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ALBERTA AND 'EQUALIZATION': SEPARATING FACT FROM FICTION OR SORTING OUT SOME IMPLICATIONS AND OPTIONS IN CANADIAN FISCAL FEDERALISM

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Introduction

A surprising amount of media attention has been paid to 'equalization' in Canada during the past couple of years. Part of that discussion has been focused on the federal government's formal Equalization Program (a half century old federal-provincial transfer program that reduces fiscal disparities among provincial governments) but much extends to encompass, often under the term 'equalization', other major federal-provincial transfers and also to include the even broader distributive implications of federal government financing and expenditures. Unfortunately, much of that discussion is incomplete, confusing, suggests misunderstanding, and too often results in misrepresentation of the various programs, their consequences and their alternatives. Assuming that the public discussion is to inform and stimulate knowledgeable and thoughtful debate, too much of the attention has not contributed effectively to that end. Fiscal federalism in Canada, as in other federal countries, is often complex and takes some effort to sort out. This paper is an attempt to sort out some of the main features, identify some important facts, and so, in contributing to a clearer understanding, aid in conveying the policy issues to the public.

The amount of recent media attention is surprising because only a few years ago the federal government commissioned an expert panel to review the Equalization Program. The recommendations of that panel were largely implemented in Budget 2007.[1] The result was widely viewed as having put Equalization back on track. The media attention to 'equalization' appears to stem mostly from reports and articles emerging from a small number of organizations, most notably the Frontier Centre for Public Policy.[2] The products from the Frontier Centre have been uniformly critical of Equalization and, more generally, other federal-provincial transfers and federal activities resulting in some interprovincial redistribution.[3] The themes of those and similar works are that

- equalization, if not unnecessary, is excessive, improperly designed and is ineffective if not detrimental;
- federal spending power encroaches unduly on provincial jurisdictions; and
- Canadian federalism results in large unjust and economically distorting transfers among provinces.

1 See the Report of the Expert Panel on Equalization and Territorial Formula Financing (2006) (the O'Brien Report) and Canada Department of Finance, Budget 2007.

2 In addition, see particularly the Atlantic Institute of Market Studies, the Ontario Institute for Public Policy and, most recently, the Ontario Chamber of Commerce.

3 For an overview go to the Frontier Institute's website and look at publications under 'equalization'; for example, www.fcpp.org/issues.php?issue_id=4 .

So, new policies are required.

The Mowat Centre for Policy Innovation has contributed a rather more balanced perspective in its Report Card on Canada's Fiscal Arrangements but is likewise provocative (Hjartarson et al., 2010). Perhaps naturally, the more provocative and controversial messages have received considerable and widespread media attention. One of the more receptive avenues has been the National Post, a newspaper that declares that it would be pleased to see equalization and its affiliates killed,[4].

This negative outflow is striking given the recent reforms and the subsequent relative peace between the federal and provincial governments on the issue. Various factors may be motivating this attention:

There is the normal propensity to promote positions prior to the regular renegotiation of the federal-provincial fiscal arrangements (coming in 2013-14);

- for the first time Ontario has become an Equalization receiving province;
- the Canadian economy has been negatively shocked; and
- there is always an element of academic interest in federalism issues.

The latest discussion, however, is rather one-sided. Despite that, it raises questions that merit taking a second look and reflecting again, and somewhat further, on these issues in an effort to understand better these features of Canadian fiscal federalism. That is the purpose of this paper – that is, to outline the basics of the main features under discussion and, occasionally, to reflect on alternatives.

The paper continues as follows. The next section looks at the Equalization Program. However, Equalization is only part of the federal-provincial transfer system so the other major components are analyzed briefly in the subsequent section. In the fourth section, I examine in a broad way the interprovincial redistribution that occurs as a result of aggregate federal government taxation and expenditure, and follow that with a more detailed examination and assessment in the fifth section. The consequences of introducing some possible changes to federal programs are outlined in section six. The seventh section notes an additional perspective on interprovincial transfers. A conclusion completes the paper. Because of the primarily Alberta audience and the Alberta focus of the conference, examples of the implications for Alberta predominate.

4 National Post, Editorial, July 22, 2011, page A8.

The Federal-Provincial Equalization Program

Equalization, that is Equalization with a capital, is a specific federal government program. Its objective is to reduce the fiscal disparities among the provinces by enabling the fiscally less well-off provinces to provide services that are reasonably comparable to those in other provinces at reasonably comparable rates of taxation. It realizes the objective through well- defined federal government transfers to the fiscally disadvantaged ('have-not') provinces. Equalization transfers are unconditional in that they come without restrictions and the funds are used in the way(s) that the recipient province feels is best. The program has been in place since 1957 and the purpose of equalization became part of the Constitution in 1982.[5]

How Equalization Works

The fundamental determinant of Equalization payments is straightforward. If a province has a provincial tax base per person that is less than the national average provincial tax base per person, it deserves a per capita Equalization payment equal to that difference times the national average provincial tax rate. Alternatively, one can look at it in aggregate terms. In that case, if a province has a share of the aggregate tax base of all provinces that is smaller than its share of the population, it deserves an Equalization grant equal to that difference times aggregate provincial tax revenues. The two views are equivalent[6] and the result is that a receiving province imposing the national average of provincial tax rates on its taxpayers would receive total revenues from taxes and Equalization payments equal to the per capita revenue of an average province imposing average rates. That is, a low tax base province imposing average/comparable tax rates is able to provide average/comparable services.

Some complain that Equalization is arcane or impossible to understand. It is true that while the principle is straightforward, the calculations become more complex. Although we can think of there being a single tax base, there are numerous. Currently five tax bases are:

- personal income taxes;
- corporate income taxes;
- consumption taxes;
- property taxes; and
- natural resource revenues.

5 Further information on the basics of the Equalization Program can be found in Finance Canada at www.fin.gc.ca/access/fedprov-eng.asp, Dahlby (2008) and the Expert Panel (2006).

6 For those preferring more detail, formulae are provided in Appendix A.

Each base must be defined and separate calculations made and summed. For various reasons, only 50 percent of natural resource revenues are included. Sometimes the Equalization standard has been redefined but, presently, the ten province average is employed. In addition, various 'bells and whistles' have been added (or removed), the latest in 2009.[7] Those have typically been introduced as mechanisms to facilitate transition when the method of calculation has changed and to prevent Equalization from becoming too expensive but still meet its objective. Most of those adjustments have been the product of changes in natural resource revenues which complicate Equalization because the revenues involved are often substantial, are not evenly distributed among provinces, are largely the returns to resource ownership rather than taxation, and can impact significantly the cost of Equalization. Regardless, the basic formula drives Equalization and the various add-ons make mostly (overall) marginal adjustments to maintain fairness.[8] Calculations in Smart (2009, Table 1) illustrate. The recent floor protection and receiving province cap have relatively small effects in aggregate. More significant nominally, but also fundamentally because it introduces a deviation from the ten province standard, is the new annual growth constraint. That reduced total Equalization payments in 2009-10 by over 11 percent. Even so, 89 percent of the payments were determined by the basic formula.[9]

Hence, the concept and primary calculation of Equalization are relatively simple. Experts can readily handle the detailed calculations and those are available and transparent for all who are interested. It is important to note that the current method of equalization is not the only approach that might be employed, but debating the options requires a basic understanding of the existing system.

Having this background, we now look at the fiscal capacities of the provinces and at what Equalization does to reduce fiscal disparities. The per capita provincial fiscal capacities for 2010-2011 are shown in Figure 1, below. The blue (bottom) portion of the column is the amount when only 50 percent of natural resource revenues are included. The red (top)portion is the additional amount if 100 percent of natural resource revenues were incorporated. The national average per capita capacity is $7276 at 50 percent and $7675 at 100 percent. Alberta has the largest capacity at $12,091 even with the 50 percent calculation and at $13,847 if resource revenues are fully included. That is, its fiscal capacity is 166 percent or 180 percent of the average, depending upon the resource inclusion factor used. Also, Alberta's per capita fiscal capacity is 37 to 45 percent greater than that of the next highest province, Saskatchewan. And Alberta's is almost

7 See Smart (2009) for a review and update.

8 Certainly problems and disputes occur. For example, see Courchene (2004).

9. Finance Canada estimates the reduction due to the growth constraint at 6.5 percent (not over 11 percent).

three times that of Prince Edward Island, the province with the lowest capacity (at $4705). Alberta's dominance of the fiscal capacity ranking is not new. For example, Alberta's capacity was 178 percent of the national average in 2000-2001 and Alberta has not received equalization payments since the early 1960s.

Figure 1.
Provincial Fiscal Capacities in Dollars per Capita, 2010-2011 Calculations

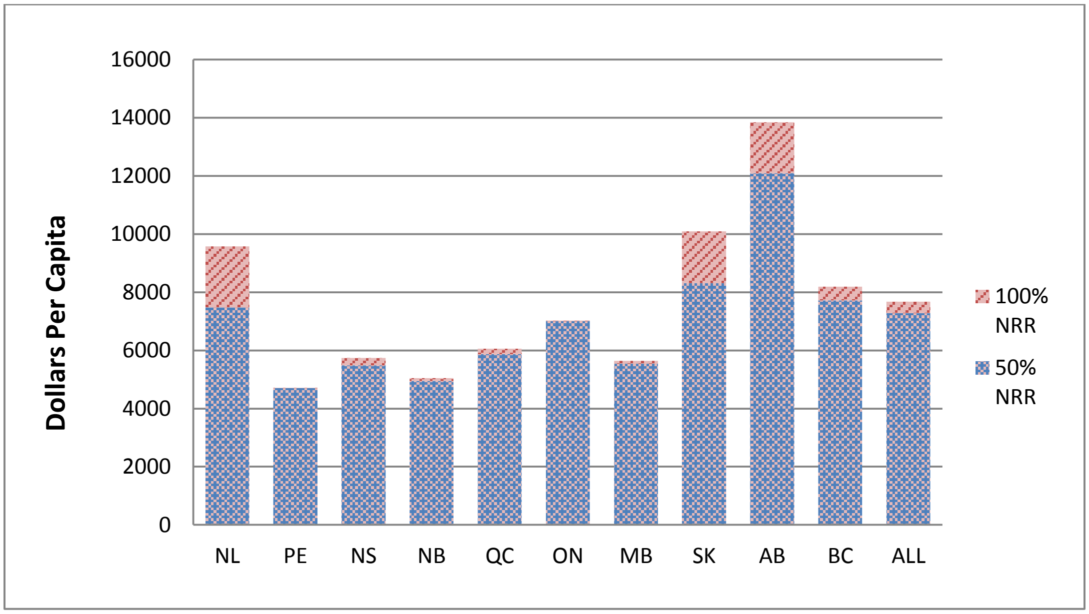
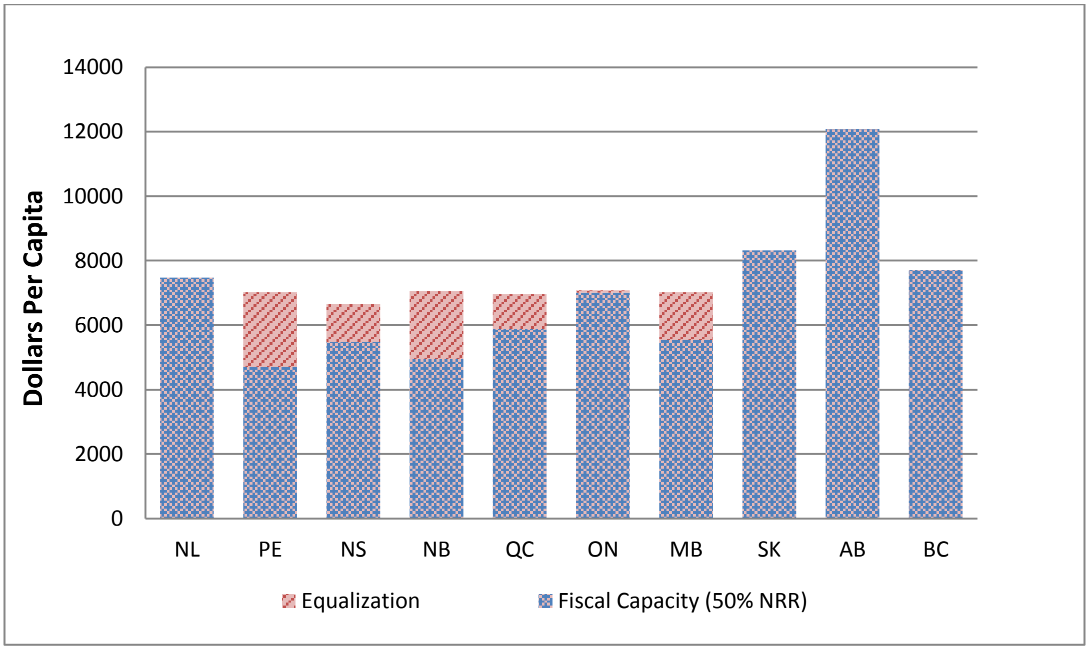


Figure 2, below, shows the effect of Equalization in 2010-2011. The provincial per capita fiscal capacities are the blue (bottom) sections at the base of the columns and those averaged $7276 nationally. The red (top) portions show the Equalization paid to the six qualifying provinces. That ranged from about $73 per person in Ontario (the thin red line at the top of the Ontario column) to about $2,318 per person in Prince Edward Island. The Equalization payments raise the fiscal capacities of the qualifying provinces to a standard of about $7,000 per capita. Various provisions result in some small variations in the realized levels among the receiving provinces.[10] No payment was made to the four non-qualifying, or 'have', provinces (i.e., Newfoundland and Labrador, Saskatchewan, Alberta and British Columbia). The fiscal capacities of the non-qualifying provinces did not change. Equalization levels up to a standard but not down. Total Equalization payments that year amounted to $14.4 billion.

10 The various adjustments and their implications are illustrated in Appendix B for 2007-08. The figure there comes from the Expert Panel's report and shows its recommendations (essentially adopted) as applied to 2007-08.

Figure 2.
The Effects of Equalization on Fiscal Capacities: (Approximate) Fiscal Capacities with and without Equalization, 2010-2011



Some notable changes have occurred recently in the provinces qualifying for Equalization; since 2007-08 for example. In particular, Ontario has qualified to receive Equalization, and Newfoundland and Labrador and Saskatchewan no longer qualify or receive Equalization. Also, the 2009 growth cap constrains the total amount of Equalization paid so Ontario's entry bites somewhat into what the other provinces might receive if the ten province standard were not limited in that way.

There are a number of features to note.

- There are substantial disparities among provincial per capita fiscal capacities.
- Equalization substantially reduces those disparities.
- Disparities are reduced by raising the fiscal capacities of low capacity provinces to a level approximating the ten province average.
- The capacities of the high capacity provinces are not affected and, in particular, are not reduced by Equalization.
- That is, the program works by bringing low capacity provinces up to the average and not by bringing down the capacity of high capacity provinces – that is, by raising the floor not lowering the ceiling.
- Equalization grants are unconditional. That is, the recipient province can use the funds as it sees fit; for example, to finance services or to reduce taxes.

- The federal government finances the Equalization payments from its own revenues – there is no province to province transfer (or provincial government to federal government transfer).
- Equalization payments are only to a level that if a receiving province wishes revenue per capita equal to that of the average (or standard province), it must impose average levels of taxation.
- It is assumed that equal/comparable revenues per capita enable equal/comparable levels of services. The only measure of need in the formula is population. The Expert Panel rejected inclusion of other need factors.

Does Equalization Realize the Objectives?

An obvious question to ask is whether, or how well, Equalization accomplishes the objectives of reasonably comparable services at reasonable comparable taxes. We look at both the service and tax side.

First, consider services. Services and service quality are not easily compared. Some people have made efforts to compare some provincial services in specific ways and have sometimes expressed concern about observed differences. Such an analysis has limitations. Tastes and preferences, demographics and other conditions may differ among provinces resulting in citizens preferring somewhat different outputs from their provincial governments. Also, that approach is typically not comprehensive. Imperfect, but reasonable, is to look at expenditures per capita. Assuming that costs are comparable or differences are offsetting, as Equalization does, comparable expenditures suggests comparable services if tastes are relatively similar. Also, because provinces organize the assignment of their responsibilities between provincial and local governments somewhat differently, one needs to consider the consolidated operations of the provincial and local governments (that is, combined without double counting).

The consolidated expenditures of the provincial and local governments averaged $12,795 per capita in 2008-2009.[11] Those numbers range from $11,412 to $14,130. To facilitate comparison, the provincial levels are reported as a percentage of the national average in Figure 3, below. In percentage terms, the expenditures range from 89.2 percent of the national average in Ontario to 110.4 percent in Saskatchewan. Note that the provinces are ordered there with the Equalization receiving provinces on the left and the non-recipient provinces on

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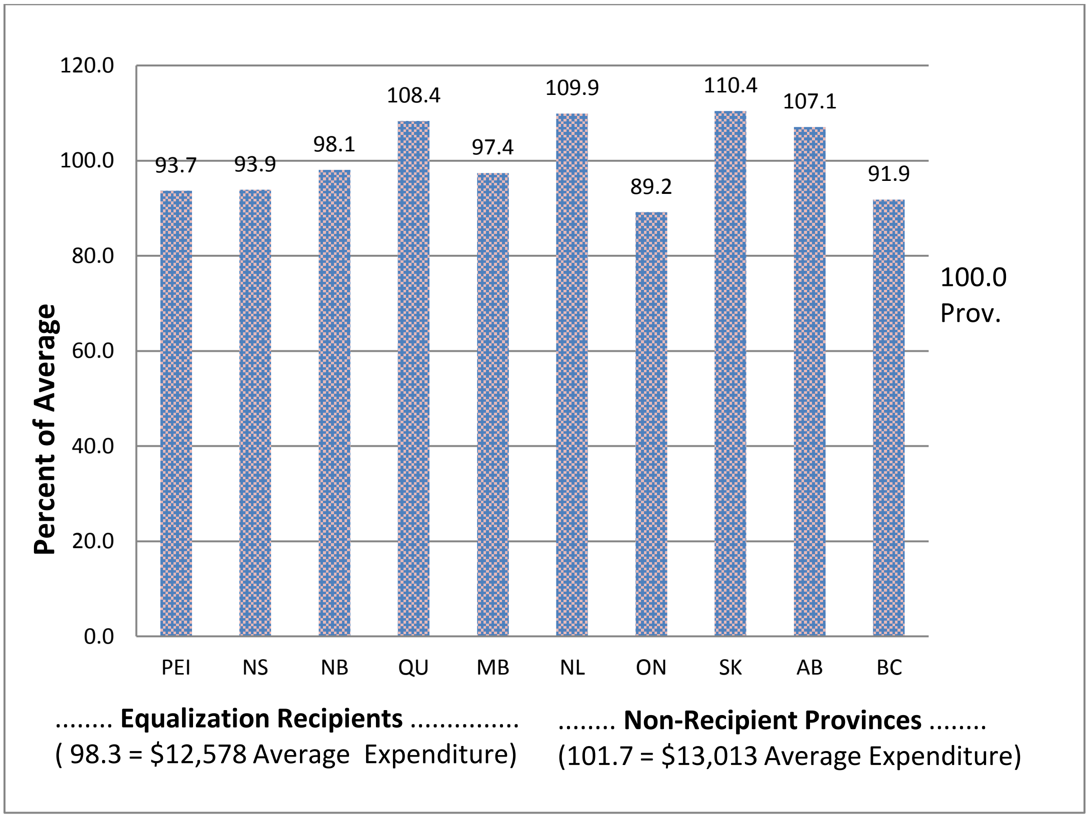
11 Comparisons of provincial expenditures and taxes are (for the most part) based the Financial Management Series as reported in Statistics Canada's CANSIM II data base. The FMS data is advantageous because the data is organized to be consistent across provinces. Unfortunately, the FMS series ends in 2008-2009 and its replacement has not yet materialized but, fortunately, the data is relatively current as it is likely that only 2009-2010 would be available now regardless.

the right.[12] Average per capita spending in the non-recipient provinces averaged $13,013 while that in the Equalization receiving provinces averaged $12,578. Clearly, these averages are quite similar – only a 3.5 percent difference. Still, there are notable differences. The above average spenders are Quebec, Newfoundland and Labrador, Saskatchewan and Alberta. Quebec is an Equalization recipient but is noted for providing a broader array of services through its public sector – seemingly reflecting somewhat stronger voter preferences for publicly provided services. The other three above average provinces are all resource rich (see Figure 1) and, certainly in the case of Saskatchewan and Alberta, have been experiencing rapid growth which creates large demands for new infrastructure. Two non-recipient provinces, Ontario and British Columbia, are modest spenders. Recall, however, that Ontario was on the cusp of becoming an Equalization recipient and British Columbia had been receiving small Equalization payments for seven years ending in 2006-2007. Thus, for 2008-2009, those two provinces could be considered about 'average' in terms of their fiscal capacities and, perhaps not surprisingly, their levels of spending are quite similar to the recipient provinces excluding Quebec (although at about 90 percent as opposed to about 95 percent of the national average). So overall, judging by levels of per capita spending (our proxy for services), the capacity for which Equalization aims at evening out by equalizing up (but not down) to a national standard, Equalization seems to be managing reasonably well. Aside from Quebec, the provinces spending above average are those enjoying an above average fiscal capacities resulting from substantial resource revenues. That is, the expenditure disparities arise where we expect them, in resource rich (and rapidly growing in the case of Alberta and Saskatchewan) provinces. Otherwise, the differences are not large.

12 Note that in 2008-2009, Newfoundland and Labrador had just become a non-recipient of Equalization and Ontario was not yet a recipient.

Figure 3.
Consolidated Provincial and Local Expenditures of Provinces as a Percentage of the National Average, 2008-2009

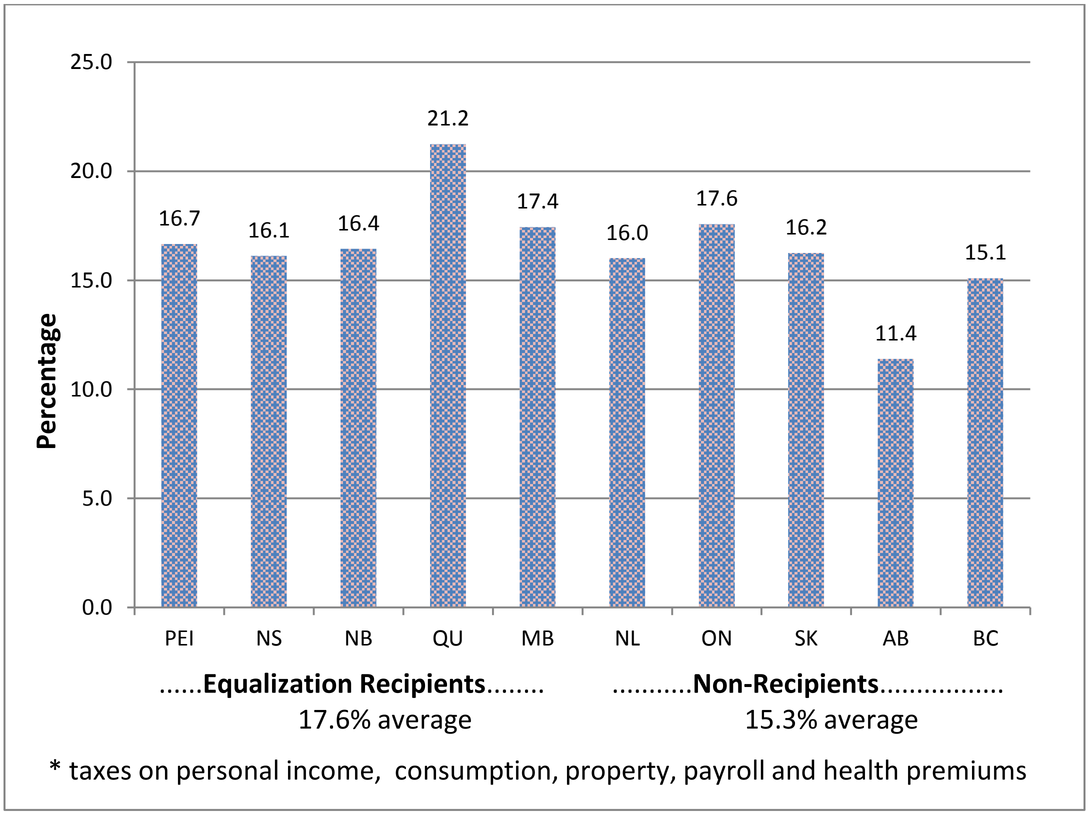


What of the tax side? Are tax rates reasonably comparable across provinces? This question too is not as simple to answer as one might initially expect. There are various ways look at tax rates. It is natural for us as individuals to think of taxes relative to our incomes. Figure 4, below, reports the portion that a broad range of provincial and local taxes in total represent of personal incomes across the provinces – that is, the sum of personal income taxes, consumption taxes (e.g., on general sales, alcohol and tobacco, fuel), property taxes, payroll taxes and health care insurance premiums. At 21.2 percent, these taxes are relatively high in Quebec but, at 11.4 percent, are relatively low in Alberta.[13] Across the Equalization recipients, the average is 17.6 percent while, across the non-recipient provinces, the average is 15.3 percent. If Quebec and Alberta are omitted, the percentages are 16.6 and 16.2 percent; numbers that are quite

13 The reported Quebec percentage is somewhat overstated. Under an opting-out provision of the federal-provincial fiscal arrangements, the federal government abates personal income tax room to Quebec resulting in, for a given combined tax burden, a larger portion being collected by Quebec than in other provinces. A back of the envelope adjustment suggests a more interprovincially comparable number would be about 20 percent.

