances have been political. Despite the fact that Quebec has had a fairly strong voice in Ottawa (though with good cabinet posts only recently, and with the problem that this advantage is closely tied to the fortunes of the Liberal party), Quebec nation-builders argue that past federal policy has been unrepresentative of francophones, in conflict with French aspirations and values, infringing on Quebec autonomy, and operating to the disadvantage of the Quebec economy. The recent strengthening of francophone representation in the bureaucracy may help to reduce these problems, but it has resulted in considerable friction with anglophones.

Quebec nation-builders have come to feel that the cultural, economic and political problems can best be tackled through the creation of a politically independent Quebec nation-state. Paralleling this feeling is the trend since 1960 for more power to accrue to the Quebec government, rather than more rights for French Canadians everywhere. The new middle class in Quebec, both the creator and the creature of this development, increasingly sees the Quebec state as the instrument for preserving Quebec culture and controlling the economic destiny of Quebecers.

Only a minority of Quebecers, at this point, are Quebec nation-builders. Committed federalists distrust ethnically based nationalism, emphasize individual rights, and feel that federalism can best preserve humanist values including the rights of French Canadians outside Quebec. Third option federalists put less emphasis on the federal system's ability to preserve rights and more on its expediency and

profitability. They stress that Canada is "two nations" and they require special status for the Quebec nation. The péquistes go further and believe that separation would benefit both French and English Canada, although they expect economic association to continue. Despite these varying views, support for Quebec nation-building within Quebec is strong enough, argue E and S, that any successful modification of federalism will need to take account of it.

E and S summarize their argument by saying that the "political crisis of Canadian federalism thus comes down to a clash between rival governments, each tending to speak for one of the three drives we have surveyed: for national leadership, for greater provincial control, or for a special role for Quebec as the political expression of a distinct national community." Moving on to remedies, they note that the rival drives lead to much overlapping of federal and provincial responsibilities. Little political integration of the two levels exists, policy reconciliation, such as it is, occurring in a fashion similar to that whereby disputes are resolved in international relations, with literally hundreds of joint meetings and conferences. Intergovernmental meetings, however, are very unsatisfactory as conflict reconciling mechanisms; they tend to be secretive; action comes slowly and sometimes not at all; responsibility is divided and public accountability difficult to achieve.

E and S conclude that the urgent need is for the kind of changes to the Canadian constitution that would permit the country to handle intergovernmental relations better and more formally. The changes should incorporate machinery for making intergovernmental agreements easier to arrive at and arrangements that would increase public accountability for decisions taken. The federal government needs to be made more representative and mediative of regional differences and, more important, ways must be found to improve the relationship between it and the provincial governments.

In discussing this paper, Stanley Roberts agrees that the current crisis is political in nature, that "the roots of discontent" lie deep within the Canadian federal system. He provides many fascinating insights into the Western point of view and suggests that federal structures should be reformed to give the West more effective regional representation.

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Many westerners feel that they are disadvantaged by the tariff, by resource taxation and by the structure of railway freight rates. Professor Norrie's paper aims to see if this feeling is justified.

The essence of the complaints that westerners make, according to Norrie, is that federal policies in these three areas keep incomes in the region below their potential and prevent industrialization.

He argues that western grievances will be justified if serious problems of unrealized income and industrialization do exist and if they are attributable to federal policies that distort and interfere with market forces, changing the geographical distribution of income and industry in Canada from what it would be in a more neutral policy environment. He would regard as unjustified a complaint that the federal government had failed to adopt policies deliberately designed to overcome natural economic disadvantages, such as decreasing effective distance from markets by subsidization of transportation. The main focus of the paper is a report on an empirical investigation of allegations of discrimination in railway freight rates, though Norrie deals briefly with the tariff and resource issues. The main effect of the tariff is to create more industrial jobs in central Canada, to raise living costs for all Canadians, and to lower the value of natural resources. It can be argued that these effects discriminate against westerners, because unlike central Canadians they have to move to take advantage of tariff-created jobs, and because westerners' wealth is more concentrated in natural resources. Other tariff-created problems are dealt with briefly and then the paper moves on to resources. The main issues here are the federal export tax on crude oil, the 1974 disallowance of royalty payments as a deduction for federal company tax, and federal challenges to Saskatchewan oil and potash policies. After briefly reviewing the literature on what level of government ought to control resources (an issue somewhat independent of who has the legal right to do so under the BNA Act), Norrie concludes that "the issue of resource taxation does seem to be a legitimate area for federal-provincial concern."

In investigating whether there is freight rate discrimination against the west, Norrie enumerates five complaints: that the railways charge less per ton mile for raw materials moving out of the west than for processed goods, thereby destroying otherwise natural industries for the west; that decentralization of production within the west is inhibited by not having zone rates like those in the east; that living costs are raised because the railways' charges for products shipped from central Canada are higher to the Prairie provinces than to Vancouver; that manufactured goods move west more cheaply than they move east, making competition for western manufacturers tougher than it need be; and that the recent practice of increasing rates by a constant percentage for all products exacerbates the latter problem. The general solution proposed by the west is to price railway services more in line with their costs.

Norrie argues on theoretical grounds that the first, fourth and fifth complaints are strange, because it seems likely that the railway would make more profit by pricing in just the opposite way to that suggested. And the third complaint, valid enough, is evidence that the railway does price to obtain as much profit as possible.

In his empirical work, Norrie looks at actual rates charged by varying degrees of disaggregation. He finds that the "general incidence of rates is low on goods exported from the Prairies" and that there "is no obvious bias in export rates on raw versus semi-processed or processed products, except in the case of rapeseed and feedgrains, and only here because of statutory rates that favour western farmers." Thus, the first complaint does not stand up to analysis. In addition, "charges on manufactured goods are higher on regional imports than on exports" so that the fourth and associated fifth complaints are also doubtful. He concludes that railway freight rates constitute a burden in the sense that manufactured goods cost more for western consumers as a result of railway pricing practices, but that they do not have the effect of favouring raw materials versus processing activities in the economy of the western provinces.

In his opening remarks, H.C. Eastmen, discussant for the above work, describes Norrie's research as "exceptionally clear and concise." The discussion of the paper that follows is filled with valuable points of clarification and the discussant finds no call for substantial criticism of Norrie's study, in part or in whole.

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Professor Leslie's concern is whether the substance of public policy is affected by the kind of constitution we have. In principle, he says, constitutional change can have six kinds of influence, on respectively: the careers of politicians and bureaucrats, the costs of administering and developing government policies, the degree of sensitivity of government policies to regional needs, the distribution among regions of the costs and benefits of public policies, and the size and role of government as a whole. Leslie uses his taxonomy to distinguish six viewpoints about the importance of constitutional change, according to whether a person gives credence only to the first influence, to the first and the second but not the other four, and so on through to a belief in all six. He also notes, on page 7, which interests are affected by constitutional change in each case.

The Great Depression seemed to show at the time that the constitution was a serious barrier to implementing needed social

policies. However, after World War II a great deal was achieved without in fact amending the constitution in major ways, though in the process some resentment of federal powers was created in Quebec and the west. Nevertheless, Leslie argues, the constitution does affect policy in significant ways. It determines, for example, which community has the main voting say in particular policy areas, and a parallel is drawn here between the effects of constitutional change and the effects of gerrymandering. A minority interest in a large jurisdiction can be a majority interest in a smaller one. Although that in itself suggests benefits from decentralization of powers, good policy may sometimes require joint action by both levels, more easily achieved without too much decentralization.

The question is then taken up of whether interests divide along regional lines, because decentralization will only be an important political issue if they do. Examples are studied: of transportation and western interests, and of labour policy and Quebec interests. Even if there are significant regional interests, it may nevertheless pay the regions to agree on a central authority, since the periodic gains from the exercise of this authority may more than offset the periodic losses also caused by it. It is also noted that the forms of the constitutional structure do have a certain importance, e.g. how powerful the Senate is and what the precise role of the Supreme Court is.

Leslie concludes that constitutional change has a real and important effect on what governments do and do not do, and on which interests get what they want and which do not, and closes with an appeal for more empirical work on these matters.

Bernard Bonin directs his energy towards a re-emphasis of several points raised within Leslie's paper concerning the possible benefits to be derived from decentralized political decision making. He asserts that centralized decision making and strong regional interests cannot be easily reconciled.

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The paper by Professor Irvine offers a new federal electoral system designed to give provinces better representation in the caucuses of the two major parties. Governments, he argues, need legitimacy, which involves the four attributes of representativeness, sensitivity to the popular will, ability to mobilize social forces, and capacity to manage conflicts between different groups in society. They also need responsiveness to make policy as demanded and to change it as necessary and to provide redress for grievances such as the unfair

exercise of administrative discretion. A well designed electoral system can improve both legitimacy and responsiveness and does this through its effects on representativeness, party strength, policy-making and the capacity for redress.

Four types of existing electoral system are described. The plurality system is one, and Canada is an example of it. Another is the single transferable vote system, as in Ireland, in which three to five people are elected per constituency, with voters indicating their relative preference among candidates, these preferences being used in helping to determine who wins. A third is the list electoral system, with the Netherlands an example. Here there are several representatives per constituency, but each party must now offer a list of candidates for each constituency equal to the number of representatives it will have. The assignment among parties of seats to each constituency is such that: "without going into details, each party can count on receiving a number of seats closely corresponding to its proportion of the constituency vote and will fill those seats starting with the top of its constituency list." (p.6). Finally, there are compromises between the plurality and the list system, as in the Federal Republic of Germany. In general, list systems lead to representation of political parties roughly in proportion to the votes cast for them, in contrast with the plurality, first-past-the-post, system.

Irvine then provides details of his proposed new system. Its general characteristic is that, while retaining the present "one man represents a constituency" character of Canada, albeit with somewhat larger constituencies, a number of additional members will be elected to the house as party representatives of each province. Among these members, who would represent just under half of the total, parties would usually achieve representation within provinces fairly close to their percentage of the provincial popular vote. The exceptions might occur either with very small parties or with very small provinces. Irvine "re-runs" the 1974 election with his system, showing that, for example, Quebec elects a substantial minority of conservative members, and Alberta of liberal members.

Since Irvine's proposal involves a new system that compromises between the present plurality and a list variant that introduces elements of proportional representation, he is concerned to meet the common criticisms that proportional representation tends to weaken governments and make them indecisive. He addresses these arguments in general terms as well as in the Canadian context and finds them unconvincing.

The system's main benefit would be in improving the representation within the party caucuses in a special kind of way. It would allow representation of the concerns of large blocs of voters whose views *qua* members of provincial communities, in contrast with their views *qua* members of the wider Canadian community, are not presently receiving adequate consideration within those caucuses. Once again, there are the examples of conservatives in Quebec and liberals in Alberta. One could say of the present system that it tends to make provinces look more unanimous than they really are, to sharpen regional cleavages, and thereby to exacerbate the problem of the Canadian community as a whole.

The criticisms of K.Z. Paltiel in his discussion of the Irvine paper are directed towards the lack of consideration given to technical problems which he feels would arise in any attempt to implement Irvine's proposed electoral system. He argues that adoption of such a system would only exacerbate the representational shortcomings of the existing Canadian electoral structure.

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In their preface Professors Rabeau and Lacroix (R and L) emphasize the persistence of regional economic disparities as a prime factor in the doubts felt by the provinces, notably Quebec, regarding the distribution of power and jurisdictions within confederation. One key regional disparity is that unemployment is much more severe in some regions, including Quebec, than elsewhere. These same regions also bear a disproportionate share of the burden of extra unemployment during economic recessions and therefore have a strong interest in improving the effectiveness of stabilization policy, not only in general but also in such a way that the stimulating effect of that policy is especially enhanced in regions where cyclical unemployment tends to be high. R and L's paper seeks to find methods to improve stabilization policy along these lines, with particular stress on making it more effective in combatting regional unemployment disparities.

R and L begin by discussing stabilization "instruments." These are particular taxes or categories of government expenditure which can be changed in order to increase or decrease production and employment. They maintain that categories of expenditure are technically more efficient instruments than changes in income tax and corporation tax. Moreover, the types of expenditures most suitable for stabilization purposes are under provincial or municipal jurisdiction, not federal.

In section 2 a number of different issues are taken up. In 2.1, R and L estimate how much would have to be borrowed by a government wishing to increase employment in Quebec by 1 per cent. This borrowing is called the "net cost to the treasury," and Table 2.1 shows how it varies according to the level of government stabilization instrument used, an example being that annual borrowing of $891 million would be needed if the Quebec government created the jobs via increased spending on gross capital formation.

In parts 2.2 and 2.3, R and L discuss causes and remedies for unemployment in Quebec. Of the 3 percentage point average discrepancy between Quebec and Ontario, one-half of a point is seasonal, with the rest attributable to labour immobility and institutionally caused wage rigidity. Since downward wage flexibility is impractical for political reasons, according to the authors, and a mobility solution to unemployment "has always been, and will always remain, unacceptable to the Quebec elite, and perhaps to the Quebec people as a whole," jobs must be created in place. This should be done by a combination of long-term structural adjustments, short-term regional stabilization measures and "concerted action (on wages) by the major social partners," with the last measure being needed because "these policies would not have a truly lasting effect on employment through productivity unless wages in the under-privileged regions continued to rise at a slower rate in other regions, despite the fact that the unemployment rate had abandoned past trends."

The final part of section 2 discusses whether the federal or provincial governments should have the responsibility for stabilization. Arguing in favour of federal responsibility, say R and L, is the need from time to time to apply restrictive policy in some provinces simultaneously with expansionary policy in others, and the need for the stabilizing authority to carry a considerable budget deficit over a long period of time. Arguing in favour of provincial responsibility is the technical efficiency of provincial stabilization instruments.

Section 3 now proposes a new organization of stabilization policy intended both to permit its regionalization and to resolve the "Canadian dilemma" -- that the effective stabilization policies are at the provincial government level while the effective financing and co-ordinating power is at the federal level.

The authors begin by stressing that their

> ...proposal does not actually intend to increase transfers from one region to another, but rather to increase their economic effectiveness.

> Under our proposal, transfer payments made for purposes of stabilization would also be designed to restructure the regional economies. Over the medium term, these stabilization policies would lead to a reduction or even a complete disappearance of some other transfers.

Only the broad outlines of the proposal can be described here. The provinces would vary capital expenditures counter-cyclically, using a federally financed fund. Access to the fund would be controlled by a method related to economic indicators, coupled with a political decision, through a federal-provincial committee, on the stabilization and other objectives to be met by use of the fund. The latter is intended to be quite large, for they foresee its existence and use gradually leading to "an extensive reorganization of Ottawa's main expenditure items," including the disappearance of certain federal programs, such as the Department of Urban Affairs, Manpower Training, and the Department of Regional Economic Expansion.

A key criticism raised by Pierre Fortin in his analysis of the L and R paper is that insufficient discussion is afforded to the question of what are or should be the goals of Canadian stabilization policy. Though Fortin concurs with L and R on their grading of previous Canadian stabilization performance, he finds "some overselling" of the proposition that the federal budget is ill-suited for pursuing effective stabilization measures. He argues that their proposals for future stabilization measures rely too heavily on the capital expenditure device, the authors having too quickly dismissed the usefulness of tax cut measures.

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A controversial and interesting thesis is put forward by Professor Martin in collaboration with A. Moroz. It is that pure decision making can be as potent a force in regional development as expenditure policies like equalization payments and fiscal and monetary stabilization.

Pure decisions include regulatory activities, international trade agreements and tariffs, and the location of federal government activities and purchases of goods and services. From 1867 to 1940, the authors argue, pure decisions were the cornerstone of federal intervention in the economy, the main ones being Prairie settlement, the all-Canadian transportation system, and industrialization by protected tariffs. Only in the more recent period have expenditure policies come to the fore, beginning with general stabilization policy

and moving on to the addition of equalization payments and expenditures like those now coming under the Department of Regional Economic Expansion. Within Regional Economic Expansion, however, there is now a move to exploit once more the potential of pure decisions. Martin and Moroz (M and M) go farther that qualitative argument and try to demonstrate empirically just how pure decisions can influence the location of economic activity. They choose two examples, the Canada-United States Automotive Agreement and the impact on one small industry, flour and breakfast cereals, of the regulation of railway freight rates in Canada.

The authors begin by updating previous work on the national impact of the Automotive Agreement. To calculate this they need to specify what would have happened in the absence of the agreement, to rewrite Canadian economic history, as it were. What they specify is that fiscal and exchange rate policy would have been used instead of the Automotive Agreement to try to keep unemployment and other economic variables at values as close as possible to those actually obtained by use of the Agreement. In performing the necessary calculations underlying this exercise they made use of a great deal of work previously done by the Economic Council in explaining the general functioning of the Canadian economic system, work summarized in what is known as "the CANDIDE econometric model" of the Canadian economy. Using procedures that are standard with such models, they find that the Automotive Agreement generated improvements in employment, production, and other indicators of economic success that would have been difficult to achieve by use of more conventional expenditure-type policies. They conclude that this particular "pure decision" was a very potent one.

They then consider the effects of the Automotive Agreement on output in individual regions, in comparison with what would have happened under alternative policies. The key results are found in Table 2. The central panel of that table, labelled alternative strategy 6, is especially interesting because it comes closest, for Canada as a whole, to achieving the beneficial effects of the Automotive Agreement by other means. Even so, the table shows that Canada's gross domestic product was an average of $250 million a year higher as a result of the Agreement than it would have been with alternative strategy 6. In the last row of this central panel of Table 2 it is shown that the Canada wide gain involved a gain of about $500 million a year for Ontario, twice the national gain, and actual losses in all the other provinces, e.g. about $120 million a year loss in Quebec, about $45 million a year loss in British Columbia. It should be noted, however, that if one compares the Auto Agreement, not with the best alternative federal policy, but with a much worse

alternative policy, the "passive" scenario, all provinces gain, though Ontario far more than the others. M and M's conclusion is that the Automotive Agreement was a very powerful "pure decision" and that it had strong effects on the regional distribution of Canadian economic activity.

In examining the effect of decisions concerned with railway freight rate setting, M and M's focus shifts to the west. They wish to distinguish between distance and discrimination as variables influencing industrialization and, like Norrie, they recognize no obligation on the federal government to use pure decisions to offset the economic effects of distance, but do recognize an obligation not to compound those effects by discrimination. Their approach to the problem is to make two different calculations of how much protection central Canadian producers receive on account of transport costs from actual or potential western competition. A measure of that protection, called an "effective protection rate," is first calculated using actual freight rates, and then using theoretical freight rates that approximate the full costs of moving the relevant merchandise. For flour and breakfast cereals,the actual effective protection for central Canadian producers turns out to be far higher than the theoretical full cost protection (22.5 per cent versus 4.8 per cent). M and M conclude that "the ability of the railways to set prices above their true full costs which in turn are determined by their accounting practices allowed by the government results in an incentive to locate the processing plants in Ontario." Unlike Norrie, they do not attempt to decide whether the railway's ability to set prices above costs is generally used in such a way as to inhibit industrialization in the west; their purpose is simply to show, via the flour and breakfast cereals example, the power of pure decisions to influence location, regardless of whether all the potential power has actually been made use of in one way or another.

Michael Walker, in his opening comments on the M and M paper, attempts to redefine the regional development problem from the standpoint of a classical economist, providing a valuable alternative insight. He goes on to criticize M and M for the distinction they draw between pure decisions and expenditure decisions, feeling their taxonomy distorts the essential issues of efficiency and equity which arise in the choice between these decisions. He expresses his skepticism over attempts to simulate the non-existence of the auto-pact.

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In studying matters of pressing current urgency it is easy to

forget that the problems may be more comprehensible in the perspective of history. Professor Durocher does not feel that the present crisis is unique but he does consider, as a historian, that it

> constitutes one of the most serious challenges that Canada has faced since 1867. The present crisis over federalism is all the more serious because it has been building up for a long time. This crisis is deeply rooted in the history of the country, which explains my interest in a study of the evolution of federalism since 1867.

Durocher's thesis may be interpreted as showing that the Canadian government system has oscillated since confederation between centralization and decentralization. In a historical perspective there is nothing sacred or unchangeable about the particular division of relative power between the federal and provincial governments which can be and has been modified according to the needs and pressures of each historical period. Confederation began in 1867 as a compromise between the French and the English who had different purposes--the French to survive and the English to secure control of the Canadian territory. The intent was to create a highly centralized federal system, but the centralizing dream of the Fathers of Confederation, says Durocher, received a rude awakening.

From 1873 to 1896 several factors modified the federation in the direction of more relative power to the provinces, with Ontario under Mowat playing a leading role. Thus, except during World War I, federalism after 1896 came to emphasize provincial sovereignty, with the federal government limited to powers enumerated in article 91 of the BNA Act. It was a system in which the two levels of government were co-equal, rather than one being subordinate to the other.

The problems of the 1930s revealed difficulties with this kind of federalism and paved the way for a return to centralization. World War II completed the rupture with the years since 1896. After the war's end the federal government had a quasi-monopoly of direct taxes. It planned to implement a vast social security program, either directly or via conditional grants; to Canadianize several institutions; to follow a dynamic cultural policy for Canada; and to make use of Keynesian economics to avoid problems of unemployment and depression. All these policies greatly increased the degree of centralization of the confederation.

Starting in the middle of the 1950s, however, several political and economic factors began restoring provincial autonomy, most notably in Quebec. These included the coming to power of the Liberals in that province, marking the beginning of the "quiet revolution" there, and massive use of the opting out provision. People began to speak of "co-operative federalism," but as time went by the system took on, Durocher argues, more of an appearance of "competitive federalism."

In 1965, Quebec and Ottawa positions had rigidified. Constitutional negotiations in 1968 and 1971 ended in failure. Since 1970 the other provinces have shown signs of discontent and of wanting more power to assure their own development. With regard to the provinces in 1976, Durocher concludes, that

> they have formed the beginnings of consensus on several points, and the new Quebec Government is now actively participating in the elaboration of what might become a new federalism.

In discussing this paper, Stanley Ryerson suggests that Canadian federalism has evolved from a basically equivocal premise. Canada's two founding peoples are ostensibly partners in Confederation, but underlying socio-economic inequalities, which are rooted in the country's past, have only led to increased ethnic cleavage. He feels that Durocher could have looked closer at the impact of property, private business and labour on this basic structure on inequality.

SOME OPENING REMARKS

by

Sylvia Ostry, Chairman

Economic Council of Canada, Ottawa

I am delighted to take part in this workshop, which is jointly sponsored by the Economic Council and the Institute of Intergovernmental Relations at Queen's. I feel I should stress that the papers presented by the Council within this Conference do not represent the views of the Economic Council; they represent the views of the authors, whether they be staff members or academics who are hired on contract by us. The views of the Economic Council are as diverse on the issues examined here as those of any other group of Canadians; indeed they are probably more so because there are a number of economists on the Economic Council now!

The papers presented here through the Queen's Institute are part of a far larger project entitled "The Future of Canadian Communities," which is being funded by the Donner Foundation.

I would like to open the Conference by providing some kind of background for it, if you'll bear with me for a few minutes; then, we will move on to the papers prepared for this morning's session.

We have almost reached an anniversary at this Conference: it has been about two years since the P.Q. government was elected in Quebec. At that time, it appeared that a referendum might take place at about now. It looked as though we would be facing, at this time, the most momentous decision point in this country's history. Many individuals and organizations felt an urgent need to communicate to the Quebec public and to the Canadian public at large, and to say what they thought it was important for people to know before Quebecers voted one way or another. After a few months' lag, there was a flurry of conferences; there was the setting up of a National Unity Task Force; there was the setting up of a unit within the Quebec government to analyse and produce studies on various forms of sovereignty-association and their implications; and, within the federal government, a "Co-ordination" group was formed in the Federal-Provincial Relations Office to develop a federal position; the C. D. Howe Institute set up an ambitious program of about a dozen studies, many of which have been published; Canada West Foundation initiated a work program, as did many other individuals and groups around the country.

The members of the Economic Council discussed the matter at some length and felt that they, as a Council, wanted to contribute. It became obvious that the Council could not give a rounded view of the issues as a whole, since so many of the relevant questions in the national unity debate were outside the realm of economics; there were issues of language, of culture, of political structure, and there was philosophical cleavage on whether the ideal country must coincide with a nation, or whether more than one nation could co-exist within a country.

But the Council felt that it could contribute economic information or "intelligence," to put the economic aspect of the debate on as accurate a factual base as was possible in the circumstances. The studies presented here are a result of that undertaking, which began early in 1977. I would like to give some perspective on whether a good factual base is in fact possible, and on the relative importance of economic and non-economic factors.

An extremely important purpose of such economic intelligence work is to inform voters in a Quebec referendum of relevant economic facts, as well as citizens in the rest of the country, to the extent that their readiness to accept changes in federalism might influence the relative attractiveness of the alternatives facing Quebec voters. The ideal technique is fairly clear. It would involve contrasting the expected performance of a fractured country, however each of these is defined. How do these alternatives look for Quebec? For the West? For other parts of the country? A second purpose, stressed by the Council, was to analyse possible changes in those aspects of the Canadian economic system whose alleged malfunctioning may have been influential in leading to the present crisis. Both sides in the debate could presumably subscribe to such an aim "without prejudice," as the lawyers say.

The first task -- that of providing information -- requires some attempt to define relevant alternatives or scenarios. Let me deal briefly with that before coming to my main theme. Two alternatives are federalism and separation. In the latter case, we did not consider it useful to give extensive consideration to sovereignty with association, since it rapidly became obvious that "Rump Canada," in Clarence Barber's superbly inelegant phrase, would have so little to gain from association over the long run that this alternative seemed very unlikely to happen. In addition, the concept of association is very difficult to define with any accuracy. Nevertheless, let me emphasize that it is quite easy to apply our analysis to the sovereignty-association alternative. We also considered that the possibility that our present "fédéralisme" could be radically "renouvelé" was most unlikely. But that

does not mean that improvements are impossible in the economic sphere -- far from it. Nor does the improbability of sovereignty-association mean that no links whatsoever would exist.

It was our view that contrasting various alternatives for the system as a whole would be less useful than keeping in mind alternatives for control over each of four economic variables that largely define how much economic "sovereignty" or "independence" a province or a nation has. Moreover, sovereignty in the economic sphere is not only multidimensional, it is also continuously variable, rather than being there or not there, in the four economic dimensions. These dimensions are the tax expenditure system, the external trade system, the monetary system, and the conventions regarding factor mobility.

In the case of the tax expenditure system, the present federal arrangement gives Quebec a partial say on taxes and expenditures in that province and a partial say on taxes and expenditures outside; independence, with or without association, would give Quebec full say within its own borders and no say outside; a Swiss-style confederation would fall in between.

In the area of external trade, Quebecers at present share power with others in Canada to decide upon a common external tariff and commercial policy; with independence, Quebec might gain zero extra sovereignty in this area (a Common Market agreement); some extra sovereignty (a free trade area); or full extra sovereignty (no trade association at all).

As for the monetary system, the shared jurisdiction of Quebecers with other Canadians might be left as it is, with no gain in sovereignty (that is, a monetary union), or there could be a partial increase in sovereignty, by means of a separate currency but a fixed exchange rate, or a bigger increase, by means of a separate and floating currency.

In the area of factor mobility, the Quebec government exercises no present control over movement of people and capital into Quebec from Canada, while the Quebec people share control with other Canadians over immigration from abroad. Independence could go with varying degrees of sovereignty here, depending on whether Quebec control on foreign immigration of people was supplemented by control over migration from the rest of Canada or control over capital movements, or both.

Whenever we did research on a particular issue concerning change in constitutional arrangements, we took into account only those changes, in each of these four dimensions of economic sovereignty, that were relevant to the issue at hand. For example, in studying the implications of changes in control over the tax-expendi-

ture system for taxes paid by Quebecers, it is not very important what one assumes about monetary union. But for trade flows, a wider spectrum of changes in the economic components defining independence needs to be examined. You will see, therefore, that we have varying scenarios or alternatives according to the topic considered.

Let me now return to the main thrust of my argument. An uneasiness that I, personally, have always felt about economic analysis of the issues at stake, by anyone --including the Economic Council -- is that some of the relevant economic facts cannot be uncovered by the current tools of economic analysis, powerful though they be. And if these particular facts were important, in that they could seriously influence living standards and unemployment in Quebec or elsewhere, they would dwarf into insignificance the conventional facts that analysts like ours, C. D. Howe's, Mr. Bonin's, Mr. Tellier's, are capable of uncovering.

What I mean by that is what Maynard Keynes called "the animal spirits" of entrepreneurs, and the unpredictability of human reactions in crises, which could play a key economic role in the event of separation -- one that essentially cannot be analysed. If businessmen withdrew capital from Quebec or, indeed, from Canada, in large amounts, the impact on employment and income in Quebec -- and in the rest of Canada -- could be far more significant than any other economic factor we analyse in these three days. Equally, if independence liberated a spirit of dynamic co-operation within Quebec, as some péquistes have argued, that could also be of dominating importance. My point is that there are *dynamic factors whose impact is both potentially large and in practice unknowable*. How do we account for such dynamic uncertainties? I don't know, but I confess to great uneasiness that we cannot do so and that we have not done so in these papers. I would caution you, therefore, to take the excellent economic analyses presented here as incomplete stories. They could be less significant than these other, "undoable" analyses.

As you know, the Council is sponsoring this workshop jointly with the Institute of Intergovernmental Relations at Queen's. I am grateful that we have the chance to work with the Institute, because a myopic focus on the economics of the issues would be more than just misleading; it would, in my view, be positively distasteful. Misleading, because for many Canadians the really important issues in Confederation, as I said earlier, concern language, culture, political structure, and philosophy about what a country is, and, in particular, emotional commitment. Distasteful also, for the question of whether it is worthwhile or not to preserve this country we call Canada must surely transcend our pocketbooks.

As long as these reservations are kept very firmly in

mind, economists can contribute something to the debate. What they can do is give perspective concerning the size of some of the economic problems associated with separation, if that should come, and on some non-problems that people think are problems. They can also give a limited number of ideas about what to do to improve the system we have.

As you will note, the focus in today's sessions is mainly on economic issues, whereas tomorrow it will be on political issues, and Friday on history, politics, and economics.

Separation would alter trade and "aid" flows among provinces. By "aid" flows, I mean flows of cash in the form of equalization and other transfers. The first three papers today tackle these questions. Dr. Hazledine's examines the economic costs and benefits of the present system -- a customs union -- as measured by what the system is worth in terms of real output available for use by the citizens, relative to separation-type alternatives. He measures this value for each province taking into account both trade and aid flows within Canada. His time horizon is the medium term, defined as a period within which policy adjustments could occur in the form of changes in the values of any new currencies associated with separated provinces, and in the wage levels in those provinces, in order to cope with employment and balance-of-payments problems that might occur as a result of separation.

Dr. Auer's focus is narrower in scope but thereby richer in detail. He looks at the short run, and only at trade flows in the manufacturing sector. His basic concern is how big the short-run manufacturing employment losses would be in each province, if current tariff protection were modified by either going to free trade or to tariffs between Quebec and the rest of the country, how big the corresponding consumer gains would be, and how the gains and losses would balance out in each province.

Mr. Glynn's focus is also narrower than Mr. Hazledine's, but this time richer in detail on the "aid" flows -- equalization as mentioned, the federally subsidized portion of transfers to persons, such as old age security, unemployment benefits, and transfers to business from DREE, IT & C and other departments. If any province left the system, how much would the Finance Minister have to think of changing taxes and spending on the morning after? And what would be the implications for families at various income levels in that province? Mr. Glynn's paper will be presented by Mr. Baxter MacDonald. On the other economics paper today, Baxter will present his own research, on a question often raised in the debate -- the quantitative importance of scale economies associated with providing certain government services federally rather than in two or more separate jurisdictions.

The focus of the economics papers tomorrow and Friday is rather different. Professor Norrie, tomorrow, will present his views on economic grievances in the West. On Friday, the focus shifts somewhat, away from emphasis on economic facts about our present system as compared with separation-type alternatives, to an emphasis on economic problems within the present system, a careful examination of which could lead to possibilities for improvement. Professors Rabeau and Lacroix deal with the problem of cyclical unemployment, which impacts especially severely on Quebec, and develop the concept of a regionally targeted stabilization policy. Professor Martin believes that regionally targeted policies should go beyond conventional manipulations of taxes and expenditures, in that federal decisions in the economic sphere should be actively used to equalize regional disparities.

THE ECONOMIC COSTS AND BENEFITS OF THE CANADIAN FEDERAL CUSTOMS UNION

by

T. Hazledine*

Economic Council of Canada

*Frank Flatters, Harry Postner, Bob Thompson and, especially, Neil Swan have contributed very useful criticisms and suggestions.

I. INTRODUCTION

There are at least three features of the Canadian confederation which might not survive should one of the member provinces leave.

First, Canada is a "customs union" -- that is, an arrangement whereby the provinces agree to impose no tariffs on trade between themselves and a common tariff on goods imported from foreign countries.

Second, it is a monetary union, sharing a common currency.

Third, it contains a federal government, which taxes economic activity in the provinces and then redistributes the revenues amongst them; not, in general, in the proportions in which they were received.

It is the implications of this system which I will attempt to uncover and compare with the conceivable alternatives for each of the five regions of Canada.[1] It turns out that a good deal depends on two characteristics of each region's economy under confederation: its total balance of trade (i.e., its trade position vis-à-vis foreigners and other Canadian regions combined) and its balance on just the regional component of the total. A region is likely to gain from running a deficit on its total trade account, since it is then consuming more than it produces, with the difference made up by transfers from other regions. It may lose, however, having a deficit on its regional trade account if it is, therefore, buying more Canadian-produced goods from other regions at tariff-protected prices than it is selling to them.

Of the five regions of Canada, two (Quebec and the Atlantic provinces) run an all-trade deficit, and three (British Columbia, the Prairie and Atlantic provinces) have a deficit on their regional account. Thus, from this point of view, Quebec unambiguously should be a gainer from confederation, and British Columbia and the Prairie region losers. For Ontario, we cannot, *a priori*, know whether the opposing effects of running surpluses on both total and regional trade net out to a gain or a loss; nor for the Atlantic region, although the size of the latter's deficit on all its trade makes it fairly safe to predict the net effect.

Nevertheless, these numbers cannot be taken very far as indicators of the regional costs and benefits from confederation. In particular, we should note that the transfers received by

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1 The Prairie and Atlantic provinces are aggregated into two regions, in order to impose some sort of order-of-magnitude comparability of the economic size of the units being analysed.

Quebec and the Atlantic provinces are associated with lower, not higher, incomes -- there they come in the form of equalization and unemployment insurance payments reflecting the lower productivity and employment rates in Eastern Canada. Much of these regional disparities, no doubt, can be blamed on deep-seated structural imbalances, the resolution of which is beyond the medium-term horizon of the present work (though, probably crucial to the future of Canada).

However, we will be able to look at the sensitivity of regional output and employment to some important macroeconomic variables. Perhaps the Canadian tariff structure does not best meet the requirements of particular regions; nor, perhaps, does the Canadian currency -- might an independent Quebec, for example, be able to increase employment by devaluing its currency against the rest of Canada and the World?

These and related questions are the subject of the work reported in this paper. I do not expect that they are all-important to the future of confederation, but they are certainly of interest.

Two "scenarios," or alternatives to the status quo, are examined for each region. The first might be called "simple-minded separation." In it, each independent region retains the present Canadian tariff structure and imposes it on the other regions. While not in itself particularly likely, this scenario gives us a way of evaluating the consequences of the customs union as presently constituted.

The second scenario supposes unilateral free trade -- the abolition by Canada of all its tariffs on foreign imports. Which regions, if any, would gain, and which lose?

In addition, for Quebec, we will look at a third option, in which it retains tariffs on foreign imports which the rest of Canada abolishes, and in which free trade between the regions continues.

For the separation scenario we first compute the initial impact, then allow for compensatory adjustments in regional currencies and wage rates.

To quantify all this, I needed a mathematical "model" of the regional economies. In section II, this model is first outlined, then in section III documented in detail. We may just note here that a crucial feature of the model, and one which sets it apart from other work in this area, is its explicit rejection, for manufacturing industries, of the "law of one price." The main consequence of doing this is to make the numbers smaller -- to reduce the quantitative impact on production and employment of changes in trading arrangements.

Section IV contains a brief description of the database built up for the study. Section V brings together model, database, and scenarios, to generate the actual results, and Section VI summarizes these and concludes the paper.

II. THE MODEL: OUTLINE AND CAVEATS

Outline

Goods and services produced in a Canadian region can have any of three destinations: they can be consumed within the region, they can be shipped to other regions, or they can be shipped abroad. Consumption within the region is supplied from three sources: from intraregional production, from other regions, or from abroad. Thus, we have five categories of flows of goods and services which summarize the "real" economic activity (that is, not considering capital account flows) of the region.

It is the analysis of these flows which is the concern of this paper. In particular, by considering the three production flows we can analyse gross regional product and employment, and by netting out the four export and import flows, we measure a region's balance of payments on its current account.

Each regional economy is broken down into up to twenty-seven industries, in each of which we observe some or all of the five sorts of shipment flows. Changes in these flows are, in the first instance, prompted by changes in prices induced by changes in tariff rates levied on interregional or foreign shipments. The price paid in other regions for an industry's regional shipments goes up with the imposition of the tariff, but the price received by the industry falls (since the new tariff is paid to the governments of the importing regions). The size of these changes may depend on the extent to which the local industry was, before separation, taking advantage in its pricing of the protection afforded it by the Canadian tariff. As well, the price in the local market will go up with the application of a tariff to shipments from other regions.

The effects of these price changes are as follows: the lower price received by regional shippers will put some of the highest-cost producers out of business. The demand for the output of the surviving shippers will fall with the increase in price paid. The local demand for foreign imports and for locally produced output will increase somewhat, as consumers substitute away from the now higher-priced regional imports. The net effect on employment and the balance of payments within the region depends on the relative magnitude of the various flows. For example, a region which finances its imports relatively more by exporting to other regions than to the rest of the world will probably experience a deterioration in its balance of payments and a fall in employment if the absolute value of the fall in regional exports is larger than

either the fall in regional imports or the increase in domestically produced consumption.

In reaction to the initial impact on the trade balance and employment, market forces and/or government policies may change the exchange rate and the distribution of income in the region. The model will give us estimates of the size of the adjustments needed on the part of these macroeconomic variables to compensate for the effects of dismantling the customs union.

Limitations

The model should be placed in the context of its limitations -- in order to make useful sense of the numbers that will be discussed in later sections, we must know what questions the model does not cover; what factors are held constant. The important ones are:

1. This is a model of flows of goods and services only. No attempt is made to predict changes in capital account flows that might follow separation or free trade.

2. The time horizon of the model is "medium term," by which is meant a period long enough for any adjustment lags in changes in prices and costs to work through, and for a firm that finds it unprofitable to operate under the new conditions to exit from its industry, but not so long that new capital can enter an industry (though we allow existing firms flexibility in changing their levels of output).

3. Changes in quantity variables in the model are induced solely by changes in price variables. One implication of this is that the input-output linkages between the quantity produced of a finished good in a region, and the demand for materials and semi-finished inputs, does not affect outputs of other industries within that region. In a model of a closed economy, this property would be very restrictive, but for the rather open regional economies here modeled it should not matter so much.

4. A second property of a price-motivated model is that no recognition is given to possible multiplier effects on output and employment consequent to price change-induced changes in incomes. Again, we must hope that the openness of the regional economies is such that "leakages" to other regions and abroad dissipate multiplier effects.[2]

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2 Multipliers in Canadian macromodels are around 2. In regional models they would be still smaller.

5. It is assumed (a) that Canada is small relative to the rest of the world, and (b) that each region is small relative to the rest of Canada, so that (i) no Canadian region can influence its terms of trade by altering its exchange rate, (ii) each region is modeled independently; that is, we assume no reaction to its actions by other regions. This rules out such events as competitive devaluations between two or more regions.

These qualifications to the generality of the model are not, of course, desirable in themselves, but are forced by the limited resources (approximately one man-year) available to this project. It would be quite feasible, and possibly useful, to go on to merge my model with a regionalized macroeconometric model including Input-Output relationships.

III. THE WORKINGS OF THE MODEL

We need two things: one, a database of "base-period" foreign, interregional, and intraregional flows of goods and services , and two, a model of how these flows would change if the customs union were broken up. The database is described in Section IV; the model in this section. First, the price change process is outlined, and second, the relationships between prices and shipments.

Price Changes

(a) Manufacturing industries

Previous work on the national or regional implications of Canadian tariffs has *assumed* the validity of the "Law of One Price,"[3] which states that there is a single world market price for each commodity, so that the equilibrium domestic price in any country is simply equal to the world price times the country's exchange rate plus any tariff imposed on imports of the commodity, since any price differences will be arbitraged away.

