

Fiscal Needs and the CHST Per Capita Division Rule

—Serge Coulombe and Marcel Mérette*

ABSTRACT

According to the 1999 federal budget, the Canadian Health and Social Transfer will be divided across provinces on a per capita basis. This new rule does not take into consideration provincial fiscal needs. We show in this paper that the rule would have created significant disparities across provinces in 1998 and will create significant ones in the future. Hence, in contrast to the claim in the 1999 federal budget, not all Canadians will be treated fairly and equally, but rather with significant inequities, depending on their province of residency.

INTRODUCTION

The difficulty here is not one of principle but one of measurement. How one might go about actually devising a comprehensive index of need or cost, covering all public services that could be used in an equalization formula, is not obvious.¹

It is hard to argue against the principle that provinces with greater expenditure needs deserve additional revenues.²

Canada is a very decentralized federation. Some of the most important expenditure categories, such as social assistance, health care, and post-secondary education, are the basic responsibility of provincial governments. In Canada, this decentralization was made possible with the establishment of a substantial federal-

* Of the Department of Economics, University of Ottawa. The research was supported by the Faculty of Social Sciences and the School of Graduate Studies and Research of the University of Ottawa. The authors are grateful to Someshwar Rao for useful comments and to Lydia Yakonovsky for her efficient research assistance. Any errors that remain are our own.

1 Robin W. Boadway and Paul A.R. Hobson, *Intergovernmental Fiscal Relations in Canada*, Canadian Tax Paper no. 96 (Toronto: Canadian Tax Foundation, 1993), 93.

2 Thomas J. Courchene, *Renegotiating Equalization: National Polity, Federal State, International Economy*, C.D. Howe Institute Commentary no. 113 (Toronto: C.D. Howe Institute, September 1998), 29.

provincial transfer system, two key components of which are the equalization program and the Canada Health and Social Transfer (CHST).³

In this paper, we argue that it is desirable to incorporate fiscal needs, or expenditure needs from a balanced-budget perspective, in the Canadian federal-provincial transfer system. The desirability of taking into account fiscal needs follows in part from the new interprovincial division rule for the CHST announced in the 1999 federal budget. According to the new rule, the CHST will be divided into equal per capita entitlements across all provinces by 2001-2. The CHST, introduced in 1996-97, was designed to supersede the Canada Assistance Plan (CAP) and established programs financing (EPF) for the financing of social assistance, health care, and post-secondary education.

The 1999 budget speech stated that one reason for moving to a per capita division rule for the CHST is that “all Canadians [should] be treated fairly and equally.”⁴ We argue in this paper that the per capita division rule does not treat all Canadians equally; rather, unequal treatment is the consequence of substantial disparities in needs across provinces and the intrinsic feature of the present equalization program.

Despite substantial cuts in the cash component of the CHST since 1994, the amount of money involved remains large enough to make the division rule an important policy issue. Cash transfers from the federal government to the provinces under the CHST currently stand at \$13.5 billion and are expected to reach \$15 billion by 2002-3.

As suggested by the introductory quotations from well-known Canadian experts on fiscal federalism, the problems of incorporating fiscal needs in the federal-provincial transfer system are not problems of principle. They are instead mainly operational, related to the difficulty of measuring different fiscal needs for the financing of social assistance, health care, and post-secondary education. Consequently, most of this paper focuses on the issue of measuring fiscal needs at the provincial level. Before turning to these practical considerations, we discuss briefly the principle of incorporating fiscal needs in the federal-provincial transfer system.

THE PRINCIPLE: DISPARITIES, DECENTRALIZATION, AND EQUITY

Until the early 1950s, per capita income disparities across Canadian provinces were extremely high. According to Williamson,⁵ the levels of regional disparities

3 For an analysis of the historical evolution of the federal-provincial transfer system, see Boadway and Hobson, *supra* footnote 1; for the recent transformations, see the appendix in Courchene, *supra* footnote 2.

4 Canada, Department of Finance, 1999 Budget, Budget Speech, February 16, 1999, 13.

5 Jeffrey G. Williamson, “Regional Inequality and the Process of National Development: A Description of Patterns” (July 1965), 13 *Economic Development and Cultural Change* 3-84.

were higher in Canada than in other industrialized countries. Since World War II, however, as shown in a number of recent Canadian empirical studies, per capita income, earned income, output, and labour productivity across the Canadian provinces have converged.⁶ During the last 50 years, on a per capita or per unit of labour basis, the poor provinces have tended to grow faster than the rich ones (beta-convergence), and the dispersion of per capita economic indicators have tended to decrease over time (sigma-convergence).

From a prospective point of view, one of the most interesting results of recent Canadian empirical studies is that provincial disparities appear to be, since the mid-1980s, close to their long-run equilibrium level.⁷ In other words, sigma-convergence was a phenomenon of the 1950s to the mid-1980s. The provincial disparities that remain appear to be structural in nature and are not likely to disappear in the future, and thus have important implications for fiscal federalism.

