The Restructuring of the Canadian Federation:
Lessons for Other Countries

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1. Context

The Canadian federation has undergone a process of gradual evolution during the four decades since the main elements of the modern welfare state were put in place, including the universal public health insurance system, the system of welfare and social services, public post-secondary education institutions, public pensions for the elderly, and transfers for children. As in most federations, the welfare state was necessarily a collaborative effort between levels of government. While provincial and municipal levels of government were largely responsible for delivering important public services, the federal government provided a substantial part of the financing and was instrumental in defining the standards of social programs when they were first introduced. This joint responsibility was an inevitable source of tension: the provinces sought to have more autonomy in designing and delivering public services, while the federal government had an interest in using the power of the purse to achieve what it viewed to be national objectives being served by programs delivered by the provinces. These tensions were gradually worked out as the social programs became established, largely by increasing degrees of decentralization of fiscal responsibility.

At the same time, exogenous events occurred over the period, sometimes abruptly, that put some stress on the federation and on policies of the welfare state more generally. They included the following:

a. Natural resource booms. Natural resources have always been important to the Canadian economy, and shocks in resource prices have had an impact on both federal and provincial finances. The most recent of these has been the enormous increase in oil and gas prices in the early 2000’s. This has led to two main problems. Since oil and gas reserves are disproportionately located in a small number of provinces (Alberta, Saskatchewan, Newfoundland), large horizontal imbalances have built up across the federation, which has put pressures on the system of federal-provincial equalization transfers. Second, the rise in oil and gas prices has been accompanied by exchange rate appreciation, and this has put pressure on the manufacturing sector, which is located largely in the most populated central provinces (Ontario and Quebec).

b. Separatism threats. In one province (Quebec), there is a strong nationalism movement that proposed separation from the rest of the country, and has held two
referenda on the issue. While the referenda were not successful, nonetheless the threat of separation has led to measures of decentralization designed to appease residents of that province. This is one of many pressures that have contributed to the gradual decentralization of the federation.

c. Debt crisis. During the 1980s, unemployment rates were relatively high as was the rate of inflation and nominal interest rates. Governments at all levels built up large public debts that eventually had to be dealt with. The federal government in its 1995 budget finally took decisive austerity measure to deal with the debt. One of these measures was a significant reduction in transfers to the provinces and a restructuring of the system of federal-provincial transfers. In addition to the fundamental changes in the structure of fiscal federalism this entailed, it also brought with it a large amount of animosity and mistrust between levels of government.

d. Demographic projections. As in many other OECD countries, demographic changes have put pressures on social programs that have intergenerational impacts. The impact of these have not been as great as in many other countries (including Japan). For one thing, immigration has been available to at least postpone large changes in dependency rates. For another, our welfare state is much less reliant on intergenerational transfers, such as unfunded public pensions, than elsewhere, and positive policy measures were taken to improve the funding of the public pension system that does exist.

e. Pressures on the cities. Canada has become increasingly urbanized over the past several years both due to movements from the rural sector and due to immigration. Cities have been put under greater financial pressure both to provide public services to meet their increased populations, but also to deal with changes in their responsibilities and in the financial support they receive from the provincial governments. In some cases, provinces have downloaded to the cities major responsibilities to deliver public services without providing additional funding. This has put pressure on cities to find new ways of delivering services, cutting costs, and managing their affairs. At the same time, major infrastructure needs have increased, and cities have undergone some political restructuring.
The way in which the Canadian federation has responded to these various pressures is instructive for other nations. The success that has been achieved can be at least partly attributable to the flexibility of the federal system, and especially to the ability to manage fiscal decentralization in a way that does not threaten core national values. The purpose of this paper is to explore in more detail how the Canadian federation has adapted to these many challenges. That involves beginning with some overview of the key features of the Canadian federation and with the federal fiscal system underlying it. The evolution we shall focus on will be mainly what has occurred in the past 10-15 years, although reference to previous periods will be inevitable.

1.1 Constitutional Structure

Canada is a federal country, and that is reflected in its constitution. The provisions of the constitution have a significant influence on the organizing and financing of public services and social insurance programs, and on the responsiveness of the social and economic landscape to exogenous influences like resource price shocks, competitiveness pressures, and demographic changes. What follows is a selective discussion of some of the features of the constitution that are important for understanding recent restructuring of the Canadian federation.

There are three main levels of government: federal, provincial/territorial and municipal, but the levels have different standing in the Canadian constitution. The federal government and the ten provincial governments are independent entities with their own legislatures and powers. On the other hand, the three territorial governments, which govern the northern, sparsely populated part of the country, are under the jurisdiction of the federal government. All their powers are legislated by the federal government, although in practice they have a high degree of autonomy (though without the ownership of natural resources that the provinces enjoy, as discussed below). Similarly, the municipalities are under the jurisdiction of the province in which they are located, and draw all their powers from provincial legislation. In practice, although the provinces differ considerably in size and characteristics, their municipalities have roughly similar powers assigned to them, so that we can talk of municipal responsibilities in general rather than province-by-province.
Municipalities come in varying types. There is a mix of single-tier and two-tier incorporated municipalities and, in most provinces, a number of unincorporated communities. The most common type of municipal structure in Canada is the two-tier system. Under a single-tier structure, each municipality is responsible for all services. Frequently, however, these municipalities rely on inter-municipal or joint-use agreements or special purpose bodies for sharing services with neighbouring jurisdictions. Under a two-tier structure, there are a number of lower tiers or area municipalities – cities, towns, villages, and townships – and an upper tier that is called a county, region or district. The lower tier assumes responsibility for certain services, although this varies across provinces and quite often across regions/counties/districts within a province. For some services, lower tiers rely on inter-municipal agreements (fire and roads being the most common). The upper tier is responsible for the remaining services and generally, because of its geographic area or size, is more self-sufficient and much less dependent on inter-municipal agreements.

A key feature of the relationship among governments is that it is hierarchical in nature. With few exceptions, the federal government deals with the provinces, and the provinces deal with the municipalities within their borders. The federal government has relatively few direct fiscal dealings with the municipalities (even though some of them are of comparable population to some provinces). As we shall see, this has important implications for the operation of the federation and its responsiveness to shocks.

The Constitution sets out the powers and responsibilities of the federal government and the provinces. Both the federal government and the provincial governments have a wide degree of autonomy in their legislative decision-making. There are lists of areas where the federal government and the provincial governments have exclusive legislative responsibility. For the federal government, these include such matters as defense, foreign affairs, international trade, currency and banking, bankruptcy, copyright and trademarks, marriage and divorce, criminal law, and unemployment insurance. There is also an overriding responsibility of the federal government to provide ‘peace, order and good government’ for the nation, which is a somewhat vague responsibility that is appealed to infrequently. The provinces have exclusive responsibility for some important public services such as health education and welfare
services, for civil and property rights (which effectively allows them to regulate labor and
capital markets as well as cultural matters), for municipalities within their borders, and
for matters of provincial concern, which includes roads, waterways, management of
natural resources and environmental issues. Of some significance for issues of fiscal
federalism is the fact that the provinces ‘own’ the natural resources that are found within
their borders. This implies not just the right to manage and regulate them, but also to
obtain revenues from the use of those resources by the market economy.

Some powers are shared between the federal and provincial governments,
sometimes with one level taking precedence. Thus, agriculture and immigration are
shared powers, as is public pensions, and in the latter case, provinces are paramount (so
can accept federally legislated pensions or opt for their own). The ability to raise
revenues by taxes or borrowing is also a shared power for the most part. In practice, both
levels of government can levy virtually any of the main types of tax, such as income,
sales and excise taxes. However, taxes on international trade are restricted to the federal
level, while taxes on natural resources and property are provincial/municipal taxes. A
further important power that the federal government has is the so-called spending power,
which refers to its ability to transfer funds for purposes that are in the public interest. It is
this power that lies behind the substantial transfers that the federal government makes to
individuals, to businesses and to the provinces. Indeed, an important consideration on
what follows is the potential conflict that exists between the federal spending power and
the exclusive legislative responsibility that the provinces have in areas like health,
education and welfare. In practice, the federal government has been allowed (by the
courts as well as public opinion) to make transfers to the provinces in support of these
public services with conditions attached, it being deemed not to interfere with the ability
of provinces to legislate programs as they see fit. Finally, some powers are unspecified,
partly because they were not foreseen at the time the Constitution was drafted. All such
residual powers rest with the provinces.

In addition to these specific powers, the Constitution specifies some general
provisions that federal and provincial legislation must satisfy. There is a Charter of
Rights and Freedoms that requires that basic rights such as non-discrimination, freedom
of speech and assembly, and freedom of religion be satisfied. As well, there is a provision
in the Constitution that guarantees the treaty rights of aboriginal peoples, referred to as First Nations. In practice this leads to another order of government consisting of the 600-plus First Nations that receive substantial funding from the federal government and exercise significant amounts of self-government. In what follows, we shall set aside the issues that arise in the federal financing of First Nations since they do not have direct bearing on federal-provincial fiscal relations. The Constitution imposes rather minimal conditions on the provinces not to interfere with the flow of goods across provincial borders. Relative to common market provisions that apply in some federations and in economic unions, these are relatively weak conditions. There is also one section of the Constitution that imposes positive commitments on governments. In one part of that section, the federal and provincial governments are jointly committed to pursuing equality of opportunity, regional economic development and the provision of basic public services to all Canadians. In the other part, the federal government is committed to the principle of making equalization payments to the provinces so that all can provide ‘reasonably comparable levels of public services at reasonably comparable levels of taxation’.

Not surprisingly, these constitutional provisions lead to conflicts and disagreements between the federal government and the provinces. There are various possibilities for settling these disputes. One that is never used is the power that exists for the federal government to disallow provincial legislation. It has fallen out of use for political reasons. Another possibility is the use of the courts. From time to time, the courts have been used to resolve disputes about the constitutionality of federal or provincial government legislation. However, that is a fairly blunt instrument that is not suitable for most day-to-day disputes. Similarly, constitutional amendment has been used to revise the distribution of powers, sometimes after the courts have made a ruling. Thus, it took constitutional amendments to give the federal government responsibility for unemployment insurance and pensions. Most disputes are taken up by federal-provincial discussion and negotiation, with more or less success. Indeed, one of the current problems that the federation has faced is the perception that the federal government had taken fiscal actions in a unilateral and unannounced way without having consulted with the provinces. In some federations, formal arms-length institutions exist that serve as
advisory or consultative bodies with respect to federal-provincial fiscal relations (e.g.,
Australia, India, South Africa). No such body exists in Canada at the moment. There have,
however, been some substantial federal-provincial agreements that have been designed to
make federal and provincial decision-making more coordinated and cooperative, and with
agreed objectives in mind. The two most significant examples of these are the Agreement
on Internal Trade and the Social Union Framework Agreement. The first of these is the
analogue of a free trade agreement and is intended to preserve and pursue efficiency in
the internal economic union of the country. The second is an agreement meant to
regularize provincial and federal decision-making over social policy issues, especially
those involving matters of provincial jurisdiction. Thus, it establishes some guidelines for
the federal government use of the spending power in these areas, and also encourages
information exchange between the two levels of government. In the end, the effectiveness
of these agreements is diluted by the absence of an effective dispute settlement
mechanism. Thus, it turns out to be difficult to agree on in a setting where the two levels
of government enjoy significant autonomy of legislative decision-making.

The end result is a situation in which the federal government exercises influence
over provincial programs. It does so explicitly through its use of conditional transfers (the
spending power), and implicitly through moral suasion that it has as a result of the size of
transfers it makes to the provinces. This strategic leadership position that the federal
government occupies as a result of transferring funds to the provinces also gives rise to
potential problems. For one thing, the provinces might argue that the spending power
represents an intrusion into provincial areas of responsibility to the extent that significant
conditions are attached to federal-provincial transfers. For another, since the size of
transfers is determined unilaterally by the federal government, there is the possibility that
changes might be made that are both unexpected and impose at least temporary financial
constraints on the provinces. As we shall see, this is the gist of what took place as the
federal government reduced its transfers in the mid-1990s to address its own debt
problems. Similar issues arise with respect to the fiscal relations between the provincial
governments and their municipalities.¹

¹ Note that this is the opposite of the so-called soft budget constraint, whereby a higher level of government
provides transfers to a lower level when the latter has got into financial difficulties. Here, the problem is
The upshot of this constitutional landscape is a federation that is very flexible and allows for varying degrees of decentralization, especially on the revenue-raising side. In practice the federal fiscal system has evolved into one that is among the most decentralized in the world. The next section describes that evolution in detail.

1.2 Description and Evolution of Fiscal Federalism in Canada

The three levels of government in Canada spend on a variety of services and programs. A few are exclusive to one level, but many are shared by more than one level. Similarly, some taxes are shared by more than one level of government while others are the sole domain of one level of government.

For spending responsibilities and access to revenue sources, both federal and provincial governments have considerable autonomy and control. They have the freedom and flexibility to determine their expenditures (level and range) and they have access to a range of revenues that can be used to fund their services/programs. This includes an assortment of taxes, user fees, special charges, and investment income. Local government (municipalities and school boards), by comparison, are not recognized in the constitution (they are creatures of the province) and consequently, they have very little control over their expenditures (both range and level) and they only have access to one tax (property) that is of any importance. They do, however, rely fairly heavily on user fees with modest amounts of income from investment and a miscellaneous bundle of special charges, licences, and permits. Tight provincial controls and limited access to tax sources leaves municipalities and school boards, then, operating in a fiscal environment that is considerably different from that in which the provincial and federal governments function.

Intergovernmental Comparison of Spending

Table 1 records four measures of government spending for selected fiscal years from 1988/89 to 2005/06. From this table, the following may be noted (see appendix A for more detail).

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that the financial difficulties of the higher level of government are partly being passed on to a lower level by a reduction in transfers.
At the beginning of the period, federal government expenditures (as measured by current dollars per capita) were higher than the other orders of government. By the end of the period, provincial spending was considerably higher than federal spending.

In constant (1997) dollars per capita, federal spending decreased significantly over the period while provincial and municipal spending increased.

As a percent of GDP, expenditures of all levels of government decreased with municipal governments declining the least and the federal government declining the most.

Federal spending in constant dollars per capita declined by 1.36 percent per year while provincial and municipal spending increased by 0.55 and 0.74 percent per year respectively.

About 2/3 of federal spending consists of transfers of one sort or another, including to persons, businesses and governments. Well over 1/3 of all federal spending is on social services – a proportion that has risen in importance over the last two decades. Federal debt charges have declined dramatically – from more than 25 percent of federal spending in the late 1980s to less than 10 percent by 2005. General purpose transfers increased in relative importance over the eighteen year period.

Health expenditures now account for 1/3 of provincial spending, up from 1/4 in the late 1980s. Debt charges have declined as a percent of all spending, although much less noticeably than for the federal government. Finally, general purpose (unconditional) grants are not very important at the provincial level. In fact, they accounted for less than 2 percent of provincial spending in the late 1980s and early 1990s and less than 1 percent in the 2000s.

Municipal spending on transportation (roads, streets, snow removal, public transit), protection (police and fire) and environment (water, sewage, solid waste collection and disposal) account for well over 50 percent of the total in every province. Growth in these expenditures is most notable for environmental services, reflecting the growing importance that municipalities are placing on concerns for clean water and environmental issues and the need to meet provincially set standards. Social services are entirely a provincial funding responsibility in every province except for Ontario where social
services are a joint funding responsibility of the provincial and municipal governments. Debt charges (interest cost on long term borrowing for capital purposes) have dropped dramatically in relative importance in every province. This has arisen for two main reasons; interest rates have dropped considerably over this period and municipalities have reduced their borrowing for local infrastructure. In place of borrowing, they have moved towards pay-as-you-go financing (annual property taxes and user fees put into reserves) and increased their reliance on development charges (collected up front, prior to development) that are imposed on new growth to cover the costs of growth related capital expenditures.

Intergovernmental Comparison of Revenues

Each level of government gets revenue from taxes, user fees and a miscellaneous bundle of small revenue sources. Many taxes are used by more than one level of government but some are exclusive to only one level of government. For example, the federal and provincial governments share personal and corporate income taxes; many excise, and consumption based taxes. Provinces also rely on property taxation which is the only tax of any significance that is available to municipal governments and school boards. In addition, provinces have their own taxes – natural resources and capital taxes. User fees do not overlap – those used by the federal or provincial governments are not used by municipalities. Provincial and local governments have access to grant revenue, both general purpose and specific purpose, although the relative importance of these grants varies across provinces.

Table 2 records five measures of government revenue for four years.

- Per capita current dollar revenues were marginally higher for the province than the federal government at the beginning of the period and considerably higher by the end of the period.
- Constant dollar per capita revenues increased for each level of government with the highest absolute increase occurring at the provincial level.
- Annual deficits for the federal and provincial governments have turned into annual surpluses for the federal and most provincial governments. Deficits at the municipal level generally exist only where long term borrowing for capital infrastructure has
taken place – municipalities are not permitted to budget for an annual operating deficit.

- Own source revenue accounts for all federal revenues and over 80 percent of both provincial and municipal revenues.
- Overall, taxes account for over 90 percent of federal revenue, 60 percent of provincial revenue, and 50 percent of municipal revenue

Further information on inter-provincial and inter-temporal revenue comparisons can be found in the tables in Appendix A. Differences in the importance of provincial and municipal taxes vary by province. User fees are much more important as a revenue generator for municipal governments than for other governments. Investment income is much more important as a revenue contributor for provincial governments than it is for federal or municipal governments. Furthermore, at the provincial level, there is considerable variation in its importance across provinces with Alberta getting almost half of its revenue from this source. Similarly, Saskatchewan and British Columbia get significant sums of total revenues respectively. General purpose or unconditional grants are much more important for provinces than for municipalities. Specific purpose or conditional grants are almost twice as important for municipalities than for provinces. There is, however, considerable variation in the importance of these grants across provinces.

Transfer System

Intergovernmental transfers in Canada consist of two types - general purpose or unconditional grants and specific purpose or conditional grants. Both types are used in federal-provincial transfers and provincial-municipal transfers. Specific purpose grants also exist at the federal-municipal level and provincial-school board level.

Intergovernmental transfers play an important, although varying role in provincial and local revenues in Canada. More specifically, federal grant support ranges from a high of almost 60 percent of provincial revenues in Newfoundland (the most dependent) to a low of slightly more than 10 percent in Alberta (the least dependent) with the provincial average for Canada being 19 percent (Table 3). In Atlantic Canada, Quebec, and
Manitoba, unconditional transfers are more important than specific purpose transfers. For all of Canada, however, unconditional (9.9 percent of total revenue) and conditional (9.4 percent of total revenue) transfers account for roughly the same percent of provincial revenues.

[INSERT TABLE 3 NEAR HERE]

At the municipal level, the pattern of grant support is different. In total, specific purpose transfers account for a much larger share of municipal revenues (over 14 percent) when compared with general purpose transfers (less than 3 percent) – this is quite different than for federal-provincial transfers. Interprovincially, unconditional grants;
- account for almost 14 percent of municipal revenues in Manitoba (the highest), 8 percent in New Brunswick and less everywhere else (Table 3).
- are more important than conditional grants as a revenue source in only one province – New Brunswick.
- account for 3 percent or less of all municipal revenue in Prince Edward Island (2.6 percent), Nova Scotia (3.1 percent), Quebec (2.6 percent), Ontario (2.7 percent), Alberta (0.3 percent), and British Columbia (2.0 percent).
- come entirely from provincial governments

With the exception of Manitoba, specific purpose transfers are much more important as a source of revenue for municipalities. This is a largely a consequence of the control that provinces have over municipalities and a reflection of provincial interest in controlling where municipalities spend their money. All federal transfers to municipalities are for specific projects and services, generally dealing with environmental concerns and infrastructure projects (discussed below).

School boards survive on considerable grant support from provincial governments (many provinces have a provincial property tax which is alleged to be for funding education although the revenue derived from this tax often goes into general funds). Interprovincially, grants account for more than 90 percent of revenues in 4 provinces, between 60 and 90 percent in 4 provinces, less than 50 percent in one province, and 100 percent in New Brunswick because school boards have no involvement in financing education.
The remainder of this section is divided into the following parts: federal transfers to provinces; provincial transfers to municipalities; federal transfers to municipalities; provincial transfers to school boards.

Federal Transfers to Provinces
Federal-provincial transfers include general purpose grants and specific purpose grants, with the total size of the former being slightly greater than the later in 2005-06 (Table 7). Each type of federal-provincial grant is briefly discussed below.