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3 James R. Williams, *The Canadian-U.S. Tariff and Canadian Industry*, Toronto, 1978; Vittorio Corbo and André Martens, "Le tarif extérieur canadien et la protection de l'activité manufacturière québecoise," *CRDE*, Montreal, 1978; Clarence Barber, "The Customs Union Issue," Conference on the Future of the Canadian Federation, Toronto, October, 1977; Ontario Treasury "Interprovincial Trade Flows, Employment, and the Tariff in Canada," Supplementary material to the 1977 Ontario Budget; R. J. Wonnacott, *Canada's Trade Options*, Economic Council of Canada, Ottawa, 1975; H. M. Pinchin, "The Regional Impact of the Canadian Tariff," Economic Council of Canada Background Paper, Ottawa, 1977; Roma Dauphin, *The Impact of Free Trade in Canada*, Economic Council of Canada, Ottawa, 1978; Federal-Provincial Relations Office, *Trade Realities in Canada and the Issue of "Sovereignty-Assocation,"* Ottawa, 1978, L. Auer, *Confederation and Some Regional Implications of the Tariffs on Manufactures* (this Workshop). It is perhaps only fair to warn the reader that, although the evidence seems to refute this assumption, not making it makes a difference to our results that in one particular case -- the free trade scenario -- seems to be especially marked (on the basis of preliminary evidence). The direction of the difference is that free trade is considerably less productive of employment loss in the short run when the "one price" assumption does not hold.

This is a very strong proposition[4] and direct analysis of changes in time-series of manufactured traded goods prices appears decisively to refute it.[5] Differences in common-currency prices of the "same" traded commodity from different countries appear typically to exist and persist, even when commodities are classified at the 7-digit level of disaggregation.

In a background study, I have tested the proposition that price differences are consistent with a world of generally heterogeneous goods, in which each seller has some market power (non-infinite price elasticities of demand). Using a cross-section of Canada/U.S. relative common-currency domestic prices of manufactured commodities from the study by Frank,[6] I found that more than 60 per cent of the variation in the price ratio could be statistically explained by differences in tariff protection, market concentration and relative costs.[7] Protection and concentration (measured by the Herfindahl index) appeared to act multiplicatively, such that only in a highly concentrated industry[8] would full advantage be taken of tariffs. In an industry with many small firms, high cross-elasticities of demand apparently prevent domestic sellers from taking any advantage at all of the tariff -- competition chisels away any prices that are sufficiently higher than costs to generate monopoly profits. This result implies that the common assumption (found in all studies which assume the "law of one price") that the protection afforded a domestic industry is equal to the tariff rate is not valid.

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4 For example, the law of one price implies that, since all domestic prices are already equal to the world price plus the tariff, imposing this tariff on interregional shipments would have *no effect* on the market price (though it would lower the supply price -- the price received by domestic interregional shippers -- by the amount of the tariff).

5 For recent evidence cf. Irving B. Kravis and Robert E. Lipsey, "Price Behavior in the Light of Balance of Payments Theories"; and J. David Richardson, "Some Empirical Evidence on Commodity Arbitrage and the Law of One Price"; both in the *Journal of International Economics*, May 1978. Reviewing these findings, R. Dornbusch and D. Jaffee conclude that "the evidence presented leaves that hypothesis [the law of one price] rather in shambles" (*ibid*, p. 159).

6 James G. Frank, *Assessing Trends in Canada's Competitive Position*, The Conference Board in Canada, Ottawa, 1977.

7 Tim Hazledine, "Protection; and Prices, Profits and Productivity in Thirty-three Canadian Manufacturing Industries," Economic Council of Canada Discussion Paper No. 110, Ottawa, 1978. The results used in the present paper are slightly different, reflecting work done since the publication of the Discussion Paper.

8 A Herfindahl value of 0.25 is needed for full pricing-up-to-the-tariff. The mean value of the Herfindahl index is about 0.10. The Herfindahl index is defined as the sum of the squares of the market shares of all the firms in an industry.

Differences in the Canadian/U.S. ratio of the cost of producing a unit of output also appeared systematically to affect price differentials. About one half of any cost difference seems to be reflected in prices. That is, a Canadian industry with unit costs lower, say, than the average for the U.S. industry producing the same commodity, passes on about half of these lower costs in lower prices to Canadian buyers, and keeps the other half. An industry with higher costs absorbs about half of these, and passes the rest on to consumers. In so doing it presumably suffers some loss in market share, but not an *infinite* loss, as is required in the law of one-price models.[9]

These findings are the basis for the model of pricing needed, in this study, to begin predicting the impact for each region of its separation from the rest of Canada. First, I assume that the market structure input to prices survives separation. That is, the degree to which a Canadian industry can take advantage of tariff protection from the rest of the world stays constant when further tariff barriers are set up between the regions. At least in the medium-term context of the model, in which there are no separation-induced capital movements (apart from liquidations when high-cost fringe firms exit from an industry), this assumption is probably reasonable -- the same firms will be doing business in a dismembered Canada as operate across the country at present.

Second, I suppose that the 50/50 partition of cost differences applies to separation-induced changes in market conditions such as the imposition of interregional tariffs, the de- or re-valuation of a region's currency, and changes in interregional costs following independent movements in regional wage rates.[10] That is, for example, a region which imposes a 10 per cent tariff on shipments from other regions will find itself paying a 5 per cent higher price for these shipments. Half of a 10 per cent devaluation in a region's currency will be passed through to consumers in other regions -- the other 5 per cent will go to the region's producers. Half of a wage change-induced cost differential will be passed on.

We have, thus, hypotheses to account for price changes in two of the five sorts of shipments flows -- flows to other regions and from them. For "domestic" shipments -- that is, the price of goods that are produced and consumed within a region -- I assume that the relationship found in the Background Study between domestic and world prices still holds after separation. This means that prices of domestic output are affected by changes in the price of imports and in domestic costs.

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9 We may note that a 50 per cent pass-through of cost changes would be predicted by a monopoly model with constant marginal costs and linear demand.

10 Persistent wage differentials *may* require some limitations on the mobility of labour between regions.

The landed or domestic market price of imports is taken to reflect in full changes in the exchange rate, in accordance with the "small country" assumption -- that is, that Canada can change the quantity it buys from abroad without affecting the foreign currency price.

Finally, fluctuations in the price of goods exported to markets in other countries are assumed to match one half of fluctuations in exchange rates and costs, just like goods shipped to other Canadian regions.

There is thus an asymmetry between the treatment of shipments to and from Canadian regions and the rest of the world. The asymmetry may well be too clear cut; its validity depends on a postulate that, in a generally demand-constrained world, Canadian importers tend to have more alternative sources of supply than Canadian exporters have alternative sources of demand.

(b) Primary commodities

The prices of primary sector commodities -- grain, petroleum, potash, and so on -- are likely to be more closely identifiable than are manufactured goods prices with a set of world market prices, given the generally greater degree of homogeneity of primary goods. I assume that for primary industries the law of one price holds, so that the price of exports to the world equals a given world market price, and the prices of imports and of domestic and regional shipments are set at the world price converted to domestic currency and with any tariff added on.

(c) Construction and Services

The remaining sectors of the economy are characterized by an output which is not much traded, so that it is reasonable to assume that they price according to some percentage mark-up on domestic costs. The size of this mark-up probably varies across industries according to differences in market concentration, ease of entry of small firms, and other market structure factors, but so long as each industry's mark-up stays the same over the medium-term period here considered, we just need to know changes in costs in order to calculate changes in price in each sector.

Shipment Changes

The price changes discussed above will work through both the supply and demand side of the market to induce changes in the flows of goods and services.

It is assumed that commodities in the same industries from different supply sources are substitutable, but not perfectly so. Thus, changes in the demand for foreign imports are calculated as a weighted sum of price changes of foreign imports, regional

imports, and domestic shipments, with the weights being the own- and cross-price elasticities of demand. Precise formulae, and a description of the derivation of cross-price elasticities from market shares and own-price elasticities are given in an Appendix, which is available on request.

Changes in the demand for regional imports are computed similarly. For these two shipment flows I assume that each region is small enough relative to the world and to the other regions for actual shipments to be demand-determined.

For shipments originating within a region, however, we must consider possible supply effects of changes in the prices received by domestic producers. The imposition of a tariff on regional exports, for example, lowers demand by increasing the market price, but also may affect supply by lowering the price received by producers by the amount that they absorb the new tariff. For manufacturing, I have estimates of the distribution of unit costs relative to price for the establishments in each industry, and use these "capacity elasticities" to predict the proportion of pre-separation industrial capacity that would become unprofitable (costs greater than price) for a given fall in price received. I assume that these highest-cost establishments would exit from the industry, and that a proportion of their sales, according to pre-separation market shares, would go to the surviving firms. The latters' output would be further affected by the change in the price paid in their market, according to the demand elasticity, and assuming that output of surviving establishments can be expanded or contracted over the medium term, at constant average cost.[11]

In the primary sector, with elastic world supply and demand, domestic output is supply determined. At the going price, individual producers supply up to the point where it is no longer profitable (that is, to where marginal cost equals price). If the sum of these supplies is greater than the region's consumption demand, it will export the surplus; if not, it will be an importer.

There is no trade between Canada and the rest of the world in construction and service industries shown in the Statistics Canada Trade data, and I did not have any information on inter-regional flows. I, therefore, assumed these to be not significant, or, at least, not significantly affected by tariff and other changes, and focused on intraregional (domestic) output, taking this to be demand-determined.

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11 Constant unit costs is, if anything, a conservative assumption. Most econometric models (such as CANDIDE 2.0) find that Okun's Law holds -- that is, that productivity *increases* with output in the short run. There is certainly little evidence for the upward sloping marginal cost curves required by neoclassical models in which producers *choose* output such that marginal cost equals price.

Employment Changes

We have data on the distribution of employment by the cost/price ratios of establishments, from which an estimate can be made of the change in employment consequent to the closing down of some capacity in a manufacturing industry. For surviving establishments, employment is assumed to change in the same proportion as output, in keeping with the assumption of constant unit costs over the medium-term time horizon of the model.

This assumption is made, too, for the construction, service, and primary sectors, with the exception of agriculture. In this industry hired labour makes up only a small proportion of the total labour force, which is largely families operating their own farms, whom we assume to remain in the industry over the medium term, whatever the fluctuation in agricultural prices.

IV. DATABASE

The model uses 1974 as a base year. This year was chosen because it was the most recent for which Statistics Canada provided data on provincial economic accounts[12] and because it was the only recent year for which data were available on interregional shipments from manufacturing industries.[13] Each regional economy is disaggregated into up to twenty-seven industries or sectors -- five primary sectors, up to twenty manufacturing industries, construction, and other industries (mainly services). Except for Ontario and Quebec, the number of 2-digit manufacturing industries for which complete interregional trade data were available was less than the possible maximum of twenty. It was possible, though, to calculate flows for the sum of the missing industries as a residual. These flows were assigned to a "residual manufacturing" industry. The gaps in the interregional data lead to a certain amount of "guesstimating" to ensure that the sum of regional flows matched the total Canada data which were available for all industries.

Data on regional value added, wages and employment for manufacturing, for the primary industries, and for construction, were taken from the appropriate Statistics Canada industry reports for 1974. To ensure consistency with the provincial accounts, the remaining "other" industry was measured as a residual so that value added in all industries would sum to the figure for gross provincial domestic product at factor cost calculated for each region from the Provincial Accounts publication.

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12 Statistics Canada, "Provincial Economic Accounts, 1961-1974," Experimental Data, Ottawa, 1977.

13 Statistics Canada, *Destination of Shipments of Manufacturers, 1974*, Cat. No. 31-522, Ottawa, 1978.

No regional shipments from primary industries are included at present in the database, but this is currently being worked on, as is the disaggregation of the agriculture sector into four sub-sectors.

Goods and services go either to final "consumption" (consumer expenditure, capital formation, public authority expenditure) or as intermediate inputs to the production of other goods and services. I have calculated intermediate requirements for the output of each industry in each region by applying the 1971 Canada Input-Output coefficients[14] to the region's particular industrial structure. Regional final consumption was inferred by dividing up the all-Canada figures (calculated from GDP and foreign trade data, and the I-O tables) according to the size of gross regional product.

The elasticity estimates needed to work the model (Table 6) are culled from a number of sources. The derivation of capacity and employment elasticities from analysis of establishments within each manufacturing industry was mentioned in Section III. For non-manufacturing industries, the "capacity" elasticity, which is actually the supply (marginal cost) elasticity for the primary industries, was taken, arbitrarily, to be 2/3, so that an x per cent change in price is assumed to have a 2/3x per cent effect on output. Employment elasticities for non-manufacturing are put at 1 (implying a constant employment/value added ratio) except for agriculture, for which it is assumed that, over the medium term, there is no employment response to a price change.

Estimation of price elasticities of demand were arrived at by combining econometric estimates from several sources.[15] The "net rate of protection" is tariff protection net of protection on inputs as a proportion of selling price, aggregated by shipment-shares, from the 3-digit figures given by Dauphin.[16]

All elasticity data sources gave information only at the all-Canada level; therefore, the same numbers are used for all regions.

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14 Statistics Canada, *The Input-Output Structure of the Canadian Economy, 1961-71*, Cat. No. 15-506E, Ottawa, 1977.

15 Elasticities were calculated by combining estimates of Z. A. Hassan and S. R. Johnson ("Static and Dynamic Demand Functions," Economics Branch, Agriculture Canada, November, 1977) with unpublished estimates by T. Schweitzer and Bobbi Cain of the CANDIDE Modeling group. The two sources tended to agree.

16 Dauphin, *op. cit.*, Table 3-2, pp. 50-5.

V. RESULTS

We wish to have the reply, promised by the title of this paper, to the question: "what are the costs, or benefits, to each region of its membership in the Canadian confederation?" Now this is a rather difficult question, not just to answer, but even to pose, since we must specify the alternative with which we are to compare the present system. One possible comparison is with the initial impact of separation when this involves adding some restrictions to interregional trade, as in the first option considered here. However, it is reasonable to expect that, in a newly independent region, other important economic factors would change from their present Canadian levels. In particular, I have proposed in the preceding sections a model in which a region's balance of payments and the change in its total numbers employed are functions of exchange rate and wage rate changes as well as the tariff structure. A useful property of the model is that these two functions are linear, or nearly so, and can, therefore, be re-arranged to give two expressions for exchange rate and money wage rate, each a linear function of the balance of payments (BOP), the change in employment (ΔE), and tariffs. With post-separation tariffs held constant, we can then solve the equations to find out what exchange and wage rate adjustments would be required to achieve any given BOP and ΔE situation.

I leave unsettled the question of how such changes would be effected. It could only be direct government policy action (pegged exchange rates, incomes policies), or by market forces, or by a combination of these. So long as the adjustments implied by the BOP and ΔE targets are not unusually large by, say, the standards of past experience, it is probably reasonable to suppose that, by one means or other, they could be achieved.

These "target equations" give us tools we can use to put a figure on the net effect on a region's well-being of leaving confederation (or, if you like, of staying in). We will calculate whether a separated region is better or worse off than before after its level of money wages and the exchange rate of its new currency have adjusted so that (1) employment in the region remains at its pre-separation level, and (2) its balance of payments on current account is the same, as a proportion of gross regional product, as was the Canadian balance of payments before separation. The second of these conditions (suggested to me by Neil Swan) requires some explanation. Its point is to net out interregional transfers, leaving an equal regional apportionment of the current account surplus or deficit of Canada with the rest of the world, which, we assume, could be maintained by a Canada of independent regions. That is, it is proposed that, after separation, each region no longer contributes to, or benefits from, a system of redistributing spending power in Canada among the regions through such federal mechanisms as equalization payments and unemployment insurance.

As the measure of changes in economic well-being, we will use the total annual "absorption" of goods and services in the region -- total private and public consumption and capital formation -- measured in constant (1974) dollars.

None of this is immune from controversy. A region might wish to increase employment over its pre-separation level, and, indeed, may, at least in part, wish to separate in order to do this. Regions' current account BOPs may differ from the Canadian average due to differences in capital account flows reflecting interregional variation in rates of growth and in foreign investment. The use of aggregate absorption as the welfare index, though admirable in its simplicity, glosses over, in particular, the consequences of separation for the division of income between private and public sectors; consequences which are strikingly revealed in the paper by Tony Glynn.

A limitation to the generality of this approach to the costs and benefits question is that the exchange and wage rates are both "expenditure-switching" variables. That is, they work through changes in relative prices to divert expenditure from one industry or source of supply to another. This is acceptable in the case of a region which finds itself, after separation, with a BOP deficit which must be worked off with the cutting-off of the transfers from the other regions which previously had financed it. In this case, a currency devaluation coupled, perhaps, with a fall in the wage level will switch consumption from imports to domestic production, and encourage exports, thus increasing employment and improving the BOP, both desirable results.

In the case of a region with a post-separation BOP surplus, however, expenditure-switching policies may not be the most appropriate, since they will tend to reduce the surplus by reducing exports and increasing imports at the expense of domestic production and employment. If so, "expenditure-augmenting" policies, such as aggregate monetary and fiscal policies, which boost demand for both imports and domestic production, will be preferable. The present model does not, as noted in Section II, incorporate these macroeconomic relationships.[17]

We will consider, too, a second option, namely unilateral free trade, in which all tariffs on world imports are abolished (and the present interregional customs union retained). I expect

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17 However, they could be allowed for in an *ad hoc* way simply by multiplying absorption, production and import values by proportions according (a) to the size of the fiscal or monetary stimulus assumed, and (b) the different impact (different multipliers) such stimuli have on different industries and sources of supply.

that this is more likely or, at least, of more interest, as an option for a united Canada than for separated regions, excepting, perhaps, the Prairies. In any case, I have not yet calculated regional target equations for option 2.

For one region (Quebec), I have worked through a third option, in which it preserves the present tariffs on world imports and free trade with the rest of Canada, but in which the latter declares unilateral free trade, thus lowering prices of goods competing with Quebec's exports to the other regions.

Keeping in mind all the qualifications and cautions noted above, we proceed to the actual results. These are given, region-by-region in Tables 1 through 5, beginning in the west of Canada.

British Columbia (B.C.) had a deficit on current account in 1974 (Table 1), but this is probably not typical. In other recent years, the Provincial Economic Accounts reveal a surplus more often than not. In any case, "simple separation" (column 2 of the table) has a small effect on the deficit and on employment. The decline in interregional trade in manufactures (the only sector affected by simple separation in the present model) improves the BOP, since the value of the fall in regional imports is greater than the fall in regional exports; the latter being just over one half of the value of the former in 1974. Domestic shipments increase, but not by enough to prevent a fall in employment.

The target equations suggested that a devaluation of 6.5 per cent and an increase in money wages of 1.7 per cent would get the B.C. economy to the required situation of a BOP surplus of about 1.0 per cent of GDP (the all-Canada BOP situation in 1974) and no change in employment. Probably due to inaccuracies caused by non-linearities, the targets are not exactly met, but the finding that real absorption would fall by around $700 million is probably robust.[18]

Unilateral free trade (UFT) increases the deficit by nearly $200 million, mostly due to increased imports of manufactures. However, employment does not fall much as the prices of domestic output falls in competition with import prices.

The *Prairies* begin with a large BOP surplus -- equal to 14 per cent of their GDP in 1974. Simple separation slightly increases this, as the region gains from lower supply prices for regional imports. A hefty revaluation of 20 per cent wipes out most of the surplus, but this is largely done by reducing output in the high-productivity primary and manufacturing sectors rather than by consuming the surplus through increased absorption.

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18 Of course, had 1974 been one of B.C.'s BOP-surplus years, there might have been no fall in consumption needed.

Clearly, expenditure-switching policies are not very efficient for the Prairies. Coupling revaluation with an expansion in aggregate demand should enable this region to increase absorption by more than its $3.7 billion surplus (the excess coming from the improvement revaluation implied in the terms of trade). UFT induces a small fall in the surplus and increase in absorption. Gross product hardly changes. Again, aggregate demand-augmenting policies are appropriate.

Ontario had a surplus equal to about 8 per cent of its GDP in 1974. About $1.25 billion of this is attributable to its position as a net exporter of manufactured goods at tariff-free prices to the other regions and disappears after simple separation. The target equations were not very accurate in eliminating the remainder of the surplus, but, unlike the Prairies, revaluation is a feasible method for consuming the gains from separation -- Ontario's manufacturing sector is large enough to benefit from a switch in demand away from regional imports, although there is still a net fall in manufacturing employment and a shift into construction and services. Expansionary monetary and fiscal policies could help in lowering the BOP without "de-industrializing" the province.

UFT does reduce Ontario's surplus on total (regional + world) trade in manufactures, but by only about half as much as does simple separation.

Simple separation reduces the BOP of *Quebec* by more than $700 million. This change is about the same as a proportion of GDP (2 1/2 per cent) as it is for Ontario, but the latter province has a comfortable overall BOP surplus to chip away at, whereas Quebec begins with a deficit. Employment falls by about 21,500. Devaluation of 9.3 per cent, along with a very small fall in wage rates, is enough to get Quebec's trade balance near to the required surplus of 1 per cent of GDP. The cost of doing this is a $1.5 billion drop in real absorption. That is, due to the worsening of the terms of trade, it costs about $1.50 to improve the balance of payments by $1, or 5 per cent of Quebec's GDP.

The two other options considered are less damaging to Quebec's BOP than simple separation. Under UFT, the real value of exports to the rest of Canada actually *increases*, a result that may surprise some. This happens because the demand-boosting effect of the lower prices Quebec manufacturers must charge when tariffs are removed from foreign imports is greater than the capacity-reducing effect of lower prices on the fringe of high-cost producers, in enough industries for the net effect to be positive.

There is an increase in productivity following this shift from higher- to lower-cost manufacturers which I have not yet tried to isolate, but which I will investigate further, since it has obvious relevance to the debate on the desirability, for Canada as a whole as well as its regions, of trade liberalization.

The third option, in which Quebec retains tariffs on world imports while living with UFT in the other Canadian regions, results, as one would expect, in a smaller increase in the BOP deficit than does full unilateral free trade.

The *Atlantic* region begins with an enormous deficit of about 40 per cent of its 1974 GDP. Simple separation increases this by another $100 million or so.

According to the target equations, a 30 per cent currency devaluation would eliminate most of the deficit and also induce an increase in employment of more than 13 per cent. Despite this increase in employment and GDP, however, real absorption would have to fall by 20 per cent. These are big numbers.

VI. SUMMARY AND CONCLUSIONS

This paper reports an attempt to calculate the economic effects on the regions of Canada of some conceivable alternatives to the present federal system. For each region, figures are given for changes in exports, imports, production and employment in each sector. These figures are aggregated to show the effect on total employment, on a region's balance of payments with the rest of Canada and the world, and on the absorption within regions of goods and services, which is taken as a measure of the cost or benefit of membership in the present system.

Two important features of this system are (1) tariff-free movement of goods between regions and (2) interregional transfers, through the federal government, of disposable income. It appears that, with the possible exception of Quebec, the second of these features is the most important. Thus, Ontario loses more from its transfers to other regions than it gains from tariff-free access to their markets. The Prairies lose on both counts. Quebec, which receives transfers and runs a surplus on its inter-regional trade, thereby gains from both. British Columbia appears to gain from confederation, according to the 1974 data used in this study, but might not do so had another year been chosen, so that the *average* effect of confederation on this province may not be substantial and could be of either sign.

The Atlantic region does not appear to be viable as an independent economy, at least within the time-horizon to which the study is restricted. This limited "medium-term" focus of the model is perhaps the most important of the many qualifications and *caveats* strewn through the paper, and to which the reader can no doubt add his or her own list. The time scale matters particularly to our interpretation of these interregional transfers on which so much in the model depends. Canadian regions which receive subsidies from other regions may not enjoy doing so. They may wish to have the sort of industrial structure that would enable them to pay their own way, and may even see the confederate system, as it is presently arranged, as an impediment to long-term changes in their own economies which might achieve this.

Table 1

British Columbia Results[1]

	1974	Option 1 $\dot{r} = 0.00$ $\dot{w} = 0.00$	Option 1 $\dot{r} = -0.065$ $\dot{w} = 0.017$	Option 2 Unilateral Free Trade
Balance of Payments	-435,716	-418,884	182,102	-630,580
Employment	996,000	995,072	992,803	994,314
Absorption, separation prices	15,710,016	15,651,326	15,537,529	15,833,896
Absorption, 1974 prices	15,710,016	15,544,025	14,983,760	16,181,960
Wage Bill	9,534,000	9,521,208	9,686,175	9,516,863
Profits	5,740,300	5,711,234	6,033,457	5,686,453
Gross Domestic Product, separation prices	15,274,300	15,232,442	15,719,632	15,203,316
Gross Domestic Product, 1974 prices	15,274,300	15,251,275	15,337,063	15,238,127
Primary				
Balance of Payments	1,203,999	1,203,999	1,637,229	1,197,239
Employment	73,513	73,513	77,743	73,513
Domestic Shipments	1,848,677	1,848,677	1,820,120	1,843,509
World Exports	1,417,133	1,417,133	1,710,242	1,416,573
World Imports	217,095	217,095	176,151	223,336
Absorption	410,647	410,647	218,401	418,800
Manufacturing				
Balance of Payments	-1,639,715	-1,622,883	-1,455,127	-1,827,819
Employment	143,964	143,036	146,275	142,278
Domestic Shipments	3,662,112	3,740,774	3,717,792	3,604,028
World Exports	2,954,392	2,954,392	3,029,894	2,954,392
Regional Exports	1,398,480	1,259,932	1,371,923	1,381,091
World Imports	3,797,483	3,835,299	3,693,555	4,029,977
Regional Imports	2,482,938	2,368,971	2,371,800	2,442,576
Absorption	5,032,258	4,866,267	4,625,600	5,496,049
Construction, Services				
Employment	778,523	778,523	768,784	778,523
Domestic Shipments	11,229,681	11,229,681	11,098,135	11,229,681
Absorption	10,267,111	10,267,111	10,139,759	10,267,111
Total				
Domestic Shipments	16,740,470	16,819,132	16,636,046	16,677,219
World Exports	4,371,525	4,371,525	4,740,136	4,370,965
Regional Exports	1,398,480	1,259,932	1,371,923	1,381,091
World Imports	4,014,578	4,052,394	3,869,707	4,253,312
Regional Imports	2,482,938	2,368,921	2,371,800	2,442,576

1 Figures are in thousands of dollars except employment, which is in natural numbers. Balance-of-payments figures are in current dollars (separation prices); other sectoral data are in constant (1974) prices.

Table 2

Prairies Results[1]

	1974	Option 1 $\dot{r} = 0.00$ $\dot{w} = 0.00$	Option 1 $\dot{r} = 0.20$ $\dot{w} = 0.00$	Option 2 Unilateral Free Trade
Balance of Payments	3,678,303	3,749,632	768,432	3,609,476
Employment	1,497,590	1,497,456	1,480,761	1,495,586
Absorption, seperation prices	20,476,212	20,378,694	20,111,083	20,461,684
Absorption, 1974 prices	20,476,212	20,191,237	21,166,891	20,715,519
Wage Bill	11,152,178	11,151,022	10,981,280	11,134,379
Profits	13,002,337	12,977,303	9,898,235	12,936,781
Gross Domestic Product, seperation prices	24,154,515	24,128,325	20,879,515	24,071,160
Gross Domestic Product, 1974 prices	24,154,515	24,150,076	22,716,105	24,118,246
Primary				
Balance of Payments	7,813,484	7,813,484	4,879,005	7,800,692
Employment	230,250	230,250	225,737	230,246
Domestic Shipments	2,591,217	2,591,217	2,867,184	2,603,355
World Exports	7,899,664	7,899,664	6,224,913	7,887,447
World Imports	86,842	86,842	126,951	87,417
Absorption	1,210,586	1,210,586	1,722,104	1,223,965
Manufacturing				
Balance of Payments	- 4,135,182	- 4,063,853	- 4,110,573	- 4,191,216
Employment	135,643	135,509	123,328	133,643
Domestic Shipments	5,494,246	5,643,972	5,532,028	5,420,204
World Exports	716,624	716,624	650,859	716,624
Regional Exports	1,810,660	1,599,844	1,135,962	1,799,460
World Imports	2,199,996	2,251,791	2,421,983	2,318,738
Regional Imports	4,632,929	4,434,557	4,440,627	4,594,649
Absorption	7,002,111	6,717,135	7,181,270	7,228,038
Construction, Services				
Employment	1,131,697	1,131,697	1,131,697	1,131,697
Domestic Shipments	13,847,002	13,847,002	13,847,002	13,847,002
Absorption	12,263,516	12,263,516	12,263,516	12,263,516
Total				
Domestic Shipments	21,932,465	22,082,192	22,246,214	21,870,561
World Exports	8,616,288	8,616,288	6,875,772	8,604,071
Regional Exports	1,810,660	1,599,844	1,135,962	1,799,460
World Imports	2,286,838	2,338,633	2,548,934	2,406,154
Regional Imports	4,632,929	4,434,557	4,440,627	4,594,649

1 Figures are in thousands of dollars except employment, which is in natural numbers. Balance-of-payments figures are in current dollars (separation prices); other sectoral data are in constant (1974) prices.

Table 3

Ontario Results[1]

	1974	Option 1 $\dot{r} = 0.00$ $\dot{w} = 0.00$	Option 1 $\dot{r} = 0.07$ $\dot{w} = -0.035$	Option 2 Unilateral Free Trade
Balance of Payments	4,104,118	2,831,226	1,298,457	3,469,647
Employment	3,519,000	3,496,194	3,534,348	3,509,920
Absorption, separation prices	47,696,383	48,349,375	48,068,298	47,840,927
Absorption, 1974 prices	47,696,383	47,927,853	50,056,363	48,992,334
Wage Bill	33,001,003	32,790,258	31,940,857	32,919,968
Profits	18,799,498	18,390,344	17,425,898	18,390,606
Gross Domestic Product, separation prices	51,800,501	51,180,601	49,366,755	51,310,574
Gross Domestic Product, 1974 prices	51,800,501	51,373,833	51,504,435	51,649,244
Primary				
Balance of Payments	-954,048	-954,048	-1,310,803	-985,214
Employment	170,441	170,441	168,448	170,432
Domestic Shipments	4,926,698	4,926,698	4,883,510	4,895,120
World Exports	501,073	501,073	321,397	499,910
World Imports	1,465,732	1,465,732	1,745,389	1,496,091
Absorption	4,167,054	4,167,054	4,487,013	4,192,893
Manufacturing				
Balance of Payments	5,058,166	3,785,275	2,609,260	4,454,861
Employment	883,730	860,924	837,654	874,658
Domestic Shipments	26,107,301	26,382,878	26,323,998	25,778,599
World Exports	11,297,741	11,297,741	11,019,251	11,297,741
Regional Exports	11,991,029	10,740,585	9,841,059	12,020,211
World Imports	14,445,118	14,554,390	15,075,458	15,078,058
Regional Imports	4,758,684	4,525,734	4,391,330	4,586,803
Absorption	14,862,342	15,093,811	16,172,499	16,132,454
Construction, Services				
Employment	2,464,829	2,464,829	2,528,247	2,464,829
Domestic Shipments	31,927,758	31,927,758	32,684,692	31,927,758
Absorption	28,666,987	28,666,987	29,396,850	28,666,987
Total				
Domestic Shipments	62,961,757	63,237,334	63,892,201	62,601,477
World Exports	11,798,814	11,798,814	11,340,648	11,797,651
Regional Exports	11,991,029	10,740,585	9,841,059	12,020,211
World Imports	15,910,849	16,020,121	16,820,847	16,574,149
Regional Imports	4,758,684	4,525,734	4,391,330	4,586,803

1 Figures are in thousands of dollars except employment, which is in natural numbers. Balance-of-payments figures are in current dollars (separation prices); other sectoral data are in constant (1974) prices.

Table 4

Quebec Results[1]

	1974	Option 1 $\dot{r}$ = 0.00 $\dot{w}$ = 0.00	Option 1 $\dot{r}$ = -0.093 $\dot{w}$ = -0.006	Option 2 Unilateral Free Trade	Option 3 $\dot{r}$ = 0.00 $\dot{w}$ = 0.00
Balance of Payments	-774,048	-1,496,009	229,743	-1,175,625	-943,569
Employment	2,427,000	2,405,435	2,440,280	2,422,342	2,425,985
Absorption, separation prices	30,876,345	31,141,152	30,516,578	31,034,684	30,451,224
Absorption, 1974 prices	30,876,345	30,777,667	29,379,648	31,556,668	30,351,067
Wage Bill	19,739,000	19,565,131	19,754,042	19,698,619	19,733,436
Profits	10,363,296	10,080,012	10,992,278	10,160,440	10,304,705
Gross Domestic Product, separation prices	30,102,296	29,645,142	30,746,320	29,859,059	30,038,140
Gross Domestic Product, 1974 prices	30,102,296	29,780,973	30,376,129	30,057,185	30,114,293
Primary					
Balance of Payments	-1,527,941	-1,527,941	-1,241,544	-1,548,768	-1,527,941
Employment	155,726	155,726	158,514	155,683	155,726
Domestic Shipments	2,848,852	2,848,852	3,030,387	2,832,234	2,848,852
World Exports	0	0	0	0	0
World Imports	1,544,337	1,544,337	1,149,023	1,565,235	1,544,337
Absorption	3,173,746	3,173,746	2,886,886	3,202,342	3,173,746
Manufacturing					
Balance of Payments	753,892	31,931	1,471,286	373,143	584,371
Employment	541,500	519,935	544,349	536,885	540,485
Domestic Shipments	13,637,545	13,920,467	13,748,176	13,567,949	13,637,545
World Exports	4,790,121	4,790,121	4,967,854	4,790,121	4,790,121
Regional Exports	6,946,280	5,950,285	6,865,430	6,953,069	6,953,069
World Imports	5,385,168	5,395,881	5,051,204	5,658,295	5,385,168
Regional Imports	5,961,056	5,679,768	5,478,743	6,019,144	5,961,956
Absorption	9,290,954	9,192,276	8,000,449	9,942,682	8,765,676
Construction, Services					
Employment	1,729,774	1,729,774	1,737,417	1,729,774	1,729,774
Domestic Shipments	20,298,699	20,298,699	20,382,251	20,298,699	20,298,699
Absorption	18,411,645	18,411,645	18,492,313	18,411,645	18,411,645
Total					
Domestic Shipments	36,785,096	37,068,018	37,160,814	36,698,882	36,785,096
World Exports	4,790,121	4,790,121	4,967,854	4,790,121	4,790,121
Regional Exports	6,946,280	5,950,285	6,865,430	6,953,069	6,953,069
World Imports	6,929,505	6,940,218	6,200,227	7,223,530	6,929,505
Regional Imports	5,961,956	5,679,768	5,478,743	6,019,144	5,961,956

1 Figures are in thousands of dollars except employment, which is in natural numbers. Balance-of-payments figures are in current dollars (separation prices); other sectoral data are in constant (1974) prices.

Table 5

Atlantic Provinces Results[1]

	1974	Option 1 $\dot{r}$ = 0.00 $\dot{w}$ = 0.00	Option 1 $\dot{r}$ = -0.30 $\dot{w}$ = 0.00	Option 2 Unilateral Free Trade
Balance of Payments	-3,173,550	-3,290,588	844,205	-3,421,981
Employment	692,000	688,975	785,624	690,257
Absorption, separation prices	10,829,750	10,873,532	9,284,647	11,025,767
Absorption, 1974 prices	10,829,750	10,763,001	8,257,420	11,415,484
Wage Bill	5,099,000	5,071,731	5,952,184	5,083,051
Profits	2,557,200	2,511,213	4,176,665	2,520,734
Gross Domestic Product, separation prices	7,656,200	7,582,944	10,128,850	7,603,786
Gross Domestic Product, 1974 prices	7,656,200	7,594,058	9,208,929	7,618,168
Primary				
Balance of Payments	-43,569	-43,569	3,459,821	-54,950
Employment	66,431	66,431	144,261	60,431
Domestic Shipments	593,351	593,351	619,876	589,903
World Exports	918,210	918,210	3,351,945	917,580
World Imports	977,267	977,267	701,529	987,931
Absorption	913,711	913,711	-555,600	938,141
Manufacturing				
Balance of Payments	-3,129,981	-3,247,018	-2,615,616	-3,367,030
Employment	83,489	80,464	99,283	81,746
Domestic Shipments	1,850,439	1,932,641	2,233,743	1,782,492
World Exports	2,032,344	1,868,792	2,337,160	2,032,344
Regional Exports	777,964	651,965	943,297	755,662
World Imports	3,918,017	3,988,572	3,379,848	4,235,288
Regional Imports	2,393,605	2,260,957	2,146,502	2,279,682
Absorption	4,697,775	4,631,025	3,594,756	5,259,079
Construction, Services				
Employment	542,080	542,080	542,080	542,080
Domestic Shipments	5,760,154	5,760,154	5,760,154	5,760,154
Absorption	5,218,264	5,218,264	5,218,264	5,218,264
Total				
Domestic Shipments	8,203,944	8,286,146	8,613,774	8,132,549
World Exports	2,950,555	2,787,003	5,689,105	2,949,924
Regional Exports	777,964	651,965	943,297	755,662
World Imports	4,895,284	4,965,840	4,081,377	5,223,220
Regional Imports	2,393,605	2,260,957	2,146,501	2,279,682

1 Figures are in thousands of dollars except employment, which is in natural numbers. Balance-of-payments figures are in current dollars (separation prices); other sectoral data are in constant (1974) prices.

Table 6

Canadian Industry Parameters

Industries	Capacity Elasticity[1]	Employment Elasticity[2]	Domestic Demand Price Elasticity[3]	Import Demand Price Elasticity[4]	Export Demand Price Elasticity[5]	Net Rate of Protection[6]	Domestic Markup on World Price[7]
Agriculture	0.667	0.0	-0.50	--	--	0.003	--
Forestry	0.667	1.000	-0.50	--	--	-0.003	--
Fishing	0.667	1.000	-0.75	--	--	-0.026	--
Petroleum and natural gas	0.667	1.000	-0.75	--	--	0.001	--
Other inedible crude materials	0.667	1.000	-0.50	--	--	-0.014	--
Food and beverage manufacturing	1.399	0.951	-0.50	-0.50	-1.00	0.055	1.041
Tobacco and products industries	1.454	1.419	-0.50	-0.50	-1.00	0.169	1.352
Rubber and plastic products	1.079	1.148	-0.75	-1.00	-1.00	0.059	1.054
Leather products	1.008	1.066	-0.75	-1.25	-1.00	0.158	1.073
Textiles	1.084	1.156	-0.75	-1.25	-1.00	0.105	1.078
Knitting mills	1.231	0.981	-0.75	-1.25	-1.00	0.152	1.007
Clothing	1.140	1.062	-0.75	-1.50	-1.00	0.121	1.064
Wood industries	0.824	0.969	-0.75	-1.25	-1.00	0.039	1.005
Furniture and fixtures	0.723	1.091	-1.00	-1.25	-1.00	0.101	1.051
Paper and allied	1.496	1.248	-0.75	-1.00	-0.75	0.045	1.124
Printing, publishing and allied	0.671	1.225	-1.00	-1.25	-1.00	0.052	1.045
Primary metals	1.524	0.688	-0.50	-0.50	-0.75	0.027	1.033
Metal fabricating	1.038	1.065	-0.75	-0.75	-1.00	0.077	1.173
Machinery	1.216	0.999	-1.00	-1.00	-0.75	0.020	1.063
Transportation equipment	1.712	1.066	-0.75	-0.75	-0.75	0.007	1.005
Electrical products	1.157	1.144	-0.75	-1.25	-1.00	0.078	1.077
Non-metallic mineral products	0.969	1.194	-0.75	-1.00	-0.75	0.050	1.067
Petroleum and coal products	1.946	1.033	-0.75	-0.50	-0.50	0.081	0.993
Chemicals and products	1.012	0.986	-0.75	-1.00	-0.75	0.048	1.082
Miscellaneous manufacturing	1.143	1.092	-0.75	-1.00	-1.00	0.074	1.066
Residual manufacturing industries	0.923	1.000	-0.75	-1.00	-1.00	0.000	1.038
Construction	--	1.000	-1.00	--	--	--	--
All other industries	--	1.000	-0.75	--	--	--	--

1 Percentage change in domestic capacity from a 1 per cent change in price.

2 Percentage change in employment from a 1 per cent change in shipments.

3 Percentage change in Canadian demand for domestic output from a 1 per cent change in domestic price.

4 Percentage change in Canadian demand for imports from a 1 per cent change in import price.

5 Percentage change in demand for Canadian exports from a 1 per cent change in Canadian export price.

6 Effective tariff protecting Canadian output as a proportion of price.

7 0.436 + 3.94 * Herfindahl * net rate of protection + 0.547 * relative Canadian/world costs.

Comments by R. Boadway, Department of Economics,
Queen's University, Kingston

Tim Hazledine has set for himself an extremely ambitious task, that of predicting changes in resource allocation that would occur subsequent to a change in the trading arrangements among Canadian regions. He has done a most creditable job given the time available and, especially, given the poor quality of the data on interregional trade flows. My comments will be directed toward two things:

1. Those aspects of the results and analysis which may be sensitive to the manner in which the model was formulated;

2. Suggestions for improvements in the modelling of the problem.

Most of them will be directed towards the technical economic aspects of the problem rather than at the broader political economy aspects.

