

C.D. Howe Institute Institut C.D. Howe

# Communiqué

Embargo: For release *Tuesday*, July 13, 1999, at 10:00 a.m.

## Federal-provincial transfers need fundamental reform, says C.D. Howe Institute study

Canada's system of federal-provincial transfers is broken and needs fundamental reform, argues a *C.D. Howe Institute Commentary* released today that is critical of the existing equalization and Canada Health and Social Transfer (CHST) programs.

In "Simply Sharing: An Interprovincial Equalization Scheme for Canada," authors Paul Boothe, Professor of Economics at the University of Alberta and an Adjunct Scholar of the C.D. Howe Institute, and Derek Hermanutz, formerly with Alberta Treasury, maintain that the existing equalization and CHST programs are seriously flawed. For example, the current scheme

- transfers income from poor Canadians in rich provinces to rich Canadians in poor provinces;
- treats some provinces inequitably outside the formal equalization program;
- hinders economic development in less well off regions; and
- blurs accountability, with Canadians not knowing which level of government to hold responsible for the taxes they pay and the programs they receive.

Boothe and Hermanutz argue that recent changes to the equalization program constituted only minor tinkering and failed to address these fundamental problems.

The authors contend that the existing transfer scheme is much larger than is necessary currently more than two-thirds of the money raised to fund federal-provincial transfers ends up back in the province it came from. A smaller, more effective program would begin with Ottawa transferring income tax room equal to the total of federal-provincial transfer programs to the provinces. Provinces would allocate a portion of these revenues to a new interprovincial equalization fund. By design, initial contributions and withdrawals from the fund would ensure that the transfer of taxes left provincial budget balances unchanged, so that all governments would be no worse off at the outset. Future transfers among the provinces would be calculated using a simple equalization formula based on differences in provincial personal income, an arrangement that would avoid many of the existing system's problems.

Among the advantages of such a scheme, the authors say, are that equalization-receiving provinces would no longer face incentives that distort their economic development efforts.

With transfers made directly between provinces rather than through Ottawa, voters would find it easier to relate the taxes they pay each level of government to the programs they receive. In addition, the federal budget would be insulated from swings in provincial fortunes that, through their impact on federal-provincial transfers, have affected Ottawa's bottom line in the past.

Boothe and Hermanutz conclude by observing that reforming intergovernmental transfers, though politically contentious, is worth the effort. They point out that the existing system's economic flaws have undermined its political support. By improving the incentives created by the transfer system and by making the system more transparent and accountable, Canadians can ensure that fiscal transfers will continue to support the federation in the future.

This is the fourth and final study in a special *C.D. Howe Institute Commentary* series called "The Transfer Papers." The series aims to encourage debate about new ways to finance the Canadian federation and how to accomplish the twin goals of an efficient and prosperous economy and fairness for all Canadians. The general editor of the series is Paul Boothe.

\* \* \* \* \*

The C.D. Howe Institute is Canada's leading independent, nonpartisan, nonprofit economic policy research institution. Its individual and corporate members are drawn from business, labor, agriculture, universities, and the professions.

-30-

For further information, contact:

Paul Boothe (780) 492-2989; Shannon Spencer (media relations), C.D. Howe Institute phone: (416) 865-1904; fax: (416) 865-1866; e-mail: cdhowe@cdhowe.org; Internet: www.cdhowe.org

"Simply Sharing: An Interprovincial Equalization Scheme for Canada," by Paul Boothe and Derek Hermanutz, *C.D. Howe Institute Commentary* 128 (July 1999). 24 pp.; \$9.00 (prepaid, plus postage & handling and GST — please contact the Institute for details). ISBN 0-88806-458-6; ISSN 0824-8001.

Copies are available from: Renouf Publishing Company Limited, 5369 Canotek Road, Ottawa, Ontario K1J 9J3 (stores: 71½ Sparks Street, Ottawa, Ontario; 12 Adelaide Street West, Toronto, Ontario); or directly from the C.D. Howe Institute, 125 Adelaide Street East, Toronto, Ontario M5C 1L7. The full text of this publication will also be available on the Internet.



C.D. Howe Institute Institut C.D. Howe

## Communiqué

Embargo : à diffuser le *mardi* 13 juillet 1999 à 10 h

## Selon une étude de l'Institut C.D. Howe, il faudrait complètement remanier les transferts fédéraux-provinciaux

Le système canadien des transferts fédéraux-provinciaux ne fonctionne pas et a grand besoin d'une réforme fondamentale, soutient un *Commentaire de l'Institut C.D. Howe* publié aujourd'hui, qui est critique à l'égard de la formule actuelle de péréquation des programmes du Transfert canadien en matière de santé et de programmes sociaux (TCSPS).

Intitulé « Simply Sharing: An Interprovincial Equalization Scheme for Canada » (« Un simple partage : un programme de péréquation interprovinciale pour le Canada »), le document est rédigé par Paul Boothe, professeur d'économie à l'Université de l'Alberta et attaché de recherche auprès de l'Institut C.D. Howe, et Derek Hermanutz, qui travaillait auparavant au Trésor de l'Alberta. Les auteurs soutiennent que les programmes actuels de péréquation et du TCSPS comportent de graves défauts. À titre d'exemple, le mécanisme actuel :

- transfère le revenu des Canadiens démunis dans les provinces nanties aux Canadiens nantis dans les provinces démunies;
- traite certaines provinces de manière inique en dehors du programme officiel de péréquation;
- entrave l'essor économique des régions moins bien nanties;
- crée de la confusion en matière de responsabilité, car les Canadiens ne savent plus à quel palier de gouvernement attribuer la responsabilité des impôts et taxes qu'ils versent et des programmes qu'ils reçoivent.

MM. Boothe et Hermanutz soutiennent que les changements récemment apportés au programme de péréquation n'étaient que du rafistolage qui n'a pas remédié aux problèmes fondamentaux.

Les auteurs estiment que le mécanisme actuel de transfert est bien plus lourd qu'il n'est nécessaire — à l'heure actuelle, plus des deux-tiers des sommes perçues pour financer les transferts fédéraux-provinciaux retournent à la province dont elles proviennent. On pourrait avoir un programme de taille plus réduite et plus efficace dans le cadre duquel Ottawa transférerait aux provinces une marge fiscale équivalente au total des programmes de transfert fédéral-provincial. Les provinces attribueraient une part de ces revenus à un nouveau fonds de péréquation interprovinciale. Les contributions et les retraits initiaux du fonds seraient conçus de façon à ce que le transfert des taxes et impôts ait un effet nul sur le solde budgétaire des provinces, afin qu'il n'y ait au départ aucune répercussion négative sur les gouvernements. Tout transfert futur entre les provinces serait calculé à l'aide d'une simple formule de péréquation en fonction des différences du revenu des particuliers de la province, une méthode qui éliminerait plusieurs des problèmes causés par le système actuel.

Les auteurs indiquent qu'un tel mécanisme offrirait de nombreux avantages. Ainsi, les provinces recevant les paiements de péréquation ne seraient plus confrontées à des incitatifs qui nuisent à leurs efforts de développement économique. Grâce à des transferts effectués entre les provinces plutôt que par le biais d'Ottawa, les électeurs seraient mieux en mesure de faire le lien entre les impôts et les taxes qu'ils versent à chaque palier de gouvernement et les programmes qu'ils reçoivent. De plus, le budget fédéral serait indépendant des fluctuations économiques entre les provinces, fluctuations qui dans le passé ont eu des répercussions sur les résultats nets d'Ottawa, en raison de leur effet sur les transferts fédéraux-provinciaux.

En conclusion, MM. Boothe et Hermanutz soulignent que la réforme des transferts intergouvernementaux en vaut la peine, même si elle est épineuse sur le plan politique. Ils font la remarque que les lacunes économiques du système actuel ont sapé l'appui politique qu'il reçoit. En améliorant les incitatifs créés par le système de transfert, en le rendant plus transparent et en en clarifient les responsabilités les Canadiens veilleront à ce que les transferts financiers continuent à appuyer la fédération dans l'avenir.

Le présent document est le quatrième et dernier volet d'une série spéciale de *Commentaires de l'Institut C.D. Howe* intitulée « Les cahiers du transfert ». La série, publiée sous la direction de Paul Boothe, vise à stimuler le débat sur de nouvelles façons de financer la fédération canadienne et sur la réalisation de l'objectif double d'une économie efficiente et prospère, et de l'équité pour tous les Canadiens.

\* \* \* \* \*

L'Institut C.D. Howe est un organisme indépendant, non-partisan et à but non lucratif, qui joue un rôle prépondérant au Canada en matière de recherche sur la politique économique. Ses membres, individuels et sociétaires, proviennent du milieu des affaires, syndical, agricole, universitaire et professionnel.