With persistent disparities in per capita income across Canadian provinces, fiscal needs for social assistance, health care, and post-secondary education are not likely to converge in the future for two reasons. First, fiscal needs for social assistance are likely to be related to the degree of economic disparity. The need for social assistance should be higher, on average, in a poor province than in a rich one. Second, fiscal needs for health care and post-secondary education are mainly driven by demographic factors. Nothing ensures that the demographic projections across provinces will be the same. Furthermore, numerous Canadian studies on interprovincial migration have highlighted the fact that regional demography in Canada is driven by young, educated people migrating from poor provinces to rich ones.⁸

The decentralization of the Canadian federation, coupled with the existence of persistent regional disparities, motivates the use of equalizing intergovernmental transfers. However, as pointed out by Oates,⁹ equalizing transfers are not a necessary feature of all federations. In the United States, for example,

6 The new Canadian empirical growth studies are reviewed and synthesized in Serge Coulombe, *Economic Growth and Provincial Disparity: A New View of an Old Canadian Problem*, C.D. Howe Institute Commentary no. 122 (Toronto: C.D. Howe Institute, March 1999).

7 See S. Coulombe and F. Lee, "Évolution à long terme de la convergence régionale au Canada" (1998), 74 *L'Actualité économique—revue d'analyse économique* 5-27; Serge Coulombe and Kathleen M. Day, "Economic Growth and Regional Income Disparities in Canada and the Northern United States" (June 1999), 25 *Canadian Public Policy* 155-78; and Serge Coulombe, *New Evidence of Convergence Across Canadian Provinces: The Role of Urbanization*, Working Paper no. 0002E (Ottawa: University of Ottawa, Department of Economics, January 2000).

8 For a recent study highlighting this fact, refer to J.M. Cousineau and François Vaillancourt, "Regional Disparities, Mobility and Labour Markets in Canada" (mimeograph, Université de Montréal, Département de sciences économiques, 1997).

9 Wallace E. Oates, "An Essay on Fiscal Federalism" (September 1999), 37 *Journal of Economic Literature* 1120-49, at 1127.

equalization transfers from the federal government to state governments have always been minimal, whereas state governments provide equalizing transfers to local jurisdictions for financing education. Moreover, because equalization has mixed effects in terms of efficiency,¹⁰ the economic justification for equalization is based on equity. In Canada, according to Courchene,¹¹ analysis of the economics of intergovernmental transfers acknowledge that equity concerns underlie the principle of equalization. The language in section 36(2) of the 1982 Constitution Act is quite clear:

Parliament and the government of Canada are committed to the principle of making equalization payments to ensure that provincial governments have sufficient revenues to provide reasonably comparable levels of public services at reasonably comparable levels of taxation.¹²

Given a substantial degree of economic disparity and the decentralization of public spending in Canada, how should intergovernmental transfers be designed if one wants to achieve the Grand National Objective of section 36(2)? We follow Oates¹³ in suggesting that equalization payments would typically be responsive to both the fiscal need and the fiscal capacity of each province, so that disproportionate shares of transfers would go to those jurisdictions with greater fiscal needs and lesser fiscal capacities.

Before the move to the per capita division rule, the CHST, and its predecessor CAP, incorporated some equalization features arising from the cap on CAP enforced in 1990 by the federal government on Alberta, British Columbia, and Ontario. Part of the effect of the cap on CAP was attributed to the CHST in 1995. But this type of equalization is not equivalent to the fiscal needs approach, as the following analysis demonstrates.

In the Canadian federation, the equalization program is the tool designed to channel resources from rich provinces to poor ones. The purpose of the program is to raise the fiscal capacity of the seven “have-not” provinces closer to the level of Alberta, British Columbia, and Ontario. In the equalization scheme, fiscal capacities of the seven have-not provinces are not fully equalized to the national average. But even if fiscal capacities were fully equalized, the transfer system does not incorporate fiscal needs. Consequently, even if the fiscal capacity of a have-not province is increased through the equalization program, the province might not be able to achieve the goals of section 36(2) if its fiscal needs for social assistance, health care, and post-secondary education are substantially

10 For an economic efficiency analysis of equalization, see Robin Boadway and Frank Flatters, “Efficiency and Equalization Payments in a Federal System of Government: A Synthesis and Extension of Recent Results” (November 1982), 15 *Canadian Journal of Economics* 613-33.

11 *Supra* footnote 2.

12 Constitution Act 1982, being schedule B of the Canada Act 1982 (UK), 1982, c. 11.

13 *Supra* footnote 9, at 1127.

higher than those of the other provinces. If fiscal needs vary substantially across provinces, equalization based only on fiscal capacity cannot by itself achieve the goals of section 36(2).

In the remainder of this paper, we evaluate fiscal needs at the provincial level for the financing of social assistance, health care, and post-secondary education. Only if fiscal needs on a per capita basis do not differ much across provinces will the CHST per capita division rule, combined with an equalization system based on fiscal capacity, be adequate to meet the goals of section 36(2) of the Constitution. We show next that this is not the case.