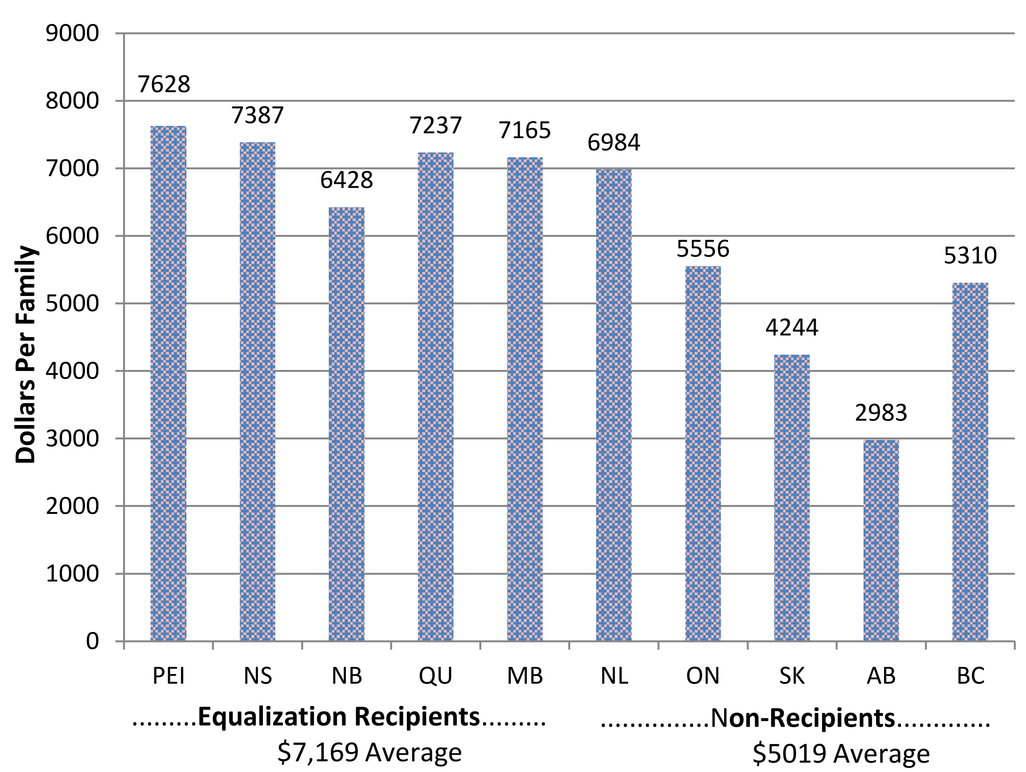
comparable. The higher level in Quebec may be a product of taste differences for public services. The lower level in Alberta is due to resource revenues.

Figure 4.
*Selected Provincial and Local Taxes as a Percentage of Provincial Personal Income, 2008-2009**



Another perspective comes from looking at provincial taxes alone (without local). Comparisons may be made in various ways but the Alberta Budget provides a convenient insight. There, the major taxes paid by typical households are estimated and reported for all provinces. Figure 5 shows the results for a family of four having two income earners with employment income of $75,000 in 2011. Perhaps surprisingly, household taxes in the Equalization recipient provinces are typically higher than those in the non-recipient provinces. Taxes for such a family average $7,169 in the recipient provinces and $5,019 in the non-recipient; a difference of $2,150 or 43 percent. Newfoundland and Labrador imposes taxes comparable to those of the recipient provinces on this family. Taxes in the other non-recipient provinces are notably lower. Even in Ontario and British Columbia, these taxes are about $900 to $2,300 less than in the provinces east of Ontario. Assuming that this illustrative family characterizes provincial tax levels in the provinces, Equalization does not result in households paying lower taxes than in the non-recipient provinces.[14]

Figure 5.
Comparison of Provincial Taxes: Two Income Family of Four with Employment Income of $75,000 (2011)



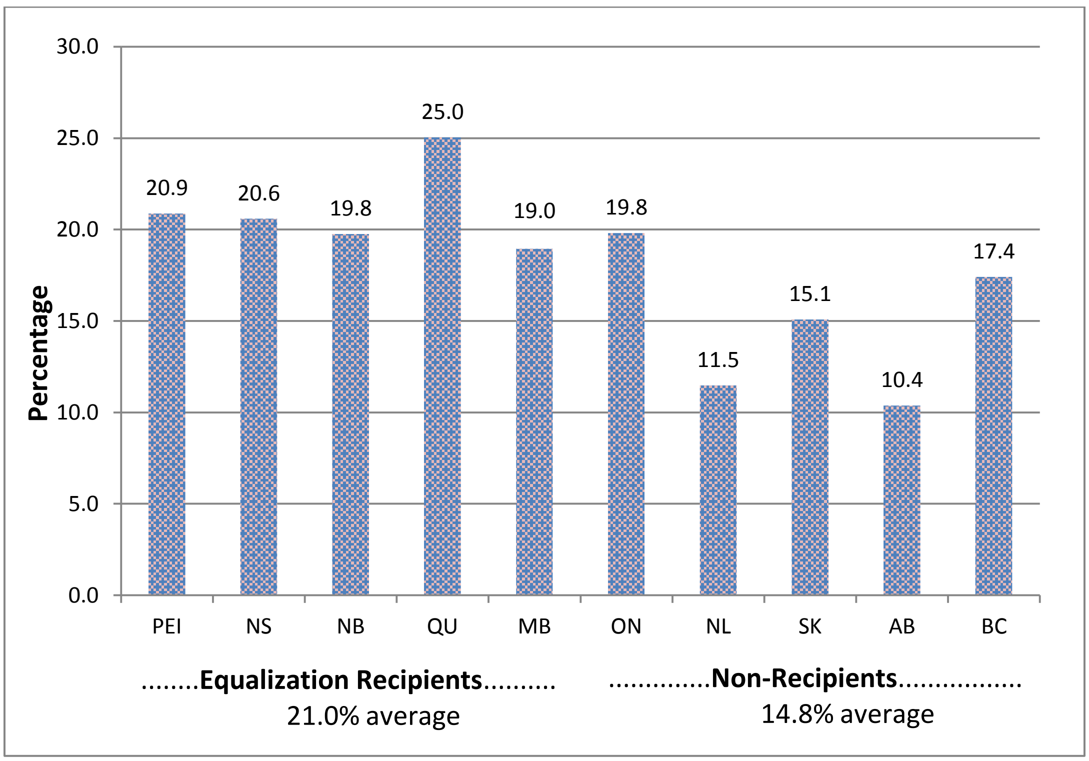
Source: Alberta Budget, February 2011, page 152.
Includes Personal income, general sales, payroll, fuel taxes and health premiums.

14 A quite similar pattern exists when looking at similar families but earning $125,000.

A final tax comparison is made relative to net provincial product (NPP). NPP, as provincial production less the capital used up to produce that output, is a comprehensive indicator of income and, potentially, of tax capacity. Provincial and local taxes as a percentage of NPP are shown in Figure 6, below. Again, the tax share is lower in the non-recipient provinces – averaging 14.8 percent versus 21 percent. Ontario's tax burden in this context, 19.8 percent, is similar to that of the Equalization recipient provinces, that in British Columbia is somewhat less but the lowest levels (10.4 to 15.1 percent) are in the three provinces with the greatest natural resource based fiscal capacities.

Figure 6.

Comparison of Provincial and Local Tax Revenue as a Percentage of NPP, 2008-2009



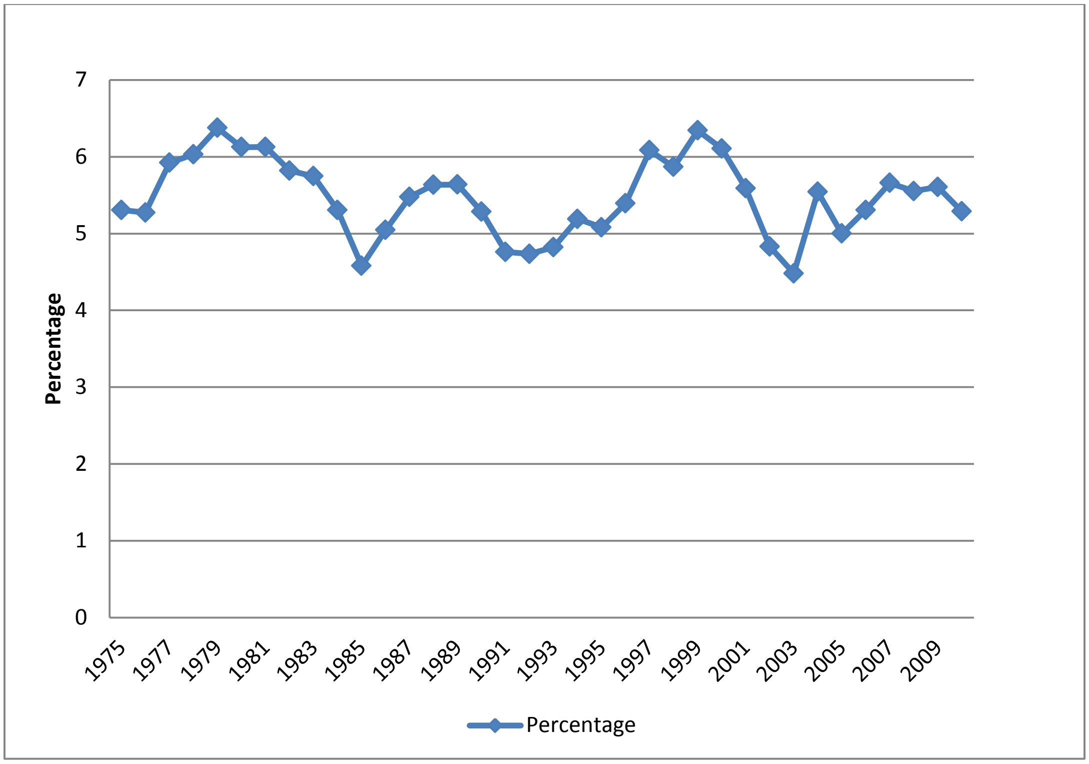
To summarize this section on whether Equalization realizes its objectives, we observe that:

- Consolidated provincial and local expenditures are relatively uniform across the provinces and, in particular, those of the Equalization recipient provinces are not low.
- The greatest variation in per capita expenditures is among the non-recipient provinces with the resource rich provinces being the largest spenders.
- By any of the three measures used here, the Equalization recipient provinces have neither low rates nor low levels of taxation. They provide comparable expenditures by imposing comparable taxes on the bases available to them.
- Lower tax burdens are found primarily in those provinces having resources contributing substantially to fiscal capacity. Alberta stands out.
- The Equalization system appears to accomplish the objectives set for it about as well as can be expected of one designed to equalize up to a standard (approximating the average) and not equalizing down.
- High fiscal capacities appear to translate often into lower taxes more so than high expenditures.

What Does Equalization Cost?

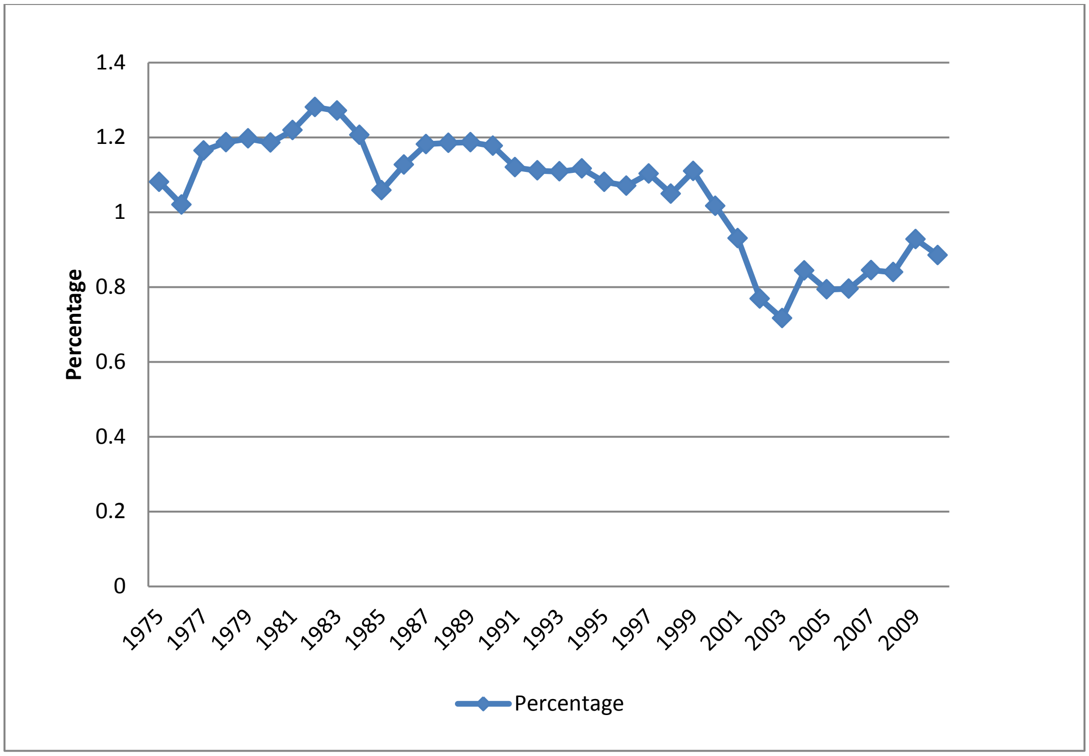
In 2010-11, the Equalization program cost $14.372 billion. That sounds like, and is, a lot of money. Even in per capita terms, at $421 per Canadian, it is significant, although in comparison to the total expenditures of governments (e.g., $12,795 per person by consolidated provincial and local governments), it appears more modest. Also, Equalization has grown over the years; for example, to illustrate, from $1.9 billion in 1975-1976. However, the cost of Equalization to the federal government has, in relative terms, been fairly stable. Figure 7, below, shows Equalization payments as a percentage of federal expenditures over a 36 year period. The percentage has fluctuated, between about 4.5 and 6.4 percent, but the level in 2010-2011 is essentially the same as it was in 1975-1976.

Figure 7.
Equalization Entitlements as a Percentage of Federal Government Expenditures, 1975-1976 to 2010-2011



Considering Equalization as a percentage of GDP is another way to look at the cost. That trend is reported in Figure 8, below. The expenditure for Equalization has been as large as 1.28 percent but, since 2001, has averaged 0.83 percent which is well below the post-1974 average of 1.05 percent. Thus, Equalization expenditures have tended to decline relative to national output.

Figure 8.
Equalization as a Percentage of GDP from 1975 to 2010



Our conclusions here are:

- Expenditures for Equalization continue to representative a relatively stable percentage of federal government outlays (currently about 5.5 percent).
- Expenditures for Equalization appear to be declining as a percentage of GDP; that is, Equalization has been tending towards being a smaller ‘cost’ to the economy.

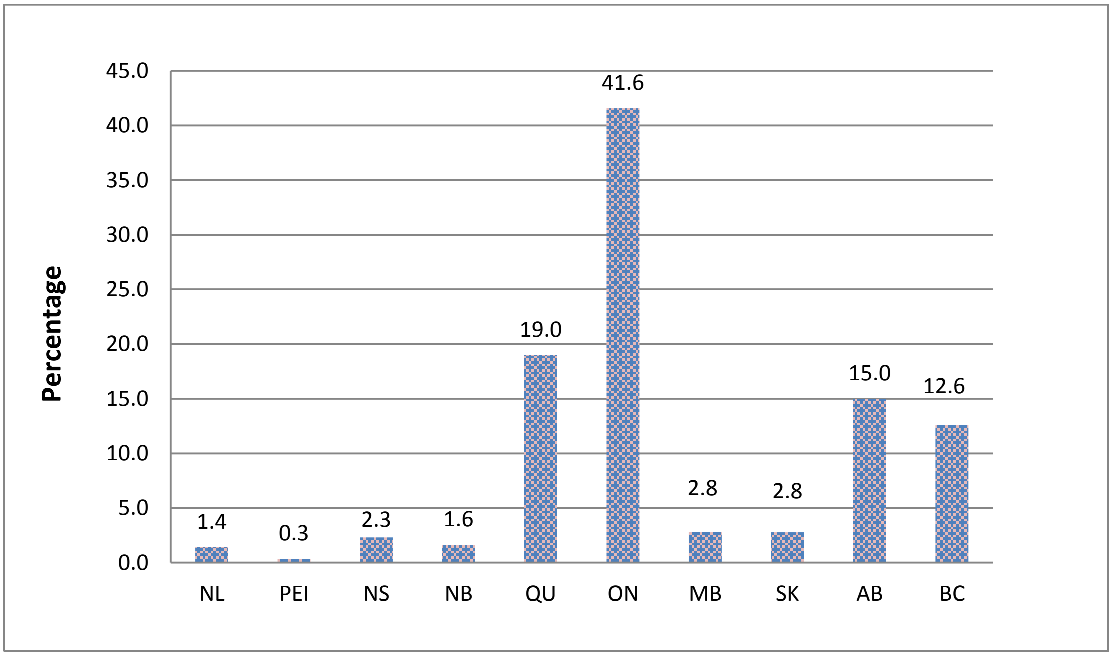
Who Pays for Equalization?

Equalization is a federal government program so the cost is paid by federal taxpayers whether they live in an Equalization recipient or non-recipient province. Taking a provincial perspective (as in Figure 9, below), the bulk of the revenues come from the most populous provinces. Considering the contributions over 2004 to 2008, over 60 percent come from the two largest provinces -- 41.6 percent come from Ontario and 19.0 percent from Quebec.[15] The next largest

15 The period examined ends at 2008 as that is the latest year for which the sources of federal revenues are reported in the Provincial Economic Accounts. The five year average is taken as the shares are shifting with those from

contributors are Alberta and British Columbia (15 and 12.6 percent respectively) with no other province accounting for more than 2.8 percent of the total

Figure 9.
Percentage of Federal Revenue Collected in Each Province



The per capita contribution to federal revenues by province is another way to look at who pays. Those amounts are shown in Figure 10,below, again for the 2004-2008 average. The amounts differ considerably across the provinces reflecting the differences in federal tax bases among the provinces. The average per person contribution was $6,289 and, looking across nine provinces excluding Alberta, the amounts range from $4,878 in Prince Edward Island to $7,294 in Ontario. Alberta stands out with a per person contribution of $9,813. That level reflects, in part, the high personal incomes and corporate profits realized in its recent energy boom. Note too that the $6,310 per person amount coming from Newfoundland and Labrador is only exceeded in British Columbia, Ontario and Alberta.[16]

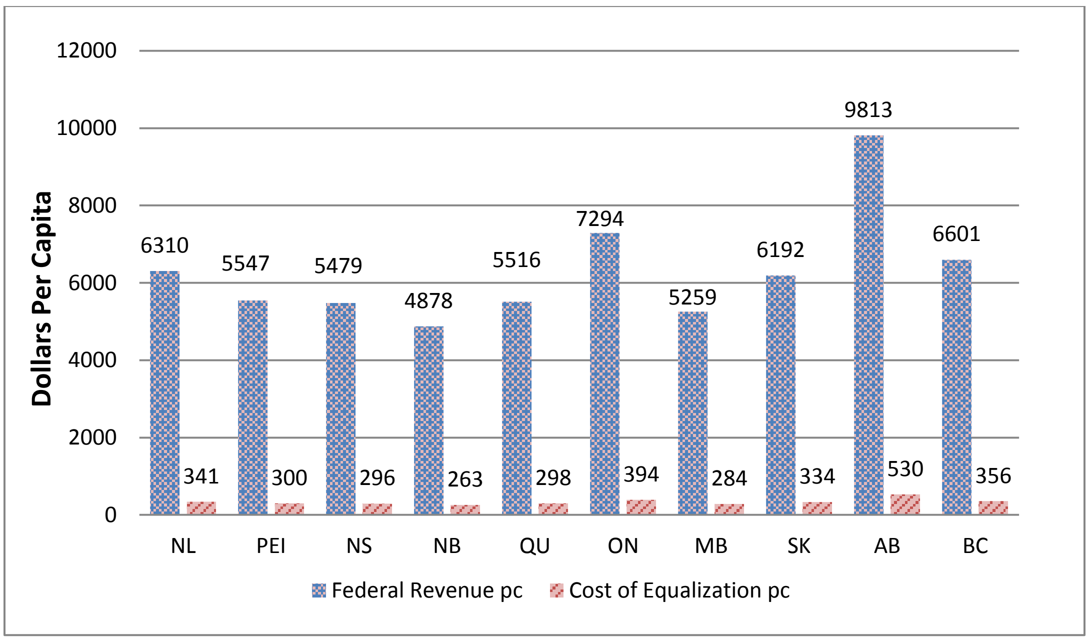
The short red columns in Figure 10 show the amount of the per capita contribution to federal revenues that is required to finance Equalization (5.4 percent of the totals during those years). This assumes that if Equalization ended, federal revenues would be reduced in a way that resulted in a uniform reduction

Alberta and from Newfoundland and Labrador increasing with energy prices and economic expansion. More recent estimates from Alberta suggest that the Alberta contribution has at least leveled off if not declined.

16 Both Newfoundland and Labrador and British Columbia were recipient provinces during most of those years.

to each province. Because all provinces, including recipient provinces, contribute to the cost, the recipients gain only a net benefit. The implication is most striking in the case of Quebec. During this period, Quebec averaged $777 per capita per year from Equalization but contributed $298 per capita annually towards the cost of the program. Ontario is another interesting case. In 2010-2011, it received $972 million in Equalization payments or about $74 per person. However, assuming that about 40 percent of federal revenues originated in Ontario (the 2008 level), Ontario funded Equalization to the amount of $454 per capita implying still a net transfer to recipient provinces of $380 per person.

Figure 10.
Provincial Per Capita Contributions to Federal Revenues and Equalization Expenditure, 2004 to 2008 Average

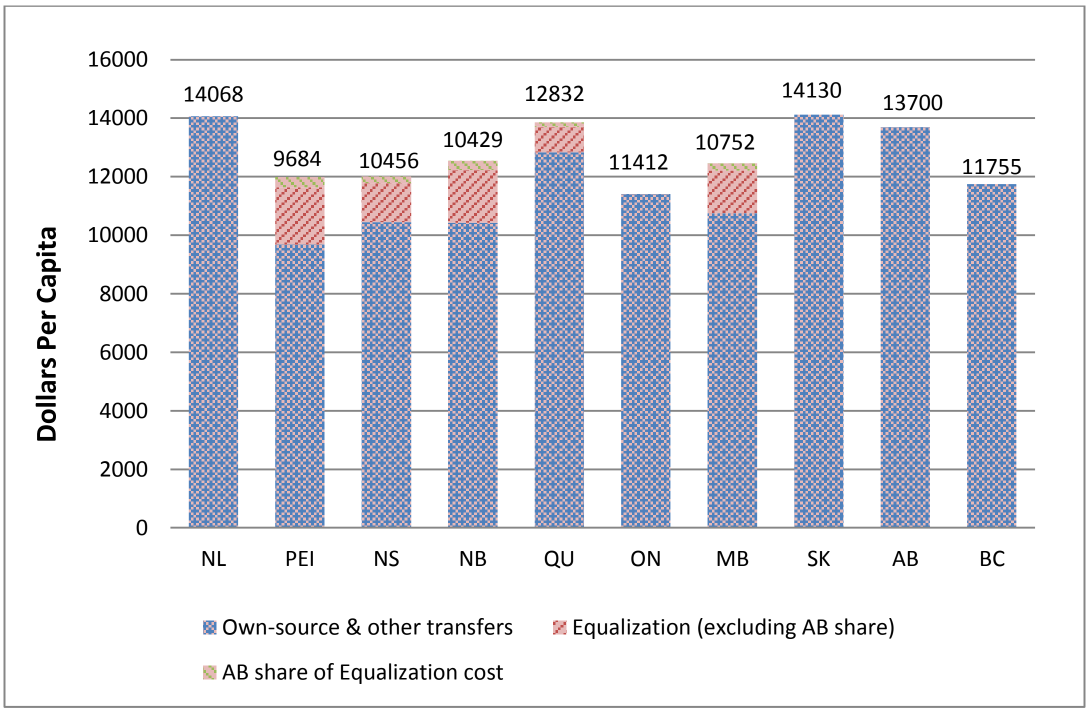


Some commentators have expressed concern about the cost of Equalization to the non-recipient provinces. Ontario still makes the largest aggregate net contribution but Alberta makes the largest per capita contribution. Some have interpreted the numbers as implying that Albertans pay large portions of the provincial expenditures in the recipient provinces. That is not the case. Figure 11, below, shows the role of Equalization towards the financing of consolidated provincial and local expenditures in the provinces in 2008-2009. Five provinces received Equalization that year and the funding Equalization made to their per capita expenditures is shown in the combined red and brown (top two) shaded areas. The blue (bottom) portions show the funding in all provinces coming from own-source revenues and other (non-Equalization) federal transfers.