General Purpose Grants
General purpose grants, which account for about 10 percent of provincial government revenues (Table 7), largely consist of equalization transfers. The federal government also makes unconditional transfers to the three territories. Under the equalization transfer program, the federal government provides unconditional grants to the provinces that have a fiscal capacity below average. Until 2004-05, the equalization payments were determined by a formula under which the equalization entitlements were intended to cover the difference between the per capita revenues that a province would raise on a particular tax base, if it were to impose the provincial average tax rate on that base, and the average per capita revenues that would be raised in the five representative provinces (Quebec, Ontario, Manitoba, Saskatchewan and British Columbia) at the same tax rate. The total equalization entitlement of a province was the sum of the entitlements over 33 tax bases, including personal and corporate income taxes, sales taxes and property taxes, among others. The equalization entitlements were also subject to floor and ceiling provisions which protected both the provincial and the federal governments against large fluctuations in payments. However, the ceiling was removed in 2002-03.

Provinces with a fiscal capacity above average do not receive or provide any transfers. Equalization transfers are financed out of the general revenues of the federal government. Currently, only Alberta and Ontario have a fiscal capacity above average, although British Columbia has only recently started to receive equalization payments.

In recent years, the equalization program has moved away from the formula-based approach. In particular, the federal government made agreements in 2005 with
Newfoundland and Nova Scotia guaranteeing that their equalization payments would not
decrease, for a limited time period, as a result of increased offshore resource revenues.
Moreover, starting in 2005-06, the formula-based approach was essentially suspended
and the entitlement of each province is now determined as a fixed share of total
equalization transfers, which will grow at 3.5 percent per year. A panel of experts was
appointed by the federal government in 2005 to make recommendations for a reform of
the equalization program. The panel delivered its final report in 2006 and a new formula-
based approach is likely to be adopted in the near future.

Specific Purpose Grants
The most important federal specific purpose grants to provincial governments are the
Canada Health Transfer (CHT) and the Canada Social Transfer (CST). Prior to 2004,
these two transfer programs were grouped under the Canada Health and Social Transfer
(CHST). Although the CHT and CST are intended to support provincial expenditures in
particular areas and are subject to certain general conditions, they are not conditional on
provincial expenditures in these areas. They are both block transfers provided to each
province on an equal per capita basis. The CHT is intended to support provincial
expenditures on health care and is conditional on certain general criteria specified in the
Canada Health Act. These criteria essentially require that provincial public health care
insurance systems provide universal coverage to all residents and for a comprehensive set
of medical services specified in the Canada Health Act, that the programs be
administered publicly, that there be no significant barriers, including financial barriers,
limiting access to health care services, and that coverage be provided to individuals that
are temporarily away from their province of residence or that have moved to a new
province but are not yet covered by the program of their new province of residence.
Provinces that fail to comply with some of these criteria may be imposed financial
penalties, although in practice the size of these penalties tends to be fairly small.

The CST is intended to support provincial expenditures in the areas of post-
secondary education, social assistance and social services, including early childhood
development and childcare. Provinces are precluded from imposing minimum residency
requirement for social assistance but can otherwise use the funds according to their own priorities.

**Federal Transfers to Municipalities**

Historically and constitutionally, the federal government has had very little to do with municipalities in Canada. Over the past decade, this has changed somewhat. The federal government through a few capital programs (accounting for about 1.5 percent of all municipal revenue in 2005) provides grants to municipalities for specific infrastructure projects heavily dedicated to satisfying environmental objectives and meeting environmental standards.

The federally funded *Green Municipal Fund*, now in its seventh year, is the longest lasting federal program and supports capital projects to improve air quality, soil and water, and to reduce greenhouse gas emissions. The federal government determines the amount of money that is available each year and the Federation of Canadian Municipalities (FCM), which is an advocacy body, allocates it to municipalities for specific projects. The allocation committee is dominated by members of FCM with minority federal representation to ensure that eligibility conditions are met. These funds are not allocated on the basis of a formula, rather municipalities must apply for them and in their application, specific conditions must be satisfied.

The $2 billion *Canada Strategic Infrastructure Fund* was announced in the Budget of 2001 and an additional $2 billion was set aside for this Fund in Budget 2003. This fund complements other federal infrastructure programs but differs in orientation. It emphasizes partnerships with any combination of municipal, provincial, or territorial governments, as well as the private sector. Each partnership is governed by specifically tailored arrangements. Investments are directed to large-scale projects of national and regional significance. Regional equity considerations are taken into account and costs are generally shared between the three levels of government. Investments are made in areas that are vital to sustaining economic growth and supporting an enhanced quality of life for Canadians. Under this fund, the maximum contribution of the Government of Canada is 50 per cent of the total eligible costs. As there are vast differences in the population of
Canada's provinces and territories, there is a threshold formula for defining "large-scale" projects.

- In Prince Edward Island, Newfoundland, Nunavut, Yukon and the Northwest Territories where populations are under 750,000, total eligible project costs must be at least $10 million.
- In Nova Scotia, New Brunswick, Saskatchewan and Manitoba where populations range between 750,000 and 1.5 million, the threshold is at least $25 million.
- In Quebec, Ontario, Alberta and British Columbia where populations are over 1.5 million, the threshold is at least $75 million.
- This formula ensures that funded projects are large-scale and strategic within the context of the province or territory in which they are located.

The Canada/Provincial Municipal Rural Infrastructure Fund (MRIF) is a tripartite program between the federal, provincial and municipal governments dedicated to providing infrastructure projects in small urban centres and rural municipalities that are designed to improve the environment while improving the health and safety of the community. Eligible projects include water and sewage systems, solid waste management, roads and bridges. Once again, these grants are not allocated by a formula. Municipalities must apply for them and applications must meet certain eligibility criteria.

Under this program, each province, territory, and First Nations community receives a base allocation of $15 million, with the remaining funds allocated on a per capita basis. This formula ensures that provinces, territories and First Nations have a meaningful amount of base funding to address public infrastructure needs. The formula is also designed to achieve a balance between the infrastructure needs of urban and rural parts of the country. For this reason, at least 80 percent of funding under the MRIF is dedicated to municipalities with a population of less than 250,000.

The MRIF is cost-shared, with the federal government contributing, on average, one-third of total project eligible costs. Provinces and municipalities contribute the remainder. In recognition of the unique circumstances of the First Nations and the northern territories, where many communities have no tax base, the federal government may contribute more than one-third. In total across Canada, a minimum of 60 percent of funding under the MRIF, with a minimum of 40 percent per jurisdiction, targets “green
infrastructure.” These projects include water, wastewater, solid waste, municipal energy improvements, and public transit. The fund also invests in cultural, tourism and recreational infrastructure, local roads and broadband connectivity.

The 2006 Federal Budget provided $900 million for a Public Transit Capital Trust. This supports investments in public transit infrastructure in cities and communities. Modeled on the federal gas tax, these funds are allocated to provinces and territories on a per capita basis. The funds support environmental outcomes of cleaner air and lowered greenhouse emissions. Management arrangements are the same as those for the gas tax agreement.

The most widely discussed federal initiative involves the Federal Gas Tax Transfer. This is the major component of the federally announced “New Deal for Cities and Communities.” Revenues for this fund, once it is fully phased in, will come from revenues generated from five cents of federal gas tax revenues. The federal and all provincial/territorial governments (in consultation with municipal associations) have signed this agreement. The federal government allocates funds to provinces on a per capita basis, with targeted allocations for Nunavut, the Northwest Territories, the Yukon and Prince Edward Island. Targeted allocations recognize the need for less-populated jurisdictions to have sufficient funds for significant infrastructure investments and the increased costs associated with infrastructure in Northern and remote areas. Provinces are then responsible for determining, generally in consultation with municipalities through their associations, how these funds are to be spent or allocated to municipalities.

In order for each province and territory to access these funds, each had to sign an agreement with the federal government satisfying a number of conditions. These agreements are not identical. They vary in the following ways (Bojorquez and Vaillancourt, 2006).

- the share of the provincial amount that is spent directly by the province rather than passed on to the municipalities;
- differences in the formulas used by each province to allocate funding to municipalities;
- variation in the role of the provincial association of municipalities in distributing and monitoring the funds; and
use by the Québec government of a crown corporation, the Société de financement des infrastructures locales du Québec (SOFIL), which is a conduit for both federal and provincial funds to flow to municipalities for infrastructure projects.

As indicated above there are a few conditions that must be met. The funds must be spent on new (incremental) infrastructure. This includes public transit, community energy systems, water and wastewater, solid waste and capacity building (includes community plans, liquid waste management plans, and drought management plans). Recipients of these grants must satisfy the following federal conditions by March 1, 2010 (most provinces have insisted that municipalities meet these conditions by March 1, 2009).

- municipalities must adopt Public Sector Accounting Board Standards - basically accrual accounting for all capital assets;
- must have properly designed and effective long term capital budget programs; and
- must implement asset management plans.

These requirements cannot be criticized, however, because they are designed to fill a current deficiency in the financial and operational management of most municipalities in Canada (see discussion in the cities section later in the report).

Provincial Transfers to Municipalities

Provincial transfers are separated into those for specific purposes and those for general purposes.

Specific Purpose Grants

Specific purpose or conditional grants constitute, by far, the largest proportion of grant revenue received by municipalities (Tables 3). These grants are provided for both operating and capital purposes and are on functions or services where the province has a specific interest. Moreover, they are provided for a range of services and functions, many of which vary from province to province (Table 4).

[INSERT TABLE 4 NEAR HERE]

To highlight some of the more notable differences, social services account for more than 53 percent of all conditional grants in Canada, but this is almost singularly driven by their presence in Ontario where they account for more than 75 percent of all provincial grants.
conditional grants and they fund about 80 percent of all municipal spending on this
service. Everywhere else, social services are provided by the province or partially funded
by funds to local agencies who deliver this service. Similarly, grants for health
preventative services (anti-smoking, alcohol and drug abuse) are provided in Ontario
where health prevention is largely a municipal responsibility. A provincial grant to cover
municipal debt charges is prevalent in Newfoundland and almost non-existent
everywhere else.

Across provinces, special purpose grants are relatively important for transportation
(roads and public transit), environment (water, sewers, solid waste), and recreation and
culture. Ontario is an exception, however, following a provincial downloading exercise a
few years ago when the province dramatically reduced grant funding in these areas.

General Purpose Grants

For all of Canada, unconditional provincial grants to municipalities are relatively small –
accounting for less than 3 percent of all municipal revenue (Table 3). Across provinces,
however, there is considerable variation – from being almost non-existent in Alberta to
accounting for about 14 percent of all revenue in Manitoba. The following is a brief
description of unconditional grant programs in each province.

Newfoundland: There are four components to the operating grants program for
municipalities. First, equalization is tied to the municipal assessment base relative to the
provincial average. If a municipality’s assessment base is less than the provincial average,
a grant brings the revenue up to some percentage of the provincial average. Second, local
revenue needs are based on revenue per household. If a municipality’s revenue per
household is below the threshold, the municipality gets a percentage of the difference.
Third, a grant of $85 per household is provided to every municipality. Fourth, a road
subsidy of $500 per kilometre is distributed to every municipality.

Prince Edward Island: The province has an equalization scheme (the Municipal Grant
Support Program) that is based on per capita assessment. Each municipality with an
assessment base per capita that is below the average receives grant funding to bring it up
to the average. Rural municipalities also receive additional grants that are determined on the basis of a fixed dollar amount per kilometer of roads and fixed dollar amount per capita for police. These grants, however, are not tied to specific expenditures on roads and police. Urban municipalities do not receive the grant for roads or for police. Instead, the province rebates to each urban municipality a portion of the provincial property tax – this rebate is not available to rural municipalities.

**Nova Scotia:** Unconditional grant funding is in the form of an equalization grant. It is based on a measure of local expenditure need and local revenue base. For the purpose of calculating grants, the province groups municipalities into two classes.
- Class I includes regional municipalities and towns.
- Class II includes county and district municipalities.

Expenditure need is measured by standard expenditure per dwelling unit by class of municipality for basic services per dwelling unit multiplied by the number of dwelling units. The standard expenditure per dwelling unit for each class of property is calculated as the average operating expenditure estimates per dwelling unit for each class. This standard is based on the estimated operating cost of providing the following services: police protection; fire protection; other protective inspections; transportation services excluding public transit; and 50 percent of garbage collection and disposal; and storm sewage collection and disposal, excluding sanitary sewerage. The formula excludes municipal expenditures for recreation and culture and debt service. The intention is to equalize only for services that are essentially non-discretionary and necessary for a functioning municipality.

The province calculates the revenue base by taking uniform assessment per dwelling unit and multiplying it by a standard tax rate and then by the number of dwelling units. The standard tax rate for each class of municipalities equals the total standard expenditures for all municipalities within the class divided by the total uniform assessment for the same municipalities within the class.

Each municipality’s equalization entitlement is the difference between standard expenditures (the product of standard expenditures per dwelling unit times the number of
units in each municipality) and standard revenues (the product of the standard tax rate and uniform assessment in each municipality).

**New Brunswick:** The unconditional grant formula has the following features. First, municipalities are divided into six groups configured to reflect their characteristics, expenditure pressures, and service requirements. For example;

- Group A includes three metropolitan centres (Moncton, Saint John and Fredericton). These municipalities have a full range of municipal services and have a strong commercial/industrial and residential tax base.
- Group B includes the remaining urban centres (six smaller cities and towns ranging in population from 5,000 to 20,000) with per capita spending patterns and service responsibilities that are similar to group A, and with a relatively strong residential and commercial/industrial tax base.
- Group C includes large towns (population from 5,000 to 10,000) that are not located close to urban centres identified in groups A and B. Here, the level of service provided is lower than municipalities in groups A and B. As well, the tax base is characterized by a much stronger residential than commercial base although both exist.
- Group D includes suburban communities. These are located near a metropolitan or urban centre (ranging in population from 700 to 10,000) and often serve as a residential district or suburb to the larger neighboring community. Because residents of these communities benefit from services provided by the larger urban neighbors, their per capita expenditures tend to be lower and their tax base is primarily residential.
- Group E represents growing communities that can offer a full range of services to residents but have a small population base (600 to 3,500). They also tend to sprawl out over a large geographical area.
- Group F covers the smallest communities (population from 225 to 1,900), but this group includes the largest number of municipalities. For the most part, they offer a limited number of services to their residents and they are spread over large geographic areas. They have a very small commercial tax base and many of their
services are contracted out or provided by another order of government. Finally, they are often removed from any larger community and surrounded by a large unincorporated area.

Second, the grant formula uses average expenditure for each group of municipalities to reflect expenditure need. Third, as a measure of fiscal capacity, the formula uses the tax base of individual municipalities with an average tax rate for the group to determine the amount of funds required to fund the standard level of expenditures. Fourth, a weighting factor is incorporated into the formula to account for specific characteristics of a municipality in terms of its density as measured by population per kilometer of roads. Fifth, to ensure that the unconditional grant does not provide funding to an individual municipality that may establish its tax rate at an unreasonably low level, a threshold (or average) tax rate is incorporated into the formula.

The unconditional grant formula is designed to enable each municipality (regardless of the size of its tax base) to provide an average level of service (when compared with other municipalities within each group) without levying a tax rate that is higher than the average for the group. Where a municipality spends more than the average for standard expenditures, its grant funding is based on the average. Conversely, if a municipality’s expenditure is below the average, it is awarded a grant based on the average. Inclusion of the actual tax base of the municipality in the calculation provides equalization on fiscal capacity. The density measure ensures that those municipalities with a large geographic area and dispersed properties are provided additional funding to reflect greater expenditure pressures arising from this (lack of) density. This factor is particularly significant in some of the smaller villages with very large geographic areas and lots of roads to maintain.

**Quebec:** About two-thirds of unconditional grants in Quebec are used for equalization purposes. The equalization grant for a municipality is determined by a formula that provides funds to a municipality whose tax base is lower than a standard tax base as determined by the province. Within this grant formula, municipalities are grouped according to population into four categories with a different standard tax base for each category. Finally, a weighting factor is applied to the grant formula with the weight
varying by the poverty level of the regional municipality (the higher the poverty level index, the larger the weight which varies from .05 to 0.3). There is no expenditure component in the equalization formula and no standard tax rate is applied.

**Ontario:** The Ontario Municipal Partnership Fund (OMPF) was introduced in 2005 and is the Province's main transfer payment to municipalities. The OMPF has four components.

- The Social Programs Grant provides funding to municipalities to help offset the municipal share of social program costs through two components:
  - Assessment Threshold – provides funding to municipalities with limited property assessment to support their share of social program costs;
  - Income Threshold – provides funding to municipalities with high social program costs relative to their residents’ household incomes.
- Equalization Grant provides funding to municipalities with limited property assessment through two components:
  - Assessment Equalization – provides funding to municipalities with limited property assessment due to lower property values and limited non-residential assessment;
  - Farmland and Managed Forest Assessment – provides funding to municipalities with limited property tax bases due to a significant amount of farmland and managed forest assessment.
- Northern and Rural Communities Grant provides funding to northern and rural communities through four components:
  - Rural Communities – supports municipalities in rural areas or small communities;
  - Northern Communities – assists municipalities in the north;
  - Northern and Rural Social Programs – limits the municipal share of revenue needed to support social programs in northern and rural communities;
  - Stabilization – provides ongoing assistance to municipalities in the transition to the new funding model.
Police Services Grant provides funding to rural communities to support policing costs but the funds are not earmarked for policing.

**Manitoba:** Under the Provincial-Municipal tax sharing program, funds available for equalization come from the estimated revenue from 4.15 percent of estimated provincial personal and corporate income taxes and 2 cents per litre of provincial gasoline tax revenues and 1 cent per litre of provincial diesel fuel tax. The amount of this total that goes to Winnipeg is determined by taking the population of Winnipeg as a percent of the total population in the province. If, for example, Winnipeg’s population is 30% of the provincial population, Winnipeg gets 30% of this sum. The residual is distributed to the remaining municipalities in Manitoba on a per capita basis.

Video lottery terminal (VLT)/casino revenue is a second form of unconditional grant. It is determined as follows: Ten percent of provincial VLT revenues generated outside of Winnipeg are distributed to municipalities unconditionally, based on a formula. The City of Winnipeg receives 10 percent of provincial VLT revenues generated in Winnipeg on an unconditional basis. Winnipeg also receives 10 percent of net casino revenues generated in Winnipeg for additional police officers.

Finally, 100 percent of provincial fine revenues are provided to municipalities responsible for providing their own policing (urban municipalities with a population over 750).

**Saskatchewan:** For unconditional grant purposes, there are two scenarios - rural revenue sharing and urban revenue sharing.

Under rural revenue sharing, there are two components to the unconditional grant: first, a transportation component: and second, a services component. The transportation component is directed at rural roads. A road classification system is used and adjustments are based on the taxable assessment per kilometer and the relative cost of road construction in each rural municipality; that is, there is an adjustment based on expenditure need relative to fiscal capacity among rural municipalities.

The services component is based on a three-year rolling average of actual net expenditures (gross expenditures less associated revenues) of each rural municipality for
protective services, environmental health services, environmental development services, recreation and cultural services, and public health and welfare services. An adjustment is made based on taxable assessment per capita, to equalize the fiscal capacity of each rural municipality to provide such services.

Organized hamlets receive a basic grant and a per capita grant like those paid to urban municipalities. If an organized hamlet is located within a rural municipality, payments to the hamlet do not affect the grant eligibility of the rural municipality.

The urban revenue sharing grant is made up of three components. First, it includes a basic grant of $1,350 for each community. Second, it includes a grant of $15.62 per capita. Third, there is a foundation grant or an equalization grant. This grant is calculated by comparing recognized revenues and recognized expenditures in each municipality. The data are adjusted to provide standardized figures for municipalities of similar size. Recognized revenues include taxes, grants in lieu of taxes, licences and fees, electrical surcharges, utility surplus (or deficit) and other own source revenues. Recognized expenditures include the cost of policing, transportation, environmental health, public health and welfare, environmental development and culture and recreation.

If recognized expenditures exceed recognized revenues, a foundation grant component is paid. The size of the grant depends on the shortfall and is a percentage of the shortfall – 16.45% at the moment. If recognized revenues exceed recognized expenditures, no foundation grant component is paid.

**Alberta:** The unconditional municipal grant was established in 1994 by combining a number of grant programs from other departments into one grant. The portions of the now existing grant include the Police Assistance Grant, the Public Transit Operating Assistance Grant and the Urban Parks Operating Grant. The grant components are based on per capita formulas.