The Law of One Price

The author suggests that the so-called law of one price has been universally adopted in all work investigating the effects of tariff changes. This is not so. Those papers which have used general equilibrium computational techniques to simulate the effects of tariff changes in open economies have all rejected the law of one price (e.g. the work of John Whalley and the recent paper on Canadian tariffs by Boadway and Treddenick in the Canadian Journal of Economics). These models have typically assumed imports to be imperfect substitutes for domestically-produced goods as in the current paper.

The reason for mentioning this explicitly is that I think the general equilibrium methodology has a great deal to teach us about these sorts of problems. The technique does not always have to be applied or restricted to the seemingly sterile, neo-classical, perfectly competitive models. They can be viewed as a systematic way for solving simultaneously several supply/demand market equilibrium conditions of the sort which is implicitly behind this paper.

The Pricing Model

The analysis proceeds sequentially. First, price changes are assumed on the basis of some shifting assumptions. Then, output, demand, and employment changes are obtained from that. In other words, price changes are imposed independently of the output changes that accompany them. It is very difficult to justify this on theoretical grounds. I am tied to the view that prices have at least some market-clearing function so that price changes cannot be determined independently of quantity changes. Much of microeconomics would fall apart otherwise.

One of the advantages of the general equilibrium computational approach would be to allow prices and outputs on markets to be determined simultaneously from any assumed demand and supply elasticities one cared to postulate. Furthermore, this would allow one to perform sensitivity analysis very easily, something which has not been done here. It would be nice to know how sensitive the results are to the pricing and elasticity assumptions. My own work on Canadian tariffs indicates that results are sensitive to world trade elasticities but not to domestic production elasticities.

There are some particular pricing assumptions which puzzle me somewhat. Imports from one region of Canada into another are assumed to be not fully priced up to the tariff (unlike imports from outside Canada). This implies that the exporter bears part of the tariff imposed by a region. The pricing assumptions used to justify the price changes for import substitutes come from the author's own empirical estimates. However, those estimates are not relevant for determining the pricing mechanism for imports and exports between regions. The other peculiarity is that exports to the rest of the world are not priced up to cost changes. This seems inconsistent with the small open-economy assumptions and is in no way implied by the dropping of the law of one price. It would be worthwhile to make demand and supply elasticities explicit here as well.

Intermediate Goods

Data problems obviously preclude a full treatment of the role of intermediate goods flows between regions, but I suspect this to be an important part of the problem. Intermediate goods price changes have an important impact on prices for all other goods, whether they be manufacturing, primary, or non-traded. The latter industries use traded intermediate inputs so their prices would be expected to change upon a change in tariffs. Unfortunately, this has had to be ignored. Intermediate flows are also an important source of demand. If manufacturing in region A is increased in output due to tariff protection, intermediate purchases from B will be reduced and this will influence output and employment in the latter.

Non-Traded Goods

Tariff changes are assumed not to influence the output of non-traded goods. This is unrealistic for two reasons. First, their prices will change when tariffs on their intermediate purchases are changed. Second, the demand for them will change when the price of other (e.g. manufacturing) goods changes. The work that has been done using the general equilibrium technique has generally found that tariff changes have a large impact upon the output of non-traded goods.

Shipment Changes

The main problem with the calculation of output and shipment changes has already been mentioned: price changes are assumed to be determined prior to and independent of shipment changes. In general, price and output changes are determined simultaneously on markets. In this model some shipment changes are demand-determined and others supply-determined. When investigating the effects of a change in the customs union on a particular region, the regional imports are said to be demand-determined since each region is small relative to the world and to other regions. This does not seem to be consistent with the fact that the imports from other regions are not priced up to tariff changes (i.e. the elasticity of their supply to the importing region is not infinite).

Supply considerations are, however, important in determining shipment changes originating within a region's own manufacturing sector. The mechanism leaves me a bit uneasy. Consider, for example, a reduction in tariffs on manufacturing. The induced price fall is assumed to force some high cost firms out of business. Any demand changes induced by the lower price for manufacturing goods is then assumed to be met by an expansion of the output of the remaining firms in the industry at constant cost. What I find puzzling is why the low cost firms, if they can expand at constant cost, do not force the high cost firms out of business even without any tariff change.

Results

The results are much as one would expect on the basis of an inspection of the data on manufacturing flows among regions. Presumably the results on Quebec separation are the most interesting. The finding is that if Quebec separated, adopted the present tariff structure of Canada, and allowed its exchange rate and wage rate to change to maintain its employment level and balance its current account to correspond to that of Canada's before separation, its

real absorption would fall by $1.5 billion per year. This is obviously no paltry sum and may be an underestimate due to the fact that factor movements, especially capital flows, are assumed away. Presumably what is happening here is that Quebec is made worse off due to the fall in exports to other regions (e.g. textiles) when tariff protection of markets in the rest of Canada is lost.

I have only three comments about these results in addition to those I have already stated. First, it would be interesting to know the effect of Quebec's separation on the well-being of the rest of Canada as well as the effects on Quebec which are reported here. It is certainly not obvious *a priori* whether they would be better or worse off. Second, some sensitivity analysis would be helpful to test the robustness of these results. Finally, the assumption that both Canada and Quebec would adopt the pre-separation Canadian tariff structure is a strong one. Other tariff structures might be experimented with.

CONFEDERATION AND SOME REGIONAL IMPLICATIONS OF THE TARIFFS ON MANUFACTURES

by

L. Auer
K. Mills

Economic Council of Canada

Objectives of Study

This paper attempts to show how Canadian manufactures tariffs affect producers and consumers in each province today, and how alternative tariffs under a different set of federal-provincial arrangements -- including Quebec separation -- might affect them tomorrow.

Four distinctly different tariff scenarios are considered. One relates to tariffs under confederation and the other three to tariffs arising from a Quebec separation. Within confederation today manufactures of all provinces are protected by a common tariff wall and, therefore, all provinces are insulated to the same degree against competition from foreign imports. By examining the potential impact of a "free-trade" policy, it can be shown how vulnerable Canadian manufacturing industries are to free trade today; to what extent the current tariffs protect manufacturing employment in plants, small and large; how many plants might have to close if tariff protection were removed; what cuts in salary employees might have to accept if they wanted to keep these plants open; which industries would be threatened most and which ones least; and how in all these aspects the impact might differ from one province to the next.

On the consumer side the study examines how today's tariffs raise prices of some of the basic necessities, how that affects the "average family" and how it affects those families and unattached individuals whose incomes are close to the "poverty line." Then we compare producer "benefits," in short run preservation of jobs, to consumer "costs," in higher prices, showing which provinces would gain most and least if tariffs were eliminated. This information is essential background for understanding the issues at stake in the present debate on confederation, especially as regards the stance the rest of Canada might wish to take on the issue of sovereignty-association. The analysis done here is short run, but revealing nevertheless.

In a similar vein, some trade policies are examined that might be imposed if Quebec were to separate from the rest of Canada. Looking at separation of Quebec as a process of economic disintegration,[1] separation leads in the opposite direction to that of the "Common Market experience":[2] Trade links between Quebec and the rest of Canada will weaken, tariff walls will arise between the two, and the markets now open to both will shrink in size. Since it is impossible to predict precisely which tariff policy the former trading partners might pursue after separation, three

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1 Deutsch, A. "Quebec Libre and the Economics of Disintegration," in the *Journal of Canadian Studies*, February 1968.

2 Krause, B. *The Meaning of European Economic Integration for the United States*, Brookings Institution, Economic Studies, February 1968.

different trade scenarios will be considered: one represents a very "hostile" trade scenario, the second describes a "mixed" scenario, and a third is what one might call a "tit-for-tat" scenario. Not all three are equally likely to occur but each will be described in detail later and in every case the impact on employment in the short run will be estimated for Quebec as well as the rest of Canada.

This analysis is very limited in scope. It deals only with economic questions and ignores all social, cultural, and political aspects; it covers only the manufacturing industries and ignores all other goods-producing and service industries;[3] it ignores longer-run adjustments, such as alterations in exchange rates, in monetary and fiscal policy, in industrial structure and technology, as well as potential changes in flows of foreign investment that might accompany an event as traumatic as separation. No attempts are made to specify what action ought to be taken to overcome the potential adjustment problems. The analysis should provide, however, a fair indication of the size of the adjustment problem that awaits the manufacturing industries, should tariffs be removed today or should Quebec separate from the rest of Canada tomorrow.

The order of presentation is as follows: Canada's national tariff policy is described first, some regional aspects of tariff protection are presented next, then the provincial benefits and costs of the present Canadian tariffs are examined and, finally, it is shown what the initial losses or gains might be if Quebec were to separate.

Canadian Tariff Protection

In the past, Canadian governments have employed tariffs with the objective of stimulating the growth of the manufacturing industries of the eastern provinces, and of accelerating population growth and development of the resource industries of the western provinces.

During the early decades of this century, U.S. policy afforded U.S. producers a higher degree of protection than Canadian producers. Towards the end of the Great Depression of the 1930s, however, a reciprocal trade agreement was reached with the United States aimed at reducing tariffs. As well, attempts were made to lessen the role of bilateral agreements with the United Kingdom in favour of freer trade. Following the Second World War, even stronger support emerged for lowering the barriers of trade when all the major trading nations endorsed a "General Agreement on Tariffs and Trade." As one of its initiators, Canada accepted the underlying principle of the (GATT) agreement that national commercial policy measures should not primarily serve to achieve high levels of employment in protected industries at the expense of other trading partners, but should be used to promote growth of world trade, international specialization, and efficiency of national production. Canada participated in several rounds of tariff

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3 Cf. the paper by T. Hazledine, also being delivered at the Workshop, which covers all sectors, not just manufacturing, and in which some possible effects of changes in the value of the currency and monetary and fiscal policy are considered as well.

negotiations under GATT and, along with other countries, reduced its tariff barriers substantially.

Table 1

Industrial Tariff Rates on Total and Dutiable Imports, by Commodity Group, Canada and Major Trading Partners, 1973

	Trading Nations			
	CANADA	USA	ECC	JAPAN
Total Import Average				
Raw materials	0.3	2.7	0.5	5.9
Semi-finished manufactures	8.4	7.6	8.1	8.6
Finished manufactures	10.2	7.9	9.3	11.2
All industrial products	7.7	6.7	7.2	9.4
Dutiable Import Average				
Raw materials	7.2	6.1	3.4	9.3
Semi-finished manufactures	12.7	9.0	9.6	9.9
Finished manufactures	14.7	8.3	9.6	11.5
All industrial products	13.7	8.1	9.1	10.7

Source *Looking Outward: A New Trade Strategy for Canada*, Economic Council of Canada, Information Canada, Ottawa, 1975, p. 11. These tariff rates vary somewhat with estimation procedures but the variations do not alter the basic conclusion that some of the Canadian manufacturing industries are very highly protected -- much more so than in other countries -- while others are comparatively little protected.

Today, Canadian tariff rates, in comparison to those of other industrialized countries, fall in the medium to upper range. They rank high if averaged over finished manufacturing products, and higher yet if averaged only over those commodities that are dutiable. That is so because typically the primary Canadian industries, e.g., agriculture, forestry and mining, as well as some of the resource-based secondary manufacturing industries, have little or no tariff protection while others are very highly protected. As shown in Table 1, Canadian tariff rates range from a low of 0.3 per cent for the import average of raw materials to a high of 14.7 per cent for dutiable imports of highly finished manufacturing products.

Similarly, a wide range of tariff rates applies to the manufacturing industries. Judging by the effective rates, generous protection -- at a rate of over 20 per cent -- is granted to knitting mills, the textile and clothing industries, and the leather-products industry, and very limited protection -- at a rate of 5 per cent or less -- is given to about half of the remaining industries (Table 2). A very low rate of tariff is also listed for the transportation-equipment industry, but in this case subsidies to the shipbuilding and motor vehicle industries provide some additional shelter. This does not change the ranking significantly, however, because quotas, subsidies and tax concessions generally reinforce the protection afforded by tariffs, even to those industries that are already highly protected by tariffs.[4]

A ranking of manufacturing industries according to tariff rates does not necessarily correspond to their importance in the economy. Industries with high rates of tariff protection may account for very little of total output while others with low tariff rates may account for a large part of it. To assess the potential impact of tariff changes on domestic production and import flows, it is necessary, therefore, to take the size of the different industries into account. Weighting the tariff rates by value of manufacturing [5] ranks the food and beverage industries with 20 per cent of the total, first; the leather, textile, knitting and clothing industries with 19 per cent, second; and the paper and allied industries with 16 per cent, third. Together these three industry groups account for over half of the tariff protection and, if combined with the metal fabricating and electrical equipment industries, for three-quarters of the tariff protection of all manufacturing industries. Because of their larger weight in tariff protection, some of these industry groups will be examined more closely.

Historically, tariffs have been granted to industry for a variety of reasons. They have been granted to enable industries to compete with cheap foreign labour, to retaliate against restrictive tariffs imposed by other countries, to equalize the cost of production at home and abroad, to shelter an industry at the "peril point" from extinction, to improve the country's terms of trade, to help reduce high unemployment, to shift from a specialized to a more diversified economy, and to help promising infant industries

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4 See, for example, B. W. Wilkinson and K. Norrie, *Effective Protection and the Return to Capital*, Economic Council of Canada, Information Canada, 1975, Table 3-4, pp. 42, 43.

5 Following traditional methods of estimation the degree of tariff protection is measured here by weighting of the individual commodity tariffs, at a more refined level of disaggregation, by the relative amount of value added. It implies that manufacturers price right up to the tariff barrier. In this general area see, for example, J. Melvin, "A Weighting Problem in the Calculation of Effective Tariff Protection: A Comment," in the *Economic Record* (June 1972).

Table 2

Tariff Rates and Tariff Protection
Afforded to Canadian Manufacturers, Canada, 1974

	Effective Tariff Rate	Percentage Distribution of Effective Protection
Food and Beverages	16	20
Tobacco Products	-1	0
Rubber Products	18	5
Leather Products	27	2)
Textiles	21	7) 19
Knitting Mills	32	2)
Clothing Industries	29	8)
Wood Industries	5	2
Furniture and Fixtures	20	4
Paper and Allied Products	15	16
Printing and Publishing	2	1
Primary Metals	4	3
Metal Fabricating	14	12
Machinery	1	1
Transport Equipment	-2	-2
Electrical Equipment	15	9
Nonmetallic Minerals	4	1
Petroleum and Coal Products	5	1
Chemicals and Chemical Products	5	4
Miscellaneous	13	4
All Manufacturing	10	100

Source The effective rates were based on the 1974 nominal tariff rates and the 1970 Input-Output Table of Statistics Canada; all estimates were derived from more disaggregated data.

acquire competitive strength. Most of these reasons for tariff protection can be rejected as false, as a textbook on first principles of economics will readily show.[6] A notable exception among them, however, is the infant-industry argument whose advocates would favour a temporary protective tariff for those industries which have a strong potential for future growth once the critical points of learning experience and scale of production have been reached.

Although the objectives of Canadian tariff policy of earlier years have never been clearly defined, statistical analysis suggests that the existing Canadian tariffs are not designed for temporary protection of promising infant industries but favour old-established manufacturing sectors which rely heavily on low-priced labour. As shown in Table 3, Canadian tariff rates are higher for labour-intensive manufacturing industries which require more labour per unit of output, employ labour of less skill with lower ratings in education and work experience, produce in smaller plants, and lag behind in productivity growth. During the past decade, for example, manufacturing industries whose labour productivity was 10 per cent below the national average received 4 per cent higher tariff protection. If, in addition, their growth rate was 10 per cent below the national average, they received another 3 per cent protection.[7] The inverse applied to the more efficient industries. The higher the level of labour productivity and the greater the rate of growth, the lower was the rate of tariff protection.

The explanation for this seemingly perverse incentive system is quite simple. Low-productivity and slow-growth manufacturing industries often have difficulty in attracting more capital investment, are unable to modernize their plants, and can not afford to pay higher wage rates even at the best of times. Although often they employ less-skilled and lower-paid labour, they are not able to compete against cheaper imports. Tariff protection of such industries is not likely to solve their long-run problems and may only prolong the agony of adjustment. In the short run, however, tariff protection of such industries will raise the returns to capital, save jobs, keep people from being unemployed, and perhaps enable families to maintain their incomes above poverty levels.

Regional Aspects of Tariff Protection

Within the context of federal-provincial arrangements or re-arrangements, questions of tariff policy would hardly matter if the size of the manufacturing sector and the industry mix were the same in all provinces. But about one half of Canada's manufacturing output is produced in Ontario, not quite one-third in

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6 See, for example, P. A. Samuelson, *Economics, An Introductory Analysis*, McGraw-Hill Book Company, Inc., Toronto, Ninth Edition, 1973, Chapter 35.

7 Estimates are based on regression results given in Appendix Table 1.

Table 3

Relationship between Tariff Rates and Selected Industry Characteristics, Manufacturing, Canada, 1974

Rank of Industry's Tariff Rate[1]	Average Tariff Rate[2]	Labour Intensity[3]	Labour Productivity[4]	Labour Quality[5]	Plant Size[6]	Productivity Growth[7]
			(Per cent)			
High	280	166	60	85	112	94
Medium	153	94	106	102	152	98
Low	66	93	107	107	234	102

1 Among 19 (2-Digit SIC) manufacturing industries the six protected by the highest (nominal) tariff rates are ranked high, the next seven medium, and the remaining six low. The tobacco industry was excluded because its nominal and effective tariff rates differ widely.

2 All estimates are expressed in percentages of the (weighted) average of all manufacturing industries. The average tariff rate of 280 per cent of the high-ranking group, for example, implies that the nominal tariff rate of this group was 2.8 times as high as that of all manufacturing in 1974.

3 Estimates of labour intensity are based on the ratio of workers (employees plus working owners) per unit of value added. A labour intensity of 166 per cent of the high-ranking group, for example, implies that it takes 1.66 times as many workers to produce a million dollars' worth of (value-added) output in this group as it takes on average in all manufacturing.

4 Labour productivity estimates are defined as the ratio of value added per worker, and are the inverse of labour-intensity estimates.

5 Labour-quality estimates are based on criteria of age, education and sex of manufacturing employment of the year 1970. Estimation technique and additional statistics are given in L. Auer, *Regional Disparities of Productivity and Growth in Canada*, Economic Council of Canada (forthcoming).

6 Plant size refers to the number of workers per establishment, averaged over the period 1970-73.

7 Estimates of 1961-74 end-point growth rates of value added per worker, in current dollars.

Quebec and the remaining fifth in the eight other provinces. Since Canada's manufacturing industries are mostly located in Ontario and Quebec, it would be a fair guess to say that these two provinces rely more on tariff protection than other provinces and, *vice versa*, if tariffs on manufactures were removed they would be affected more than other provinces. To extrapolate this line of reasoning, however, and to say that the provincial reliance upon tariff protection is simply proportionate to the provincial shares of manufacturing output, is to overstate the case. There are a number of reasons why this is not so.

As shown in Table 4, the levels of tariff protection vary greatly among provinces. The highest levels of protection are afforded to manufacturers in Quebec and Manitoba. Compared to Ontario, for example, Quebec's level of protection is one quarter higher.[8] At the same time, Quebec and Manitoba are the only provinces where all four characteristics of industry performance, i.e., the level of labour productivity, the quality of the work force, the size of plants, and the rate of productivity growth, fall below the national average. Perhaps this does not come as a surprise since it was shown earlier that Canadian tariffs rates are highest for the labour-intensive manufacturing industries which require more labour per unit of output, employ labour of lower quality ratings, produce in smaller plants, and lag behind in productivity growth. A tariff policy of this kind will, of course, favour manufacturers of those provinces that rank lowest in these performance characteristics.

While the provinces with the highest levels of tariff protection rank below average in all four measures of industry performance, the opposite does not hold true. The provinces with the lowest levels of tariff protection, i.e., Newfoundland, Alberta, and Ontario, do not rank above average in all measures of performance. It is clear from this that there are considerable variations in tariff protection and industry performance and that it could be misleading to estimate how a province might be affected by tariff changes by considering only the provincial level of tariff protection or the size of the provincial manufacturing sector.

The pattern of foreign and domestic trade also has a bearing on the potential impact of tariff changes. The more efficient an industry, the more likely it is that it can compete in world markets, and, *vice versa*, the less efficient it is, the more likely that it must depend on its tariff protected home markets. In 1974, Canadian manufacturers shipped one fifth of their output to foreign markets, a quarter to other provinces, and the remainder, about one half, to their home province. British Columbia and three of the four Atlantic provinces exceeded the national proportion of exports

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8 This conclusion is based on the relative tariff rates of 118 and 93, for Quebec and Ontario respectively (Table 4, col. 1).

Table 4

Tariff Rates and Selected Industry Characteristics, Manufacturing, Canada (=100) and Provinces, 1974[1]

Province	Nominal Tariff Rate	Labour Productivity	Labour Quality	Plant Size	Productivity Growth
			(Per cent)		
Newfoundland	76	93	100	98	106
Prince Edward Island	103	70	93	32	109
Nova Scotia	99	81	100	82	110
New Brunswick	104	98	98	92	113
Quebec	118	88	96	97	97
Ontario	93	106	102	123	99
Manitoba	107	84	98	71	96
Saskatchewan	86	103	101	41	96
Alberta	91	106	104	56	96
British Columbia	96	112	106	77	106
Canada[2]	100	100	100	100	100

1 The estimates of industry characteristics correspond to the national estimates described earlier in Table 3. Estimates in columns 1 and 2 relate to the year 1974, in column 3 to 1970, in column 4 to 1974 and in column 5 to 1963-74.

2 Excludes Yukon and North West Territories.

to foreign markets, Ontario was right on average, and the other five provinces -- including again Manitoba and Quebec -- fell well below the national average. All provinces shipped their manufactured goods to other provinces but only three provinces -- Newfoundland, British Columbia and Ontario -- shipped less than half as much as they shipped to their home market to other provinces. All other provinces in the Atlantic region, the Prairie provinces and Quebec were relatively more dependent on interprovincial trade. As will be shown later, it is partly this dependence on interprovincial trade that makes the latter provinces, including Quebec, more vulnerable to lower tariffs.

Table 5

Destination of Shipments of Goods of Own Manufacture
by Province of Origin, Canada, 1974

	Exports[1] (Per cent)	Shipments to Other Provinces (Per cent)	Shipments to Same Province (Per cent)	Total of All Shipments (Per cent)	Total of All Shipments ($ Millions)
Newfoundland	62	13	25	100	712
Prince Edward Island	8	44	48	100	94
Nova Scotia	25	37	37	100	1,696
New Brunswick	33	35	32	100	1,586
Quebec	14	30	57	100	22,397
Ontario	20	23	57	100	41,404
Manitoba	9	34	57	100	2,280
Saskatchewan	11	33	56	100	1,045
Alberta	7	32	61	100	3,821
British Columbia	38	14	49	100	7,411
Canadian Average[2]	20	25	55	100	82,446

1 Exports are based on province of lading.

2 Excludes Yukon and North West Territories.

To estimate what part of the provincial manufacturing would be affected by changes in tariffs, that is to say, what part of the industry would be "tariff-vulnerable," the industry characteristics and the patterns of trade need to be taken into account. Towards this end, we examine how many plants in each industry would have to close down and by how much the surviving plants would have to cut their output. At the same time, information on wage rates, price of material inputs, labour productivity, foreign and provincial trade, is brought to bear on these questions.

Analysis of the twenty major manufacturing industries shows that over the years 1963 to 1974 a change in the industry price often affects the smaller plants more seriously than the larger plants, that accommodating adjustments in wage rates could moderate this impact, and that concurrent changes in material prices could modify the impact on the whole industry. It is estimated, for example, that a 10 per cent cut in prices, brought about by an industry-wide cut in tariffs, would threaten the survival of plants in some industries much more than in others. Among the industries related to clothing, the leather-goods-producing plants

would be hardest hit, with a 15 per cent reduction in the number of plants irrespective of plant size (Table 6). The textile plants would be a close second with anywhere from 8 to 15 per cent reduction in plant numbers, with small plants closing at nearly twice the rate of large plants. Among the furniture and fixture plants, the survival of small plants would also be threatened more than that of large plants. Indeed, the same holds true for most other industries. A striking exception, however, is the petroleum and coal products industry where an industry-wide cut in prices would not only affect a large part of the plants but would threaten the survival of large plants even more than that of smaller plants. Some other notable exceptions are the pulp and paper industry, the publishing industry and the primary metal industry where adjustments to price changes are not at all size-specific.[9]

The very unfavourable impact of tariff-induced price reductions on plant survival could be moderated substantially if labour was prepared to reduce its wage rates accordingly. Indeed, the estimates suggest that no plants, small or large, would need to close if labour reduced its wage rates at the same rate as tariff reduction reduced prices. If, for example, tariff removal would lower prices of shipments by, say, 10 per cent, no plants would need to close if labour reduced its wage rate by 10 per cent too. Or, if labour was not willing to lower wages by quite as much but by some intermediate amount, say by half the percentage cut in prices, e.g., 5 per cent, a little over half of the "endangered" plants would survive.

Over the past ten to fifteen years, wage rates and prices of material inputs have risen along with prices of shipments. Although the recent rise in energy prices may have given the impression that prices of material inputs have risen much faster than wage rates, analysis of the years 1963-74 shows that this is not so. Relative to the price of manufacturing output, annual wage rates have risen 82 per cent, while prices of material inputs have risen only 6 per cent.[10] At the same time, labour has obtained an increasingly larger share of the returns in manufacturing. This happened during a period of rapid economic growth. Should tariffs be removed and prices of manufacturing output fall, it is *not* likely that drastic downward adjustments in wage rates would accommodate this fall. To wit: the textile industry has recently encountered serious problems of meeting international competition, yet minimum wage rates have been raised at the same time, an action that might render the industry even less competitive.

In all further analysis of tariff changes, therefore, it is assumed that labour does not agree to lower (nominal) wage

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9 Perhaps this is related to the fact that in these industries some large firms operate or control plants of varying sizes and, therefore, can withstand the competition of the market place better than others. This hypothesis, however, was not tested.

10 For details, see Appendix Table 2.

Table 6

Percentage Reduction in Numbers of Plants Resulting from a 10 Per Cent Reduction in the Price of Shipments, by Plant Size[1]

Industry	Plant Size[2]								
	1-4	5-9	10-19	20-49	50-99	100-199	200-499	500-999	1000+
Food and Beverage	9	5	2						
Tobacco Products	1								
Rubber and Plastic Products	21								
Leather	15	15	15	15	15	15	15	15	15
Textile	15	14	13	12	11	11	10	9	8
Knitting Mills	4								
Clothing	9	7	6	4	2	1			
Wood	2								
Furniture and Fixture	12	10	10	9	8	7	7	6	5
Paper and Allied									
Printing, Publishing and Allied									
Primary Metal	1								
Metal Fabricating	1								
Machinery	3								
Transportation Equipment	6								
Electrical Products	17	7							
Nonmetallic Mineral Products	10	3							
Petroleum and Coal Products	20	23	24	26	29	30	32	33	36
Chemical and Chemical Products	3								
Miscellaneous Manufacturing	6	4	2						
Total Manufacturing	19	13	8						

1 Table based on regressions equations listed in Appendix Table 3.

2 Plant size groups are defined in terms of numbers of workers (employees plus working owners) per plant.

rates, even if the survival of some of the plants in the industry were at stake.[11]

Elimination of the less efficient and less competitive plants, however, would not accommodate the full impact of tariff removal. In all size groups average shipments per plant can be expected to fall off. For most industries a 10 per cent reduction in the price of shipments would mean a real output reduction of less than 10 per cent. It appears to be critical, however, whether or not the prices of material inputs are reduced at the same time. If they were reduced by the same proportion, i.e., 10 per cent, as shipment prices, they would have no additional effect. If, however, they were reduced by only five per cent or not at all, the impact could be very serious. Hardest hit, by far, would be the textile, food and beverage industries, but also the knitting, the primary metal, and metal fabricating industries would be threatened (Table 7).

Compared to the Canadian average, more plants in Ontario fall into the larger size groups than in any other province. According to one measure, for example, Ontario's plants exceed the size of the average Canadian plant in three out of four manufacturing industries. Quebec exceeds it in half of them, and all the other provinces exceed it by only one out of four or less. Since tariff and price reductions can be expected to hit small plants harder than large plants, the plant size distribution will favour Ontario and Quebec over the others.

As well, there are substantial provincial variations in labour productivity. Part of these come from provincial variations in industrial structure and part come from lower output per worker in each industry. After adjusting for industrial structure, manufacturing output per worker in Ontario, Saskatchewan, Alberta and British Columbia is greater than in Quebec, Manitoba and the Atlantic provinces. Output per worker in Quebec and Manitoba is 10 to 20 per cent, and in the Atlantic Provinces as much as 40 per cent, below that of the high-productivity provinces.[12] Since lower output per worker implies that more people are required to produce the same output, it also implies that more people will be laid off if production is cut. Should tariff-induced price changes lead to

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11 It is interesting to note that improvements in production technology and labour productivity, leading to lower unit labour costs, might be more effective in helping plants survive than the lowering of wage rates. The efficacy of such measures, however, would depend on the long-run prospects of these industries. It is unlikely that adoption of new technology could save all industries, let alone all plants.

12 *Living Together: A Study of Regional Disparities*, Economic Council of Canada, 1977, pp. 66, 67.

Table 7

Percentage Reduction in Shipments per Plant Resulting from a 10 per cent Reduction in Price, under Various Assumptions of Material Costs[1]

Industry	Percentage Reductions of Shipments		
	Price of Material Reduced by 10 per cent	Price of Material Reduced by 5 per cent	Price of Material Unchanged
Food and Beverage	16	50	71
Tobacco Products	6	11	15
Rubber and Plastics Products	10	19	28
Leather	7	9	11
Textile	7	66	88
Knitting Mills	3	31	52
Clothing	7	16	25
Wood	6	6	6
Furniture and Fixture	5	21	35
Paper and Allied	4	14	24
Printing, Publishing and Allied	11	16	20
Primary Metal	12	32	49
Metal Fabricating	10	32	50
Machinery	6	6	7
Transportation Equipment	15	15	15
Electrical Products	7	13	20
Nonmetallic Mineral Products	12	18	24
Petroleum and Coal Products	6	11	16
Chemical and Chemical Products	2	2	2
Miscellaneous Manufacturing	5	27	45
Total Manufacturing	13	26	42

1 Table based on regression coefficients listed in Appendix Table 4. The percentage estimates suggest by how much shipments per plant would be reduced if prices of material inputs were to fall at various rates relative to the price reduction in shipments.

production cuts, the low-productivity regions in Canada, including Quebec, will be hit harder by employment cuts than the high-productivity regions.[13]

Provincial "Benefits" and "Costs" of Canadian Tariffs Today

To assess how Canadian tariffs affect producers and consumers in each province today, industry-specific tariff rates, the size of the industry, the size of plants, plant survival, prices of material inputs, output per worker, industry structure, and the provincial pattern of domestic and foreign trade are brought together in a consistent framework. That makes it possible to estimate by how much manufacturing revenue would be reduced in each province and how many workers would lose their jobs, in the short term at least, if all tariffs were removed overnight. As shown in Table 8, gross revenue would drop by 23 billion dollars and nearly 275 thousand workers would be laid off. That is roughly equivalent to 15 per cent of all manufacturing employment and represents about 8.6 per cent of the employment in the goods-producing industries, and 3.2 per cent of the Canadian labour force. Ontario and Quebec would account for 83 per cent of all the employment losses, and the rest of Canada for the other 17 per cent. Although manufacturers' shipments of Quebec are only about half as large as those of Ontario, the employment losses of Quebec would come to within 10 per cent of those of Ontario. Indeed, Quebec would lose nearly 20 per cent of its manufacturing employment, one of the highest percentage losses among the ten provinces (Table 8).

A substantial part of the provincial variations in potential employment losses can be traced to industry-specific tariff rates and provincial industry structure. As mentioned earlier, tariffs granted to the food and clothing industries are much higher than those of most other industries. Since Quebec has a larger share of its manufacturing employment in these highly protected industries, its potential loss from tariff removal is correspondingly larger. With 14.5 per cent they account for nearly twice the percentage loss of manufacturing employment of 7.7 per cent in Ontario (Table 9). Thus, tariff protection of the food and clothing industries makes for different levels of protection of the individual provinces.

The benefits of tariff protection to producers, in terms of short-run preservation of jobs, can be compared to the costs to consumers, in terms of more expensive goods. Estimates along this line are based on the assumption that tariff-induced price increases on the industry side are passed on to consumers and increase consumer expenditures accordingly. Without the tariffs granted to Canadian producers, consumer expenditures would be substantially lower. The price of food, for example, would be nearly 10 per cent lower

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13 This conclusion is based on the earlier assumption that workers will not opt for reduction in their nominal wage rates even if it would save the jobs of their fellow workers in the less efficient manufacturing plants.

Table 8

Estimated Revenue and Employment Losses in the Short Run from Complete Tariff Removal, Canada and Provinces[1]

(Based on 1974 data)

	Gross Revenue Loss	Employment Loss		
			Percentage of:	
		Numbers	Manufacturing	Goods-Producing Industries
	(Million)	(Thousands)		
Newfoundland	62	1.5	9.6	2.3
Prince Edward Island	43	.6	22.5	3.6
Nova Scotia	318	5.2	13.9	6.0
New Brunswick	376	4.2	12.5	5.1
Quebec	7,942	108.9	19.5	12.7
Ontario	10,653	118.8	14.0	9.7
Manitoba	850	9.8	17.4	7.1
Saskatchewan	306	2.8	14.4	1.9
Alberta	1,135	9.2	15.1	3.6
British Columbia	1,435	13.0	8.4	4.0
Canada	23,120	274.0	15.3	8.6

1 Estimation procedures are described briefly in the Appendix of this paper.

Source Based on data of Statistics Canada.

Table 9

Estimated Employment Losses in the Short Run from Complete Tariff Removal, Food and Clothing Industries, Canada and Provinces

(Based on 1974 data)

	Employment Losses[1]			As per cent of Total Manufacturing Employment
	Food	Clothing[2]	Food and clothing	
	(Thousands)			
Newfoundland	1.4	-	1.4	8.8
Prince Edward Island	.6	-	.6	22.6
Nova Scotia	2.9	1.3	4.2	11.2
New Brunswick	3.2	.1	3.3	9.9
Quebec	20.4	61.0	81.4	14.5
Ontario	28.5	36.7	65.2	7.7
Manitoba	4.3	2.9	7.2	12.9
Saskatchewan	2.0	.3	2.3	12.0
Alberta	5.3	.7	6.0	9.8
British Columbia	5.8	1.7	7.5	4.9
Canada	74.4	104.9	179.2	10.1

1 Estimates of employment losses have been derived as described in footnotes 1 and 2 of Table 10.

2 Clothing industries comprise the leather, textile, knitting and clothing manufacturers.

Source Based on data of Statistics Canada.

and that of clothing over 20 per cent lower.[14] This reduction could have saved the average urban family of four over 500 dollars per year in 1974. Since food and clothing are essential expenditure items, it is very difficult for low-income families to cut down on these expenditures. Savings on food and clothing, therefore, would have been of particular benefit to the low-income families. In 1974, for example, the savings could have lowered the incidence of poverty in Canada by an estimated 25 per cent, from roughly 1.4 million people living below the poverty line before removal of tariffs to 1.0 million people thereafter.

Consumer costs of tariffs, computed in this manner, can be compared to the extra returns of producers and the government. On the consumer side the annual costs are simply the extra expenditures on higher-priced tariff-protected manufactures and imports; on the producer side the benefits are the extra wages and salaries paid to labour as well as the extra returns to capital; and on the government side they are the extra tax revenue from duties collected on imports. Some of these costs and benefits are listed side by side in Table 10. It shows that tariffs imposed on food and clothing alone add over 2 billion dollars to consumer expenditures annually and raise the level of poverty in Canada by over 350 thousand persons.[15] The principal benefit of the same tariffs is a saving of about 180 thousand jobs in the food and clothing industries.[16] This does not yield a favourable cost-benefit ratio: after allowance is made for 453 million dollars of customs duties collected by the federal government, it costs $1.93 billion to save these 180 thousand jobs, enough to pay every worker who would have lost his job in these industries over 10,000 dollars annually.

Provincially the costs and benefits of tariffs vary with population size, income, manufacturing activities and productivity performance. Because the two central provinces account for over half of Canada's population, one would expect that they account also for over half of the costs and benefits of tariffs. This is confirmed in the case of food and clothing, for example, where over two thirds of all consumer costs and benefits accrue to these two provinces. Although Quebec's population is only three quarters the size and its manufacturing output is only about half the size of Ontario's, Quebec's employment benefits, derived from

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14 Assuming that removal of tariff protection would lead to corresponding price reductions at the retail level, the prices of food and clothing would have been reduced by an estimated 9.6 and 23.1 per cent, respectively, in 1974. These price reductions would only hold if the "surviving" plants could produce food and clothing at world competitive prices, a necessary assumption which will be reconsidered at the end of this paper.

15 The corresponding estimates in Table 10 are the totals of 2,383 million dollars and of 357 thousand persons, and 179 thousand jobs lost.

16 The food and clothing industries include the food and beverage processors and the leather, textile, knitting and clothing manufacturers.

Table 10

Consumer Costs and Employment Benefits in the Short Run of Selected Manufactures Tariffs, Canada and Provinces

(Based on 1974 data)

	Consumer Costs[1]		Employment Benefits[2]	
	Extra Expense on Food and Clothing	Increase in Poverty	Food and Clothing Manufacturers	All Manufacturers
	(Millions of dollars)	(Thousands)	(Thousands)	
Newfoundland	32	9	1	2
Prince Edward Island	5	1	1	1
Nova Scotia	49	9	4	5
New Brunswick	43	7	3	4
Quebec	699	148	81	109
Ontario	942	111	66	118
Manitoba	95	11	7	10
Saskatchewan	71	10	2	3
Alberta	170	24	6	9
British Columbia	265	27	8	13
Canada	2,383	357	179	274

1 Consumer costs are measured in terms of extra dollars spent on food and clothing because of tariff protection. The degree of poverty is estimated on the basis of consumer expenditure functions of the form $ln\ X_i = a + b\ ln\ Y + c(ln\ Y)^2 + d\ ln\ S$ where X_i is expenditure on item i (food, clothing, housing), Y is family income, and S is family size. The functions were converted to Engel's curve ratios X_i/Y, related to income distributions and poverty lines at which (urban) families spent an estimated 70 per cent or more on food, shelter and clothing. The authors are indebted to Ms. K. McMullen who estimated these consumer costs.

2 The employment benefits were estimated on the basis of plant-number and shipment-response functions (Appendix Tables 3 and 4) and translated into numbers of jobs saved, taking into account the provincial variations in plant-size distributions and labour-productivity performance. Estimation procedures are described in the Appendix.

Source Based on data of Statistics Canada.

tariffs on manufacturers are nearly as large as Ontario's. In food and clothing, Quebec's producer benefits (measured by the number of jobs saved) are even larger than Ontario's, but, at the same time, the extra cost of tariffs puts a heavy burden on the lower-income families in Quebec. For the 81 thousand jobs protected in Quebec, the number of low-income people falling below the poverty line increases, initially at least,[17] by an estimated 148 thousand (Table 10).

In these comparisons of consumer costs and producer benefits, the cost-benefit ratios vary greatly among provinces and are in some cases much less favourable than Quebec's. In food and clothing, for example, they are very unfavourable to Newfoundland, Saskatchewan, Alberta and British Columbia. In these provinces, the number of low-income people put below the poverty line by tariffs on food and clothing outweighs the number of jobs saved by a far greater margin than in Quebec. That is so because these provinces incur the extra consumer costs without benefiting from the same job savings in their manufacturing industries as Ontario and Quebec.

From the preceding analysis it is evident that tariffs protect employment in manufacturing but that, at the same time, they impose a burden on consumers, particularly on the low-income earners.

Quebec Separation

So far only the tariff protection has been described as it exists under confederation today. The analysis can be readily extended to the potential impact of separation of Quebec under various trade scenarios.

If the Canadian confederation of provinces were ever to break apart, far more manufacturing jobs could be lost if the former "common-market partners" would adopt a very hostile attitude towards each other than if they would find a more rational approach to settle their differences. A "hostile trade scenario" would prevail, for example, if Quebec and the rest of Canada boycotted each other's trade. This could be a very discriminatory policy and could have the same effect as if Quebec were to put a trade embargo on all imports from the rest of Canada and the rest of Canada were to put a trade embargo on all imports from Quebec. It could result in a total job loss of close to 260 thousand workers. Nearly 60 per cent of that loss would occur in Quebec and a little over 40 per cent in the rest of Canada. Since Quebec's manufacturing sector is less than half the size of that of the rest of Canada, the burden of adjustment -- measured in terms of the proportion of manufacturing employment lost -- would be at least three times as heavy for Quebec as it would be for the rest of Canada (Table 11).