Equalization represented between 7.5 (Quebec) and 19.2 (Prince Edward Island) percent of expenditures. The brown (topmost) segment of the bars represents the portion of expenditures financed by Alberta's share of federal funding. The Alberta share ranged between 1.1 percent in Quebec to 2.9 percent in Prince Edward Island. Although, on a per capita basis, Albertans make significant contributions to federal revenues, funds from Alberta do not account for large shares of provincial level expenditures via Equalization.

Figure 11.

Consolidated Provincial and Local Per Capita Expenditure and Financing, 2008-2009



Summarizing our findings in this section, we note:

- Equalization is a federal program financed by federal government revenues.
- Federal taxpayers in all provinces contribute towards financing Equalization – in amounts ranging from $263 to $530 per capita (the 2004-2008 averages).
- Given the distribution of population and the federal tax bases across provinces, almost 90 percent of federal revenues originate from Ontario, Quebec, Alberta and British Columbia (41.6, 19.0, 15.0 and 12.6 percent respectively).
- Quebec, and now Ontario, receives Equalization. Comparing Equalization payments to the federal funding coming from each province,

Quebec is a net recipient while Ontario, although receiving Equalization, is still a net contributor.

- In 2008-2009, Equalization payments represented between 7.5 and 19.2 percent of recipient provinces' provincial and local expenditures. Thus, Equalization made a significant contribution towards funding services in those five provinces.
- The portion of provincial level expenditures that might be attributed to federal funds raised from Alberta to finance Equalization is small – ranging from 1.1 percent in Quebec to 2.9 percent in Prince Edward Island.

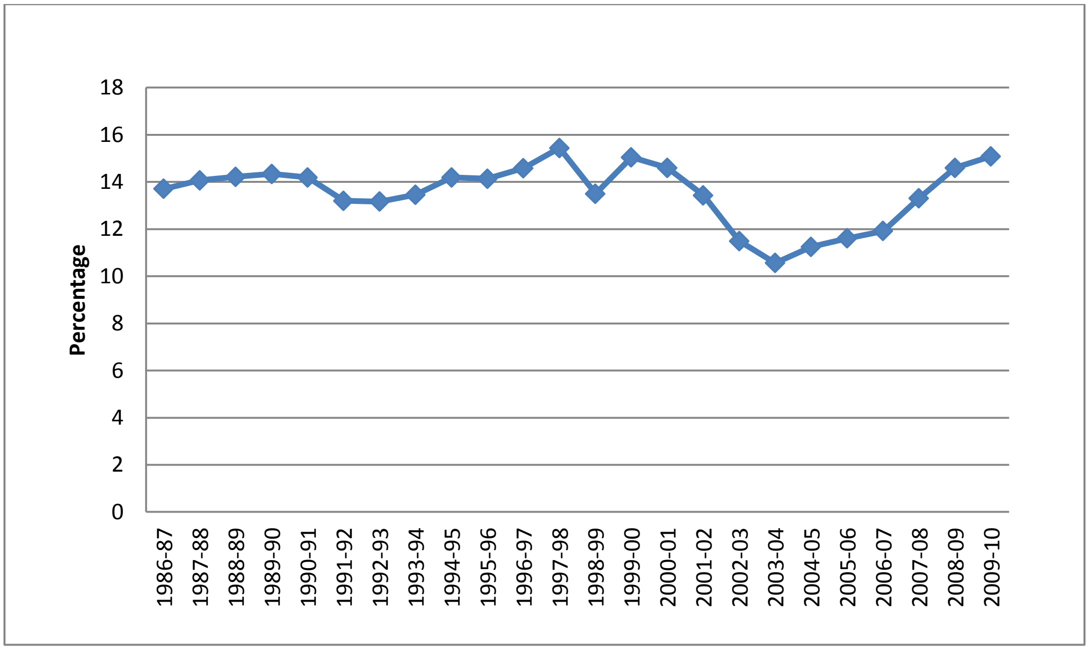
Impacts on the Recipient Provinces: A Culture of Dependency?

Concern has been expressed about Equalization causing recipient provinces to become dependent upon transfers and that Equalization retards economic adjustment and growth. Here we look at some broad indicators that may provide evidence on this issue. All provinces have received Equalization at some time. However, only five provinces have consistently received Equalization during the existence of the program. Those provinces are Prince Edward Island, Nova Scotia, New Brunswick, Quebec and Manitoba. We call those the 'core' recipient provinces. Attention is focused on them because it is there that negative consequences should be most apparent.

First considered is the importance of Equalization payments to provincial revenues. That trend is shown in Figure 12, below. While there is some variation over the years,[17] there does not appear to be any trend in the core recipient provinces towards greater dependency on Equalization payments as a source of provincial revenues.

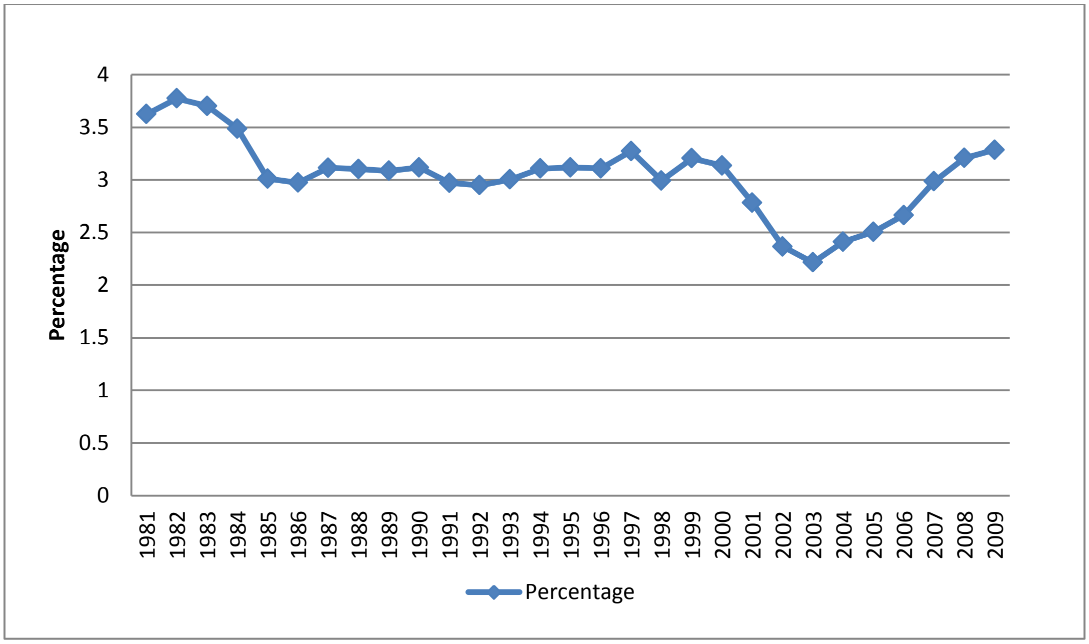
17 Besides growth rates of the provincial tax bases in the core provinces, the percentage depends on growth in other provinces and how Equalization is defined or calculated.

Figure 12.
Equalization Paid to the Five 'Core' Recipient Provinces (PEI, NS, NB, QU, MB) as a Percentage of Provincial Revenues



Another indicator is the size of Equalization relative to gross domestic provincial product (GDPP). That trend is reported in Figure 13, below. Again, although there is some fluctuation, no trend is apparent. In particular, over a 29 year period, Equalization does not appear to be becoming a more important source of provincial output. But, neither is there evidence of it becoming less important.

Figure 13.
Equalization to the Five 'Core' Recipient Provinces as a Percentage of Their GDPP



A lack of relative improvement in economic productivity – that is, a lack of convergence towards the mean – would be a better indicator of a detrimental impact of Equalization on the recipients' economies. The trend in relative GDPP is a measure that provides insight. However, the comparison is more complicated than might be anticipated. Alberta, especially, has experienced rapid growth and large increases in GDPP per capita during its latest boom. Swings in energy prices and the accompanying booms and busts are sufficiently large that even Canadian per capita GDP reflects those cycles and makes comparison to that national standard difficult to interpret. Hence, the first indicator of relative productivity reported here is the per capita GDPP of the core provinces as a percentage of GDP per capita in Canada excluding Alberta. That is shown in Figure 14, below, for the years 1981 to 2009. Despite resource booms in other provinces besides Alberta, there is a gradual upward trend suggesting that per capita GDPP in the core recipient provinces is improving. An alternate comparator is Ontario, a province with a productive economy although lacking in natural resource revenues.[18] The trend relative to Ontario's per capita GDPP is shown in Figure 15, below. That figure shows the recipient provinces' per capita GDPP declining relative to Ontario's during the 1980s but, after 1989, increasing and, over 20 years, moving from about75 percent to 87 percent of the Ontario levels. Thus, the per capita GDPP indicators imply that the core recipients'

18 The per capita GDPP in Ontario closely approximates the national average during the decade 2000 to 2009.

economies are improving relatively despite the fact that resource rich provincial economies, notably Alberta's, are performing better.

Figure 14.
Per Capita GDPP of the Five 'Core' Recipient Provinces as a Percentage of Per Capita GDP of Canada Excluding Alberta

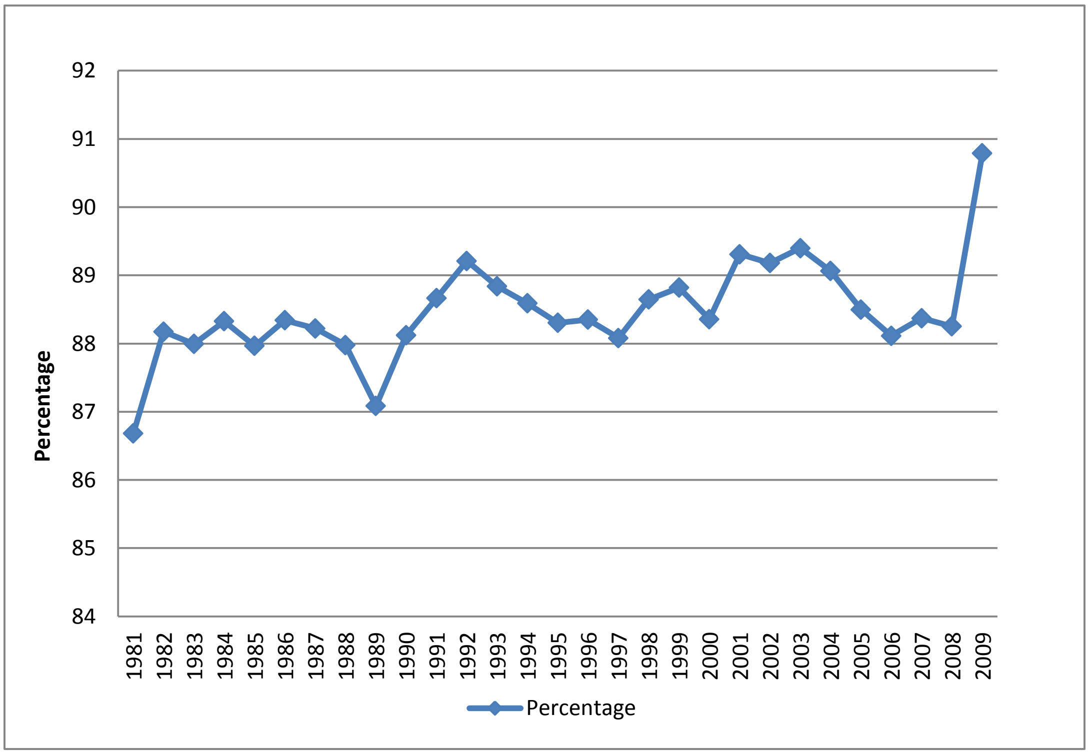
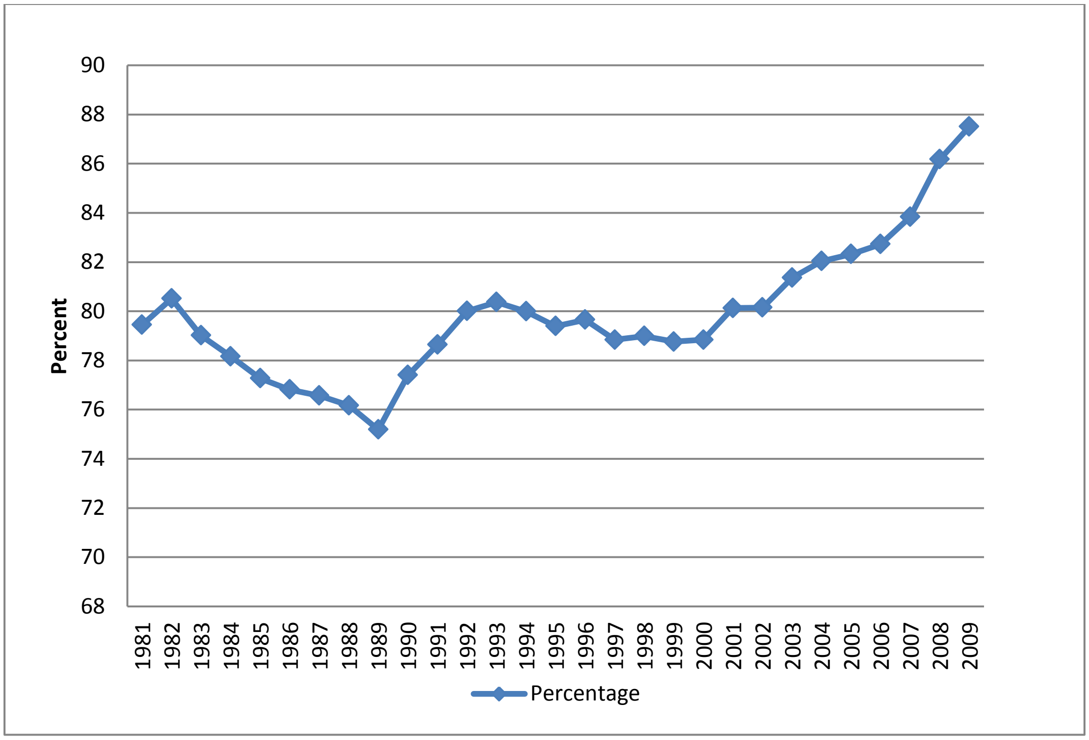


Figure 15.
Per Capita GDPP of Five 'Core' Recipient Provinces as a Percentage of Per Capita GDPP in Ontario



Summarizing this section:

- The provincial governments and economies of the five core Equalization recipient provinces do not appear to be becoming more dependent on Equalization payments over the past 25 to 30 years.
- Rather than stagnating, the per capita GDPP figures suggest that the core recipient provinces' provincial economies are improving and improving relatively.

Costs and Benefits of Equalization

Equalization provides equity benefits but also, though less well known, efficiency benefits. Canadians readily see the equalizing effects of Equalization and, for the most part, approve of Equalization on the basis of fairness. Although fiscal disparities remain, access to a level of provincial public services approximating the national average at reasonable tax rates has strong appeal. Equalization has been characterized as the glue holding the Canadian federation together. The appeal and importance of Equalization was sufficiently strong that the principle was embedded in the Constitution of Canada.

Although not as well recognized, Equalization also provides efficiency benefits. Interest in the efficiency implications has largely been left to economists but the potential gains from Equalization have been a focus of their research. A notable contribution in that area is Flatters and Boadway (1982). The efficiency issue that equalization is seen to address is fiscally induced migration. Fiscally induced migration refers to mobile factors of production (i.e., labour and capital) locating in jurisdictions where they are less productive in order to take advantage of low taxes for the level of services and/or high public services for the taxes levied on those factors. That is, fiscal considerations such as a low tax rate-high service combination in one jurisdiction which others cannot match, can induce efficiency diminishing factor migration. Or more simply, differences in fiscal capacities can distort labour and capital markets and reduce national output. Inefficiency inducing fiscal capacity differences may arise from differences in the characteristics of the tax base or, more obviously in Canada, natural resource ownership. It is an advantage for society to have its factors of production located where they are most productive and not induced by distorting fiscal considerations to locate elsewhere. Well designed equalization programs offer a means to correct or offset distorting features of the fiscal landscape and enhance economic efficiency and national productivity.

Fiscally induced migration is not a trivial concept to employ ivory-tower academics. Certainly, at levels experienced, it is not the main driver of factor location but it exists and its effects on migration are cumulative over time.[19] Wilson calculates the benefits of reduced fiscally induced migration due to changes made in the Equalization program from 1971 to 1977 and compares those to the change in costs (Wilson, 2003).[20] He estimated gains of $1.61 for each dollar of cost.[21] The economic benefits and costs of an equalization program depend upon the design and the fiscal environment in which it operates. Just what the benefit to cost ratio of the current Equalization program might be has not been estimated but Wilson's analysis demonstrates the potential economic benefits. Those economic benefits augment the equity benefits which Canadians already clearly value.

There is another aspect of interprovincial migration that deserves mention. This aspect also has to do with recognizing fully who benefits from Equalization. Clearly, the residents of Equalization recipient provinces benefit from Equalization because those transfers enable better services and/or lower taxes. Residents of other provinces may gain economically as well. Above, we noted the national efficiency improvements resulting from reducing the distorting effects of fiscally induced migration. But, even in the absence of fiscal distortions,

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19 See, for example, Day and Winer (2001).

20 Wilson focused on the 1971-1977 changes because he corrected earlier work published in 1986.

21 Wilson's calculations focused on significant changes in the program. As a result, potential net benefits from the then existing program may have been omitted. Thus, the overall benefit of the Equalization program may have been somewhat larger.

Equalization can provide economic benefits to non-recipient provinces. Interprovincial migration is significant in Canada as Canadians pursue their most attractive opportunities. Normally, we expect net out migration from Equalization recipient provinces. Those migrants carry with them a bundle of human capital – human capital that largely represents the investments of the provincial governments from which they come. Education is the most obvious factor but healthcare is another consideration. To the extent that Equalization improves provincial public services, and so education and healthcare, migrants bring with them more human capital than they would otherwise. That improvement in human capital benefits those provinces with a net inflow of interprovincial migrants. Greater productivity and higher tax revenues are economic benefits.

To conclude:

- Equalization provides both equity and efficiency benefits.
- The equity or fairness benefits are most clearly recognized and are seen as the glue holding our federation together.
- Equalization programs generate efficiency benefits by correcting (or partially correcting) for fiscally induced migration. Fiscally induced migration distorts economic activity and reduces national output. Wilson (2003) estimates the value of efficiency benefits to exceed the costs of Equalization.
- Thus, there is an efficiency gain from Equalization that augments the equity benefits so the total benefits from Equalization exceed those usually recognized.
- Non-recipient provinces also gain from Equalization through the improved human capital of interprovincial migrants.

Other Federal Transfers to the Provinces

Although Equalization attracts considerable attention, it is actually a relatively modest federal transfer program in budget terms. Equalization accounts for only about one-quarter (recently about 24 percent) of federal government cash transfers to the provinces. The major components of the other cash transfers are the Canada Health Transfer (CHT) and the Canada Social Transfer (CST). Together, those two represent about 60 percent of cash transfers. The Offshore Accords, that are unique to the energy developments off Nova Scotia and Newfoundland and Labrador, account for about one percent. The remaining 15 percent or so of federal transfers to the provinces go to various federal programs such as reducing health services waiting times and for labour training.

As the largest, the CHT and the CST warrant attention. The CHT is the larger of the two accounting for about 70 percent of their combined funding. Under current arrangements, the CHT funding is growing by six percent annually to 2013-2014. The CHT is to assist provinces in providing health services supporting the principles of the Canada Health Act. Cash transfers are approximately equal per capita, at $713 per person in 2008-2009, with somewhat lower amounts paid to non-Equalization receiving provinces (since credit is still given for their extra 'tax point' capacity). As of 2014-2015, equal per capita cash payments will be made to all provinces. The CST is to support provincial social programs; in particular, post-secondary education, social assistance and programs for children. The funding for it grows now at 3 percent each year until the next fiscal arrangements are negotiated (to begin in 2014-2015). The CST is paid in equal per capita amounts to all provinces since 2007-2008 when it was $289 per person. Thus, in 2008-09, the per capita CHT and CST together amounted to just over $1,000 per person to Equalization receiving provinces and somewhat smaller amounts to the non-Equalization receiving provinces.

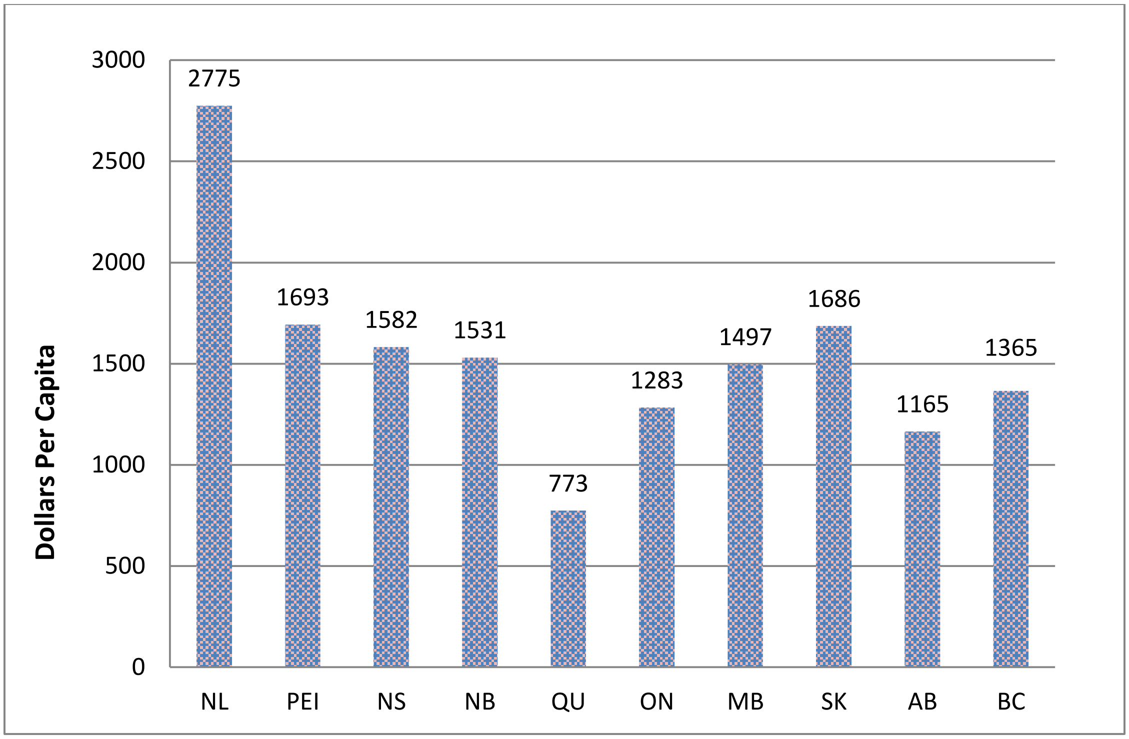
The CHT and CST are products of earlier federal government grants to support health care, post-secondary education and social assistance. Those were initially conditional grants provided in the interests of promoting greater national uniformity of programs and services and of ensuring interprovincial mobility of residents. Although these services are provincial responsibilities, the national interest was deemed to warrant federal support of programs meeting certain expectations. In their evolution, those grants have been rearranged (e.g., combined and separated) and converted into 'block' grants with relatively minimal conditions – that is, to support expenditures in these areas but to have little or no interference with their delivery. The federal government also provides a number of smaller grants. Those transfers are typically conditional or specific purpose grants negotiated with the provinces to accomplish jointly selected objectives. Examples are the gas tax transfer to support cities and communities, grants for agricultural support, and the wait time reduction transfer as part of the 2004 Plan to Strengthen Health Care.