**British Columbia:** Unconditional grants consist of the small community protection grant - this is an unconditional grant to municipalities to assist them in providing basic services. Grant amounts are based on a formula that factors in base amount, population and
assessment values. These grants generally apply to municipalities with populations up to 18,000.

The regional district basic grant is an unconditional grant available to regional districts to assist with administration costs. This grant is based on regional district population; under 50,000 population, $120,000; 50,000 to 100,000 population, $110,000; above 100,000 population, zero. Each regional district receives an additional $2,500 for each local community in the regional district.

A third unconditional grant is made up from traffic fine revenues. The total amount of this grant is a budget allocation and its distribution is based on a municipality’s policing costs as a percent of total municipal policing costs for the province. The Ministry of the Attorney General is responsible for documenting the police costs and providing them to the Ministry of Municipal Affairs.

**Summary:** Unconditional grants are used to close a municipality’s fiscal gap and to reduce disparities among municipal governments in their ability to provide local services (equalization). At the moment, there are a variety of provincial/municipal unconditional grant programs in use. Some are simple while others are more complicated. Some provinces provide per capita grants. Some provinces/territories allocate grants to municipalities with inadequate or insufficient fiscal capacity. Still others take into consideration expenditure needs and the municipality’s ability to raise its own revenues. Some provinces pool municipalities into different groups – arranged by population, functions or services provided, rural versus urban and so on. Two provinces use a weighting factor to differentiate the treatment of municipalities. Finally, some provinces have more than one unconditional grant program. About the only thing that is common across all provinces and territories is the lack of federal involvement in unconditional grant programs.

**Provincial Funding for Education**

This section summarizes the characteristics of education funding, all of which is reflected in grants in each province.
**Newfoundland:** Operating funds come from provincial grants with very small sums of money raised through local donations and fundraising activities. Provincial funding for kindergarten to grade 12 is provided for instruction, school building operations, janitorial and maintenance services, secretarial support, administration, repairs and maintenance. Within each of these categories, funding is based on a variety of factors that affect cost such as student population, school building size, weighted average wage rates, and number of schools. The province also funds the approved costs of school bus transportation (both contracted and school board operated) and school insurance.

**Prince Edward Island:** The province funds 100 percent of public education costs from general revenue. This includes revenue from a uniform provincial property tax to cover a basic standard of elementary and secondary education from kindergarten to grade twelve. These revenues, however, are not earmarked specifically for education. The *School Act* contains a provision allowing the regional administrative units to levy and collect a local tax for supplementary programs (upon approval by the ministry and by a plebiscite), but that power has never been used.

**Nova Scotia:** Public schools are financed from general revenues of the province (there is no provincial property tax) and municipalities. The municipal portion, less than twenty percent of total education revenues, comes from a uniform property tax rate set by the province. At the moment, the rate is $0.351 per $100 of uniform assessment. In addition, municipalities may provide supplementary funding to school boards for funding optional programs.

The bulk of provincial grant funding is in the form of an operating grant – over 90 percent of total funding – with smaller amounts coming from a series of restricted grants. The latter cover costs associated with special education, learning materials, and school bus purchases.

**New Brunswick:** All public education costs are funded from general provincial revenues. Included in these revenues is a provincial property tax on all properties, however, the property tax is not earmarked specifically for schools. Legislative provision for using
local property taxes to raise revenue for supplementary programs is permitted but seldom used. Operating budgets are financed from a formula that is based largely on historical cost. Professional salaries are financed on the basis of standards that relate to required school programs and school organization.

**Quebec:** About eighty-five percent of all school costs are funded from provincial grants and roughly fifteen percent from locally set property tax rates. The locally set property tax rate cannot exceed $0.35 per $100 of standardized assessment unless referendum approval is obtained from the taxpayers within the school district. Provincial revenues do not include a provincially set property tax rate.

**Ontario:** Education is funded from a combination of provincial grants and an education tax on property that is set by the province, collected by the municipality and remitted to school boards. The provincially set education tax rate on residential/farm and multi-residential properties is uniform across the province. The province also establishes the amount of education tax revenue that is to be raised by a property tax on commercial and industrial properties. Local school boards have no taxing power.

There are two types of grants. The first is a general grant and is calculated by subtracting local property tax revenues collected by the municipality and forwarded to the board, from the board expenditures as determined by the provincially set ‘Student Focused Funding Model’. Second, there are a series of special purpose grants for funding individual and board-specific needs such as special education, secondary language education, transportation, and additional costs faced by school boards that cover large rural or isolated geographic areas.

**Manitoba:** The public school system is funded by a combination of provincial and local revenues. Provincial funding comes from the general revenues of the province and from the proceeds of a province-wide property tax for education. The provincial tax rate applied to residential property is lower than the rate assigned to other properties. Farm properties (land and buildings) are exempt from the province-wide education tax. In 2002, Manitoba reduced the provincial education property tax on residential property by 10
percent. This tax is to be completely removed from all residential properties by 2007.

Local revenues are almost entirely derived from property taxes on both commercial/industrial and residential property. Local school boards have the power to set local tax rates to fund school expenditures. Provincial grants to school divisions are largely based on per pupil grants; however, over the past three years, more equalization funds have been provided for school divisions with higher tax rates and lower average property assessment.

**Saskatchewan:** Elementary and secondary schooling is funded by provincial grants and local property taxes. Provincial funding to school divisions is provided through a foundation grant program. The grant is determined by subtracting recognized locally raised revenues from recognized provincially determined schooling expenditures. Recognized expenditures include standard amounts per enrolled student, weighted to reflect cost differences between various grade levels and school locations (whether the school is in a rural or an urban division); disbursements for services for special needs students, allowances for student transportation in rural areas, and expenses for other items such as room and board provided to certain students in lieu of transportation.

Recognized local revenue is the amount that would be raised if a standard property (mill) tax rate were applied to local property assessed values, plus fees received from other school systems, the federal government, and individuals. The value of the grant is not affected by expenditure levels or tax rates set by individual school boards.

**Alberta:** The province is responsible for funding elementary and secondary education. About half of its funding requirement is supported from general provincial revenues and the remainder from a uniform province-wide tax rate on residential and non-residential (commercial and industrial) property. The residential property tax rate is lower than the commercial/industrial property tax rate.

The provincial funding framework provides money to school boards through three block grants: instruction, support, and capital. The instruction block covers instructional programs and services, which include basic and special instruction, early childhood services, home education, learning resources, native education, and regional assessment
services. The support block covers student transportation, related equipment and facilities, and board governance and central office administration. The capital block finances school building projects.

**British Columbia:** Schools are funded entirely by provincial block grants generated from provincial government revenue that includes provincially imposed non-residential (commercial and industrial) and residential property taxes. These taxes are collected by the municipalities and remitted to the province. Although the provincial government sets the rate for school property taxes, there is no necessary connection between school property taxes and provincial grants to school districts. Everyone within a school district pays the same residential tax rate, but the province varies the rate between districts in order to moderate the effects of differences in assessed values across the provinces. If school boards wish to spend more than their provincial grant, the board must seek local taxpayer approval through a referendum for additional expenditures to be financed through local property taxes. This has seldom been used.

The provincial allocation is intended to provide equal access to educational services across the province and recognizes the relative costs of providing programs in each district. Most of this funding is in the form of a common core grant, which allocates a standard base amount to each district, each student based on grade level, and each elementary and secondary school. Variations across districts are recognized in specific district grants. These reflect differences in student makeup such as the number of students enrolled in special needs (high cost) programs such as English as a second language and special education; variation in teachers salaries attributed to salary grid and experience; district size and remoteness; and variations in board spending patterns primarily caused by differences in the cost of operations, maintenance, and transportation.

**Tax Harmonization**
Although the Canadian tax system is highly decentralized as discussed above, there are federal-provincial agreements insuring some level of harmonization of tax policies, in particular with respect to personal and corporate income taxation and sales taxation.
**Personal Income Taxation**

Under a Tax Collection Agreement (TCA) that initially came in effect in 1962, the federal government collects personal income taxes on behalf of all provinces except Quebec. Provinces choose their own tax rate, although until 2001, they had little discretion over the tax base and the rate structure. Provinces could only set a tax rate that was applied on the federal tax liabilities of their residents – a tax-on-tax approach. The sources of income subject to taxation, the tax brackets and marginal rates applied in each bracket and the exemptions were all determined by the federal government. However, the federal tax collecting agency would administer province-specific tax credits. Nonetheless, provinces essentially had to use the federal tax base and the degree of progressivity in the federal rate structure.

Over time, as the share of provincial governments in income tax revenues increased, provinces wanted to have more control over their tax base and rate structure, and have progressively introduced a greater number of tax credits and province-specific measures, including high-income surtaxes and tax reductions for low-income taxpayers. In response to increasing demands for provincial flexibility in setting tax policy, a tax-on-income approach was adopted in 2001 under which provinces can directly apply their tax policy on taxable income rather than being restricted to the tax-on-tax system. As a result, provinces can now choose their own structure of tax rates and tax brackets, as well as their tax credits, surtaxes and tax reductions for low-income individuals. However, provinces are still restricted to using the same tax base as the federal government. Although there are very few restrictions about the taxes that the federal government will collect on behalf of the provinces under the tax-on-income system, the structure of collection fees that the federal government charges to the provinces is designed to subsidize the collection costs of provincial tax measures that are well harmonized with those of the federal tax policy.

The province of Quebec has never been part of the Tax Collection Agreement. It administers its own personal income tax system and its residents must file two separate income tax report, a federal report and a provincial report. In practice however, despite having its own income tax system, the provincial tax policy in Quebec tends to be quite similar to that of the other provinces.
Corporate Income Taxation

Under the TCA, the federal government also collects provincial corporate income taxes in the provinces that have chosen to participate. All provinces but Ontario and Quebec initially joined the corporate income tax part of the agreement, although Alberta withdrew in 1981. Ontario came to an agreement with the federal government in 2006 and will also have its corporate income tax collected by the federal government starting in 2008.

The TAC gives the federal government the authority to define the tax base on which provinces can apply their own tax rate. The provincial governments can set province-specific tax credits that will be administered by the federal tax collecting agency, subject to some fees, and provided that these credits do not discriminate against firms from other provinces. The agreement also defines the formula, common to all participating provinces, for allocating the revenues of firms that are operating in multiple provinces.

Sales Taxation

There is much less harmonization of sales taxation. Currently, there is a federal value added tax called the Goods and Services Tax (GST), three provinces (Nova Scotia, New Brunswick and Newfoundland) have a value added tax perfectly harmonized with the GST, Prince Edward Island applies its own tax rate on the GST base, Quebec has its own value added tax, four provinces (Ontario, Manitoba, Saskatchewan and British Columbia) have retail sales taxes with narrower bases than the GST, and Alberta does not have any provincial sales tax at all.

The federal GST is a 6 percent tax applied on a fairly broad base of consumption goods and services although it excludes certain necessities such as food, prescription drugs, health care services, residential rents and educational services. The Harmonized Sales Tax (HST), which replaced the GST and retail sales taxes in Nova Scotia, New Brunswick and Newfoundland in 1997, is applied on exactly the same base at the rate of 14 percent, the provincial and federal shares being 8 and 6 percent, respectively. The tax is collected by the federal revenue agency and the tax base is determined by the federal
government. In fact, the HST acts very much like a revenue-sharing arrangement with virtually no discretion for the provinces involved. In the provinces that have retail sales taxes, most services are excluded from the tax base and the set of exempted goods varies considerably across provinces. Finally, the value-added tax in Quebec is somewhat harmonized with the federal GST. In contrast to the HST however, both the Quebec value-added tax and the federal GST are collected by the Quebec government.

**Federal-Provincial Agreements**

Several agreements between the federal and provincial governments with respect to the functioning of the economic union and the conduct of social policy are important complements to fiscal arrangements in the federation. Some of these agreements are briefly outlined below.

The Agreement on Internal Trade (AIT) was implemented in 1995 with the objective of increasing trade liberalization within Canada and eliminating barriers to investment and mobility across provinces. Among other things, the agreement prohibits governments from imposing regulation, standards, fees, residency and local presence requirements, or any other discriminatory measures and obstacles that would restrict the movement of persons, goods, services or investment across provinces.

The Social Union Framework Agreement (SUFA) was signed in 1999 by the federal and provincial governments in order to improve cooperation between governments in the conduct of social policy. In particular, the agreement commits governments to the joint federal-provincial planning of social policy, to increasing accountability and transparency in the conduct of social policy by better measuring the outcomes of social programs and sharing information on performance, it establishes a clearer role and boundaries for the federal spending power, it increases the freedom of movement across provinces by reducing barriers to labour mobility, it promotes the establishment of dispute avoidance and resolution mechanisms, and further commits governments to certain principles in the conduct of social policy, including the principles of the Canada Health Act.

There are federal-provincial agreements with respect to immigration, which is a shared responsibility of the federal government and the provinces under the Constitution.
In particular, most provinces have agreements with the federal government that allows them to select a certain number of immigrants according to the specific skill requirements of their provincial economy, although subject to federal admissibility conditions. Under these agreements, some provinces also share responsibilities with the federal government for the planning and implementation of immigration policies and for related programs, such as integration programs, language training and labour market access programs. The province of Quebec has the most extensive of these agreements which gives it greater responsibilities in the selection process as well as sole responsibility in providing various services to new immigrants.

There are also agreements between the federal and provincial governments for various programs supporting children. In particular, the National Child Benefit program is a federal-provincial partnership program that provides income support to low- and middle-income families with children, while the Early Childhood Development Agreement is a program through which the federal government provides funding for several provincial services targeted at young children and parents.

Finally, the federal and provincial governments are jointly responsible for the Canada Pension Plans (CPP) that was established in 1966 to provide retirement income for the elderly. The CPP is a federally legislated program, although the support of at least two-thirds of provincial governments representing at least two-thirds of the Canadian population is required to make changes to CPP policies. Every three years, the CPP is jointly reviewed by the federal and provincial governments. The CPP operates in all provinces except Quebec where a similar plan, the Quebec Pension Plan (QPP), is in effect. The Quebec government opted-out of the CPP and administers its own program.

1.3 Cross-Country Comparisons
Every federation has its own unique features, both in terms of its history, politics and institutions and in terms of the way it confronts economic policy issues. While this requires one to be cautious in drawing lessons for other countries, at the same time there may be some important messages that come out of comparing alternative ways of dealing with similar issues. In this subsection, we discuss some of the most relevant ways in which the Canadian federation differs from other federations, as well as unitary nations
like Japan. We focus on differences that are particularly relevant for the fiscal restructuring debate. The following is a list of factors that is not in order of importance.

1. **High level of autonomy of provincial governments.** Provincial governments have full discretion for legislating in areas of responsibility that have been assigned to them by the constitution either exclusively or jointly with the federal government. As mentioned above, these include some of the most important social policy areas, including those that are of some national interest. Although the federal government can influence provincial policies through the use of the spending power, it is constrained both politically and constitutionally from imposing more than general conditions. Unlike in other federations, the federal government cannot impose mandates on provincial governments (funded or not). In principle, it can disallow provincial legislation, but the use of that power has fallen completely out of use. The consequence is a system in which the provinces and the federal government are autonomous within their own jurisdictions. While this leads to inevitable conflicts and tensions, it also leads to accountability, innovation and responsibility in policy-making. The scope of responsibilities and the extent of autonomy that the provinces have are much greater than in most federations, and certainly considerably more than in the case of prefectures in Japan.

2. **Decentralized revenue-raising.** The provinces have access to all major revenue sources, and are responsible for raising a high proportion of their own revenue, more so than in most federations. This too contributes to the responsibility and accountability mentioned above. But it also leads to potential problems since different provinces have different abilities to raise revenue. This, however, is dealt with by a system of equalizing transfers that is formula-based and that allows the provinces with low revenue-raising capacities to obtain some minimal national standard of revenues to finance their programs. While most federations are comparable in terms of the share of public spending accounted for by provincial and local governments, the Canadian one is much more decentralized than most in revenue-raising. Exceptions might include Switzerland and the United States. It is also much more decentralized than unitary nations with regional governments, such as Japan or the Scandinavian countries.
3. **Importance of unconditional transfers.** Despite the extent of revenue-raising decentralized to the provinces, there remains a vertical fiscal gap to be filled by transfers. The federal-provincial transfer system has evolved to one in which the bulk of the transfers consist of two types. Equalization transfers, dispensed according to provincial revenue-raising ability, are fully unconditional. Bloc transfers in support of provincial social programs are basically equal per capita transfers with very broad conditions attached. There are some small shared cost programs in areas like transportation, but they are dwarfed by these two main transfers. The absence of highly conditional transfers further reflects the extent to which provincial autonomy is respected.

4. **Harmonized taxes.** To the extent that the provinces have discretion for their own taxes, the possibility exists that a fragmented tax structure will result. This would cause distortions and administrative costs on cross-province transactions and inefficiency in the internal economic union. This has been forestalled to some extent by the tax harmonization arrangements described above. However, the scope of these is limited. While most provinces harmonize their personal income taxes with the federal income tax, the three largest ones have their own separate corporation income taxes. Problems are greatest in the case of sales taxes. Four provinces harmonize their sales taxes with the federal value-added tax, but the remaining ones do not. This is a source of some concern for competitiveness since provincial sales taxes typically include some business inputs in their base and can discriminate against domestic production in favor of foreign producers. The issue of tax harmonization is obviously more important in decentralized federations than more centralized ones where taxes tend to be centralized. This is one area where there is more work to be done, and it points to one of the challenges that decentralization poses.

5. **Mix of local revenues.** While the provinces have wide discretion in revenue-raising, the options open to municipalities are more limited. Their own-source revenues come from two main sources, property taxes and user fees. While they have considerable discretion with respect to the rates they set, in practice they have been more constrained in recent years. That is because in some provinces, they have been required to take on significant spending responsibilities in areas like social services,
while at the same time the transfers they receive from provincial governments have been restricted. This change in the provincial-municipal vertical balance has resulted in property tax rates that are relatively high by OECD standards. While municipalities have considerable discretion over their local budgets, they nonetheless face financial constraints in exercising that discretion.

6. **Hard budget constraints.** Related to this is the fact that, unlike in some countries with multiple levels of government, lower-level governments in Canada (both provinces and municipalities) face hard budget constraints. There is no tradition of bailouts. Nor is there any expectation of them. This may be due in part to the fact that sub-national governments have considerable fiscal autonomy with limited rules set by higher levels, and are therefore expected to meet their own spending obligations. Transfer systems tend to be formula-based, although that principle has been violated in recent years. If anything, sub-national governments face the opposite of soft budget constraints, as mentioned above. Rather than financial constraints of lower levels of government being met by transfers from above, it is the financial problems of higher level governments that are passed down by cuts in government transfers. In this respect, the Canadian case is dissimilar to the Japanese case.

7. **Provincial and municipal debt.** The fact that soft budget constraints are not a problem is also a consequence of the fact that provinces have full autonomy over their borrowing, subject only to the discipline of the capital market (and of the electorate). The ability of provinces to borrow can be a useful device for accommodating sudden changes in economic fortunes as well as reductions in federal transfers. In the case of municipalities, borrowing is restricted to the financing of capital projects, but even here municipalities are compelled to finance their own debts and there are provincial restrictions on borrowing.

8. **Infrastructure needs.** A major current priority at the provincial-municipal level is the need to rebuild the nation’s infrastructure that has been allowed to deteriorate over the years because of other priorities (and perhaps a neglect of maintenance expenditures). It has been increasingly recognized that public infrastructure is a necessary component of a competitive economy, especially one that is becoming increasingly urbanized. A major question involves who should finance infrastructure
investment. Much of it falls within provincial and municipal jurisdiction, so one might think that arguments of accountability and autonomy would point to decentralized responsibility. Others argue that economic competitiveness is a national priority so the federal government should take the initiative.

9. **Provinces ownership of resources.** A unique feature of the Canadian federation, which goes back to the initial bargain struck when the provinces joined to form a country, is that natural resources within provincial boundaries are owned by the provinces. (The federal government owns offshore resources, as well as resources in the northern territories.) This leads to a situation in which different provinces have very different revenues from natural resources, which is one of the main sources of inter-provincial fiscal disparity. The issue is currently a significant one since oil and gas revenues are heavily concentrated in a small number of provinces. This has led to a sizeable reallocation of economic activity from resource-poor provinces to resource-rich ones, and has even enabled the latter to take pro-active policies to diversify their provincial economies partly at the expense of other provinces. An extreme consequence of this is the development of movements in some provinces for more independence and in some cases outright sovereignty.