- 30 -

**Renseignements** :

Paul Boothe 780 492-2989 Shannon Spencer (relations avec les médias), Institut C.D. Howe téléphone : 416 865-1904, télécopieur : 416 865-1866; courriel : cdhowe@cdhowe.org, Internet : www.cdhowe.org

« Simply Sharing: An Interprovincial Equalization Scheme for Canada », *Commentaire de l'Institut C.D. Howe* n<sup>o</sup> 128, par Paul Boothe et Derek Hermanutz, Toronto, Institut C.D. Howe, juillet 1999, 24 p., 9,00 \$ (les commandes sont payables d'avance, et doivent comprendre les frais d'envoi, ainsi que la TPS — prière de communiquer avec l'Institut à cet effet). ISBN 0-88806-458-6; ISSN 0824-8001.

On peut se procurer des exemplaires de cet ouvrage auprès des : Éditions Renouf Itée, 5369, chemin Canotek, Ottawa ON K1J 9J3 (librairies : 71½, rue Sparks, Ottawa ON, et 12, rue Adelaide Ouest, Toronto ON) ou encore en s'adressant directement à l'Institut C. D. Howe, 125, rue Adelaide Est, Toronto (Ontario) M5C 1L7. On peut également consulter le texte intégral de cet ouvrage dans le site Web de l'Institut.

## Simply Sharing:

# An Interprovincial Equalization Scheme for Canada

by

Paul Boothe and Derek Hermanutz

Intergovernmental transfers are a key element of Canada's federal system, yet the current scheme has become outdated and no longer serves the country well. The federal and provincial governments' recent review of equalization, conducted behind closed doors, considered only a narrow range of technical issues. It did little to address growing problems of inequitable treatment of individuals and governments, incentives for inefficient behavior by individuals and government, and declining sustainability and political viability.

We propose a fundamental reform of Canadian intergovernmental transfers. The new scheme would, first, transfer sufficient income tax points from Ottawa to the provinces to allow a set of net interprovincial equalization transfers. These transfers would be fiscally neutral for all governments, thus respecting the political bargain implicit in the current level and distribution of transfers. Next, the scheme would use a simple equalization formula based on a single macroeconomic indicator: adjusted personal income.

This proposal addresses many of the problems of the existing scheme while preserving the political bargain embodied in the current level and distribution of transfers. A key benefit of the proposal is that it would increase both the equalization program's transparency and the accountability of governments for the transfers they make and receive. In addition, the new scheme would transform the federal government from funder of the scheme to guarantor of transfers from a new interprovincial fund.

Improving the incentives embodied in Canada's intergovernmental transfer system and enhancing the transparency and accountability associated with the program should strengthen Canadians' support for this critical underpinning of the federation.

### Main Findings of the Commentary

- Canada's current system of intergovernmental transfers is outdated and no longer serves the federation well.
- The current system has problems related to equity, efficiency, declining political viability, and sustainability.
- One result is that resources go from low-income families in some provinces to high-income families in other provinces.
- Equity problems for governments also occur: provinces receive different amounts of federal support for welfare, health care, and postsecondary education. In effect, these transfers are a separate equalization scheme, outside the formal program.
- The current system impedes efficiency-enhancing migration by individuals to provinces where employment opportunities are better.
- The existing scheme reduces incentives for equalization-receiving provinces to stimulate certain kinds of economic development. It also encourages them to set tax rates higher than they otherwise would.
- The current system makes it difficult for taxpayers to know who pays for what. For example, in fiscal year 1996/97 about 69 percent of the money Ottawa collected for transfers went back to the provinces from which it originated.
- Because equalization is paid by the federal government but is based on provincial revenues, large changes in those revenues can force major fluctuations in federal expenditures. For example, pressure on the equalization program was a major factor leading to the infamous National Energy Program.
- The recent federal-provincial review of equalization did little to address these problems. Neither the federal nor provincial governments used this opportunity to initiate an open, wide-ranging discussion on the future of this critical program.
- To that end, we suggest a fundamental reform of the transfer system. The proposed scheme would, first, transfer sufficient income tax points from Ottawa to the provinces to allow a set of net interprovincial equalization transfers. These transfers would be fiscally neutral for all governments, thus respecting the political bargain implicit in the current level and distribution of transfers. Next, the scheme would use a simple equalization formula based on a single macroeconomic indicator: adjusted personal income.
- Such a scheme could address many of the problems of the current system. Key benefits would include increases in transparency and the accountability of governments for the transfers they make and receive. The federal government would no longer be funder of the scheme, as it is currently, but guarantor of the new interprovincial fund.
- Reforming intergovernmental transfers is worth the effort. By improving the incentives created by the transfer system as well as making it more transparent and accountable, Canadians can ensure that this important program will continue to support the federation in the future.

ommentators have long recognized that intergovernmental transfers, especially those under the equalization program, are a key element of Canadian federalism. Canada's system for sharing among the provinces is held to be one of the world's best examples of federalism at work.

Over the past decade, however, the intergovernmental redistribution system has come under increasing pressure. With the federal government striving to balance its budget, the system has undergone a number of changes, not all of them consistent with the principles of fiscal federalism.

Today, support for the intergovernmental transfer system is waning (for evidence, see Boothe 1992; 1998). Concerns have been expressed that Ottawa's ad hoc changes to key transfer programs have increased the element of interprovincial redistribution in transfers originally aimed at funding programs for health, postsecondary education, and social assistance.<sup>1</sup> In addition, the transfer system has become so complicated that it is virtually impossible for taxpayers to know how their tax dollars are being spent and which politicians to hold accountable. Some analysts also suspect that the design of certain intergovernmental transfer programs encourages inefficiency and impedes economic adjustment.

Equalization, Canada's most important program for regional redistribution, has recently undergone its regular quinquennial review. It was, as usual, held behind closed doors and confined to a relatively narrow range of technical points. In this *Commentary*, we hope to open the next review by broadening the debate to consider a wider range of issues and to include participants outside government.

To this end, we propose a new scheme for intergovernmental transfers: a simple, net interprovincial system to replace the current equalization program as well as the Canada Health and Social Transfer (CHST) and the regionally sensitive portion of employment insurance (EI). Briefly, our proposal would address many of the concerns with the current system by

- basing transfers to provinces on a single macroeconomic indicator, rather than attempting to measure bases in more than 30 tax fields, as is currently the case;
- having contributions from "have" provinces and payments to "have-not" provinces come directly from an interprovincial pool, rather than from the federal government's general revenues (see Box 1); and
- transferring personal income tax (PIT) points from Ottawa to the provinces.

The *Commentary* is organized as follows. In the first section, we discuss the reasons that led us to believe the current system of intergovernmental transfers needs reform. Next, we consider principles that should guide that reform. In the third section, we present our proposal. In the fourth, we evaluate the proposal in light of the principles set out earlier. In the fifth section, we examine transition and governance issues. The paper concludes with a brief summary.

#### The Reasons for Reform

The concept of equalization, enshrined in the *Constitution Act, 1982*, enjoys almost unanimous support among Canadian politicians and academics.<sup>2</sup> This esteem has not, however, prevented a long-standing and lively debate over the appropriate design of transfer programs, the amount of redistribution, the effects of transfers on efficiency and equity, and the amount of redistribution that should occur outside of the formal equalization program.

In this section, we discuss concerns with the current transfer system under as they relate to equity, efficiency, political viability, and sustainability.

#### Box 1: The Current Equalization Program

Most Canadians are at least vaguely aware of the principle of equalization and the Constitution's guarantee of it:

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. (*Constitution Act, 1982*, section 36(2).)

Many people do not realize, however, that explicit equalization, which dates from 1957, is a bargain between Ottawa and the provinces, reviewed every five years (more or less). Neither do they know how the current program works.

The Constitution's reference to "sufficient revenues" is taken to mean "fiscal capacity," which the program defines as the amount of revenue a province could raise if it applied an average tax rate to each provincial or local tax base (other measures of fiscal capacity are, of course, possible).

Each province's per capita fiscal capacity (not its actual revenue) is calculated in more than

30 taxation categories — from the personal income tax to resource revenues — and compared with a standard that, historically, has varied from the average of the two wealthiest provinces (Ontario and British Columbia in the late 1950s) to the national average. Since the early 1980s, the measure has been "the representative five-province standard," which is the average per capita of Quebec, Ontario, Manitoba, Saskatchewan, and British Columbia. (In recent years, the five-province standard has tended to run about 98 or 99 percent of the national average.)