Figure 16, below, shows the per capita amounts of other federal cash grants by province. That is, the amount of non-Equalization grants. There appears to be a fair amount of variation in the per capita amounts but much of that can be explained. For the Equalization receiving provinces (Prince Edward Island, Nova Scotia, New Brunswick, Quebec and Manitoba that year), about $1000 per capita is CHT and CST funding. Quebec's number is misleading because it opts for tax room as Alternative Payments for Standing Programs and the Youth Allowances Recovery. The bulk of the alternative payment is tax room in lieu of cash transfers for the CHT and CST. Hence, Quebec's cash transfer is smaller. The provinces not receiving Equalization typically receive somewhat less. Alberta, the province with the greatest value of tax points, currently gets about $650 (versus about $805) per person under the CHT than Equalization receiving provinces. Similar, but smaller, credits account for the lower amounts in British Columbia and Ontario in 2008-2009. Once the CHT is made equal per capita in 2014-2015, the per capita totals will be much more alike. Non-CHT and CST transfers represent about one-half more on average or about $500 per capita.[22] This component of the transfers varies somewhat among provinces. Certainly some of that is to be expected as some of those specific purpose grants are for special situations; for example, natural emergencies or disasters, or special events (Olympics), etc. To illustrate, looking at the per capita non-Equalization funding over a decade, the per capita amounts are more even. At $2,775, the per capita receipts of Newfoundland and Labrador for 2008-09 are notably larger than those to other provinces. This difference results from payments under the 1985 Atlantic Accord.[23] Those payments ended in 2010-11. Without them, the per capita amount for Newfoundland and Labrador would be $1,675 and be comparable to those in the other provinces.

22 There is some discrepancy in the ratios here as compared to the first section of the paragraph but that seems due to differences in accounting in different tables for the funds represented by Quebec's opting for extra tax points rather than cash transfers.

23 No cash payment has been made to Newfoundland and Labrador under the 2005 Accord since 2004-05 and, since no longer qualifying for Equalization, Newfoundland and Labrador no longer is eligible for payments under the 2005 Accord. Nova Scotia continues to receive payments under the 2005 Accord. I thank Finance Canada for assistance in sorting out the Accord finances.

Figure 16.
Non-Equalization Federal Cash Transfers to the Provinces, 2008-2009 (Dollars Per Capita)



To highlight some major points:

- 'Other' federal cash transfers to the provinces are much (about three times) larger than the Equalization payments.
- The CHT and CST are the major component of those other transfers. Those transfers are (CST) or soon will be (CHT) entirely per capita. Together, they amounted to about $1,000 per capita in 2008-2009 and have increased to about $1,100 this year.
- Various other small programs account for the rest of the federal transfers but, together, provide about $500 per capita. The funding by province may vary from year to year but this tends to even out somewhat over time.
- Quebec and Newfoundland and Labrador are exceptional in their levels of per capita funding. Quebec is low because of opting out, Newfoundland and Labrador is large due to the lingering impacts of the 1985 Atlantic Accord but those payments ended in 2010-11.

Federal Government Finance

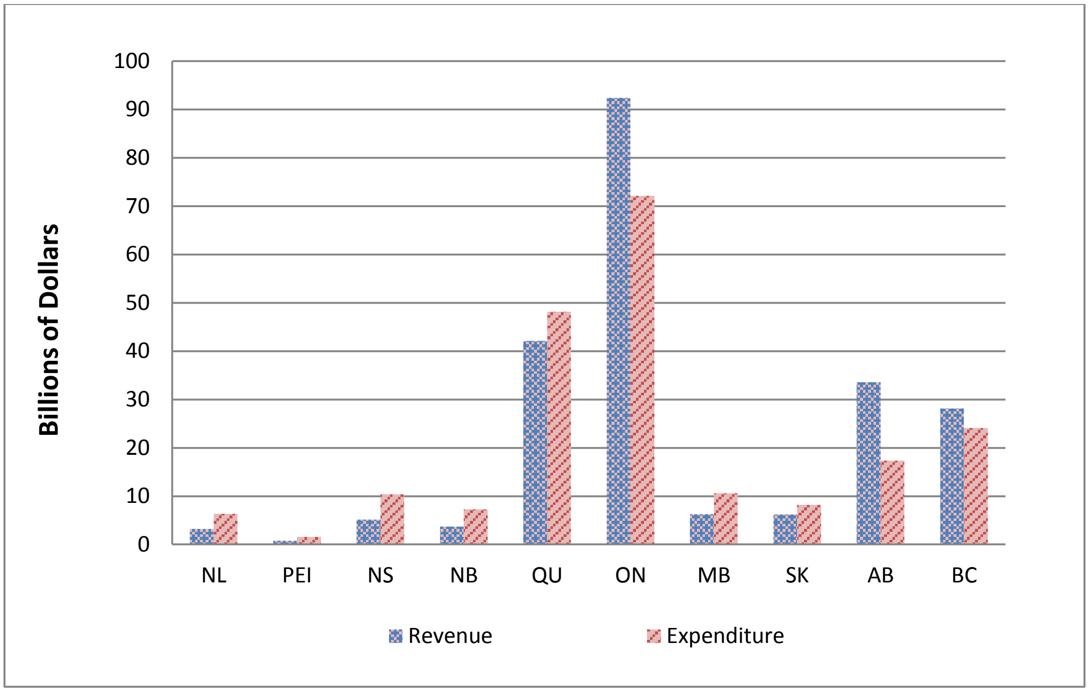
The analysis of government revenues and expenditures in Statistics Canada's Provincial Economic Accounts has caused some to realize that the federal government's revenues and expenditures are not evenly distributed geographically and, in particular, across the provinces. That is, more federal funds are collected in some provinces than are spent in them while, in other provinces, more is spent than is collected. This has sometimes led to laments about an unfairness of federal finance, calls for ending or reducing transfer programs (Equalization and others), and, often implicit or undefined, calls for 'reform'.

Indeed, the federal government's fiscal activities do shuffle funds around the country. Various factors contribute to those movements but, largely, they result from differences in the federal tax bases among provinces (and individuals). That is, the people and businesses in some provinces have, on average, higher incomes and consume more than others and, in turn, pay larger amounts in federal taxes. The objective in this section is to review the nature and magnitude of this fiscal reshuffling and to get a grasp on who is affected, how and why. That is followed in the next section by a more detailed examination. Then, in the subsequent section, assuming some dissatisfaction with the existing arrangements, we explore some alternatives.

Federal Fiscal Reshuffling: An Overview and Snapshot

We begin by looking at the federal government's revenues and expenditures by province. Figure 17, below, shows the aggregate amounts in billions of dollars. To moderate for some of the year to year movements, we look at the average annual amounts over the five year period 2004-2008. 2008 is the latest year for which there is data. Note that most of the federal government's revenues and expenditures come from and are made to Ontario and Quebec. The next largest sources and recipients are Alberta and British Columbia. The federal fiscal impacts on the other provinces are all less than 10.6 billion dollars annually. In terms of fiscal flows, the main feature is that Ontario, Alberta and British Columbia generate more federal revenue than they receive in federal outlays. In the other seven provinces, the federal government spends more than it collects in revenues. To illustrate, Quebec generates 19 percent of the federal revenues but 23 percent of federal expenditures are made there. Although revenues and expenditures do not match, it is still clear that the aggregate federal impacts parallel population sizes.

Figure 17.
Federal Revenue and Expenditure by Province, 2004-2008 Average

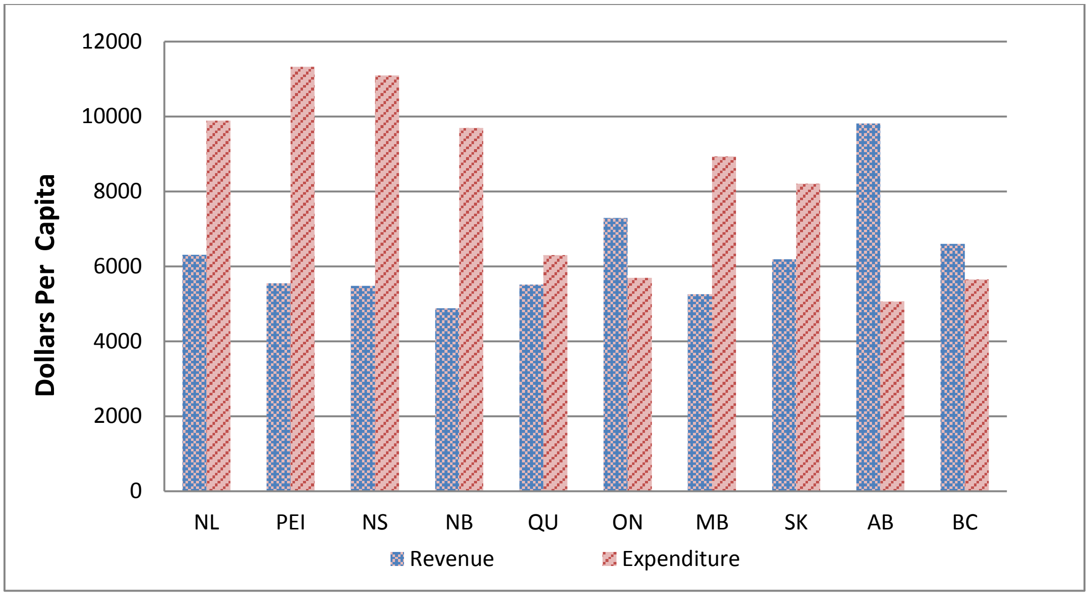


Because the aggregate amounts are quite uneven, looking at the revenues and expenditures in per capita terms provides an alternative perspective. Those amounts are displayed in Figure 18, below. Per capita, Alberta was the largest source of federal revenues followed by Ontario and British Columbia. Newfoundland and Labrador and Saskatchewan closely follow British Columbia. On the expenditure side, Alberta receives the smallest amount per capita followed by British Columbia, Ontario and Quebec (with amounts ranging between $5,060 per person in Alberta and $6,300 in Quebec). Federal expenditures in the other provinces are notably higher ranging from $8,200 to $11,330 per person.[24]

Whichever way one looks at the federal fiscal activities, there is some substantial reshuffling or net redistribution of funds among provinces in the country.

24 Federal expenditures in Newfoundland and Labrador have been adjusted for natural resource revenues associated with offshore developments; that is, royalties rather than transfers.

Figure 18.
Per Capita Federal Government Revenue and Expenditure by Province, 2004-2008 Average



Federal Fiscal Reshuffling: Some Time Paths

It is also useful to look at the impacts on the provinces of the federal government's operations over time. Data are available from 1981 to 2008. To consider the implications for each province is too much to provide here and more than is needed. Rather, we take advantage of some persistent patterns to keep our analysis manageable. Over the 28 years, although the magnitudes vary, seven provinces have consistently been net recipients of federal funds. We group those provinces together for our analysis. On the other hand, Alberta, British Columbia and Ontario have usually, but not always, been the source of more federal revenues than they have been recipients of federal outlays; that is, they have generally been net contributors to the federal coffers. British Columbia and Ontario tend to follow similar paths but Alberta's pattern is more irregular. Consequently, we combine British Columbia and Ontario but keep Alberta separate. Thus, we examine the time paths for the seven net recipient provinces combined, for British Columbia and Ontario together and for Alberta.

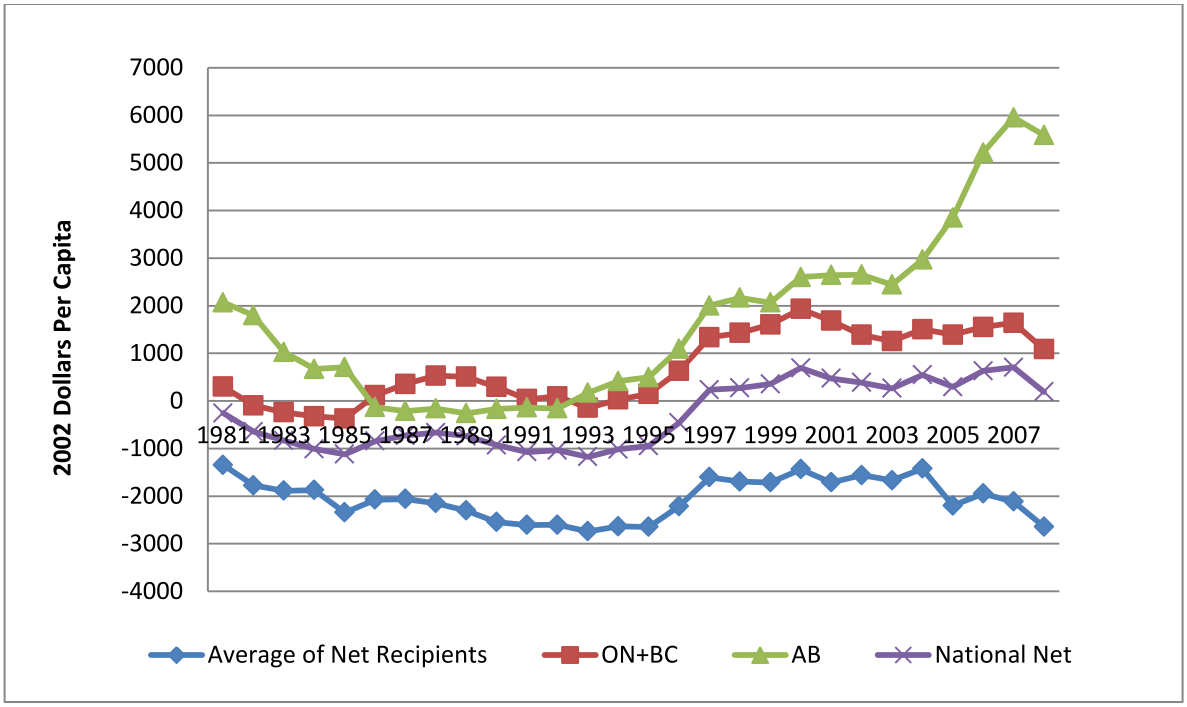
Net Fiscal Impacts

The time paths of the net fiscal impacts of the federal government in the three provincial groupings appear in Figure 19, below. To aid in comparing over time, those are per capita amounts in constant 2002 dollars. The vertical axis shows the net effect of the provinces on the federal treasury. Positive amounts indicate net inflows to the federal government (i.e., a net federal outflow from the provinces) and negative amounts indicate a net reduction in federal funds (i.e., the provinces being net recipients of federal funds). The seven net recipient provinces realized an average net inflow from the federal government of about $3,000 per capita from 1981 until the mid-1990s. Since then, the net receipts have been about $2,000 per person. British Columbia and Ontario hovered around zero for the first 15 years but since then have made net annual contributions of $1,000 to $2,000 per person. The net flow to or from Alberta has fluctuated substantially. In the early 1980s, Albertans were the source of large real dollar per capita net inflows to the federal coffers but then, for the better part of a decade, Alberta too was a low level net recipient. After the mid-1990s, Alberta's net contribution rose in line with those of British Columbia and Ontario. However, that diverged from the those two provinces substantially with the energy boom reaching levels of about $5,000 per capita from 2006 to 2008. Alberta estimates that the level had dropped to $3,785 by 2010.[25] The impact of the federal finances on Alberta or, alternatively, the impact of Alberta on the federal finances, depends greatly upon the status of the energy industry in the province. The pattern explains why Alberta is reported separately.[26]

25 See Alberta Finance and Enterprise, December 8, 2010. The table of calculations from that document is in Appendix C.

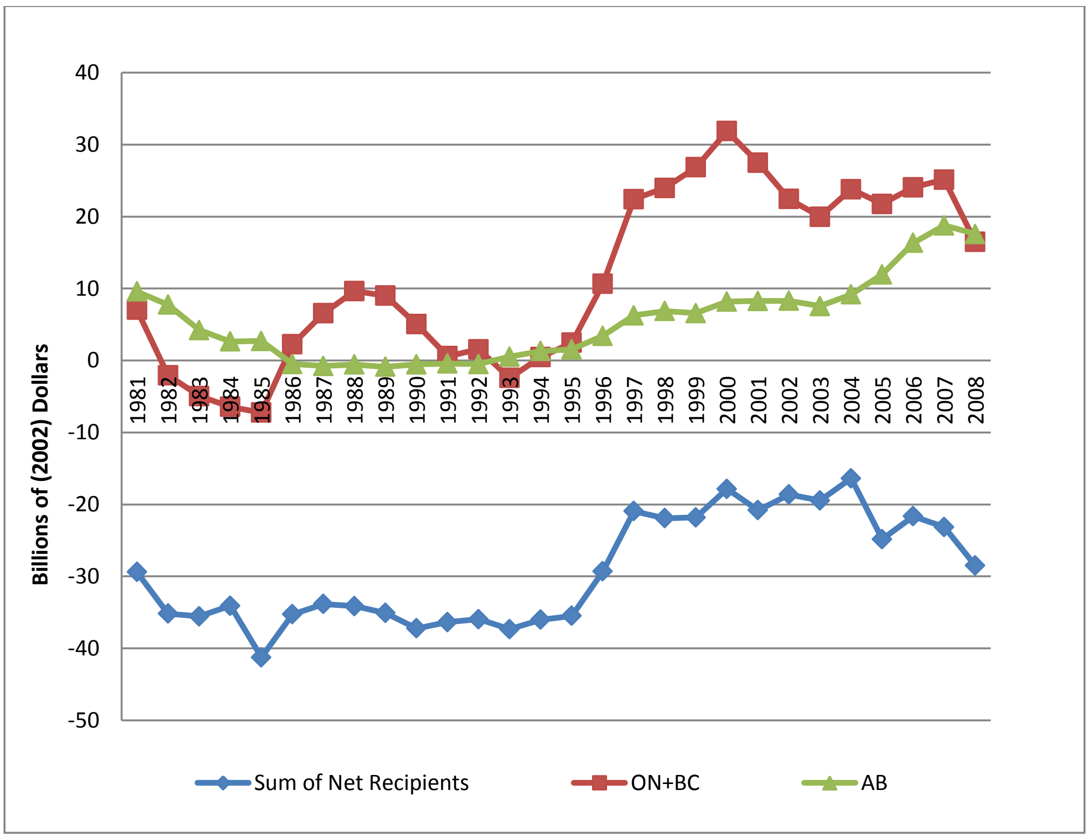
26 How can almost all provinces simultaneously be net recipients or almost net recipients? That can occur when the federal government is running significant deficits as was the case until the mid-1990s. The federal government's overall net fiscal position is reflected in the Net National line in the figure. That line is below zero until 1996 and then positive, indicating a net surplus, from 1997 on.

Figure 19.
Per Capita Net Fiscal Impact on the Federal Treasury, Provincial Groupings, 1981-2009 (2002 Dollars)



Again, the picture is somewhat different when viewed in the aggregate rather than in per capita terms. The aggregate amounts of the net impacts are shown in Figure 20, below. There, the overall importance of the net federal revenues from British Columbia and Ontario are evident. However, in 2008, net inflows from Alberta matched those from British Columbia and Ontario combined. The net inflows from Alberta have been growing relatively since 2004. How the relative net contributions from these provinces change in the future will depend upon the performances of the three provincial economies. The aggregate net flow to the recipient provinces has been much smaller since 1996.

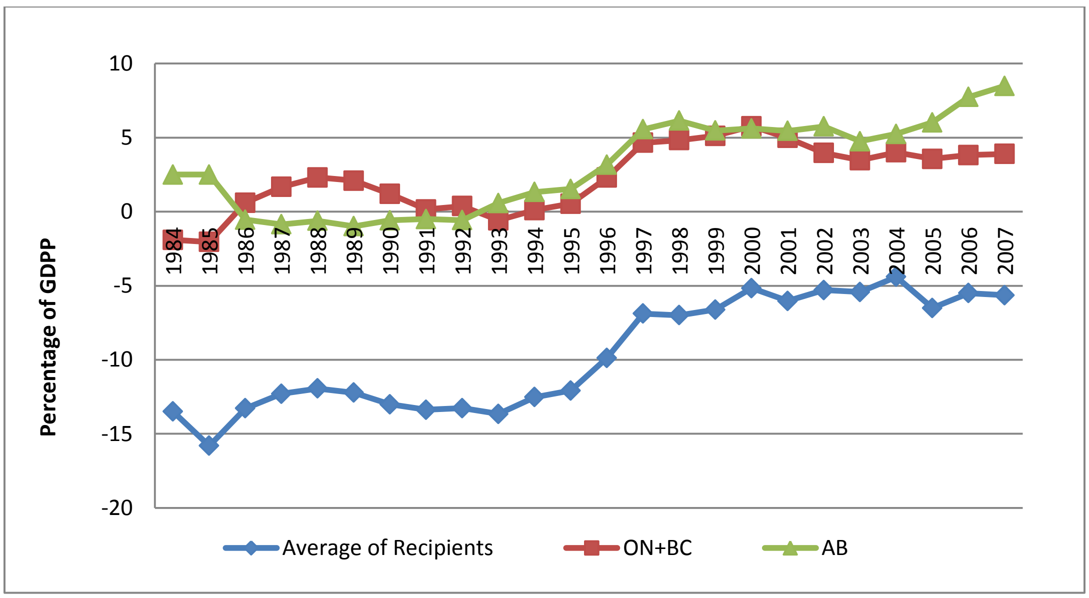
Figure 20.
Aggregate Net Fiscal Impacts on the Federal Treasury, 1981-2008 (Billions of 2002 Dollars)



Federal Government Revenues and Expenditures Relative to GDPP

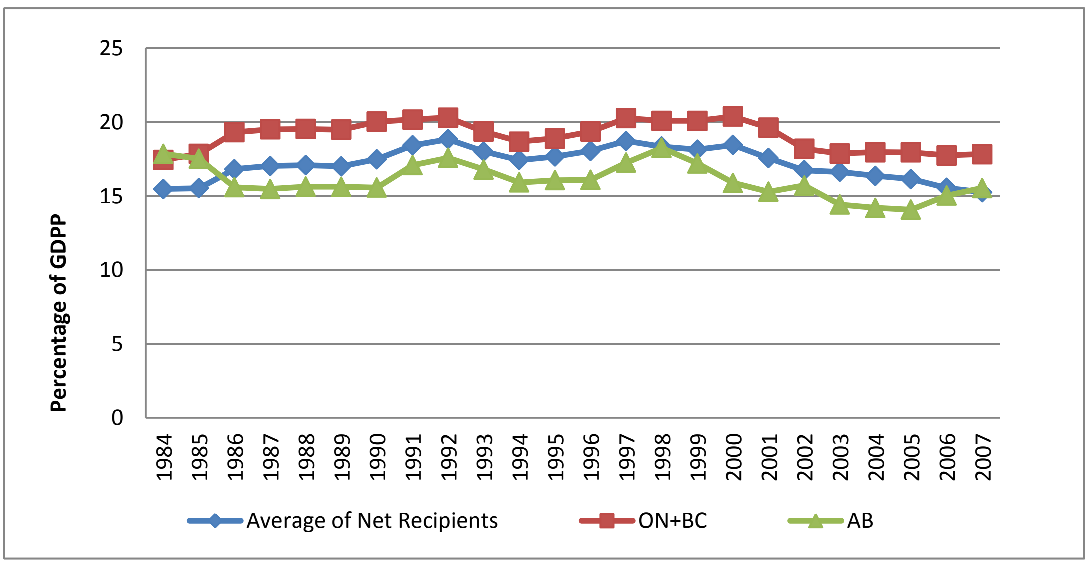
We have looked at the dollar amounts of the net federal fiscal impacts in different ways but the relative magnitudes are also of interest. The net flows relative to GDPPs are reported in Figure 21, below. Focusing on the post-1996 period (after which the federal government was not running deficits), the net inflows to the recipient provinces amount to about five or six percent of GDPP and the net outflow about five percent of the GDPP of Ontario, British Columbia and Alberta. Since 2002, the British Columbia and Ontario percentage has slipped a little while that in Alberta rose to seven to eight percent in 2006 and 2007 (the last of the available GDPP data).

Figure 21.
Net Fiscal Impacts as a Percentage of GDPP, 1984-2007



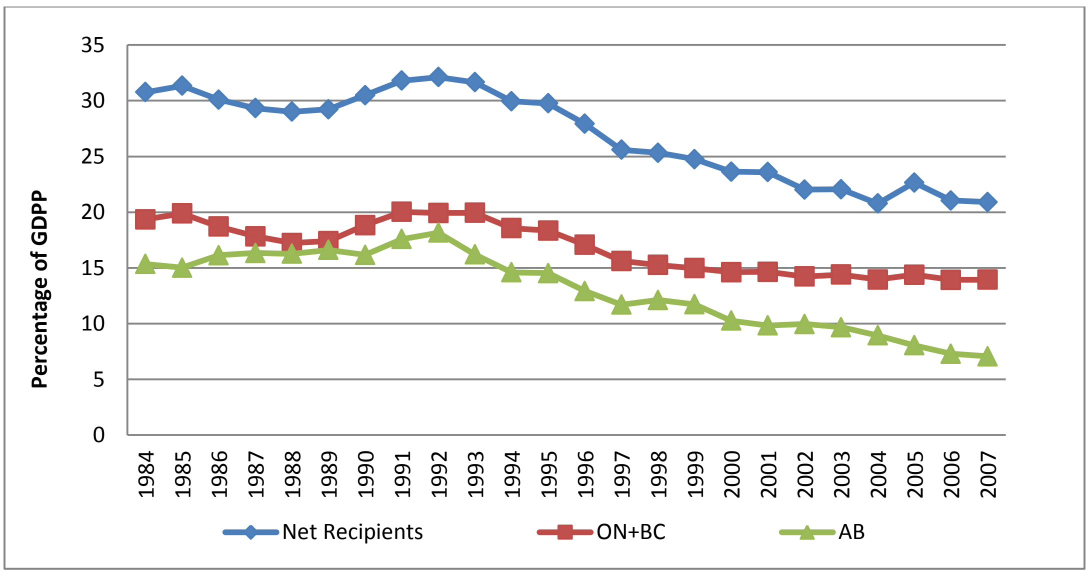
We next turn to look at federal revenues and expenditures separately rather than the net amounts (their differences). Revenues collected by the federal government as a percentage of GDPP appear in Figure 22, below. Because the net recipient provinces have relatively lower incomes and federal tax bases, it is no surprise that federal revenues collected there are a smaller percentage of their GDPP than is the case in British Columbia and Ontario. What is surprising is that, as a percentage of GDPP, federal revenues are the lowest in Alberta. That is, federal government revenue as a percent of provincial output is less in Alberta than in the other net contributing provinces (averaging 16.1 versus 19.1 percent) and, in almost all years, even less than the percentage (an average of 17.2 percent) collected from the net recipient provinces. Note that since 2000, federal revenues have tended to be a somewhat lower percentage of GDPPs than in the previous 15 years; in part reflecting an improved economy.