10. **Demographics.** Most OECD countries, Japan being a prominent example, are in the beginnings of a serious demographic crisis brought on by declining fertility and increased longevity. The consequent aging of the population, as well as having obvious effects on the market economy, will have serious effects for the public finances to the extent that intergenerational transfers from young to old have been built into economic policy structures (accumulated public debts, public services to the retired financed by taxes on the working population, unfunded public pensions, etc.). These problems are much less severe in Canada than in other countries, partly because of actions that have been taken to forestall them. The public debt overhang has been reduced by dramatic deficit reduction measures that were undertaken in the 1990s. Canada’s main public pension scheme has been reformed to make it virtually funded. Private pensions schemes are relatively more important than elsewhere, partly because of tax incentives that exist for retirement saving. The demographic shock has been softened, or at least postponed, by liberal immigration policies that aim to let in
about one percent of the population as immigrants each year, and this has contributed to the robust growth in the economy. As well, mandatory retirement has been abolished in many provinces so that workers can work to an older age. Nonetheless, the dependency ratio will inevitably rise, and the cost to taxpayers of providing services to the retired will increase. Moreover, some consequences of the earlier measures remain. The fallout from the deficit reduction measures of the 1990s included a significant cut in transfers to the provinces, which led to much acrimony and accusations that the federal government had created a vertical fiscal imbalance. The issue of the proper vertical balance between the federal government and the provinces remains a key policy issue. There has also been increasing pressure felt by the largest cities, which have grown rapidly partly because a high proportion of immigrants come to one of the three largest cities in the country.

2. Principles of Fiscal Federalism

Federations are very diverse, but there are some important common features. The kinds of functions exercised by provincial governments are roughly similar, though they have varying degrees of discretion across federations. Provinces typically assume responsibility for delivering important public services, and are able to exercise considerable discretion. The federal government influences provincial policies in a variety of ways, especially using financial incentives (transfers). This federal interest arises because many public services delivered by provincial governments have an effect on national efficiency and equity. Federal governments have discretion over a wide range of tax types, subject to tax harmonization measures that may be in effect. The main difference among federations is the extent of provincial revenue-raising responsibility. Taxation responsibilities are very decentralized in Canada and Switzerland, and highly centralized in Germany and Australia. The type of taxes used by provincial governments and the extent to which they are harmonized varies across federations. In some cases, both broad- and narrow-based taxes are used, while in others, provinces are restricted to using quite narrow tax bases. The decentralization of spending and revenue responsibilities implies that the actions of provincial governments will have spillover effects that can affect the well-being of residents of other provinces. Much of the policy
discussion in federations is dominated by the need to deal with these spillovers and interdependencies, both in their efficiency and equity dimensions.

There are three standard features of federations that are important for fiscal decision-making. The first is the existence of a strong federal government with some financial, regulatory or legal leverage over the provinces that enable it to induce policy harmonization across provinces. One can view the fiscal arrangements between the federal and provincial governments as allowing the federation to exploit the advantages of decentralized decision-making while at the same time ensuring that national objectives are addressed.

A second feature of most federations is the existence of a system of redistributive—or equalizing—federal-provincial transfers. This is important because provinces are responsible for delivering some key public services, such as education, health and social services. Redistributive federal-provincial transfers equalize to some extent the capacity of the provincial governments to provide comparable levels of public services at comparable tax rates, thereby removing one source of inefficiency and inequity that would otherwise result from decentralized fiscal responsibility. They also reduce the tendency for provinces to engage in self-defeating fiscal competition.

Third, residents in a federation enjoy citizenship rights and the economic and social rights that entails. The principle of equal treatment of citizens in all provinces is sometimes written into the constitution, as in Canada, Germany and South Africa. Large differences in levels of public service and social protection across provinces are not tolerated. Measures are often taken by the federal government to ensure that the social protection provided by the province meets national standards. Federal remedies will reduce the extent to which destructive interprovincial competition will occur.

In what follows, we recount in some detail the relevant features of federations, beginning with the nature of fiscal decentralization. Then we turn to the inefficiencies and inequities that can arise because of decentralized fiscal responsibilities, and the kinds of remedies that are used to counter them. Finally, the structure of tax systems in federations is considered, including both which taxes are decentralized to the provinces and the harmonization measures that are in effect.²

² This section draws on Boadway (2006a).
Two overriding issues should be stressed at the outset, because both have an enormous bearing on one’s assessment of federal models of government. The first is that much of what federal and provincial governments do, and the source of much controversy, involves redistribution. This includes transfers to the poor, the disabled, the elderly, the families of children, the unemployed, and so on. It also includes public services such as education, health care and social services, which constitute a large share of provincial government budgets. The implication is that the redistribution dimension is bound to be important in discussions of fiscal federalism. This might be contrasted with classical views of federalism that based decentralization on whether public goods were national or provincial in scope. Decentralization was viewed as a means of ensuring efficient provision of local public goods in accordance with local preferences, and redistribution was a concern of the national government. This old view of federalism does not accord with the facts. The provision of public goods represents a small proportion of what provincial governments do, and redistribution judgments are inextricably involved in their fiscal decisions.

The second issue is the important role of political economy considerations in fiscal federalism. Arguments for decentralization are typically based on assessments of what functions provincial governments can undertake more effectively than national governments. The outcome of such debates ultimately depends on one’s view of how benevolent governments are. Roughly speaking, more decentralization is preferred by those who put less weight on equity relative to efficiency and think of government as more self-serving, inefficient and self-aggrandizing. In what follows, we take an agnostic view of this debate, although many of the arguments we present are normative in nature.
2.1 The Case for Decentralization

To put matters in perspective, it is useful to review the arguments for decentralization in a federation. We contrast current views with the classical view that continues to influence much of the academic literature. These arguments also apply to a unitary nation with regional and local governments, although in this case regions typically do not have the same autonomy as provinces in a federation.

According to the classical view as formulated by Musgrave (1959) and Oates (1972), the assignment of functions follows from the classification of the three branches of government policy—the Efficiency, Redistribution and Stabilization. Only the Efficiency branch is shared by the two levels of government. The main function of provincial governments is to provide local public goods, while the federal government provides national public goods and undertakes redistribution and stabilization functions. Residents of different provinces have different preferences for local public goods and services, induced perhaps by a migration mechanism of the Tiebout (1956) sort whereby people vote with their feet. Decentralization facilitates the matching of provincial public goods with preferences, whereas centralized provision tends to uniformity. This is the celebrated Oates Decentralization Theorem. Since redistribution is a national function, provincial tax systems should follow the benefit principle, a point of view that has recently been forcefully argued by McLure (2001). This may be conditioned somewhat by provincial-level altruism, but in that case altruistic transfers to the poor can be viewed as simply another provincial public good (Pauly 1973).

In the classical federation, inefficiencies from decentralization occur as a result of interprovincial spillovers, such as those that arise because provincial boundaries do not coincide with the reach of benefits of local public goods (Breton, 1965). Migration can also be inefficient; and migration equilibria can be unstable and may not even exist (Bewley 1981, Stiglitz 1977). The role of federal-provincial transfers is essentially to correct for these various spillovers and inefficiencies, and for that purpose matching transfers are deemed to be appropriate (Dahlby, 1996).

This classical view of the nature of federations bears little resemblance to actual ones. Provincial government expenditures are not mainly on public goods. Benefit taxation is not the norm. There is little evidence of significant heterogeneous preferences
across provinces. And, the flow of migration is relatively limited compared with provincial population levels. The alternative view of decentralization does not focus on satisfying heterogeneous local preferences, although that can be an element. It focuses on the fact that the provision of public services and targeted transfers, which serve a redistributive function, is more efficiently done at the provincial than at the federal level. An important consequence is that provincial policies have an unavoidable equity dimension. Redistribution cannot be assigned solely to the federal government.

There are several reasons why decentralization leads to more efficient delivery of public services. Provinces are better informed about local needs for public services and costs of provision. They are better able to target programs to those for whom they are intended. Administrative costs are reduced by eliminating a layer of bureaucracy and alleviating agency costs. The fiscal competition that accompanies decentralization enhances efficiency and reduces rent-seeking through fiscal discipline. The performance of a provincial government can be evaluated more effectively if neighboring provinces are also providing similar public services, providing a yardstick for comparison. Decentralization induces better fiscal and political accountability for public service provision, since decisions are made closer to those benefiting. Finally, the existence of several independent service providers can enhance the chances of innovation and experimentation in public service provision.

These arguments apply especially where there are no scale advantages from central provision (national public goods), no advantages from centralized information gathering (general revenue collection), or where there are no national social insurance considerations. There are significant harmonization advantages from a relatively centralized tax system. This, along with the fact that federal-provincial transfers fulfill an indispensable function, implies that the case for decentralizing expenditures is greater than for decentralizing revenue-raising: there should be a vertical fiscal gap.

A striking feature of this viewpoint is that some of the most important spending programs for redistributive equity are decentralized to the provinces, including public services like education, health care and social services, and transfers that are targeted to particular groups rather than being delivered through the income tax system. Indeed, even in unitary-type nations (Japan, Scandinavian countries), many of these kinds of services
are provided locally. To the extent that these programs are also important for national equity, the federal government has an interest in how they are delivered, and may want to use the federal-provincial transfer system to make that interest felt. In other words, equity considerations are important in choosing the extent of decentralization as well as designing the system of intergovernmental transfers needed to accommodate that decentralization. One can view the function of the transfer system as to enable the federation to reap the benefits of decentralization while avoiding its costs.

2.2 Features of Federations

The economies of federations are like economic unions, where all products and factors of production can freely cross provincial borders without border controls. All persons enjoy common citizenship regardless of province of residence, and that endows them with certain common rights and entitlements. These include mobility and employment rights, as well as some expectation of reasonably comparable levels of public services and levels of taxation wherever they reside and work. But, no two federations are identical. There are exceptions to free mobility (Switzerland), and there are exceptions to the expectation of equal fiscal treatment (USA), but these are exceptions to the rule. Most federations tend to accomplish some common fundamental goals, but in a wide variety of ways.

In most federations, provincial governments and their municipalities are responsible for providing local public goods and services (roads, sewage, water, garbage, recreation) as well as public services of national importance (education, health and social services) and some important targeted transfers (welfare). The amount of provincial discretion varies. In some federations (Belgium, Canada), provincial governments have a high degree of autonomy, subject only to general financial incentives from the federal government. In other cases (Australia, USA, Spain), the provinces are subject to somewhat more influence from the federal government through varying combinations of conditional grants, mandates and the disallowance of provincial legislation. In yet other cases (Germany), the provinces are largely administrative creatures of the federal government, and implement public programs legislated by the latter. However, even in federations where expenditure programs are highly decentralized, commonality in levels
The provision of public services in federations is often achieved through expenditure harmonization, conditional bloc grant financing, and equalization programs. On the revenue side, things are much more diverse. The extent to which provinces finance their expenditures out of their own sources varies considerably, although a sizeable vertical fiscal gap exists in almost all federations. In Canada and the USA, provincial governments raise significant proportions of their own revenues. At the other extreme, Australian states and German länder rely heavily on federal transfers or revenue-sharing, and have limited revenue-raising responsibilities. In federations where provinces do raise significant revenues, the form of taxes varies considerably. In Canada and the USA, provincial governments have access to virtually the same broad-based revenue sources as the federal government, and have the option of piggybacking onto federal income taxes. In Canada, they also have exclusive access to taxes on natural resources. On the other hand, discretionary tax sources in Australia and Germany tend to include mainly narrow-based taxes.

In most federations, the federal government has similar responsibilities. It provides national public goods and major social insurance schemes, and incurs expenditures that are roughly comparable to those of provincial and local governments in the aggregate. As mentioned, taxes are much more centralized than expenditures. Even where provinces have access to broad-based taxes, the federal government has the dominant share, which has important implications for tax policy and tax harmonization within the federation.

Given the range of important public services provided by the provinces, there is federal-provincial overlap in interests and responsibilities. Both levels of government have an ultimate interest in providing public services to their citizens, in efficiency in the internal common market, and in the diverse objectives of redistribution, including equality of incomes, equality of opportunities, and social insurance. These tasks cannot be assigned exclusively to one level. The federal government has an overriding interest in national efficiency and equity, given that its constituency is the nation, while many of the policy instruments that affect these objectives are in the hands of the provinces. A key aspect of fiscal federalism is the way in which the institutional arrangements, particularly the federal-provincial fiscal arrangements, are designed so as to facilitate the benefits of decentralized decision-making while at the same time ensuring that national equity and
efficiency objectives are not compromised. Exactly how national efficiency and equity might be compromised by decentralization is outlined below. For now, we outline some common features of fiscal arrangements in federations, classifying them by three types—federal-provincial transfers, tax harmonization arrangements, and negotiated agreements.

**Federal-Provincial Transfers**

Federal-provincial transfers are necessary to close the vertical fiscal gap between provincial expenditure responsibilities and own-source revenues, a gap which ensures that the federal government plays a dominant role in tax policy. In addition, these transfers fulfill two substantive functions.

First, they serve an equalizing role by transferring funds unconditionally to the provinces so that all have the financial capacity to provide reasonably common levels of public services. Equalization transfers can be based on revenue-raising capacity in cases where provinces have significant revenue-raising authority (Canada), on expenditure needs when provincial revenue-raising is minimal (South Africa), or on both (Australia, Germany). The total transfer can be based on given shares of federal revenues from different sources (Australia, Germany), on average per capita revenues raised by all provinces (Canada) or on estimated provincial expenditure needs (South Africa).

Second, transfers can be used to influence the spending amounts and patterns of provincial governments. Matching grants can be used as an incentive for provinces to implement certain programs or to encourage spending on existing programs. Bloc conditional transfers can be used to encourage national standards of provision. Provinces may be subject to penalties if their spending programs do not meet the conditions set by the federal government. The use of conditional transfers by the federal government (spending power) is common, but can be controversial (Watts 1999). On the one hand, they can be ideal instruments for ensuring that provincial expenditure programs take account of national objectives. On the other, there is the possibility that the federal government will use them too intrusively, thereby impeding the benefits of fiscal decentralization. Such tensions are at the core of decision-making in a federation. Perhaps the best way to guard against them is for there to be full consultation between the federal and provincial governments prior to their implementation, and otherwise to rely on the
ultimate check of the political process. Despite its potential for abuse, the spending power is the least intrusive of instruments for ensuring that the benefits of decentralization are achieved without compromising the achievement of national objectives. For it to be effective, the federal government must have some degree of fiscal dominance.

These two functions of federal-provincial transfers—equalization and conditionality—need not be addressed by separate transfer systems. Equalization grants can have some general conditions attached to them. And, the allocation formula for conditional grants can have an equalization element in them, such as when they are equal per capita transfers to all provinces financed out of federal general revenues. Jointly they bring national harmony in fiscal systems, and help to reduce the incentives that might otherwise exist for provinces to use their tax systems in highly non-cooperative ways.

**Tax Harmonization**

Tax harmonization arrangements exist in virtually all federations, but their form and extent vary considerably. Where provinces have little revenue-raising authority, tax harmonization is effectively achieved by a common central tax system, whether or not revenue-sharing applies. Where provinces have significant own revenue-raising authority using major tax bases such as income or sales, explicit harmonization is relevant.

In the case of income taxes, harmonization can apply to the base alone or to the base and rate structure together. Full harmonization can be achieved by some variant of a provincial surtax applied either to the federal base or to federal tax liabilities. In either case, the provinces can choose their own surtax rate to facilitate fiscal responsibility, while the federal government chooses both the base and the rate structure. Provinces may be allowed to implement province-specific tax credits, surtaxes and exemptions as well, although this affects the rate of progressivity and may implicitly distort interprovincial transactions. Alternatively, harmonization may apply to the base only, with the provinces free to choose their own rate structures to apply to the federal tax base. Canada has recently moved from the former to the latter system, so now the provinces are allowed to apply their own rate structures and, with limits, their own system of credits, while retaining the use of a federal base. Participation in federal-provincial tax harmonization arrangements may be voluntary (as in Canada and the USA). Indeed, provinces may
unilaterally choose to harmonize their tax bases with that of the federal government to reduced compliance and collection costs for their taxpayers.

There are two important institutional features of income tax harmonization. The first is that the harmonization system may be accompanied by a single tax administration that collects taxes on behalf of both the federal government and the participating provinces. This has some obvious administrative advantages in terms of compliance, collection and information sharing. The cost to the province is that it gives up some discretion over the base and possibly the rate structure. If the share of provincial tax room is high, provinces may prefer to choose their own tax policies, and may be willing to pay the price of collecting taxes on their own. Indeed, the Canadian case illustrates this well. As the provinces obtained more and more income tax revenue-raising authority, the tax harmonization arrangements became looser and looser.

The second feature is the need for a common allocation formula for assigning tax bases to provinces when incomes are earned in more than one province over the tax year. In the case of personal income taxes, an attempt might be made to share the tax according to the proportion of the year spent in each province. Alternatively, one can assign the entire base to the province of residence on some arbitrarily chosen date. With corporate income taxes, matters are not as simple since corporations can carry on business in more than one province at the same time. Formulas to allocate the tax base among provinces typically use some combination of shares of sales, shares of payroll, and shares of capital stock. There is no exact way of assigning tax bases to provinces, so factors are chosen that are both reasonable indicators of income-earning activity and that are difficult to manipulate by transfer pricing and profit shifting through financial transactions, or by changing the number of taxpaying units within a given firm if the system does not require consolidated tax accounting among all a firm’s entities.

Harmonization of provincial sales taxes is less common (Canada being the only example among OECD countries), although it is virtually mandatory in the case where provinces use value-added taxes (VATs). Some harmonization is needed to ensure proper accounting for input crediting on cross-border transactions in the absence of border controls. With single-stage sales taxes, which are typically levied on a destination basis, the usefulness of harmonization would be mainly to deal with cross-border purchases,
including those that are consummated electronically. Potentially, sales taxes could be also used as strategic policy instruments to favor provincial activities and to affect provincial redistribution, and a case could be made for base harmonization to deal with that.

**Negotiated and Other Arrangements**

Fiscal arrangements between the federal government and the provinces also include various agreements and institutional arrangements. Federal and provincial government officials are in continuous consultation over many policy issues, and sometimes negotiate explicit agreements. They may involve overlapping policy areas, such as environmental policy, infrastructure, regulatory policies on labor and other markets, and social policies. Or they may be more general. In Canada there is an Agreement on Internal Trade that is analogous to international trade agreements. There are two problems with negotiated agreements. First, since they require unanimous consent, they are hard to negotiate, especially so they include binding dispute settlement mechanisms. Second, by their nature they will be mutually beneficial to all provinces, so will typically not include any redistributive component, which limits their applicability.

A much more common form of non-financial federal-provincial arrangement is for the federal government to adopt a strong leadership role, given that it bears special responsibility for matters of national interest. Institutions vary from federation to federation. At one extreme, the federal government legislates major policies that the provinces must implement (as in Germany, albeit with länder input through the Bundesrat). The federal government may also be able to mandate provincial programs in certain areas, sometimes even without providing full funding (USA). The federal government may have the power to disallow provincial legislation that is deemed not to be in the national interest, or it may rely on the courts to do so. A less intrusive policy instrument is to provide a financial incentive to the provinces to design their spending programs so they respect national interests (the spending power). These policy instruments are not used in a vacuum, however. The continual consultation that exists between the two levels of government means that many conflicts are resolved by negotiation, or by moral suasion, rather than by more heavy-handed federal intervention.
2.3 Efficiency Effects of Federal Decentralization

There is a large literature on the efficiency effects of decentralized decision-making in a federation. The effect of provincial policies on efficiency arises because of cross-border flows of products and factors of production, because of the mobility of households among provinces, and because of interaction effects between policies at different levels of government. It is useful to distinguish three general sources of inefficiency: those arising from horizontal fiscal interaction, those arising from vertical fiscal interaction, and those arising from differences in fiscal capacity created by decentralization.

**Horizontal Fiscal Externalities**

Provincial government policies can have positive or negative spillover or externality effects on other provinces in the federation. These can result from direct effects of fiscal policies on residents of other provinces and indirectly via effects on other provinces’ budgets. Positive fiscal externalities occur if spending policies in one province provide direct benefits to residents in other provinces (highways, environmental control, education, etc.). Provinces will underestimate the social value of expenditures to the extent that spillover benefits occur. The ideal remedy is for the federal government to impose a Pigovian-type subsidy on spillover-inducing provincial spending, but this ideal is very difficult to achieve. The size of spillovers is hard to estimate. As well, the extent of inefficiency depends upon the way provincial governments choose their fiscal policies, and that may not conform to the rational optimizing way that individuals agents presumably use. In practice, means other than matching grants are often used to deal with spillovers, such as negotiation and bloc grants with conditions attached.