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17 Subsequently, government welfare payments may ease the lot of some of the people.

Table 11

Potential Short-Run Employment Losses in Manufacturing from a Separation of Quebec

(Based on 1974 data)

	Trade Scenarios[1]		
	Hostile Trade Boycott	"Mixed" Policy	"Tit-for-Tat" Policy
Employment loss in thousands of workers			
Quebec	152	41	41
Rest of Canada	107	165	23
Total Loss	259	206	64
Employment percentage of manufacturing employment			
Quebec	28.0	7.5	7.5
Rest of Canada	8.6	13.3	1.8
Total Loss	14.5	11.5	3.6

1 Under a hostile trade scenario Quebec is assumed to boycott all trade with the rest of Canada, while the rest of Canada boycotts all trade with Quebec. Under a mixed policy scenario Quebec would impose tariffs on the rest of Canada, while the rest of Canada would pursue a policy of free trade. Under a "tit-for-tat" scenario the former "common market" trading partners would impose the same tariffs upon each other's trade as Canada imposes today on imports from the rest of the world.

Source Based on data of Statistics Canada.

More likely, perhaps, than a trade embargo would be a scenario of a mixed commercial policy: tariff protection for Quebec industries and free trade for the rest of Canada. Assuming Quebec would continue the tariff protection which it has under confederation today, while the rest of Canada -- perhaps because of pressures from the western provinces -- shifted over to a policy of free trade, Quebec would encounter an employment loss of 41 thousand, while the rest of Canada would have to adjust to a loss of 165 thousand jobs. It would also mean that the consumers in the rest of Canada would have the benefit of tariff reduction, while consumers in Quebec would continue to carry the cost of tariff protection.

Different from these two policy extremes would be a "tit-for-tat" policy where, after separation, Quebec would impose tariffs on imports from the rest of Canada and the rest of Canada would impose tariffs on imports from Quebec. Under this arrangement both would treat each other like foreign countries. This would reduce the total adjustment problem of manufacturing employment to a low of 64 thousand workers. Quebec and the rest of Canada would continue with the same levels of tariff protection as before, but the burden of adjustment (measured by the proportionate employment loss in manufacturing) would be at least four times as heavy for Quebec as it would be for the rest of Canada because Quebec's manufacturing sector would lose 7.5 per cent of its employment, while the rest of Canada would lose 1.8 per cent (Table 11).

According to this analysis the potential short-run employment losses would be highest if Quebec and the rest of Canada imposed a trade embargo on each other, and they would be lowest if both implemented a "tit-for-tat" policy against each other. It could be simplistic to assume, however, that a commercial policy aimed at minimizing employment losses would be the only rational policy, and that any other, resulting in higher employment losses for one or both trading partners, would be irrational and nothing but "economic terrorism."

To be only concerned with employment losses and not with the impact of commercial policy on consumer expenditures and on the incidence of poverty, is to ignore half the economic issue. It was shown earlier that the costs of food and clothing have a significant impact on consumer welfare. It was also shown that the cost-benefit ratios of protective tariffs vary greatly among the provinces, with Newfoundland, Saskatchewan, Alberta and British Columbia being at a distinct disadvantage. Because of these regional variations the "mixed policy" scenario, with triple the employment loss of the "tit-for-tat" policy, could be far more attractive to the West and Newfoundland than either of the other two. Under this free-trade policy scenario, Ontario would face sizeable employment losses. In view of these losses, Ontario might have to opt for an industrial policy that encourages its more dynamic industries at the expense of the more traditional ones. To facilitate the

adjustment problem of the latter, Ontario might have little choice but to impose tariffs or restrictive quotas against imports of the food and clothing industries of Quebec.

Appendix

Estimation Procedure

In estimating economic losses from tariff-induced price reductions, two aspects are taken into account: plant closings and output reductions of the surviving plants. Given the regression estimates for both (Appendix Tables 3 and 4), the revenue loss of each of 20 manufacturing industries and each of 9 plant size groups is estimated according to

$$\sum_s \Delta VS_s = \sum_s \{N_s(1 - (1-\tau)^{\alpha_s}\}(\frac{VS}{N})_s + \sum_s (\frac{VS}{N})_s(1 - (1-\tau)^{\beta}\{\frac{1-\tau}{1-\sigma}\}^{\gamma})N_s(1-\frac{\Delta N_s}{N_s})$$

where s denotes plant size group, ΔVS is the change in value of shipments, τ is the nominal tariff rate on industry output, σ is the tariff rate on material inputs, α is the elasticity of the ratio of output price to wage rate, β is the price elasticity of output, γ is the elasticity of the price ratio of industry output to material inputs, and $\Delta N/N$ is the change in plant numbers estimated by the first part of the summation.

Employment losses are estimated for each plant size, each industry, and each province by dividing ΔVS by the appropriate output-per-worker ratios.

Appendix Table 1

Relationship between Tariff Rates and Performance of 43 Manufacturing Industries, Canada, 1970

	Regression Coefficients		$\bar{R}^2$
	Value added per worker	Growth Rate 1961-70	(df. = 40)
Nominal Tariff Rate	-.35*	-.00	.23
Effective Tariff Rate	-.40*	-.25*	.26

*Tested statistically significant at the 5 per cent level.

Note This regression analysis was based on cross-sectional data of 43 manufacturing industries selected from B. W. Wilkinson and K. Norrie, Effective Protection and the Return to Capital, Economic Council of Canada, Information Canada, Ottawa, 1975, Appendix Table A-1, pp. 75-80.

Appendix Table 2

Regression Estimates[1] of Average Annual Changes in Wage Rates and Prices of Material Inputs Relative to a 1 Per Cent Change in Price of Shipments, Manufacturing, 1963-74

	Wage Rates		Price of Material Inputs	
	α	r^2	β	r^2
Food and Beverage	1.39**	.40	1.09**	.99
Tobacco Products	2.67**	.88	.85**	.93
Rubber and Plastics Products	2.14**	.76	.59**	.44
Leather	1.64**	.87	1.02**	.97
Textile	3.72[2]	--	1.07**	.96
Knitting Mills	6.54[2]	--	1.25**	.77
Clothing	1.95**	.86	.83**	.95
Wood Products	1.25**	.60	1.01**	.99
Furniture and Fixture	1.65**	.83	.93**	.98
Paper and Allied	1.38**	.36	.93**	.95
Printing, Publishing and Allied	1.64**	.89	1.02**	.99
Primary Metal	1.65**	.63	1.07**	.99
Metal Fabricating	1.83**	.84	1.01**	.99
Machinery	1.99**	.85	1.06**	.99
Transportation Equipment	2.12**	.65	1.13**	.98
Electrical Products	2.37**	.71	.93**	.97
Non-Metallic Mineral Products	2.08**	.97	1.04**	.99
Petroleum and Coal Products	.79	.04	1.04**	.99
Chemical and Chemical Prods.	1.08	.28	1.09**	.96
Miscellaneous Manufacturing	1.56*	.03	.93**	.91
Total Manufacturing	1.82**	.54	1.06**	.99

**, * indicates statistical significance at the 1 and 5 per cent levels (11 degrees of freedom), respectively.

1 The estimated regression equations were specified as in:

$$ln\text{PL} = \alpha ln\text{PS}; \text{ and } ln\text{PM} = \beta ln\text{PS}$$

where ln denotes natural logarithms, and PS, PL and PM are indexes of shipment prices, wage rates and material prices as defined in the preceding Appendix Tables.

2 Estimates based on 1963-74 end-points.

Source Based on data of Statistics Canada.

Appendix Table 3

Regression Estimates of Plant Number Response
to Changes in Prices of Shipments and in Wage Rates of Labour,
Twenty (2-Digit-SIC) Manufacturing Industries, Canada, 1963-74

Industry	Constant	Ratio of Price Shipments to Wage Rates Interaction with Plant Size			Plant Size		Time Trend	Correlation Coefficients	
	C	ln(PS/PL)	ln(PS/PL)lnS	ln(PS/PL)(lnS)^2	lnS	(lnS)^2	t	$\bar{R}^2$	df
Food and Beverage	6.40**	1.25**	-.40*		-.43**	-.18**		.96	90
Tobacco Products	2.29**	.19	-.11		-.15	-.13**		.42	38
Rubber and Plastics Products	3.88**	.80	.87**		-.38**	-.02	2.33**	.75	78
Leather	4.44**	1.52*			-.43**	-.18**		.53	59
Textile	4.52**	1.59*	-.11		-.42**	-.13**	7.63+	.93	92
Knitting Mills	4.12**	.12	-.38**		-.41**	-.22**		.80	74
Clothing	6.17**	1.03**	-.18		-.54**	-.21**		.86	56
Wood	6.27**	.52	-.49+		-.52**	-.18**		.93	69
Furniture and Fixture	5.77**	1.23*	-.10		-.60**	-.16**		.93	74
Paper and Allied	4.77**				-.59	-.21**		.77	76
Printing, Publishing and Allied	6.15**				-.69	-.07**		.96	82
Primary Metal	3.68**	.55	-.81**	-.21**	-.24**	-.04+		.65	75
Metal Fabricating	6.59**	.02	-.02		-.60**	-.19**		.97	83
Machinery	5.00**	.59	-.16	-.17	-.47**	-.13**	2.50	.90	70
Transportation Equipment	4.14**	1.24	-.74**	-.24**	-.29*		3.28	.79	72
Electrical Products	4.47**	2.18	-.47*	-.18+	-.38**	-.14**	8.67	.84	65
Nonmetallic Minerals	4.74**	2.18	-.47**	-.18+	-.38**	-.14**	8.67	.84	65
Petroleum and Coal	2.96**	1.86**	.31+	-.51*	-.11**			.68	61
Chemical & Chem. Prods.	5.06**	.66	-.35**	-.21**	-.54**	-.10**	7.56+	.92	63
Miscellaneous Mfg.	6.14	.50			-.70**	-.11**		.96	72
Total Manufacturing	7.77**	2.26**	-.29**	-.11**	-.47**	-.10**	6.57*	.97	101

**, *, †, denotes statiscally significant t-tests at the 1, 5, or 10 per cent levels respectively.

Appendix Table 4

Regression Estimates[1] of the Response in Shipments per Plant to Changes in the Prices of Shipments and Materials Inputs, Twenty (2-Digit-SIC) Manufacturing Industries, Canada, 1964-74

Industry	Constant	Price of Shipments	Price Ratio of Shipments to Materials	Plant Size	Ratio of Shipments to Value Added	Time Trend	Correlation Coefficients	
	C	ln PS	ln PS/PM	S	VS/VA	t	$\bar{R}^2$	df
Food and Beverage	3.44**	2.64**	10.16**	1.05**			.99	91
Tobacco	1.28**	1.60**	.96	1.31**	.97**		.98	38
Rubber	3.04**	2.02**	2.04**	1.06**			.99	80
Leather	2.61**	1.68**	.45	1.01**			.99	59
Textile	2.65**	1.66**	19.64**	1.09**			.99	94
Knitting	3.57**	1.29**	6.68**	.84**			.99	75
Clothing	3.42**	1.65**	2.12*	.84**			.99	57
Wood	2.57**	.56**	.03	1.14**		.05**	.99	69
Furniture	2.64**	1.48**	3.63**	1.05**			.99	75
Paper	3.10**	.36	2.23†	1.08**		.05**	.99	74
Printing and Publishing	2.30**	1.10**	1.07	1.08**	.69**	.02**	.99	79
Primary Metal	1.70**	2.17**	5.18**	1.11**	1.37**		.99	76
Metal Fabricating	2.05**	1.96**	5.54**	1.07*	1.29**		.99	83
Machinery	2.89**	1.56**	.08	1.0**	.45**		.99	72
Transport Equipt.	2.37**	1.49**		1.14**		.06**[2]	.99	74
Electrical Prods.	2.72**	.69**	1.38**	1.02**	.59**	.04**	.99	66
Nonmetallic Mineral Prods.	2.74**	2.2**	1.38	1.06**	.67†		.99	71
Pet. & Coal Prods.	2.51**	1.56**		1.09**	1.34**		.99	62
Chem.&Chem. Prods.	-2.35**	1.23**		.96**	.66**[3]		.99	66
Miscellaneous Manufacturing	2.61**	1.48**	5.23**	1.07**			.99	72
Total Manufacturing	2.98**	1.28**	3.82*	1.09**		.04**	.99	103

**,*,†, denotes statistically significant t-tests at the 1, 5, or 10 per cent levels respectively.

1 The regression estimates were specified as in

$$ln\frac{VS}{N}_{s,t} = c + \alpha ln\ PS + \beta ln\ PS/PM + \gamma\ ln\ S + \delta\ ln(VS/VA) + \varepsilon t + u$$

where ln denotes natural logarithms, S is plant size, t is time trend (t = ... -1, 0, + 1, ... for the years ... 1970, 1971, 1972 ... respectively), PS is the price of shipments (1971 = 100), PM is the price of material inputs, VS is the (nominal) value of shipments, VA is the (nominal) value added, and u is the residual error term.

2 In case of the transport equipment industry, the time trend variable is replaced by WAFT6 of the CANDIDE 2.0 data bank (it equals 0 for 1963 and 1964; 1, 2, 3, 4, 5 for the years 1965-69 and 6 thereafter), a variable designed to capture some of the impact of the Canada-U.S. auto agreement.

3 In this case the rates of shipments to value added VS/VA was replaced by 1963-74 manufacturing exports of the CANDIDE 2.0 data bank.

Source Based on data from Statistics Canada.

Comments by V. Corbo, Director,[1] Institute of Applied Economic Research, Concordia University, Montreal

The two objectives of Dr. Auer and Miss Mills' (A and M's) paper are, first, to quantify how present tariffs on Canadian manufactures affect producers and consumers in each province and, second, to simulate the effects of alternative tariff schemes on both.

A and M begin by measuring the protection afforded by manufacturing tariffs at the aggregate Canadian level and then examine some of the regional variations in the degree of protection. In their regional computations, the nominal tariff rates are weighted by the production of each of the provinces. With nominal tariffs as measures of protection, Quebec's manufacturing ranks as one of the most highly protected in the country. My own studies of Quebec's industry have shown this not to be true. They indicate that the Canadian tariff affords less protection to the manufacturing industry in Quebec than it affords to the rest of Canada.

A and M go on to examine the consequences for employment and manufacturing shipments when there are changes in the tariffs. They perform a regression analysis with a double-log function in which the number of plants is regressed against the price of shipments relative to the price of labour, and where the size of the plant is measured by employment. This double logarithmic function also allows for interaction terms and a time trend. Finally, it is fitted to Canadian data at the two-digit level of the Standard Industrial Classification. The difficulty with this type of analysis is that most of the conclusions derived from it are based on the specification of the function. In my opinion, the number of plants affected by a tariff change should not depend solely on the relative price of shipments to the price of labour, when there are other important variables such as the price of capital services and the price of raw materials. A and M conclude that a 10 per cent cut in tariffs, for example, would not affect the survival of plants as long as labour was willing to take a comparable cut in wages. If the wage rate moved in conjunction with the tariff, there could be no great change. Surely this is because of the way the equation is fitted and because of the fact that it is homogeneous at zero for the price and wage rate. It seems to me that this equation for predicting the number of plants affected by tariff changes does require further

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1 Publisher's Note: These comments are based on a tape-transcript. Aside from certain theoretical considerations, Professor Corbo asserts that Canadian tariffs afford less protection to Quebec than they afford to the rest of Canada. It is noteworthy that his research findings were based on 1966 input-output data, at a very disaggregate level, whereas the analysis here is based on 1974 data at a more aggregate level. To include the effects of changes in capital stock, as Professor Corbo recommends, would be essential for an analysis of the long-term but is not relevant for analysis of the short-term, the time frame of this study.

theoretical justification than provided by the authors.

The same can be said for the equation predicting changes in shipments of different industries. In this double-log equation, the dependent variable is shipments per plant and the explanatory variable is the price of shipments. A certain non-homogeneity is introduced into this price because it enters both by itself and as a ratio to the price of raw materials. In this specification labour plays no role and production is no longer homogeneous of degree zero. As a result, there is no need for a one-to-one correspondence between changes in price of shipments and price of materials to maintain output after a tariff-induced price reduction. Again, I would suggest that capital be included as a variable even though I am aware that there are limitations to capital input data. Aside from a separate role for capital, I would like to see more theoretical underpinning of this specification. My main point is simply the wisdom of drawing strong conclusions on the basis of parameters obtained from this type of function. With so much derived from it, this equation can not afford to be theoretically weak. Clearly, it should include capital, and *a priori* I would probably choose a function that would be homogeneous with respect to price. One could then test for non-homogeneity.

I have no real quarrel with A and M's methodology once they begin to look at the consequences of various degrees of trade suspension between Quebec and the rest of Canada. It is important to remember that this study is geared to the short-term and unencumbered by any hypothetical indirect effects. Unfortunately, we have not yet devised a well-developed, multi-regional, input-output model capable of taking such indirect effects into account.

THE NET PROVINCIAL EXPENDITURES ASSOCIATED WITH FEDERAL GOVERNMENT EXPENDITURES, AND FISCAL AUTONOMY

by

A. Glynn

Economic Council of Canada

In this study, we investigate for each province the likely short-term changes in both the level and distribution of taxes on families in the province, assuming fiscal autonomy. Becoming fiscally autonomous means that the provincial government gains full control over all federal tax sources (personal income taxes, corporate income taxes, customs duties and sales taxes, etc.) but at the same time loses access to federal intergovernmental transfers (equalization payments, for example) and becomes responsible for continuing or eliminating all expenditures that are presently wholly or partially financed by the federal government. Such expenditures include federal transfer payments made directly to persons in the province (Old Age Security, for example); public services from which provincial residents may be presumed to benefit, whether or not the expenditures happen to be made in the province itself, such as national defence; and federal transfers currently being made to businesses in the province, such as those funded by the Department of Regional Economic Expansion.

We thus compare a hypothetical future situation under which each provincial government would be totally fiscally autonomous, with the current situation where each provincial government has a degree of fiscal autonomy but, at the same time, is fiscally tied to the federal government.

Of necessity our analysis relies on current data, which depend on the present set of fiscal arrangements, in drawing implications for a future which might be founded on a different set of arrangements. In addition, the analysis ignores the possibility of future structural changes and their influence on future tax revenues, for example. By thus concentrating on the short term, we ignore the possible influence of such factors or changes in the trend level of the unemployment rate and changes in the industrial structure which a province might experience in the future under fiscal autonomy. In essence we compare what is presently the case with what would be the case if nothing else changed other than the set of underlying fiscal arrangements. It seems fairly reasonable to assume that not much would change in the short term under fiscal autonomy and that the *ceteris paribus* assumption underlying our results is defensible.

This does not, of course, deny that such structural changes might occur and might alter drastically the tax revenues available to a fiscally autonomous province, and hence the conclusions drawn from the present analysis. Suffice it to say that the results presented here are based on a reasonable assumption as to the situation facing a fiscally autonomous province in the short term.

In allocating federal expenditures to the provinces, or rather to provincial residents, two basic approaches have been used--the benefits or consumption approach and the cash-flow or production approach. The benefits approach treats the federal

government as a supplier of goods and services and attempts to measure the value of these goods and services consumed by the residents of each province. The cash-flow approach treats the federal government as a purchaser of factors of production from the provinces and measures its resulting impact. Transfer payments are treated similarly under both approaches since the beneficiaries, be they provincial governments or residents directly, are clearly identified.

In this exercise, we adopted the benefits or consumption approach in allocating the non-transfer items of federal expenditures. In using this approach, we employed the "costs incurred on behalf of principle" common to this type of exercise and equated the benefits and the costs incurred (the actual expenditures). We thus assumed that a dollar spent on health care provides a dollar's worth of benefits to those who receive the benefits.

The use of the benefits approach allows us to calculate the total benefits derived by the residents of each province from federal government activity. Having this total, we can compare it with the total each province would receive based on its share of total tax contributions to calculate a net expenditure total for each province. Since the provincial allocations of federal expenditures and taxes differ, some provinces receive a share of benefits (expenditures) that is larger than their share of federal taxes and hence run a net expenditure surplus with the federal government. Some provinces, on the other hand, receive a share of expenditures which is smaller than their share of taxes and hence run a net expenditure deficit with the federal government. To investigate the situation facing a province in the short term on assuming fiscal autonomy, it is necessary to calculate these current net expenditure totals for each province. All calculations refer to fiscal year 1974-75 and the expenditure and tax totals were taken from the Statistics Canada Financial Management Series publication, *Federal Government Finance*, Cat. no. 68-211.

We first allocated total federal taxes to the provinces using two basic tax-shifting assumptions. Under Experiment A we assumed that 50 per cent of the corporate income tax is shifted backwards to shareholders. In addition, we assumed that all indirect taxes (general sales, alcohol, tobacco and other commodities) and customs duties were borne by the consumers of the taxed products. All other taxes were assumed to be borne by those upon whom they are levied, that is no shifting is assumed to occur.

Given the uncertainty as to the portion of the corporate income tax that is shifted to consumers and hence that share borne by shareholders, we have used some alternative tax-shifting assumptions in Experiement B. Here, we assumed that

only 25 per cent of the corporate income tax is shifted to consumers while the remaining 75 per cent is borne by shareholders. These shares have been used in the literature quite frequently, although this is an area where the number of estimates is as great as the number of studies themselves. In addition, we assumed that 50 per cent of the indirect taxes were borne by consumers and 50 per cent by factor incomes, as opposed to 100 per cent being borne by consumers which we used in Experiment A. The details of these tax-shifting assumptions along with the series used to allocate the national totals to the provinces are shown in Table 1. We see under Experiment A, for example, that the share of corporate income tax borne by consumers has been allocated by province according to the provincial distribution of total retail sales. The share borne by shareholders has been allocated according to the provincial distribution of dividends received, having first eliminated those dividends accruing to non-resident shareholders. We assumed that none of the tax passed on to consumers in the form of higher prices is exported but is borne in full by Canadian consumers.

The Canadian oil export tax as well as the hidden tax on Canadian oil producers (who have to sell oil on Canadian markets below world prices) receive controversial treatment in the scenarios presented in the text of this paper. We did not include either tax in the calculation of total federal tax contributions which we allocated among the provinces.

Both taxes exist only so long as the price of oil in Canada lies below world oil prices. Federal-provincial agreements, committed to eliminating this price differential, have the effect of relegating these taxes to the position of purely short-term transitory phenomena.

Provincial allocations of total federal taxes paid which include the export and hidden oil tax would be representative only of that period that began with the world oil embargo of 1974 and will end when Canadian oil prices rise to world levels. However, because such calculations would provide the most accurate description of the current situation, they have been performed and are available on request.[1]

Suffice it to say here that inclusion of these two taxes in the federal tax total, and the provincial allocation of tax contributions that results, differ significantly from the results presented in the text only with respect to Alberta and Saskatchewan. In the former estimates, Alberta appears in an overwhelmingly deficit position (receiving far less in federal

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1 Available from the Economic Council of Canada.

benefits than would be expected, based upon its federal tax contributions). Saskatchewan appears in the same estimates in a marginally deficit position, while in the latter set of estimates it attains a significantly surplus position (receiving more in federal benefits than would be expected, based upon its federal tax contributions). The net positions of the remaining provinces are similar in both estimates.

The results of our experiments appear in summary form as part of Table 2. This table contains the total federal taxes borne by the residents of each province as estimated. Using these totals we derive a percentage distribution which we will use to calculate the net expenditure totals.

The provincial allocation of federal expenditures on goods and services required many decisions as to the location of the beneficiaries of these expenditures. We employed two basic experiments in allocating these totals. Under experiment (i) those expenditure items whose benefits could be said to accrue to all, or rather to no one group or province in particular, were allocated according to the provincial distribution of family units. These included expenditures on general government, national defence, courts, correctional services, other protection, health, environment, recreation and culture, foreign affairs and research establishments. Expenditures on transportation, communications and the post office were assumed to benefit the users of these facilities, while expenditures incurred in administering social welfare programs were assumed to benefit the recipients of these program payments. Expenditures on education were assumed to benefit the students receiving instruction; expenditures on natural resources, agriculture, trade and industry, labour and employment were assumed to benefit those employed in these industries. Expenditures on housing were assumed to benefit those homeowners who received assistance; expenditures on immigration, those provinces where the immigrants settle; and expenditures on the supervision and development of regions, the recipient provinces. Having thus identified the recipient groups, the provincial allocations were derived by using appropriate distributive series, the details of which are contained in Table 3.

We altered some of the underlying assumptions as to the recipients of federal expenditures on certain goods and services in experiment (ii). Rather than assuming that the benefits derived from general government, national defence, courts, correctional services and other protection accrue to all families equally, we assumed that the more income a family possesses the larger the benefits it derives from these expenditures. We then allocated these expenditure totals according to the provincial distribution of personal income. We thus assumed that peace and order and good government largely benefit those with higher incomes mainly because they have more to lose in times of war or strife or social unrest. We further assumed that farmers

benefit from agricultural expenditures in proportion to their income, that expenditures on research establishments mainly benefit those employed in this activity rather than all families, and that expenditures on labour and employment benefit employees in proportion to their earnings. Again these alternative assumptions and the distributive series used to allocate them by province are shown in Table 3.

The allocation of transfer payments to persons by province presents fewer difficulties if only because the recipients are more easily identified and the task is to find appropriate series with which to allocate the totals among the provinces. Some of the expenditure items cover categories already included under goods and services expenditures and similar distributive series have been employed, while other items are unique to this classification and their distributive series are explained in Table 4.

Under the expenditure item "Interest," we find those interest payments made by the federal government to holders of the public debt. We assumed that the real beneficiaries of this item are the holders of the debt itself. We thus allocated it according to the provincial distribution of federal debt outstanding.[2]

The total federal transfers to business have been allocated by province following the procedures outlined in Table 5. Expenditures on rail transportation have been assumed to benefit the users of these facilities rather than the recipient businesses and were allocated according to the provincial use of these facilities. Expenditures on agriculture have been assumed to accrue entirely to the producers of the assisted products. Given the size of the dairy subsidies, we divided total agricultural expenditures into a dairy component and a non-dairy component. The share of the total going to the dairy industry was then allocated by province according to data from Agriculture Canada, while the non-dairy portion was allocated according to the provincial distribution of all other agriculture expenditures.

Federal transfers to the provinces present no problems since the benefiting provinces and municipalities are by definition identified. This is sufficient information for our purposes. We do make the assumption that the benefits flowing from these

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2 Based upon the regional distribution of federal debt as given by Jon Cockerline in "A Balance-Sheet to Federal-Provincial Integration and Implications for Divestment", Table 21, mimeo., Economic Council of Canada.

federal transfers accrue only to the residents of the province in question. Thus, for example, we ignore the possible benefits derived by non-resident motorists from federally supported provincial highway maintenance expenditures. It is unclear how restrictive this assumption is, but because of data limitations it is one which we are forced to live with.

The results of all our calculations on the provincial distribution of federal expenditures are presented in summary form in Table 2, with separate rows for expenditures on goods and services, transfers to persons, transfers to businesses and transfers to local and provincial governments, respectively. We have covered 98.5 per cent of total expenditures; hence, the results can be said to be representative of the current situation.

Given these estimates of federal expenditures, hence benefits received by the residents of each province, we can then determine what these expenditures would have been had each province received a share of expenditures equal to its share of total federal taxes. Applying, in turn, the provincial distribution of total federal taxes from Experiment A and B (in Table 2) to the national totals (again in Table 2), we obtain four sets of estimates (Experiment A(i), B(i), A(ii) and B(ii) of the "expected" expenditures.

Subtracting these expected expenditures from the provincial distributions of actual expenditures, we obtain the current net expenditure totals. These net expenditure totals are shown in the first four rows of Table 6.

We see that these range from $2.2 billion in Quebec to -$3.0 billion in Ontario. All of the Atlantic provinces, Quebec, Manitoba and Saskatchewan appear with net expenditure surpluses, while Ontario, Alberta and British Columbia appear with net expenditure deficits. Thus, for example, Quebec is currently (1974-75) receiving $1.9-$2.2. billion more than it would if it was receiving expenditures equal to its share of taxes. Ontario, on the other hand, is receiving approximately $3.0 billion less than its share of taxes might entitle it to. These net expenditures are obviously based on a technique which is a zero sum game in that the gains and the losses cancel each other. In examining the net surpluses and deficits, we speak of entitlements to benefits based on tax contributions only to illustrate the size and sign of tax changes and/or expenditure cuts each province would face under fiscal autonomy. We do not mean to imply that the current political system is reducible to such an exercise, with the gains and the losses offsetting, if only because of the limited information obtainable from this type of investigation. What the totals do tell us is that those provinces currently experiencing net expenditure surpluses would be faced with similar sized deficits under fiscal autonomy in the short term. Conversely, those provinces currently experiencing net expenditure deficits would be faced with similar sized surpluses under fiscal autonomy.

The magnitude of these future deficits and surpluses can be better appreciated if we look at the current net expenditures on a per capita basis, also shown in Table 6. We see that currently each person in Newfoundland is receiving close to $900.00; each person in Quebec is receiving close to $350.00; and each person in Ontario is contributing approximately $350.00. In this form, we see that the size of the required adjustments is likely to be greatest in Newfoundland and Prince Edward Island and smallest in Manitoba and Saskatchewan. The same story is evident when we look at the net expenditures per family unit. Here each family in Alberta is contributing approximately $600.00 while each family in New Brunswick is receiving about $1,800.00.

Now that we have some feel for the size of the current net expenditures and the corresponding net deficits and surpluses under fiscal autonomy, we consider possible ways by which these fiscally autonomous provinces might finance or disburse these net deficits or surpluses.

In Table 7 we present four possible scenarios by which the provinces might finance (disburse) their net deficits (surpluses) under fiscal autonomy. These results refer to the net expenditures as estimated in Table 6, Experiment A(i).[3] These net expenditures are related to present federal and provincial tax totals to yield the percentage tax changes shown in Table 7.

Under Scenario (i) we assume all of the net deficits are financed through increases in the personal income tax and all of the net surpluses are disbursed through personal income tax reductions. The table shows the size of the resulting tax increases which are all very large, ranging from 15.7 per cent to 342.0 per cent. The tax reductions range from 38.0 per cent in Ontario to 25 per cent in Alberta. The very magnitude of the resulting tax increases in the Atlantic provinces and Quebec makes it extremely unlikely that such a scenario would be used.

Scenario (ii) postulates splitting the net deficits (surpluses) equally between the personal income tax and the general sales taxes. The results indicate that while the resulting personal income tax increases are halved, the general sales tax increases are unrealistically large.

Scenario (iii) postulates splitting the net deficits (surpluses) equally between the personal income tax, the corporate income tax and the general sales tax. Under this scenario

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[3] Similar results for Exercises A(ii), B(i) and B(ii) are available upon request from the Economic Council of Canada. Results do not differ greatly.

all of the Atlantic provinces, Quebec and Saskatchewan would be faced with personal income tax increases in excess of 12 per cent, corporate income tax increases in excess of 57 per cent and general sales tax increases in excess of 23 per cent. As before, the reductions in taxes in Alberta, Ontario and British Columbia remain substantial by conventional standards.

In Scenario (iv) we have not specified the manner in which the tax increases (decreases) would occur but, rather, included it to indicate the size of the resulting tax changes compared to the total taxes available to the province under fiscal autonomy. Here we see that financing the net deficit in the Atlantic provinces by way of tax increases would everywhere lead to an increase of at least 33 per cent in total taxes. The increase in Quebec would be of the order of 20 per cent. The size of the tax decreases range from 16 per cent in Ontario to 6 per cent in Alberta. Clearly, then, the Atlantic provinces, Quebec and, to a lesser extent, Manitoba and Saskatchewan would be facing high tax increases upon assuming fiscal autonomy, if that was the route chosen to finance their net deficits.

In view of the great size of many of the tax increases shown in Table 7, it is instructive to look at their effects on the distribution of income. The changes in taxes per family unit associated with scenarios (i), (ii), (iii) from Table 7 are shown in Table 8 for seven income classes.[4] We have not included Scenario (iv) because data limitations did not allow us to fully specify the effects of changes in all tax revenue sources.

We have had recourse to Survey of Consumer Finance data for 1975 in preparing the income distribution results presented in Table 8. These data contain information on the sources of income and total taxes paid by economic families cross-classified by total income. Thus we were able to obtain frequency distributions with which to allocate a given change in personal income taxes and dividends across income classes. The data refer to calender year 1975 but have been applied to our 1974 totals to yield the results shown.

In addition, we needed information on the pattern of consumption expenditures by income classes to allocate that share of the corporate income tax change and the general sales tax change assumed to be borne by consumers. Lacking current data we have made adjustments to some 1969 consumption series derived by Maslove,[5] adjustments which make allowance for the effects of increases in personal

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4 The corresponding results for Experiments A(ii), B(i) and B(ii), are available upon request from the Economic Council of Canada.

5 Allan M. Maslove, *The Pattern of Taxation in Canada*, Economic Council of Canada, December 1972.

income per family between 1969 and 1974. This procedure assumes that all families experienced the same increase in income, that is, that the effects of inflation were distributionally neutral.

With a series on personal income taxes, dividends and consumption, we were able to translate the tax changes resulting from each of the three scenarios in Table 7 into tax changes per family in each income class. In Table 8 we see that for Newfoundland, Scenario (i) implies a tax increase of $10. per family for each family whose total income is less than $3,000 and over $11,000 per family for families whose total income is $20,000 and over. Under Scenario (ii), where both the personal income tax and the general sales tax are increased, we find that families in the five lowest income classes pay more than was the case under Scenario (i), while those in the top two income brackets pay less. The inclusion of the general sales tax, which under Experiment A(i) is assumed to be borne in full by consumers, makes this scenario more regressive than Scenario (i) where the progressive nature of the personal income tax itself is evident. It appears as if the inclusion of the corporate income tax, half of which is borne by consumers, makes Scenario (iii) the most regressive of the three scenarios presented in Table 8. This should not obscure the fact that higher income classes do bear more of the tax increases so that within each scenario there is a large degree of progressivity; it is this degree of progressivity which changes as we move from Scenario (i) to Scenario (ii). Much the same pattern is evident for the other provinces as well, although for Ontario, Alberta and British Columbia we are dealing with tax reductions so that the terms progressive and regressive need to be interpreted with care. For example, for Ontario Scenario (i) is technically the most progressive in that the higher income classes experience the largest changes in taxes. Since these changes are negative, however, the lower income classes obtain little benefit; thus, from an equity point of view, Scenario (i) is hardly progressive. We will limit our comments to those cases where tax increases are in prospect rather than discussing those provinces facing tax reductions.

Along with the changes in taxes per family, Table 8 also shows the current situation facing families in each province. In Newfoundland, where we found that Scenario (i) would imply a tax increase of $11,291 for families with total incomes of $20,000 or more, we find that presently they are paying only $5,218 in personal income taxes. Thus, Scenario (i) implies a tax increase of 216.4 per cent as seen in Table 7. While families in each income bracket face similar percentage tax increases,[6] the absolute size varies. The inclusion of data on current tax payments helps to put the likely tax changes resulting from fiscal autonomy into perspective. It is more instructive to know that each family in

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6 This is due to the use of the same distributive series to estimate the tax increases and the current taxes paid by families in each income class.

the $12,000 to $14,999 bracket in Quebec would be faced with an added $869.1 on top of their existing tax obligations of $3,463, should a fiscally autonomous Quebec decide to finance its net deficit through equal absolute increase in personal income taxes, corporate income taxes and general sales taxes, than to know the percentage change in each tax revenue source implied by such a scenario.

Since the resulting tax increases everywhere appear very large, it seems reasonable to explore alternative ways in which these net deficits might be financed. One such alternative (Scenario (iv)) is presented for the Atlantic provinces, Manitoba, and Saskatchewan for Experiment A(i) in Table 9.[7]

In each instance we postulate a cut in expenditures and a change in taxes as a means of financing the net deficit facing each of these provinces. The nature of the expenditure cuts, their size relative to existing expenditures and the distributive series employed are shown in Table 10. In Newfoundland, for example, we postulate a cut in expenditures of $250 million comprised of cuts of $50 million in Unemployment Insurance benefits, Family and Youth Allowances, Primary and Secondary Education, Health and Transportation expenditures. The remaining net deficit is then financed by means of equal absolute increases in personal and corporate income taxes and the general sales tax.

We derived distributive series from the 1975 Survey of Consumer Finances to allocate the losses arising from the expenditure cuts. Data on recipients of Unemployment Insurance benefits and Family and Youth Allowances by income class were available directly. We used the distribution of the number of children of appropriate age to allocate the losses associated with the education expenditure cut, while the distribution of families across income classes was used to allocate the losses arising from both the health and transportation expenditure cuts.

The losses per family arising from these expenditure cuts appear to be more evenly spread across income classes than was the case for any of the tax scenarios considered to date. This is not unexpected given that the expenditure items which have been reduced benefit the lower income classes to a larger degree. In addition, we have allocated both health and transportation according to the distribution of families which tends to make the expenditure cuts regressive in nature.

The increase in taxes was then allocated in a fashion similar to that of Table 8, Scenario (iii), to yield the results as shown. Here we find a more marked degree of progressivity

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7 The corresponding exercises for Experiments A(ii), B(i) and B(ii) were conducted and are available upon request from the Economic Council of Canada.

compared with the losses associated with the expenditure cuts. The total loss per family is , then, the sum of the losses due to the expenditure cuts and the tax increases. We see that families with incomes less than $3,000 would lose $1,401 which compares with a loss (tax increase) of $1,078.5 under Scenario (iii) in Table 8, $1,202.0 under Scenario (ii) and $10.1 under Scenario (i). Families in the highest income bracket, on the other hand, face a loss of $6,660.9 compared with a minimum of $7,716 in Table 8. In fact , the bottom four income classes appear to lose more under Scenario (iv) than is the case under either of the three tax scenarios of Table 8, while the reverse is true for the top three classes. This same pattern holds for the other provinces except Manitoba where only the top two income classes appear to lose less under Scenario (iv) than under Scenarios (i), (ii) or (iii).

While it is still the case that families with higher incomes lose more than families with lower incomes, the method chosen to finance the net deficit does appear to have distributional implications which appear to be of some significance.

Given the attention paid to Quebec , we present in Table 11 two alternative scenarios by which a fiscally autonomous Quebec might finance its net deficit. Under Scenario (iv), Experiment A(i), we postulate expenditure cuts of $1,500 million and tax increases totalling $595.8 million. The expenditure cuts consisted of $200 million in Unemployment Insurance benefits, Transportation expenditures and other welfare payments, $400 million in Primary and Secondary Education and Health, and $100 million in Family and Youth Allowances. We derived similar distributive series as those employed for Newfoundland in Table 9 to allocate these expenditure cuts to families in each income class , and the resulting total losses per family are displayed in the first row of Table 11. As was the case with Table 9, we note that the incidence of these expenditure cuts is more regressive than that of the losses resulting from the tax increases described in Table 8. For example, families with incomes less than $3,000 lose $523 due to the cutback in these expenditure items whereas they, at worse, lose $187.0 due to the tax increases postulated under Scenario (iii) in Table 8.

The losses due to the increase in taxes (Table 11) display the more normal degree of progressivity, and the total losses under this scenario, while progressive overall, are more regressive for the bottom five income classes than those found in Table 8. Again , the top two income classes appear to lose less under Scenario (iv) than under any of the three scenarios previously considered. Thus , the distributional impacts vary according to the method of financing chosen by the province under fiscal autonomy. The desire to avoid large tax increases appears to shift more of the burden to the lower income classes while still retaining a basic degree of progressivity.

A second alternative to the three tax scenarios of Table 8 is also presented in Table 11. Here we limit the tax increases

to 5 per cent of the personal and corporate income taxes and to 25 per cent of the general sales tax. As previously noted, the tax increases facing these fiscally autonomous provinces far exceed what has normally been the practice of Ministers of Finance to adopt on their budgets. Scenario (v) attempts to limit the resulting tax increases to the range normally adopted while placing most of the onus for financing the net deficit on expenditure cuts. Given our experience with Table 9 and Scenario (iv) of this Table we then expect this scenario to be the most regressive of the five thus considered for a fiscally autonomous Quebec. This is in fact the case , with families in the bottom five income classes facing larger losses under this scenario than under any of the previous four scenarios. For example, families with incomes less than $3,000 face losing $536 compared with $572 under Scenario (iv). At the same time, families with incomes of $20,000 or more would lose $2,232 as opposed to $1,935 under Scenario (iv) and $4,340 under Scenario (i). Again , the method of financing displays a distributional component which is of importance in any evaluation of alternative strategies for financing the resulting net deficit.[8]

In summary, we can say that under fiscal autonomy the four Atlantic provinces would fare very badly, facing large tax increases and/or expenditure cuts. Although the four scenarios postulated in the text are by no means exhaustive, they do indicate the real difficulty each of these provinces would face under fiscal autonomy. In addition, the method by which the resulting net deficits are financed appears to have significant distributional effects, shifting the burden among income classes.