Figure 22.
Federal Government Revenues as a Percentage of GDPP, 1984-2007



Federal government expenditures in the provinces relative to GDPP appear in Figure 23, below. Federal spending relative to GDPP has been greatest in the net recipient provinces and lower in Ontario, British Columbia and Alberta. That in Alberta has been the lowest and especially so since 2000 and after 2003. In part reflecting the shift from federal deficits to surpluses and, in part, the improvements in the economies, there has been a gradual decline in federal expenditures relative to GDPP in the three cases. From peaks in 1992, the federal share declined from about 32 percent to 21 percent in the recipient provinces, from 20 to 14 percent in British Columbia and Ontario, and from 18 to 7 percent in Alberta.

Figure 23.
Federal Government Expenditures as a Percentage of GDPP, 1984-2007

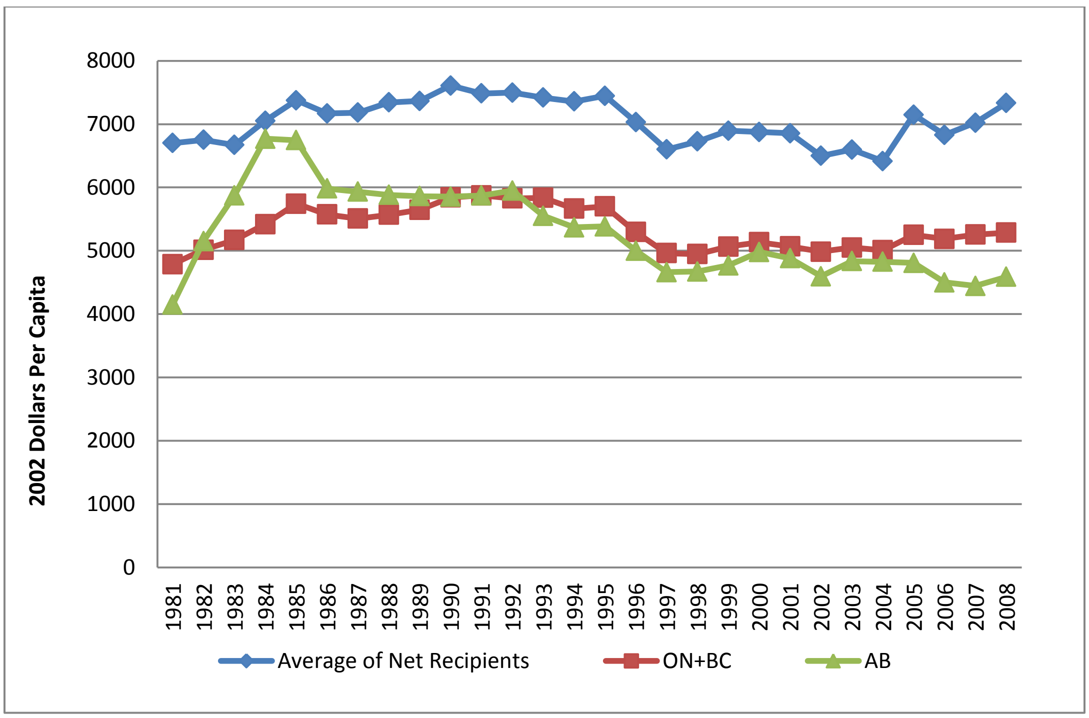


Federal Government Revenues and Expenditures, Real Per Capita Dollars

Expenditures are reported in constant 2002 dollars per capita in Figure 24, below. Those have been about $7,000 per capita in the net recipient provinces and, while showing somewhat more variation, have averaged about $5,300 per capita in the other three provinces. Expenditures per capita fell about 10 percent or more during the fiscal restraint of the late 1990s and tended to stay lower. Per capita expenditure in Alberta has recently been somewhat less than in British Columbia and Ontario, especially after 2005. On the other hand, federal expenditure in Alberta was higher than in those two provinces during most of the 1980s.

Figure 24.

Per Capita Federal Government Expenditures in the Provinces, 1981-2008 (2002 Dollars)



It is interesting to look at federal revenues a little more closely by distinguishing between those collected from individuals and those from business. Federal taxes collected from persons include the personal income taxes, excise and sales taxes (e.g., GST and fuel taxes), and employment insurance premiums.[27] Those taxes are reported in constant 2002 dollar terms per capita in Figure 25, below. Particularly because the personal income tax accounts for two-

27 The employment insurance contributions include both the employee and employer portions.

thirds of this total and is progressive (the average rate increases with income), those residing in higher income provinces (Alberta, British Columbia and Ontario) pay more tax per capita and also a larger portion of their personal income as taxes to the federal government (see Figure 26). Incomes in Alberta have fluctuated more than in most provinces (see Figure 27, below) so the amount per person, and even the percentage, paid as federal taxes has also fluctuated, especially relative to that in British Columbia and Ontario. Note that even though the taxes per capita paid by Albertans have been notably high since 2004, as a percentage of personal income, they were only about 1.0 to 1.5 percentage points greater than in British Columbia and Ontario although incomes have averaged 23 percent more.

Figure 25.
Major Federal Taxes on Persons Per Capita, 1981-2008 (2002 Dollars)

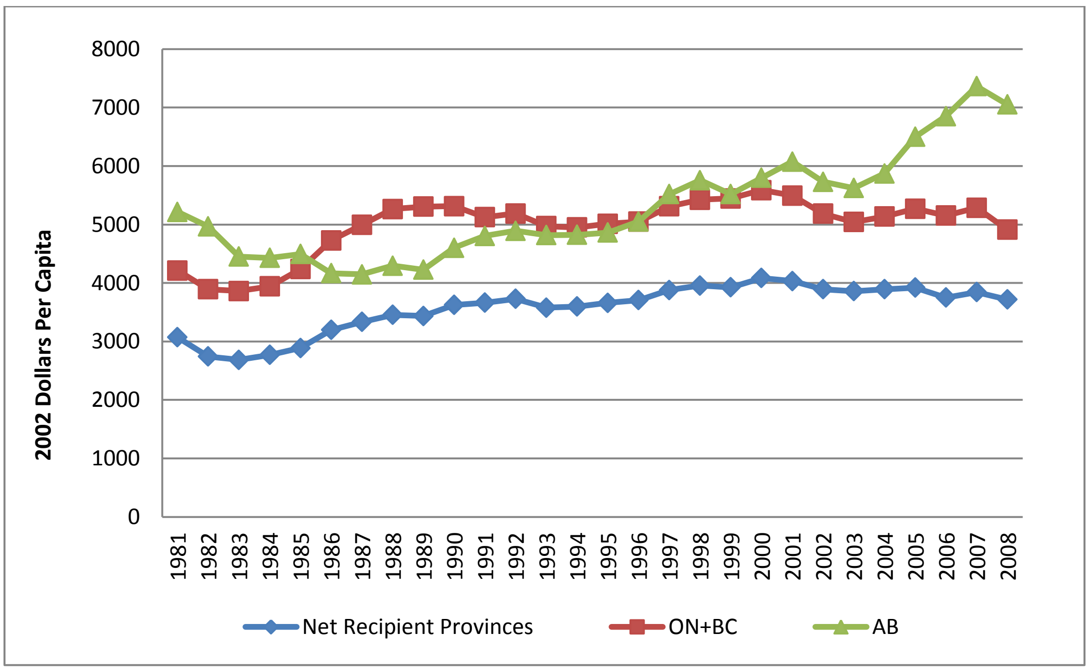


Figure 26.
Major Federal Taxes on Persons as a Percentage of Personal Income, 1981-2008

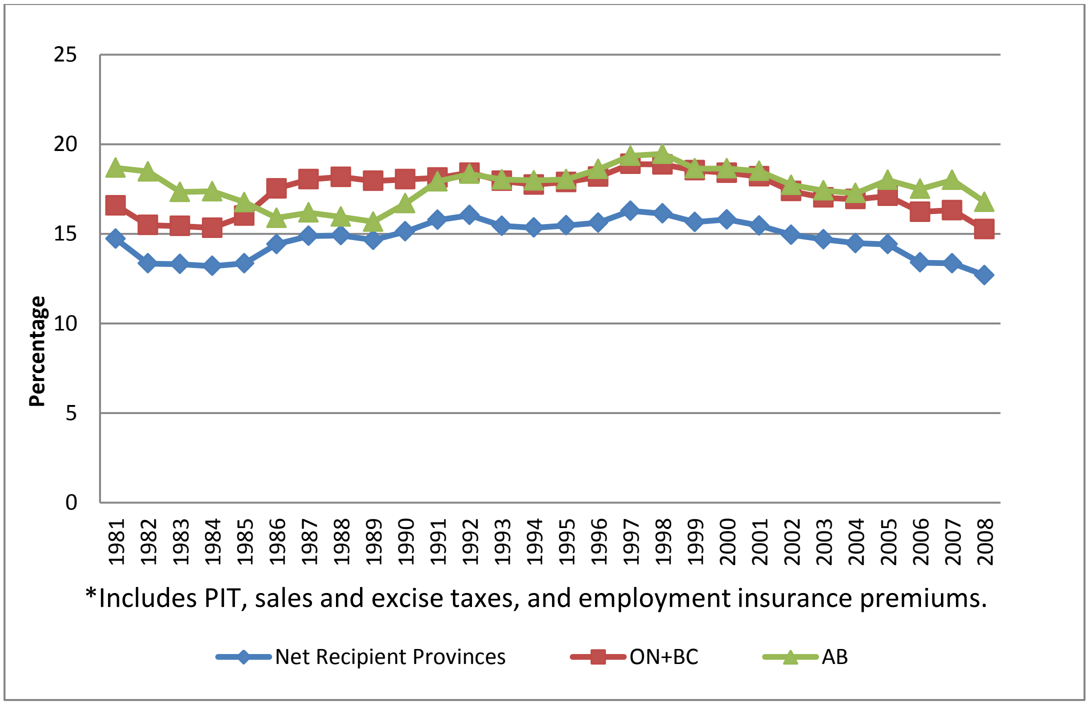
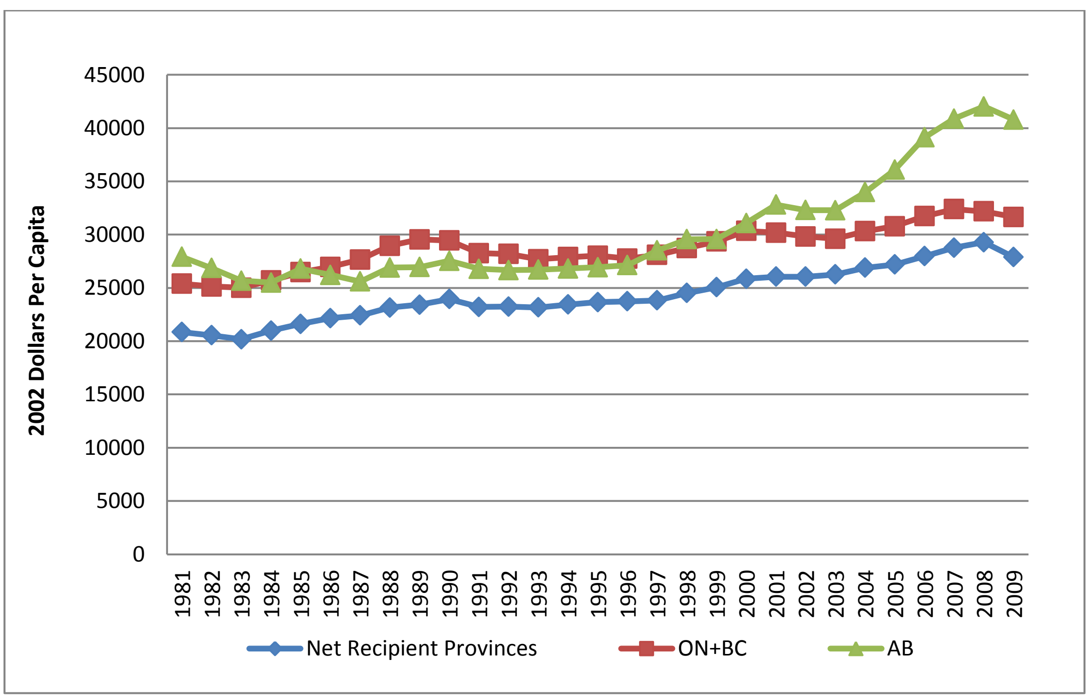


Figure 27.
Personal Income Per Capita, 1981-2009 (2002 Dollars)

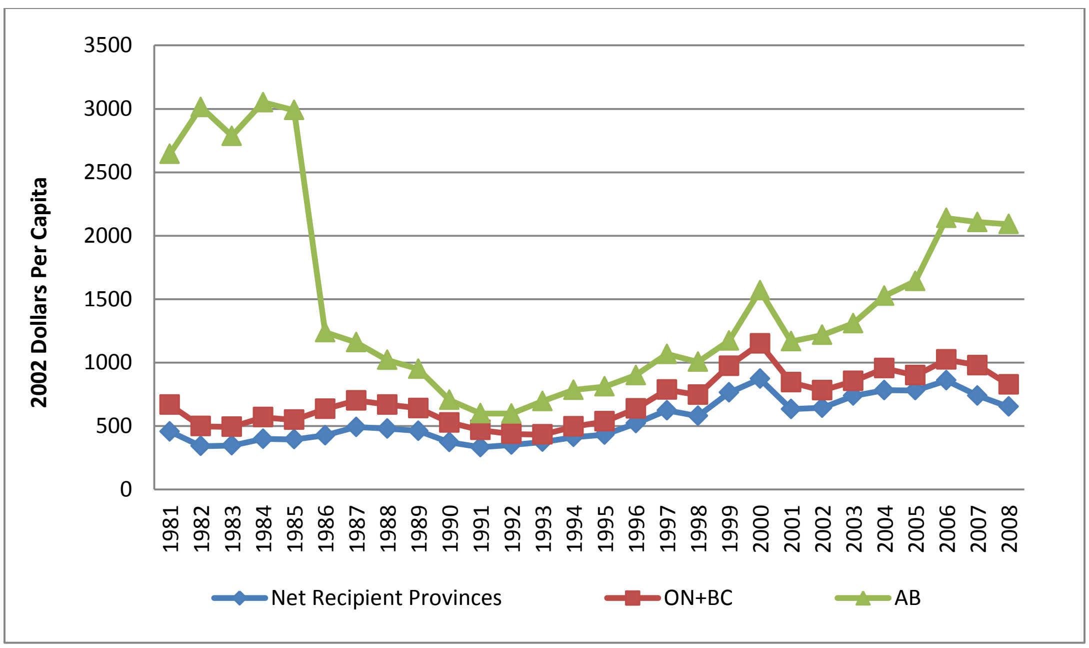


The time path of federal taxes collected from Alberta businesses is striking. Federal business taxes (essentially corporate income taxes) in constant dollars per capita are plotted in Figure 28, below. The patterns in the net recipient provinces and in British Columbia and Ontario are similar with the levels being somewhat higher in the latter two. Recently, those have been in the $700 to $1,000 range. Business taxes collected in Alberta are quite different. They were exceptionally high, about $3,000 per capita in the early 1980s, dropped dramatically in 1986 and then followed a trend much more like those in the other provinces before diverging again after 2000 and reaching about $2,000 per capita in 2006. When Alberta businesses do well, the federal government collects substantial amounts of business taxes from them.

The contribution of taxes on Alberta business to the federal revenues from Alberta fluctuates substantially. The share accounted for by business has ranged from 11 percent to almost 40 percent of total federal business taxes. Even in the 'lean' years, they represented about 15 percent of that total.[28] At the height of the recent energy boom, business taxes were 20 percent (or slightly more) of the total.

Figure 28.

Federal Business Taxes Per Capita, 1981-2008 (2002 Dollars)

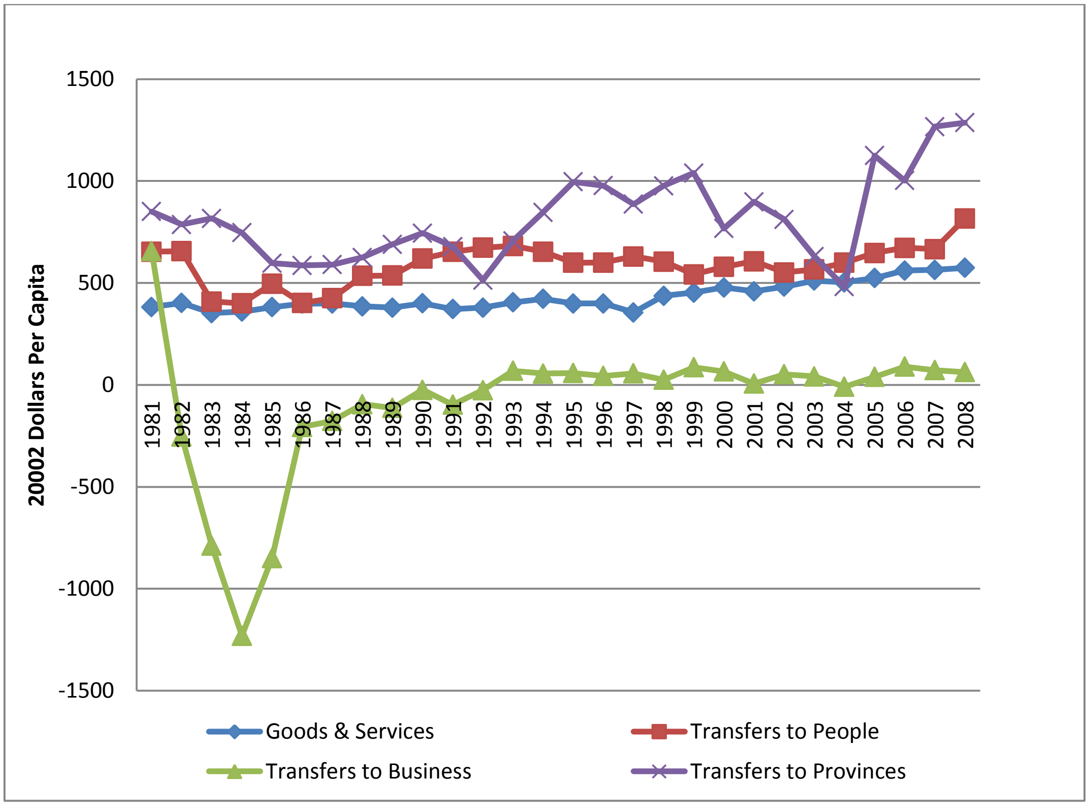


28 Even during the 'lean' years, business taxes per capita were noticeably higher than in the other provinces. At least part of the reason for that is that business investment per capita is much larger in Alberta. During the 1980s, it was about 80 percent greater and that has grown to about 150 percent more per capita.

In the final element of this section, we look in more detail at differences in the federal expenditures among provinces by examining differences in federal expenditures by type. First, in what ways does the federal government spend more in the net recipient provinces than in Alberta? The major expenditure categories are outlays for goods and services, transfers to persons (EI, OAS, GIS but excluding CPP), transfers to business and transfers to the provincial governments.[29] Figure 29, below, depicts the additional expenditures per capita (in 2002 dollars) that the federal government makes by type in the net recipient provinces relative to Alberta. (Note, this means that positive amounts in Figure 29 represent a larger amount spent in the net recipient provinces than in Alberta and negative amounts represent larger expenditures in Alberta.) Expenditures on transfers to provinces represent the largest difference, recently in the order of $1,000 per capita. Differences in transfers to people and expenditures on goods and services are next and rather similar in magnitude but with transfers to people being somewhat larger. With the exception of a few years, differences in the transfers to business have been the smallest of the four categories. However, they were negative from 1982 to 1992 and strikingly large from 1982 to 1986. That is, differences in transfer to business, though normally minor, were large and to Alberta's benefit during the early 1980s.

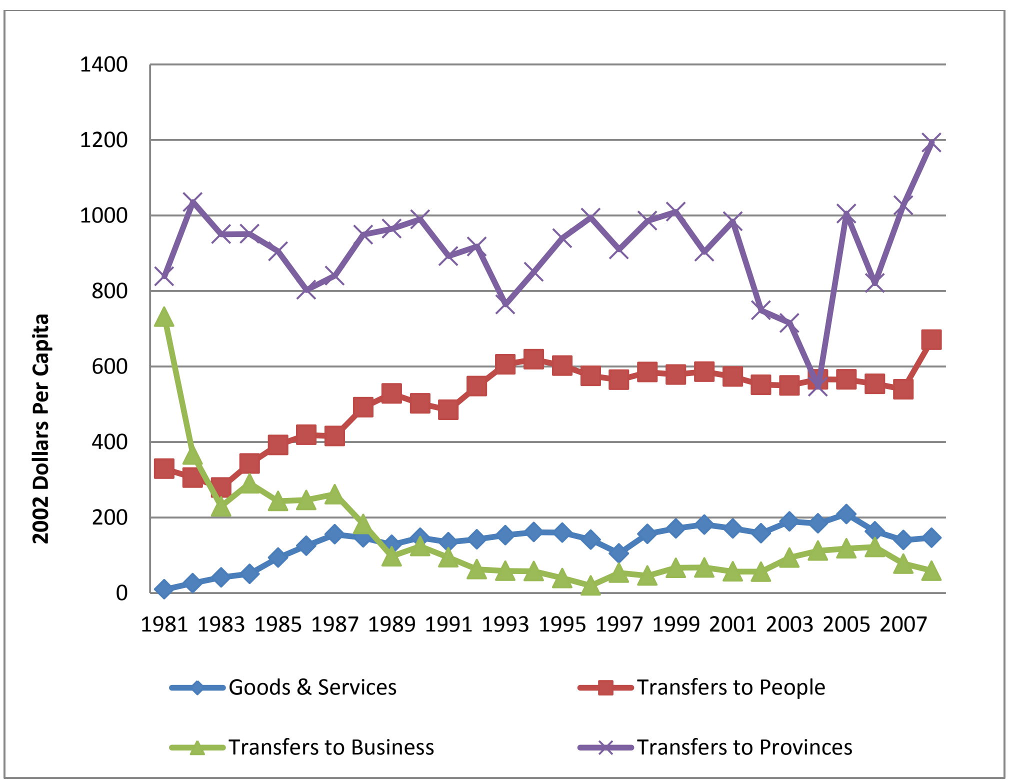
29 Transfers to local governments and interest on the public debt are ignored. Transfers to local governments are very small and interest on the public debt is distributed equally per capita to all provinces so has no effect on the per capita differences.

Figure 29.
Per Capita Amounts that Federal Expenditures are Less in Alberta than in Net Recipient Provinces, 1981-2008 (2002 Dollars)



A reasonable question to ask is "How does the Alberta situation compare with that of British Columbia and Ontario?" Figure 30, below, is the parallel to Figure 29 but for British Columbia and Ontario rather than for Alberta. Differences in scale, due to there being no large differences in transfers to business, are to be noted. However, inspection will reveal that Alberta and British Columbia and Ontario have experienced similar differences in the federal per capita dollar transfers to provinces and to persons. Other than for the 1980s, the differences in federal transfers to business are similar. There is a difference, however, in expenditures on goods and services. The net effect is that the federal government has spent about $250 and, more recently, $300 to $400 (constant dollars) less per capita in Alberta than in British Columbia and Ontario for goods and services. Thus, while Alberta seems to have fared much like British Columbia and Ontario in terms of most federal expenditures, the federal government purchases fewer goods and services in Alberta than in the other provinces but Alberta did benefit from large transfers to business about 25 years ago.