FISCAL NEEDS FOR SOCIAL ASSISTANCE

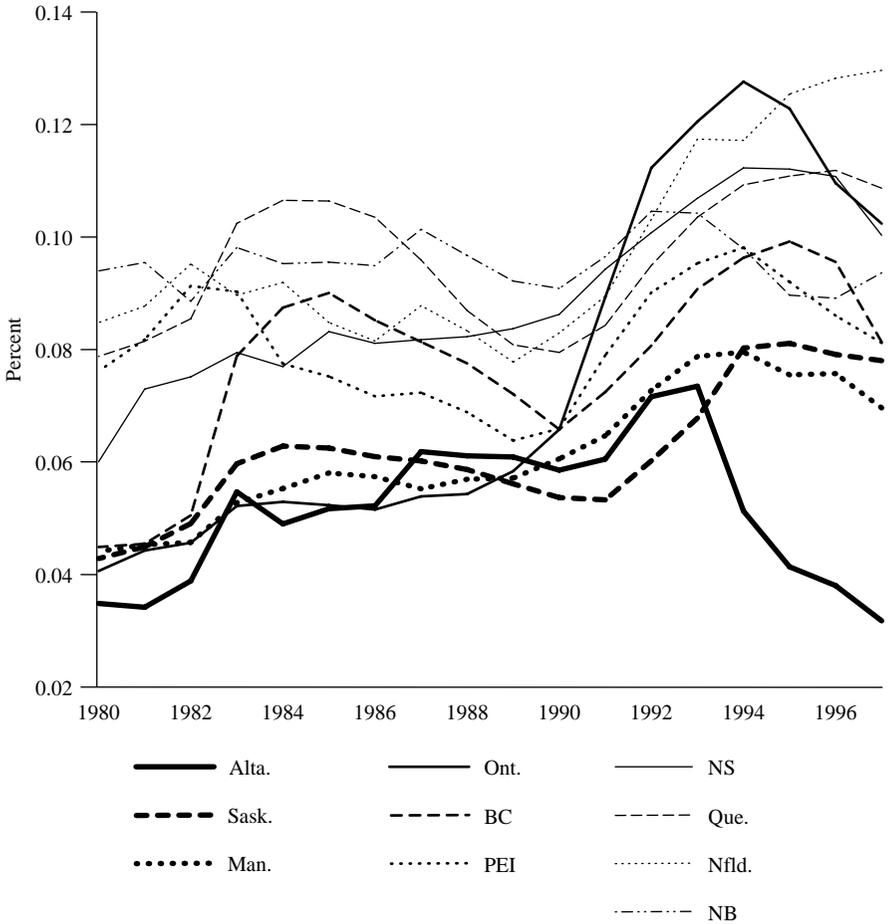
The determination of fiscal needs for federal-provincial transfers should, ideally, be based on a measure that cannot be manipulated by provincial government policies. This implies that a cost-sharing approach to fiscal needs is inappropriate. For example, in the case of the CAP cost-sharing formula, the provinces had the incentive to overspend for social assistance when political returns were sufficiently high. Indeed, a provincial government could benefit fully from an increase in the generosity of social assistance payments while bearing only a fraction of the cost. If fiscal needs are not appropriately measured, equalizing intergovernmental transfers may encourage overspending by local governments.

It is easier to provide non-manipulable measures of fiscal needs for health care and post-secondary education than for social assistance. (Later in this paper we supply relative measures of fiscal needs across provinces for health care and post-secondary education because we seek to assess the consistency between the CHST per capita distribution rule and per capita fiscal need.). For social assistance, we have to rely on a measure that is not entirely exogenous to provincial policy. An appropriate measure would be based on poverty measures that are directly correlated with fiscal needs for social assistance. However, further research is needed before such a measure becomes operational. The analysis that follows is an attempt to characterize the differences in fiscal needs for social assistance.

Our measure of fiscal needs is based on the proportion of social assistance beneficiaries in the population of a given province relative to the Canadian average (see figure 1). The data come from the National Council of Welfare and are available on a yearly basis since 1980. As defined by the council, the number of welfare recipients refers to the number of individuals who rely on welfare for income support. This measure should not be confused with the number of welfare cases. A family of four on welfare represents one welfare case and four individual welfare recipients.

The time-series of the 10 Canadian provinces covers the 1980-1998 period. The per capita division rule for the financing of social assistance would be consistent, on equity grounds, with relatively small and non-systematic differences across provinces in the proportion of beneficiaries. But this is not the case. Typically, the western provinces of Alberta, Saskatchewan, Manitoba, and British

Figure 1 Proportion of Social Assistance Beneficiaries in the Population, by Province, 1980-1997



Source: National Council of Welfare, "Profiles of Welfare: Myths and Realities," Spring 1998.

Columbia have a low proportion of social assistance beneficiaries compared with the other provinces. Furthermore, the differences in the proportion of social assistance beneficiaries are large. In 1998, for example, the proportion was only around 3 percent in Alberta compared with 10 percent in Ontario and 12 percent in Newfoundland. These are huge differences because they imply that the proportion of social assistance beneficiaries is 3.33 and 4.44 times higher in Ontario and Newfoundland, respectively, than in Alberta.

Differences of this size appear to be incompatible with the per capita division rule for the CHST. For example, if a per capita division rule had been adopted in 1998, the federal government would have given 4.44 times more money for

financing one social assistance beneficiary in Alberta than for one in Newfoundland. Contrary to the claims of Boessenkool, if the purpose of the CHST is to "treat Canadians equally regardless of their place of residence,"¹⁴ the data in figure 1 show that the transfer of social assistance *should not* be equally divided across provinces on a per capita basis.