A fiscally autonomous Quebec would face tax increases and/or expenditure cuts substantially smaller than those facing the Atlantic provinces but still very large by conventional standards. As before, the distributional effects seem to be sensitive to the way in which the net deficit is financed.

The situation facing a fiscally autonomous Manitoba and Saskatchewan, while far better than that in the Atlantic provinces or Quebec, would still necessitate large tax changes.

Of the three provinces which presently experience net expenditure deficits and which consequently might be facing tax reductions (or expenditure increases) under fiscal autonomy, Ontario seems to be in the most enviable position. The province would be in a position to reduce all its present taxes by 16 per cent. British Columbia would be in a position to cut its total tax collections by 12.2 per cent and Alberta by only 6.3 per cent.

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8 The corresponding exercises for Experiments A(ii), B(i) and B(ii) were conducted and are available upon request from the Economic Council of Canada.

Table 1

The Provincial Allocation of Federal Taxes -- Methodology

Tax	Shifting Assumption	Distributive Series Used
Experiment A		
Personal Income	No shifting	Total taxes payable -- Dept. of National Revenue, Taxation Statistics
Corporate Income	50 per cent borne by consumers	Total retail sales -- Retail Trade, Statistics Canada #63-005
	50 per cent borne by shareholders*	Dividends received -- Taxation Statistics
General Sales	Borne by consumers	Retail sales subject to the tax -- Retail Commodity Survey, Statistics Canada #63-526
Alcohol	Borne by consumers of alcoholic beverages	Sales of alcoholic beverages -- The Control and Sale of Alcoholic Beverages in Canada, Statistics Canada #63-202
Tobacco	Borne by consumers of tobacco products	Retail sales of tobacco -- Retail Commodity Survey, Statistics Canada #63-526
Other Commodities	Borne by consumers	Total retail sales -- Retail Trade, Statistics Canada #63-005
Customs Duties	Borne by consumers	"
Estate Income	Recipients of estate income	Estate Income -- Taxation Statistics
Unemployment Insurance Contributions	--	U.I. contributors -- Provincial Economic Accounts, Supplementary Tables
Universal Pension Plan Levies	--	Canada Pension Plan Contributors, 1974

* The allocation of those taxes borne by shareholders excludes that portion borne by foreign shareholders. The foreign portion was assumed to be equal to the share of foreign ownership of capital employed in the corresponding industry, as obtained from Statistics Canada Daily, August 27, 1976.

Table 1 (cont'd)

Tax	Shifting Assumption	Distributive Series Used
Experiment B -- The following tax allocations were altered as specified, the allocation of the remaining taxes was as specified in Experiment A.		
Corporate Income	25 per cent borne by consumers	Total retail sales
	75 per cent borne by shareholders	Dividends received
General Sales	50 per cent borne by consumers	Retail sales subject to the tax
	50 per cent borne by factor incomes	Factor incomes -- National Income and Expenditure Accounts Statistics Canada #13-201
Alcohol	50 per cent borne by consumers of alcoholic beverages	Retail sales of alcoholic beverages
	50 per cent borne by factor incomes	Factor incomes
Tobacco	50 per cent borne by consumers of tobacco products	Retail sales of tobacco products
	50 per cent borne by factor incomes	Factor incomes
Other Commodities	50 per cent borne by consumers	Total retail sales
	50 per cent borne by factor incomes	Factor incomes

Table 2

Federal Government Expenditure on Goods and Services, Transfers to Persons, Transfers to Businesses, Transfers to Local and Provincial Governments and Federal Taxes, by Province, 1974-75*

		Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Ten-Province Total
						(Millions of dollars)						
Total Federal Taxes by Province												
Experiment[1]	A	380.5	87.4	751.6	557.4	5,218.2	10,773.0	1,085.4	948.2	2,143.4	3,365.7	25,310.8
	%	1.5	.34	2.96	2.21	20.61	42.56	4.28	3.74	8.46	13.29	100.0
Experiment	B	352.2	79.8	721.0	526.0	5,051.9	10,855.7	1,053.1	901.0	2,072.1	3,306.8	24,899.6
	%	1.41	.32	2.89	2.11	20.28	43.51	4.22	3.61	8.32	13.28	100.0
Federal Gov't Expenditure on Goods and Services[2]	Ex(i)	231.2	53.6	334.5	245.7	2,048.7	3,175.7	424.8	435.9	740.2	1,199.9	8,890.0
Transfers to Persons[2]	Ex(i)	307.9	72.8	448.8	377.2	2,908.4	4,051.5	492.6	453.8	741.3	1,375.5	11,229.8
Transfers to Business[3]	Ex(i)	6.4	7.3	37.3	17.6	331.0	408.0	52.4	88.9	99.2	98.5	1,146.6
Transfers to Local and Provincial Gov'ts[3]	Ex(i)	351.3	84.7	406.1	362.3	2,786.7	1,963.2	378.8	313.6	536.3	560.5	7,743.5
Total		896.8	218.4	1,226.7	1,002.8	8,074.8	9,596.4	1,348.6	1,292.2	2,117.0	3,234.4	29,009.9
Federal Gov't Expenditure on Goods and Services	Ex(ii)	220.3	46.3	312.2	221.0	1,916.2	3,376.9	407.3	467.0	719.1	1,180.3	8,866.6
Transfers to Persons	Ex(ii)	306.9	72.5	447.3	375.2	2,891.9	4,086.5	490.3	450.7	735.8	1,368.3	11,225.7
Transfers to Business	Ex(ii)	6.4	7.3	37.3	17.6	331.0	408.0	52.4	88.9	99.2	98.5	1,146.6
Transfers to Local and Provincial Gov'ts	Ex(ii)	351.3	84.7	406.1	362.3	2,786.7	1,963.2	378.8	313.6	536.3	560.5	7,743.5
Total		884.9	210.8	1,202.9	976.1	7,925.8	9,834.6	1,328.8	1,320.2	2,090.4	3,208.1	28,982.4

*A further breakdown for taxation & expenditures figures into component parts is available upon request.

Sources 1 Federal Government Finance, Statistics Canada, Cat. No. 68-24,) Further Economic Council of Canada
2 Federal Government Finance, Statistics Canada, Cat. No. 68-211,) data available on request.
3 Federal Government Finance, Statistics Canada, Cat. No. 68-211, and Department of Finance Worksheets.

Table 3

The Provincial Allocation of Federal Expenditures on Goods and Services -- Methodology

Item	Beneficiaries	Distributive Series Used
Experiment (i)		
General Government	All families	No. of families -- Income Distributions by Size in Canada, Statistics Canada #13-207*
National Defence	All families	No. of families
Courts and Correctional Services	All families	No. of families
Police	Residents of location of police personnel	RCMP wages and salaries
Other Protection	All families	No. of families
Air Transportation	Users of facilities	Consumer expenditures on air travel -- Urban Family Expenditure, Statistics Canada #62-544**
Water Transportation	Users of facilities	Consumer expenditures on boats, steamships and ferries
Telecommunications	Users of the services	Consumer expenditures on telecommunications
Post Office	Users of the services	Consumer expenditures on postage
Health	All Families	No. of families
Veterans' Benefits	Recipients of benefits	Veterans' benefits -- Provincial Economic Accounts, Supplementary Tables
Unemployment Insurance Benefits	Recipients of benefits	U.I. payments -- Public Accounts
Other Welfare Benefits	Recipients of benefits	Other welfare payments -- Provincial Economic Accounts, Supplementary Tables
Primary and Secondary Education	Primary and secondary students	No. of students -- Elementary and Secondary School Enrolment Statistics Canada #81-210 Vocational and Technical Training Statistics Canada #81-209

* The number of family units in each of the Atlantic provinces and in each of the Prairie provinces were not available for 1974. Applying the 1975 percentage distributions to the 1974 regional totals we estimated the missing provincial totals. The 1975 totals were taken from Statistics Canada #13-207.

** We assumed that the average consumption expenditure per family unit in each urban centre on the item in question was representative of all families in that province. In those instances where more than one urban centre was surveyed in any one province we calculated a weighted average expenditure per family, using the weighted number of families in each centre as the weights. With these provincial average expenditures per family and the number of families in each province we could calculate provincial total expenditures and from these obtain a provincial distribution to apply to the corresponding national total which we wish to allocate provincially.

Table 3 (cont'd)

Item	Beneficiaries	Distributive Series Used
Post Secondary Education	Post secondary students	No. of students -- Fall Enrolment in Universities, Statistics Canada #81-204
Special Retraining Services	Trainees	No. of Canada Manpower trainees -- Vocational and Technical Training, Statistics Canada #81-209
Fish and Game	Employees	Employment in fishing -- Regional Databank
Mining	Employees	Employment in mining -- Regional Databank
Other Natural Resources	Employees	Employment in primary industries -- Regional Databank
Agriculture	Employees	Employment in agriculture -- Regional Databank
Trade and Industry	Employees	Employment in manufacturing and trade -- Regional Databank
Environment	All families	No. of families
Recreation and Culture	All families	No. of families
Labour and Employment	Employees	Total employment -- Historical Labour Force Statistics, Statistics Canada #71-201
Immigration	Province of intended destination	Province of intended destination -- Canada Year Book
Housing	Homeowners	CMHC loans -- Canadian Housing Statistics
Foreign Affairs	All families	No. of families
Supervision and Development of Regions	Recipient provinces	Transfers to provincial and local governments -- Department of Finance
Research Establishments	All families	No. of families
Experiment (ii)	The following allocations were altered as specified while the remaining expenditure items were allocated as specified in Experiment (i)	
General Government	Persons in proportion to their income	Personal income -- National Income and Expenditure Accounts, Statistics Canada #13-201
National Defence	Persons in proportion to their income	Personal income
Courts and Correctional Services	Persons in proportion to their income	Personal income
Other Protection	Persons in proportion to their income	Personal income
Agriculture	Farmers in proportion to their farm income	Farm income -- National Income and Expenditure Accounts, Statistics Canada #13-201

Table 3 (cont'd)

Item	Beneficiaries	Distributive Series Used
Labour and Employment	Employees in proportion to their earnings	Wages and salaries -- National Income and Expenditure Accounts, Statistics Canada #13-201
Research Establishments	Employees in these establishments	Expenditures on research -- Federal Government Activities in the Human Sciences, Statistics Canada #13-205

Table 4

The Provincial Allocation of Federal Transfers to Persons -- Methodology

Item	Distributive Series Used
Public Service Pensions	Public Service Pension payments -- Provincial Economic Accounts, Supplementary Tables
Old Age Security	Old Age Security payments -- Public Accounts
Veterans' Benefits	Veterans' Benefits -- Provincial Economic Accounts, Supplementary Tables
Unemployment Insurance	U.I. payments -- Public Accounts
Family and Youth Allowances	Family and Youth Allowances -- Public Accounts
Assistance to Disabled etc., plus Other Welfare	Other welfare payments -- Provincial Economic Accounts, Supplementary Tables
Health	No. of families -- Statistics Canada #13-207
Post Secondary Education	No. of students -- Statistics Canada #81-204
Agriculture	Farm income -- Statistics Canada #13-201
Recreation and Culture	No. of families -- Statistics Canada #13-207
Labour and Employment	Total employment -- Statistics Canada #71-201*
Foreign Affairs	No. of families -- Statistics Canada #13-207
Research Establishments	No. of families -- Statistics Canada #13-207**
Interest	No. of families -- Statistics Canada #13-207***

*As an alternative we used the provincial distribution of wages and salaries (Statistics Canada #13-201) to allocate this item.

**As an alternative we used the provincial distribution of federal expenditures on the human sciences (Statistics Canada #13-205) to allocate this item.

***Here we assumed that the true beneficiaries of this item are those for whom the borrowing was incurred on behalf of and who benefited from the subsequent expenditures, rather than those recipients of interest payments themselves.

Table 5

The Provincial Allocation of Transfers to Business -- Methodology

Item	Beneficiaries	Distributive Series Used
Rail Transportation	Benefits passed on to users of the facilities	Consumer expenditures on rail travel -- Statistics Canada #62-544
Agriculture	Producers of agricultural products	Provincial share of total agricultural subsidies going to dairy and all other products -- Agriculture Canada
Trade and Industry	Employees in subsidized industries	Employment in manufacturing and trade -- Regional Databank
Labour and Employment	Employees in subsidized industries	Total employment -- Statistics Canada #71-201*
Housing	Recipients of housing assistance	CMHC loans -- Canadian Housing Statistics

*As an alternative we used the provincial distribution of wages and salaries (Statistics Canada Cat. No. 13-201) to allocate this expenditure item.

Table 6

The Net Expenditures, Per Capita, Per Family Unit, Associated with Federal Government Expenditures, By Province, 1974-75

	Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
Net Expenditures					(Millions of dollars)					
Experiment A										
(i)	461.6	139.2	368.0	361.7	2,095.8	-2,748.2	107.0	207.2	-337.0	-621.0
(ii)	434.7	112.2	345.0	335.6	1,952.5	-2,500.3	88.3	236.2	-361.5	-643.6
Experiment B										
(i)	487.8	125.6	388.3	390.7	2,191.6	-3,023.8	124.4	244.9	-296.6	-618.1
(ii)	476.2	118.0	365.3	364.6	2,048.2	-2,775.6	105.7	273.9	-320.9	-640.8
Net Expenditures Per Capita					(Dollars)					
Experiment A										
(i)	851.5	1,189.6	452.6	546.3	341.6	- 339.4	105.8	228.4	-196.6	-259.2
(ii)	802.0	958.9	424.3	506.8	318.3	- 308.8	87.3	260.4	-210.9	-268.6
Experiment B										
(i)	899.9	1,073.4	477.5	590.1	357.2	- 373.5	123.0	270.0	-173.1	-258.0
(ii)	878.5	1,008.5	449.3	550.7	333.9	- 342.8	104.5	301.9	-187.3	-267.5
Net Expenditures Per Family Unit					(Dollars)					
Experiment A										
(i)	3,369.3	4,350.1	1,502.6	1,836.0	1,080.2	- 969.4	309.2	690.0	-568.3	-713.1
(ii)	3,172.9	3,506.3	1,408.7	1,703.5	987.7	- 881.9	-255.1	786.5	-609.6	-739.0
Experiment B										
(i)	3,560.5	3,925.1	1,585.5	1,983.2	1,108.7	-1,329.7	-359.5	815.5	-500.1	-709.7
(ii)	3,475.9	3,687.6	1,534.6	1,850.7	1,036.1	- 979.0	-305.4	912.1	-541.2	-735.8

Source Further Economic Council of Canada data available on request.

Table 7

Possible Scenarios by which Fiscally Autonomous Provinces Might Finance (Disburse) their Net Deficits (Surpluses) Associated with Federal Government Expenditures, Experiment A(i), by Province, 1975-75

	Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
					(Millions of dollars)					
Scenario (i)										
Personal income tax change	461.6	139.2	368.0	361.7	2,095.8	-2,748.2	107.0	207.2	-337.0	-621.0
Percentage tax change	216.4	342.8	87.3	117.1	46.5	-38.9	15.7	36.0	-25.2	-29.7
Scenario (ii)										
Personal income tax change	230.8	69.6	184	180.5	1,047.9	-1,374.1	53.5	103.6	-168.5	-310.5
Percentage tax change	108.2	171.4	43.6	58.5	23.2	-19.4	7.8	18.0	-12.6	-14.9
General sales tax change	230.8	69.6	184	180.5	1,047.9	-1,374.1	53.5	103.6	-168.5	-310.5
Percentage tax change	145.3	202.3	79.1	94.0	52.9	-46.4	16.7	34.4	-47.5	-33.5
Scenario (iii)										
Personal income tax change	153.9	46.4	122.7	120.6	698.6	-916.1	35.7	69.1	-112.3	-207.0
Percentage tax change	72.1	114.2	29.1	39.0	15.5	-12.9	5.2	12.0	-8.4	-9.9
Corporate tax change	153.9	46.4	122.7	120.6	698.6	-916.1	35.7	69.1	-112.3	-207.0
Percentage tax change	206.0	246.8	75.8	104.8	52.1	-36.2	14.7	37.6	-19.2	-26.7
General sales tax change	153.9	46.4	122.7	120.6	698.6	-916.1	35.7	69.1	-112.3	-207.0
Percentage tax change	96.8	134.8	52.7	62.7	35.2	-30.9	11.1	23.0	-31.7	-22.3
Scenario (iv)										
Total tax change	461.6	139.2	368.0	361.7	2,095.8	-2,748.2	107.0	207.2	-337.0	-621.0
Percentage tax change	74.7	102.1	33.5	40.8	19.8	-16.4	64.2	12.2	-6.3	-12.2

Source Table 1. Further Economic Council of Canada data available on request.

Table 8

The Changes in Taxes Per Family Unit Associated with Possible Scenarios by which Fiscally Autonomous Provinces Might Finance (Disburse) their Net Deficits (Surpluses), by Family Income Classes, Experiment A(i)

	Less than $3,000	$3,000 - 5,999	$6,000 - 8,999	$9,000 - 11,999	$12,000 - 14,999	$15,000 - 19,999	$20,000 and over	Total
Newfoundland								
Fiscal Autonomy Financed by:			Change in Taxes Per Family Unit					
(i) Increase in personal income taxes	10.1	176.6	808.8	2,282.5	3,694.6	5,629.0	11,291.1	3,369.3
(ii) Increases in personal income and general sales taxes	1,202.0	1,136.4	1,982.3	2,744.9	4,287.1	4,712.5	7,716.0	3,369.3
(iii) Increases in personal income, corporate income and general sales taxes	1,076.5	1,371.9	1,644.9	2,164.9	3,264.0	4,296.0	10,068.0	3,369.3
Current Situation			Taxes Per Family Unit					
(i) Personal income taxes	5	82	374	1,055	1,707	2,601	5,218	1,547
(ii) Personal income and general sales taxes	828	803	1,460	2,158	3,385	3,907	6,643	2,698
(iii) Personal income, corporate income and general sales taxes	1,089	1,121	1,794	2,499	3,878	4,494	8,172	3,240
Prince Edward Island								
Fiscal Autonomy Financed by:			Change in Taxes Per Family Unit					
(i) Increase in personal income taxes	10.2	348.6	1,394.4	3,063.1	5,170.8	8,515.6	17,289.2	4,350.1
(ii) Increases in personal income and general sales taxes	1,220.9	1,281.8	2,661.7	3,766.8	2,760.8	7,064.2	12,087.0	4,350.1
(iii) Increases in personal income, corporate income and general sales taxes	1,361.2	1,817.8	3,155.2	3,939.5	4,940.8	7,029.4	10,736.0	4,350.1
Current Situation			Taxes Per Family Unit					
(i) Personal income taxes	3	102	407	899	1,509	2,486	5,046	1,253
(ii) Personal income and general sales taxes	603	649	1,377	1,999	3,080	3,874	6,748	2,314
(iii) Personal income, corporate income and general sales taxes	878	994	1,922	2,589	3,732	4,724	7,756	2,894

Table 8 (cont'd)

	Less than $3,000	$3,000 - 5,999	$6,000 - 8,999	$9,000 - 11,999	$12,000 - 14,999	$15,000 - 19,999	$20,000 and over	Total
Nova Scotia								
Fiscal Autonomy Financed by:			Change in Taxes Per Family Unit					
(i) Increase in personal income taxes	3.5	88.5	481.8	1,083.9	1,731.8	2,606.3	4,947.3	1,502.6
(ii) Increases in personal income and general sales taxes	427.4	484.7	985.6	1,424.7	1,828.9	2,245.5	3,386.7	1,502.6
(iii) Increases in personal income, corporate income and general sales taxes	386.2	576.2	1,051.1	1,357.1	1,672.3	2,051.6	3,705.9	1,502.6
Current Situation			Taxes Per Family Unit					
(i) Personal income taxes	11	101	551	1,241	1,982	2,983	5,663	1,720
(ii) Personal income and general sales taxes	549	658	1,493	2,356	3,198	4,174	6,816	2,669
(iii) Personal income, corporate income and general sales taxes	803	1,019	2,030	3,013	3,921	4,955	8,174	3,330
New Brunswick								
Fiscal Autonomy Financed by:			Change in Taxes Per Family Unit					
(i) Increase in personal income taxes	15.7	123.1	555.7	1,215.2	1,926.3	2,892.4	6,204.3	1,836.0
(ii) Increases in personal income and general sales taxes	516.7	699.8	1,359.4	1,542.4	2,006.0	2,504.7	4,237.3	1,836.0
(iii) Increases in personal income, corporate income and general sales taxes	407.9	894.2	1,268.7	1,532.3	1,984.1	2,224.6	4,584.2	1,836.0
Current Situation			Taxes Per Family Unit					
(i) Personal income taxes	13	105	474	1,037	1,644	2,469	5,297	1,570
(ii) Personal income and general sales taxes	554	784	1,624	2,031	2,753	3,595	6,504	2,547
(iii) Personal income, corporate income and general sales taxes	746	1,191	2,141	2,569	3,393	4,196	7,704	3,132

Table 8 (cont'd)

	Less than $3,000	$3,000 - 5,999	$6,000 - 8,999	$9,000 - 11 999	$12,000 - 14,000	$15,000 - 19,000	$20,000 and over	Total
Quebec								
Fiscal Autonomy Financed by:				Change in Taxes Per Family Unit				
(i) Increase in personal income taxes	6.1	54.5	263.1	565.8	870.3	1,653.9	4,340.4	1,060.2
(ii) Increases in personal income and general sales taxes	187.0	310.7	568.6	878.0	982.6	1,483.5	3,218.5	1,060.2
(iii) Increases in personal income, corporate income and general sales taxes	175.8	436.2	613.8	866.1	869.1	1,422.9	3,249.1	1,060.2
Current Situation				Taxes Per Family Unit				
(i) Personal income taxes	13	117	566	1,218	1,873	3,560	9,343	2,284
(ii) Personal income and general sales taxes	361	653	1,392	2,342	2,907	4,800	11,323	3,286
(iii) Personal income, corporate income and general sales taxes	528	1,056	1,897	2,992	3,463	5,637	13,053	3,965
Ontario								
Fiscally Autonomous Disbursements				Change in Taxes Per Family Unit				
(i) Reduction in personal income taxes	7.8	45.3	202.0	361.9	660.7	1,056.7	3,236.7	969.4
(ii) Reductions in personal income and general sales taxes	174.5	285.7	418.7	659.4	858.8	1,076.5	2,446.8	969.4
(iii) Reductions in personal income, corporate income and general sales taxes	163.2	433.7	538.9	735.8	800.5	974.7	2,373.2	969.4
Current Situation				Taxes Per Family Unit				
(i) Personal income taxes	20	116	519	929	1,697	2,714	8,312	2,488
(ii) Personal income and general sales taxes	387	682	1,202	1,959	2,834	3,894	10,095	3,530
(iii) Personal income, corporate income and general sales taxes	597	1,230	1,819	2,763	3,593	4,708	11,788	4,375

Table 8 (cont'd)

	Less than $3,000	$3,000 - 5,999	$6,000 - 8,999	$9,000 - 11,999	$12,000 - 14,000	$15,000 - 19,000	$20,000 and over	Total
Manitoba								
Fiscally Autonomous Disbursements				Change in Taxes Per Family Unit				
(i) Reduction in personal income taxes	1.4	23.0	89.8	184.8	308.8	446.9	971.7	309.2
(ii) Reductions in personal income and general sales taxes	86.8	104.4	184.7	243.2	302.0	428.5	724.8	309.2
(iii) Reductions in personal income, corporate income and general sales taxes	79.4	148.8	217.1	242.3	310.5	399.2	685.1	309.2
Current Situation				Taxes Per Family Unit				
(i) Personal income taxes	9	146	570	1,171	1,952	2,833	6,159	1,961
(ii) Personal income and general sales taxes	523	701	1,404	2,073	2,836	4,059	7,587	2,885
(iii) Personal income, corporate income and general sales taxes	790	1,178	2,036	2,682	3,539	4,903	8,808	3,581
Saskatchewan								
Fiscally Autonomous Disbursements				Change in Taxes Per Family Unit				
(i) Reduction in personal income taxes	5.6	30.4	166.2	402.9	578.0	867.5	2,225.6	690.0
(ii) Reductions in personal income and general sales taxes	174.8	198.3	407.3	565.6	699.9	957.3	1,557.8	690.0
(iii) Reductions in personal income, corporate income and general sales taxes	144.6	270.1	432.7	552.4	654.6	794.5	1,650.5	690.0
Current Situation				Taxes Per Family Unit				
(i) Personal income taxes	16	84	461	1,117	1,602	2,405	6,171	1,906
(ii) Personal income and general sales taxes	515	615	1,401	2,174	2,794	3,824	7,462	2,903
(iii) Personal income, corporate income and general sales taxes	704	961	1,904	2,729	3,408	4,595	8,669	3,512

Table 8 (cont'd)

	Less than $3,000	$3,000 - 5,999	$6,000 - 8,999	$9,000 - 11,999	$12,000 - 14,999	$15,000 - 19,999	$20,000 and over	Total
Alberta								
Fiscally Autonomous Disbursements			Change in Taxes Per Family Unit					
(i) Reduction in personal income taxes	11.4	30.9	142.0	290.4	467.4	684.9	1,493.7	568.3
(ii) Reduction in personal income and general sales taxes	152.7	159.2	267.7	437.6	586.3	700.5	1,138.8	568.3
(iii) Reduction in personal income, corporate income and general sales taxes	132.2	212.0	295.5	443.9	547.9	613.5	1,179.5	568.3
Current Situation			Taxes Per Family Unit					
(i) Personal income taxes	45	123	563	1,150	1,851	2,712	5,915	2,250
(ii) Personal income and general sales taxes	354	425	976	1,765	2,592	3,465	6,739	2,847
(iii) Personal income, corporate income and general sales taxes	688	950	1,623	2,668	3,613	4,468	8,514	3,833
British Columbia								
Fiscally Autonomous Disbursements			Change in Taxes Per Family Unit					
(i) Reduction in personal income taxes	4.3	26.7	162.3	284.9	515.5	911.9	2,525.4	713.1
(ii) Reductions in personal income and general sales taxes	140.8	155.3	302.4	439.5	668.3	982.7	1,893.7	713.1
(iii) Reductions in personal income, corporate income and general sales taxes	121.8	224.2	377.8	463.9	589.3	868.0	2,000.5	713.1
Current Situation			Taxes Per Family Unit					
(i) Personal income taxes	15	90	546	958	1.734	3,067	8,492	2,395
(ii) Personal income and general sales taxes	429	514	1,206	1,845	2,959	4,639	10,376	3,458
(iii) Personal income, corporate income and general sales taxes	554	916	1,812	2,535	3,740	5,582	12,544	4,346

Source Table 1. Further Economic Council of Canada data available on request.

Table 9

The Losses Per Family Unit of an Alternative Scenario by which Fiscally Autonomous Provinces Might Finance Their Net Deficits Associated with Federal Government Expenditures, by Family Income Classes, Experiment A(i)

	Less than $3,000	$3,000 - 5,999	$6,000 - 8,999	$9,000 - 11,999	$12,000 - 14,999	$15,000 - 19,999	$20,000 and over	Total
Newfoundland								
Scenario (iv)								
Deficit financed by:								
-- expenditure cuts of $250 million	907	1,465	2,100	2,065	1,998	1,813	2,049	1,813
-- the remaining $211.6 million equally by increases in personal income, corporate income and general sales taxes	494.4	628.9	754.0	992.4	1,496.2	1,969.5	4,611.9	1,534.2
Total loss per family unit	1,401.4	2,093.9	2,854	3,057.4	3,494.2	3,782.5	6,660.9	3,347.2
Prince Edward Island								
Scenario (iv)								
Deficit financed by:								
-- expenditure cuts of $50 million	804	1,082	1,594	1,904	1,890	1,961	1,739	1,543
-- the remaining $89.2 million equally by increases in personal income, corporate income and general sales taxes	872.3	1,164.8	2,021.9	2,524.4	3,160.1	4,504.5	6,879.7	2,752
Total loss per family unit	1,676.3	2,246.8	3,615.9	4,428.4	5,050.1	6,465.5	8,618.7	4,295
Nova Scotia								
Scenario (iv)								
Deficit financed by:								
-- expenditure cuts of $250 million	727	951	1,061	1,160	1,025	1,164	1,036	1,021
-- the remaining $138.0 million equally by increases in personal income, corporate income and general sales taxes	123.8	184.7	322.3	435.1	536.3	657.8	1,188.3	481.7
Total loss per family unit	850.8	1,135.7	1,383.3	1,595.1	1,561.3	1,821.8	2,224.3	1,502.7

Table 9 (cont'd)

	Less than $3,000	$3,000 - 5,999	$6,000 - 8,999	$9,000 - 11,999	$12,000 - 14,999	$15,000 - 19,999	$20,000 - and over	Total
New Brunswick								
Scenario (iv)								
Deficit financed by:								
-- expenditure cuts of $250 million	854	1,178	1,350	1,349	1,371	1,371	1,373	1,271
-- the remaining $111.7 million equally by increases in personal income, corporate income and general sales taxes	125.9	276.1	391.8	473.2	612.7	687.0	1,415.7	567.8
Total loss per family unit	979.9	1,454.1	1,741.8	1,822.2	1,983.7	2,058	2,788.7	1,838.8
Manitoba								
Scenario (iv)								
Deficit financed by:								
-- expenditure cuts of $50 million	77	112	132	157	155	173	185	144
-- the remaining $57.6 million equally by increases in personal income, corporate income and general sales taxes	42.3	79.2	115.6	129.1	165.3	212.7	364.9	164.8
Total loss per family unit	119.3	191.2	247.6	286.1	320.3	385.7	549.9	308.8
Saskatchewan								
Scenario (iv)								
Deficit financed by:								
-- expenditure cuts of $100 million	174	192	32	39	41	48	38	332
-- the remaining $107.2 million equally by increases in personal income, corporate income and general sales taxes	74.8	139.7	223.9	285.8	338.6	411.0	853.6	355.6
Total loss per family unit	248.8	331.7	255.9	324.8	379.6	459.0	891.6	687.6

Source Table 1. Further Economic Council of Canada data available on request.

Table 10

Postulated Expenditure Reductions and the Series Employed to Allocate the Losses by Income Class

	Expenditure Item	Reduction	Reduction as a per cent of total Expenditures on Item	Distributive Series Used
		($ Millions)	(Per cent)	
Newfoundland				
	Health	50	30.6	No. of families
	Primary and Secondary Education	50	35.6	Children 0-17
	Transportation	50	47.3	No. of families
	Unemployment Insurance	50	39.9	UI recipients
	Family & Youth Allowances	50	89.3	F&YA recipients
Prince Edward Island				
	Health	10	34.5	No. of families
	Primary and Secondary Education	10	31.3	Children 0-17
	Transportation	10	46.1	No. of families
	Unemployment Insurance	10	50.3	UI recipients
	Family & Youth Allowances	10	98.0	F&YA recipients
Nova Scotia				
	Health	100	42.7	No. of families
	Primary and Secondary Education	60	46.5	Children 0-17
	Transportation	25	17.5	No. of families
	Unemployment Insurance	20	20.0	UI recipients
	Family & Youth Allowances	20	29.3	F&YA recipients
	Other Welfare	25	27.3	Provincial social assistance recipients
New Brunswick				
	Health	70	40.2	No. of families
	Primary and Secondary Education	70	41.4	Children 0-17
	Transportation	50	38.4	No. of families
	Unemployment Insurance	20	17.3	UI recipients
	Family & Youth Allowances	20	34.1	F&YA recipients
	Other Welfare	20	20.0	Provincial social assistance recipients

Table 10 (cont'd)

	Expenditure Item	Reduction	Reduction as a per cent of total Expenditures on Item	Distributive Series Used
		($ Millions)	(Per cent)	
Manitoba				
	Health	10	3.2	No. of families
	Primary and Secondary Education	10	6.1	Children 0-17
	Transportation	10	7.7	No. of families
	Unemployment Insurance	10	42.3	UI recipients
	Family & Youth Allowances	10	12.3	F&YA recipients
Saskatchewan				
	Health	25	10.6	No. of families
	Primary and Secondary Education	25	18.5	Children 0-17
	Transportation	10	5.8	No. of families
	Unemployment Insurance	20	44.7	UI recipients
	Family & Youth Allowances	20	26.2	F&YA recipients

Note The distributive series employed were obtained from the 1975 Survey of Consumer Finances public release tape.

Source Appendix Tables 7,8,9,10 and 13 and Provincial Government Finance, Statistics Canada Cat. No. 68-207, 1974.

Table 11

The Losses Per Family Unit of Alternative Scenarios by which a Fiscally Autonomous Quebec Might Finance its Net Deficit Associated with Federal Government Expenditures, by Family Income Classes, Experiment A(i)

	Less than $3,000	$3,000 - 5,999	$6,000 - 8,999	$9,000 - 11,999	$12,000 - 14,000	$15,000 - 19,000	$20,000 and over	Total
Scenario (iv)								
Deficit financed by:								
- Expenditure cuts of $1,500 million	523	772	709	733	721	865	1,012	759
- The remaining $585.8 million equally by increases in Personal Income, Corporate Income and General Sales Taxes	49.9	124.5	174.4	246.2	247.1	404.5	923.7	301.4
Total loss per family unit	572.9	896.5	883.4	979.2	968.1	1,269.5	1,935.7	1,060.4
Scenario (v)								
Deficit financed by:								
- Expenditure cuts of $1,386.0 million	440	700.0	653.6	648.4	617.4	799.2	1,193.6	701
- 5 per cent increases in Personal Income and Corporate Income Taxes and a 25 per cent increase in General Sales Taxes	96	160	260	374	380	530	1,049	399
Total loss per family unit	536	860	913.6	1,022.4	997.4	1,329.2	2,242.6	1,100

Source Table 1 and Appendix Tables 24.

Table 12

The Expenditure Reductions Postulated for Quebec under Scenarios (iv) and (v), the Associated Tax Changes and the Distributive Series Employed

	Expenditure Item	Reduction ($ Millions)	Reduction as a per cent of total Expenditure on Item (Per cent)	Distributive Series Used
Scenario (iv)				
	Health	400	20.0	No. of families
	Primary and Secondary Education	400	29.8	Children 0-17
	Transportation	200	22.5	No. of families
	Unemployment Insurance	200	24.9	UI recipients
	Family & Youth Allowances	100	20.1	F&YA recipients
	Other Welfare	200	21.1	Provincial social assistance recipients
Scenario (v)				
Experiment A(i)				
	Health	150	7.5	No. of families
	Primary and Secondary Education	150	11.2	Children 0-17
	Postsecondary Education	102.9	17.2	Children 17+ in school
	Transportation	283	31.8	No. of families
	Unemployment Insurance	300	37.4	UI recipients
	Family & Youth Allowances	200	40.3	F&YA recipients
	Other Welfare	200	21.1	Provincial social assistance recipients
Experiment A(ii)				
As A(i) except	Postsecondary Education	108.9	18.2	Children 17+ in school
Experiment B(i)				
As A(i) except	Postsecondary Education	331.1	55.5	Children 17+ in school
Experiment B(ii)				
As A(i) except	Postsecondary Education	215.0	36.0	Children 17+ in school

	Tax Changes		
	5 % Personal Income Tax	5 % Corporate Income Tax	25 % General Sales Tax
Experiment A	225.6	67.1	494.8
Experiment B	225.6	59.7	496.7

Source Appendix Tables 7, 8, 9, 10, 13, and Provincial Government Finance, Statistics Canada Cat. No. 68-207, 1974.

Comments by D.B. Perry, Research Associate,
Canadian Tax Foundation, Toronto

It is now evident that decentralization in both taxing and spending powers has changed from the possible to the probable. Decisions about the new division of powers must be placed in a financial perspective, as they have been in the preceeding paper. In this context, I am reminded of the amalgamation studies done at the local government level to show how some local property tax rates would rise and others would drop. They serve to indicate areas where a change in status would create severe hardships and areas that could easily afford the change. Nice, precise studies are produced to show how union would equalize the burdens, but unfortunately none of the predictions come true; the shifts in policy in the level, quantity and quality of government are more significant in determining the fiscal outcome than the reorganization of existing government.

The tips of two icebergs are evident in the development and conclusions of Mr. Glynn's paper. The first and most visible is, of course, the problem of distributing federal revenues and expenditures by province. There are alternative approaches, as noted by Glynn and Gerard Belanger of the C.D. Howe Institute; this approach, using Statistics Canada Financial Management Series data, is the appropriate one. However, I would suggest that the analysis has been carried out at too high a level of aggregation. Specific examples, where a finer breakdown of revenue items would have yielded better results, include the distribution of customs duties, taxes on other commodities (mainly on "luxury" items), the tax on building materials used in residential construction, and non-tax revenue.

Certain expenditure categories could have been broken down further with recourse to the Public Accounts. The Interest item is partly gross in the FMA; interest earned on lending to Crown corporations, fishermen, small business, municipalities, and a multitude of borrowers shows up on the revenue side in the FMS but not here. Also excluded from this analysis is the book transfer of interest to the public service pension plans. Given the assumptions of the paper, this item represents an obligation to be assumed by the provinces. The study does not examine the effect on federal Crown Corporations of this hypothetical shift of responsibilities, although many of them concentrate their activities in

particular areas of the country, using federal funds to underwrite losses.

The author does not discuss the problem of choosing a year for the exercise. The year chosen was influenced by the oil export tax and import compensation, a program designed to be transitional in nature. The author can be excused for ignoring them. Had he studied a year or a decade earlier, the Ottawa Valley line policy would have been seen to give some benefit to the Western oil producer apparently at the expense of Ontario. The two-price wheat program was not in effect that year. The following year, $189 million was provided to subsidize a low domestic wheat price, a clear advantage to bread eaters as opposed to wheat growers. Should the world price fall below $3.25 per bushel, the benefit would go to the farmer.

The FMS federal figures for 1974-75 showed a surplus, offset to some extent in this study by the concentration on tax revenue. The surplus or deficit is nevertheless something that should be tackled in a study such as this. In one sense, the difference between expenditure by province distributed on the basis of revenue and expenditure by province distributed on the basis of benefit (expenditure) automatically distributes the surplus or deficit between the provinces, yielding a nationally balanced figure. Two drawbacks are apparent, first that the surplus or deficit as included above distorts the results; there should be an attempt to distribute the surplus or deficit itself. Secondly, as shown in the Council publication "Living Together," regionally differentiated fiscal policies, whether accidental or intentional, can have significant impacts on particular areas. These impacts should at least be touched on in an analysis such as this, with a reference to the options available for distributing the surplus or deficit.

The second iceberg, barely showing on the surface, but potentially much more dangerous in this study, is the distribution of federal tax revenue and expenditure by family income by province. Again, the literature is not extensive; many of the assumptions, not closely examined in the work, are open to debate. I must question one operation, where Maslove's figures for 1969 are escalated to 1974 assuming that inflation effects are distributed neutrally. In its 13th Annual Report, the Council presented quite a different picture. Tax incidence studies are very tricky, demanding full scale studies on their own. The patterns of income, consumption and provincial and local taxation change too much to assume constancy over periods of five years or more.

This brings me to a general comment on the conclusions and format of the study. The operations performed are technically complex in terms of public finance, and much of the work presupposes a familiarity with the general subject. In addition, as noted earlier, some of the assumptions are debatable. I question both the value and the wisdom of providing a summary by expressing the results in terms of gain or loss, increase or decrease, in tax or expenditure, in terms of dollars per family at each income level. How confident can we be about these dollar figures, given all that has gone before? How much are the income distribution final results influenced by the choice of certain income distributions used in the allocative process? The alternative scenarios help to illustrate the variety of results possible and the influence of various sets of assumptions. This form of condensation is unnecessary for the audience that the paper is intended for and can be dangerous when put into general circulation. To suggest 'per family' figures taken to the nearest whole dollar is deceptive when such figures can only be accurate to the nearest $25 to $50 per family, at best.

I would suggest that this study should not be interpreted as predicting fiscal outcomes because I feel that the *ceteris paribus* assumption is not realistic. If the underlying set of fiscal arrangements in Canada is changed, it is obvious that each province will immediately assess its own priorities. The minimum costs involved in maintaining what provincial residents regard as a "presence," nationally and internationally, will vary greatly and adjustments will be made. For example, the Economic Council may be disbanded, but the Ontario Economic Council may not necessarily be expanded in proportion, according to any of the measures shown here. The Atlantic Provinces Economic Council may be considered adequate in the new age. The investment committees of the Alberta and Saskatchewan Heritage Savings Trust Funds may become the dominant economic experts in British North America. The maritime provinces will put more emphasis on defending the two hundred mile limit than a continental power might. Further, no one seems to have claimed the Territories. Should Confederation break down after 112 years, I find it hard to imagine that the provinces will not move immediately to pick up the customs duties abandoned reluctantly in 1867 and to adapt them to their particular industrial strategies. The diversity that is now present within Confederation is a sufficient indication that quick and significant changes in the quantity and quality of government will follow immediately on "fiscal autonomy."