Figure 30.
Per Capita Amounts that Federal Expenditures are Less in Ontario and British Columbia than in Net Recipient Provinces, 1981-2008 (2002 Dollars)



Reviewing federal expenditures by category by province enables some summary observations.[30] Expenditures per capita for goods and services are uniformly lowest in British Columbia, Alberta and Saskatchewan, followed by Quebec, but highest in the three Maritime Provinces. Per capita federal transfers to the provinces are (not surprisingly) smallest to British Columbia, Alberta and Ontario. Quebec and Saskatchewan are the next largest recipients and Atlantic Canada the largest.[31] As for transfers to persons, those are lowest to Alberta and Ontario and the next smallest per capita recipient provinces are British Columbia and Quebec. Federal transfers to business are the most surprising. The annual per capita constant (2002) dollar amounts fluctuate substantially over the years (1981-2008) and across provinces.[32] While remembering that, we note that the largest average annual transfer to business was $705 to firms in Saskatchewan. Those in Prince Edward Island and in Manitoba averaged $370 and $308. The provinces receiving the lowest per capita average transfers to business were British Columbia, Ontario and Quebec ($98, $114 and $120 respectively).

Summary

This section has examined a large amount of material and presented many results. Hence, it is useful to summarize the major points.

- The net impact of the federal government's taxes and expenditures differs among provinces so federal fiscal activity does reshuffle funds geographically. The amounts can be large absolutely and relatively, and can differ across place and time.
- Despite that variability, there are some notable consistencies. Since 1981, seven provinces have consistently been net recipients of federal funds (i.e., federal revenue collections from those provinces have consistently been less than the federal expenditures in them). The other three provinces (British Columbia, Ontario and Alberta) have normally, but not always, been a net source of federal revenues. Unlike British Columbia and Ontario, the net contributions from Alberta have been quite variable moving up and down with the swings in the energy industry.
- If one takes 2002 as a typical year (prior to the latest energy boom), the average net receipt in the net recipient provinces was $1,561 per person and the average net contribution from the three net contributing provinces was $1,591. Federal revenues averaged $5,911 per person nationally.

30 This provincial analysis is not documented here in tables or graphs in a modest effort to conserve space.

31 Effective transfers to Quebec are understated somewhat due to tax point offsets.

32 Recall the large transfers to business in Alberta during the 1980s that was indicated in Figure 29.

- During the past decade or so, the net contributions to and the net receipts from the federal treasury have both averaged about five percent of the GDPP for both the net contributor and net recipient groups of provinces.
- Federal revenues from Alberta are the lowest as a percentage of GDPP, even less than the percentage of the net recipient provinces.
- Looking over the last decade of data, federal expenditures per capita have been about $1,700 (2002 dollars) more in net recipient provinces than in the three net contributor provinces. While per capita expenditures in Alberta have been similar to those in British Columbia and Ontario in many years, they have been somewhat less in the most recent years but they were larger during most of the 1980s.
- During the latter part of the last decade, Albertans have paid higher taxes per capita to the federal government than the average in British Columbia and Ontario. The reason is that Albertans have been earning higher incomes. Over the years 2005 to 2009, personal incomes per capita in Alberta were 25 percent higher than in British Columbia and Ontario and 41 percent higher than those in the seven net recipient provinces. Even so, federal revenues as a percentage of personal incomes were only 1.1 percent higher in Alberta than in British Columbia and Ontario; 17.5 percent versus 16.4 percent.
- Business taxes paid to the federal government by Alberta businesses fluctuate widely and much more so than business taxes in other provinces or personal taxes. Constant (2002) dollar business taxes from Alberta have ranged between $600 and $3000 per capita since 1981. When the energy sector is booming, business taxes in Alberta are high. Otherwise, they are more comparable (though somewhat larger per capita) than in British Columbia and Ontario.
- Federal government expenditures are for goods and services, transfers to people,[33] transfers to business, and transfers to (provincial) governments. Transfers to provinces and to persons and purchases of goods and services are larger per capita in the net recipient provinces than in Alberta, British Columbia and Ontario. In regards to transfers to provinces and transfers to people, the net contributions of Alberta, British Columbia and Ontario are similar. Federal expenditures for goods and services are relatively smaller in Alberta but they are also relatively less in British Columbia and Saskatchewan and even in Quebec.
- Federal transfers to business are generally not large overall but can be substantial to specific provinces at particular times. That is, there is considerable province and time variation. Saskatchewan, Alberta (during

33 In its transfers to persons, the Provincial Economic Accounts include EI, OAS and GIS but omit CPP.

the 1980s) and Manitoba, along with Prince Edward Island, stand out as having received substantial per capita transfers to business. Also, relatively large transfers were made to businesses in Newfoundland and Labrador and in Nova Scotia in 1981 and 1982.

Federal Fiscal Reshuffling: Further Examination

The federal government's financial operations shuffle a considerable amount of funds around the country and do so in a variety of ways. Three provinces – Alberta, British Columbia and Ontario – are generally net contributors to the federal treasury and seven provinces are consistently (for about a generation) net recipients of federal funds. The net transfers that result are a concern to some and prompt calls for change. To assess better the need for and potential scope of change, it is useful to consolidate much of the information presented above. We do so by summarizing information first on the revenue side and then the expenditure side of the account, and then considering that in the context of federal principles. Also, the examination moves, we expect, from the less controversial to the more controversial items.

Federal Revenues

The sources of the federal government's revenues are reported in Table 1, below. The values reported are the averages of the annual current dollar amounts over the 10 year period 1999 to 2008. Using a decade of data avoids the year to year variations and much of cyclic movements while still demonstrating the relevant patterns. Four sources contribute the vast majority of federal revenues – direct taxes on persons (PIT), indirect taxes (GST, excise taxes, customs), social insurance contributions (EI here) and direct taxes on business (CIT). Those generate about 93 percent of the total revenue which amounted to $6,444 per capita nationwide. Taxes on business provide 15 percent of the revenue leaving about 78 percent coming from taxes on people with most of that and almost half of the total funds coming from the PIT. The other 6.7 percent comes from investment income, taxes on non-residents and other sources. Those are small sources and of no interest to us and, so, are ignored.

The geographic sources of federal revenues is what is of prime interest to many; especially the distribution among provinces. To summarize that aspect, we report the dollars per capita by source for three provincial groups. Alberta, British Columbia and Ontario are the three provinces whose taxpayers normally make net financial contributions to the federal coffers. Since the situation of Albertans is of particular interest to the audience and because taxes from Alberta are more volatile than those from British Columbia and Ontario, the per capita revenues from Alberta are reported separately from those from British Columbia and Ontario. The average per capita revenues from the seven net recipient provinces, 'other' provinces here, is the third class. While there are interesting features specific to each province that are lost here, this grouping does provide a relatively simple and representative characterization.

The main point is that the per capita federal revenues originating from the net contributing provinces, Alberta especially, are much greater than those coming from other provinces. The Alberta average of $8,580 is 26 percent larger than the $6,819 from British Columbia and Ontario and 63 percent larger than the $5,255 average per capita revenue from the seven recipient provinces. Clearly, Alberta taxpayers contribute significantly more to the federal government, on a per capita basis, than the average Canadian. While the per capita amounts are revealing, it is also important to keep the aggregate in perspective. Despite the large per capita amounts, because of relative population size, Alberta's federal taxpayers generated, on average during this period, 13.5 percent of total federal revenues.

Table 1.
Federal Government Revenues (10 Year Average, 1999-2008

Source	**Percent**	**Dollars Per Capita**		
		AB	**ON & BC**	**Other**
Direct taxes from persons	47.9	4236	3424	2263
Indirect taxes	21.6	1667	1424	1239
Contributions to social insurance plans (EI but excluding CPP)	8.8	591	577	522
(Total taxes on persons)	*(78.3)*	*(6494)*	*(5425)*	*(4024)*
Direct taxes from business	15.0	1671	960	773
Investment income	3.8	-	-	-
Non-residents	2.5	-	-	-
Other	0.4	-	-	-
Total				
Percent	100.0			
Dollars per capita	$6,444	8580	6819	5255

Note: Average per capita personal incomes were $35,246 in AB, $31,272 in ON & BC, and $27,370 in the other provinces.

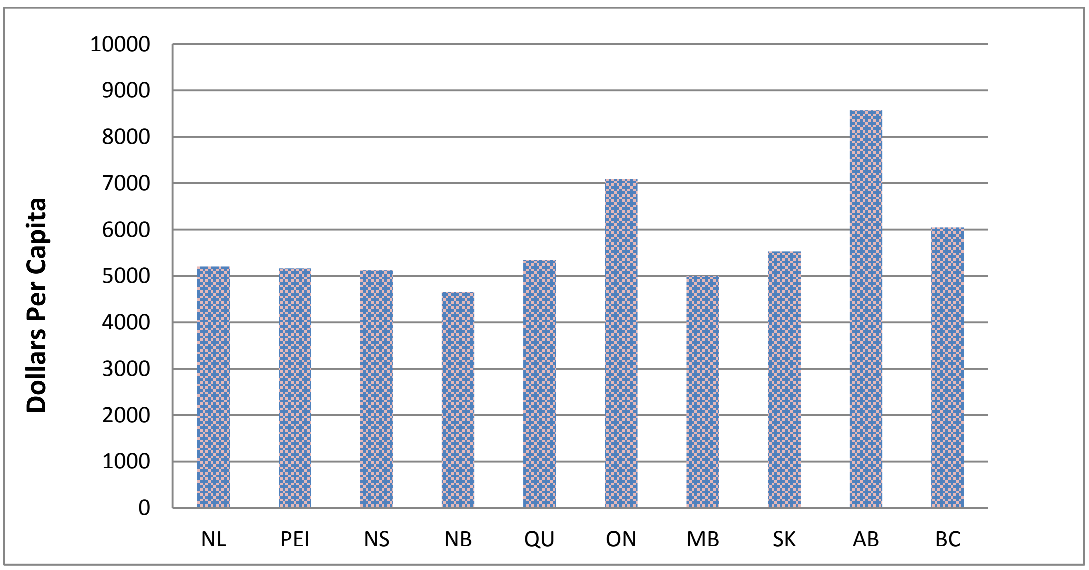
Business taxes account for a considerable portion of the provincial differences. They were almost $900 per capita greater from Alberta than from the net recipient provinces ($1,671 versus $773) and $711 dollars more than those from British Columbia and Ontario. Recall, however, that the amount of business taxes originating in Alberta fluctuates substantially depending upon the activity and profitability of the energy industry in the province. The 1999-2008 decade was a period of unusual business prosperity in Alberta. During the 1990s, federal business taxes from Alberta were about half as large averaging $834 per capita (in 2002 dollars).

When looking at business taxes as here, some caution is advisable. It is easy to slip into thinking that corporate income taxes collected in Alberta are paid by Albertans. That may not be the case or, at least, not entirely the case. Who pays the CIT is debated if not uncertain. The tax is on net income and, although net income is associated with the owners, some of the tax may be shifted to consumers, labour, resource owners (public or private) and suppliers of other inputs. Certainly corporate ownership, especially of major energy companies, is widespread and so are consumers of corporate outputs (energy or otherwise). Thus, although large amounts of federal corporate income taxes are collected from firms situated in Alberta, what portion of those taxes are 'paid' by Albertans is quite another matter and, unfortunately, one about which I cannot offer insight. However, it seems reasonable to believe that a significant, perhaps even a large portion, of the corporate income taxes collected in Alberta are shifted to nonresidents.

Taxes from persons are the major source of federal revenues. The personal income tax, indirect taxes and EI contributions together are about 78 percent of federal revenues. The per capita amount from Albertans was the largest at $6,494 per capita in contrast to $5,425 from those in British Columbia and Ontario and $4,024 in the other provinces. The largest absolute difference appears in the PIT due to the dominance of the PIT as a revenue source and the largest relative differences also occur there due to the PIT's progressive nature. On the other hand, very little difference exits in the per capita contributions to social insurance (which range from $522 to $591 per person) because contributions to EI are limited to maximums at moderate levels of income. Alberta's federal taxpayers do contribute relatively large amounts to the federal treasury but it is because Albertans have high incomes. During the decade analyzed, the average per capita income in Alberta was $35,246 versus $27,370 in the net recipient provinces and $31,272 in British Columbia and Ontario. Such a large Alberta advantage is not always the case. During the 1990s, per capita incomes in Alberta were the same as those in British Columbia and Ontario but, also, those incomes were almost 50 percent higher than the average in the other provinces.

The federal government's tax collections are not the same in per capita terms across the country. But then, neither are incomes the same. Incomes and tax revenues differ among provinces and over time. Alberta has recently enjoyed a period of notable prosperity, even relative to other prosperous regions, and so its taxpayers have contributed relatively more to the federal revenues. What is the same across the country are the federal government's tax rates. Comparable households and comparable businesses in different provinces pay the same federal taxes. When a disproportionate share of high income households and/or businesses reside in a particular province, that 'province' pays (or rather the federal taxpayers in that province pay) a disproportionate share of federal taxes. Yet, each federal tax unit is being treated the same regardless of location.[34] The differences that have attracted attention arise because the well off and the less well off are not uniformly distributed geographically. I suspect that Canadians, including high taxpayers in Alberta, regard the nationally uniform treatment of like taxpayers (the equal treatment of equal people) as fair and equitable and that few policy makers would want to argue otherwise. Thus, although taxes paid per capita differ among provinces, it seems safe to argue that the burdens are considered fair and the distribution appropriate. If so, we are prepared to accept a pattern of federal revenues across provinces that, from 1999 to 2008, looked like that in Figure 31, below. That is, where the per capita revenues are as low as $4,654 in New Brunswick to as high as $8,574 in Alberta.

Figure 31.
Average Federal Revenue Per Capita by Province of Origin (1999-2008)



34 Even then, and in contrast to the aggregate result from the uniform treatment of taxpayers, an anomaly appears in that the burden of federal taxes as a share of GDPP has been lowest in Alberta at 15.3 percent versus 18.6 in British Columbia and Ontario and 17.8 in the other provinces.

To summarize the main points:

- From 1999 to 2008, the major sources of federal revenues were corporate income taxes, 15.0%, taxes on persons (PIT, sales and excise, EI), 78.3 percent, and other taxes, 6.7 percent. Almost half, 47.9 percent, of federal revenues came from the PIT.
- While federal revenues during this period averaged $6,444 per capita, the per capita amounts paid by federal taxpayers differed considerably across provinces – average amounts were $8,580 from taxpayers in Alberta, $6,819 from those in British Columbia and Ontario, and $5,255 in the other provinces.
- Interprovincial differences arise primarily from large differences in CIT and PIT. Those differences are a result of large differences in per capita corporate profits and personal incomes. During 1999 to 2008, per capita corporate net incomes in Alberta were more than twice those in the seven 'other' provinces and per capita personal incomes were 29 percent larger.
- Because of the widespread (national and international) ownership of many Alberta corporations and the shifting of corporate income taxes among inputs and consumers, it is inappropriate to attribute all the CIT collected from Alberta firms as being paid by Albertans (and likewise CIT paid by firms in other provinces).
- Federal tax rates are applied uniformly to like taxpayers across Canada. That seems fair. The unevenness in the per capita taxes paid by federal taxpayers residing in different provinces is due to the well off and the less well off not being uniformly distributed geographically across the country.

Federal Expenditures

Now consider the expenditure side of the ledger. Table 2, below, outlines federal expenditures (again averaging over the 1999-2008 period). Transfers to persons accounts for 33.0 percent of federal outlays, transfers to business for 2.0 percent, the purchase of goods and services for 22.2 percent, transfers to provinces 21.9 percent, other outlays for 2.0 percent and interest on federal government debt for 18.9 percent of the $6,188 expenditure per person.[35] Note that payments of interest on the public debt amount to $1,142 per capita and that, in the public accounts, those payments are (by assumption) distributed equally per capita across all provinces. Because a) the public accounts allocate interest equally per capita across the provinces so, when interest focuses on per capita differences across provinces, it has no impact on the differences, and b) its

35 Note that there is a difference of $256 between per capita revenues ($6,444) and expenditures ($6,188). That is a result of the federal government having budget surpluses during this period.

declining trend distorts the shares of the other components which have, otherwise, been quite stable, interest on the debt is excluded from attention here. So, focusing on expenditures excluding interest, transfers to persons accounts for 40.7 percent of federal outlays, transfers to business for 2.5 percent, the purchase of goods and services for 27.4 percent, transfers to provinces 26.9 percent and other outlays for 2.5 percent of the $5046 expenditure per person.

In contrast to the distribution of taxes, expenditures are concentrated in the net recipient provinces. Of the outlays we consider, those in the net recipient provinces averaged $6,054 per capita while those in British Columbia and Ontario averaged $4,173 and, in Alberta, $3,738. That is, federal expenditures made in the net contributor provinces are 69 percent and 62 percent respectively of those in the other provinces. In the hope of getting a better grasp of the rationale, if any, that underlies this pattern, we examine expenditures more closely.

Table 2.
Federal Expenditures (10 Year Average, 1999-2008)

Purpose	Percent of Total	Percent of Total Excluding Interest	Percent of Component	Dollars Per Capita		
				AB	BC & ON	Others
Transfers to persons	33.0	40.7		1,746	1,803	2,397
Old Age Security			42.9			
Employment Insurance			18.9			
To families			13.6			
To Aboriginals			8.2			
GST credit			5.1			
Veterans			2.7			
Scholarships			1.1			
Miscellaneous			7.4			
Transfers to Business	2.0	2.5		122	88	175
Agricultural subsidies			37.9			
Other			62.1			
Purchase of Goods and Services	22.2	27.4	100.0	957	1,311	1,489
Transfers to Provinces (governments)	21.9	26.9		912	954	1,884
Equalization Program			26.1	*0*	*15*	*888*
Transfers for health, education and social aid			48.4			
Other			25.5			
Other	2.0	2.5				
Total (excluding interest on federal debt)						
Percent		100.0				
Dollars per capita		$5,046		3,738	4,173	6,054
Interest on Federal Debt	18.9			1,142	1,142	1,142
Total (including interest on federal debt)						
Percent	100.0					
Dollars per capita	$6,188			4,880	5,315	7,196

Note: Interest on the public debt is excluded primarily because, as a percent of expenditure, it has changed substantially between 1999 and 2008 (from 26 to 12.7 percent and so affects the other percentages which are relatively stable. During the 10 year period, interest averaged $1,142 per capita and total expenditure per capita including interest was $6,188.

Transfers to Persons

Transfers to persons represent about 40 percent of the expenditures considered. Transfers to Albertans averaged $1,746 per capita which is similar to the $1,803 made to residents of British Columbia and Ontario but is only 73 percent of the $2,397 to residents in other provinces. There are numerous programs and they are targeted at specific groups. Particularly important in terms of expenditures are Old Age Security, Employment Insurance and transfers to families (e.g., Child Tax Benefit/Credit, Universal Child Care Benefit) which account for three-quarters of the transfers to persons and with Old Age Security being almost 43 percent of the total. We suspect that most people are comfortable with the belief that the funds go to the targeted groups. That is, for example, that OAS goes to the elderly, EI to the unemployed, veterans' benefits to veterans, GST credits to low income families and individuals, etc. Assuming effective delivery, the targeted populations receive the intended benefits and the provincial distribution of those benefits depends upon where the beneficiaries live. That is, the distribution to individuals is appropriate and any interprovincial variations are due only to residential patterns and so are, or should be, uncontroversial.[36]

Transfers to Business

Federal transfers to businesses are relatively small. They are 2.5 percent of our restricted federal expenditures and, nationally, averaged $124 per capita between 1999 and 2008. The average per capita amounts differed somewhat with British Columbia and Ontario on the low end averaging $88 per capita and with an average of $175 in the net recipient provinces. Alberta came in at $122. But, as noted, transfers to business fluctuate greatly over time and among provinces. Even so, from 1981 to 2008, Saskatchewan (businesses) received an average of $705 per capita (in 2002 dollars), approximately twice the per capita amounts going to Prince Edward Island and Manitoba, which were the next largest recipients. British Columbia, Ontario and Quebec (at $98, $114 and $120 respectively) were the provinces with the lowest average transfers to business. Alberta was a major beneficiary during the 1980s when they averaged $520 per capita (again in 2002 dollars).

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36 If there is any controversy, it may be over EI. Although EI is 18.9 percent of transfers to persons, it accounts for about 40 percent of the differences in the per capita transfers between Alberta and the 'other' provinces – $265 versus $522 in EI per capita in the context of $1746 versus $2,397. However, the average unemployment rates were 4.5 percent in Alberta and 9.1 percent in the 'other' provinces (and 6.6 percent in British Columbia and Ontario). So, while Albertans received about half the EI payments per capita as residents of the 'other' provinces, Alberta experienced about half the unemployment rate. Hence, the EI payments seem to have gone where required. While there are questions and legitimate debates about the design of the EI program, and possibly about other programs, the consequences of adjustments or reforms can be expected to be relatively minor from the perspective here.

Our data considers cash transfers but tax expenditures are another form of transfer. A tax expenditure is the money value of a tax concession. In the case of the corporate income tax, well known tax concessions have been the tax rate reduction provided manufacturing and processing industries and various concessions available to the non-renewable natural resource sector. Those too should be considered. The importance of the oil and gas sector in Alberta suggests that Alberta firms could be significant beneficiaries of the concessions to the non-renewable resource industry and I attempt a back-of-the-envelope estimate of the magnitude.[37] From that, I estimate that the tax expenditure transfer benefit to the resource sector amounted to $138 per capita. That amount is large relative the per capita cash transfers to business (e.g., an average of $122 per capita in Alberta). However, it represents only about 8.3 percent of per capita CIT revenue originating from Alberta firms and 1.6 percent of total federal revenue from taxpayers in Alberta. Similar sorts of calculation could be done for the tax preferences benefiting the resource sectors in other provinces and for those benefiting manufacturing but I have not undertaken them and I suspect that the estimates are not large in relative terms.

Even if one combined cash transfers and tax expenditures to business, one is left again with the question of who benefits and where do they reside. The benefits may initially accrue to owners but market forces are expected to see those shifted, like business taxes, among business owners, consumers, labour and landholders. Hence, any allocation of the numbers to provinces as here is questionable. Certainly many stockowners and consumers do not live in Alberta.

The other factor to consider is the rationale for the federal transfers to business. That is, the outlays are clear but what are the benefits. Why were the expenditures made and who benefited? Presumably, the federal government saw some national benefit. Some of these transfers supported industrial development (e.g., the early developments of the oil sands and heavy oil in the west and offshore development on the Atlantic coast), others went towards compensation for natural disasters and economic downturns, etc. One would like to think that these programs passed some social benefit-cost test and represented the effective

37 In Budget 2000, the federal government began a program to improve and reduce corporate income taxes. An important part of that was to make the tax more neutral across industries. A federal rate reduction from 28 to 21 percent over a five year period was initiated but the resource and manufacturing industries were excluded. The resource sector was brought into a parallel tax rate reduction program in Budget 2003 with the introduction of various other reforms to the determination of taxable income in that sector. I take the neutrality improving changes as being worth a seven percentage point reduction in tax rate from 28 to 21 percent, thereby bringing the resource sector on the same schedule as other corporations. From that, I assume that paying 21 percent without the special concessions is equivalent to paying 28 percent with them or that the special concessions had a value of one-third of the CIT paid. I also assume that the relevant oil and gas sector paid about one-quarter of the total CIT paid in Alberta. Better informed people, or more effort on my part, could generate better estimates but these will be illustrative.

and best use of the resources directed to them. To determine whether these transfer programs were indeed cost effective would require individual program evaluations. Simply looking at relative amounts spent in various provinces is not necessarily insightful.

Purchases of Goods and Services

Federal government purchases of goods and services comprise just over one-quarter of federal expenditures. Those too are not evenly allocated across the country. For example, the per capita amounts in the net recipient provinces is, at $1,489, about 55 percent larger than the $957 spent in Alberta. Also, the $1,311 spent in British Columbia and Ontario that is reported in Table 2 is hardly representative of either province. Federal spending on goods and services in British Columbia is about the same as that in Alberta while that in Ontario averaged $1,420. Per capita expenditures on goods and services are lowest (and very similar) in British Columbia, Alberta and Saskatchewan. On the other hand, they are highest, averaging $2,789 per capita, in the three Maritime Provinces. Perhaps there are fewer commodities and services available, or available at competitive prices, in Western Canada. Or, perhaps, there is a greater need for federal services in the Maritimes. We should probably not be concerned about these interprovincial differences if the federal government is getting the best value for the dollar as allocated and it is delivering its services nationally at low cost. Even if some purchases are directed to or located in the economically less robust provinces, if that involves no additional cost, it is hardly a concern. Providing services are efficient, many would be indifferent about the location of a tax processing center (Winnipeg) or an office managing public works purchases (Charlottetown). But, if the allocations involve higher costs, the choices are more debatable. To assess the economic soundness of the location of federal purchases would require detailed information. Hence, one cannot really condone or condemn the patterns observed.