Figure 2 measures the relative dispersion of the proportion of social assistance beneficiaries across provinces. The measure is based on the standard deviation of the natural logarithm of the 10 provincial ratios of the variable investigated in a given province to the Canadian average. The number 0.40 in 1998 indicates that the typical disparity in fiscal needs for social assistance across provinces is 40 percent.

Although the dispersion of the proportion of social assistance beneficiaries declined between 1980 and 1990, it has increased considerably in recent years. This indicates that the disparity in fiscal needs for the financing of social assistance across provinces is now growing.

The bottom line in figure 2 represents the relative dispersion of welfare expenditure per capita across provinces. The fact that this line lies below the line for the dispersion of the proportion of social assistance beneficiaries indicates that welfare programs are less generous in provinces with high beneficiary rates. Conversely, more money is spent per welfare recipient in provinces with low beneficiary rates.¹⁵ This trend is rapidly increasing, and may be the consequence of abandoning the cost-sharing formula (as it existed before with CAP) for federal transfers in social assistance. Returning to cost sharing may lead to overspending, as discussed before. Still, in 1988, the disparity across provinces was minimal; as shown in figure 2, the difference between the two lines was zero. In that year, provinces spent, on average, the same amount of money per welfare recipient, whether their beneficiary ratios were high or low.

14 Kenneth J. Boessenkool, *Clearly Canadian: Improving Equity and Accountability with an Overarching Equalization Program*, C.D. Howe Institute Commentary no. 114 (Toronto: C.D. Howe Institute, October 1998), 6.

15 To demonstrate this, let's suppose that D_i is welfare expenditure in province i , H_i is the population, and B_i is the number of social assistance beneficiaries in province i . The following identity illustrates the relationship among these three variables:

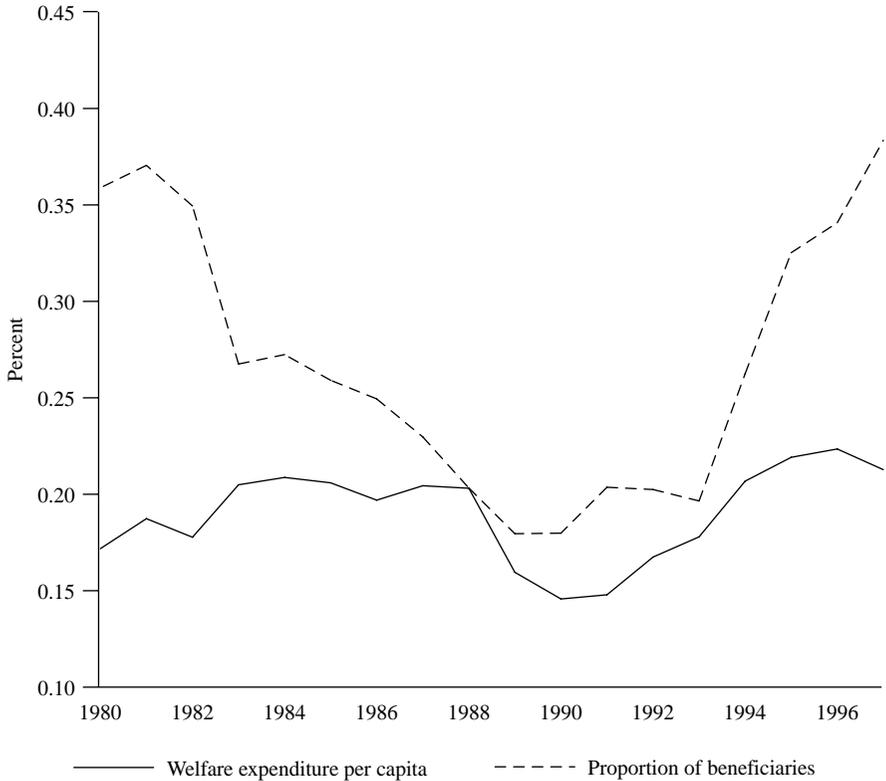
$$D_i/H_i = D_i/B_i \cdot B_i/H_i$$

Welfare expenditure per capita (D_i/H_i) equals the product of the degree of generosity (D_i/B_i) and the proportion of beneficiaries in the population (B_i/H_i). Taking the variance (across the i) of the logarithm on both sides of this equation and rearranging leads to the following relationship:

$$\text{var}(B_i/H_i) - \text{var}(D_i/H_i) = -\text{var}(D_i/B_i) - 2\text{cov}(B_i/H_i, D_i/B_i)$$

where $\text{var}(x)$ and $\text{cov}(x,y)$ are respectively the variance of distribution x and the covariance between x and y . The left-hand side is the difference between the two lines in figure 2. Consequently, the covariance between the proportion of beneficiaries and the degree of generosity has to be negative.

Figure 2 Relative Dispersion of Expenditures and of Social Assistance Beneficiaries, Canadian Provinces, 1980-1997



Source: Expenditure: CANSIM matrices 02790 to 02799, series D464652 (Alberta) and correspondent (other provinces).