It is possible to suggest the direction of some changes. Welfare levels (including unemployment insurance) in each province will probably change to reflect the variation in per capita income.

Health and education will obviously have some elements that vary inversely because the importance of basic services may be relatively more important in lower income provinces. The export of trained workers and the import of expenses (such as students and the unemployed) will cause adjustments in other areas. The importance of telecommunications, air transportation and broadcasting may be more important in the vast expanses of the west and northern areas. Obviously, cultural influences will govern Quebec's actions under fiscal autonomy. Thus we might see the rise in importance of provincial air services and the expansion of the educational television authorities in some areas. The areas of speculation are many. The provision of financil details in the Glynn study would help to put such speculation into perspective.

To return to the amalgamation studies, there is a presupposition that there are differences in the level of service or the prospects for growth, and re-organization is seen as a policy tool to solve the problems. Similarly, the examination of Confederation and the decentralizing tendencies are policy tools that could be used to solve specific economic, social and cultural problems. In the municipal amalgamation studies, the problems are also spelled out and quantified. This type of study could do the same at the federal level.

THE NOVA SCOTIA ELITE AND THE PROBLEMS OF CONFEDERATION

by

G. Rawlyk
Department of History

and

G. Perlin
Department of Political Studies

Queen's University*

*Assisted by Mary-Pat. MacKinnon

It is never easy to select a small influential elite group from amongst the perceived and often self-perceived leaders of any community. Nevertheless, despite the manifold problems involved, an attempt has been made, by using a variety of criteria, to choose such a group in each of the four Atlantic provinces. Politicians and civil servants, however, have not been included since their attitudes and opinions are examined in a separate chapter. Fifty-one Nova Scotian leaders were interviewed.[1] The occupational status of these respondents may be categorized in the following manner:

			Per cent
Business and economic	--	7	15.7
Education	--	11	21.6
Professional	--	16	31.4
Religious	--	4	7.8
Labour and others	--	13	23.5

Most of the fifty-one Nova Scotia leaders interviewed made it abundantly clear that they were not in any way reluctant Canadians. Almost 80 per cent of the respondents regarded themselves as Canadians first and Nova Scotians second. This does not mean, however, that their attachment to their native province was weak. The interaction of the two identities did not seem to cause conflict or dysfunction. The sentiment of one university administrator captured well the general consensus:

> I don't consider the two identities to be conflicting. I think that part of my continuing identity as a Nova Scotian involves my Canadian identity. I would have to say that I feel Canadian first but this is accompanied by a very strong provincial identity. (028)

A Roman Catholic leader insisted that Nova Scotians felt no estrangement from their nation but rather were staunch Canadians. "I think Maritimers have a greater sense of being Canadians than do other parts of Canada," (013) he asserted. Given that national attachment was so strong, it is important to consider the nature of that attachment and its possible relation to provincial commitments.

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[1] In this study, specific individuals will not be mentioned. A large number of respondents asked that their name should not be associated with their answers to explicit questions. To meet this reasonable demand, each respondent has been given a three-digit code number, which has also been affixed to the questionnaires which are in the possession of the author's at Queen's University. This study was originally commissioned in 1978 by the Task Force on Canadian Unity. It is published with the permission of the Task Force which, of course, is not responsible either for its contents or its interpretations.

Most of the respondents defined Canadians and Canada in a positive manner, and only a handful either in negative terms or in both positive and negative terms. A few were not able to respond, either because they believed Canada lacked an identity or because they felt that the country's essence was not definable. As one professional engineer explained, "The country is so diverse that it can't be defined except perhaps to say that diversity defines Canada." (026) A view frequently expressed was that a mixture of British, American, and French culture, tradition and history had produced a unique and valuable entity called Canada. In the words of a religious leader, "We have the free and easy ways of the Americans and yet the staidness and tradition of the British." (013) Or as expressed by a leading academic lawyer,

> Basically we are a mid-Atlantic country that tries to bridge the gap between the old world and the new. We are a biracial and bicultural country and we've tried to combine features of both cultures and societies ... we have British common law and French civil law. We are also shaped by our North American environment. (042)

Others stressed the view of Canadians as generous and moral people whose social conscience had contributed to advanced social welfare schemes. "Canadians have a strong sense of the collective. We are a community oriented people." (025) Also emphasized was the physical environment and its impact in shaping and colouring Canadian realities. As a prominent Halifax businessman explained, "Our environment, sharing in the geography of Canada unites us. We all have an appreciation for the outdoors and a closeness to nature." (010) Respondents who had difficulty defining Canada's identity often turned to the international sphere in an attempt to find some answers. These individuals referred to Canada's middle power status, her peace-keeping role, and what was described as a respected international reputation. Some claimed to be most aware of a Canadian identity when abroad. According to a member of Nova Scotia's Bar Society Executive, "It's a very hard thing to express but I think there is a Canadian identity. When I'm abroad I feel it most particularly. We are recognized within international circles." (041)

Negative perceptions of Canada focused on the lack of drive, enthusiasm and ambition shown by its citizens and the failure of Canadians to take pride in their country's achievements and potential. One academic complained that Canadians were "over cautious, never take a risk and are not adventuresome." (022) A religious administrator was annoyed with the absence of patriotism in Canada. "We have a Canadian identity but we don't spend enough time thinking about it. We have been too humble and have lacked pride and assertiveness." (033)

Although they may have considered themselves to be Canadians first, most Nova Scotian leaders had little difficulty in articulating their provincial identification in positive terms. Positive

respondents emphasized historical factors, the geography of the peninsula, and certain social and demographic characteristics. The province's rich reservoir of history, its early achievement of responsible government and its stable population whose roots reach generations-deep into Nova Scotian soil were frequently mentioned. The remarks of one physician were typical of many comments made: "People here have a close association with the land, their roots in the land are strong. This relationship also involves the consciousness of how long their families have lived here." (009) Comments about the North Atlantic and its impact upon the past, present and future shaping of Nova Scotia and its residents were often made. "The people here have a great interest in the sea both in work areas and play areas." (027) Respondents perceived the province as a place where the rural character was still strong, and the pace of life slow enough to allow people to have time for one another and for the communities in which they lived. "Our distinctive values," it was asserted, "are our strong family roots, our extended family idea and generally our deep community ties." (033) The clear impression given was that there was a certain simplicity of life-style in Nova Scotia; there was a lack of tension generally -- a tension associated with big-city living. An important member of the economic elite offered this observation: "There is a difference in how we run our daily lives. I think that we are commercialized to a lesser degree than other parts of Canada." (010) The province's smallness in terms of land mass and population was thought to contribute to neighbourliness and honesty. The weight of history and tradition had created a people somewhat conservative in nature and generally "not as aggressive or outgoing as Upper Canadians." (011) Several respondents mentioned the significance of Scottish settlement to the province's development. A university president pointed out that "in Nova Scotia's history there has been much Scottish predominance," (007) and a Roman Catholic leader asserted that many Nova Scotians "are very much influenced by their Highland Scot background." (013) A number qualified their descriptions of Nova Scotians by remarking that there also existed a variety of local identities. One lawyer insisted, "I am not only a Nova Scotian. I am also a Haligonian and proud of it." (041) A university teacher cautioned outsiders against assuming that all provincial residents were alike. "Another distinctive thing about Nova Scotians, they are Pictounians, Cape Bretoners, people from the Valley, Southshore people or whatever." (024) A Sydney union leader described his provincial identity in Island terms alone: "On Cape Breton there has always been a strong sense of brotherhood and co-operation among residents." (001)

Negative aspects of Nova Scotia's identity were usually traced to the province's economic vulnerability. Persistent economic hardship and "have not" status were blamed for breeding an inferiority complex, a dependency syndrome, slight paranoia and a loss of confidence and initiative. A prominent Halifax lawyer described Nova Scotian distinctiveness in the following manner:

> I think that the long history of economic disparity here has created a sense of inferiority among the people. There is a certain Maritime paranoia found here -- the fear that the province is being taken advantage of. Speaking of the legal profession, because it is the one that I am closest to, I would say that many lawyers here have the feeling that they could not compete or cope with lawyers in Ontario. They feel they can get along very well in Nova Scotia but would not be able to cut any ice in Ontario. (030)

A few people were critical of Nova Scotians' acceptance of what was considered to be intolerable conditions. A leading Cape Breton union spokesman complained that residents "tend to be placid in their acceptance of things which normally cause people to be upset." (004) On the other hand, a university administrator felt that residents complained too often and emphasized their "have not" status too much.

> Nova Scotians tend to emphasize the have-not idea and this is dangerous because it can be a self-fulfilling prophecy.... Nova Scotians have to get rid of a kind of mentality that blames others for their misfortunes. (022)

Another criticism was what one respondent referred to as the province's "tunnel vision." (017) A Halifax union official complained of the "clannish" nature of Nova Scotians and their "inwardness." (029) And according to a key Roman Catholic leader, "The negative side of our identity is our parochialism. We have encouraged rather passé myths about this province and the vision of Nova Scotians is not, as a rule, very broad." (033)

Attitudes towards Confederation and its significance for Nova Scotia shed more light on the relationship of some of its leaders with their country and their province. Of the fifty-one respondents, thirty-five (68.6 per cent) judged Confederation to be a good thing for the province, eight (15.7 per cent) thought it had a detrimental effect, and eight (15.7 per cent) did not or could not make any overall assessment. Many of the affirmative respondents referred to the benefits derived from being part of a country as large, powerful, and wealthy as Canada. They asserted that partnership with Canada had allowed Nova Scotia more latitude for growth and broadening than would have been otherwise possible.

> Nova Scotia could not have developed as it did without being part of a larger unit. (037) At the time of Confederation Nova Scotia had reached a peak; it was ripe for some kind of change. In order to grow further it had to join something bigger. (034)

> In being part of Canada's development, we took part in something valuable -- more valuable than if we had been alone. (029)

> Confederation helped us because it gave us a larger identity, the opportunity of belonging to a great country. We couldn't have had that kind of identity if we had not joined Confederation. (028)

Belief in Confederation did not prevent Nova Scotians from criticizing national economic policies developed and fostered by Ottawa and Central Canadians, many of which policies were considered inappropriate for the Atlantic region. The majority did not blame Confederation, *per se*, for the economic decline of their province, but did stress that centralist economic policies had retarded provincial economic development. One university president observed:

> I can't honestly say that I blame the province's economic decline after Confederation solely on the fact of Confederation. We would have encountered economic troubles with or without Confederation. However, there is no doubt that the national tariff structure was set up to help Ontario and that it hurts us. I also blame the federal government for not doing enough to give Nova Scotians the choice and opportunity of staying within their own province. (028)

A minority of respondents, however, took a more extreme view. A past President of the Association of Professional Engineers of Nova Scotia was far more outspoken and harsh in his criticism. Confederation, he asserted,

> has hurt us severely in the economic field. We have not been able to develop our initiatives, our own resources, and manufacturing potential because we have been smothered by the more powerful central Canadian bloc. This discrimination is and was a very deliberate policy of the financial and political authorities. (023)

But a university president arrived at a very different conclusion. He was unwilling to accept that Confederation had anything to do with Nova Scotia's economic problems:

> I do not think we can blame the economic woes of Nova Scotia on Confederation. Confederation merely coincided with a bad time of development. Using this Confederation argument is a rationalization for our own failure. We have ourselves to blame for much of what happened. (007)

Many leaders considered equalization grants and the standardization of social security programs as great advantages derived from being part of Canada. Frequent mention was made of the federal government's commitment to lessen regional disparity. An executive of the Nova Scotia Teachers Union felt certain of the country's "commitment to fight disparity. Equalization payments and shared cost arrangements have helped.... The federal government is putting more money into Nova Scotia than it is taking out." (020) Others, although accepting the positive aspects of the equalization process, warned that such assistance was not without its negative effects. The remarks of one businessman concerning the ramifications of continued subsidization, although too strong to be representative, did indicate why some were alarmed. "Because the federal level controls so much of Nova Scotia," he maintained, "we have been sapped of our autonomy, lost our self-respect, our creativity, our motivation and initiative. We are no longer in control." (010)

A grievance more commonly expressed was that Ottawa had not been energetic enough in fighting regional disparity, and that federal economic policy continued to discriminate against the region. According to one leading Halifax lawyer, "There has to be more give and take in Canada, more recognition of the need to have equal opportunity for all regions." (037) He was supported by another legal authority who pointed out that "What the federal government does in Nova Scotia is really patchwork; it is not changing our situation." (041) Numerous complaints against discriminatory economic policy, however, did not change the fact that a majority of leaders seem convinced that Nova Scotia's gains from Confederation had been far greater than its losses.

Questions dealing with national goals received rather pragmatic, non-philosophic answers from the sample. Less than a quarter of the fifty-one respondents gave first priority to the necessity of promoting and ensuring national unity. Almost half focused attention on goals of an economic nature and insisted that the current economic crisis required immediate remedial action,

> Economics has to take priority over all other concerns. We must get our economy back into shape and our business flourishing. This will resolve so many present concerns being expressed ... if people are making money and sharing in the joys of life all else will fall into place. (019)

Others, equally preoccupied with practical matters, accentuated the need for appropriate regional development policies that would allow the "have not" regions to become full partners in Confederation. According to one advocate of "regional technologies," "we must ... provide the technological infrastructure and research to allow each region to develop the appropriate technology for itself.... We must change the assumption that every thing has to be in Ontario." (027)

Reinforcing this opinion were the words of a Halifax businessman, "Our first goal should be to work out national and regional economies that provide a standard of living and a way of life that we should have in Canada." (010)

Those who stressed the importance of national unity argued that it was urgently necessary to come to grips with the disharmony arising between the two founding races. The comments of a union official accurately reflected the sentiments of this group.

> Obviously Canadians must try to obtain unity of purpose. We will go nowhere if we continue our constant fighting between the founding races. If this fighting continues, it will tear the country apart and that is nothing we can afford to let happen.... The attempt to mend the split in Canada must take priority. (029)

An influential engineer, in voicing concern over federal-provincial differences, provided a variation on the unity theme,

> The survival of the country must be our primary goal. We must allow regional identities to exist but we must also search for a common Canadian identity.... I am worried about the destruction of the cohesive forces of this country. We are too concerned with the parts and not enough with the whole. (026)

Very few of those interviewed elaborated upon the virtues and advantages of national unity. Most seemed to take the country's continued existence very much for granted. Those that did comment stressed that the alternatives to federal union were not promising:

> As for why to remain united, I don't see any more attractive alternatives to Canada.... It is nice to be part of a bigger thing and being so does not detract from the region. (027)

> ... As for why we should preserve the country, well as Nova Scotians alone I don't think we cut a very wide swath in the world. As Canadians we are respected and have a useful role to play in world politics. (007)

When dealing with Quebec and the possibility of separation, the Nova Scotia leaders revealed a strong desire to avoid the partition of Canada. Of the fifty-one respondents, forty-five (88.2 per cent) feared that Quebec's separation would have a somewhat or very harmful effect on Nova Scotia. When asked to state what course of action they preferred to take should Quebec decide to become independent, almost the same number expressed the

desire to remain in Canada. This group reasoned that "Nova Scotia could not exist on its own, it is too small and not a viable entity" (037) and also that "many people here feel a definite allegiance to Canada." (035) Most respondents observed that "Nova Scotia would be better off economically within Confederation" (007) and were therefore hopeful of the province's ability "to get a better deal in a new federation. I think the rest of Canada will want to keep us." (023) The prospect of an independent Nova Scotia or an independent Atlantica was scoffed at by a majority of the leaders. It was argued that Nova Scotia lacked the resources, funds, infrastructure and power to go it alone. This contention was accompanied by a tendency to rely on Canada as a source of security.

> There would be extreme difficulties associated with independence. We would be just too vulnerable.... Nova Scotians feel an allegiance to Canada and would be too frightened at the prospects of independence to go it alone. (019)

The reluctance to consider independence seriously was also evident in their second preference. Only ten opted for joining the United States and twelve for Atlantic union; four individuals favoured an independent Nova Scotia.

There were a variety of responses to Nova Scotia's future economic prospects. Many of these revealed hostility towards large-scale industrialization unrelated to the provincial resource base. The industrial experiments of the 1960s and 1970s, the efforts of DREE, IEL, and a number of other public agencies to entice industry to Nova Scotia appear to have produced an elite cautious in its hopes for a revitalized province. Most of those interviewed seemed to envisage a future where the province's natural resources would be used to their fullest extent, combining new sophisticated technology with expert marketing techniques and skills. The opinion of one engineer captured this sentiment.

> I have been a close observer of IEL and I have to conclude that our industrial strategy has not worked and not because of lack of talent and effort. We have to go back to a reliance on our natural resources, on fishing, lumbering, mining, agriculture and on tourism. (026)

Cautious as respondents were about the economic future, quite a number indulged in a bit of excitement and speculation when discussing the potential of the fisheries and the gains to be made from the extension of the 200-mile limit:

> The 200-mile limit provides vast economic potential. We could develop a huge fishing fleet complete with factory ships, small craft and all the infrastructure that goes with it. We could get into the manufacture

> of fishing gear, into the refrigeration process and general processing. By improving marketing techniques we could be selling to an international market. (023)

It is interesting that in their discussion of planning for the province's future, few leaders turned to industrial Ontario or booming Alberta as development models. Scandinavian countries were thought to be far more appropriate models for a province like Nova Scotia. Nor, warned a number of respondents, was the standard of living of the wealthier provinces necessarily to be envied or emulated. One academic protested that "we must realize that we don't need the same standard of living as Ontario," (027) while another commented that "our unemployment levels will go down although we will never enjoy the prosperity that Ontario, British Columbia and Alberta do." (038)

Increasing dependence on government equalization and transfer payments had to stop, many argued. It was felt that the provincial economy was far too concentrated in the service sector and far too dependent on government money and not sufficiently productive. "We have to accept the fact that we have to work hard and increase our productivity" it was explained. "In other words, get the work ethic back and convince ourselves that we can do it and it will pay off." (035) Another concern expressed related to the need for more entrepreneurial leadership and business expertise. It was pointed out that the potential for development existed but what was lacking was qualified and adventuresome entrepreneurs to accept the challenge.

> The most fundamental thing needed to get the economy going is leadership. In the past we have not had effective leadership and we have lost year after year potential entrepreneurs. This is what is needed yet. (036)

It was also stressed that more sensitive national policies in transportation, taxation, tariff rates and marketing were needed as a precondition of economic recovery. With appropriate policies in place, the region would have less need for transfer payments. "We must change many of our national policies," it was asserted, "so that they reflect regional needs." (041)

The provincial identity of those interviewed reflected a healthy regionalism founded upon a positive attachment to Nova Scotia and the Atlantic region. For the most part, individuals believed that their province provided special psychological, social and physical advantages but within a Canadian context. An awareness of the very serious problems confronting the province was also an important aspect of their "Nova Scotianess." Their attachment to the nation was correspondingly strong. Collectively, the Nova Scotia leaders gave the impression that Canada provided a larger stage upon which they could actualize their greater ambitions and full potential. Most stressed that creating an independent

province was neither possible nor desirable. It was also clear that the nationalism expressed was not without its critical edge. All those interviewed expressed some frustration with federal policies. It was contended that Ottawa was callously indifferent to the Atlantic region, and it was bitterly resented that Nova Scotia in particular was often overlooked in the corridors of power. As one Maritime historian has quite succinctly expressed it, "Maritime eschatology ... has not been predicated upon the destruction of the national policy but upon its fulfilment."[2] Respondents obviously intended to remain Canadians, but Nova Scotian Canadians, living in a respected and viable and productive corner of Canada.

Respondents' perceptions of the federal and provincial governments were quite varied. When asked about contacts with the federal government, twenty-six of the fifty-one replied that they did have such contacts, fourteen said that they did not, and eleven did not respond. Provincial contacts, as might be expected, were more frequent. Thirty-seven respondents had dealings with the provincial government and only four had no contacts. In the federal sphere, twelve had dealings with public servants, one individual dealt strictly with politicians and twelve with both politicians and bureaucrats. The remaining twenty-eight did not respond. At the provincial level, two dealt exclusively with politicians, six with public servants, twenty-seven with both groups and sixteen did not answer. Twelve claimed to have been negatively affected by federal government policy, six felt that they had suffered no ill-effects and thirty-three did not respond. Provincial government actions were not considered as being especially harmful. Of the thirty-two individuals responding, twelve felt they had experienced negative effects from provincial government policy while twenty regarded such actions as relatively harmless. When asked to decide which level of government was easier to deal with, a majority chose the provincial government. Of the twenty-one people answering this question, seventeen preferred to deal at the provincial level, two favoured the federal government and two saw no difference in dealings with the two governments. A question about the impact of jurisdictional conflict produced twenty-five answers. Of these, fifteen said that they had been affected by jurisdictional conflict, and ten suggested that they had felt no such thing.

Opinions concerning the extent of Ottawa's understanding of Nova Scotia's problems were evenly divided. Twenty-eight respondents believed that the federal government understood Nova Scotia's problems, while twenty-one disagreed with that conclusion. Two did not find an answer. When asked about the provincial government's ability to communicate problems to Ottawa, thirty-six (70.6 per cent) replied that Halifax was doing a good or adequate job with only eight (15.7 per cent) ranking provincial efforts as

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2 T. W. Acheson, "The Maritimes and 'Empire Canada'" in Bercuson, *Canada and the Burden of Unity*, p. 109.

poor. The remaining seven did not respond, claiming they did not know enough to answer intelligently. When asked to decide whether federal-provincial conflicts were mainly the result of different policy orientations or of a power struggle, respondents gave a variety of answers. Of the forty-six individuals responding, twenty-nine suggested the conflict involved a power struggle, eleven saw issue differences to be more crucial, and six felt conflict involved both issues and power.

It is necessary, it seems clear, to elaborate somewhat on the above findings. From an examination of answers, it is evident that the leaders were more likely to have contacts with the provincial government than with the federal government. It is notable that only one individual preferred dealing with the federal government. Accompanying remarks suggested that respondents perceived the federal government as a huge, very complicated and quite inaccessible machine. The provincial government, on the other hand, was considered more accessible, much less complex and more humane. The comments of one Halifax lawyer captured well the general view. "Naturally, I find the provincial government much easier to deal with ... it is so close and it is smaller." (030) The existence of personal contacts within the provincial government was a factor frequently referred to. The following remarks indicate something of the extent to which that personal element was considered important.

> I have a good rapport with the government both because of the size of it and because of the fact that I know them personally. This personal element makes a fantastic difference. (019)

> Well, it is easier for me because I have personal contacts with a number of politicians and bureaucrats. I play tennis with Gerry Regan. I must say that I am well-received and have continuous contact both at a professional level and a social level. (012)

In discussing the most effective way to handle obstacles or difficulties with the provincial government, this personal element was frequently mentioned. Although respondents advocated following conventional grievance channels when dealing with problems associated with the federal government, they emphasized a different method with respect to the provincial government. In the latter case, individuals remarked that it was best to take the matter to a minister, some influential person in the government or perhaps to the Premier himself. In the words of one business leader, "Well, in Nova Scotia, I would be more inclined to go to the politicians than I would at the federal level.... I have no hesitation in going to the Premier if need be." (010) According to a leading lawyer, "If I have serious difficulties I have no hesitation about going to the Minister or the Premier. This is the most effective route to go." (018)

This preference for dealing with provincial officials did not necessarily mean that the federal government was perceived totally in negative terms. That twenty-eight individuals, 54.9 per cent of the total sample, thought Ottawa understood Nova Scotia's problems is both noteworthy and significant. Scrutiny of accompanying comments, however, revealed that although a majority felt Ottawa to possess adequate understanding, many also felt that it lacked the will to deal effectively with provincial problems. As one engineer put it, "I think they perceive the scope and nature of the problems but that does not mean they act on that knowledge." (026) Others qualified their affirmative responses by adding that if Ottawa understood Nova Scotian problems, it understood even better the political realities of Canada, and that was that the province carried little real political weight. In the blunt words of one union leader, "They are quite aware but they won't do anything because they are too concerned with the interests of Ontario and the West." (001) Still others suggested that problems arose not from Ottawa's lack of awareness, but rather because it applied inappropriate solutions. As one academic explained:

> Ottawa does try to understand the problems here. Their error is in thinking that they alone have the solutions. There is an arrogant attitude in the federal public service that seems to say that they know better what has to be done than people here. (025)

A number of respondents, in discussing Ottawa, clearly differentiated between political Ottawa and bureaucratic Ottawa. Most perceived the bureaucracy to be rather unsympathetic and hard to reach. It was observed that the Ottawa mandarins had lost "contact with reality" (034) and were far too removed from the situation in Nova Scotia to understand it. A doctor, formerly an Ontario resident, argued that few officials in Ottawa had any comprehension of what the province was all about. "I myself did not understand until I moved here." (024) Others based their arguments on an assessment of federal government actions in the province. According to a university president, "It's difficult to generalize ... about all the people in Ottawa but the results and actions witnessed don't lead one to believe that Ottawa does understand." (028).

Most respondents considered the provincial government's attempts to communicate with Ottawa to be good or at least adequate. This did not mean, however, that they believed Halifax's pleas were always given a fair hearing or were acted upon. They did believe, however, that Halifax was persistent and very vocal in demanding recognition of the province's particular problems. As one hospital administrator put it, "the provincial governments have been vocal and active. They do a good job of taking their prayers to Ottawa." (011) A lawyer reiterated this opinion, adding a frequently-mentioned complaint. "Our people here make lots of

noise. They try to get through to Ottawa. There is a problem at the other end -- those receiving the information leave something to be desired." (018)

The majority of respondents had no difficulty in delineating areas of conflict between the federal and provincial governments. As might be expected, most conflicts were thought to arise because of economic difficulties. Aside from a few individuals who mentioned Constitutional reform as a contentious issue, most emphasized funding arrangements, natural resource utilization and control, transportation policy, tariff and trade arrangements, energy, regional development, and unemployment rates. Tension in these areas, it was argued, was triggered by the power struggles between politicians and bureaucrats. It was "Basically ... a power struggle between the two levels of governments to see who can get the most credit, who can get the votes." (007) Also stressed was a government desire to accumulate and solidify power. "Neither side wants to give up any of their power," (029) it was observed. Individuals believing that different policy orientations were at the root of the tension explained that "it is a case of Ottawa trying to keep the national interest in mind while the province is trying to push its provincial interests. It is quite natural." (030)

Taken as a group, the leaders appeared to feel more comfortable and relaxed in their dealings with the provincial government. This ease resulted from the proximity and accessibility of that government. The federal government, although certainly not condemned, was criticized for its insensitivity to regional needs. Nonetheless, comments concerning Ottawa were usually reasonable in tone and lacked bitter invective.

The general reaction to Quebec and the possibility of separation revealed tolerant and compromising viewpoints. Forty-nine (96.1 per cent) respondents considered the French language and culture to be valuable contributions to Canadian culture. Special constitutional status for Quebec was accepted by twenty-eight (54.9 per cent) and rejected by twenty-one (42.9 per cent). Reaction to the proposal outlining economic union (sovereignty-association) was not so positive. Twenty-one (41.2 per cent) accepted the proposal, while twenty-three (45.1 per cent) rejected it and seven were uncertain. Forty-one (80.9 per cent) believed that a third option was possible. Guaranteeing the right of French-speaking Nova Scotians to be educated in their own language and to have trials conducted in their mother tongue posed no problem for the majority of respondents. Thirty-eight (74.5 per cent) agreed with educational and legal rights while nine (17.6 per cent) disagreed with the education guarantee and ten (19.6 per cent) rejected the legal guarantee. Although disapproval of the federal government's implementation of bilingualism in the public service was widespread, respondents looked favourably on the principle of bilingualism. The actual implementation of bilingualism was criticized by thirty-one (60.8 per cent), approved by thirteen (25.5 per cent) and seven

(13.7 per cent) were unable to answer. The principle itself received acceptance from thirty-eight (74.5 per cent) and was rejected by twelve (21.5 per cent). The generally conciliatory attitude of respondents is better understood when one realizes that forty-five (88.2 per cent) feared that Quebec's separation would have a somewhat or very harmful impact upon Nova Scotia.

It was felt that the linguistic factor was not a major cause of Quebec's unrest. Forty-five (88.2 per cent) stated that "something else" lay at the root of the Quebec problem. A majority perceived the struggle in Quebec as a struggle of the people striving to achieve "equality." A few individuals referred to Quebecers as "white niggers," while others described them as "second-class citizens." Most expressed sympathy for Quebec's demands, and tried to understand their grievances in the context of historical and cultural factors unique to that province. The comments of an executive member of the Nova Scotia Registered Nurses Association were typical of many opinions expressed:

> Their discontent results from their historical difficulties. I have sympathy for Quebecers and do think they have been subjected to injustices by English Canadians. They have been frustrated in the past, and the Church worked to maintain their subjection. They want equality. (017)

A number of other Nova Scotians stressed the traditional economic inferiority of the French-Canadians and Quebec's current financial difficulties. According to a Teachers' Union Official:

> They [Quebecers] are frustrated because of their inability to progress in economic fields. They want to be able to run their own province and maintain their identity. The federal government responded wrongly to their needs by concentrating on language. (020)

Respondents rejected bilingualism in the public service, not because they opposed increased use of French in Canada, but because they considered the program to be grossly expensive and a total failure. Some protested that funds spent on the policy would have been better spent if channelled into the school system in the hope of making the next generation bilingual. "The money could have been spent in better ways such as beginning French at the grade Primary level." (034) Others accepted the goal of a bilingual public service but considered the methods employed by the government to achieve this goal to be "absurd, ineffective, a farce and absolutely stupid." Many complained that the wrong individuals were sent away for language training, that too many in bilingual positions never had reason to use French, and in general that the government was less than sincere in its efforts to promote French.

In summary, it seems obvious that most Nova Scotia leaders were willing to concede certain rights and special privileges, however undefined, to French Canadians. And most, moreover, expressed concern for Quebec's needs and seemed confident that compromise was indeed possible.

Reactions to possible reform proposals revealed interesting and varied opinions, many of them shedding light on the current provincial-federal debate. A proposal for administrative decentralization received favourable answers from twenty-six (51.0 per cent) individuals, negative replies from twelve (23.5 per cent); six (11.8 per cent) were ambivalent and seven did not respond. A proposal advocating jurisdictional decentralization provoked a different reaction. Thirty (58.8 per cent) disliked the proposal, twelve (23.5 per cent) favoured it, three were ambivalent and six did not answer. Many felt that administrative decentralization would bring the government closer to the people, improve decision-making and the administration of programs, and spread some of Ottawa's wealth around the country. According to a leading member of Halifax's financial elite, "government departments could be just as effective outside Ottawa as they are inside. If departments were spread out that way, it could mean a great deal to the area they were decentralized to." (008) Many also expressed concern that change should truly be change and not mere tokenism. As one union leader stated, "I agree with administrative decentralization as long as it is truly decentralization, that is when offices are moved, the power to make decisions goes with them. I don't want to see regional desks set up with no real power." (034) It was suggested that administrative reform would encourage people to identify more with the nation. "I favour administrative decentralization of government services. This will act to strengthen the regions and also to help them identify more with the whole of Canada. Canada will no longer be something up in Ottawa." (029) A main complaint of those opposing the reform proposal was that administrative decentralization was an impractical, unworkable scheme which, if implemented, would remedy no existing problems. One engineer referred to the reform as "a political gimmick to get votes," (023) and a lawyer was concerned about a loss of efficiency. "I have grave doubts about its efficiency. I don't think it will work, it will lessen government efficiency." (018) Others stressed that the reform's effects would be largely irrelevant. "Administrative decentralization is not significant. The decisions would still be made in Ottawa anyway." (038)

Opponents of jurisdictional decentralization based their rejection on one or both of the following arguments. The first argument usually took the following form:

> I don't want to see a change in the power distribution between the provinces and Ottawa. We need a strong central government in order to keep this country together. (007)

> I am a federalist and I believe that the survival of the country depends upon a centralized government. (012)

The second argument was more specific:

> We would be financially hurt in the Atlantic region if Ottawa was no longer in a position to grant subsidies here. (037)
>
> Weakening Ottawa might hurt us because certainly Ontario would have little desire to develop our economic potential. (035)

Most respondents were less concerned with balancing jurisdictional powers than they were with improving the consultation process between the two levels of government and ensuring that Nova Scotia's voice was heard and considered in a serious manner. As one individual explained, "it would be better if we had a strong Ottawa that gave more recognition to Nova Scotia." (023) A chartered accountant pointed out that "the problem today is not with jurisdictional balances but rather with the attitude of Ottawa." (014) The seriousness of the problems confronting the provinces, argued many respondents, required a sharing of skills, expertise and knowledge. A generalized conclusion was that "provincial interests can be better protected through a consultative, co-operative process." (024) People were not particularly responsive to questions dealing with specific delineations of federal and provincial powers. One union leader in answering the above question curtly stated, "it's not where the power is that counts but how it is administered." (001) Many individual expressed general satisfaction with the *status quo*, although they added that they would not be necessarily opposed to change, provided it occurred through a consultative process. Seven respondents wanted to have fisheries changed to a provincial jurisdiction, while eleven felt that education should be turned over to the federal sphere. The latter group sought the change as a means of standardizing curriculum and avoiding glaring qualitative differences in educational systems. A few believed the province should have control of all its natural resources, and some proposed that the provinces "be allowed to decide where the money it receives should be spent." (019) Overall, one could certainly not claim that those interviewed were strong advocates of provincial rights, or of a radical alteration of the B.N.A. Act. The general consensus seemed to be captured in the following cogent statement:

> It's not so much a matter of jurisdictions prevailing as it is of more meaningful consultation between the two levels; more provincial input. We don't have to have an across-the-board national policy; we need policy with regional variations. (041)

Proposals suggesting that the Senate be reformed, to give it more power in federal-provincial matters and to have its members chosen from the provinces, drew mixed reactions. Nineteen (37.3 per cent) supported the suggestion, eleven (21.6 per cent) rejected it, eight (15.7 per cent) wanted the Senate abolished, and thirteen (25.5 per cent) did not respond. The prospect of an elected Senate drew nineteen (37.3 per cent) advocates, twenty-three (45.1 per cent) opponents, and nine (17.6 per cent) uncertain individuals. A proposal for an appointed Senate chosen by provincial governments received a response rather similar to the above reaction. Twenty-nine (51.9 per cent) opposed the reform, twelve (23.5 per cent) supported it, and ten (19.6 per cent) were unsure. A final option, having Senators appointed by all parties in the provincial legislatures, produced no more favourable a response. Only eight (15.7 per cent) desired the change, twenty-seven (52.9 per cent) rejected it, and sixteen (31.4 per cent) did not answer. Few leaders indicated any enthusiasm for Senate reform, many seemed somewhat bored and unconcerned with the topic. Others, desiring Senate reform, were unsure of how it should be achieved. As one union leader said "I have not thought out the particulars but I do think change is necessary." (029) A number of those who failed to respond to the reform options explained their hesitancy by saying that in their opinion the cart was being put before the horse. In the words of one lawyer:

> Before we can talk of giving it more power we have to define its role. That has not been done and is crucial to any discussion of the Senate. The selection system can be worked out after the role is determined. I can't answer these questions until that is done. It is obvious that something has to be done. (042)

Abolitionists called the Senate "an old man's club" (028) and complained that "Senators have outlived their usefulness. We don't need two governments up there playing games." (039)

Respondents were more favourably disposed to reform proposals that advocated increasing provincial influence in federal institutions and policies. A proposal suggesting that provincial governments have more influence in appointing Judges to the Supreme Court was accepted by twenty-six people (51.0 per cent), rejected by eighteen (35.3 per cent) and was not reacted to by seven (13.7 per cent). Supporters who elaborated upon their choices tended to stress that "regional representation is important" (037) and that the Court needed "a better balance" (021) than it currently had. Others admitted that allowing provincial appointments would not eliminate political favouritism, but insisted that nonetheless the reform would bring about a Court "better than what we have now." (041) A major complaint of reform opponents was that "the Supreme Court was not meant to represent provincial interests or regional interests." (018) In the opinion of this group, provincial input "would create a political body.

The Supreme Court should not be political." (030) "Its function," it was contended, "was to represent the law." (007-8) Those who failed to respond either said that they "did not know enough about" the issue or they pointed out that appointments would be political anyway so they did not care who made the selection. "I see them as purely political appointments so I don't care who is making them." (002)

A proposal to permit provincial governments a role in appointing individuals to federal regulatory agencies received affirmative answers from twenty-nine (56.9 per cent) individuals, negative responses from sixteen (31.4 per cent), and six declined to answer. Advocates maintained that it was very important that federal agencies keep "in touch with provincial concerns" (022) because the impact of their actions was felt right across the country. Provincial input on the various agencies was considered to be absolutely essential. Reform opponents complained that involving provincial governments would accomplish very little and would do nothing to alter the fact that many appoints were based on considerations of political affiliation rather than merit. As one university president argued, "although the immediate response is yes, on second consideration it is evident that this would accomplish little. The province would be making political appointments just as the federal government." (036)

Supporters and critics of a proposal advocating greater involvement of provincial governments in the determination of monetary policies were very evenly balanced. Twenty-five (49 per cent) desired an enhanced role for the provinces, twenty-two (43.1 per cent) did not, and four could not or did not respond. Supporters insisted that the different regions of Canada required special attention and policies, policies more likely to be developed if provincial input was increased. "It would be desirable to have monetary policies that suit us rather than having to abide by national policies which are not applicable." (029) Opponents warned that involving provincial governments would only create a "confusing" situation and that "the perils inherent in allowing the provinces in on this policy are greater than the advantages. It would balkanize the country." (007) Another criticism voiced was that "provinces don't have the expertise to become involved" (011) in shaping national monetary policy.

More provincial involvement in federal fiscal policy, specifically in the determination of the federal budget, was sought by twenty-nine (56.9 per cent) and rejected by twenty (39.2 per cent). Only two individuals did not respond to this reform proposal. Although the majority supported the reform, many qualified their support by adding that final authority in policy determination should always be the federal government. "The provincial governments should be consultants in this matter and not full partners, that is, the federal government must have the final say." (026) Reform opponents complained that monetary

control had to be centralized. In their opinion, allowing the provinces a greater role would open up an enormous can of worms. As one academic put it:

> The idea is great but I think there would be great problems of implementation ... there is the danger of its becoming too political and of the national good being ignored because of bargaining between the two levels of government. (028)

From an examination of the response to the various reform proposals, it is clear that Nova Scotia leaders were not overwhelmingly in favour of provincial rights. A majority did support greater involvement of provincial governments in a variety of federal functions. The opposing minority was, however, significant in numbers and quite articulate. Comments suggested that what was desired was not a weakening of federal powers but rather a sensitive, aware Ottawa able to act on Nova Scotia's special needs. At no time did respondents give the impression that they sought the aggrandizement of provincial powers at the expense of the federal sphere.

Atlantic union received support from twenty-three (45.1 per cent). The remaining twenty-eight (54.9 per cent) were opposed. Twenty-two (43.1 per cent) supported Maritime Union, twenty-eight (54.9 per cent) rejected it, and one individual declined to answer. Although some did support both union proposals, most did not "think it ... likely to occur in the near future unless some traumatic change occurs in the region." (010) Many believed that if Quebec separated, the region would be practically forced into such a union. Even union opponents stated that in the event of Quebec independence they would support the joining together of the four Atlantic provinces. As one opponent remarked, "I don't think it [union] is likely to occur and I would not favour it unless some radical change happened such as Quebec's separation." (011) Political amalgamation was considered unlikely for two main reasons. One factor involved the provincial identity of Atlantic residents. "We are too traditionally bound by our provincial love affairs. We don't want to give up these identities." (008) As one academic put it, "the psychology of the people in the Maritimes prevents or inhibits any such union." (038) A second reason preventing union was thought to be the reluctance of political leaders to promote the idea in earnest. "We don't have the leadership to bring it about. They are too interested in their own empires." (010)

Respondents considered the following as advantages to be gained from Atlantic or Maritime union: "more political clout with Ottawa" (018), "standardization of services and savings in administrative costs" (038), enhanced ability to "devise a common strategy for development in economic, educational and social areas" (010), "avoid needless duplication" (012), "increase our bargaining power with companies" (027), and finally, "de-emphasize

petty politics and strengthen our government, improving the quality and competence of those involved." (033) The following were listed as disadvantages associated with union: "rather than having less bureaucracy we might have more" (036); "government would become too remote, we would lose the feeling that we are able to influence people in government" (019); it would "water down some of our political clout with Ottawa" (012); "politically impossible to administer" (014); "Nova Scotia might lose a bit since we would have to redistribute funds to the poorer provinces" (009); and finally, "there would be a loss of identity for people in the region and also a loss of pride in provincial identities." (018)

Opponents of union proposals protested that co-operation would be more difficult to achieve within a union. They complained that political union was unnecessary and directly opposed to the wishes of the people. "I believe we can achieve better co-operation without a formal political union. No one wants it anyway." (041)

Respondents' appraisal of existing co-operation among governments in the region varied. A small group considered co-operation to be poor. They complained that politicians were unwilling to pursue objectives common to the whole region and were too concerned with maintaining their own power. As one religious leader bluntly stated, "the co-operation that exists is just tokenism. All of the governments are primarily interested in maintaining their power and protecting their bureaucracies." (033) An economic leader predicted that co-operation would not improve until "we improve our political leadership and political life." (010) A second, more numerous group, although not satisfied with the degree of co-operation, conceded that provincial governments were at least making an attempt to communicate and co-operate. This group accepted that some competition would always exist because it was a part of the political system, but hoped that it would lessen in the years ahead. "Co-operation has been reasonably good in those areas in which there are common interests. Disagreements arise because of the political system we have to work with. Each politician must be responsible to his own constituency." (038) Others worried that recent economic setbacks would inhibit or retard improved relations. "They are beginning to work together, but recently I've detected a certain backing off, a reappraisal of co-operation. I have a feeling that co-operation is beginning to decline." (029) The smallest group, numerically speaking, was composed of individuals generally satisfied with the extent of government co-operation in the region.