The calculation then takes each province's shortfalls and overages from the standard and sums them across categories. A positive sum has no effect — that is, the governments of the wealthier provinces receive nothing and put nothing into the scheme. A negative sum entitles a province to receive equalization payments, although some floors and other variations apply.

The federal government makes the payments from its general revenues.

#### Equity

Equity concerns stem from the current transfer system's implications for the distribution of income among individuals. Academics have known for some time that the operation of transfer schemes that improve the distribution of income among governments can worsen its distribution among individuals (see, for example, Oates 1977). Thus, program designers must make a tradeoff between intergovernmental and interpersonal equity.

How much are Canadians prepared to worsen the distribution of income among individuals in order to improve the distribution of income among governments? The first step in answering this question must be to determine how a given scheme of intergovernmental transfers affects the distribution of income among individuals. Fortunately, recent work by Poschmann (1998) casts light on this issue for Canada's current scheme. Looking at transfers resulting from equalization, the CHST, and the regionally sensitive part of EI, he calculates the net cost of federal transfers and taxes for families of various incomes in each province.

Using data for 1997, Poschmann finds a surprising amount of "perverse" interpersonal redistribution. For example, an Ontario family with income of \$30,000 to \$40,000 contributes an amount equal to 2.8 percent of that income, or about \$980, to the transfer system, while a family with a similar income in Prince Edward Island receives an amount equal to 19.8 percent, or about \$7,000.

Perverse redistributions are not, however, restricted to families in similar income brackets. Poschmann also finds that, while an Alberta family with income of \$30,000 to \$40,000

contributes 9.0 percent of it, or about \$3,150, a Newfoundland family with income of more than \$100,000 receives benefits equal to 1.2 percent or about \$1,200.

If Canadians were aware of the effects of the current intergovernmental transfer scheme, we believe many would find this degree of perverse interpersonal redistribution to be unacceptable.

#### Efficiency

Efficiency concerns about the current equalization program involve two questions: To what extent does it prevent efficient interprovincial migration by individuals? Does it distort the policy decisions of provincial governments?

#### Migration

Boadway and Flatters (1982) formally set out the theoretical case that equalization grants improve efficiency. Essentially, their model shows that interprovincial differences in government-provided benefits (net of taxes) can cause economically inefficient migration: individuals move to capture better net benefits, rather than efficiency-enhancing employment opportunities.

However, another body of work, pioneered by Courchene (1970; 1978), argues that intergovernmental transfers may retard economic efficiency by inhibiting efficiency-enhancing migration. A good deal of empirical work on this issue has been done since the 1970s; in reviewing it, Day and Winer (1994) conclude, first, that the evidence suggests regional differences in EI hinder migration, inducing people to stay in regions with high unemployment rather than move to those where jobs are more plentiful and, second, that there is no clear evidence that intergovernmental grants have a direct effect on migration.

#### Provincial Government Behavior

The second efficiency concern about transfers is that they create incentive problems for governments, as Courchene (1994), Dahlby and Wilson (1994), Smart (1998), and Boessenkool (1998), among others, have documented.

Consider, for example, the problem of the "base taxback." Under the current scheme, this arises because a receiving province loses equalization revenue when the value of its tax base increases relative to the standard base. For a province not included in the representative five-province standard (see Box 1), the taxback rate is generally dollar for dollar — that is, 100 percent. For a province included in the standard, the taxback is less than 100 percent because the change in its tax base also changes the standard (the exact percentage depends on how much influence that province has on the standard). Generally speaking, receiving provinces included in the standard do not have much influence on it, especially on the income and consumption tax bases. In the case of resources, however, some provinces do have considerable influence - consider potash in Saskatchewan, asbestos in Quebec, and offshore oil in Newfoundland and Nova Scotia.

High taxback rates may discourage a province from investing in the development of economic activity associated with particular tax bases. Currently, the federal government attempts to undo this perverse incentive by applying an *ad hoc* measure to reduce the taxback on resource bases and by using direct federal grants to encourage economic activity in selected regions.

Smart (1998) raises an additional efficiency concern. He argues that the current equalization system encourages higher distortionary tax rates in the receiving provinces because the program, in effect, compensates their governments for a portion of the deadweight costs associated with taxes. To the extent that their tax bases are elastic with respect to tax rates, provinces can induce larger equalization transfers by increasing tax rates and thereby shrinking the tax base.

#### Political Viability

While support for the *principle* of equalization remains strong in Canada, the *political viability* of the current transfer system has declined markedly over the past decade. This disenchantment has two facets: a deterioration of relations between Ottawa and the provinces, and the increasing complexity of intergovernmental transfers.

#### Ottawa and the Provinces

At present, although the equalization program is theoretically an agreement between the federal and provincial governments, Ottawa can

legislate changes at will, including changes that have significant, unexpected effects on provincial budgets. Since changes in equalization are budgetary items, changes in the program are subject to the usual practice of budgetary secrecy. That means that public discussion is limited except after the fact. (Boadway 1996, 21.)

Much of the recent decline in support for equalization has resulted from Ottawa's choosing to eliminate its deficit by reducing transfers to the provinces by much more than it has reduced spending on its own programs.

To make matters even more difficult, while all provinces were affected by Ottawa's deficitreduction strategy, three provinces have been singled out for special treatment. In 1990, the Progressive Conservative government decided to limit the growth of Canada Assistance Plan (CAP) payments to the provinces that did not receive equalization — British Columbia, Alberta, and Ontario. Thus, the CAP, through which Ottawa had paid half the cost of provincial welfare, was, in effect, transformed into a form of equalization outside the formal program. (The three provinces challenged the legality of the change but lost when the Supreme Court of Canada ruled that the federal government could not be bound by intergovernmental agreements of previous parliaments.)

When the Liberals came to power in 1993, transfers to provinces were greatly reduced. For example, between fiscal years 1994/95 and 1997/98, cash payments under the CAP and Established Programs Financing (EPF) and their successor, the CHST, fell by \$6.7 billion, or 35 percent. Equalization payments increased by \$400 million, or 5 percent, over the same period. But federal program spending (excluding transfers to other levels of government) fell by \$3.7 billion, or only 4 percent, and \$3 billion of that savings came from reduced EI benefits, which decreased partially because of improvements in the economy.

Ottawa's focus on deficit reduction through provincial transfers and its differential treatment of the provinces left provincial governments bitter and divided in matters related to the intergovernmental transfer system.

#### Transparency and Accountability

Issues related to the transparency and accountability of the system are also a concern. The current transfer system is so complex that only a few experts in government and academe understand it. Even the CHST, which is conceptually simple, has become very complicated in practice, with calculations involving tax points, associated equalization, floors, and supplements.

The level of complexity in the equalization program inspires a false sense of precision in the numbers. It also requires a substantial and ongoing effort to keep the formula's tax bases current. For example, the development and maturation of the gambling industry and the substantial growth in government revenues derived from it created substantial challenges for the most recent equalization review. Another difficulty is resource revenues: most experts agree that economic rents are the appropriate tax base here, yet no one has found a suitable way to measure them.

Problems of transparency translate into barriers to public accountability. Under the current system, the actual amount of interprovincial redistribution is difficult for the public to discern. Logically (and probably in the minds of most taxpayers), equalization money flows from contributing provinces to receiving provinces. In actuality, however, federal taxes collected in every province finance the program. Thus, part of the equalization entitlement a recipent receives comes from federal revenues collected in that province.

Netting out federal taxes collected in receiving provinces makes a considerable difference to one's vision of the flow of funds. Franke and Hermanutz (1997), for example, show that, of the \$8.7 billion Ottawa spent on equalization transfers in fiscal year 1995/96, only \$5.8 billion actually flowed from the three contributing provinces to the seven receiving provinces. The rest came from the recipients' own taxpayers. Actual net transfers ranged from a contribution of 1.2 percent of provincial gross domestic product (GDP), or \$3.7 billion, by Ontario to receipt of 8.2 percent of GDP, or \$827 million, by Newfoundland.

It is difficult for voters to judge the value of a government program if they cannot be sure how much it costs them in taxes.

#### Sustainability

To be sustainable over the longer term, intergovernmental transfers must be stable and reliable revenue sources for recipients and affordable expenditures for contributors. The two characteristics are linked: transfer programs that prove unaffordable will, by their nature, also be unreliable. As already described, the current transfer system lacks reliability and, not surprisingly, problems of affordability are inherent.

Consider the equalization program as now funded and delivered by Ottawa. Provinces with negative entitlements do not pay into the program (although their taxpayers do); they simply receive no transfer. This asymmetric revenue-sharing scheme is commonly called a "gross" equalization scheme. Alternatively, a symmetric "net" scheme would involve positive and negative entitlements that summed to zero. It would be preferable to a gross scheme on several grounds, including affordability.