FISCAL NEEDS FOR HEALTH CARE

It is well known that old people benefit the most from health-care services. For example, Fougère and Mérette¹⁶ estimated that a person 60 years old consumes three times more health-care services than a person 30 years old. Consequently, relative health-care needs across provinces are determined by provincial population compositions. To assess relative health-care needs across provinces, we use

16 Maxime Fougère and Marcel Mérette, "Population Ageing, Intergenerational Equity and Growth: Analysis with an Endogenous Growth, Overlapping-Generations Model," a paper presented to the Using Dynamic Computable General Equilibrium Models for Policy Analysis International Conference, GI. Avernoes, Assens, Denmark, June 14-17, 1998 (available on the Web at www.gams.com/projects/dk/foug&mer.pdf).

Fougère and Mérette's estimation of relative health-care costs across age groups and Statistics Canada's demographic projections by province.

Health-Care Costs Across Age Groups

Fougère and Mérette¹⁷ estimate relative health-care costs across 21 age groups, from 17-19 years of age to 77-79 years of age. In their estimation, Fougère and Mérette use data from Health Canada and allocate the different components of health-care expenditures using the Social Policy Simulation Database and Model (SPSD/M).¹⁸ We use their methodology, but we extend the number of three-year age groups to 25, starting with the same age group (17-19 years of age) but ending with 89-91 years of age.¹⁹

Health-care expenditures across age groups are considered identical across the 10 provinces. Figure 3 shows our estimation of the distribution of health-care costs across the 25 age groups. The age groups are plotted along the horizontal axis and the relative shares of expenditures received are plotted along the vertical axis. The figure shows that for each dollar spent by Canadian governments on health care, a person in the 89-91 age group receives on average 7.84 cents, while a person in the 17-19 age group receives only 0.92 cents.

The shares across age groups sum to 1. As expected, the distribution of health-care expenditures increases with age, as health condition deteriorates. The elderly are the most important consumers of hospital care, which, according to Health Canada, constitutes by far the largest component of health-care expenditures.²⁰

Provincial Demographic Projections

For the same age groups as in the analysis of health-care costs, we next use Statistics Canada's projections to determine the population composition by province between 1996 and 2050. Because health-care expenditures are sensitive primarily to the proportion of elderly people in the population, we report here the old-age dependency ratio, which is the ratio of people 65 years of age and older to those between 17 and 64 years of age. Table 1 presents the old-age dependency ratio for the 10 provinces and Canada, for specific years, as well as the rate of change between these years. Starting in the next decade, significant

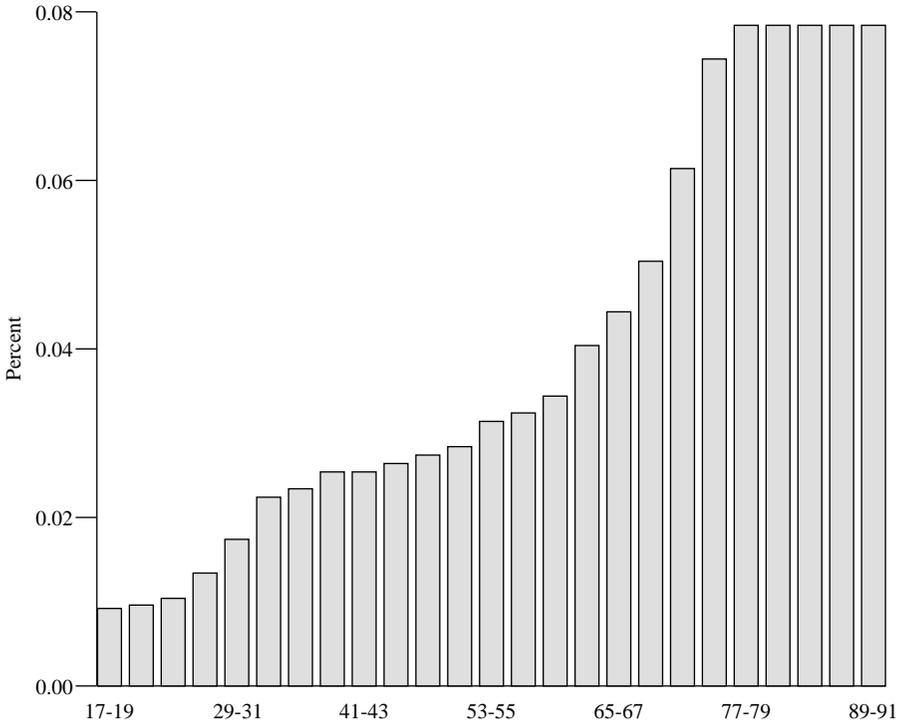
17 Ibid.

18 For more details on the SPSP/M, see Michael Bordt, Grant J. Cameron, Stephen F. Gribble, Brian B. Murphy, Geoff T. Rowe, and Michael C. Wolfson, "The Social Policy Simulation Database and Model: An Integrated Tool for Tax/Transfer Policy" (1990), vol. 38, no. 1 *Canadian Tax Journal* 48-65.

19 See the appendix of Fougère and Mérette, *supra* footnote 16, for more details on how the different components of health expenditures were allocated across age groups.