Attention must be drawn to the fact that many in referring to Atlantic co-operation really meant Maritime co-operation. Quite a few respondents saw Newfoundland as a self-declared outsider, unwilling or unable to share concerns with the other three Atlantic

provinces. As one union leader said, "Newfoundland does not get very involved with the other three provinces and is inclined to be aloof." (029)

When questioned about APEC, most respondents reacted by saying they thought it fulfilled a necessary role in Atlantic Canada. They also stressed that its publications provided relevant information. "APEC is good. It attempts to gather information on a regional basis. It allows us to compare things and to see where we are going." (027) The single most common complaint against the institution by both admirers and critics was that it lacked power and consequently was less effective than it could be. "APEC is a good idea but it doesn't have much power and thus can't accomplish a great deal. It has to receive more recognition from the government." (024)

The Council of Maritime Premiers (CMP) evoked fewer detailed responses from the sample than did APEC. While most individuals were more positive than negative about CMP, many were rather vague about the Council's specific achievements. Comments like "the CMP have done a number of useful things" (032) were common. Others did not differentiate between the CMP and APEC, making statements like this one, "Both APEC and CMP are very relevant and needed. They do a good job in certain areas of co-operation." (022) Criticism of the Council paralleled that of APEC, that is, some respondents questioned CMP's effectiveness given its lack of power. "As far as CMP is concerned, it seems that the three Premiers have backed down on co-operation. In the end it is a political matter. None of the provinces will give up anything." (018) Others worried that the original intentions of the Council were being neglected or misdirected. "The CMP was a good first step but lately they have been regressing. The Premiers are more concerned with politics." (010) Those who were completely unimpressed with the Council referred to it as "an entertainment society" (041) which had a "big bash three times a year." (034)

Nova Scotian leaders seemed united in their conviction that meaningful co-operation and sensitive consultation provided the answers not only for the region's problems but also for those facing the Canadian nation. Despite a strong attachment to the constitutional *status quo*, there was some willingness expressed to accept some changes, provided that these did not undermine a strong federal presence in Ottawa.

Comments by Peter E. Gunther, Task Force on Canadian Unity, Ottawa

It is impossible to do justice to this year's efforts by Professors Perlin and Rawlyk in a paper such as we have just heard. It is but a single cell in a much more encompassing opus which includes the historical themes of Confederation, the interpretations of the press for the last decade, a mass survey and an elite one. Although these preliminary Nova Scotia results still await more sophisticated statistical treatment, they contain the heart of what I might dub the Canadian irony; national allegiance midst provincial preference.

The resilience of Nova Scotian national allegiance is quite remarkable. The paper correctly recognizes the necessity at Confederation, midst the decline of wood and sail, new world wide competition for the British Empire and the cancellation of reciprocity, for Nova Scotia to enter a larger trading entity but it could also harken back to the options of Maritime union, union with the United States and a British Empire parliament of which Joseph Howe was the main exponent. The new allegiance to a parliament dominated by land lubbers intent upon a national, not international policy, meant that the dead hand[1] of national policy would be upon the Atlantic region for at least 100 years. Next year, do not ask the ghosts who remain to celebrate its centennial.

As recently as 1961-1971, it contributed to a net emigration of 129,000 people from the Atlantic region. The scars of this emigration will remain with us for two generations through a depleted tax base, low demand for housing and the transfer of income of those migrants to established central Canadian land owners in the form of increased land prices elsewhere in the country. Although these cuts have been sutured by net immigration of 30,000 from 1971-1976, many economists and politicians alike are poised to rip open the stitches with little understanding of regional or provincial preferences.

Perhaps Ottawa bureaucrats who protest about their guilded cages being moved as far away as Hull should recognize that others feel strongly about their domestic nests. By their own protestations it is certainly clear that the bureaucrats prefer the Versailles of Ottawa to life amongst those whose interests they purport to serve. Yet Nova Scotians maintain allegiance.

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1 Harold Innis, *Complementary Report Nova Scotian Commission*, Provincial Economic Inquiry, King's Printer, Halifax 1934, p. 133.

Although I live in Halifax, there is no one else listed on this programme as residing east of Montreal. Yet, omitted from the discussion table, Nova Scotians remain loyal.

This unconscious omission has been historically typical of Dominion attitudes. In his review of the "Literary Standing of the Dominion" in 1877, the leading critic of his time, Jean Talon Lesperance, admitted "I am not sufficiently acquainted with the literary movement in the Maritime Provinces to enter into an account of it, but I know...the names of." A century later Central Canadian attitudes have not changed. Witness *Quill and Quire*, from its advertising, the obvious darling of the Canadian publishing industry,

> "...Atlantic provinces could become a solid front against what Karl Webb, Nova Scotia's youth director refers to as 'The Central Canada Syndrome'. 'Writers are writing books as if Canada stopped short at the Quebec border.' Insularity, it should be said, is not confined to the Maritimes.[3]

Note that according to *Quill and Quire* it is Maritimers who are insular not Central Canadians who simply ignore part of the country's heritage when writing texts. Yet allegiance more than lingers among the elite.

Perlin and Rawlyk assure us of that. Almost 80% of the respondents were Canadians first and Nova Scotians second. I am not sure that 80% is a large number. I suspect it would be higher in Ontario. More important, is Nova Scotian allegiance based upon positive factors? The basic thrust of the paper suggests to me that it is not. There is the inferiority complex made deeper by the maintenance transfers which are the major means for distributing benefits of the economic union. Development policies are preferred. Only 68.6% see Confederation as being a good thing, so it is not surprising that less than a quarter give national unity as their priority objective, although most recognize a net gain stemming from Confederation despite Ottawa's perceived callousness. The Honourable Eugene Whalen's recent comment that Nova Scotia's election was no more important than a municipal one will do nothing to improve Ottawa's image in a province that, should it join the United States, would be the 41st in population size. The response to Ottawa's

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2 Jean Talon Lesperance, "The Literary Standing of the Dominion," *Canadian Illustrated News*, 1877.

3 Loren Lind, "Geography lessons in text adoptions," *Quill and Quire*.

policies is singularly unenthusiastic, 12 injured and 6 not injured, no one helped and 33 not responding. Suggestions for reform ought not to fall on deaf ears.

Most (17 of 21) preferred to deal with the province; in the language of Scott and Breton, signalling costs to provinces were clearly less than to Ottawa. For example, even an application of their principles of total costs would have dictated that the Atlantic Restoration Center remain in Moncton in order to avoid serious costs and risks in transporting Acadian and Atlantic artifacts and resultant destruction of our heritage. But that is of little concern to Ottawa.

My purpose here is not to summarize or to add colourful particulars; it is to highlight the Canadian irony and suggest to economists that the analytical framework based upon neo-classical economics is wholly inadequate to deal with the issues at hand. Economics has little to say of allegiance and regional social preferences. The propositions of neo-classical economics require mobility of labour and capital[4] as well as complementary tax structures as outlined by Johnson.[4] Perlin's and Rawlyk's findings, sustained discrepancies in income and linguistic barriers, suggest that these assumptions are not met. Indeed, until we social scientists come fully to grips with much broader but equally specific models, we shall continue to recommend policies which politicians and poets alike will rightly regard as being non-optimal. When neo-classists speak of "non economic costs," there is an admission of inadequacy. At the micro foundation level, Lancaster[5] and Becker[6] have begun to form a broader, more detailed theoretical base, but their work needs to be expanded to include a perceptual function between activities and utility. We need to make models compatible with those of perceptual psychologists if we are to have anything to say about vesting education and communications. Only in such models can all the avenues for development become clear; only then can the constraints imposed by government and the division of power be examined completely. Only then can we clearly delineate the social costs and see how they are borne by government and individuals. Economists will then be able to discuss the tax structure as a vehicle for transferring social cost back to those creating the costs and, within that framework, the allocation of power which is what is at stake in federal-provincial conflict.

These are the best of times; they are the worst of times; it is an age of foolishness; it is an epoch of belief; it is the season of

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4 This theory is developed by Harry G. Johnson, "The Implications of Freer Trade for the Harmonization of other Policies" in *Aspects of the Theory of Tariffs* (London: Allan and Unwin, 1971).

5 Kevin J. Lancaster, "A New Approach to Consumer Theory," Journal of Political Economy, Vol. LXXIV, 1966, pp. 133-157.

Light; it is the season of Darkness. Income per capita is higher than it has ever been; soaring unemployment leads to unrest. Glass palaces tower over dinosaurs in Calgary and cover the old guilded cage of the Bank of Canada in Ottawa. Mirror windows reflect cold steel and the art of technocrats. In Montreal, buildings stand naked and gutted; Expo is gone, and the big O is all that remains of the Olympic rings. The Prime Minister's pretty lady is splashed all over films, and people know that pretty is not beauty. Some rip off the UIC, and others lose self-respect.

Economic models that worked by sleight of hand do not work in more sophisticated times. The depression gave us Keynes and economic management for a quarter of a century.

If we are lucky, the crisis in federation will give us a viable theory of federalism and particularly of Canadian federalism. It has taken us a century to travel from Joe Howe to Joe Who. We do not have another century to find Joe Why. The two Georges do us a service in tackling this problem, but I wonder what the results of a survey in the France of 1773 would have revealed?

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This comment is that of the author alone. It in no way reflects the opinion of any of his employers or the direction of their research.

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6 Gary S. Becker, "A Theory of Social Interactions," Journal of Political Economy, Vol. LXXXII, 1974, pp. 1063-1093.

DECENTRALIZATION AND PROVINCIAL REPLICATION OF THE CANADIAN FEDERAL PUBLIC SERVICES

by

B. MacDonald

Economic Council of Canada

PART I

INTRODUCTION

Either significantly increased decentralization of federal powers or separation of Quebec would mean that some presently federal public services would be provided by two or more jurisdictions. Some argue that such a change would, on balance, be beneficial, while others argue that it would be harmful to the general interest of Canadians. Four sets of arguments have commonly been advanced in this connection, which are presented and summarized below.

1 Varying Tastes

Decentralization of public services from the federal to the provincial level would mean that each of these smaller political jurisdictions could put forth a personally designed package of services to reflect the peculiar preferences of each constituency. Given perfect interprovincial mobility, individuals could relocate on the basis of their preferences for various provincial programs, and the general level of satisfaction derived from the services offered within a province and the nation as a whole would rise. Some argue that many would benefit from such an arrangement, while none would be made worse off.

2 Allowing for Spillovers

Decentralization or greater provincial autonomy over public services would erode the ability of the federal government to correct for the existence of externalities arising as interjurisdictional spillovers.

Production externalities may arise, for example, when Ontario produces pulp and paper, and pollutants are emitted as a by-product. Suppose these pollutants are passed into waterways shared with the province of Quebec. It is unlikely that Ontario would, of its own accord, compensate those consumers of the waterway whose utility has been affected by the pollution and who do not reside in Ontario.

If, however, some central authority exists, such as the federal government with its control over reallocative tools like taxation and subsidy, then these externalities may be accounted for. The federal government could place a tax on the sale of pulp and paper products so that the price of this product would reflect all costs, including that for polluting the riverway. It could then, if desired, compensate directly those affected most by the pollution.

The development and enforcement of such solutions by individual persons and provinces could be prohibitively expensive, and similar spillovers and associated allocative inefficiencies would go on uncorrected.

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1 G. Tullock, "Federalism: Problems of Scale," *Public Choice*, Spring 1969, pp. 19-29.

3 Presence of Scale Economies

Decentralization may mean the loss of certain cost advantages which accrue from the centralized production of goods and services because of positive scale economies in the production process. Of course, where negative scale economies dominate the provision of a public service, exactly the opposite will hold true, and lower average unit and total cost will be attained by dispersing the production facilities among the provinces.

4 Possibilities of Duplication

Within the federal-provincial political framework it might well be possible that competition or lack of consultation between the federal and provincial levels of government could result in certain public service operations being performed more than once, implying wasteful duplication.

These four arguments have received considerable analytical attention. Two or more of them have often been considered within the context of a trade-off situation where, for example, the potentially positive gains from decentralization associated with argument 1 are weighed against the potentially harmful effects of decentralization associated with argument 2.

We shall be devoting most of our attention to argument 3 which concerns economies of scale, and argument 4, involving the possibilities of duplication, is briefly examined.

Our study is different from previous works on the subject of decentralization because of its empirical approach to the analysis of decentralization. We adapt our analysis to a novel Canadian institutional framework with quite revealing results.

In Part II, entitled "An Industry Synopsis," we examine the nature of the production processes underlying the provision of those public services in Canada which are now provided by the federal government. In Part III, "The Regionalized Services," we consider alternative scenarios under which decentralization might occur. These scenarios are not individually exhaustive, but we hope that, together, they may capture the range of possible costs associated with decentralization. In Part IV, "Economies of Scale in the Regionalized Services," we discuss our empirical estimation procedures, as well as results generated concerning economies of scale in the provision of the regionalized public services. In Part V, "Decentralization of the Regionalized Federal Public Services," we combine our estimates of economies of scale from Part IV with out scenarios of decentralization outlined in Part III and arrive at some estimates for the cost of decentralizing the federal, regionalized public services in the province of Quebec. In Part VI, "The Unregionalized Federal Services," we discuss the decentralization of the unregionalized federal public services, and in Part VII we provide a summary of our results and some conclusions.

PART II

AN INDUSTRY SYNOPSIS

Roughly $47 billion will pass through the hands of the federal government in 1978. Much of this money is simply transfers, so that, of the $47 billion, approximately $17 billion constitutes the real operating costs of the federal government which is here viewed in a role analogous to that of a private sector industry, supplying goods and services. These costs include such things as supplies, salaries, buildings and equipment, etc.

Provincial government expenditures on goods and services, which surpassed similar expenditures by the federal government in 1971[1], are relevant to this study as well. The degree of similarity between Federal and Provincial programs suggests that infrastructure and expertise existing at the provincial level may well be capable of absorbing federal responsibilities.

In Canada the majority of public services result from the combined effort of head office and field operations. The head office activity may usually be separated from the field operations, both in terms of descriptive function and in expenditures.

In Table 2-1 we outline the production process which characterizes the majority of federal services. We have divided this overall production process into six distinct stages which we then attempted to align with their counterparts in private industry.

While we expect to find Stages 1 through 6 occurring to some degree at both head office and field levels, we expect activities within Stages 1, 2, 3 and 6 to be more predominant at the head office level. Policy directives, research and development, interprovincial co-ordination, etc., all occur within these stages of production. Stages 4 and 5 are predominantly field operations.

We analysed the actual field-head office allocation of occupational groups in an attempt to affirm our expectations of such a division. The occupational category we expect to be most prevalent in Stages 1, 2, 3 and 6 would be the scientific-professional group which, as expected, is distributed more heavily to the head office level. We would, in turn, expect operations under Stages 4 and 5 to involve the technical and operational categories of employees. We find a preponderance of these occupational groups at the field level, which again supports our proposed division of operations between the two levels.

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1 Statistics Canada, *Canadian Statistical Review*, Pub. No. 11-003E, vol. 53, no. 7, July 1978.

Table 2-1

Production Stages of a Public Service

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
		(Public sector)			
Analysis of electoral support research and development (Exec, Sci-Pro*)	Analysis of production, distribution and administrative costs (Sci-Pro,Tech, Af, Afs)	Delegation and co-ordination of senior administrative and executive responsibility and actions (Exec, Af)	Physical production and servicing (Tech, Sci-Pro,Oper,Af, Afs)	Distribution and administration (Oper, Tech, Af,Afs)	Program effectiveness analysis (Sci-Pro, Af, Exec)
		(Private market counterpart)			
Analysis of market demand research and development	Analysis of production, distribution and marketing costs	Delegation and co-ordination of senior administrative and executive responsibility and actions	Physical production and servicing	Marketing and distribution	Profit analysis

*Occupational group most prevalent in above stage.

The executive component, as expected, is almost exclusively located at the head office level (our units of measurement were not fine enough to capture the occurrence of small numbers of this category at the field level).

Significant numbers of administrative and administrative support categories are employed in Stages 3 and 5 and are associated with both head office and field output.

When we analysed the distribution of occupational groups disaggregated to the level of the individual program, we found distribution of occupational groups among the provinces to be virtually identical. This suggests that there is little variation amongst the provinces in the field operations they use for any particular program.

An examination of the regionalized component of numerous federal departments revealed, as well, that the field operations between any two provinces were largely independent of one another. For example, the field operations of the federal department of agriculture in Saskatchewan serve largely, if not exclusively, the residents of that province.

The separability of head office and field operations, along with the independence of field operations among the provinces for operations of the same federal program, carries implications for the direction of our research.

First of all, we shall be advancing in Part III a scenario of decentralization in which Quebec takes responsibility for all ongoing federal field services within that province, and maintains these programs in their existing form. Essentially, we are proposing that field operations are already decentralized, and the division established between these and head office operations allows us to focus our attention exclusively upon the cost implications of further decentralization of this head office component.

Secondly, as the federal field services in any two provinces are independent of one another, we can safely assume (in the case of an autonomous Quebec, for example) that the post-decentralization level of field services would be the same as the original level of field services, everything else being equal.

The functional division between head office services and work performed in the field may be extended to the level of provincial services as well. The "general administrative" operations of most provincial programs perform a function highly similar in many respects to that of the head office at the federal level. Though both federal and provincial head office components fulfil a general steering function, federal head office operations expend considerably greater resources on R & D and policy development.

We divide federal programs into two categories. The first category involves programs in which the head office operation is largely concerned with steering and co-ordinating field operations, with the bulk of head office output arriving in the form of policy directives, financial management, research and development information and program co-ordination. These services flow directly to the field offices. The field operations are then responsible for manufacturing the final goods and services and delivering them to the public. Where the head office fulfils such a function, we expect its expenditure to be dwarfed by the expenditure of the field components. We label this group the "Regionalized Programs." Examples of regionalized programs are Agriculture, Transport, and Health and Welfare.

The second group of programs are composed largely of the head office operations themselves. These head office operations are not occupied to any great extent with the administration of their field operations; indeed field operations for these programs are a relatively minor component of the total service, if they exist at all. Such programs as Treasury Board, Energy Mines and Resources, and Urban Affairs fall into this category.

The head office for such programs would be primarily concerned with the production of goods and services which do not lend themselves to a regional implementation. These goods and services may be quite indivisible on a provincial basis, as would be the promotion of a national policy on energy conservation. They may be oriented mostly towards Research and Development with either a theoretical or a practical bias, or they may be constituted in such a way as to be best disseminated and administered by a single central authority. An example would be Canadian foreign relations.

A large number of smaller commissions and agencies whose fully centralized activities are directed to serving other agencies and departments fall into this category. Such agencies or commissions tend not to deal with any large cross-section of the Canadian public, but rather deal with specific industries, interest groups, or directly with other institutions.

Both regionalized and unregionalized federal programs are listed in Table 2-2 under Canadian Federal Program. In the same table, under Quebec Provincial Program, we have alligned with the federal institution a program at the Quebec provincial level which performs a similar operation.

The pairing of federal and provincial programs presented in Table 2-2 suggests that the regionalized vs. unregionalized division of federal programs may be extended to the level of provincial programs as well. In fact, this disaggregation can be as effectively applied to provincial as it can to federal programs. The Quebec department of the treasury, like its federal counterpart, is largely a head office operation, while the Quebec department of agriculture, like its federal counterpart, is largely field-oriented or regionalized (within the province).

We will first examine in detail those programs which are regionalized in nature.

Table 2-2

Canadian Federal Programs (Regionalized)
and Most Similar Quebec Provincial Counterparts

Canadian Federal Program	Quebec Provincial Program
A - Regionalized Programs	
National Defence	
Public Works	Public Works
RCMP	Justice I[1]
Transport	Transport
Indian and Northern Development	Tourism, Fish and Game
Health and Welfare	Social Affairs
Agriculture	Agriculture
Environment	Environmental Protection
Employment and Immigration	Manpower and Employment
Post Office	
Taxation	Revenue
Customs and Excise	
Regional Economic Expansion	
Correctional Services	Justice II[2]
Veterans Affairs	
B - Unregionalized Programs	
Secretary of State	Cultural Affairs
External Affairs	Intergovernmental Affairs
Urban Affairs	Municipal Affairs
Parliament	National Assembly
Communications	Communications
Privy Council	Executive Council
Treasury Board	Treasury Board
Consumer and Corporate Affairs	Consumers, Co-operatives and Financial Institutions
	Education
Finance	Finance
Civil Service Commission	Civil Service
Industry, Trade and Commerce	Industry and Commerce
Energy, Mines and Resources	Natural Resources
	Lands and Forests
Labour	Labour and Manpower

1 Justice I includes certain programs within the Quebec Department of Justice, with appropriate pro-rated share of internal management and support. These programs include (a) Securité du Quebec, and (b) Inquiries into Scientific and Specialist fields in assistance of judicial performance, and (c) appropriate share of management and support.

2 Justice II includes (a) custody of prisoners and detained persons, and (b) the appropriate share of management and support.

PART III

THE REGIONALIZED SERVICES

In this part we discuss the decentralization of the regionalized services. We attempt to formulate a framework within which we can estimate the costs of decentralizing these programs.

Similarity between ongoing federal and provincial services, and the existing capacity of the provinces to assume responsibility for federal programs, along with the nature of scale economies in the production of these services, will determine jointly the costs of decentralization.

With the exception of defence services the larger provinces maintain numerous programs which cope with problems similar to those dealt with by federal institutions.

In order to determine with any degree of accuracy the significance of existing capacity at the provincial level we would have to compare all federal and provincial programs, their roles, objectives, organizational framework, etc., as they were stated and as they appear to be. This approach is outside the scope of this paper.

However, we can assume various degrees of existing capacity and test for the significance of these assumptions on the impact of the size of cost associated with decentralization.

An upper cost boundary will be generated by Assumption 1 -- that no provincial capacity exists in Quebec due to the lack of similarity between federal and provincial programs.

A lower cost boundary will emerge from our second assumption, that the Quebec and federal departments paired in Table 2-2 are perfect substitutes for one another, so that production and responsibility for a particular federal program (for which a substitute exists) can be transferred to the provincial program.

In order to clarify the implications for decentralization costs of scale effects and existing provincial capacity, we shall provide a hypothetical exercise.

Assume the nature of scale economies in program X to be determined; we depict the cost output relationship characterizing field and head office operations in Figure 3-1, (a), (b) and (c). (Note that the scale economies governing head office operations, Figure 3-1(a), are not the same as those describing field operations in Figure 3-1 (c).)

Though in practice long-run average cost curves may slope upwards or downwards or lie horizontal, the long-run average cost curves in our hypothetical example, given in 3-1(a) and 3-1(c), fall to the right, as positive scale economies are assumed to characterize both field and head office production.

Figure 3-1(b) repeats the story told by 3-1(a) in terms of total costs.

In the world "before" decentralization, the federal government and provincial government are both in the business of providing public service X. At the level of field operations, both the Quebec and Canadian governments serve a Quebec population of 600, each spending $100 in the province, so that both governments produce at M along $LRAC_F$ in Figure 3-1(c). The federal government maintains an expenditure of $100 in all ten provinces, so that total federal field expenditure equals $1,000, as indicated in Figure 3-1(a) by point F_1.

To administer these operations, the federal and provincial governments, respectively, spend $500 and $110 on head office operations, as shown in Figure 3-1(a) and 3-1(b). F_1 represents the initial federal position, P_1 the initial Quebec operation, in both figures.

These "before" expenditure values, as well as total federal and provincial expenditures obtained by addition, are provided in Table 3-1.

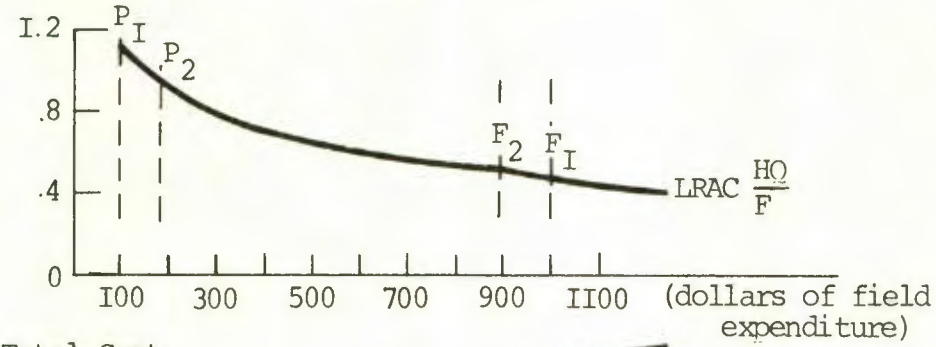
Upon decentralization Quebec combines federal and provincial field operations into a single field unit, serving the total combined population (600 + 600 = 1,200, as indicated by point N in Figure 3-1(c)). Quebec, however, does not double its field expenditures to $180. Because of economies of scale in field services it is able to serve a population of 1,200 for $180 (1,200 x 15) at the original level of services -- see Figure 3-1(c). Along the "after" row of Table 3-1, 180 is entered in column 6 and a zero is entered for federal field expenditure in Quebec in Column 3. Total federal field expenditure falls to 900 in column 2.

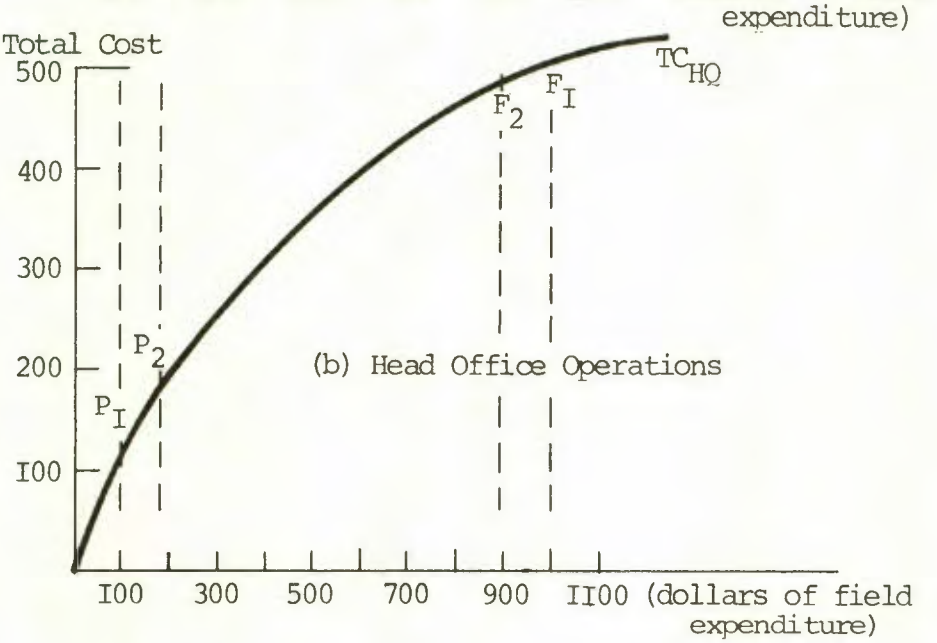
The decline of the federal field expenditure allows the federal government to reduce its head office expenditure, while Quebec must enlarge its own head office facilities. Though the absolute change in the level of federal field services (-) and provincial field services (+) is equivalent, the absolute and proportionate increase in size of the Quebec head office that follows is substantially greater than the associated decrease in the size of federal head office operations. Federal head office expenditure falls to 486 (column 4), adjusting to a new field expenditure of 900. Quebec head office expenditure rises to 160 for a field expenditure of 200. The new points of federal and provincial head office production, F_2 and P_2 respectively, are indicated in Figure 3-1(a) and 3-1(b).

$Head Office expenditure
$Field expenditure

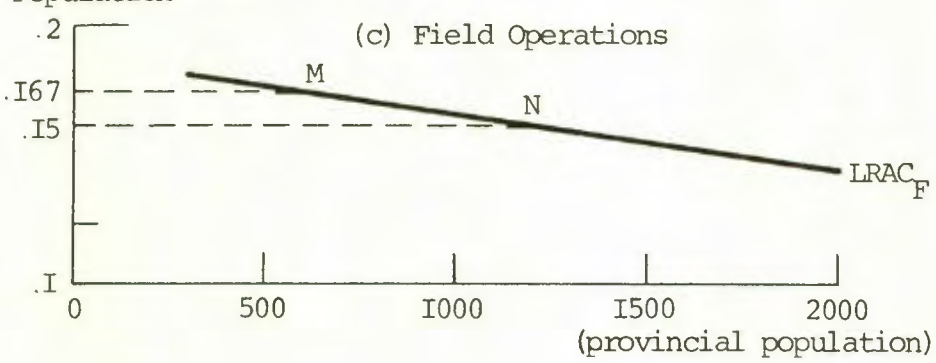
Figure 3-I

Head Office Operations (a)





$\frac{\text{\$Field expenditure}}{\text{Population}}$



All remaining spaces in Table 3-1 may be ascertained through simple addition or multiplication.

The change in total cost for providing the same level of services is shown in column 12. In this case, the change is positive.

Decentralization will imply higher costs for head office administration (given: $HQ_{j,f} > HQ_{j,o}$) and economies of scale at the field level will exert a negative influence on the change in total cost. The larger the initial fraction of head office to total operating costs, the more likely is the head office effect to outweigh the field effect, and vice versa.

This exercise, then, is typical of the other exercises we will carry out under alternative assumptions.

We must now estimate the slope and nature of the long-run average cost curves at the level of head office and field operations. This will be done in Part IV within the context of the regionalized public services.

Table 3-1

Numerical Exercise
(Dollars)

Program			Federal				Provincial (Quebec)				
			$C_{J,F}$	$F_{J,C}$	$F_{J,Q}$	$HQ_{J,F}$	$HQ_{J,Q}$	$P_{J,Q}$	$C_{J,Q}$		
Federal	Provincial		Total Operating Expenditure	Field Operating Expenditure (All Canada)	Field Operating Expenditure (Quebec only)	Head Office Operating Expenditure	Head Office Operating Expenditure	Field Operating Expenditure	Total Operating Expenditure	Combined Federal and Provincial Operating Expenditure	Change in Combined Federal and Provincial Operating Expenditure
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
x	x	Before	1,500	1,000	100	500	110	100	210	1,710	
x	x	After	1,386	900	0	486	160	180	340	1,726	+ 26

PART IV

ECONOMIES OF SCALE IN THE REGIONALIZED SERVICE

We are interested in determining whether a systematic relationship exists between cost and output in the regionalized public services. We use cost-function estimation to examine the cost-output relationship in terms of the output of both head office and field operations.

Cost Functions

Introduction

We made use of several alternative cost functions in our analysis at both head office and field operations levels, meeting with varying degrees of success. We began by estimating the most general textbook equation:

$$TC = A_0 + A_1 x + A_2 x^2 \qquad (1)$$

where TC was made equal to either head office or field costs, and x made equal to either field expenditure or population (as proxy for market size).

This equation format allows for the presence of internal economies and diseconomies of scale arguments. Positive scale effects are generally suspected to arise, at least in the initial stages of increased production, from the division and specialization of labour, combined with the more efficient use of indivisible capital inputs with these labour resources. Negative scale economies may be expected to arise at some point due to labour management or other organizational problems which may bottleneck specific areas of the production process. As long as the positive scale effects dominate, average costs fall over the long run. If, however, negative scale economies surface more as production increases, then the average costs will first level out and then perhaps begin to rise.

From the total cost equation we may derive the average cost equation by dividing both sides of (1) by output x:

$$AC = \frac{A_0}{x} + A_1 + A_2 x_1 \qquad (2)$$

Whether average costs generated over various levels of output will take on the image of a U-shaped average cost curve, or that of either a constantly increasing or declining average cost curve, depends upon the sign and size of the right-hand terms in equation (2). The typical U-shaped curve will surface from the presence of positive first and third terms. Constantly falling average costs would result from a positive first term and a negative second term. On the other hand, constant average costs would appear if the first and third terms were either small and/or insignificant.

We also estimate a linear form of cost-output relationship, as given below, in total and average cost terms:

$$TC = A_0 + A_1 x_0 \tag{3}$$

$$AC = \frac{A_0}{x} + A_1 \tag{4}$$

The straight-line average cost curve generated will fall if the first term is positive, rise if the first term is negative, and be horizontal if this term is small or insignificant.

The second type of general relationship we estimate is in Log format, so that scale elasticities are generated. For example, testing the following equation:

$$\text{Log } TC = A_0 + A_1 \text{ Log } x \tag{5}$$

the value arrived at for A_1 is the elasticity coefficient relating the percentage change in output to the percentage change in costs that result.

Head Office Cost Functions

We had no explicit measurement for head office output and therefore employed a proxy for this variable -- the size of field expenditure administered by head office. Equation (1) thus becomes:

$$HQ_F = A_0 + A_1 F_F + A_2 F_F^2 \tag{6}$$

HQ = expenditure at the head office level and F = field operating expenditures (subscripts F and 2 denote federal and provincial institutions, respectively).

We tested equation (6) for a cross-section of all federal programs with field size >0 and then tested it separately for those programs which constitute the regionalized services. The results are presented in Table 4-1, lines 1 and 2.

We also tested equation (6) using provincial data, the costs of the general administrative component for provincial programs serving as our estimation of head office costs. The sample of provincial programs used to test equation (6) was limited to those programs which coincided with the regionalized federal programs. The results are in line 3 of Table 4-1. We then attempted to test (6) for regionalized federal and provincial programs.

Once A_0, A_1 and A_2 were estimated for the various populations tested, they were placed in our average cost curve equation

$$AC = \frac{A_0}{x} + A_1 + A_2 x.$$

Table 4-1

Empirical Results -- Economies of Scale
at Head Office

		A_0	t	A_1	t	A_2	t	R^2, $\bar{R}^2$
	$HQ = A_0 + A_1F + A_2F^2$							
1.1	All federal programs F>0	39,233	(3.8)***	.17	(3.5)***	.1(-.07)	(.64)	.76, .75
1.2	Regionalized federal programs	85,672	(1.7)**	.06	.53	.3(-.07)	(1.0)	.77, .73
1.3	Regionalized provincial programs	1,736	(1.3)*	.03	(1.7)*	.1(-.07)	(.47)	.37, .32
	$HQ = A_0 + A_1F$							
1.4	Regionalized federal programs	45,715	(1.4)*	.19	(6.0)***			.76, .75
1.5	Regionalized provincial programs	2,006	(1.9)***	.02	(4.2)**			.37, .35
	$\text{Log } HQ = A_0 + A_1 \text{ Log } F$							
1.6	Regionalized federal programs	2.4	(.94)	.71	(3.5)***			.51, .47
1.7	Regionalized provincial programs	2.2	(1.8)	.51	(4.4)**			.40, .8
	$\text{Log } HQ = A_1 \text{ Log } F$ + Dummies							
1.8	Regionalized provincial-departmental dummies	(All dummies)***		.60	(3.8)***			.46, .33
1.9	Regionalized provincial-provincial dummies	(All dummies)***		.53	(5.8)***			.78, .68
	$\text{Log (O.C.)} = A_0 + A_1 \text{ Log } F$							
2.0	Exec.	-8.8	1.26	(2.6)**				.35, .30
2.1	Sci. Pro	-1.9	.85	(2.03)**				.25, .19
2.2	Af.	1.3	.66	(4.1)***				.58, .55
2.3	Tech.	-2.9	.86	(1.65)*				.19, .12
2.4	Afs.	3.3	.47	(2.4)***				.32, .36
2.5	Oper.	-.69	1.14	(1.5)*				.15, .08

*Significant at a 90 per cent level of probability.

**Significant at a 97 per cent level of probability.

***Significant at a 99 per cent level of probability.

The results for equations tested showed the presence of large, significant first terms for 1.1 and 1.2 (Table 4-1), and small and insignificant third terms for the same equations. This suggested definite scale economies for both samples of federal and provincial head office operations.

Because the third term in all equations proved insignificant, it appeared that a linear specification may have been more appropriate to capture the cost-output relationship. We tested equation (7):

$$HQ = A_0 + A_1 F \qquad (7)$$

for regionalized federal and provincial programs.

As shown in Table 4-1, lines 1.4 and 1.5, the R^2 was unaffected by the change to linear format, and the levels of statistical significance for the coefficients in each equation improved.

The results of these equations are graphically illustrated in Figures 4-1 and 4-2. The relative sensitivity of average costs to changes in the level of output is quite similar for federal and provincial samples. We would expect, therefore, our Log equations to yield similar coefficients for provincial and federal programs. However, the absolute size of the provincial head office operations at any one level of field output is close to one-tenth that of its federal head office counterpart. This reflects facts pointed out in our earlier discussion, relating to the relatively higher federal head office expenditures on R & D, interprovincial co-ordination, policy development, etc.

Testing our Log specification of the cost-output relationship given below

$$\text{Log } HQ = A_0 + A_1 \text{ Log } F \qquad (8)$$

we found highly significant cost-output elasticity coefficients for provincial programs (.51) and federal programs (.71). Both elasticity coefficients indicate a high degree of scale economy in head office operations. The federal coefficient suggests that a 1 per cent change in field operations results in a .71 per cent change in head office expenditure, while the reaction of provincial head offices is only a .51 per cent change in expenditure for the same 1 per cent change in the level of field operations.

As indicated by both $LRAC\frac{HQ_F}{f}$ and $LRAC\frac{HQ_p}{f}$ in Figures 4-1 and 4-2, average costs first decline rapidly and then gradually decrease to become almost constant after field size surpasses $300 million expenditure. Provincial field or head office operations are on average less than one-tenth of the size of the average of our sample of federal head office or field operations with almost all

Figure 4-I

Economies of Scale at
Head Office Level
(Federal)

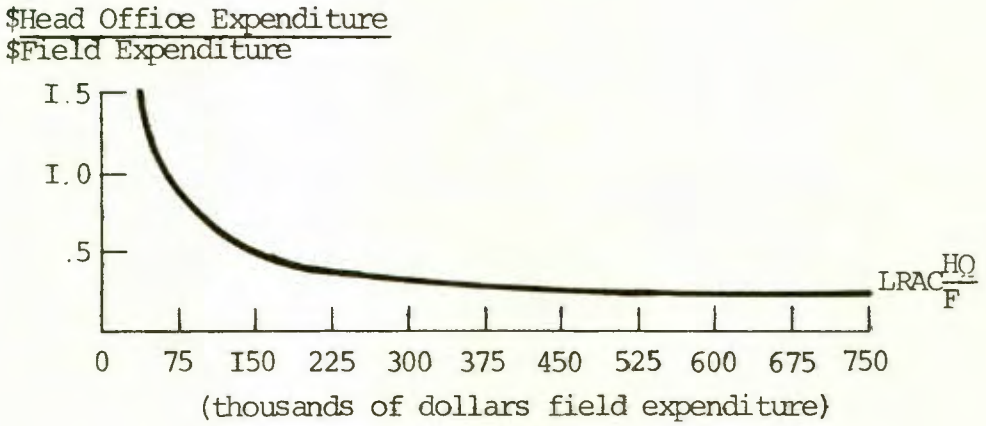
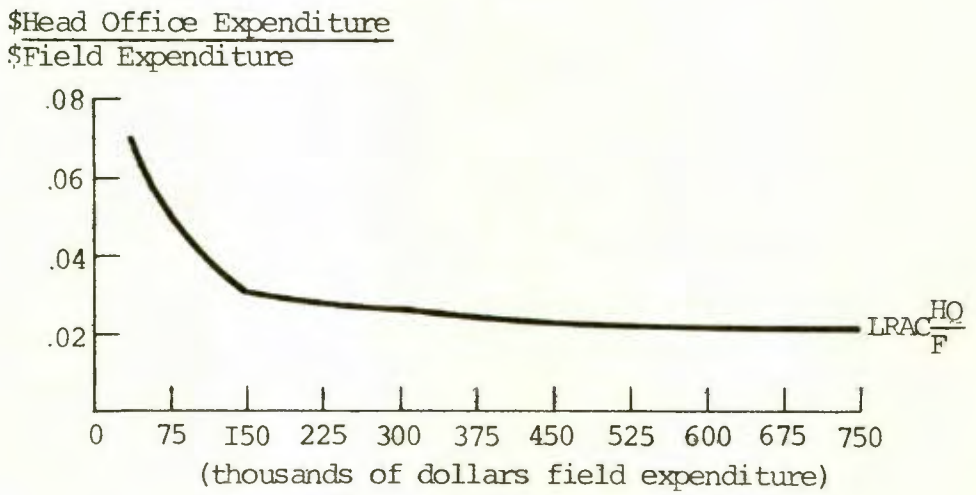


Figure 4-2

Economies of scale at
Head Office Level
(provincial)



observations on field size falling below the expenditure level of $300 million. This explains the higher degree of scale economies generated from the provincial sample. This is the range of field-size with which scale effects appear to be most significant.