Positive fiscal externalities also result indirectly from the fact that tax bases are mobile, so that an increase in one province’s tax rate, given tax rates elsewhere, will cause a loss of tax base to other provinces. Recognition by provincial governments of this potential loss of tax base gives rise to tax competition. Each province has an incentive to reduce its tax rate to avoid loss of base, or to attract base from others. Since all provinces behave in the same way, the consequence is an equilibrium outcome in which tax rates

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are lower than they otherwise would be. Moreover, the relative size of tax rates can differ among provinces resulting in an inefficient allocation of resources across the federation.

Competition for mobile tax bases can also involve other instruments, such as business services and infrastructure. The resulting expenditure competition is analogous to tax competition in its efficiency consequences. However, it leads to expenditures (and taxes) that are too high, and also skews public expenditures away from public goods and services and toward business services (Keen and Marchand 1997). Provinces may also offer subsidies to attract firms and capital, including subsidies on labor to encourage employment (Boadway et al 2002).

The extent to which fiscal competition occurs depends on the mobility of tax bases. Capital and firms are relatively more mobile than workers, so tax competition is perceived to be more of a problem with capital income taxes, wealth taxes, and taxes on firms and entrepreneurs. This is true both of general taxes as well as specific tax relief or subsidies directed at particular industries. Most important, taxpayers may be able to relocate their tax bases without changing their location of production. Thus, corporations operating in several provinces can arrange to reduce their profits in a province by charging high transfer prices on inputs from elsewhere or by obtaining their debt finance in high-tax jurisdictions and taking advantage of interest deductibility provisions.

Since labor is less mobile than capital and firms, payroll taxes and general consumption taxes (which are effectively taxes on labor income) are less prone to tax competition than taxes that apply to capital income. The same might be true of taxes on real property and natural resources to the extent that they do not apply to capital used with the immobile resource. Tax competition from excise taxes occurs because of cross-border shopping: households have an incentive to purchase taxed goods in low-tax provinces. If the tax is levied on a destination basis, which is typically the case, taxpayers are legally liable for the tax in their province of residence in which case tax competition would not apply. However, in the absence of borders, this is hard to enforce.

Tax competition is usually regarded as a bad thing since it causes provincial governments to compete their tax rates down, thereby skewing their tax structures in favor of more mobile bases and causing them to provide a lower level of public goods than they otherwise would. And, the undersupply of public goods and services to
households is exacerbated to the extent that expenditure competition occurs. However, in practice there are a number of caveats. First, if provincial governments are not benevolent enough and tend to over spend for its own sake, tax competition can serve as a discipline on their profligacy. By forcing them to reduce tax rates, their ability to exploit taxpayers is reduced (Edwards and Keen 1996). Second, some tax bases are more mobile \textit{ex ante} (before their location is set) than \textit{ex post}. In this case, the familiar hold-up problem applies: once assets are in place, provincial governments treat them as fixed and levy a high tax rate on them. In these circumstances, tax competition can mitigate the problem (Kehoe 1989). Third, in some cases, the equalization system will reduce the incentive for tax competition. In Canada, for example, equalization is based on a province’s per capita tax base relative to a national standard. Reductions in tax revenue due to a reduction in the tax base will be at least partly offset by an increase in equalization payments, so the incentive to reduce taxes to attract more of the base is cleansed (Smart 1998). Fourth, there will be offsetting incentive effects arising from our next two categories of interaction: tax exporting and vertical tax externalities.

Tax exporting is a negative tax externality that occurs when taxes imposed by one province are borne partly by residents in other provinces (Lockwood 2001). A destination-based excise tax on an imported commodity, by reducing demand for the commodity, may cause its price to fall thereby causing foreign suppliers to share the burden. Alternatively, an origin-based excise tax will be partly borne by non-residents to the extent that they are willing to pay a higher price for the product. Or, a tax at source on income generated domestically but accruing to non-residents might partly be borne by the non-resident. The effect of tax exporting is the opposite of tax competition. Provincial governments will have an incentive to overtax. This may serve to offset the adverse effects of tax competition, except that tax exporting may occur on different tax bases than tax competition. Tax exporting might not be as great a problem as tax competition in a world with liberalized trading and investment arrangements. If a provincial economy were a small open one, tax exporting would not apply. The province could not export its tax bill through higher prices to non-residents, and it could not (in the long run) induce non-resident capital owners to pay a share of taxes.
**Vertical Fiscal Externalities**

Provincial policies affect not only the province’s own budget, but also that of the federal government. An increase in a provincial tax rate causes the base to shrink, and reduces the revenue that would otherwise be raised both by the province itself and also by the federal budget. There is little incentive for the province to take account of the latter. This is referred to as a vertical fiscal externality (Boadway and Keen 1996, Dahlby 1996). The consequence is that there is an incentive for provinces to overtax.

There is some empirical evidence that both horizontal and vertical tax externalities apply, though there is some uncertainty about their overall size. The evidence is typically based on empirical studies of the interrelationship between tax rates among provinces, and between provinces and the federal government (Besley and Rosen 1998, Hayashi and Boadway 2000, Esteller-Moré and Solé-Ollé 2001, 2002, Devereux, Lockwood and Redoana 2004, Brülhart and Jametti 2005).

The appropriate response to fiscal externalities is not obvious. A judicious choice of tax types to decentralize to provincial governments might mitigate horizontal tax externalities, as might tax harmonization arrangements. But, given the advantages of attracting mobile tax bases like capital, firms and entrepreneurs, the danger is that cutting off standard routes for tax competition might simply induce provinces to use less efficient ways to attract firms, such as labor market policies or social policies (Boadway, Cuff and Marceau 2002). The federal government may take offsetting measures by, say, increasing its own taxes on mobile tax bases (although it may also be reluctant to do so because of international mobility). There might also be some form of internal trade agreement that precludes beggar-thy-neighbor policies by provincial governments. With respect to vertical externalities, the federal government might offset them by a judicious choice of its own tax rates. But, it is hard to imagine policies that can overcome all the consequences of fiscal decentralization.

Inefficiency might also arise from the strategic interaction between federal and provincial governments. The traditional fiscal federalism literature takes the federal government as the first-mover (Stackelberg leader) able to commit to its policies both with respect to provincial governments and private agents. In these circumstances, the federal government could induce a second-best allocation of resources by its choice of
policies, where the second best might reflect the unavoidability of distortionary fiscal policies or limits imposed on policy instruments. In the absence of commitment, inferior outcomes might occur, and this could influence the optimal assignment of fiscal responsibilities and the extent of decentralization.

Two kinds of problems can be identified. First, provinces might assume first-mover status if their decisions are longer run in nature and the federal government cannot commit. Thus, if provinces choose their levels of expenditures first, they may have an incentive to overspend and to run excessive deficits if they anticipate that the federal government will bail them out with higher transfers. This so-called soft budget constraint problem has been much studied (e.g., Kornai et al 2003, Rodden et al 2003, Wildasin 2004, Vigneault 2007). While general lessons are difficult to draw, it seems that the soft budget constraint is mitigated in federations where the degree of autonomy of provincial governments is high. Indeed, in decentralized federations, the federal government may be as likely to abuse a first-mover advantage as the provinces (Boadway and Tremblay 2006). This has been a concern in Canada where it is alleged that the federal government has imposed a vertical imbalance on the federation by precipitously restricting transfers to the provinces as a way to address its own fiscal deficits.

The second problem is that private agents might move before federal and provincial governments. Given the long-run nature of migration decisions, it is reasonable to suppose that migration might occur before governments choose their policies. As Mitsui and Sato (2001) have shown, ex ante migration choices can lead to inefficient agglomeration of households in anticipation of federal equalization transfer responses. To the extent that this occurs, the response is not at all obvious.

**Fiscal Inefficiency**

A final source of inefficiency is called fiscal inefficiency. It refers to inefficiency in the allocation of productive factors across provinces resulting from the fact that decentralization leaves provinces with different fiscal capacities.\(^4\) These differences imply that the ability of provincial governments to provide net fiscal benefits (NFBs) for their residents differs, where the NFB is the difference between the monetary value of

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\(^4\) The concept originates with Buchanan (1952), and its full consequences were studied by Boadway and Flatters (1982). For recent discussions, see Mieszkowski and Musgrave (1999) and Boadway (2004a).
public goods and services obtained and taxes paid. Typically, NFBs are negative for high-income persons and positive for lower-income persons. But for a taxpayer of a given income, they will be higher in provinces with greater fiscal capacity. In that case, they provide an incentive to relocate based on fiscal considerations rather than productivity.

NFB differences can be traced to three sources. The first are tax bases that are taxed at source, such as natural resources or business income. Tax revenues from these revenue sources are available for all residents. If two provinces differ in their per capita access to source-based tax revenues, they will be able to provide different amount of public services so will have correspondingly different NFBs. There will be an incentive for factors to migrate to provinces with high endowments of, say, natural resources. Recent evidence from Canada suggests that fiscally induced migration is significant (Day and Winer 2005), and its cost can be substantial (Wilson 2003).

Second, residence-based taxes, such as income and sales taxes, also give rise to NFB differentials. This will be the case when, for example, they are used to finance expenditures yielding equal per capita benefits. If residence-based taxes are roughly proportional and are used to provide equal per capita benefits across provinces, households of all income groups will face differences in NFBs equal to the difference in per capita residence-based tax collections.

Third, differences in expenditure needs will give rise to NFB differences. If the take-up rate of public services differs for different household demographic types, the cost of providing a given level of services will be higher for provinces whose populations consist of a higher proportion of heavy users. Provinces with more school-age children will face higher education costs per capita, those with more elderly will face higher health costs, and so on. It is important to note that needs differences do not include differences in the cost of providing public services due to, say, climate, geography, wage levels, etc. It would not be efficient to compensate fully for such cost differences, although typically some compensation would be done on equity grounds.

Most federations have in place equalization systems whose purpose is in part to undo NFB differences. As mentioned, some systems provide equalization payments on

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5 Source-based tax revenues may be at least partly shifted onto labor, in which case they are indirectly like proportional residence-based taxes. In this case, the arguments with respect to residence-based taxes apply.
the basis of the ability to raise revenues from both source-based and residence-based taxes (Canada), while others equalize on the basis of needs as well (Australia). In either case, equalization is bound to be inexact in the sense that NFB differentials are not completely eliminated. That is because provincial governments behave differently, providing different mixes of public services using different tax structures, while equalization is directed at differences in average levels of taxes and public services. The best that can be done is to give provinces the potential to provide comparable levels of public services at comparable tax rates, and that can be taken to be the objective of actual equalization systems. We return to this again in the next section.

2.4 Equity Effects of Federal Decentralization

Assessing the equity effects of decentralized decision-making is inherently difficult. Equity is a value-laden concept whose meaning can differ for different persons. Also, in a federal setting, there can be no clear demarcation of responsibility for achieving equity objectives. The extent to which federal versus provincial views of equity should rule is not self-evident. Indeed, assigning responsibility for equity is impossible since all fiscal instruments will have some redistributive impact. Things are made even more complicated by the fact that important public services in areas of health, education and welfare that are typically decentralized to the provinces are important for achieving redistributive equity.

Despite these conceptual problems, some progress can be made on the basis of relatively limited value judgments about the ideal amount of redistributive equity that governments should and can aim for. As with efficiency, there are three dimensions to the equity effects of policy in a federation: horizontal effects, vertical effects and effects arising from different capacities to provide public services.

**Horizontal Effects**

Redistributive policy addresses three main objectives. One is the pursuit of *ex post* equality of outcomes, which involves redistribution from the better-off to the less well-off. The tax-transfer system obviously plays an important role in this, although the literature that emphasizes the usefulness of public services as redistribution devices
alongside the tax-transfer system. The second is ex ante redistribution, which involves providing households with more equal opportunities. Important public services like education and health care are policy instruments used for this purpose. The third is the avoidance of economic risk through social insurance. Here, transfer schemes like disability insurance, pensions, and unemployment and health insurance are relevant.

Redistributive policies imply that some types of households are net contributors to the public purse, while others are net beneficiaries. Horizontal effects arise because of the implicit competition that provinces might engage in to attract the former and repel the latter. Thus, provincial governments might reduce the progressivity of their tax systems, make transfers less generous, and design public service programs so they provide relatively more benefits to net contributors (for example, by relying on user fees, or by restricting the scope of coverage of public services). Even if migration is not very responsive to such policies, it might be argued that a form of yardstick competition will result in the competing down of decentralized redistributive policies. One province’s policy reforms may legitimize similar reforms in other provinces.

The strength of this argument depends on a number of considerations. As already mentioned, it depends on one’s view of the benevolence of government. If one imagines that governments are driven by a desire to increase their size or by special interests, fiscal competition is a way of disciplining them (Edwards and Keen 1996). It also depends on which policy instruments are decentralized, and how much discretion lies at the provincial level. Provinces may be precluded from competing down the benefits of public services because of constraints or incentives imposed by the federal government. They may not have access to progressive taxes, such as income and wealth taxes. More important, full fiscal competition among provinces may not result in reduced redistribution. For one thing, if provincial objectives are aligned with those of the federal government, the extent of redistribution chosen by provinces and the federal government taken together need not result in too low a level of redistribution. Indeed, decentralizing redistribution to the provincial level may actually enhance its effectiveness, since province-specific redistribution may be closer to optimal than a uniform federal

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redistribution system. That is, given different demographic make-ups in different provinces, the optimal income tax will have different degrees of progressivity in each province. Finally, migration responses and yardstick competition effects may simply be too small to impair redistributive policy.

**Vertical Effects**

The seminal contribution on vertical fiscal externalities argued that their effect would be to reduce the costs of redistribution to the provinces and thereby encourage it (Johnson 1988). The argument was that the efficiency costs of redistribution consist of the output reduction, and so tax revenues forgone, as the tax rate is increased to pay for increased transfers to the poor. To the extent that the federal government, which shares the same tax base, bears part of the reduction in tax revenue, part of the cost of a province’s increase in transfers is effectively borne by federal taxpayers in other provinces. Thus, provinces will have an incentive to over-redistribute, effectively countering any competitive effects in the other direction. The overall effect of decentralization on redistribution in a federation is an open question.

**Fiscal Inequity**

The discussion of horizontal and vertical effects on redistribution was essentially a positive one, identifying effects decentralization may have on the extent of redistribution pursued by the provinces and leaving judgment to the observer. The notion of fiscal inequity involves a value judgment. However, the judgment is a relatively innocuous one in the sense that it is independent of one’s views about the ideal extent of redistribution from the better-off to the less well-off members of society. The value judgment underlying fiscal equity is the analog of horizontal equity in a federation: otherwise identical persons ought to be treated comparably by the public sector no matter where they reside. In a federal context, this implies comparable treatment taking account of both levels of government (Buchanan 1950). One way to view this principle is as an implication of social citizenship, which entitles one to equal treatment with other like citizens. In this view, the national ‘social welfare function’ ought to treat persons identically no matter where they reside.
Horizontal equity will be violated if there are systematic differences in NFBs across provinces, and these differences can arise for two reasons. For one, as discussed above, decentralization of fiscal responsibilities will leave different provinces with different capacities to raise per capita revenues using given tax rates, and with different needs for public services. For another, even if they had comparable fiscal capacities, different provinces would choose different mixes of public services and taxes. This would imply that given types of persons are treated differently in different provinces.

Given that one of the purposes of decentralization is to allow provinces the autonomy to choose their own fiscal programs (subject to some desire to achieve at least minimal national standards), it is clearly not feasible or even desirable in a federal setting to achieve full horizontal equity. This would involve overriding the fiscal decisions of the provinces in order to make them uniform. Instead, a commonly advocated alternative is to strive for what is called fiscal equity. Fiscal equity applies if the first of the above two sources of horizontal equity is eliminated so that all provinces have the capacity to provide comparable public services and other programs using comparable tax systems, if they so choose. In other words, NFB differentials are eliminated on average by a system of inter-provincial equalization transfers. The concept of fiscal equity is thus a compromise between the conflicting principles of horizontal equity and the desire for autonomy of provincial government decision-making.

Some comments about this compromise, which reasonably well captures the approach of most federations, are useful. First, the ideal of fiscal equity, which involves full elimination of differences in fiscal capacity among provinces, presupposes full horizontal equity as an ideal only to be compromised by the desire to allow provinces the freedom to choose how to use their fiscal capacities. The ideal of fiscal equity involves a degree of social citizenship or solidarity nationwide that cannot be taken for granted. It may not be the case that a societal consensus exists for such a degree of sharing among provinces. That is, federations may tolerate some differences in fiscal capacity among provinces. For example, while Australia and Germany strive for full fiscal equity, Canada does not. Its equalization system makes compensating transfers to provinces with below-average fiscal capacities, but does not 'tax' those above the average.
Second, the concept of fiscal equity has to do with equalizing access to public services, not redistributing private incomes. That is the role of the interpersonal tax-transfer system rather than the intergovernmental one. It may well be that different provinces themselves adopt different consensuses with respect to the optimal degree of interpersonal redistribution within their borders, and that is perfectly consistent with the concept of fiscal equity among provinces.

Third, because the concept of fiscal equity is a compromise, the design of an optimal system of equalizing transfers is itself ambiguous. This will be especially true the more heterogeneous are provincial policies. There is a substantial literature on the design of equalization systems that addresses these issues, but discussion of them would take us too far afield.\(^7\)

Finally, there is a direct parallel between the concepts of fiscal equity and fiscal efficiency. The same NFBs that give rise to fiscal inequity also induce fiscal inefficiency to the extent that households are mobile. There will be a purely fiscal incentive to migrate to provinces with higher than average fiscal capacities since those provinces will be able to provide given levels of public services and lower tax rates. It is therefore an interesting feature of fiscal inequity and fiscal inefficiency that the remedy for them is identical: the equalization of NFB differentials. This is one of those rare instances in economics when equity and efficiency prescriptions are aligned.

### 2.5 Tax Assignment and Harmonization

As we have stressed, provincial governments deliver important expenditure programs with varying degrees of autonomy. A natural question is to what extent revenue-raising should accompany spending responsibilities. The argument for provincial revenue-raising authority is often based on considerations of political accountability and autonomy. Provincial governments are alleged to be more accountable to their electorates to the extent that own-source revenues finance their spending. Moreover, provinces will be more autonomous in if they do not rely heavily on federal transfers.

These arguments are inherently difficult to evaluate. \textit{A priori} it is not clear why accountability for actual expenditures is higher when funds are obtained from elsewhere.

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\(^7\) For an overview, see Boadway (2004a).
Moreover, as long as marginal funds must be raised by the province, accountability for
the size of government is possible. At the same time, there may be legitimate arguments
in favor of letting provinces exercise their preferences for tax policy, especially where the
mix of bases differs from province to province and where different consensuses are
reached about exemptions, incentives, progressivity and the like. In fact, in federations
where provincial governments have discretion over tax policy (USA, Canada), there are
significant differences across provinces. And, in federations where revenue-raising is
highly centralized (Germany, Australia), there does seem to be much less autonomy in
fiscal decision-making by provincial governments.

To achieve the benefits of revenue decentralization, provinces need to have access
to at least one broad-based tax capable of raising sizeable amounts of revenue. Reliance
on narrow tax bases, such as specific excise taxes, stamp duties and gaming revenues, is
prone to skew the tax system in favor of these narrow taxes. The question is: what broad-
based taxes are most suitable for decentralization, and what form should the
decentralization take? There are really three candidates—income taxation, sales taxation
and payroll taxation—each of which is used by provincial governments in at least some
federations. And for each one, there are varying degrees of decentralization that can be
adopted, ranging from full and autonomous access to a given base by provinces to
piggybacking on the federal tax and collection machinery. Before considering the merits
of each, it is worth recounting the general considerations that seem to be relevant.