20 Health Canada, *National Health Expenditures in Canada, 1975-1994* (Ottawa: Supply and Services, 1996).

Figure 3 Health-Care Costs Across Age Groups



Sources: Maxime Fougère and Marcel Mérette, “Population Ageing, Intergenerational Equity and Growth: Analysis with an Endogenous Growth, Overlapping-Generations Model,” a paper presented to the Using Dynamic Computable General Equilibrium Models for Policy Analysis International Conference, GI. Avernoes, Assens, Denmark, June 14-17, 1998 (available on the Web at www.gams.com/projects/dk/foug&mer.pdf); and calculations by the authors.

changes will occur in the demographic structure of the Canadian population. Once the baby-boom generation reaches retirement age, the proportion of the population that is retired will increase dramatically in all provinces. However, the magnitude of change in the old-age dependency ratio will differ across provinces. For example, in Newfoundland the old-age dependency ratio will increase by more than 248 percent between 2000 and 2041. In contrast, the old-age dependency ratio in Saskatchewan, now the highest in Canada, will increase at the slowest pace in the same period.

Relative Provincial Health-Care Cost

We now combine the relative health-care costs across age groups and the provincial demographic projections to obtain an estimate of provincial health-care costs relative to the Canadian average for the years 1996 to 2050. In figure 4, a

Table 1 Old-Age Dependency Ratio, Canada and the Provinces, 1996, 2023, and 2041

	1996	2023	2023/1996 (%)	2041	2041/1996 (%)
Alberta	15.2	27.9	83.6	36.2	138.2
British Columbia	20.2	30.7	52.0	39.3	94.6
Manitoba	22.0	31.1	41.4	38.6	75.5
New Brunswick	19.4	37.4	92.8	49.9	157.2
Newfoundland	15.8	38.8	145.6	55.0	248.1
Nova Scotia	20.1	36.7	82.6	48.5	141.3
Ontario	18.9	27.4	45.0	35.5	87.8
Prince Edward Island	21.3	34.9	63.8	46.1	116.4
Quebec	18.3	32.1	75.4	39.0	113.1
Saskatchewan	24.9	34.7	39.4	42.5	70.7
Canada	18.8	29.8	58.5	37.8	101.1

Sources: Statistics Canada; and calculations by the authors.

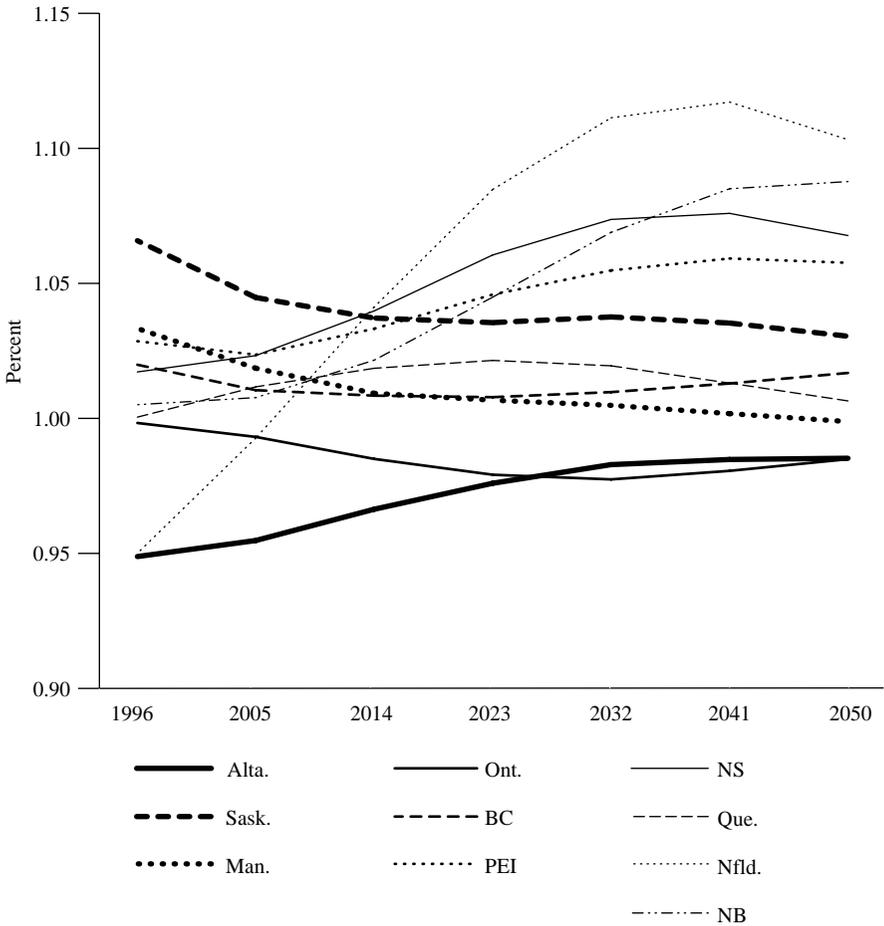
provincial health-care need equal to 1 equals the Canadian average. Note that although the disparities in fiscal needs for health care across provinces are less important than those in fiscal needs for social assistance, they are growing over time. Moreover, health-care expenditures will grow and the differences in fiscal needs for social assistance will increase in the coming years as the population ages rapidly. As shown in the figure, the two provinces with the lowest relative health-care needs in 1996 were Alberta and Newfoundland; Ontario was the third lowest. Our projections suggest that the province facing the most rapid increase in health-care needs will be Newfoundland.