Under the current scheme, provincial contributions do not necessarily match provincial fiscal capacity, even as defined by the equalization program. For example, Alberta has the highest fiscal capacity of all the provinces, mainly as a result of oil and gas revenues. Its share of federal revenues collected does not match, however, because the federal government is forbidden to tax resources directly. On a per capita basis, most federal revenues come from Ontario.

Table 1 shows that the share of federal revenues collected in each of British Columbia, Alberta, and Saskatchewan is much lower than the estimated fiscal capacity derived under the current equalization formula. Quebec comes out almost even. All the other provinces provide a share of federal revenue greater than their calculated fiscal capacity; the difference is almost 4 percentage points in the case of Ontario.

If fiscal capacity increased in one province — say, in British Columbia as a result of increased timber prices — the total amount of equalization would rise. All provinces would have to pay for this increase since the extra federal taxes required would be collected across all of them, even though nine provinces would enjoy no increase in fiscal capacity (indeed, their relative capacity would decrease). In such a case, it would be more desirable to have the increase in equalization paid for by British Columbia residents — the citizens who benefit directly from the extra fiscal capacity.

The potential mismatch between the fortunes of transfer contributors and their contributions is an ongoing problem for the federation. In the early 1980s, the rise of Alberta's energy revenues put intolerable pressure on the transfer system. The federal government responded by reducing the equalization of energy revenue and by instituting the National Energy Program.

Much of the current division between provinces can be traced to that reaction and to the differential treatment of them by Ottawa as it cut transfers in the 1990s.

#### Principles to Guide Reform

Given the concerns outlined above, we believe a fundamental rethinking of Canada's intergovernmental transfers is warranted. Any attempt to design a new system of fiscal transfers must be motivated by a set of underlying principles. Although no practical scheme for transfers can adhere to all the principles one might consider worthy, we draw from Boothe (1998) and Courchene (1998) to lay out a set matching the concerns we discussed above. (For another recent discussion of principles that could motivate the transfer system, see Clark [1998].)

In the next section, we use our set of principles to test our redesigned transfer scheme.

#### Equity

Any intergovernmental transfer system has the potential to result in perverse interpersonal transfers. Thus, policymakers must make a tradeoff between the amount of intergovernmental redistribution and the size of perverse interpersonal transfers to be tolerated.

Our principle here is that due regard should be given to arranging a given level of intergovernmental transfers so as to minimize the size of perverse interpersonal transfers.

and Fiscal Capacity	
 Federal	Provincial-Local
Revenues	Fiscal Capacity
1996	1996/97

Table 1: Shares of Federal Revenue

	Revenue 1996	es Fiscal Capacity 1996/97		
	(percentage of total)			
Newfoundland	1.35	1.24		
Prince Edward Island	0.39	0.32		
Nova Scotia	3.03	2.33		
New Brunswick	2.16	1.88		
Quebec	21.64	21.67		
Ontario	42.70	38.82		
Manitoba	3.31	3.04		
Saskatchewan	2.74	3.32		
Alberta	9.71	13.37		
British Columbia	12.99	14.00		
All provinces	100.00	100.00		

Sources: Canada 1998a; Statistics Canada, cat. 13-213.

Further, we believe the federal government should, to the extent possible, treat similarly situated individuals equally, regardless of the province in which they happen to reside.

#### Efficiency

To the extent possible, the transfer system should not distort the economic decisions of individuals or governments. Thus, intergovernmental transfers should not unduly affect individuals' decisions to move in search of employment; neither should transfers affect governments' decisions about tax rates or about encouraging certain kinds of economic activity.

#### Political Viability

The political viability of a redesigned transfer system rests on its harmony with current political reality; in Canada's case, that means it should be consistent with the spirit and letter of the Constitution.

Recognition of the political bargain embodied in the current level and distribution of transfers in Canada is also critical. Following Bird (1986), we assume that the current level and distribution of transfers are the outcome of a political bargain among the provinces and the federal government. The implication is that a redesigned transfer system should start at a point that is fiscally neutral for all governments. In other words, there should be no fiscal winners or losers.

Political viability requires transparency: the mechanisms used to collect and spend public funds should be as understandable as possible to the public. Thus, a redesigned transfer system should be simple enough for most taxpayers to understand and, therefore, to judge in an informed way.<sup>3</sup>

Greater transparency should also contribute to improved accountability. To the extent possible, governments that spend public funds should be responsible for raising those funds through taxation. This kind of match allows taxpayers to form a clear idea of the tax price of public services and to hold the appropriate government accountable for its spending of public funds. Thus, a redesigned system of fiscal transfers should seek to make the link between taxes and public spending as direct as possible.

#### Sustainability

Transfers should be as stable and predictable as possible, permitting them to contribute to good fiscal planning by federal and provincial governments. Thus, a redesigned transfer system should smooth changes in transfers and allow them to be reasonably predictable in the medium term.

Sustainability requires that transfers also be affordable. A redesigned transfer system should ensure that entitlements and the revenues that finance them are not allowed to diverge for long, imperiling the political viability of the program. Affordability requires that entitlements be closely related to the revenues of the governments funding the program.

#### A Redesigned Scheme

Our proposed scheme is best described as a comprehensive, net interprovincial program based on a macro formula.

The scheme is *comprehensive* in that it includes not only the current equalization program but also the equalization components of the existing CHST and EI programs. Our rationale for including these two programs is the principle of equity. "Fiscal neutrality," as Courchene calls this principle, requires that, "apart from equalization, federal programs should treat similarly situated individuals equally, regardless of their place of residence" (1996, 7). In our minds, the current CHST and the regionally sensitive portion of EI fail to meet this criterion. (The current infrastructure program also contains an element of equalization since its formula for allocating federal dollars is based half on population and half on unemployment rates. We did not include it in our calculations since it is intended to be a temporary program.)

Our proposed scheme is a *net interprovincial* one in that all transfers would be directly contributed or received by provincial governments. No transfers from the federal government would be involved.

Finally, the scheme's contributions and withdrawals would be calculated using a simple formula based on a *macroeconomic variable*: adjusted personal income.

The proposed scheme would not use provincial revenues to calculate entitlements. It would also be independent of actual provincial tax rates, a feature that would make it differ both from the current equalization program and from other macro-based proposals, which tend to involve calculating a national average tax rate and then a per capita deficiency from a defined standard. Under our proposal, however, increases or decreases in provincial taxes would have no direct effect on equalization entitlements and an indirect ef-

	Equalization Program	CHST	Regional Component of EI <sup>a</sup>	Total
			(\$ millions)	
Newfoundland	888	148	309	1,345
Prince Edward Island	162	14	53	229
Nova Scotia	932	63	88	1,082
New Brunswick	794	84	233	1,111
Quebec	2,217	1,423	530	4,085
Ontario	-3,772	-1,338	-835	-6,030
Manitoba	800	110	-35	875
Saskatchewan	-17 <sup>b</sup>	88	-44	27
Alberta	-857	-282	-220	-1,359
British Columbia	-1,148	-139	-80	-1,367
All provinces	0	0	0	0
Total redistribution <sup>c</sup>	5,793	1,844	1,214	8,755
Program size	8,834	14,820	4,248	27,901
Redistribution ratio	65.6%	12.4%	28.6%	31.4%

Table 2: Federal Net Transfers to Provinces, fiscal year 1996/97

Note: Columns and rows may not add due to rounding.

<sup>a</sup> Estimates from Boessenkool (1998) of the amount of EI spending that can be attributed to the variable entrance requirement component.

 $^{\rm b}$   $\,$  Includes a one-time floor payment of \$225 million.

<sup>c</sup> The sum of the positive transfers (net receipts) in each column.

Sources: Authors' calculations based on Canada 1998a; 1998b; Boessenkool 1998; and Statistics Canada, cat. 13-213.

fect only if such measures altered the sizes of provincial adjusted personal incomes.

Because we designed the scheme around current net transfers, it would be fiscally neutral for every province (and for Ottawa) at the outset. Vertical fiscal imbalance would be eliminated because, together, the provinces' ownsource revenues would equal expenditures. Most regional income redistribution would be delivered through one simple program.

Both the program and the data required to make it work are easily described in two steps: the calculation of current net interprovincial transfers and our macro formula for calculating new ones in the future.

#### Net Interprovincial Transfers

The first step is to transform the current federal-provincial transfer system into a net in-

terprovincial scheme. We began by calculating net transfers, using the methodology employed by Franke and Hermanutz (1997). Starting with the shares of total federal revenue collected in each province, we determined the provincial contribution to financing each program (equalization, the regional component of EI, and the CHST). Next, we subtracted this amount from the actual federal payment to arrive at the net transfer or contribution under each program. Table 2 presents the results of these calculations for fiscal year 1996/97. The last column represents the amount of net redistribution under the three programs as they now exist. Notice that this column shows the same seven "have-not" provinces as under the current equalization program.