Transfers to Provincial Governments

Federal transfers to the provincial governments are the final category for analysis. These expenditures are relatively large, 26.9 percent of federal expenditures in the period 1999 to 2008, and may be one of the more controversial elements. Per capita expenditures in the net recipient provinces averaged about twice those in the net contributor provinces -- $1,884 as opposed to $954 in British Columbia and Ontario and $912 in Alberta. The differences here are largely attributable to the Equalization Program. The net recipient provinces have consistently or commonly been (since the data we analyze begins in 1981) recipients of Equalization payments from the federal government. On average, they received (from 1999 to 2008) $888 per capita. Up to 2008, Ontario had not yet received Equalization but British Columbia had received small amounts in seven years. Those small amounts result in the $15 per capita in the British Columbia and Ontario column of Table 2 (which arises from payments averaging $60 per capita in British Columbia during the decade). Alberta has not received Equalization since the 1960s.

Equalization has been with us since the 1950s. It became so much a part of federal-provincial fiscal relations that it was embedded in the Constitution. The objective of Equalization is to enable provincial governments, regardless of their own revenue capacities, to provide reasonably comparable public services at reasonably comparable tax rates. As noted, Equalization appears to have been effective in provinces achieving comparable public services (as measured by per capita expenditures) but somewhat less successful in them realizing comparable tax rates (in that the resource rich provinces enjoy notably lower tax rates). Still, Equalization is widely regarded as successful in meeting the equity objectives. In addition, though largely unrecognized, it improves national productivity by moderating the inefficiencies of fiscally induced migration. Although Equalization has been criticized, and we can consider the implications of some variations, Equalization is likely a program that Canadians would wish to continue in one form or another. During the decade examined, Equalization outlays represented about 5.7 percent of federal expenditures.

Almost three-quarters of transfers to provinces are for non-Equalization purposes and almost half are directed towards assisting the provision of health care, post-secondary education and social assistance. The transfers directed to those three areas are progressively moving towards becoming more equal per capita among the provinces and, in the next round of the federal-provincial fiscal arrangements, the CHT and CST (the largest component) are scheduled to be equal. These transfers reflect a federal or national interest in the supported programs of the provincial governments. While there is debate about how large that federal involvement should be, those transfers do not contribute notably to uneven federal expenditures among the provinces.

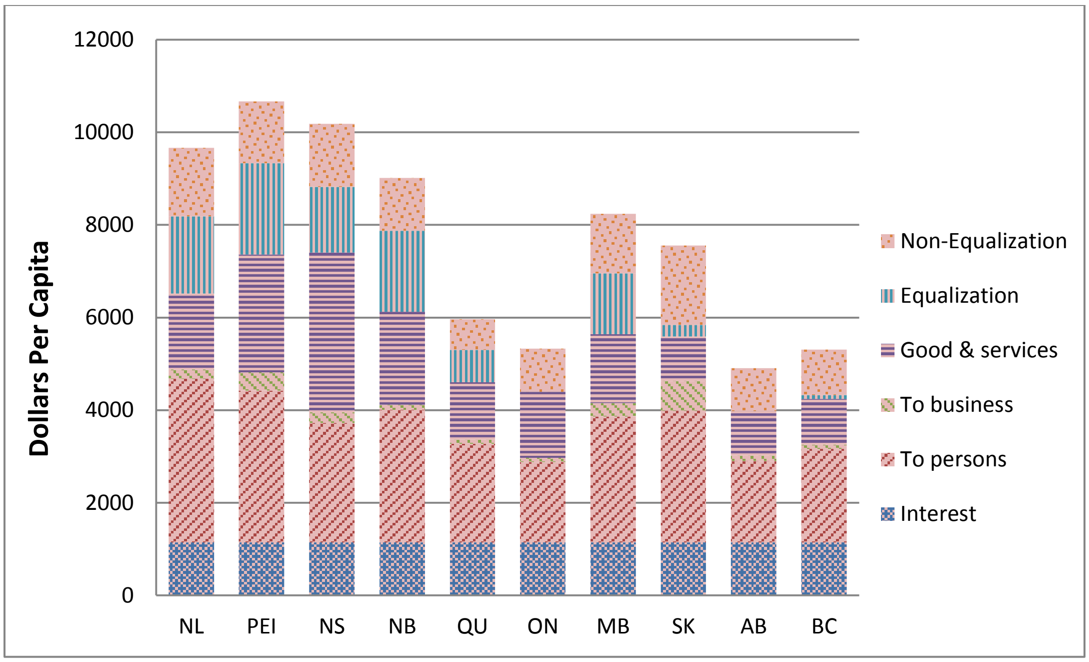
A variety of smaller specific purpose grants comprise the remainder of the non-equalization grants (e.g., economic development, official languages). (See Other Federal Transfers.) The distribution of those is less even. That is recognized when one realizes that the numbers for transfers to provinces in Table 2 suggest that the non-equalization transfers are more equal per capita than is actually the case. From 1999 to 2008, Alberta received cash transfers of $912 per capita and the net recipient provinces averaged $996. However, because Quebec accepts provincial income tax room in place of certain cash transfers, the cash transfers are smaller than the effective transfers. If one excludes Quebec, the non-equalization cash transfers to the other six net recipient provinces are $1,397 per capita rather than $996. So, the differences in the non-equalization transfers between the Alberta, British Columbia and Ontario and those six provinces are in the order of $450. Only an examination of purposes and performance of the numerous (non CHT and CST) grants can provide insight as to the rationale for such differences.

Summary

The pattern of federal expenditures that emerges is shown in Figure 32, below. Expenditures per capita (including interest on the federal debt so as to be comparable with federal revenues) ranged from $4,902 in Alberta to $10,662 in Prince Edward Island. Transfers to persons, expenditures on goods and services and Equalization are the major sources of the differences among provinces.

Figure 32.

Per Capita Federal Expenditure in the Provinces by Type, 1999-2008



To highlight the main points:

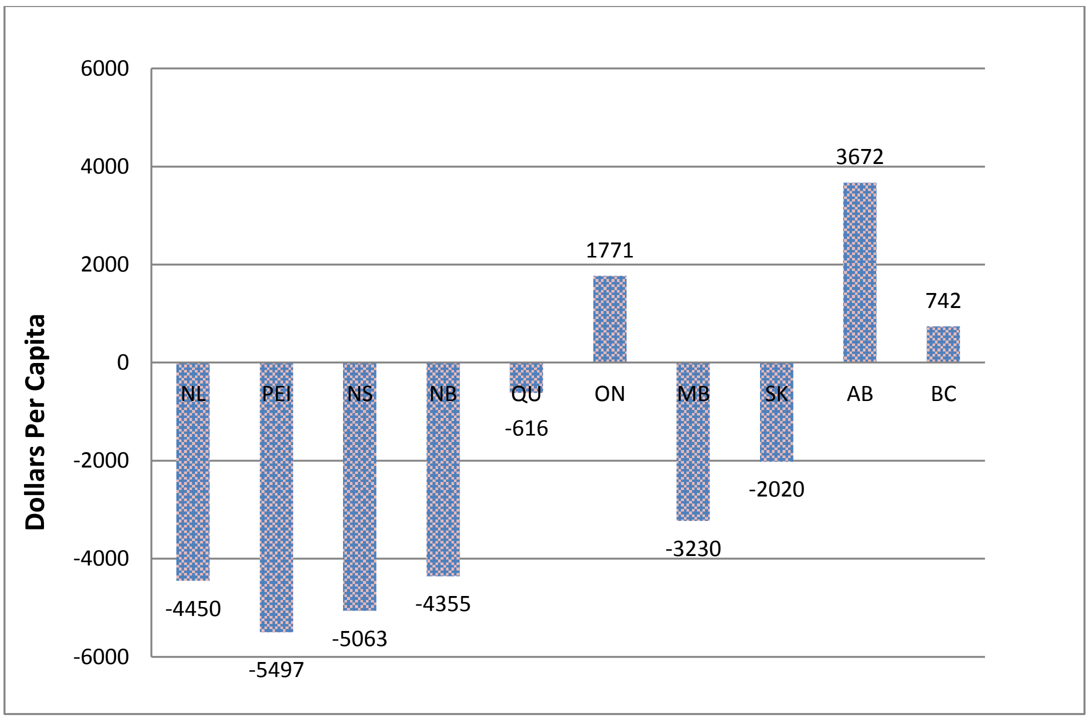
- First, to consolidate, data from 1999 to 2008 reveal that the federal government's annual revenues averaged $6,444 per capita and its expenditures averaged $6,188 per capita. Per capita revenues were greatest in Alberta, British Columbia and Ontario while per capita expenditures were greatest in the seven other provinces.
- Also, data from 1981 show that Alberta, British Columbia and Ontario have quite consistently been net contributors to the federal treasury and that the other seven provinces have quite consistently been net recipients from the federal government.

- The major categories of federal government expenditures are transfers to persons (33.0 percent during the 1999 to 2008 period), transfers to business (2.0 percent), purchases of goods and services (22.2 percent), transfers to provinces (21.9 percent), interest on federal debt (18.9 percent) and other expenditures (2.0 percent). The other expenditures are small and the interest on the public debt is allocated equally per capita in the accounts so they are of limited interest in this analysis.
- Transfers to persons is the largest single category and should be the least controversial. This category includes old age security, EI, support to families, veterans allowances, etc. These are programs that direct federal benefits to specific groups and we suspect that it is widely believed that the recipients deserve the benefits and they go where intended. Thus, interprovincial differences in per capita receipts depend only upon where the recipients reside and, so, should be uncontroversial.
- Transfers to business represent a small portion of expenditures but the amounts going to businesses in any province vary widely over time. However, from 1981 to 2008, Saskatchewan has realized the largest per capita transfers in this category. Again, ownership and shifting make the allocation of benefits by province difficult to ascertain. The merits of these transfers should be based on the evaluation of the national benefits and costs of the specific programs not simply on where the funds were spent.
- Federal government purchases of goods and services are about 22 percent of federal expenditures. Per capita expenditures are lowest in British Columbia, Alberta and Saskatchewan and largest in the Maritimes. Where federal purchases are made should be secondary to obtaining the best value for the expenditures made.
- Transfers to provincial governments are similar in magnitude to federal purchases. In the analysis of Table 2, those range between $912 and $1,884 per capita. Equalization grants, of which 'have' provinces receive nothing, represent about one-quarter of these transfers (and about 5.7 percent of total federal outlays) and account for most of the interprovincial differences. Almost one-half of transfers to the provincial governments support provincial health, education and social aid programs and those are close to being distributed on a per capita basis. The other quarter of the funds are for a variety of federal initiatives and the funding is less uniform among provinces and, if that is a concern, the purpose and performance of the various programs would need investigation.

Consolidating (Again) to the Net Contributions and Considering the Sources of Differences

Combining the sources of federal revenues with the allocation of expenditures yields the per capita net contributions to the federal treasury from each province. That is shown in Figure 33, below. Over the decade examined, federal taxpayers in Alberta, Ontario and British Columbia provided net inflows. Alberta sources generated the largest amount, averaging $3,672 per person, and sources in British Columbia the smallest at $742. The Atlantic Provinces were the largest per capita net recipients of federal funds (between $4,355 and $5,497) and Manitoba ($3,230) and Saskatchewan ($2,020) followed. Quebec received a relatively modest net amount at $616 per person.

Figure 33.
Per Capita Net Contribution to the Federal Treasury, Ten Year Average (1999-2008)



To better understand how these differences in net contributions emerge and what scope there may be for modifying them, it is useful to summarize the previous work in this section. We do so by looking at the major sources of differences in the federal government's per capita revenues and expenditures between Alberta and the averages of all other provinces. The logic for adopting this perspective is that if such deviations did not exist (overall), the net contribution of Albertans, or "of Alberta", would be zero (which seems to be what some people feel is appropriate). This information is reported in Table 3, below.

Note first that overall net contribution of Alberta results from higher taxable incomes of Albertans and lower federal expenditures in the province. Higher taxable incomes account for 65 percent of the larger net contribution of Albertans to the federal treasury. Lower federal expenditures in Alberta account for 35 percent of the larger net contribution from Alberta. That is, higher incomes (and nationally uniform federal taxes) are the main reason for a larger net contribution. Averaging over the 1999-2008 period, taxes paid by persons accounted for $1,452 per person and taxes paid by businesses for $704 of the additional revenue. About one-third of the extra revenue attributed to Albertans is from taxes on business which, due to widespread ownership and tax shifting, may not entirely be a burden on Albertans.

Lower per capita federal expenditures in Alberta account for about one-third of the larger net contribution to the federal government attributed to Alberta. The major sources of the expenditure differences are noted. Transfers per person averaged $308 less in Alberta, transfers to business $5 less, transfers to provinces $446 less, and federal purchases of goods and services $417 less. As previously argued, differences in transfers to persons arise from the geographic distribution of the recipient population and should not be controversial. Differences in transfers to business are small and approximately equal so will be ignored. That leaves transfers to provinces and the purchases of goods and services as a potential source of concern. Eliminating the difference arising from transfers to provinces essentially means eliminating Equalization which would have equity and efficiency costs. When considering differences in the purchases of goods and services among provinces, a major consideration must be whether the federal government is securing those inputs efficiently.

Table 3.
Significant Differences between Alberta's and the Provincial Averages of Per Capita Federal Revenues and Expenditures, 1999-2008

		Dollars per Capita	
Differences due to:			AB - Prov. Av.
Higher taxable incomes	65%		
Resulting from:			
Taxes on persons		1452	(6494 - 5042)
Taxes on businesses		704	(1671 - 967)
Lower expenditures	35%		
Resulting from:			
Transfers to persons		308	(1746 - 2054)
Transfers to businesses		5	(122 - 127)
Transfers to provinces		446	(912 - 1358)
Purchases of goods & services		417	(957 - 1374)

Substantial interprovincial differences exist in the net contributions to the federal treasury and, over the last decade, the large net contribution from Alberta has been notable. That large contribution arises primarily from the prosperity that the province has enjoyed and which has resulted in high incomes and so larger federal taxes. Albertans would likely prefer to continue to enjoy high incomes. That federal expenditures are relatively lower in Alberta plays a smaller role in determining Albertans' large net contribution. Of expenditures, transfers to provinces and the purchase of goods and services appear to be potential candidates for 'reform'. However, those two items together account for only about one-quarter of the larger net contribution of Albertans to the federal government. We explore various reforms in the following section.

It is the net flows, as reported in Figure 33 on a per capita basis, that have caused some concern and caused some to call for changes. It is not always obvious what the desired changes would be, but moves toward more equal per capita federal expenditures seem to be implied and, not infrequently, Equalization is criticized. We now look at the consequences of some moves in those directions. We consider four scenarios, A through D.

A. Purchases of Goods and Services, Non-Equalization Transfers to Provincial Governments and Transfers to Businesses are Set Equal Per Capita

Here we take half of the federal expenditures that differ among provinces and restrict them to be equal per capita. Transfers to persons are still allowed to vary and Equalization to continue. We examine what the impacts of this federal expenditure system would have upon net contributions to the federal coffers. Those results, along with those of the other scenarios are summarized in Figure 34, and will be discussed below.

B. Make All Transfers but Those to Persons Equal Per Capita

In this scenario, only transfers to persons are permitted to vary (per capita) across provinces. Unlike in (A), there is no Equalization with the funds having gone to Equalization now distributed to all provinces equally per person.

C. All Transfers to Provincial Governments Eliminated and Taxes Reduced. Otherwise Like B.

Under this alternative, the federal government continues to make transfers to people (which differ among provinces per capita) and continues to make transfers to business, purchase goods and services and pay interest on debt (but those are equal per capita across the provinces). Here, there are no longer federal transfers to the provincial governments. The savings that result are offset by a proportionate across the board reduction in federal taxes collected of 20 percent.

D. No Interprovincial Transfer of Funds.

In this extreme case, federal expenditures in a province are constrained to the federal revenues collected there. For each province, there is a zero net transfer to/from the federal treasury.

The average annual per capita net contributions to the federal treasury by province under the existing ('actual') situation and scenarios A, B and C are shown in Figure 34, below. The specific dollar amounts are in Table 4, below. The actual case is the same as that shown in Figure 33, above.

Scenarios A and B move a progressively larger portion of federal expenditures to being allocated equally per person among the provinces. The consequences are that the amount of redistribution is diminished to the Atlantic

Provinces and to Manitoba and Saskatchewan. Interestingly, Quebec actually nets somewhat more from the federal government under these two cases with their greater orientation to per capita transfers. The loss of Equalization through conversion to a Canada wide per capita grant has a notable negative impact on the net flow of funds to the Atlantic Provinces and Manitoba but not to Saskatchewan. On average, the net flow of federal funds to the net recipient provinces declines about $1,000 per capita under scenario A and another $1,000 under scenario B.

The elimination of federal transfers to the provincial governments under scenario C has, despite the lower taxes, the greatest impact of the three alternatives on the net flows to the net recipient provinces. Again, Quebec is least and only modestly affected. For most of the net recipient provinces, scenario C reduces net inflows by $200 to $300 relative to scenario B and by a total of about $1,000 to $4,000 per capita relative to the actual situation.

Figure 34.
Net Per Capita Contribution to the Federal Treasury: Actual and Three Alternative Scenarios (1999-2008 data)

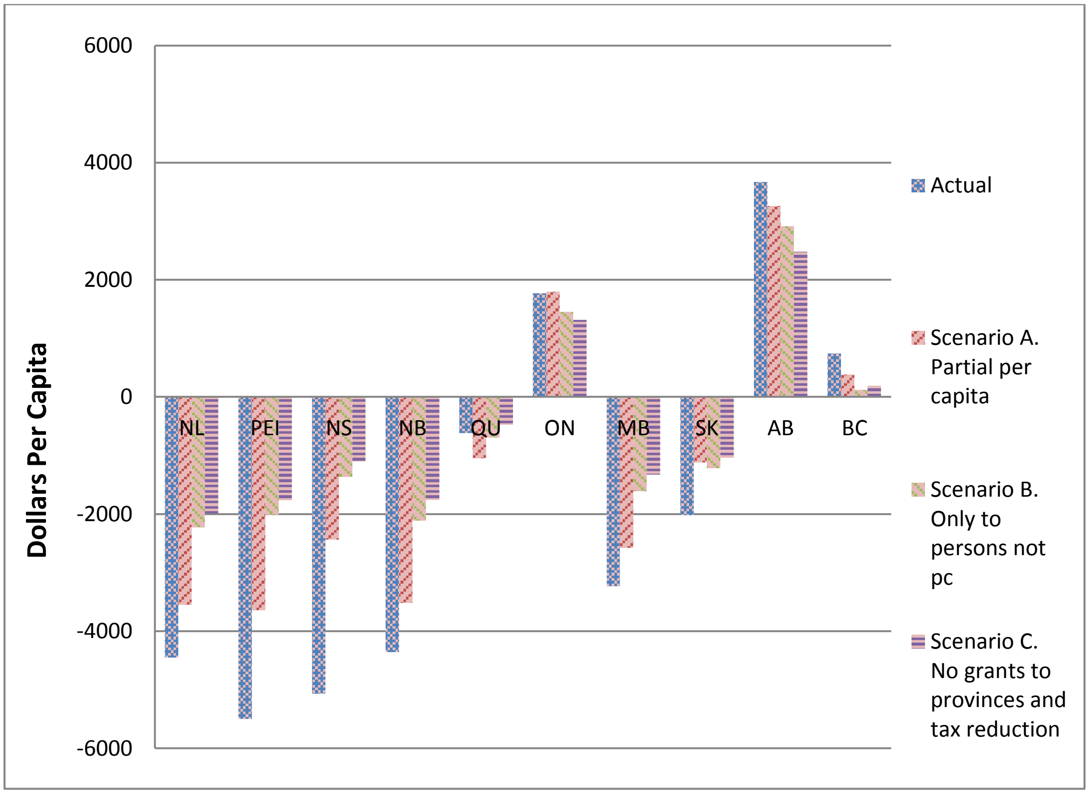


Table 4. Net Per Capita Contribution to the Federal Treasury: Actual Amounts and Three Alternative Scenarios (1999-2008 data)

	NL	PEI	NS	NB	QU	ON	MB	SK	AB	BC
Actual	-4450	-5497	-5063	-4355	-616	1771	-3230	-2020	3672	742
Scenario A	-3547	-3639	-2431	-3516	-1046	1799	-2576	-1118	3261	382
Scenario B	-2225	-2014	-1362	-2109	-689	1454	-1609	-1214	2916	122
Scenario C	-1984	-1763	-1103	-1755	-474	1316	-1327	-1037	2481	195

Most interesting, and likely surprising to some, is the relatively modest effects that the alternative scenarios have upon the net contributions from the provinces that are net contributors to the federal treasury. In the case of Ontario, net contributions would even be slightly larger ($29 per person) under scenario A and the greatest reduction would be from $1,771 to $1,316 or $454 under scenario C. Per capita contributions from taxpayers in British Columbia decrease in each case with reductions between $360 and $620. The largest impact in Alberta's case comes with reduced taxes (scenario C) in which case net contributions would fall from $3,672 to $2,481 or by $1,191 (which is almost a one-third of current net contributions although about one-seventh of per capita revenue). The changes in net contributions are more comparable to those in British Columbia and Ontario in the other cases ($410 under A and $755 under B).

The 'gains' to net contributors are typically modest relative to the 'costs' to most net recipients from the less redistributive alternatives examined for one major reason -- relative populations. The net contributors have relatively large populations while the net recipient provinces with the large per capita inflows have comparatively small populations. The different scenarios are surprisingly 'neutral' in their impacts upon Quebec as the consequences there are consistently modest if not small. Quebec has a large population but receives fairly small net inflows per capita. In aggregate, its net inflows offset only about 13 percent on the total net outflows from the three net contributing provinces. Thus, revisions in the patterns of federal expenditures as outlined can have large effects on small provinces but have modest effects on the larger ones.

Only radical changes would dramatically change the patterns observed in Figure 34, and particularly the implications for Alberta. Such changes would have to modify transfers to persons and/or revenue sources, both of which have been left unchanged thus far. Scenario D, with federal expenditures in a province constrained to the federal revenues raised there, is such a radical change. There is no need to show D in Figure 34 or a parallel figure because the net transfers are zero for all provinces. The consequences are on the magnitude of federal revenues and expenditures within each province. Three variations are considered.

D1. If the federal tax collection system (bases and rates) remained uniform nationally but there were no interprovincial net transfer of federal funds, expenditures per capita would equal revenues per capita in each province (see Figure 31, above) and would range from about $4,600 per capita to $8,600 per capita. It is difficult to believe that such differences would be consistent with efficient use of federal public funds.

D2. If federal expenditures per capita were the same in each province, federal tax rates would need to be adjusted provincially and would differ substantially across provinces – from 25 percent below the national average in Alberta to 38 percent above in New Brunswick. That is, federal tax rates in New Brunswick would be 84 percent greater than those in Alberta. The relative levels of federal taxes in this situation are the blue columns in Figure 35, below. Without Equalization, provincial tax rates would also have to be much higher than now to provide comparable services.

D3. If the federal government chose to spend in each province only what it currently does and tax in those provinces to meet that cost, the federal tax rates would be almost twice the average in some provinces and half the average in others. That is, using 1999-2008 data, federal tax rates in high tax rate provinces would be almost four times (3.7 times) those in the lowest tax province (Alberta). Those relative tax rates are shown as the red columns in Figure 35. We suspect that, at a minimum, such differences in federal tax rates as implied by D2 and D3 would be unpopular with Canadians and, in addition, would hamper economic efficiency and undermine the economic union.

It is unlikely that any version of scenario D would be appealing. To obtain a better sense of why that is unlikely, consider the implications of implementing that policy within Alberta. (If it were good for Canada it should be good in Alberta.) That is, suppose that all provincial revenues generated within a municipality had to be spent within that municipality. To illustrate, all provincial revenues from within the City of Calgary would be spent within Calgary, all those from within Wood Buffalo spent in Wood Buffalo, from Grimshaw within Grimshaw, from the County of Wetaskiwin within the County of Wetaskiwin, etc. One can readily imagine the huge disparities among localities in services and/or tax rates. It would make a north-south road trip in Alberta along Highway 2 an interesting venture.

It is difficult to see the elimination of the interprovincial shuffling of funds via the federal government's policies as being an acceptable policy. Pursuit of such objectives would seriously undermine the efficiency of public spending, create variations in services and taxes that would be questioned on equity grounds and also that would seriously distort resource allocation and disrupt the Canadian economic union. Indeed, one would be left to ask, 'What is Canada?'