FISCAL NEEDS FOR POST-SECONDARY EDUCATION

Post-secondary education fiscal needs are the other component of CHST that is strongly related to the demographic structure of the population, because most students belong to the 16-24 age group. To project fiscal needs for post-secondary education for the period 1996 to 2050 we correct the demographic data by the proportion of young people (age group 16-24) with a post-secondary degree. For this, we use Statistics Canada census data on the percentage of the population 15-24 years of age with a post-secondary degree. The data show that this proportion varies greatly across provinces. The proportion for years after 1996 was estimated using the convergence model developed by Serge Coulombe and Jean-François Tremblay.²¹

21 Serge Coulombe and Jean-François Tremblay, "Human Capital and Regional Convergence in Canada," a paper presented to the Centre for the Study of Living Standards conference, The State of Living Standards and Quality of Life in Canada, Ottawa, October 30, 1998 (available on the Web at www.csls.ca).

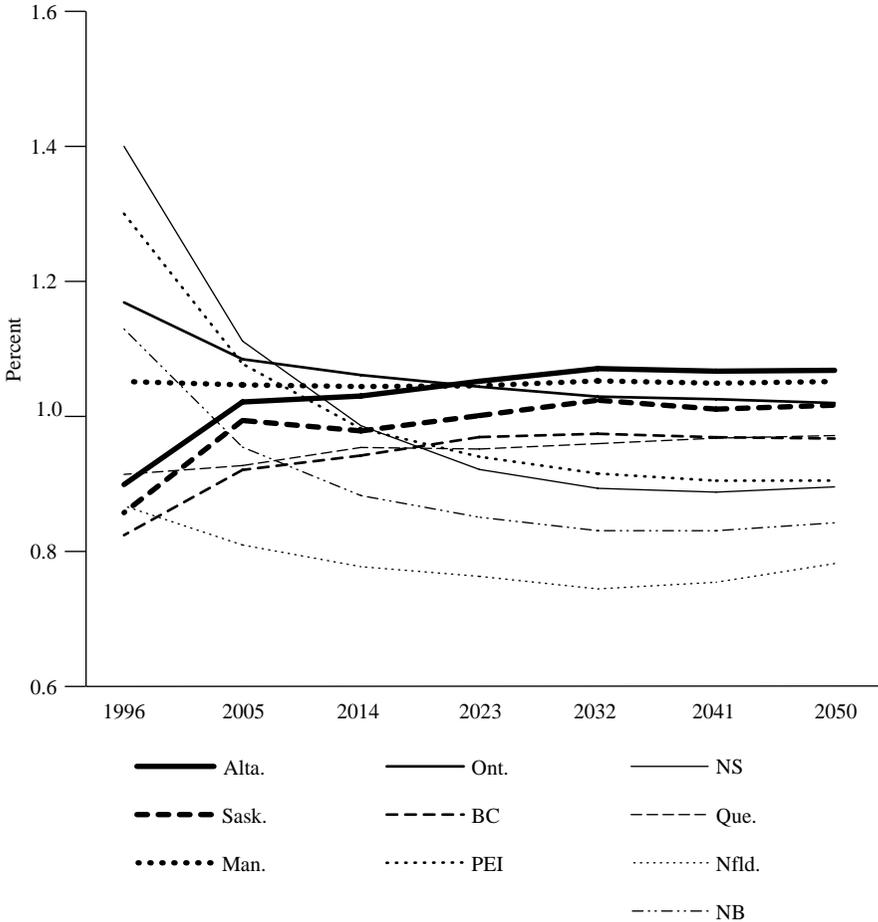
Figure 4 Provincial Health-Care Costs Relative to Canadian Average, Actual and Projected, 1996-2050



Source: Calculations by the authors from Statistics Canada demographic projections.

The fiscal needs for post-secondary education of the provinces relative to the Canadian average are represented in figure 5. Notice that in 1996, the fiscal need for post-secondary education for Nova Scotia relative to the Canadian average is very high, because the province has a large number of post-secondary institutions and a high proportion of young people with a post-secondary degree. The convergence model suggests, however, that the fiscal needs for post-secondary education across provinces will converge rapidly to the Canadian average. After two nine-year periods, the relative evolution is mainly driven by the demographic factor, which predicts only small discrepancies in the proportion of young people to total population across provinces.

Figure 5 Post-Secondary Fiscal Needs Relative to Canadian Average, Actual and Projected, 1996-2050



Sources: Calculations by the authors from Statistics Canada demographic projections; and Serge Coulombe and Jean-François Tremblay, "Human Capital and Regional Convergence in Canada," a paper presented to the Centre for the Study of Living Standards conference, The State of Living Standards and Quality of Life in Canada, Ottawa, October 30, 1998 (available on the Web at www.csls.ca).