A look at the other columns, however, reveals the interesting case of Saskatchewan. Al-

though it received equalization payments in 1996/97, the amount of federal tax its residents had to put into funding the program left its transfer negative - that is, it was a net contributor. The same was true for the regional component of EI. But these two negatives were offset by a small positive transfer under the CHST. We note, however, that these calculations include the \$225 million payment Saskatchewan received under the floor-mechanism provision of the equalization program. Had we not included this special payment, Saskatchewan's total net transfer would have been slightly negative. (Because we consider the floor payment a temporary measure, we exclude it from our subsequent analytical work.)

The third row from the bottom of Table 2 shows the actual amount of regional redistribution under the three programs, while the final row reveals how that amount compares with program size. For every dollar of federal spending under the current equalization program, only about 66 cents is redistributed; the remaining 34 cents returns to the province of origin. The amount redistributed falls substantially to about 29 cents for the regional component of EI and to only 12 cents for the CHST. Overall, of the \$27.9 billion spent on these three programs, only \$8.8 billion, or just under a third, is actually redistributed.

To transform federal net transfers into interprovincial net transfers, we next eliminated federal transfers by reallocating, from Ottawa to the provinces, PIT points equal to the value of total federal transfers under the current system. For fiscal year 1996/97, this calculation reduced federal spending and tax revenue by \$27.9 billion. Because Ottawa's revenues and expenditures (the current transfers and regional EI spending) were reduced by an equal amount, the federal budget balance was left unchanged.

We then increased provincial program expenditure by an amount equal to regional EI spending in each province (since this amount

#### Table 3: Fiscally Neutral Net Interprovincial Transfers (after PIT Transfer), fiscal year 1996/97

Level	Per Capita
(\$ millions)	(\$)
1,533	2,647
279	2,072
1,395	1,494
1,418	1,871
2,344	322
-5,288	-483
928	821
327	323
-1,435	-528
-1,502	-409
0	0
	Level ( <i>S</i> millions) 1,533 279 1,395 1,418 2,344 -5,288 928 327 -1,435 -1,502 0

Note: Columns may not add due to rounding. Moreover, although the per capita amounts should sum to zero, they do not here because they have not been weighted by population shares.

Source: Authors' calculations.

is not currently included in provincial spending). Provincial debt-service payments and net borrowing were unchanged by construction.

Box 2 shows the simple algebra of this calculation, and Table 3 presents the results by province for 1996/97.

Both Tables 2 and 3 are consistent with the current Canadian political bargain of provincial governments' being able to provide their current level of services without additional borrowing or an increase in the total tax burden on their residents. Why, then, do the required transfers differ between the two tables? The reason is simply that we calculated the net transfers in Table 2 on the basis of each province's contribution to total federal revenues, while we based those in Table 3 on each province's contribution to federal income tax revenue. Because the provincial shares of total federal revenue and federal income tax revenue differ. so must the net transfers required to preserve the current political bargain.

#### Box 2: Calculating Net Transfers

The budgets of all governments, federal or provincial, can be described by a simple equation that equates revenue and expenditure:

$$T_i + NTR_i + NB_i = PE_i + Ds_i$$

In words, for government *i*, taxes, *T*, plus net transfers, *NTR*, plus net borrowing, *NB*, must equal program expenditure, *PE*, plus debt-service payments, *DS*. Net transfers are negative if a government sends more to other governments than it receives and positive if it receives more than it sends. Net borrowing is positive if the government is running a deficit and negative if it is running a surplus.

To convert current federal transfers into net interprovincial ones, we reduced federal taxes and transfers to provinces by an equal amount (\$27.9 billion in fiscal year 1996/97) so the federal budget equality continues to hold and net borrowing (the deficit or surplus), program expenditure, and debtservice payments remain unchanged.

No matter which approach one takes, Ontario is the largest contributor in absolute dollar while Quebec is largest recipient of net interprovincial transfers. Viewed in per capita terms, however, the picture changes substantially (see the last column of Table 3). Adjusting for population shows that the four Atlantic provinces are all large recipients, while Quebec's net transfer is relatively small. British Columbia and Ontario both contribute more than \$400 per capita, and Alberta's contribution is the largest at \$528.

#### The Macro Formula

The second step in explaining our proposal is to show the development of our macro formula for allocating net interprovincial transfers in the future. Assuming that the current transfers shown in Table 3 represent the outSince provincial taxes rise by the amount that transfers from Ottawa decline, the budget equality also continues to hold for the provinces *as a group*. The distribution of income tax increases is, however, certain to differ from that of federal transfers, so maintaining balance requires that provinces with more revenue after the reallocation of income tax make transfers to provinces with less.

To compute these net interprovincial transfers, we simply determined what would be required for each province's budget equality to hold, given that net borrowing, program expenditure, and debt service remain the same. Algebraically, this calculation is

$$NTR^* = PE_i^* + DS_i - T_i^* - Nb_i,$$

where  $PE_i^*$  and  $T_i^*$  are  $PE_i$  and  $T_i$  modified to include federal transfers of regionally sensitive EI spending and tax points respectively.  $NTR^*$  can be either positive or negative, depending on whether the province is a net recipient from or contributor to the equalization pool.

come of a political bargain among provinces and the federal government, we used them as the level and distribution of transfers that our macro formula should match initially.

(We are not trying to freeze the fiscal year 1996/97 distribution forever. Our intention is simply to develop a formula close to the existing distribution at the starting point. As provincial economies grow and change, the level and distribution of equalization entitlements under our formula would also grow and change.)

#### Candidates for the Macro Indicator

We examined three candidates for the macro indicator: GDP, personal income, and adjusted personal income.

Courchene (1984) considers GDP at factor cost, and we followed him, thereby eliminat-

ing indirect taxes and subsidies. If GDP at market prices were used, provinces would have an incentive to switch from indirect taxes (such as sales taxes) to direct taxes (such as income taxes). Such a move would decrease the size of their tax base relative to other provinces and, all other things being equal, change the size of their transfer.

When we considered personal income as one of our potential indicators, we identified a number of problems that would likely prevent its use in a practical setting. We found, however, that we could address these problems with the adjusted personal income, calculated as personal income minus value changes in farm inventories, provincial-local transfers to persons, federal direct tax withdrawals, and federal goods and services tax (GST) collected.

Changes in farm inventories, a minor category, were excluded because they may not be recognized as actual income. Provincial-local transfers were removed to prevent an individual province's being able to manipulate its macro indicator; with them included, a province would have an incentive to lower transfer payments to persons, decreasing personal income and thus increasing the amount of equalization it receives.

In calculating the amounts for federal tax withdrawals, we followed Courchene (1984) and subtracted federal income taxes, employer and employee contributions to EI, and Canada and Quebec Pension Plan premiums. Finally we subtracted the full amount of GST collected in each province (a tax that did not exist in the mid-1980s, when Courchene did his analysis).

The reason for removing these items from the calculations is that they are not available for the provinces to tax. For example, if the federal government taxed 100 percent of income in a province, its available tax base in that field would be zero.

With personal income thus adjusted, we found, like Courchene, disparities across provinces smaller than those of GDP. One reason is that personal income, by definition, excludes retained earnings and resource royalties, which tend to be very unevenly distributed across the country. Also, because residents of the richer provinces pay, on average, more federal taxes than residents of the poorer provinces, removing those amounts from the base lessens disparities.

#### The Choice of Indicator

In choosing our preferred macro indicator, we looked at the alternatives' theoretical properties (discussed above) and at the results of a simple regression (see Box 3 for the technical details). This regression has several desirable properties:

- Net transfers sum to zero across provinces.
- When the macro indicator has the same value for all provinces, net transfers are likewise zero everywhere.<sup>4</sup>
- The estimated regression coefficient can be interpreted as the rate of contribution or withdrawal for the transfer scheme. Thus, a contributing province (one with a macro variable above the national average) would contribute a fixed portion of each dollar by which it exceeded the national average, and a recipient province (one with a macro variable below the national average) would withdraw the same portion for each dollar by which it fell below the national average.

Given the regression results presented in Box 3, we preferred adjusted personal income as our macro indicator. Its theoretical properties are desirable and the equation based on deviations from average adjusted personal income fits well, explaining about 96 percent of the variation in net transfers.