The trade-off is between making available a substantial source of revenue to the
provinces to satisfy the need for true fiscal autonomy, while avoiding some of the adverse
consequences of decentralized decision-making outlined above. This suggests that bases
that are relatively immobile would be preferred to those that contain highly mobile
elements, given the possibility of interfering with the efficient allocation of production
across provinces. The case for decentralization is less for bases that are used to achieve
national objectives, such as redistribution goals that are deemed to be of national interest,
and for bases that are more unevenly distributed among provinces. Bases that are harder
to administer because they involve significant cross-border flows are less preferred for
decentralization.
The strength of many of these arguments depends upon the ease with which adverse effects of decentralization can be offset by measures of harmonization, by an accompanying set of interprovincial transfers, or by a common tax-collecting authority. Such offsetting measures are easier to implement to the extent that there is an influential federal government, especially one that also occupies those tax bases to which the provinces are given access. One of the lessons of fiscal federalism is how difficult it is to achieve fiscal harmonization in the absence of federal leadership or intervention. Where provinces are the sole occupants of tax bases, tax harmonization is rare. Even where tax bases are co-occupied, tax harmonization is facilitated when the federal government maintains a predominant share of the tax base. Given these factors, let us consider in turn the three main broad tax bases as candidates for decentralization to the provinces.8

**Income Taxation**

Income taxes include both personal and corporate components, and different arguments apply to each. The personal income tax is often touted as the one most suitable for achieving redistributive objectives. Although there is some debate about the extent to which the income tax is actually very redistributive, the increasing tendency in some countries to deliver transfers by refundable income tax credits enhances this argument. Decentralizing the personal income tax to the provinces runs the risk of compromising national redistributive objectives, although here again there may be some argument for letting provinces exercise their residents’ preferences for redistribution.

Perhaps a stronger argument against full decentralization of personal income tax authority is the potential for affecting the allocation of mobile factors of production. The income tax base will include a broad set of activities, from employed labor, which tends to be less mobile, to firms and entrepreneurs, which tend to be more mobile, to financial capital income, which tends to be highly mobile. If provinces have discretion to structure their income taxes to favor mobile activities (by using preferential rates, tax credits,

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8 For a different view of tax assignment, see McLure (2001). He argues that the principle of benefit taxation should play the most important role in determining which taxes should be assigned to state and local governments, a view that is consistent with the more general principle of assigning redistributive functions to the federal government. In decentralized federations, this is not easy advice to follow given that so many redistributive programs on the expenditure side are delivered by state governments.
exemptions, etc.), they will be prone to engage in tax competition. To the extent that tax competition has unfavorable consequences, this would be a disadvantage.

With respect to capital income, a further consideration applies. Financial capital is notoriously difficult to monitor, and provinces are likely to be at a disadvantage relative to the federal government. This argues against full provincial administration of income taxation. By the same token, unincorporated businesses may engage in significant cross-border transactions, both real and financial. This may enable them to shift profits from one province to another, increasing the monitoring problems of provincial tax administrations. Indeed, provinces may even choose to adopt conflicting rules with respect to the treatment of income of their residents generated outside their provinces, and with respect to non-resident income generated within their provinces, unless this is ruled out by constitutional proscription on discriminatory behavior or negotiated codes of conduct. Either double taxation or non-taxation of certain forms of income can then apply. Similar problems may arise with the treatment of tax-sheltered income, such as pension and housing assets. Most tax systems provide some relief for acquiring these types of assets. The portability of such relief across provincial borders would be difficult to ensure in a decentralized income tax system. Thus, the mobility of population, which can be a virtue of federations, is compromised.

Finally, personal income tax bases may be highly unevenly distributed across provinces. Decentralizing them gives rise to the problems of fiscal inefficiency and fiscal inequity mentioned earlier. To the extent that these differences in fiscal capacity remain uncorrected, this would be a significant disadvantage of decentralizing personal income tax authority to the provinces.

The decentralization of personal income taxation could be accompanied by appropriate harmonization measures, facilitated by a federal government. Revenue-raising authority can be made available to the provinces without compromising national efficiency and equity by restricting the extent of provincial authority over the base and possibly the rate structure, by instituting harmonization measures, by maintaining a single tax-collecting authority, and by accompanying revenue-raising with an accommodating set of fiscal transfers. Virtually full harmonization can be obtained by province.
piggybacking on the federal base and rate structure. Provinces choose their own rates to be applied either directly to the base or as surtaxes on federal tax liabilities, with a single tax authority collecting both federal and provincial tax liabilities. Such a system ensures a uniform personal tax system, with the only divergence being different provincial tax rates, and even this divergence can be minimized by an effective system of equalization transfers. Although provinces would have discretionary revenue-raising authority, they would have little say in tax policy more generally (i.e. the choice of base and rate structure). Also, since they would not collect their own revenues, there may be concerns about the efficacy with which they receive taxes collected on their behalf by the central tax administration.

For these reasons, even in federations where surtax systems are available to the provinces, not all provinces may sign on, despite the cost savings of having their taxes collected for them. Moreover, given the option of provinces to opt out, there is pressure for the federal government to enable provinces to implement various province-specific measures, such as special exemptions, deductions and credits that can compromise the system. These pressures seem to be greater the smaller the tax revenue share of the federal government. The Canadian case is instructive here. As the share of federal income tax revenues has gradually declined, pressures from the provinces for more discretion have increased. Initially this took the form of an increasing number of special measures, but it has recently culminated in an agreement to allow provinces to move from a surtax system to setting their own rate structures. Provided they maintain the federally defined base, the federal government continues to act as tax collector for them. This system clearly sacrifices uniformity in rate structures while retaining the advantages of a single tax-collecting authority and a common base. As the Canadian case has shown, the first provinces to opt for the new system also opted for a flatter rate structure, either reflecting less taste for redistribution or tax competition for higher income taxpayers. In the case where provinces have chosen not to participate in formal tax collection arrangements with the federal government, their bases have diverged from that of the federal government. At least some of the divergence reflects a desire to attract economic activity from elsewhere.
Sales Taxation

The sales tax would seem to be a good candidate for provincial use. It is a broad-based tax whose base is relatively evenly distributed across provinces, and is a revenue-raising component of the tax mix, rather than one used for redistributive purposes. Moreover, the usual sales tax base—final consumer sales—is relatively immobile across borders. Mobility is achieved either by cross-border sales or by residential relocation, neither of which is likely to be sensitive to the kinds of rate differences observed across borders. Provinces may well choose to adopt different tax structures, including different sets of exempt goods, and different reduced-rate products. But, these mainly affect intraprovincial redistribution patterns rather than interprovincial resource allocation. Given this, when provinces adopt single-stage retail sales taxes, there is virtually no imperative for harmonization.

In practice matters are not so simple, because the most preferred sales tax system is a value-added tax (VAT). A VAT has three significant advantages over the single-stage options. First, the VAT is less prone to evasion than single-stage taxes since auditors have credit slips available for purchases at earlier stages, at least in principle. Second, VAT systems can treat domestically produced products on a par with those produced abroad. Under a destination base, all sales taxes that have been levied on the production of exports can be exempted, and imports can be fully taxed. Under a single-stage tax, it is difficult to purge exports of tax payments incurred on inputs at earlier stages of production. Third, and related, under a VAT, all taxes that have been paid on business inputs are fully credited, thereby putting all industries on an equal footing. Under a single-stage tax, it is difficult to avoid having businesses pay taxes on their inputs, some of which are also purchased by consumers for final use. This can represent a significant source of distortion. It is therefore not surprising that most countries have adopted a VAT form of taxation at the national level, despite the fact that it brings many more taxpaying firms into the system.

The problem is that avoiding these inefficiencies using a provincial VAT system is administratively challenging in a federation where there are no border controls. Firms operating in the national economy inevitably engage in transactions with producers and households in neighboring provinces. Under a strict destination VAT, sales to firms in
other provinces would be zero-rated in the province of origin, but purchasing firms would be liable to pay tax on their purchases to their own provincial government. These taxes would then be creditable on sales in the next stage of production. Alternatively, selling firms could be made liable to pay taxes in the relevant province. Thus, firms in one province selling to purchasers in another province would have to charge taxes at the rate applicable in the destination province, and pay the proceeds to the latter. Similarly, sales to final users in other provinces would either have to be taxed at the rate applicable in the destination province (and tax revenues paid there), or zero-rated with the purchaser being liable to pay the relevant tax in the province of destination. In the absence of border controls, this system is difficult to enforce. In principle, there is no reason why such a system cannot be operated by the usual self-reporting method applied to a national VAT. However, when different provinces have differing VAT systems, and also when the provincial VATs may exist alongside a federal VAT, compliance becomes complicated for firms, and so do monitoring and collection costs to the province. Moreover, if the provinces operate their own VAT systems, there is an incentive for auditing to be biased in favor of provincial tax collections and against credits due to other provinces.

Some options to the strict destination system exist. One option is to have the provinces adopt an origin basis whereby products are taxed according to where they are produced rather than where they are consumed. This system has the disadvantage that production patterns across provinces might be distorted. Another, more attractive, option is the so-called deferred-payment method (Bird and Gendron 2001). Cross-border sales to registered firms are zero-rated in the province of origin, and exempted by the purchasing firm in the destination province. The importing firm then collects tax in the destination province at the next stage of production, but claims no input tax credit since no tax was paid. This ensures that full taxation at the destination province’s rate is paid on the value of the product. If the sale is to a household, the household becomes responsible for paying the tax in the province of residence, as is typically the case for cross-border

9 Zero-rating sales to firms in other states rather than exempting such sales is important since the former preserves the ability of the selling firm to claim input tax credits on its purchases. This ensures that cross-border sales are fully purged of origin state taxes, as is required under the destination principle.

10 The only relevant options are those that preserve state revenue-raising autonomy by allowing states to set their own tax rates. Creating a common VAT system and allowing the states to share in the tax revenues, as is the case in Germany and Australia, does not satisfy this since states have no revenue-raising authority.
shopping under single-stage provincial sales tax systems. This system has the administrative advantage that resident firms need only deal with the tax authority in their province of residence.

Nonetheless, although the deferred-payment method avoids the need to collect taxes on inter-firm sales across provincial borders, it might still be viewed as complicated from a compliance point of view since firms operating in more than one province are required to abide by different tax systems in different provinces. In fact, because of the chain of crediting on input taxes, the tax that is ultimately paid is determined by the rate applying on final sales in the province of residence. This suggests that matters could be simplified considerably for firms without compromising final tax liabilities by agreeing to a common tax rate on inter-firm purchases regardless of the province. This is effectively what is done in the VIVAT system proposed by Keen and Smith (2000) and reviewed in Genser (2003). The VIVAT would apply to all inter-firm sales within and across provinces, while each province would reserve the right to set its own tax rate on final sales. Such a scheme would be workable in a setting where there is no central tax-collecting authority, although the presence of several provincial tax authorities each responsible for collecting taxes within their own province would make compliance, collection and auditing complicated and perhaps imperfect. For example, the possibility of zero-rating on sales to out-of-province firms offers a vehicle through which fraudulent sales to consumers can be made tax-free. If separate provincial tax-collecting authorities exist, the ability to monitor such transactions is impaired. As well, there is a need to allocate the revenues collected under the VIVAT.

The main benefit of harmonization would come from a single tax-collection authority encompassing all provinces, and where relevant the federal government. Although compliance with several different provincial VATs with possibly different rates and exemptions would be complex, at least the possibility of dealing with a single tax authority would simplify matters. There would also be enormous tax auditing advantages to the tax-collection authority itself. Nonetheless, as long as provinces can exercise full discretion over the rate structure, the system would be complicated.
Because of the perceived complexity of provincial VAT systems, when sales taxation is decentralized to the provinces in a federation, it is usually single-stage sales taxes that are used. This is clearly unsatisfactory for the reasons mentioned above. There are some exceptions (some Canadian provinces, Brazil), but the general lessons from these experiences are mixed. The most promising approach that has been adopted is the Canadian case, although it is so far quite limited. There, a so-called dual VAT system operates between the federal government and the province of Quebec. Both governments choose their own tax rate, and have agreed to virtually a common base. The deferred-payment method applies to inter-provincial sales between firms. Most important, a single tax-collecting authority applies (in this case, the provincial authority). The system apparently works reasonably well. But, it is the only province that operates a discretionary VAT. The complexity of the system would multiply as more provinces are added.\(^\text{11}\)

This suggests that a more restrictive form of tax harmonization might be preferable, perhaps one akin to income tax harmonization arrangements. For example, the federal government might offer a single tax-collecting authority to provinces whose VAT systems mimic the base, exemptions and structural features of the federal system. This would give provinces the discretion to apply their own rates to the common base, thereby reducing tax complexity. As with income tax harmonization, the implementation of such a system may require not only the connivance of the federal government, but also federal dominance of the sales tax field.

**Payroll Taxation**

Relative to sales and income taxation, payroll taxation is ideal for decentralizing to the provinces. Its base is broad, essentially equivalent to resident’s consumption. It is relatively easy to collect by payroll deduction. Cross-border transactions are limited to commuting workers. Potentially, mobility of the base might be a deterrent since firms, which are mobile, create jobs. On the other hand, if the tax is broad-based, this problem can be overstated. It is likely that a broad-based payroll tax is largely borne by workers

\(^{11}\) It has also been suggested that for such a system to operate effectively and without sales to final consumers masquerading as inter-firm sales, some tax must be levied on all inter-state sales. The CVAT system discussed by McLure (2000) is one approach. It too presumes a single tax-collecting authority.
themselves, at least in the long run, and this is confirmed in empirical studies. It is not a tax that is used for redistributive purposes, although if the dual income tax were adopted, progressive wage taxation would be the norm. Moreover, given its relative simplicity and the fact that there is no ambiguity associated with allocating the tax base across provinces, it is not crucial to harmonize payroll taxation.

Payroll taxes are widely used as sources of revenue, including by provincial-level governments, but they are typically earmarked to finance social insurance programs. The reluctance to use payroll taxation for general revenues is puzzling to an economist (Kesselman 1997). It seems to be based on a notion that payroll taxes are ‘taxes on jobs’. This is only true in the narrow sense of their immediate impact. To the extent that the tax applies generally to all payrolls, and that the elasticity of demand for labor is likely to be considerably greater than the elasticity of supply, the incidence of payroll taxation is likely to be largely borne by workers. In fact, there is no more reason to view the payroll tax as a tax on jobs than either a general consumption tax or an income tax. Despite this view, the use of the payroll tax as a general source of revenue by provincial governments is relatively limited, even in federations where provinces have full access to the tax.

**Other Taxes**

While access to a broad source of tax revenue is important for achieving substantial fiscal autonomy at the provincial level, there are various narrower taxes that are suitable for sub-national use. A common one is the property tax, which is typically used at the sub-national level. This partly reflects the fact that the base—real property—is immobile. At the same time, a tax on property can be viewed to some extent as a benefit tax for local services enjoyed by property owners. Perhaps more important is the fact that from an administrative point of view, the collection of the property tax is almost necessarily decentralized. Unlike most other taxes, which are assessed on the basis of self-reporting, the property tax is administered by a system of property assessment that is done by local agencies. These can be most effectively controlled by lower-level political jurisdictions.

Somewhat more controversial are resource taxes. Natural resource endowments provide a potentially efficient source of tax revenues since part of the return from exploiting resource properties is a pure rent. The case for decentralizing them is mixed.
On the one hand, resource properties are location-specific, and provincial governments may be more effective than the federal government at managing their development. However, resource properties are also often unequally allocated across the federation, so decentralizing access to resource revenues to the provinces can give rise to fiscal inefficiency and inequity. For example, in the Canadian case, the fact that resource taxation is in the hands of the provinces puts enormous pressure on the equalization system. Provincial responsibility for resource taxation can also induce fiscal competition insofar as resource development requires large amounts of capital.

There is a myriad of other narrow taxes and sources of revenues, some of which are reasonable for provincial use, others of which provinces are induced into using because of limited access to broader tax bases. Specific excise taxes are often used by provincial governments. In some cases, such as taxes and licenses on petroleum products and motor vehicles, they are easy to tax from an administrative point of view. In others, such as tobacco and alcohol taxes and taxes on communications and other utilities, they provide an inelastic source of revenue. Gambling revenues, which are also effectively a type of excise tax, also fall into this category. Some specific taxes, like those on hotel and restaurants, seem to be motivated partly by tax exporting considerations. Provinces and their municipalities also tend to use various sorts of user fees to finance services that are private in nature.

There are certainly cogent arguments for including some of these narrow-based taxes in the tax mix. They can serve as devices for mitigating externalities, or for covering the social costs of certain types of consumption. However, there is a potential for excessive reliance on them if provinces have limited access to more suitable broad-based sources of revenue. Against that, because of cross-border shopping possibilities, tax competition may make them less reliable as discretionary sources of revenue. Moreover, if the intent is to make the provinces responsible for managing social costs through corrective taxation, their ability to do so may be compromised. The upshot is that, despite the prevalent use of narrow taxes by provincial governments in many federations, a case can be made that their role should be secondary to broad-based taxation.

2.6 Conclusions
Federations are all different. Their degrees of fiscal decentralization, especially on the revenue-raising side, differ widely. The amount of autonomy exercised by provincial governments varies from one federation to another. The extent to which the federal government exercises influence over the provinces, and the manner in which it does so, whether through the spending power or more direct means, also varies. And, the extent to which provincial tax and spending policies are harmonized, so that efficiency and equity in the internal economic union are achieved, also differs. Nonetheless, there are some key ingredients common to many federations, which are consistent with the normative principles of fiscal federalism that serve as the defining principles of federations.

We have argued that from an economic perspective, good federal systems of governance should enable the benefits of fiscal decentralization to be achieved without unduly compromising national objectives of efficiency and equity. This leads to the provision of important public services and targeted transfers being assigned to provincial (and local) governments, as well as significant but varying revenue-raising responsibilities. In the absence of any countervailing measures, this decentralization would lead to various potential inefficiencies and inequities. Different provinces would have different fiscal capacities to provide public services, leading to fiscal inefficiency and fiscal inequity. There would be purely fiscal incentives for households and businesses to prefer to reside in high-fiscal-capacity provinces because of the superior NFBs that they can provide. And, for those who do not migrate, otherwise comparable citizens would be treated quite differently by government, so that national horizontal equity—a concept akin to full social citizenship—would be violated.

Perhaps as important, the manner in which provinces choose to exercise their spending, taxing and regulatory responsibilities may well violate norms of national equity and efficiency. Much of the most effective redistribution policy takes place on the spending side of the government budget, and some of the important policy instruments used for that purpose are the responsibilities of the provinces. To the extent that redistributive equity is an objective of the federal government, it will have an interest in the manner in which the provinces choose to exercise that responsibility. It will want to ensure that national norms and standards of redistributive equity are achieved in important programs in areas of health, education and welfare, all of which are legislated
at the provincial level. Of course, provincial equity objectives may well be aligned with national ones. Nonetheless, fiscal competition in a decentralized setting may compromise achieving national social protection standards. As well, decentralized decision-making is likely to cause distortions in the efficiency of the internal economic union. Provinces may actively choose their policies to attract favorable households and businesses to their provinces. More generally, decentralized choices of tax and spending structures will inevitably result in fiscal systems that are not harmonized, leading to unnecessary impediments to the free flow of products and factors of production among provinces.

In a federation, the antidote to these adverse consequences of decentralization is the federal government, and it achieves this mainly by the use of the spending power and by maintaining a dominant share of revenue-raising responsibilities. The spending power is used to make unconditional equalizing transfers to erase differences in provincial fiscal capacities, as well as to make conditional transfers, typically of a bloc form, to induce the provinces to design their programs in ways that do not violate national efficiency and equity norms. Dominance in important tax fields facilitates the harmonization of tax-transfer systems, while retaining provincial responsibility for the size and disposition of their own budgets. It also reduces the size of fiscal disparities that would result if provinces were responsible for financing their spending responsibilities entirely from their own sources.

Together, the extensive decentralization of spending responsibilities, the need for federal-provincial transfers and the desire for federal dominance in revenue-raising lead to a significant vertical fiscal gap in most federations. This reinforces the authority of the federal government and enables it to use moral suasion as a further means of encouraging the provinces to act in a coordinated manner. To the extent that this is the case, more explicit direct mechanisms for inducing cooperative provincial behavior such as mandates, regulation, disallowance of provincial legislation and even negotiated agreements can be avoided. As such, detailed codification of national norms and standards are not necessary: general principles can be used instead.

The potential price that is paid for federal fiscal dominance is that it will be used in such an intrusive way that some of the benefits of fiscal decentralization are not realized. Some protection from this might be afforded by the constitution, which may limit the
extent to which the federal government may intrude into provincial legislative areas of responsibility. But, constitutions are not very flexible instruments for this purpose. In practice, political accountability is the ultimate arbiter.

Not surprisingly, the extent to which federations are able to achieve the virtues of decentralization without compromising the efficiency and equity of the nation as a whole varies among federations, and therein may lie the relevant lessons for economic unions. In the more decentralized federations, efficiency in the internal common market remains an unfulfilled objective. Intergovernmental agreements have been ineffective in eliminating distorting behavior by provincial governments, and federal oversight has proven to be too blunt an instrument to overcome that. Thus, provinces discriminate in procurement policy, hiring policies, access to public services, regulations and taxation. Success with the harmonization of tax and spending programs has been mixed. Sales and excise taxes typically are not coordinated in decentralized federations (Canada, US). Greater success has been achieved in the harmonizing personal and corporate income tax taxes, but even here, agreements have proven to be quite fragile unless the federal government maintains a dominant share of the tax room. Moreover, even when harmonization occurs, empirical evidence suggests that tax competition is a significant factor, especially where tax bases are highly mobile. Where taxes are completely decentralized (natural resources, property taxes), harmonization of any kind has been elusive.