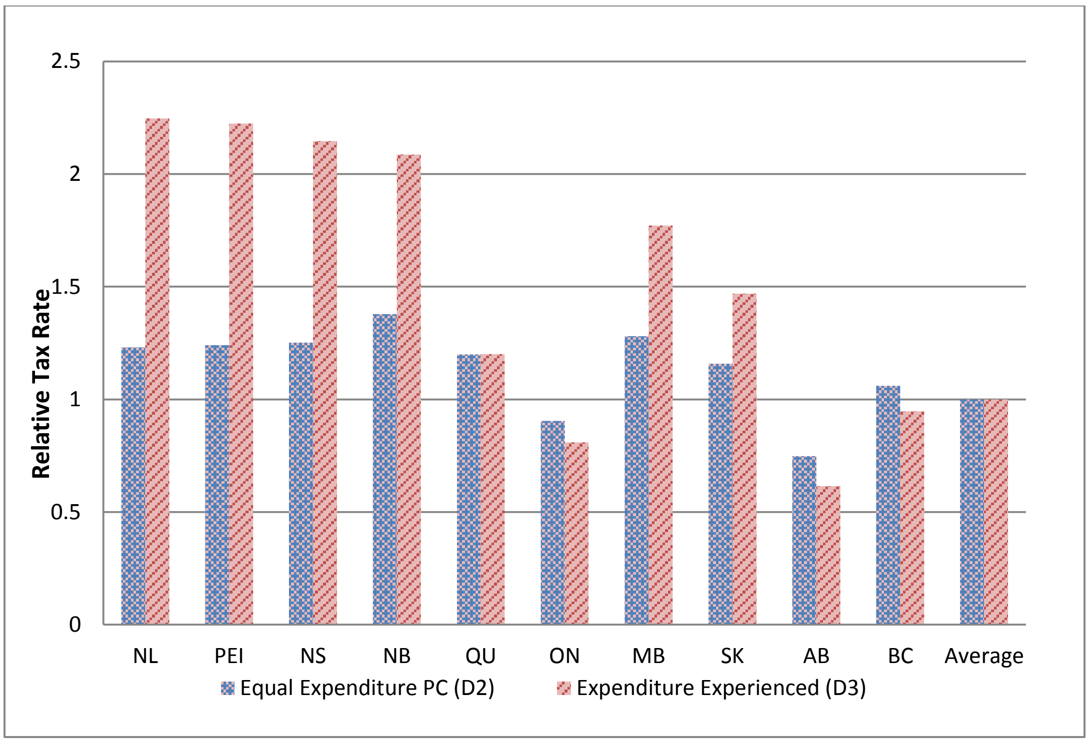
To summarize this section,

- Dissatisfaction with the existing federal fiscal reshuffling might be better understood if we considered some alternative arrangements and their implications. Four main alternatives are examined using 1999-2008 data.
- Progressively making a larger share of federal outlays equal per capita across provinces most adversely impacts the poorest and smallest provinces while having relatively modest effects on Quebec, Ontario, Alberta and British Columbia. Even eliminating federal transfers to all

provinces and reducing federal taxes an offsetting amount, only reduces net contributions from Alberta by one-third (and total contributions from Alberta by one-seventh).

- Eliminating interprovincial flows of federal funds would require very large differences in federal tax rates among the provinces. Such differences are likely to be unacceptable on equity grounds and would certainly introduce economic distortions and inefficiencies.

Figure 35.
Relative Federal Tax Rates if Federal Taxes Varied by Province and Federal Taxes Equaled the Federal Expenditures Experienced in the Province



Interprovincial migration is significant in Canada. Alberta has been a particular beneficiary of net interprovincial migration.[38] Migrants bring with them human capital. The education that they obtained elsewhere is the most obvious form of human capital. In the case of interprovincial migration, that education was provided at a cost to the exporting provinces and imported without cost to the recipient provinces. Thus, interprovincial migration represents a form of interprovincial transfers.

The net flow varies widely but it is not unusual for Alberta to experience a net annual inflow of 20,000 people from other provinces.[39] Given the attention here to human capital, the focus is on the net in-migration of those of working age. We consider those in the 18 to 44 age group and the years 1999 to 2008, a period for which education costs are available. During that decade, the net inflow of that age group into Alberta averaged 17,169 persons. Those migrants come with good educations. Using Alberta school expenditure data, the cost of providing those people with a high school education is estimated to be about $1.4 billion. In addition, about 45 percent have post-secondary education. That is likely to add $210 million to their education costs. Thus, the costs to the net exporting provinces of this net in-migration to Alberta of this group (or the savings to Alberta) are estimated to be in the order of $1.6 billion annually. In addition, one might consider the public healthcare expenditures on this group that was made by the exporting provinces. A reasonable estimate of that is $430 million.

In aggregate, net interprovincial migration has probably been providing Alberta with about $2.0 billion annually of human capital financed by other provinces. The net in-migrants come with an endowment of (notably) education provided at no cost to Alberta to work in the province and contribute to the Alberta economy and to the Alberta treasury. This annual inflow of human capital represents a considerable net benefit for Albertans, over $600 per capita.

Interprovincial migration is a great asset to the country but the implicit interprovincial transfers are sometimes overlooked. They should not be neglected.

To summarize,

- Alberta has experienced substantial net in-migration – for example, an annual average of 17,169 persons 18 to 44 years of age from 1999 to 2008.

38 During the past two decades, only Alberta and British Columbia have (overall) been net recipients of interprovincial migration.

39 Between 2001 and 2010, the net interprovincial migration ranged between 3,271 (2009) and 45,795 (2005).

- In-migrants bring with them human capital (notably education) provided at the cost of the exporting provinces.
- The value of that imported human capital to Alberta is estimated to be in the order of $2.0 billion (or over $600 per Albertan) annually. This is a transfer to Alberta from other provinces.

Summary and Conclusion

This paper was motivated by the growing commentary critical of federal-provincial transfers and 'equalization'. A significant component of that appears to be based on a partial perspective or incomplete analysis and so may be generating an obscure picture and possibly producing questionable recommendations. Those prompted this relook and rethink of the main features of Canadian fiscal federalism at the federal-provincial level. This review and analysis is an effort to provide a reasonably broad and comprehensive perspective on the grounds that public policy is best formed when having relatively full information.

The federal-provincial Equalization program has been a focus of attention so it is the start of this inquiry. The federal Equalization program is designed to offset the large fiscal disparities that exist among the provinces. For example, conservatively measured, the fiscal capacity of Alberta is 2.6 times that of Prince Edward Island. Fiscal disparities create equity and efficiency problems – hence, Equalization, a transparent program that has formally existed for over sixty years. The objective of the Canadian program is to enable the provinces to provide reasonably comparable services to their residents at reasonably comparable tax rates. It moves to do so by providing grants to fiscally deficient ('have-not') provinces to enable them to attain a national standard that approximates the provincial average in per capita expenditures at average tax rates. As such, Equalization is a leveling up program for recipient provinces but not a leveling down program for the fiscally advantaged provinces. (The 'have' provinces have typically, but not always, been Alberta, British Columbia and Ontario.) Equalization is certainly partially successful in realizing its objectives. Per capital expenditures are relatively similar among the provinces regardless of fiscal capacities but tax rates differ and are lower and notably so in the resource rich provinces.

Provincial government resource revenues, especially when they spike with energy booms, can be a significant driver of Equalization as they widen interprovincial disparities. Those events have created problems in the past and, aided by the consequences of the recent global financial crisis, seem to be doing so again with Ontario becoming a recipient province for the first time. This is an issue that has been addressed before (for example, the former five province standard) and may result in action again. Still, Ontario's qualification for Equalization (and Saskatchewan's in and out status over the years) demonstrates the insurance role of Equalization in the event of regional economic swings.

Equalization must be financed. As a federal program, those outlays are expenditures of the federal government paid from regular federal (tax) revenues. In 2010-11, Equalization transfers amounted to $14.4 billion. While the absolute amount appears large, Equalization is a much more modest cost in relative terms. It represents about 5.5 percent of federal government expenditures and, recently, about 0.83 percent of GDP. All federal taxpayers, regardless of province of residence, pay towards the cost of Equalization. Thus, federal taxpayers in Ontario and Quebec provide over 60 percent (about 41.6 and 19 percent respectively) of federal revenues and so of the funds needed for Equalization. Alberta has recently contributed about 15 percent. At a per capita level, at the two extremes, residents of New Brunswick contribute $260 towards Equalization and those in Alberta $530 per capita. Through their federal taxes funding Equalization, Alberta's federal taxpayers contribute via Equalization, about 1.1 percent of the expenditures of Quebec and 2.9 percent of those in Prince Edward Island – much less than some commentators suggest.

Equalization does not seem to have created a culture of dependency. Equalization has not grown as a share of provincial government revenues or of GDPP (gross domestic provincial product) in the core recipient provinces. Nor has it kept per capita GDPP from moving (converging) towards the national average or towards that of Ontario.

Despite the attention given to Equalization, it represents only one-quarter of federal transfers to the provinces. Of the other three-quarters, about $1,100 per capita is federal support of healthcare (CHT) and other social programs (CST). These funds are (under federal-provincial agreement) distributed essentially on a per capita basis and are scheduled to be entirely per capita as of 2014. Another $500 or so per capita comes from of a wide variety of federal transfers in support of numerous programs (for example, language training, reduced waiting times, emergency assistance). The importance of these grants to a province and among provinces tends to vary from year to year but less so over time.

The analysis of government revenues and expenditures data that is available in the Provincial Economic Accounts has caused some to realize that more federal funds are collected in some provinces than are spent in them while, in other provinces, more is spent than is collected. In some cases and at some times, the differences are substantial. The (re)shuffling of funds (sometimes confusingly labeled 'equalization') has led some to lament the unfairness of federal finance, call for ending or reducing transfer programs (Equalization and others), and propose, often implicit or undefined, 'reform'. This is an important topic and considerable effort was directed to examining it, first in an overview and then in more detail. The rather extensive results are summarized in each of those sections so only major points are highlighted here.

Taking advantage of some consistencies allows simplification of the analysis. Since 1981, the residents of seven provinces have always been net recipients of federal funds (that is, federal expenditures in those provinces have exceeded the federal revenues collected there). On the other hand, the residents of Alberta, British Columbia and Ontario have usually, but not always, been net contributors. Taking 2002 as a typical year, the average net inflow to the net recipient provinces was $1,561 per capita and the average net outflow from the contributing provinces was $1,591 per capita. Since the late 1990s, the net flows in and out have averaged five percent of GDPP (gross domestic provincial product) for the two groups. The net contributions of Albertans are quite volatile depending upon the buoyancy of the energy industry. When the Alberta economy is booming, Albertans make large net contributions to the federal treasury (up to $5,000 per person annually) but, when it is not booming, the net contributions parallel those coming from British Columbia and Ontario (in the range of $1,000 to $2,000 per capita). Federal revenues depend heavily on income taxes (e.g., 48 and 15 percent from PIT and CIT respectively)[40] and, when incomes are higher, taxes paid are larger.[41] During the 1999-2008 decade, personal incomes in Alberta were 25 percent larger than in British Columbia and Ontario and 41 percent larger than the average in the seven net recipient provinces. Despite the substantial differences in per capita income, federal taxes on persons in Alberta averaged only 1.1 percent of personal incomes more (17.5 versus 16.4) than in British Columbia and Ontario – that is, the tax share is not that much different. Net contributions to/from the federal treasury are primarily determined by income levels. Despite that, and quite surprisingly, federal revenues as a percentage of GDPP are consistently low for Alberta; averaging 16.1 percent in contrast to 17.2 percent for the net recipient provinces and 19.1 percent in British Columbia and Ontario.

During the decade 1999-2008, federal government revenues and expenditures averaged $6,444 and $6,188 per person respectively. Those differed considerably among provinces. Revenues were $8,580 in Alberta, $6,819 in British Columbia and Ontario (combined) and averaged $5,255 in the other provinces while expenditures were $4,880, $5,315 and $7,196 respectively. The differences between expenditure and revenues per capita by province have been an object of attention and sometimes concern. As noted, revenue differences arise from income differences. What of the expenditure side? The distribution of federal expenditures was transfers to persons 33 percent, transfers to business 2 percent, transfers to provinces 22 percent, purchase of goods and services 22 percent, interest on federal debt 19 percent, and other 2 percent. Analysis for Alberta of how revenues and expenditures per capita contributed to the large (almost $3,700) net contribution of Albertans to the federal treasury (see Table 3), showed

40 Another (about) 22 percent comes from indirect taxes (e.g., the GST) the revenue from which is also income related.

41 One must be cautious about attributing the corporate income taxes to provincial residents and especially so in Alberta. Corporations are widely (nationally and internationally) owned and economic forces may (re)distribute the tax burden among owners and other production inputs.

that 65 percent of that net contribution resulted from the higher incomes of Albertans and 35 percent was due to lower federal expenditures in the province. Enjoyment of high incomes carries with it greater taxes. Examination of the expenditure side revealed relatively limited room to maneuver. Significant differences between expenditures in Alberta and the average exist in transfers to persons ($308), transfers to provinces ($446) and purchases of goods and services ($417). Believing that transfers to persons (e.g., old age pension, family benefits, employment insurance) are uncontroversial, leaves only the other two categories – categories that amount to about one-quarter of federal expenditures -- open for discussion.

To assess the potential for various changes that might assuage dissatisfaction with the distribution of the existing costs and benefits of the federal programs and their financing, the consequences of a number of alternative models are determined. First, iteratively making a larger share of federal outlays more equal per capita across provinces has large adverse impacts the poorest provinces while having relatively modest effects on Quebec, Ontario, Alberta and British Columbia. Second, going further and entirely eliminating all federal transfers to all provinces and reducing federal taxes by an offsetting amount, only reduces net contributions from Alberta by one-third (and the total contribution from Alberta by one-seventh). Again, the poorest provinces experience large negative impacts while elsewhere the effects are modest. To illustrate, losses would be the equivalent of 10 to 15 percent of personal incomes in the Atlantic provinces, about 6.8 percent in Manitoba, 4.9 percent in Quebec, and 3.6 percent in Saskatchewan while the gains would amount to about 1.4 percent in Ontario, 1.8 percent in British Columbia and 3.6 percent of personal incomes in Alberta. Third, although it is difficult to imagine what Canada and the government of Canada would be in this case, the interprovincial flow of funds is eliminated entirely under this last scenario. The result would be some extreme differences among provinces in the levels of taxes and/or expenditures and services. Imagining the consequences of implementing a parallel policy within a province (i.e., no movement of provincial revenues among local jurisdictions) suggests the unattractiveness of the third alternative.

The activities of the federal government result in some geographic reshuffling of funds across the country. The federal government imposes a nationally uniform system of taxes and undertakes a wide range of expenditure programs intended to improve equity, deliver public services efficiently, provide insurance, and, undoubtedly in some cases, to enhance political prospects. The outflow from and inflows to any geographic area are unlikely to match. Measurement of the outflows and inflows by province has garnered attention and, in some instances, dissatisfaction. Just looking at the net contributions by province (or other jurisdiction) is inadequate for assessing the merits of the federal programs nationally and, very likely, with respect to any particular province. Certainly, at least some benefits (and even some costs) extend beyond the boundaries of the province in which funds are spent (or raised) and it is easy to overlook past and possible future net benefits. At a minimum, a more thorough examination would involve the assessment of the benefits and costs of each undertaking (and, of course, any proposals should be exposed to the same scrutiny). However, working with the data before us, looking closely at and understanding the sources of those flows allow a better appreciation of the causes, the underlying rationale, the reasons for the results and the scope for change. Albertans, especially with the benefits of the latest energy boom, have made large net contributions to the federal treasury and Alberta's case affords a good illustration. Almost two-thirds of the net contribution arises from the higher incomes of Albertans and, when looking at the 35 percent attributable to expenditure differences, the opportunities for reducing their impact appear modest. Eliminating Equalization, a program that gets considerable attention, would reduce Albertans' total contribution to the federal coffers about 5.4 percent and their net contribution about 14 percent. Even eliminating all federal transfers to the provinces (of which Equalization is one-quarter) and making all other federal outlays equal per capita, would only manage to reduce the net contribution of Albertans by one-third. The cost of such a policy is very high to those in the poorest and smallest provinces while having only marginal effects on those in the large and rich provinces. Only rather draconian measures, measures that would effectively disassemble Canada, would have eliminated net contributions from Alberta over the last decade.

This report is an effort to lay out basic facts of federal fiscal operations, federal-provincial fiscal relations, the financial implications of the federal government's revenue and expenditure programs at the provincial level, and to explore the effects of some alternative arrangements. By doing so, it is hoped that readers have a clearer perspective on these matters and can better assess the existing programs and policies and their alternatives.

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Appendix A: Equalization Formulae

The following depicts the fundamentals and main determinants of Equalization at the expense ignoring various supplementary but secondary factors.

Consider the case in which there is only one provincial tax. One formula for calculating equalization grants is,

$$\mathrm{EE_i} = \mathrm{T}\left(\frac{\mathrm{Pop_i}}{\mathrm{Pop}_C} - \frac{\mathrm{B}_i}{\mathrm{B_C}}\right)$$

where ,

EE_i = the Equalization entitlement or transfer to which province *i* is eligible,

T = the total tax revenue collected by the provincial governments,

B = the tax base with B_i being the base in province *i* and B_C the aggregate of the tax base across all provinces (the Canada aggregate provincial tax base),

Pop = population with Pop_i being the population of province *i* and Pop_C being the sum of the provincial populations (the population of Canada).

If a province has a tax base share smaller than its share of the population, it receives an equalization grant equal to that difference (the term in brackets) times the total tax revenue, T. If that province levies a tax on its base, B_i, at the provincial average rate, T/B_C, that revenue (which is less per capita than the national average) plus the equalization payment will provide that province with total revenue equal to its share of the population (that is, per capita revenue equal to the average of the provinces).

In the Canadian case, any province with a tax base share larger than its population share (the bracketed term is negative) does not receive any Equalization nor does it make any (direct) contribution to Equalization. Equalization is paid by the federal government from federal funds.

An alternative, but equivalent, specification of the formula is,

$$\mathrm{EE}_i = t_C\left(\frac{B_C}{Pop_C} - \frac{B_i}{Pop_\mathrm{i}}\right) x\ Pop_\mathrm{i}$$

where,

t_C = T/B_C or the average provincial tax rate (the sum of provincial tax divided by the aggregate base),

and the other terms are as defined above.

Here, if a province's per capita share of the tax base is smaller than the (national) average for all provinces, that province is eligible for an Equalization grant. The grant equals the difference in per capita bases (the bracketed term) times the average tax rate, t_C, (yielding the per capita deficiency) times its population, Pop_i. Again, the formula generates an Equalization payment allowing the province to realize per capita revenue with Equalization equivalent to that of the average province if an average tax rate is levied.

As above, no payment is made to (or made by) provinces with above average per capita tax bases.

Of course, provinces have more than a single tax base. In this situation, calculations parallel to those described are done for each tax base and the results are summed. For example, where tax bases are designated by j and there are five different tax bases,

$$\mathrm{EE_i} = \sum_{j=1}^{5} T_j \left(\frac{\mathrm{Pop_i}}{\mathrm{Pop_C}} - \frac{\mathrm{B_i}}{\mathrm{B_C}} \right)$$

Since the Expert Panel's review, five taxes and tax bases are used in the Equalization calculation. The five bases are:

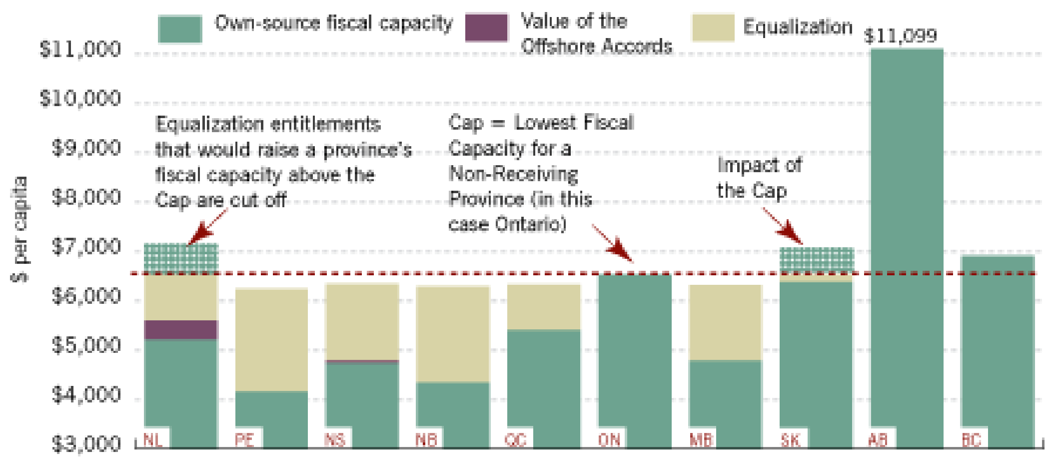
1. personal income taxes,
2. corporate income taxes,
3. consumption taxes,
4. property taxes, and
5. natural resource revenues (50 percent of).

The relative endowments of tax bases may differ within a province. That is, a province may be above average in one base (implying a negative term for that base) but below average in another (implying a positive term). The formula sums across all five bases and, if there are positive and negative terms, the net amount is determined. It is that net amount that is the Equalization transfer. If the sum is positive, an Equalization payment is made. If negative, under the Canadian system, no payment is received or made.

The actual Equalization calculations are more complicated due to a variety of factors. Although not unimportant, the main driver of Equalization is as described above and those other factors make adjustments to the amounts so determined. Some of those factors are reflected in Appendix B.

Appendix B: The Effects of Equalization on Fiscal Capacities

Provincial Fiscal Capacities Before and After Equalization, 2007-08 (Panel's Formula)



Source: Expert Panel on Equalization and Territorial Financing (2006, p 8)

Note the scale here starts at $3,000. The value of off-shore accords are added for Newfoundland and Labrador and for Nova Scotia; one of those natural resource adjustments. Per capita Equalization payments implied by the recommended formula contribute the tan segments to provincial capacities for all provinces but Ontario, Alberta and British Columbia. However, the formula would imply fiscal capacities in Newfoundland and Labrador and Saskatchewan that would exceed that of Ontario (the non-receiving province with the lowest capacity) so payments to those provinces are capped at the Ontario level. Per capita payments range from $157 to Saskatchewan to $2,079 in Prince Edward Island. No payment is made to the three have provinces. After Equalization, per capita fiscal capacities among the receiving provinces ranged from $6,346 to $6,534. The fiscal capacities in Alberta and British Columbia were unchanged. Actual total Equalization payments that year amounted to $12.9 billion.

Appendix C. Federal Government Revenue and Expenditure in Alberta

(from Alberta Finance and Enterprise)

Federal Government Revenue and Expenditure in Alberta Millions of dollars						
Revenue:	**2005**	**2006**	**2007**	**2008**	**2009***	**2010***
1 Direct taxes from persons	15,072	17,076	19,897	20,569	18,265	19,109
2 Direct taxes from corporate	5,840	7,984	8,254	8,567	9,777	6,746
and government business enterprises						
3 Direct taxes from non-residents (withholding taxes)	373	477	469	531	396	405
4 Contributions to social insurance plans	1,947	2,062	2,156	2,186	2,179	2,232
5 Indirect taxes	6,080	6,439	6,787	6,143	6,106	6,302
6 Other **current** transfers from persons	5	2	2	4	4	4
7 Investment income	562	596	759	856	653	812
8 Current transfers from provincial governments	0	0	0	0	0	0
9 Total revenue	29,879	34,636	38,324	38,856	37,380	35,609
Current expenditure:						
10 Net current expenditure on goods and services	3,384	3,446	3,498	3,928	4,399	4,597
11 Current transfers to persons	5,940	6,210	6,905	7,149	8,154	8,469
12 Current transfers to business	596	390	294	278	278	278
13 Current transfers to provincial governments	3,839	3,354	3,323	4,192	4,515	4,849
14 Current transfers to local governments	22	19	22	18	20	22
15 Interest on public debt	3,308	3,374	3,365	3,238	3,073	3,270
16 Total current expenditure	**17,089**	**16,793**	**17,407**	**18,803**	**20,439**	**21,484**
17 Net Contribution	**12,790**	**17,843**	**20,917**	**20,053**	**16,941**	**14,125**
Net Contribution per capita	3,850	5,215	5,954	5,577	4,594	3,785
Net Return on Federal Dollars	57%	48%	45%	48%	55%	60%

* Estimate

Source: Statistics Canada, Provincial Economic Accounts; estimates by Alberta Finance and Enterprise

Definitions:

1. Personal income taxes
2. Corporate income taxes and capital taxes
3. Withholding taxes on dividends, interest, royalties, and management fees paid to non-residents
4. Employer and employee employment insurance contributions
5. Goods and services tax, excise taxes (alcohol, tobacco and fuel), customs duties
6. Licenses, permits, fines and penalties
7. Interest on government-held funds and on loans and advances, remittances from government enterprises
8. Provincial government contributions to the Net Income Stabilization Account, an income support program for the agriculture sector administered by the federal government
9. Total revenue
10. Employee wages and salaries, including military, spending on other goods and services including rent
11. Employment insurance benefits, old age security benefits, guaranteed income supplement, excludes CPP
12. Subsidies, including agriculture
13. CHT/CST, Labour Market Development Agreements, crop insurance
14. Grants in lieu of property taxes
15. Interest payments on federal debt held by Albertans
16. Total current expenditure, excludes capital spending such as capital consumption allowances
17. Total revenue less total current expenditure