The regression coefficient on the macro indicator shows that a \$1.00 change in a provin-

#### Box 3: Estimating the Macro Formula

Using the three alternative macro indicators, we produced estimates of our formula using a simple OLS regression of the form

$$NTR_i = \alpha MI_{ii}$$

where  $NTR_i$  represents the net transfer to province *i*, and  $MI_{ij}$  the macro indicator *j* for that province. In each case, we expressed the macro indicator as a provincial deviation from the national average. The requirement that the sum of net transfers across all provinces be zero restricted us to using a linear functional form. We estimated the regression in levels, rather than in per capita terms, to ensure the minimizing and proper weighing of errors. The results of our regressions based on fiscal year 1996/97 data are presented below.

	Gre	oss Domestic Product		
Variable	Coefficient	Standard Error	T-Statistic	Probability
DGDP	0.17	0.03	-5.06	0.00
R-squared	0.74	Mean depe	ndent variable	-0.10
Adjusted R-squared	0.74	SD depende	ent variable	2,239
SE of regression	1142	Akaike info	criterion	14.18
Sum squared residual	11,744,933	Schwarz cri	terion	14.21
Log likelihood	-84.07	Durbin-Wa	tson statistic	1.82
		Personal Income		
Variable	Coefficient	Standard Error	T-Statistic	Probability
DPI	-0.24	0.02	-11.41	0.00
R-squared	0.94	Mean depe	ndent variable	-0.10
Adjusted R-squared	0.94	SD depende	ent variable	2,239
SE of regression	569	Akaike info	criterion	12.78
Sum squared residual	2,917,621	Schwarz cri	terion	12.81
Log likelihood	-77.11	Durbin-Watson statistic		1.81
	Adju	isted Personal Income		
Variable	Coefficient	Standard Error	T-Statistic	Probability
DAPI	-0.32	0.02	-15.48	0.00
R-squared	0.96	Mean depe	ndent variable	-0.10
Adjusted R-squared	0.96	SD dependent variable		2,239
SE of regression	426	Akaike info criterion		12.20
Sum squared residual	1,632,890	Schwarz cri	terion	12.23
Log likelihood	-74 21	Durbin-Wa	son statistic	2.01

ce's deviation from national average adjusted personal income would result in a \$0.32 change in its net transfer. For example, suppose British Columbia's per capita adjusted personal income grew by \$1.00 relative to the national average. As the province is a contributor to equalization, its per capita transfer to the pool would increase by 32 cents. This amount would then be distributed to all provinces below the new national average. Likewise, if the per capita adjusted personal income of Manitoba, a recipient from the pool, rose by \$1.00 relative to the national average, its per capita equalization transfer would decline by \$0.32.

	Levels		Per Capita		Difference	
	Current	Proposed	Current	Proposed	Level	Percentage
	(	\$ millions)	(da	ollars)	(\$ millions)	(%)
Newfoundland	1,533	1,593	2,647	2,749	60	3.9
Prince Edward Island	279	315	2,072	2,337	36	12.9
Nova Scotia	1,395	855	1,494	915	(540)	(38.7)
New Brunswick	1,418	800	1,871	1,056	(618)	(43.6)
Quebec	2,344	2,872	322	394	528	22.5
Ontario	-5,288	-5,257	-483	-480	31	0.6
Manitoba	928	391	821	346	(537)	(57.9)
Saskatchewan	327	801	323	790	474	145.0
Alberta	-1,435	-1,137	-528	-418	298	20.8
British Columbia	-1,502	-1,231	-409	-336	271	18.0
All provinces	0	0	0	0	0	_

Table 4: Interprovincial Transfers: Current versus Net Macro Scheme

Note: Columns may not add due to rounding. Moreover, although the per capita amounts should sum to zero, they do not because they have not been weighted by population shares.

Sources: Columns 1 and 3 are from Table 3; columns 2 and 4 are authors' calculations based on the regressions described in Box 3; columns 5 and 6 are authors' calculations.

#### The Results

How do the transfers predicted by the model compare with the actual transfers currently in place? Table 4 provides the answer, showing that, overall, the formula based on adjusted personal income reproduces actual transfers fairly well. It predicts higher net transfers for four recipient provinces (Newfoundland, Prince Edward Island, Quebec, and Saskatchewan) and for two contributing provinces (Alberta and British Columbia). Provinces with lower transfers are Nova Scotia, New Brunswick, and Manitoba. Ontario's predicted and actual values are almost the same.

The relative importance of the difference between actual and predicted transfers is illustrated in the last two columns of Table 4. The most significant differences would occur for four provinces: Nova Scotia, New Brunswick, and Manitoba, where current per capita net transfers are greater than they would be under an adjusted personal income approach, and Saskatchewan, where current per capita transfers are less than under an adjusted personal income approach.

#### **Evaluation**

How does our proposed scheme fare when tested against the four principles to which it was designed to adhere? We consider each of those principles in turn.

#### Equity

Our proposed scheme would enhance the equity of the transfer system for both individuals and governments. First, because all interprovincial redistribution would come directly from the provinces, the federal government would be restored to treating all similarly situated individuals in the same way, regardless of where they lived. Second, with only net transfers being made, the overall size of the transfer scheme would fall from almost \$28 billion to about \$9 billion, thus reducing the scale of perverse interpersonal transfers. Finally, the elimination of the CHST would remove a major source of inequity in the federal treatment of different provinces.

#### Efficiency

The redesigned scheme should improve incentives and, hence, efficiency in at least three ways. First, provincial policy changes should leave the scheme relatively unaffected. As a result, they would have little incentive to develop programs or manipulate their tax systems to improve their equalization entitlements.

Second, because the scheme is based on a macro indicator, rather than on individual tax bases, taxback problems would be substantially reduced (see Box 4).

Finally, the current distortions for workers' and firms' location decisions should be reduced with the conversion of the regional portion of EI to a transfer from the interprovincial equalization fund.

#### Political Viability

The scheme we propose would be aligned fully with the spirit and letter of the Constitution. Initially, it would provide the existing overall level of support (based on a different formula). The goal would continue to be to redistribute enough funds to permit provinces "to provide reasonably comparable levels of public services at reasonably comparable levels of taxation" (Constitution Act, 1982, section 36(2).<sup>5</sup> The transfer of PIT points from Ottawa to the provincial governments, which is embodied in our calculation of net transfers, would not require constitutional change. And the federal government would maintain its constitutional responsibility for EI (although that program would be focused on the conditions of individual workers, rather than on the region in which they live).

Given that the scheme initially would be fiscally neutral for all governments, it would recognize the current political bargain among Canadian governments. No winners or losers would be created at the outset of this zero-sum game. Rather, all expected gains would accrue through improved incentives and enhanced accountability and transparency.

One simple formula would determine regional redistribution. And because it would be comprehensive and based on a simple macro indicator, rather than on more than 30 bases for five provinces, the equalization program should be easier for citizens to understand. In addition, the move to a single net program, paid into and out of a pool, would give all taxpayers a clearer idea of the total cost of equalization and the contribution they make to financing it.

Improved transparency would be accompanied by better accountability. Our scheme would eliminate vertical fiscal imbalance entirely. With the transfer of some PIT tax points, provinces would raise a larger portion of their total expenditures through their own taxes. Thus, taxpayers' ability to judge the value of provincial services in relation to their cost should be enhanced.

One important issue arising here is whether Canada would continue to have national standards in the absence of federal cash transfers. Provincial (or joint federal-provincial) setting and interpretation of national standards is discussed in Courchene (1996) and was an integral part of the recent federal-provincial social union agreement. The notion here is that national standards need not be federal standards.

#### Sustainability

Our proposed scheme should be stable and predictable. Basing contributions and withdrawals on the five-year average of a single macro indicator would mean that as much as four-

#### Box 4: Taxback under the Proposed Scheme

The taxback rate for our proposal by can be calculated dividing the contribution/withdrawal rate (32 percent) by the tax rate on incremental adjusted personal income. The table below gives our crude estimates for the ten provinces over the 1992–96 period.

The first column shows each province's increase in own-source revenue for the period. The next column shows the corresponding increase in adjusted personal income. Using this information, we calculated a crude "marginal tax rate" — that is, the percentage increase in government revenue resulting from an increase in that province's adjusted personal income. For nine provinces, it is between 60 and 95 percent; for Newfoundland it is much higher.\*

By simply dividing the contribution/withdrawal rate into this "marginal rate," we obtained some crude taxback rates. Although the rate for Newfoundland seems very low, it varies for the other provinces from 34 percent to 53 percent. These rates compare favorably with the near 100 percent rates for recipient provinces under the current program.

A more detailed analysis of the taxback rates shown would include adjustments for any changes in provincial tax policy over the five years, since the first column represents base and rate changes. In provinces with increasing tax rates rates, the actual taxback rates would be higher than those shown in our table. (Three provinces — Newfoundland, New Brunswick, and Ontario — did raise their personal income tax rates over the 1992–96 period.)