Perhaps the most important function of the system of federal-provincial fiscal relations is the equalization of fiscal capacities, and even here the results are imperfect. In decentralized federations where significant disparities exist, equalization has at best been able to mitigate the disadvantage faced by the least well-off provinces. But disparities remain, and these have resulted in significant fiscally induced migration of households and businesses from province to province. Federal government transfers have also proven to be somewhat unpredictable and even volatile. Indeed, worries about soft budget constraints in decentralized federations have not materialized. Where provincial governments have unfettered discretion in revenue-raising, standard disciplines of capital markets have been sufficient to preclude soft budget constraints in the absence of controls on borrowing or spending (Vigneault 2006). Indeed, if anything, federal governments
have imposed excessively hard budget constraints in the face of fiscal shocks. Thus, in the Canadian case, observers have argued that the federal government has effectively passed its deficits on to the provinces by reducing transfers in the face of fiscal downturns. In the case of the Canadian federation, there has been much soul-searching about whether there should be more institutional cooperation between the federal government and the provinces.

3. Federal-Provincial Issues

There are a number of central issues associated with the restructuring of the Canadian federation. The first one is the general issue of fiscal balance in the federation, both in its vertical and horizontal dimensions. Generally speaking, a vertical fiscal imbalance refers to a mismatch between the expenditure responsibilities and the allocation of revenues across levels of government, while a horizontal imbalance corresponds to disparities in fiscal capacities at the sub-national level, either between provincial governments or between local governments. Following the considerable reductions in federal transfers to provinces in the mid-1990s and the rapid improvement in federal finances since then, it has been alleged that a vertical fiscal imbalance emerged between the federal and provincial governments in the sense that federal transfers have become insufficient to fill the vertical fiscal gap that results from the asymmetric decentralization of expenditures and own-source revenues at the provincial level (Boadway, 2004c; Lazar, St-Hilaire and Tremblay, 2004). At the same time, several provinces have assigned additional responsibilities to local governments without necessarily providing them additional transfers or revenue sources, possibly leading to a vertical imbalance at the provincial-local level. Along the horizontal dimension, the long-run tendency towards fiscal decentralization, as well as the recent shock in resource prices, has increased provincial fiscal disparities resulting in greater pressure on the equalization transfer system.

In addition to concerns about fiscal balances, restructuring the Canadian federation also involves addressing issues related to fiscal decentralization and competitiveness. In particular, there is a need to reform specific features of the tax system to insure that the fiscal structure does not put Canadian firms at a competitive disadvantage relative to foreign producers. As for other countries including Japan, there
are also challenges to public finances that result from demographic trends and that raise a number of policy issues with respect to public pension programs and public debt management, among others. This section reviews each of these issues and some of their implications for the restructuring of the Canadian federation.

3.1 Vertical Balance

The notion of vertical fiscal balance between the federal and provincial governments in Canada cannot be defined in a straightforward manner given that both orders of government have access to most important tax bases and have sufficient autonomy to freely set their tax policies. Provincial governments can in principle increase their own-source revenues in response to pressures on the expenditure side of their budget. However, given that there are efficiency costs associated with taxation, and to the extent that some share of the tax bases is already occupied by the federal government, the ability of provincial governments to increase their own-source revenues may be somewhat limited in practice, which can arguably give rise to a fiscal imbalance.

More generally, it may be argued that a vertical fiscal imbalance exists if federal transfers are insufficient to fill the vertical fiscal gap, given the optimal allocation of expenditures and taxation across levels of government (Boadway and Tremblay, 2006). As discussed in Section 2, a wide range of considerations determine how expenditures and taxes should be optimally allocated across levels of government in a federation, including both efficiency and equity issues. Hence, these considerations determine the optimal degree of asymmetry in the decentralization of spending and revenue-raising, or equivalently, the optimal size of the vertical fiscal gap. There is a vertical fiscal imbalance if intergovernmental transfers differ from the optimal fiscal gap.

Although there is some controversy regarding the existence and size of the vertical fiscal imbalance\(^{\text{12}}\), provinces have been claiming a greater share of public funds, especially in light of the strong spending pressures they are facing, in the area of health care in particular. While the federal government has responded by increasing specific purpose transfers in recent years, most importantly in the form of additional funding for

\(^{\text{12}}\) See Lazar, St-Hilaire and Tremblay (2004) for an overview of the recent debate on this issue and Matier, Wu and Jackson (2001) and Dahlby (2005) for positions denying the existence of a vertical fiscal imbalance.
health care as part of the Canada Health Transfer, the question of how to address the perceived fiscal imbalance remains.

There are essentially three main options available to rebalance fiscal relations between the federal and provincial governments. First, federal transfers to provinces could be increased while maintaining the current allocation of tax revenues across levels of government. The second approach is to reallocate some tax room to provinces by having the federal government reduce its tax rate on a particular tax base, or evacuate a tax base altogether, leaving provincial governments free to occupy the vacated tax room (Smart, 2005; Poschmann and Tapp, 2005). The third option is to adopt a revenue-sharing arrangement through which both levels of government would share the revenues from a particular tax base according to some pre-determined formula (Boadway, 2006b).

These approaches have very different effects on the vertical fiscal gap and fiscal decentralization. While the first and third options would maintain the current allocation of taxation across levels of government, or possibly increase the federal share of taxation, the second option would involve further decentralization of taxation. Therefore, the issue largely comes down to determining the optimal degree of taxation decentralization in the federation. Proponents of each of these options have emphasized three central considerations: the desire to increase the autonomy and accountability of provincial governments, the efficiency gains from tax policy harmonization and the need for a relatively strong federal spending power for the purpose of achieving national objectives.

A transfer of tax room to provinces would certainly increase their autonomy by reducing their reliance of federal transfers. It would possibly increase accountability as well since it would lead to a closer correspondence between provincial expenditures and taxes. On the other hand, further taxation decentralization would result in reduced tax policy harmonization, along with all the disadvantages that this entails for the efficiency of the internal economic union. As mentioned earlier, it tends to be very difficult to maintain a harmonized tax system in the federation if the federal tax structure is not dominant, or at least, if the federal occupation of the main tax bases is not relatively important. Further tax decentralization, possibly associated with lower federal specific purpose transfers, would also tend to weaken the federal spending power which would
limit the ability of the federal government to achieve certain efficiency and equity objectives in the federation.

The main advantage of the revenue-sharing approach would be to avoid the efficiency costs associated with taxation decentralization, provided that the tax base and tax rate are set by the federal government. An option would be to replace the current federal value-added tax, as well as all provincial sales and value-added taxes, with a unique national value-added tax whose proceeds would be shared between both levels of government. In addition to addressing concerns of vertical balance, such a reform would also address the pressing issue of sales tax harmonization. The actual revenue-sharing formula could take different forms. In particular, the revenues collected in each province could be shared between that province and the federal government, or national revenues could be shared between the federal government and all provinces on an equal per capita basis. Of course, any combination of these approaches could be achieved through an appropriate design of the sharing formula.

Although the option of simply increasing federal transfers would leave the degree of fiscal decentralization essentially unchanged and would possibly strengthen the federal spending power, it would not directly contribute to improving tax harmonization relative to the status quo. Finally, the vertical balance issue could in principle also be addressed through an increase in federal direct spending, although it could result in federal intrusion in areas of provincial responsibility and generate additional tensions in federal-provincial relations. As a result, there has been little support for that option.

3.2 Horizontal Balance

Horizontal balance broadly refers to a situation in which the fiscal capacities of the provinces are similar. The objective of horizontal balance is partly inspired by the Canadian constitution, which commits the federal government to the principle of making equalization payments to the provinces so that they are able to provide ‘reasonably comparable levels of public services at reasonably comparable levels of taxation’. At the same time, principles of fiscal equity and efficiency support this objective. When fiscal capacities differ across provinces, there exists a purely fiscal incentive for households and firms to reside in provinces that can provide given levels of public services at lower
tax rates (or higher levels at comparable tax rates if they so choose). To the extent that taxpayers act on this incentive, there will be an inefficient allocation of resources across provinces. If differences in net fiscal benefits are not sufficient to induce migration, fiscal inequities result: persons who are otherwise in identical circumstances are treated differently by the public sector, so horizontal equity is violated. If there is some expectation that citizens of a country should receive comparable services wherever they reside, fiscal equity constitutes a strong argument in favor of equalizing fiscal capacities across provinces.

In a federation where provincial and municipal governments have discretion over the design of their fiscal programs, it is unreasonable to expect that all provinces should provide exactly the same services at the same tax rates to otherwise identical persons. This would violate the purpose of a federal form of government. Instead, a reasonable compromise on which some consensus exists is that all provinces should have the potential to provide comparable levels of public services at comparable levels of taxation, without being compelled to exercise that potential in identical ways. That is the compromise implied by the constitution, and the compromise that the existing equalization system seeks to achieve. The achievement of that goal is inherently ambiguous. If provinces make heterogeneous fiscal choice, the measurement of fiscal capacity becomes inherently ambiguous. How does one measure reasonably comparable levels of public services when provinces choose different mixes of services? And, how does one measure reasonably comparable levels of taxation if different provinces adopt very different tax systems?

These issues have come to the fore as a result of recent developments in Canada. For one, as we have discussed, the federation has become increasingly decentralized. Provincial spending responsibilities have grown rapidly while federal transfers have not. Provinces have become more reliant on raising their own revenues. This decentralization in revenue-raising responsibilities naturally leads to greater inter-provincial disparities since different provinces have greater fiscal capacities to raise their own revenues. In addition, greater provincial autonomy in revenue-raising itself leads to more heterogeneity in provincial tax systems.
A second development has been the rapid rise in the price of oil and gas that has caused resource revenues to increase dramatically in some provinces and increased fiscal disparities remarkably. In one province alone (Alberta), per capita revenue-raising capacity has risen to twice that of the national average. Given that the current equalization system only equalizes below-average provinces up, disparities between equalization receiving provinces and the better-off ones have increased dramatically. While inequitable in its own right, this has also been accompanied by an unprecedented migration of workers and firms to oil-producing provinces.

Related to this is a final development. In the wake of its deficit-reduction campaign of the 1990s, the federal government undertook some ad hoc changes to both the equalization system and the transfers received by equalization-receiving province. Total equalization payments were capped, discretionary changes were made to payments to some provinces, and there were some special deals made with particular provinces with respect to offshore oil revenues that were outside the standard equalization system. These changes represented a serious departure from the principle of a formula-based equalization, and allowed for equalization to be influenced by policies other than equalization. The principle of equalization was compromised to the extent that the federal government established an ‘expert panel’ to study and make recommendations in 2006 about the future of the equalization program as well as about changes in the institutional setting in which choices about the equalization program are made. Soon afterward, the Council of the Federation, which is an organization formed by the provinces to represent its interests in federal-provincial affairs, set up its own advisory panel to make recommendations about the fiscal balance more generally, both horizontal and vertical. These panels follow a reasonably long line of official bodies that have studied the equalization system. A number of key issues were studied by the two panels. What follows is a summary of their recommendations in these key areas.

Revenue and/or Needs Equalization. The requirement that provinces should be able to provide reasonably comparable levels of public services at reasonably comparable levels of taxation suggests that account should be taken of both revenue-raising ability and expenditure needs. The latter would reflect different shares of the population consisting
of demographic groups that require public services (elderly, school age, etc.) as well as differences in costs. Both panels recommended following the current practice of equalizing solely on the basis of revenue-raising abilities. The arguments against needs were that they were very difficult to measure and that they did not give rise to large disparities.

*The Approach to Revenue Equalization.* The Canadian system uses the Representative Tax System (RTS) approach whereby provincial tax capacity is estimated by the amount of revenue that would be raised by applying a national average tax rate to a set of standard tax bases. The standard tax bases are meant to reflect actual provincial practices and the tax rate is an average of the rates actually used by the provinces. The RTS approach is perceived by some to be complicated and difficult to apply when the provinces use very different tax systems. For that reason, some observers have argued for a simpler ‘macro’ approach whereby provincial fiscal capacities are proxied by an aggregate measure like per capita provincial output or personal income. Both panels opted to continue the RTS approach since it best reflects the abilities that provinces actually have to raise revenues.

*Scope of the RTS Approach.* The current system uses virtually all revenue sources used by the provinces (some 33 revenue sources at present). The advisory panel of the provinces recommended keeping that system. However, the federal expert panel argued in favor of simplifying it to the five main revenue sources: personal income taxes, corporate income taxes, sales taxes, property taxes and aggregated resource revenues. The argument was that this would simplify the system considerably and make it more transparent to taxpayers, despite the loss in accuracy from not using all revenue sources.

*The Standard of Equalization.* Currently, the standard to which provinces are equalized up to is the so-called five-province standard, that is, the average tax capacity of five of the ten provinces. Since this standard does not include the high-capacity province Alberta, the standard falls short of the national average tax capacity. Both panels recommended
moving the system to a standard that used all ten provinces thereby equaling the national average revenue-raising ability.

Resource Revenues. Perhaps the most important and contentious issue is the treatment of resource revenues. Currently, resource revenues are fully equalized and have been for over 20 years. Detractors object to this on various grounds. They argue that resources are owned by the provinces and that equalization contravenes those property rights. They argue that full equalization of resources blunts the incentive for provinces to develop those resources. They argue that provinces incur development costs to earn resource revenues. And, they argue that equalizing resource revenues is difficult because of the heterogeneity of resource deposits across provinces. These arguments are rejected by those who believe that natural resource revenues provide fiscal capacity just like any revenue source, and not to equalize them would penalize provinces that had few resources. The federal panel adopted a compromise approach and advocated equalizing 50 percent of resource revenues. However, the advisory panel of the provinces recommended continued full equalization of natural resources.

The Total Amount of Equalization. Historically, the total amount of equalization has been determined by the equalization formula. This has led to fluctuations from year to year in the total amount of equalization, which has led to instability and unpredictability of provincial receipts. The federal government reacted to this by fixing the total entitlement at least temporarily until a new system was in place. Both panels have recommended retaining a system where entitlements are driven by the formula rather than being determined by federal discretion. At the same time, to avoid fluctuations in entitlements and adjustments to entitlements as data are finalized, they recommended averaging entitlements using a three-year moving average and lagging entitlements by two years. This seems like a reasonable compromise.

Institutional Options. In Canada, equalization and other federal transfers are determined solely at the discretion of the federal government, with varying degrees of consultation with the provinces. In some federations, quasi-independent advisory commissions exist
that provide advice to the federal government about the size and distribution of federal transfers. The two panels considered whether this would be suitable for Canada and recommended against it. They argued instead for more consultation between the federal government and the provinces and for more information sharing and transparency.

Finally, we have discussed only equalization at the federal-provincial level. However, similar problems of equalization apply across municipalities within a province. A case can be made that provinces should have revenue equalization schemes in place as well. The federal equalization program in fact includes all provincial and municipal revenue sources, and therefore implicitly gives both provinces and their municipalities the capacity to raise comparable revenues for providing both provincial and municipal services. Some implicit equalization does exist at the provincial level in the sense that the province provides transfers to municipalities in support of their expenditure requirements. But, the systems are far from comprehensive revenue equalization systems, and that is a shortcoming that could be addressed. It is the prerogative of the provinces to do so.

3.3 Fiscal Decentralization and Competitiveness

The Canadian economy faces an increasingly competitive challenge. Canada has always been a highly open economy in which over one third of its output has been traded. That has increased significantly in recent years to roughly 40 percent. This partly reflects the consequences of globalization and the opening up of world markets. But it also partly reflects a rapid increase in trade with the USA and Mexico as a result of the North American Free Trade Agreement of 1994. Something like 84 percent of our merchandise exports is to the USA. While globalization has increased market opportunities, it has also increased competition from rapidly emerging economies such as China, India and Brazil. The need for fiscal and institutional structures to foster competitiveness of Canadian producers is urgent.

Along with the globalization of markets, other factors have contributed to competitive concerns. The rapid increase in oil and gas prices raises fears of a resource curse (or Dutch disease) whereby pressures are put on the manufacturing and service sectors of the economy by rising real exchange rates and wages, and more generally the reallocation of resources to the resource sector (especially in Alberta) from other sectors.
elsewhere in the economy. This is exacerbated to the extent that public sector resource revenues are spent by resource rich provinces for province-building activities rather than being saved in a fund as is done in Norway.

The dependence on US markets is also a concern simply because of an absence of diversification. The Canadian economy is highly integrated with the US economy, and this has served well in recent years as US demand for goods has been strong. However, sooner or later the US economy may go into a major downturn in which case the spillover effect in Canada will be large. There have been many commentators who have argued that more emphasis should be put on opening up export possibilities elsewhere in the world, particularly Asia given the proximity to Canada’s west coast.

The decentralized nature of the Canadian federation also leads to concerns about competitiveness. For one thing, despite the existence of the federal-provincial Agreement on Internal Trade, there remain some barriers to cross-border transactions within the internal common market. This can cause some fragmentation of markets and preclude the kind of rationalization of industry that would strengthen competitiveness. The regulation of stock markets is a provincial responsibility, and many argue that this interferes with the efficient allocation of capital across provinces. Attempts to harmonize the regulation of stock markets, such as by creating a single national regulatory standard, have gone nowhere. Similarly, labor markets are regulated by the provinces, and this can lead to barriers to the mobility of skilled and professional persons. Provincial discretion in tax policy can also cause inefficiencies within the internal economic union, as well as detracting from the competitiveness of Canadian firms internationally. Provinces may engage in forms of tax competition to attract firms that are self-defeating collectively. Provincial taxes can impose considerable burdens on business competitiveness. For example, property taxes on businesses are high by OECD standards, and other profit-insensitive taxes are common (e.g., capital taxes). Policy experts agree that the most important provincial tax distortion arises from provincial sales taxes, at least in those provinces that persist in using single-stage retail sales taxes rather than value-added taxes that are harmonized with that of the federal government. Single-stage retail sales taxes discriminate against domestic businesses by impinging on business inputs, and the absence of a VAT-type crediting mechanism implies that domestic producers are at a
disadvantage relative to foreign-produced products. As we have mentioned, a priority for tax harmonization by the federal government is to encourage provinces to harmonize their sales taxes with the federal GST, so far with limited success.

A final area of concern for competitiveness involves the state of public infrastructure. This is inextricably involved with the role of government policy toward cities, to which we give full attention below.

### 3.4 Demographic Issues

The aging of the population because of a combination of lower fertility and longer life expectancy imposes potentially important constraints on fiscal decisions. The real constraints arise to the extent that the fiscal stance of governments involves intergenerational transfers. If current services and transfers to the elderly are financed by current taxes on working persons, an aging of the population will imply that the services are not sustainable at existing tax rates, so something has to give. The severity of the problems depends on both the extent of the demographic change and the extent of intergenerational transfers built into the current fiscal system.

As mentioned earlier, the demographic problem faced by Canada is not as severe as many OECD countries, particularly Japan and western European countries. Although the fertility rate has dropped below replacement level, the drop has not been as severe as elsewhere. As well, it has been cushioned, at least temporarily, by relatively high levels of immigration of working age persons. It might also be noted that for some segments of the population, fertility has remained high. This is especially so among aboriginal groups whose populations grow rapidly. On the other hand, this poses its own demographic challenges since these are among the poorest communities in the country with low education rates and high unemployment. That constitutes a policy challenge that goes beyond the scope of our current study.

Perhaps a more relevant point of contrast between the Canadian case and elsewhere is the fact that the Canadian fiscal structure has been made less vulnerable to demographic shocks than elsewhere. For one thing, Canada relies much less on unfunded public pensions than elsewhere. While there is a targeted payment to low-income elderly financed from current tax revenues, the main public pension scheme is a compulsory
occupational-based system that is now largely funded. Reforms that were undertaken in the 1990s improved its investment management procedures and increased contributions to achieve this. Persons are encouraged to save for their own retirement through a system of tax-sheltered retirement savings plans either individually or through their employers. As well, incentives exist to accumulate wealth through other means such as housing or human capital accumulation. Moreover, while the debt-GDP ratio was growing uncomfortably throughout the 1980s and early 1990s, the federal government took dramatic measures to contain it by drastic expenditure reduction measures. This, combined with very buoyant tax revenues in the past decade and low interest rates, have removed the threat of a high debt overhang.