The key point here for incorporating fiscal needs for post-secondary education is the well-established nature of interprovincial migration in Canada. The typical interprovincial migrant is an educated young person who moves from a poor province to Alberta, British Columbia, or Ontario. This migration is an externality; and economic theory on fiscal federalism underlines the fact that in the presence of geographical externalities, there is room for funding by the

central government. The rich provinces have to cover part of the cost of post-secondary education in the poor provinces.

WEIGHTING SUM OF FISCAL NEEDS

The previous sections have shown that fiscal needs differ across provinces in each of the three components of the CHST. We have not yet assessed the total fiscal needs of the three components—that is, to what extent the disparities in one component are enlarged or reduced by the disparities in the other two. For example, one may argue that a province with a fiscal need that is greater than the Canadian average in health care is implicitly compensated by having a fiscal need in post-secondary education that is lower than the Canadian average. In this section we report total fiscal needs of each province in relation to the Canadian average.

Table 2 summarizes the fiscal needs for each component of the CHST for the years 1998 and 2023. The first three rows of the table refer to the 1998 results, the next three to 2023. For 2023, relative fiscal needs in social assistance are assumed to be equal to the 1998 distribution, because no better estimate is available. However, relative fiscal needs for health care and post-secondary education change in 2023, because they are sensitive to the demographic evolution. The last two rows of the table show our weighting sum for 1998 and 2023. In 1998, total spending on social assistance, health care, and post-secondary education was \$34, \$45, and \$18 billion, respectively. Taking these amounts into consideration, we calculated the sum of the disparities of the three components using a weight of 35 percent for social assistance, 47 percent for health care, and 18 percent for post-secondary education. The weighting is the same for all provinces and for the two periods in the table.

For each of the components and the sum of the disparities, the Canadian average equals 1. Hence, per capita funding would avoid disparity if the results were equal to 1 for all provinces in each component. Obviously, the per capita division rule would have created disparities across provinces in 1998 in each of the components of the CHST, and these would persist or appear in 2023. The index of dispersion of the disparities (the standard deviation in the table) is 0.411 for social assistance, 0.188 for education, and 0.033 for health care. From 1998 to 2023, the index increases for health care but decreases for post-secondary education.

A more important observation to be drawn from the table is that the per capita division rule would treat all Canadians equally and fairly if the weighting sums were equal to 1 for all provinces. However, as can be seen, disparities in social assistance, health care, and post-secondary education do not compensate one another. The weighting sum differs for all provinces and for both periods. The index of dispersion is 0.129 in 1998 and will decrease slightly to 0.106 in 2023. The dispersion index for 2023 must be considered a rough approximation given the difficulty in predicting the evolution of social assistance and the cost of health care for an aging population.

Table 2 Provincial Fiscal Needs by CHST Component, 1998 and 2023 (Canadian Average = 1)

	Alta.	BC	Man.	NB	NF	NS	Ont.	PEI	Que.	Sask.	Standard deviation
<i>1998</i>											
Social assistance	0.312	0.874	0.750	1.045	1.387	1.072	1.127	0.934	1.164	0.830	0.411
Health care	0.950	1.017	1.031	1.008	0.958	1.018	0.998	1.026	1.002	1.061	0.033
Post-secondary education	0.899	0.824	1.052	1.130	0.868	1.400	1.169	1.300	0.914	0.857	0.188
<i>2023</i>											
Social assistance	0.312	0.874	0.750	1.045	1.387	1.072	1.127	0.934	1.164	0.830	0.411
Health care	0.976	1.008	1.007	1.069	1.085	1.061	0.979	1.046	1.021	1.035	0.036
Post-secondary education	1.071	0.974	1.053	0.831	0.744	0.893	1.029	0.915	0.960	1.024	0.115
<i>Sum</i>											
1998	0.718	0.932	0.937	1.043	1.091	1.107	1.075	1.045	1.042	0.943	0.129
2023	0.761	0.955	0.925	1.017	1.128	1.034	1.040	0.983	1.060	0.962	0.106

Source: Calculations by the authors.

CONCLUSION

The great advantage of the CHST per capita division rule is that it is simple. However, a simple rule is not necessarily an equitable one. This paper has shown that fiscal needs for the financing of social assistance, health care, and post-secondary education are not constant on a per capita basis across provinces. Although abandoning a cost-sharing rule in favour of a per capita division rule seems appropriate to limit overspending, especially in the context of government fiscal restraints, the change can be expected to increase disparities across provinces. Consequently, we propose that fiscal needs be incorporated into the equalization program or the CHST. With the per capita division rule for the CHST and the actual equalization program, the federal government is treating Canadians differently depending on their province of residence.

Even though Courchene agrees in principle with fiscal needs, he nevertheless concludes that “[i]ncorporating ‘expenditure needs’ into the equalization program would not fit well in the Canadian context, where all transfers are unconditional.”²² We disagree with this conclusion. The fact that both the CHST and equalization grants are unconditional does not mean that fiscal needs cannot be taken into account. We would rather follow Oates’s view that “unconditional grants are typically the appropriate vehicle for purposes of fiscal equalization.”²³

22 *Supra* footnote 2, at 2.

23 *Supra* footnote 9, at 1127.