<sup>\*</sup> The high rate for Newfoundland appears to result from increases in revenue which did not also lead to changes in personal income. Large increases in natural resource revenue could have such an effect.

	Change in Own-Source Revenue	Change in Adjusted Personal Income	"Marginal Tax Rate"	Contribution/ Withdrawal Rate	Taxbacl Ratio
	(\$ millions)		(%)	(%)	(%)
Newfoundland	269	81	332.1	32	9.6
Prince Edward Island	111	147	75.3	32	42.3
Nova Scotia	373	393	94.8	32	33.6
New Brunswick	823	880	93.5	32	34.0
Quebec	4,686	7,613	61.5	32	51.7
Ontario	10,029	14,092	71.2	32	44.7
Manitoba	801	1,326	60.4	32	52.7
Saskatchewan	964	1,194	80.7	32	39.4
Alberta	3,718	5,982	62.2	32	51.2
British Columbia	6,180	9,577	64.5	32	49.3
All provinces	27,843	41,285	67.4	32	47.2

fifths of the key indicator would be known with certainty at any time. This foreknowledge should reduce the impact of fluctuations on any given year and make the outlook for the medium term (two to four years) substantially more predictable. Increased stability would, however, come at the expense of decreased responsiveness. But our scheme does not rely on using a *five*-year average; program designers could choose any number of years.

The net interprovincial nature of the new scheme would enhance affordability. The size of the program and payments to individual provinces would be linked to the relative strengths and weaknesses of their economies. If contributing provinces experienced a slowdown in economic activity, other things being equal, they would contribute less to the fund. Likewise, recipient provinces would receive more when they experienced a slowdown. In addition, as the provinces' economic fortunes converged, the amount of transfers would shrink. This outcome would be in contrast to what has happened under past versions of the system of representative standard bases, when provincial revenues to be equalized grew substantially while federal revenues did not. For example, the oil boom in Alberta forced the federal government to exclude that province from the base.

Finally, since federal taxes would be subtracted from the base and federal transfers to individuals would show up as personal income, our proposed scheme would be responsive to the regional impact of federal policies. It would also have a 100 percent redistribution ratio — that is, every dollar put into the pool by a contributing province would end up in a recipient province.

#### **Governance and Transition**

Of course, the appropriate governance of any interprovincial equalization program is critical for its success. The key to using our scheme would be providing sufficient assurances to equalization-receiving provinces that it would ensure stable and reliable revenues in the future. Involving Ottawa as guarantor and having appropriate rules for amending the scheme might contribute to its attractiveness to recipient provinces. The outcome of the recent federal-provincial social union negotiations provides some hope that the cooperation required could be possible. For example, the new scheme could be governed by an agreement between the provinces and the federal government. Ottawa would sign a variant of a tax-rental agreement whereby it reduced its PIT rates by the appropriate amount and the provinces raised theirs by an equal amount. If any province withdrew from the interprovincial equalization scheme (after giving appropriate notice — say, three years), Ottawa would automatically increase its PIT rates in that province to cover the lost equalization contribution and put the extra revenue in the equalization pool. Thus, the federal government would continue to act as guarantor of the equalization program.

Changes to the equalization scheme would require three years' notice and the approval of seven provinces containing 50 percent of the Canadian population. This formula would ensure that neither the receiving nor the contributing provinces alone could put through changes. (Precedent exists for such provincial consensus: recently, the finance ministers of seven provinces — British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, and Prince Edward Island - agreed to a package of reforms to the current CHST and the equalization program, although the proposal was subsequently rejected by the federal government.) Notice could be waived in the case of unanimous approval.

In any case, accountability would be increased, as decisions surrounding the equalization program would be made more openly and subject to much more debate than they are now. For example, the provinces might decide in the future that the contribution/withdrawal rate needed to be increased or decreased. Under our scheme, they could do so without relying on a move from Ottawa.

Another consideration would be the transition to our scheme. The magnitude of the fiscal impacts for some provinces suggests that the full changeover should be relatively long to allow plenty of time for adjustment. A 20-year transition period would not be unreasonable. The new macro-indicator-based system of interprovincial equalization could be implemented immediately, along with the lumpsum transfers needed to maintain fiscal neutrality. These lump-sum transfers could then be reduced by 5 percent per year for 20 years. Such a long transition would not be a drawback because many of the benefits, such as improved incentives, accountability, and transparency, would accrue immediately; meanwhile, governments would have enough time to make necessary fiscal adjustment manageable.

#### Summary

Canada's system of intergovernmental transfers is in need of repair, and the recent renewal of the equalization program has done little to fix it. Over time, partly as a result of the way that successive federal governments have chosen to approach deficit reduction, the system has become inequitable to individuals and to provincial governments. Incentives to inefficient behavior have been created. Political support for the current scheme has eroded, leading to serious divisions within the federation. Finally, *ad hoc* changes have been required periodically to maintain the affordability of the system; the lack of stable, predictable transfers has disrupted prudent fiscal planning.

In this paper, we have outlined a proposal for a new, substantially different transfer scheme. Based on a simple macro formula, the scheme is centered on a set of direct transfers among provinces. The proposed system would be consistent with the letter and spirit of the Constitution and fiscally neutral for all governments at the outset. We believe it would address many of the current system's inherent problems related to equity, efficiency, political viability, and sustainability. *C.D. Howe Institute Commentary*<sup>©</sup> is a periodic analysis of, and commentary on, current public policy issues.

Paul Boothe is Professor of Economics, University of Alberta, and an Adjunct Scholar of the C.D. Howe Institute. Derek Hermanutz works in the Fiscal Policy Division, Department of Finance, Ottawa; this paper was written while he was an employee of Alberta Treasury. The text was copy edited by Lenore d'Anjou and prepared for publication by Wendy Longsworth and Barry A. Norris.

As with all Institute publications, the views expressed here are those of the authors, and do not necessarily reflect the opinions of the Institute's members or Board of Directors.

To order this publication, contact: Renouf Publishing Co. Ltd, 5369 Canotek Rd., Unit 1, Ottawa K1J 9J3 (tel.: 613-745-2665; fax: 613-745-7660), Renouf's stores at 71½ Sparks St., Ottawa (tel.: 613-238-8985) and 12 Adelaide St. W., Toronto (tel.: 416-363-3171), or the C.D. Howe Institute, 125 Adelaide St. E., Toronto M5C 1L7 (tel.: 416-865-1904; fax: 416-865-1866; e-mail: cdhowe@cdhowe.org). We also invite you to visit the Institute's Internet web site at: www.cdhowe.org.

Quotation with proper credit is permissible.

\$9.00; ISBN 0-88806-458-6

Our proposal is, of course, only one of the possible directions Canada's future system of intergovernmental transfers could take, and we hope for an informed and animated public debate on reform leading up to the next equalization renewal. This key element of the machinery of the federation certainly deserves time and effort to carefully consider the alternatives. Expending that time and effort now would help to ensure that Canada continues to be a model federation for the rest of the world.

#### Notes

The views expressed in this paper are our own and should not be attributed to any other person or institution. We have benefited from discussions with many colleagues, including K. Boessenkool, T. Courchene, P. Gusen, P. Hobson, M. McMillan, F. Poschmann, J. Richards, W.B.P. Robson, T. Snoddon, G. Smith, and J. Wright. R. Cheung and C. Stelmack provided valuable research assistance. This paper was written while Derek Hermanutz was with the government of Alberta, Treasury Department.

1 The 1999 budget announced that total transfers under the Canada Health and Social Transfer (CHST) will move to an equal per capita allocation by fiscal year 2001/02. Yet the calculation of cash transfers as a residual of the total entitlements ensures that the seven equalization-receiving provinces will receive a proportionally larger amount of CHST than the other three provinces.

- 2 The organization and content of this section and the next draw heavily on Boothe (1998).
- 3 Although some politicians and academics think that making the public aware of the true nature of transfers would be a bad thing. For example, see Milne (1998).
- 4 We are grateful to J-F Wen for suggesting this approach.
- 5 Some commentators interpret section 36(2) as implying that the federal government is committed to making equalization transfers to the provinces (Boadway 1998). However, we argue that as long as the commitment is being fulfilled, which order of government actually makes the payments should not matter.