We introduced two sets of dummy variables into equation (8) for the provincial sample. The first set of dummy variables represented the province of the program. The second set of variables represented the type of program.

While the introduction of the first set of variables had little effect upon the explanatory power of the equation, the elasticity coefficient went from .51 to .60. The introduction of the second set of dummies markedly raised the overall explanatory power of the equation, leaving the elasticity coefficient about the same, .53 (vs. .51). These results are outlined in Table 4-1, lines 1.8 and 1.9. All dummy variables were significant.

Finally, we had to know whether a particular component of head office employees might be more or less responsible for the head office economies of scale. Thus, we tested

$$\text{Log O.C.} = A_0 + A_1 \text{ Log } F \qquad (9)$$

for all six occupational categories, where O.C. equals expenditure upon any one of six individual occupational groups.

As might be expected, the scientific-professional category of labour reflected a significant scale response to field size, suggesting that a 1 per cent increase in the level of field activity resulted in only a .85 per cent increase in the requirement for scientific and professional employees. The strongest scale effects, however, were exhibited by the administrative and administrative support category, while the executive and operational categories exhibited a negative scale response. The results for all occupational groups are given in Table 4-1.

Economies of Scale at the Level of Field Operations

The form of equation we employed at the field operations level was essentially the same as the one we had used to test for economies of scale at the head office level.

We tested the following equation in Log format:

$$\text{Log } F = A_0 + A_1 \text{ Log } M \qquad (10)$$

where F = field expenditure within a particular province, and
M = the market size served within a particular province.

We first tested this equation cross-sectionally across all provinces for all federal programs with operations in each province. The number of observations was 210. We included in our equation dummy variables for the program type. The results generated are in line 1 of Table 4-2. As can be seen, all results were highly significant for all coefficients and the overall explanatory value of the equation was very good. The coefficient of .85 attached to the second term (POP) suggests that a 1 per cent increase in the population served results in a .85 per cent increase in expenditure.

Equation (9) was then tested cross-sectionally over 10 provinces for 21 individual federal programs, all of which had operations in all provinces. Despite the limitations of sample size, the results from these estimations are often significant and revealing. All results are presented in lines 2 to 29 of Table 4-2. Where possible we retested this equation for the individual programs, substituting alternative proxies for market-size served, as indicated in Table 4-2.

Taking only those results which were most successful in terms of the overall explanatory value of the equation, we found 13 out of 21 programs showed elasticity coefficients of less than I (positive economies of scale), while 6 showed coefficients greater than one. Two programs showed coefficients equal to I, suggesting no scale effects.

Seven of the 13 coefficients that were less than one proved to be *significantly* less than 1, while 3 of the elasticity coefficients that were greater than 1 proved to be *significantly* greater than 1.

From these results we conclude that economies of scale do exist in field operations, but are not consistently exhibited within all programs. Some programs operate under negative scale effects.

No correlation between a particular occupational category and the existence of scale effects in a particular service could be found.

Summary

Given our empirical results pertaining to economies of scale both at the level of head office and field operation, the possibility of positive scale economies at both these levels cannot be rejected; in fact, there is considerable evidence that significant scale economies characterize the cost-output structure of the provision of federal and provincial services.

Table 4-2

Economies of Scale in Field Services

All Departments

	A_0	t	A_1	t	R^2, $\bar{R}^2$
1. Log F = A_0 + A_1 Log POP + (A_2 ... A_{11}) departmental dummies	.93	(2.5)***	.85 (all dummy coefficients)	(3.75)***	.88, .85

	Log F = A_0 + A_1 Log POP	A_0	A_1	R^2, $\bar{R}^2$	Proxy	Significantly different from 1
2.	Defence	4.2 (2.22)*	.79 (2.97)**	.56, .49	POP	No
3.	Post Office	2.7(12.25)***	1.09(35.4)***	.99, .99	POP	Yes
4.	" "	- .48(-1.73)***	1.01(25.8)***	.99, .98	Postal Receipts	
5.	Transport	5.3 (4.43)***	.61 (3.67)***	.65, .61	POP	Yes
6.	Public Works	4.1 (4.02)***	.64 (4.5)***	.74, .70	POP	Yes
7.	Public Service Commission	-4.1(-1.41)*	1.42 (3.46)**	.63, .57	POP	No
8.	RCMP	3.8 (3.17)**	.47 (2.78)**	.52, .45	POP	Yes
9.	Manpower and Immigration	2.87(5.4)***	.88(11.9)***	.95, .94	POP	Yes
10.	" " "	9.0 (2.9)**	.83 (1.53)*	.25, .14	Clients	
11.	Unemployment Insurance Commission	1.93(2.06)*	.95 (7.6)***	.88, .87	POP	
12.	" " "	1.84(2.5)**	.89(10.74)***	.94, .93	Claims	No
13.	Indian and Northern Affairs	4.4 (3.4)***	.68 (3.8)***	.67, .62	POP	Yes
14.	Taxation	1.49(2.4)**	1.06(12.2)***	.95, .95	POP	
15.	"	-4.3(-5.5)***	1.00(16.9)***	.97, .97	T4's	
16.	Customs and Excise	- .48(-.54)	1.25(10.3)**	.93, .92	POP	Yes
17.	" " "	3.9 (1.1)	.87 (2.5)**	.46, .39	Revenues	
18.	Environment	4.98(3.3)***	.59 (2.8)**	.53, .46	POP	Yes
19.	Agriculture	4.8 (4.0)***	.59 (3.5)***	.63, .53	POP	Yes
20.	Health and Welfare	1.4 (1.29)	.97 (6.2)***	.84, .83	POP	No
21.	Industry, Trade and Commerce	-1.97(-1.79)*	1.01 (6.58)***	.80, .84	POP	No
22.	Veterans Land Act	- .69(-.04)	1.16 (5.15)***	.79, .76	POP	No
23.	" " "	7.5 (3.9)***	.88 (2.9)**	.68, .60	Claims	
24.	Canadian Pensions Commission	1.73(2.5)**	.47 (4.9)***	.77, .74	POP	
25.	Labour	1.15 (.38)	.72 (1.8)*	.31, .21	POP	No
26	Supply and Services	.60 (.49)	.99 (5.8)***	.83, .80	POP	No
27.	" " "	4.5 (4.0)***	.75 (5.2)***	.79, .77	Civil Servants	
28.	Communications	.84 (.78)	.81 (5.3)***	.80, .77	POP	No
29.	Consumer and Corporate Affairs	- .12 (.18)	1.00(10.8)***	.94, .94	POP	

*Significant at a 90 per cent level of probability.

**Significant at a 97 per cent level of probability.

***Significant at a 99 per cent level of probability.

PART V

DECENTRALIZATION OF THE REGIONALIZED FEDERAL PUBLIC SERVICES

It is now our objective to integrate our evidence of positive economies of scale with two alternative scenarios of decentralization to the province of Quebec. These scenarios reflect different assumptions as to the existence of scale effects in head office and field operations and the degree to which Quebec possesses the capacity to absorb ongoing federal programs. They are the following:

Scenario I

In Scenario I we postulate that Quebec provincial and federal public services are distinct from one another, both in terms of their product and methods of provision and administration. Quebec, therefore, has no existing capacity with which to absorb ongoing federal programs.

Scenario II

Scenario II develops from our pairing of federal and provincial institutions in Table 2-5. Where a suitable Quebec counterpart for a particular federal program is given, we assume that production for that particular service may be simply transferred from the federal to the provincial program. Where no substitute at the provincial level is indicated, as is true with respect to Defence, the Post Office, Customs and Excise, etc., no existing capacity is assumed to exist, and treatment identical to that received in Scenario I is received by these programs.

Scenario II is further divided into parts (a) and (b). Under part (a) we assume that Quebec maintains the existing federal field services in the original form so that no scale effects at the field level are considered through the merging of federal and provincial field operations.

In part (b) we assume that federal and provincial field operations are indeed merged into one single operation; hence we allow for economies of scale effects from both the head office and field levels.

We have chosen to reflect our assumptions regarding the degree of scale economies present at head office and field operations level in terms of an elasticity coefficient, α. *Alpha* is the percentage change in head office expenditure associated with a given percentage change in field operations, or the percentage change in field expenditure associated with a given percentage change in the size of population served.

Though we conducted our exercises using several alternative values for α, we present here results for exercises conducted with $\alpha = .7$ only. An α value of .7 provides a liberal estimate of existing scale economies. The results, in terms of changes in program expenditure under Scenarios I and II for α of .7, are provided in Table 5-1 in summary form.

The values for "Total Change in Expenditures" range from a positive $447.0 million in Scenario I to a negative $179.0 million in Scenario II(b).

It should be pointed out that positive scale effects at the level of field operations will result in a reduction in the average cost of providing ongoing Quebec services when federal and provincial field services are combined. There is no inversely related increase in average cost of remaining federal field services, however, as federal field services in Quebec are in no way operationally connected to federal field services in the other provinces.

Because field services as a proportion of total program expenditure far outweigh head office expenditure, the supposition of equivalent scale effects at both levels necessarily leads to a net reduction in total costs, with the negative field effect.

Our estimates for total expenditure change were sensitive to the value of α. Using $\alpha = .8$, values for total expenditure change ranged from positive $280.00 million to negative $143.00 million. Using $\alpha = .9$, these respective values were positive $134.00 million and negative $80.00 million.

These total expenditure increases or decreases, financed across all Canadian households, would entail, for $\alpha = .7$, an increased burden of $59.00 per household under Scenario I, $36.00 per household under Scenario II(a), and a reduction in the burden per household of $24.00 in Scenario II(b).

Besides values for total change in Canada, we calculated net costs in Quebec attributable to decentralization *per se*. Total expenditures by the federal government on regionalized services for Quebec can be estimated as $2,545 million (field expenditures plus an appropriate share of head office spending). After separation, using Scenario I as an example, provision of the same services would cost $2,851 million. The difference of $306 million is, then, the cost of decentralization in Quebec. Table 5-2 shows the net costs calculated similarly for all scenarios, in total and on a 'per family' basis.

The total net costs of decentralization for the Province of Quebec range from $306 million to -$320 million for Scenarios I and II(b) respectively. Expressed in terms of dollars per family unit, this range is $155 to -$162 between Scenarios I and II(b).

Table 5-1

Change in Expenditures Associated with
the Decentralization of the Regionalized Services in Quebec,
The Rest of Canada and Canada Including Quebec

	Change in Expenditure in Quebec	Change in Expenditure in Rest of Canada	Total Change in Expenditure Canada Including Quebec
		(Millions of dollars)	
Scenario I	2,851	-2,404	+447
Scenario II(a)	2,676	-2,404	+272
Scenario II(b)	2,225	-2,404	-179

Table 5-2

Net Costs of Decentralization of the
Regionalized Services in
the Province of Quebec

	(Million dollars)	(Dollars)
Scenario I		
Total Cost	2,851	
Net Cost	306	
Net cost per family unit		155
Scenario II(a)		
Total Cost	2,676	
Net Cost	131	
Net Cost per family unit		66
Scenario II(b)		
Total Cost	2,225	
Net Cost	-320	
Net Cost per family unit		-162

When these net costs to Quebec are viewed in terms of dollar change per family unit, both absolutely and relative to current federal expenditures on regionalized services in Quebec of about $1,300 per family unit, they are seen to be quite small.

As well, Scenarios I and II are both extreme in that Scenario I assumes no existing provincial capacity and Scenario II assumes perfect substitutability between most federal and provincial programs. Clearly, neither of these scenarios adequately reflects reality, and the results obtained under them can only establish a set of possible boundaries between which the true costs can be expected to lie.

Outright Duplication

Apart from scale economies, it is important to consider, even if briefly, the possibility of outright duplication between federal and provincial programs. Duplication can result when both the federal and provincial governments participate in programs which fall within an area of dimly sketched jurisdiction. With each government ignoring the other's activities, certain functions may be performed twice. Duplication may also arise when two levels of government compete for the dominant position within a given sphere of influence.

Though the degree of, or possible degrees of, provincial-federal overlap in Canadian services has never been adequately researched, the "Report of the Western Premiers' Task Force on Constitutional Trends"[1] provides a detailed delineation of the arenas of federal-provincial conflict among the federal services. Areas of conflict ranging from agricultural and transportation programs to Consumer and Corporate Affairs activity have been identified.

Because the activities of the larger provincial governments are similar in both scale and development, the trends attested to at the Western Premiers' Conference can probably be extended to the public service operations of the Province of Quebec.

Within Scenario II Quebec spends approximately $1,658 million on services within its boundaries.

Ignoring scale effects associated with any overall federal reduction in Quebec service expenditure upon the average cost of such services at the field and head office level, since we have shown that they are relatively small anyway, let us consider the possible consequences of an existing federal-provincial duplication in Quebec upon the estimate of decentralization costs.

A degree of overlap as small as 8 per cent would be sufficient to turn the expected total increase in cost estimated in Scenario II(a) for Quebec to a zero figure.

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1 Report of the Western Premiers' Task Force on Constitutional Trends, May 1977.

Alternatively, if we assume a 20 per cent degree of existing federal-provincial overlap in Quebec, Quebec could save $330 million by curtailing operations in areas of overlap. The total cost change to Quebecers, originally given as an increase of $306 million under Scenario I, would now involve a small decrease.

PART VI

THE UNREGIONALIZED FEDERAL SERVICES

In the unregionalized services the head office component is itself the final producer and distributor of goods and services. Either these goods and services do not lend themselves to regional implementation, or the cost-saving of centralized provision outweighs the advantages of regionalization. This would be the case for research programs such as Science and Technology or the National Research Council, for central government steering bodies such as Treasury Board, or the Department of Finance, and for other intergovernmental bodies. Total expenditure on such programs is approximately 2.5 billion dollars, compared to 13.6 billion dollars for the regionalized services.

We do not attempt any rigorous empirical estimation of head office decentralization costs in the following analysis, but rather set out to establish a more general framework of analysis, more for the purpose of laying the groundwork for discussion than for arriving at any one figure

The unregionalized programs may be categorized on the basis of the general duties they perform. Occasionally, one program may qualify for two different categories. Table 6-1 specifies six categories of "Duty" and lists the appropriate federal institutions under each category.

Expenditures within Categories I, II and VI account for the largest portion of the non-regionalized expenditure bill -- approximately 1.3 billion dollars (double counting corrected for) -- while expenditures related to Regulatory, Funding and Representative bodies are very small by comparison.

In column 2 of Table 6-1 we indicate whether or not there is evidence of similar operations performed at the Quebec provincial level. Outside the "Research-Related" category Quebec does indeed have many similar programs. The actual Quebec counterpart is not given as this would often require the lengthy description of an individual provincial program within a given department.[1]

Quebec does not have any existing capacity outside of Category V in either the science fields or international relations, but it does have considerable capacity within the category "Intergovernmental Support Bodies." This is not surprising given the similarity between the scope and organization of federal and Quebec provincial programs. The sum of expenditures associated with Research-Related Bodies and all other programs for which little indication of existing capacity

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1 The list of actual Quebec counterparts is available upon request.

Table 6-1

Breakdown of Federal Unregionalized Programs by Broad Classification of Duty

		Head Office Operating Expenditure	Possibility of existing capacity in Quebec
		($ thousands)	
I	Intergovernmental Support Bodies		
	Finance	27,865	Yes
	Auditor General	18,850	Yes
	Statistics Canada	126,107	
	Supply and Services	120,510	Yes
	Treasury Board	33,844	Yes
	Library of Parliament	5,302	Yes
	Public Archives	17,006	Yes
	Canadian Intergovernmental Secretary	1,127	Yes
	Justice	54,025	Yes
		404,636	
II	Research-Related Bodies		
	National Research Council	178,036	
	Atomic Energy Control Board	14,303	
	Atomic Energy of Canada	120,215	
	Statistics Canada	126,107	
	Medical Research Council	1,373	
	Status of Women	1,153	
	Economic Council of Canada	5,398	
	Science and Technology	6,128	
	Anti-Inflation Board	22,746	
		475,459	
III	Regulatory		
	Communications	55,912	Yes
	Canadian Radio-Television Commission	15,188	Yes
	Consumer and Corporate Affairs	35,631	Yes
	National Energy Board	10,970	Yes
	Tariff Board	1,436	
	Foreign Investment Review Agency	3,793	
	Canadian Labour Relations Board	2,265	Yes
	Canadian Transport Commission	22,065	Yes
	Canadian Dairy Commission	2,952	Yes
		150,212	
IV	Central Funding Bodies		
	Canadian International Development Agency	28,500	
	Federal Development Bank	9,036	Yes
	Medical Research Council	1,373	
	Canadian Film Development Corporation	3,562	Yes
	National Film Board	46,727	Yes
		89,198	
V	Representative Bodies		
	Senate	12,729	Yes
	House of Commons	78,225	Yes
	Privy Council	24,725	Yes
	International Joint Commission	1,260	
		116,939	
VI	Policy Development and Implementation		
	Secretary of State	64,974	Yes
	Science Council of Canada	2,468	
	External Affairs	108,277	
	Justice	54,025	Yes
	Labour	26,258	Yes
	National Energy Board	10,970	Yes
	Industry, Trade and Commerce	100,693	Yes
	Energy, Mines and Resources	139,966	Yes
	Consumer and Corporate Affairs	35,631	Yes
	Urban Affairs	14,144	Yes
		557,406	

Table 6-2

Net Costs Associated with Decentralization of the Federal Regionalized Services, and Replication of Certain Unregionalized Services; Quebec

Regionalized Services		
Scenario I	306	155
Scenario II(a)	131	66
Scenario II(b)	-320	-162
Replication of Unregionalized Services Research		
Scenario I	238	120
Scenario II	158	80
Foreign Affairs	70	35
Total Combined Costs		
Scenario I	614	311
Scenario II(a)	359	182
Scenario II(b)	- 92	- 46

in Quebec appears is approximately $600 million, and research service expenditure alone accounts for roughly 80 per cent of this amount. We discuss the decentralization of these services separately as the peculiar nature of their product merits a separate analysis.

Due to certain technical aspects of these services analysis of their decentralization *per se* can only be performed at a very general level.

The technical aspects we refer to are those which characterize and qualify these services as public goods. Two such characteristics are first, the non-rival nature of consumption of these services and, secondly, the high cost or inefficiency of applying the "exclusion principle"[2] to these services.

We say the consumption of these services is non-rival because, for example, the consumption or utilization by Province A of research reports from the National Research Council of Canada does not reduce the benefits which may be derived by other provinces from the same information.

If Quebec were to become autonomous, the expenditure necessary to maintain these existing benefits to a Canada without Quebec would be equivalent to the expenditure currently being made. We would expect no reduction in the public service operating expenditures of the federal government were Quebec to become autonomous with respect to the provision of the services.

The second characteristic of these programs is the high cost of exclusivity associated with the consumption of their services. How might the federal government prevent a Quebec which has achieved formal autonomy from utilizing the services of Statistics Canada which produces freely available information? The price of excluding an autonomous Quebec from the consumption of these services would be prohibitively high. It is quite possible that Quebec could "free-ride" on these formerly federal services at no additional cost.

Were Quebec to decide for non-economic reasons, however, that it should provide these essential research-associated services with no reliance on spillovers from the rest of Canada, the level of services equivalent to that received by Quebec before autonomy could only be generated by expenditures in that province equivalent to the existing levels of expenditures for the whole of Canada (475 million dollars). This follows from the first characteristic of public goods discussed, the non-rival nature of the consumption of these goods. This characteristic implies that Quebec is currently free to consume without limit the benefits of these services.

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2 R.A. Musgrave and P.B. Musgrave, *Public Finance in Theory and Practice*, McGraw-Hill, 1973, Chapter 3.

Neither zero nor one hundred per cent free riding seems plausible. Subsequently, we have adopted a compromise situation. For the calculations underlying Table 6-2 we assumed in Scenario I that 50 per cent of the value of present federal research services would be replicated, and 33 1/3 per cent in Scenario II. The implied additional Quebec research costs are $238 million and $158 million, respectively.

The remaining federal expenditures, attributable to services for which no capacity exists in Quebec, are accounted for by services of an international nature, the most significant of which is External Affairs itself.

There is certainly some element of the public good in these international service programs, but they are not characterized by either non-exclusivity or non-rivalry in consumption. For example, an autonomous Quebec government could be, with little cost, excluded from the use of Canadian diplomatic channels in foreign countries. It is equally likely that the Canadian Tariff Board would make greater efforts to import exemptions for goods produced and exported from the rest of Canada.

We make the somewhat arbitrary assumption that expenditure to replicate these foreign-service-related programs in an autonomous Quebec would amount to half that of current federal spending, ($139 million). The major part of this expenditure would contribute to the maintenance of Quebec diplomatic relations abroad under their own external affairs department. Expenditures within the federal department of External Affairs currently constitute well over two-thirds of the $139 million figure just cited.

In Table 6-2 we combine the costs of decentralization and replication, which together range from $614 million to -$92 million, or $311 to -$46 million on a 'per family' basis.

Although these combined costs relative to the costs of decentralization of the regional services alone are significantly larger, the absolute magnitude is still small, even under the extreme assumptions that Quebec has no existing capacity to absorb regionalized federal programs and that Quebec would have to replicate 50 per cent of federal expenditure on research programs.

There does not appear to be a sufficient basis on which to speculate as to the decentralization costs of the balance of the unregionalized services, presently accounting for some $1 billion of federal spending. Given that capacity exists in many provincial programs to absorb these unregionalized, federal head office operations, one may wonder whether similar scale effects observed among the

regionalized programs might entail definite cost increases to Quebecers, should they have to assume responsibility for these activities. On the other hand, a great deal of duplication within these federal and provincial programs might set up a situation, as we saw in Part V, in which decentralization could involve merely marginal, if not negative, cost increases. Questions involving the scale economy and the amount of existing duplication will require considerable attention in any further study.

PART VII

SUMMARY

In our empirical estimation of the cost-output structure of Canadian public services we found significant evidence that positive scale economies are at work in this industry.

The existence of positive scale economies in the provision of public goods would lead one to conclude that centralized provision of these services, at least from a purely efficiency standpoint, would be desirable.

However, within the context of the existing Canadian institutional and political framework of public service production, where similar services are already being supplied at the provincial and federal level, we conclude that further decentralization of the majority of services (regionalized services) would involve relatively minor additional costs. Using middle-of-the-road assumptions, the additional cost burden on Quebec families would be very modest, in the order of $182 per family per year. Under more extreme assumptions in one direction, this cost increase climbs to a still relatively small $311 per family. Under extreme assumptions in the other direction, there is even the possibility of a small saving of $46 per family.

Economic arguments for or against decentralization which are based on economies of scale are insignificant. This should heighten one's concern over the possible economic consequences of decentralization that might arise from consideration of spillover effects, or taste patterns, discussed in Part I. It may be that only economic considerations of this nature can swing the balance one way or the other in favour of decentralized vs. centralized provision of public services.

The provision of certain federal services for which Quebec possesses little or no existing capacity could entail significant additional costs for Quebec. However, this conclusion is sensitive to speculation on how an autonomous Quebec might fill the gap in research-oriented services. We stated that Quebec might decide to free-ride on public goods produced in Canada. In this case there would be no additional costs to Quebec.

Comments by D. Usher, Department of Economics,
Queen's University, Kingston

Much of the research into the economics of confederation has to do with deciding what are the big numbers and what are the small numbers. If one leaves aside the dynamic factors Sylvia Ostry referred to this morning, there seem to be four numbers under discussion at this conference, each representing an important aspect of the gains or losses to the different regions from the existence of an economic union. The first is the effect of the tariff; the second is the effect of nontariff barriers to trade plus industrial and consumer subsidies like that on oil; the third is direct transfers; and the fourth is scale and overheads in the provision of public services. The first three numbers have been discussed in other papers, and if their results hold up to critical analysis, we can say i) that the tariff is small; ii) that the effect of nontariff barriers is as yet uncertain, and iii) that straightforward transfers are very large. Now we have the fourth number, duplication of government services, overheads, etc. The main result of this paper is to show that, by comparison with the rest, this number is small. This is quite an important result, because it means that one argument can be virtually eliminated from the debate.

There is, however, a major technical problem with MacDonald's paper, a problem which is fundamentally insurmountable in any attempt to develop numbers on this issue. The essence of the problem is that we have no measure of output in government services. Economies to scale are defined as the increase (or decrease, as the case may be) of output per unit of input as output itself increases; we say there are economies to scale if 10 men can produce 20 units of output but 15 men can produce, not 30, but 35. We can estimate cost functions for automobiles, for instance, because we know the total cost of production of automobiles and the number of automobiles produced each year. We cannot do so for government services because we know only what was spent by government and we do not know, except in a few isolated cases, what is bought with the expenditure. Thus, to talk about scale in the public services, you must make some assumption about the relationship between what is spent and what you get for what you spend. Mr. MacDonald has had to make three very strong assumptions.

First, for a large portion of government expenditure, Mr. MacDonald assumed that a clear distinction could be made between head office expenditure, which is independent of the amount of service

supplied, and field expenditure, which is directly related to the amount of service supplied. This assumption may or may not be valid, e.g. expenditures in Ottawa may provide direct services to people elsewhere, and some overhead expenditure may take place away from Ottawa.

The other two assumptions are even more questionable. They are that services per head are the same everywhere and that any observed difference in cost per head is attributable to economies of scale rather than to characteristics of the regions in which the costs are observed. On these assumptions and in the absence of economies of scale, expenditure in province A would have to be twice expenditure in province B, if the population of province A were twice that of province B. If less than twice the expenditure occurred, MacDonald would take it as evidence that scale economies existed. This rules out the possibilities that less real service is being provided per person served (e.g. fewer letters delivered per head by the Post Office) or that cost differs for reasons other than scale (e.g. low population density, as in the Yukon, which could raise costs per unit of service provided, regardless of whether the Post Office is organized in each village or in the Territory as a whole). It is hard to see how Mr. MacDonald could have avoided these assumptions in the absence of an independent measure of the output of government services, but the fact remains that these assumptions are dubious and that the validity of the results is correspondingly impared.

Finally, I would like to add to the discussion a fifth number, which is more difficult to estimate but could be larger than any of the other four. It is the value to Canadians of living in a country so situated that we spend virtually nothing on national defence. Canada spends 1.9% of its gross national product on national defence. The United States spends 6.0%, Egypt spends 37%, Chile and Argentina with a mountain range between them and only a ridiculous little island to quarrel about spend 6.6% and 2.8%. Canada has been so peaceful for so long that we have come to take our good fortune for granted and to imagine our peacefulness to be the consequence of a special virtue that we possess and others do not share. A radical change in our circumstances could well prove to use that this is not so. Increasing defence expenditure to the average in other countries would impose a cost to Canada or its successor countries far in excess of any of the costs we have so far considered. The cost would be greater still if the expenditure proved necessary.

THE ROOTS OF DISCONTENT

by

Jeff Evenson and Richard Simeon

Institute of Intergovernmental Relations

Queen's University

The "crisis" of Canadian federalism is said to threaten the future of the country. Significant changes in the constitutional/institutional arrangements of the state apparatus have been proposed in an attempt to deal with the threat. And yet, even as it dominates the news media and political thinking of the country, its sources and nature remain unclear. This is in part due to the many problems that currently face Canadian economic and political life; relations between the two founding language and cultural groups, as well as the conflicts between national and regional development goals and priorities and those between the governments that promote them, define the crisis of federalism itself. The crisis in turn interacts in complex and little-known ways with the faltering economy, inflation, the value of the dollar, and the intolerable number of unemployed people. This paper does not attempt to explain every dimension of the crisis. It is about that part which, while perhaps not as important in day-to-day life as inflation, unemployment, or French-English relations, nevertheless lies at the root of the current discontent so many government people and academics feel with the federal system of government in Canada

We need to be clear about what the crisis is *not*. Most important it is *not* a crisis of the fundamental social and economic order of Canadian society. It is a political crisis -- a crisis of governmental institutions. At the root of discontent lies the problem of the relation of governments to one another in the federal system. It is about functions that governments are going to perform and the tools with which to perform them, about the sharing of authority and the making of decisions. It embodies a competition concerning where and how interests are to be represented and how accommodations are to be worked out.

Responsibility for most policy areas is currently shared by both levels of government. The political interests of the provincial governments demand that they share in the decision-making process and policy development of the central government and that they assert greater control of social and economic development within their own jurisdiction. The political interests of the central government similarly lead it to assert the importance of national leadership. Yet no formal -- constitutionally defined -- linkage exists for the sharing of responsibility in the federal system. This is why we have demands for constitutional change and why it is impossible to divorce changes in central institutions from the crucial question of the division of powers. Thus, the question of institutional failure must be dealt with before any attempt can be made by the federal and provincial governments to deal with the more fundamental problems of cultural and linguistic harmony and economic recovery. Substantial erosion in the support for the current system of government is due to the fact that governments cannot seem to agree to do anything. Business interests call for certain measures and grow impatient as the federal and provincial governments bicker between themselves about

who should do what. According to working people, government acts in pretty much the same way as it always has, yet unemployment continues, inflation rises and taxes get higher all the time.

Commonly, there are held to be two central elements in institutional failure. The first is the failure of the institutions of central government to represent and develop effective policy to meet regional aspirations -- a failure of Parliament, the cabinet, the bureaucracy, and political parties to act as an arena for representation and accommodation of diverse regional interests. This perspective defines one set of prescriptions for change: to develop ways to improve this representative and integrative capacity of central institutions. Such changes appear to be a necessary prerequisite for continued or enhanced federal leadership in many policy fields. What is often neglected is the fact that the institutions of the central government as constitutionally defined in the British North America Act were not designed to operate in the reality of twentieth century Canadian economic and social conditions. Substantial modification in the role of our particular set of institutions has occurred both through judicial decisions and through an evolution of accepted practices, but the basic institutions themselves in their current form remain inadequate. This is nowhere more apparent than in the lack of formal, workable mechanisms for intergovernmental co-operation, joint representation, and collective decision-making.

The second element of institutional failure is related to the first, and is expressed in the failure of the mechanisms of federal-provincial relations to develop means of reconciling regional and national aspirations and federal and provincial interests in the making of collective policy. These mechanisms, described in the literature on Canadian federalism as "co-operative federalism" and subsequently as "executive federalism" and culminating in a highly developed federal-provincial conference, refer to the accepted practices mentioned above. They are attempts to mold the policy-making and decision-making process to the realities of the twentieth century Canadian life without fundamentally altering the constitution.

The two elements of institutional failure are essentially two sides of the same coin. Our analysis leads us to frame the nature of the crisis in institutional terms and to propose institutional solutions. Currently, this historically indelible problem has been complicated by the election of the Party Québécois in November 1976 and by the severe economic problems of inflation and unemployment. It remains to be seen whether government can solve these economic problems, which are not restricted to Canada alone, and the cultural problems, which are presented by the bi-national character of the Canadian polity. Very few will submit that one level of government can do it alone. This is why we have centred our analysis in the institutional character of government.

There are three major approaches to the problem of analysing conflict in the federal system. Those who follow the sociological/cultural model of W.S. Livingston[1] see diversity as largely territorially based. Differences in language, ethnicity, religion and/or historical experience distinguish one community from another within the federation. Federal institutions are rooted in federal societies; the dynamic force in shifts between federal and provincial governments lies primarily in changes at the level of cultures and attitudes.

Such analyses typically suggest that just as the sources of conflict lie in clashing values and loyalties, so their solution lies in changing or reconciling them. This leads to proposals in the short run for more "understanding" and, in the longer run, for changes in the educational system and mass media in order to seek accommodation through attitudinal change. The most fundamental question for those who take the cultural approach revolves around the sense of community and identity that exists in each part of Canada. When a Canadian says "us," who does he mean?

The second approach sees the strain in the federal system as a result of the interaction between the various government structures and institutions and the political and bureaucratic leaders who run them. The major source of strain in this view lies in the inter-bureaucratic competition for support, prestige, and territory. The changing nature of demands and substantive conflict are seen to reflect the emergence of new elites or new priorities and interests. Government and those who run it, and their interests, shape society, rather than *vice versa*.

This approach is perhaps the dominant one in political scientists' analysis of Canadian federalism, as reflected in the work of D. V. Smiley, who writes of "executive federalism," Richard Simeon in *Federal-Provincial Diplomacy*, and E. R. Black. It leads to suggestions for change in the constitutional and institutional structures of the federal system. By changing the framework within which political competition takes place, it is hoped, the demands of governments can be more adequately accommodated and conflicts made more constructive.

Another approach is that of political economy. It goes beyond simple recognition of a regionally diversified economy to relate the uneven and sectoral development of the Canadian economy to the needs and interests of specific economic groups among the Canadian and American bourgeoisie. A continental division of labour among these groups is seen to result in the use

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1 W. S. Livingston, "A Note on the Nature of Federalism," *Political Science Quarterly*, vol. 62, no. 1, March 1952; and *Federalism and Constitutional Change* (Oxford: Clarendon Press, 1956).

of American capital to finance exploration and extraction of Canadian natural resources. Canadian capital, it is felt, is interested only in facilitating the transfer of these resources to foreign markets where they are processed and returned to Canada as finished goods. Regional development goals that run counter to the continental system of production seem to be systematically frustrated by market conditions and the activities of the central government and financial institutions. Regional disparities are thought to be created and maintained by economic and political conditions that benefit the dominant economic groups in Canada. The historical dynamic of Canadian federalism is thus seen to lie in the particualar development of Canadian capitalism and its relation to the international economic environment.

By focusing on institutional failure, we do not deny the relevance of these other factors. The underlying conditions of regional and cultural conflict are to be found in the historical development of the cultural and economic factors of the societies that make up Canada. These factors are defined culturally and territorially and the pervasiveness of regionalism and linguistic conflict is a well-known fact of Canadian political life. Political institutions to a great extent reflect these conditions. They are not neutral; the way they are structured benefits some more than others and denotes a particular image of the country -- an image that is not now shared by provincial governments and many citizens for a variety of well-known reasons.

That institutional rearrangement has been the focus in many of the proposals for change put forth since 1976, and indeed long before that, gives us an indication of the political character of the conflict. We cannot ignore linguistic duality and regional diversity; indeed, these are the central social forces at work in Canada. They are reflected in competing attitudes, values, and identities on the one hand and in important economic differences and inequalities on the other. But the political debate in Canada centres on institutions and the underlying forces are given expression through governments. Thus the language question focuses on whether linguistic duality will be reflected in national institutions and through a pan-Canadian bilingualism or in a unilingual and perhaps fiscally and culturally separate Quebec. Similarly, the debate about regionalism turns on the question of whether it will be expressed and accommodated *within* the institutions of the central government or in relations *between* governments.

How have conditions changed in the last hundred years, and why is the current system of government institutions felt to be inadequate for solving the concrete problems that face Canada today?

One way to explore these questions is to see Canadian history and current problems as lying in the interplay of three distinct political drives or dynamics, an understanding of which explains and summarizes the many dimensions of strain and conflict within

Confederation and which incorporates the salient features of each of three modes of analysis outlined above. These are what we can call country-building, province-building, and Quebec nation-building. The history of Canada has been shaped by the interplay and tension between these three dynamics and the images of culture, society, and economy they entail.

Each of these drives has a strong institutional base in the country -- in Ottawa, in the provinces, especially in the West, and in Quebec city. Each implies a different sense of community, of collectivity across which benefits are to maximized and to which primary loyalty or identity will be given. Each, moreover, implies a different direction for reform in the federal system and a different perspective on the nature of institutional failure in Canada. The federal government and each of the provincial governments can be seen to represent and in many cases articulate these drives through their policies, priorities, and solutions to problems. Thus, these drives include a strong normative element.

Country-Building

Country-building activities have taken different forms over the past hundred years. In the initial or Confederation stage, country-builders sought to weld together the various colonies in British North America under a centralized institutional structure and through certain integrative economic provisions. The British North America Act reflects the country-centred view in the creation of a single Parliament "charged with matters of common interest to the whole country" and in those provisions that made it quite clear that Canada was to have a strong central government. The general power to make laws for the Peace, Order and Good Government of Canada, the regulation of interprovincial trade, the unilateral right to reserve or disallow provincial legislation, the declaratory power and the right to appoint judges and senators, are all examples of this intention. The provisions of the Act that removed tariff barriers between the various units underlie the country-building drive in the economic sphere. Western land settlement plans, a transcontinental railway scheme, and a system of protective tariffs were further country-building initiatives of the federal government in the first stage.

The second country-building stage picked up where the MacDonald-Laurier National Policy left off and was implemented under the guidance of Keynesian economic theory. Stretching from the end of the Second World War to the mid-1960s, this era was the heyday of federal dominance. Under the principle that firm central control of the fiscal system was absolutely essential to the maintenance of economic stability and growth, the federal

government, through its comprehensive reconstruction proposals,[2] sought to institute a broadscale vision for social and cultural development in the post-war era. The role of a strong and effective central government was "to ensure appropriate levels of aggregate demand through generalized fiscal and monetary policies and through lowering barriers to international trade and investment."[3] It was apparent that the federal government sought, in this stage, to substantially reduce the degree of direct state intervention in the economic development and instead to maintain its legitimacy through policies designed to maintain a good "climate" for private enterprise.

Today, country-building activities have shifted from financing the development of the welfare state towards a much greater concern with direct economic regulation. In addition, country-builders residing largely in the federal government and its agencies have become increasingly concerned with altering federal institutions so that they might better serve the national and provincial interests from the centre. Indeed, since 1968, it appears that this task has been the principal country-building activity.

In each of these stages, federal policies have entailed a specific image of a pan-Canadian community, a definite idea of the role the central government should play in the life of the nation, and specific blueprints for national economic, social, and cultural developments. In addition, certain characteristics define the nature of the country-building impulse. The federal government and national institutions are seen to be the chief instruments of national development. Problems are defined nationally and solutions are given in national terms. The need to establish and maintain a Canadian common market is stressed throughout, as is the need for a national standard level of public services and national leadership in the development and implementation of social policies. The federal government is seen as the primary vehicle through which to maximize overall economic growth, to create and promote the development of complementary regional economies and to distribute political costs and benefits in a nationally advantageous manner.

Yet, in each of these specific areas, national institutions, the economy and the development of social and cultural policy, the federal government has met with regional resistance and

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2 *Proposals of the Government of Canada to the Dominion-Provincial Conference on* Reconstruction (Green Book), (Ottawa: August, 1945).

3 Donald Smiley, "Canada and the Quest for a National Policy," *Canadian Journal of Political Science*, vol. 3, no. 1, p. 47 (March, 1975).

discontent. The roots of this discontent lie in no single policy but in the content -- that is, the net effects of country-building activities as a whole.

Whatever else the national policy of MacDonald and Laurier accomplished, its net effect in Canada was to create a regionally structured economy based upon mercantilist relations between central Canada and the western and eastern regions.[4] The use of *generalized* fiscal and monetary policy in the reconstruction era could only serve to heighten the regional bias in the Canadian community. Lowering the barriers to international imports and actively seeking foreign, largely American, investment in resource extraction and sales further accentuated the regional character of the economy, and contributed to the growth of regional and provincial power in Canada and therefore directly to the current crisis in the federal system. By defining problems nationally and seeking to implement national solutions, the federal government has ignored the fact that economic problems in Canada vary from region to region just as their causes do and as their solutions must.[5]

This weakness of the federal government and its activities cannot be attributed solely to the mistakes of one government or to the deficiencies of particular policies. It must be seen as due in part to the failure of federal *institutions* to adequately represent the particular needs and interests of the various provinces and regions of the Canadian community. The result has been the weakening of the country-building drive on one hand and the strengthening of the province-building and Quebec nation-building drives on the other. The representative failure of the federal system is a powerful element in the rhetoric of many western spokesmen. This is, in part, due to the steady decline from 23 per cent in 1931 to 16 per cent at present in the Prairie provinces' share of the national population.

This lack of political representation is, however, more than just a problem of population. It is also a product of broader institutional failure of the federal government to effectively develop support across all regions, to reflect within itself Canada's regional diversity, and to serve as an arena for the accomodation of regional interests. The classic model of "brokerage politics" in Canada suggested that the critical integrative institutions were to be political parties, winning support

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4 *Ibid.*, pp. 43-44.

5 Maurice Lamontagne advanced just this argument in his speech to the conference on national priorities convened by the federal Liberal Party at Queen's University in 1960, noted in Smiley "Quest for a National Policy," p. 49, footnote 41.