However, not all is clear sailing into the future. Government budgets are susceptible to population aging because of the fact that the system of health insurance effectively provides free treatment to the elderly financed by current taxpayers. The cost of health care per person is expected to continue escalating, so this remains an issue. Compulsory retirement ages have been abolished in many provinces, but whether this will translate into longer working lives remains to be seen. The provinces also have their own provincial debts. Although these are only half the size of the federal debt on a per capita basis, nonetheless they do contribute to a longer-term concern that will have to be dealt with. In the Canadian decentralized federation, it will be for the provinces themselves to finance their own debts.

4. City Issues

Within the Canadian Federation, cities play an important role. They provide a range of services that affect the quality of life of Canadian citizens and most of these services are funded from own source revenues (see earlier tables). This does not mean that cities are free from stress, however, when it comes to financing their growing needs. They face a variety of fiscal challenges, many perceived as contributing to a growing fiscal imbalance, especially between provinces and cities, and more indirectly, between cities and the federal government. This imbalance has grown out of a combination of events.

Increased spending responsibilities as a result of provincial initiatives to offload additional responsibilities onto cities (especially in Ontario where cities fund a
reasonably large portion of social services, social housing and land ambulance) and by federal government policies (immigration, for example) over the past few years have led to increased spending for cities.

Declining grant support has played a role in creating this perceived imbalance. Cities now fund proportionately more of their expenditures from own source revenues. This is compounded because cities have a limited tax base and this hampers their ability to diversify and widen their revenue sources.

Provincial controls are fairly prohibitive and they frequently restrict a city’s ability to run its own affairs. Some of these constraints may be good such as in the case of borrowing limitations, but often they are a hindrance leading to inefficiency and ineffective decision-making. For example, a city’s governing structure is created by provincial statutes, and its powers, expenditure responsibilities, and access to revenue sources is ultimately under provincial control. Provincial legislation that defines a city’s responsibilities is embodied in a Municipal Act and many additional statutes and regulations. For example, in the province of Ontario, it has been estimated that over 80 pieces of legislation govern the operations of city government. In the provinces of British Columbia, Manitoba, New Brunswick, and Ontario, the cities of Vancouver, Winnipeg, Saint John, and Toronto are each governed by a charter that confers additional powers and responsibilities not given to other municipal governments. Still, these charters do not give cities a great deal of latitude. These cities provide the same local services as other cities, and they may permit access to a few new tax sources. None of these, however, would generate much in the way of revenue. One advantage that charter cities have is that they can make their own decisions when it comes to local issues such as where to locate speed bumps, and a range of other small issues.

As far as cities are concerned, the vertical fiscal imbalance is becoming more and more serious. It is, they allege, hampering their ability or capacity to be fiscally sustainable, particularly at a time when more and more people are living in cities, and when cities and urban centered regions have become increasingly important in the competitive global economy. This capacity is impacted by the types of services for which cities are responsible and the cyclical sensitivity of their funding responsibilities - do expenditure programs vary with the growth or slow down in economic activity (social
services, social housing, for example)? As well, it is affected by the capacity of the local revenue base and local taxes to keep pace with expenditure responsibilities – is there enough revenue elasticity in the local tax base to permit revenues to rise and fall with expenditure requirements? It is also affected by the way in which cities are governed and by the way in which they manage their finances – are there changes that could be made that would strengthen their fiscal position? Finally, it is impacted by their inability to levy new taxes and additional capital financing instruments – could new fiscal instruments help resolve capacity and sustainability concern?

Does the fiscal solution to the future of cities lie in increased transfers from senior governments? Does it lie in a revenue sharing program with the provincial and federal governments? Or, could cities assist themselves by reforming their current property taxes, development charges, and user fees? Should cities be given access to new tax sources? Just what should be done? While these options have been suggested on different occasions, little or no action has been taken. This may be attributed to a number of things – some city, and some provincial. For whatever reason, cities have been reluctant to change their property taxation, development charge and user fee structures. Provincial governments have been reluctant to give cities additional powers and access to new tax sources.

To set the context for this discussion, we start by discussing the fiscal role for cities and the characteristics of good local taxes while at the same time bearing in mind that the most efficient and effective cities are those that are responsible for raising the money they spend (Bird, 2001a).

### 4.1 What is the Fiscal Role for Cities?

Canadian cities have no role in the Constitution - they are ‘creatures of the province’. Because of this, their fiscal roles and responsibilities should be examined within the principal-agent model of intergovernmental finance (Bird and Chen, 1998). Here, cities are the agents while the province is the principal. The latter has the power to alter jurisdictional boundaries, to change revenue and expenditure responsibilities of the agent, and to change intergovernmental fiscal arrangements to overcome differing objectives between the principal and the agent. Within this context, the role of the agent is to
provide and fund services that benefit local constituents; hence, financing of each service is best completed within the benefits-based model of public finance (Duff, 2003).

The underlying principle of the benefits received model of local finance is straightforward: those who benefit from local public services should pay for them. Economic (allocative) efficiency is achieved when the user fee or tax per unit of output equals the extra cost of the last unit consumed. This is the well-known marginal cost pricing principle. Charges applied in this fashion are efficient for funding services where the beneficiaries can be clearly identified and the costs correctly derived. Prices or taxes ration output to those who are willing to pay and serve as a signal to suppliers (local governments or their delivery agents) that will assist them in determining the desired quantity and quality of output.

Accountability is more likely to be present when there is a close link between consumption and the price or tax paid per unit of consumption. This will also lead to increased transparency as long as citizens/taxpayers have access to information on the way in which local taxes and user fees are set. Increased transparency will lower the risk of corruption by public sector policymakers (IMF, 2001).

Fairness within the benefits model is achieved because those who consume public services pay for them. Undercharging (as is often the case) or undertaxing users of local services, especially those provided by local infrastructure, on the premise that the poor could not otherwise afford them often leads to unintended income distributional consequences – it is often the rich who benefit and the poor who lose (Kitchen, 2002 and 2006a). Concerns about the tax burden on lower income individuals should be addressed through income transfers from senior levels of government and social assistance programs targeted to individuals in need because it is far more equitable and efficient to handle income distribution issues through income transfers or targeting (Boadway and Kitchen, 1999, chapters 8 and 9) than to undercharge or under tax users of local services.

Not only should cities not distort their pricing and taxing policies for services provided, they should not be responsible for funding programs specifically directed toward the redistribution of income among individuals (social services and social housing, for example) nor should they be responsible for funding services that are nation or
province-wide in their impact and scope (education and health, to name two). These functions are more appropriately the responsibility of the federal and provincial governments and should be funded by them.

The benefits model, then, is most easily approximated where beneficiaries can be identified easily; where services do not generate spillovers or externalities; where the services are not income redistributional in nature;\(^\text{13}\) where individuals can be excluded from consuming the service; and where precise measurement of output and costs can be calculated.

Application of the benefits based model to cities steers us in certain directions. Cities supply a range of services – from those that exhibit mainly private goods characteristics (water, sewers, solid waste collection and disposal, public transit, public recreation and so on) to those that exhibit mainly public goods characteristics (local streets and roads, street lighting, neighbourhood parks, etc.) to those that exhibit a mix of public and private good characteristics (fire and police protection, for example).

For services with mainly private good characteristics, individual beneficiaries can be identified, income redistribution is not a goal, spillovers are unlikely to exist, and operating and capital costs can be measured and recorded, user fees are preferred. They are easy to administer and the best financing instrument for satisfying the principles of efficiency, accountability, transparency, and fairness.

For services providing mainly collective or ‘public goods’ benefits (specific beneficiaries cannot be identified), user fees are inappropriate. Instead, these should be funded from a local tax on residents (or exported to the same extent services are) with necessary adjustments through the use of grants to account for spillovers; that is, benefits from these services that spill over into neighbouring communities should be funded from something other than a local tax.

For services that are partially private and partially public, a combination of user fees and local taxes may be appropriate.

Grants from senior levels of government may also have a role in funding local services. Specifically, conditional grants are appropriate for partial or full funding of

\(^{13}\) While some elements of income redistribution are inherent in almost all public services, income redistributional services include welfare payments, children’s aid, social housing and income transfers to name the most obvious.
services generating spillovers and for services in which the state has an interest (to ensure uniform or minimum standards, for example). Unconditional grants play a role in filling the fiscal gap (mismatch in local own source revenues and expenditure responsibilities) and in supporting municipalities in their attempts to provide comparable levels of service for comparable tax rates (equalization).

4.2 What Are the Characteristics of a Good Tax?

Since the role for local taxes is to fund those services whose collective benefits are enjoyed by the residents of the local community, the question is ‘which tax’ or ‘which taxes’? The strongest economic and fiscal arguments for assigning a tax or taxes to local governments come from the literature on fiscal federalism where there is wide spread agreement on general principles that should be followed. In short, this theory prescribes a limited tax base for local governments (McClure, 2001). The best taxes are those that are based on an immobile tax base and therefore, borne primarily by local residents (not exported); that do not create problems with harmonization or harmful competition between local governments or local governments and more senior levels of government; that generate sufficient, stable and predictable revenues; that are visible to ensure accountability and transparency; that are perceived to be fair; and are easy to administer locally (Bird and Slack, 2004, at 30; Bird, 2001a; Bird, 1999; and Oates, 1998).

Although the property tax achieves many of the desirable characteristics of a local tax – the base is relatively immobile, it is difficult to export the residential tax to non-residents, revenues are fairly stable and predictable, and the tax base is visible – it cannot achieve all of them. Property values generally respond more slowly to annual changes in economic activity than do incomes; the property tax on commercial and industrial properties is likely exported to non-residents (Kitchen, 2002); and the tax yield is often inadequate to meet the growing expenditure needs of city governments, especially where cities are required to fund a portion of social services and social housing as in Ontario. Furthermore, the current application of property taxes, development fees, and user fees, frequently does not meet efficiency, accountability and fairness objectives although cities have the power to make changes to meet these criteria. As well, solid arguments exist for
giving municipalities access to additional taxes and financing instruments but provincial
approval and assistance with implementation would be required (discussed below).

**Vertical Imbalance - What Should Cities Do?**
Cities have relatively little discretion over the expenditures they make. Although there
are few provincially mandated services, many (probably most) are necessary for a vibrant,
healthy and operationally functional city - water and sewers, roads, trash collection and
disposal, street lights, sidewalks, police, fire, public transit, libraries, recreational
facilities and programs, and so on. The range is even wider where cities are required to
fund a portion of social services and social housing. Where the province has some impact
is in setting standards that must be met for some of these services – environment,
building, health and safety, for example. All of this suggests that cities have very little
effective control over the services they provide and can do little to resolve their perceived
imbalance by eliminating some of their spending responsibilities. This is not to suggest,
however, that improvements could not be made in their financial management and
governing structure.

Where cities have an opportunity to help alleviate their fiscal stress and to become
more fiscally sustainable is in the actual structure and application of their property taxes,
and user fees for operating expenditures and development charges for capital
(infrastructure) expenditures. As well, many cities have the fiscal capacity to increase
their borrowing for infrastructure but are reluctant to do so (discussed later).

**Property Taxes**
Property taxes are used primarily to fund annual operating expenditures. In many cities, a
few points of the property tax are specifically earmarked for capital financing. The
property tax is based on the property’s assessed value. In every city, assessed value is
some percentage of market value – as high as 100 percent in some cities but frequently a
smaller proportion because of time lags and information delays in completing assessment
cycles (Kitchen, 2002). While few analysts disagree with the principle that all properties
should be assessed in a uniform manner (that is, at the same percentage of market value),
actual assessment practices reveal a different pattern. Differences in assessment ratios are
widespread and may be grouped in two categories: non-legislated (unintentional) and legislated (intentional).

Non-legislated differentials arise when the sales of certain properties are infrequent. Here, property assessors rely on assessment techniques that may result in similar properties being assessed at different values. While problems of this sort still exist in most cities, recent initiatives to move to market value assessment and to engage in more frequent reassessments have eliminated most inequities within each property class. Inequities in assessment ratios, however, are still prevalent across property categories. Residential dwellings of 1 and 2 units are almost always under-assessed relative to multi-residential dwellings. Older homes tend to be under-assessed relative to newer homes. Commercial properties are more highly assessed than all residential properties except for multi-unit dwellings but are under-assessed relative to industrial and manufacturing properties (Kitchen, 2002).

Provincially legislated assessment differences also exist through the differential treatment of specific categories of property. For example, farmland and forest lands receive favourable treatment; mines and mineral resources are generally, but not always, exempt from local property taxes; public utilities generally pay a tax based on gross receipts rather than assessed property values; and railway tracks are assessed under special rules (Kitchen, 1992).

Because of differences in assessment practices, the application of a constant tax rate produces differences in effective property tax rates (ratio of tax liability to market value) within and across residential properties within a city.14 These differentials are generally a result of assessment practices and have existed for some time. No one defends them as reflecting differences in the costs or benefits of servicing various property types. Rather, they reflect the ease with which governments can impose higher effective tax rates on certain categories of property; for example, owner occupiers of single detached properties tend to be more vocal in their protests against property taxation than are renters who are less likely to be aware of the property tax liability on their rented quarters or than

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14 It must be emphasised that this comment refers to properties within a municipality. Comparing effective tax rates across municipalities must be treated with considerable caution for differences will arise where certain municipalities fund selected services from user fees while others fund these services from property taxes. Where this exists, differences in effective tax rates will and should be noted.
commercial/industrial property owners who may feel that they can pass it on to
consumers of their products in the form of higher product prices or employees of their
firm in the form of lower compensation packages.

Differences in effective property tax rates (the tax price) within a city are efficient if
they reflect differences in the production, environmental and social costs of providing
city services to different properties or property types. In other words, if some properties
or property types are more expensive to service than others, a case exists for differential
property tax rates. Failure to correlate benefits from city services, as reflected in effective
property tax rates, with the extra cost of services consumed (or an approximation of it)
leads to a redistribution of income that is not neutral. If the effective tax rate exceeds the
extra cost of the service consumed, people and businesses have an incentive to relocate to
lower taxed areas or alternatively, to accept lower property values that could arise from a
capitalization of property tax differentials into differential property values.

To avoid difficulties of this sort and to set the base for an efficient and fair property
tax system, all properties should be assessed at a uniform percentage of market value
with variable tax rates used to capture cost differences across properties, property types
and neighbourhoods within a city. Variable tax rates are used in British Columbia,
Alberta, and Ontario. They are fair on the basis of benefits received as long as the tax rate
is varied in order to capture the cost of municipal services for different property types or
locations. Second, they are efficient if designed to recover the cost of local public
services consumed – no incentive exists for a household or firm to alter its behaviour or
location to avoid the tax as long as it matched the cost of services consumed. Third, they
are efficient as long as higher tax rates apply to tax bases that are most inelastic in supply.
Since residential property has an inelastic tax base when compared with commercial and
industrial property (it can move to other municipalities and to other countries), this calls
for higher tax rates on residential properties than on commercial and industrial properties.
Fourth, variable tax rates have a further advantage in that they could be used to distort
decisions deliberately to achieve certain municipal land use objectives. For example, if
higher tax rates slow development and lower tax rates speed up development, a deliberate
policy to develop certain neighbourhoods instead of others might be achieved through
different tax rates for different locations.
In lieu of variable tax rates, special assessments or benefiting-area charges (area rates) could achieve the same result. Halifax is an example of a city that makes extensive use of area rates with three basic tax rates for urban, suburban and rural plus more than sixty different area rates. As long as these capture differentials in city servicing costs, they are just as efficient as variable tax rates.

The current practice of imposing higher tax rates on non-residential (commercial and industrial) properties vis-à-vis single unit residential properties either through the application of higher assessment to market value ratios with a constant tax rate or through the application of differentially higher tax rates (Kitchen, 2002) has the potential for misallocating municipal resources, being less accountable than it should be, and generally unfair in its impact on non-residential sector. Failure to correlate benefits from city services, as reflected in differences in effective property tax rates, with the extra cost of service provision has the potential for generating a level of output that is not optimal or allocatively efficient (Kitchen, 2000; McClure, 2001).

This over taxation of the non-residential sector has been addressed in four Canadian studies that compared the property tax paid by non-residential properties with the cost of municipal services consumed by these properties. All studies (Kitchen and Slack, 1993; KPMG, 1995; and MMK Consulting Inc., 2004) found that the residential sector when compared with the non-residential sector is the recipient of proportionately more benefits from local government services (social services, elementary and secondary education, libraries, recreational facilities, etc.). When combined with higher effective property tax rates paid by the non-residential sector, the studies concluded that the commercial/industrial sector is over-taxed and the residential sector under-taxed. A similar result has been found in at least one U.S. study (Oakland and Testa, 1995).

This over taxation of commercial and industrial property creates a further potentially significant problem for Canada. The amount of tax in excess of that which is necessary for funding municipal services consumed is effectively an annual fixed cost – it has no relationship to the cost of municipal services used and it must be paid regardless of whether a profit is made or a loss incurred. This fixed cost component has the potential for creating a number of distortions and allocative inefficiencies that could lead to a lower level of economic activity than should otherwise exist. To elaborate, when a profit-
insensitive tax leads to over-taxation of businesses, it has the potential for lowering economic activity, reducing output, generating fewer jobs and leading to a less competitive business environment (Ottawa, 1998). This concern should not be treated lightly. It is particularly important for Canada because of its heavy reliance on exports and resources and its exposure to world markets.

Concern about distortions caused by this overtaxation has prompted the following innovative suggestion for reform in Canada (Bird and Mintz, 2000; and Bird and Wilson, 2003). A portion of the revenues from the non-residential property tax should be replaced with revenues from a new province wide business-value tax (BVT). The BVT would be a value-added tax and would exist alongside the federal goods and services tax (GST). It would be levied on business income, and it would fall on production and not consumption. It would be an origin-based rather than a destination-based tax - it would tax exports and not imports. Cities would be able to set local rates that would be ‘piggy-backed’ onto the provincial rate, although the province might impose limits on local surcharges to prevent locational distortions. As a value-added tax (essentially, a tax whose base is sales less cost of goods purchased), a BVT would eliminate a number of the distortions created by the current overtaxation of non-residential property in Canada. While this would be a new local tax in Canada, a comparable local business tax is used in Germany and Japan.

**User Fees**

User fees currently fund a portion of or full costs of a range of services including city water and sewer systems, public transit, solid waste collection and disposal, recreation programs and complexes, and parking garages. User fees come in variety of forms. They include fixed charges that are unrelated to consumption, charges that vary directly with consumption, and various combinations of fixed and variable charges. In addition, the pricing structure for a given service may be designed to cover all or only a portion of all production and delivery costs (Kitchen, 2002).

Earlier in this section, we noted when user fees should be used. Opposition to user fees often arises because they are alleged to be regressive (that is, they absorb a higher percentage of lower income individuals’ or households’ income when compared with
higher income individuals or households), but so is the price of milk and movie tickets. In some cases, they are resisted because cost data are not collected and recorded in a way that permits an estimation of marginal costs. This is supposedly a problem with fixed costs or where there are joint costs with other services such as in assigning general government expenses to individual services. There is often political and sometimes, administrative reluctance to alter user fee structures that have been around for a long time. Although our analytical tools give us no guidance on overcoming political resistance to user fees, they do permit us to design efficient user fees under a variety of circumstances - when economies of scale are present, when capacity constraints exist, when demand differs in peak and non-peak periods, when second-best considerations are prevalent and when externalities exist (Bird, 2001b; Bird and Tsiopoulos, 1997; Kitchen, 1997; Kitchen, 2002; and Dewees, 2002).

The most frequently discussed services for which user fees could and should be applied cover water, sewer, solid waste, public transit, and public recreation. In designing their structure, the trick is to set rates that capture the extra cost of the service consumed. This includes volumetric rates (requires meters) for water and sewers that vary by consumption, time of day, and season of the year; bag tags for trash; zone fares and time of day charges for public transit; and public recreation charges based on time of day. At the outset, the importance of setting correct prices or user fees cannot be understated if policy makers are to achieve efficiency in service usage and subsequently, an optimal (or as close to optimal as possible) or desirable level of physical infrastructure. Failure to secure an efficient output leads to over or under-provision of a service and can be expensive and wasteful. Over-building or over-supplying arises when prices do not cover all costs and do not cover them in an efficient manner. Under-building or under-supplying, on the other hand, means that people are not getting the level of service they desire.

4.3 Financing Infrastructure
Capital funds for infrastructure generally come from development charges, long-term borrowing and grants.