#### References

- Bird, R.M. 1986. *Federal Finance in Comparative Perspective*. Financing Canadian Federation 6. Toronto: Canadian Tax Foundation.
- Boadway, R. 1996. "Book Reviews." *National Tax Journal* 49 (4): 667–686.
- ———. 1998. "The Economics of Equalization: An Overview." In R.W. Boadway and P.A.R. Hobson, eds., Equalization: Its Contribution to Canada's Fiscal and Economic Progress. Kingston, Ont.: Queen's University, John Deutsch Institute for the Study of Economic Policy.
- ——, and Frank Flatters. 1982. "Efficiency and Equalization Payments in a Federal System of Government: A Synthesis and Extension of Recent Results." *Canadian Journal of Economics* 15 (4): 613–633.
- Boessenkool, K.J. 1998. "Clearly Canadian: Improving Equity and Accountability with an Overarching Equalization Scheme." *C.D. Howe Institute Commentary* 114. October.
- Boothe, P.M. 1992. "Federal Budgeting in the 1990s: The End of Fiscal Federalism." In T.J. Courchene and M.F.J. Prachowny, eds., *The February 1992 Federal Budget*. Kingston, Ont.: Queen's University, John Deutsch Institute for the Study of Economic Policy.

-----. 1998. Finding a Balance: Renewing Canadian Fiscal Federalism. Benefactors Lecture, 1998. Toronto: C.D. Howe Institute.

- Canada. 1998a. Department of Finance. Federal-Provincial Relations Division. *Fiscal Equalization*, 1996–97, 5th Estimate. Ottawa. May.
- ———. 1998b. Department of Finance. Federal-Provincial Relation Division. *Canada Health and Social Transfer, 1996–97, 5th Estimate.* Ottawa. May.
- Clark, D.H. 1998. "Canada's Equalization Program in Principle and in Practice." In R.W. Boadway and P.A.R. Hobson, eds., *Equalization: Its Contribution to Canada's Fiscal and Economic Progress.* Kingston, Ont.: Queen's University, John Deutsch Institute for the Study of Economic Policy.
- Courchene, T.J. 1970. "Interprovincial Migration and Economic Adjustment." *Canadian Journal of Economics* 3 (4): 550-576.

------. 1978. "Avenues of Adjustment: The Transfer System and Regional Disparities." In M. Walker, ed., *Canadian Confederation at the Crossroads: The Search for a Federal-Provincial Balance*. Vancouver: Fraser Institute. ———. 1984. Equalization Payments: Past, Present and Future. Toronto: Ontario Economic Council.

- ———. 1994. Social Canada in the Millennium: Reform Imperatives and Restructuring Principles. The Social Policy Challenge 4. Toronto: C.D. Howe Institute.
- ———. 1996. "ACCESS: A Convention on the Canadian Economic and Social Systems." *Canadian Business Economics* 4 (Summer): 3–26.
- ———. 1998. "Renegotiating Equalization: National Polity, Federal State, International Economy." C.D. Howe Institute Commentary 113. September.
- Dalhby, B., and L.S. Wilson. 1994. "Fiscal Capacity, Tax Effort, and Optimal Equalization Grants." *Canadian Journal of Economics* 271 (August): 657–672.
- Day, K.M., and S.L. Winer. 1994. "Internal Migration and Public Poicy: An Introduction to the Issues and a Review of Empirical Research on Canada." In A. Maslove, ed., *Issues in the Taxation of Individuals*. Toronto: University of Toronto Press.
- Franke, O., and D. Hermanutz. 1997. "Employment Insurance: Returning to Insurance Principles." *Canadian Business Economics* 5 (Summer): 61–72.
- Hermanutz, D., G. Smith, and G. Robertson. 1998. "Dividing the Canada Health and Social Transfer: The Equalized Revenue Share Allocator." Alberta Treasury working paper. Edmonton.
- Milne, D. 1998. "Equalization and the Politics of Restraint." In R.W. Boadway and P.A.R. Hobson, eds., Equalization: Its Contribution to Canada's Fiscal and Economic Progress. Kingston, Ont.: Queen's University, John Deutsch Institute for the Study of Economic Policy.
- Oates, W. 1977. *The Political Economy of Fiscal Federalism.* Lexington, Mass.: D.C. Heath.
- Poschmann, F. 1998. "Where the Money Goes: The Distribution of Taxes and Benefits in Canada." *C.D. Howe Institute Commentary* 105. April.
- Smart, M. 1998. "Taxation and Deadweight Loss in a System of Intergovernmental Transfers." *Canadian Journal of Economics* 31 (1): 189–206.
- Statistics Canada. Cat. 13–213. Provincial Economic Accounts, 1997. Ottawa.

#### Recent C.D. Howe Institute Publications

- Courchene, Thomas J., and Richard G. Harris. "From Fixing to Monetary Union: Options for North American Currency Integration." *C.D. Howe Institute Commentary* 127 (June 1999). 28 pp.; \$9.00.
- Duclos, Jean-Yves, and Julie Gingras. "Mixing It Up: Directions for Federal Tax Reform." *C.D. Howe Institute Commentary* 126 (June 1999). 32 pp.; \$9.00.
- Sayeed, Adil. "Improving the National Child Benefit: Matching Deeds with Intentions." *C.D. Howe Institute Commentary* 125 (May 1999). 28 pp.; \$9.00.
- Smith, R. Todd. "Money in the Bank: Comparing Bank Profits in Canada and Abroad." *C.D. Howe Institute Commentary* 124 (May 1999). 24 pp.; \$9.00.
- Slater, David W., and William B.P. Robson. "Building a Stronger Pillar: The Changing Shape of the Canada Pension Plan." C.D. Howe Institute Commentary 123 (March 1999). 16 pp.; \$9.00.
- Coulombe, Serge. "Economic Growth and Provincial Disparity: A New View of an Old Canadian Problem." *C.D. Howe Institute Commentary* 122 (March 1999). 36 pp.; \$9.00.
- Mintz, Jack, and Finn Poschmann. "Tax Reform, Tax Reduction: The Missing Framework." *C.D. Howe Institute Commentary* 121 (February 1999). 40 pp.; \$9.00.
- Allen, Douglas W., and John Richards, eds. *It Takes Two: The Family in Law and Finance*. Policy Study 33 (February 1999). 220 pp.; \$19.95.
- Orr, Dale, and Thomas A. Wilson, eds. *The Electronic Village: Policy Issues of the Information Economy.* Policy Study 32 (February 1999). 292 pp.; \$21.95.
- Schwanen, Daniel. "More than the Sum of Our Parts: Improving the Mechanisms of Canada's Social Union." *C.D. Howe Institute Commentary* 120 (January 1999). 36 pp.; \$9.00.
- Robson, William B.P. "Payback Time: Assessing the Room for Federal Tax Cuts." *C.D. Howe Institute Commentary* 119 (December 1998). 20 pp.; \$9.00.

- Poschmann, Finn. "Inflated Taxes, Deflated Paycheques." *C.D. Howe Institute Commentary* 118 (December 1998). 28 pp.; \$9.00.
- Boessenkool, Kenneth J., and James B. Davies. "Giving Mom and Dad a Break: Returning Fairness to Families in Canada's Tax and Transfer System." *C.D. Howe Institute Commentary* 117 (November 1998). 32 pp.; \$9.00.
- Dungan, Peter. "The CPP Payroll Tax Hike: Macroeconomic Transition Costs and Alternatives." *C.D. Howe Institute Commentary* 116 (November 1998). 28 pp.; \$9.00.
- DeVoretz, Don, and Samuel A. Laryea. "Canadian Human Capital Transfers: The United States and Beyond." *C.D. Howe Institute Commentary* 115 (October 1998). 40 pp.; \$9.00.
- Boessenkool, Kenneth J. "Clearly Canadian: Improving Equity and Accountability with an Overarching Equalization Program." *C.D. Howe Institute Commentary* 114 (October 1998). 24 pp.; \$9.00.
- Courchene, Thomas J. "Renegotiating Equalization: National Polity, Federal State, International Economy." *C.D. Howe Institute Commentary* 113 (September 1998). 48 pp.; \$9.00.
- Robson, William B.P., ed. "The Changing Rules of the Money Game: Proceedings of a Roundtable on Canada's Financial Industry after the Bank Merger Proposals." *C.D. Howe Institute Commentary* 112 (September 1998). 28 pp.; \$9.00.
- Howse, Robert. "Settling Trade Remedy Disputes: When the WTO Forum Is Better than the NAFTA." *C.D. Howe Institute Commentary* 111 (June 1998). 24 pp.; \$9.00.
- Laidler, David, and Finn Poschmann. "Birth of a New Currency: The Policy Outlook after Monetary Union in Europe." *C.D. Howe Institute Commentary* 110 (June 1998). 28 pp.; \$9.00.
- Schwanen, Daniel. "Chilling Out: The MAI Is on Ice but Global Investment Remains Hot." *C.D. Howe Institute Commentary* 109 (June 1998). 20 pp.; \$9.00.