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International Lessons in Fiscal Federalism Design

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Abstract

We review and evaluate alternative ways of designing federal-state fiscal relations with a view to achieving accountability, efficiency and fairness in the financing and delivery of public programs to citizens of different states. We draw on practices in other federations, particularly in decentralized ones such as Canada.

1. FEDERAL-STATE FISCAL ARRANGEMENTS: THEIR FORM AND PURPOSE

Federal-state fiscal arrangements can include a variety of elements. The *system of transfers* from the federal to state governments is an important one, and can consist of general unconditional transfers, bloc conditional transfers and specific-purpose transfers. The transfers can be unilaterally determined by the federal government or subject to federal-state agreement. They can be formula-based or can include discretionary elements. They can be enacted for a fixed term or can be indefinite. Two key features of federal-state grants that influence their role in achieving policy objectives are the extent to which they are equalizing among states and the extent to which conditions are imposed that are intended to influence state behaviour.

Related to federal-state transfers are *revenue-sharing arrangements*. In their simplest form, thes[Relatna Tcy)-6.9(what 0 e,i.9( )þ)ing9( )]ns, parn2.2459 n8 en(Tc.000o-5.9(est)-523 harmonization of spending programs or regulations, such as social insurance programs, environmental regulations or the regulation of product or labour markets.

The fiscal arrangements can also include *broad agreements* setting out principles that govern or constrain government policies. There might be an agreement to abide by internal economic union or common market behaviour to preclude policies that distort product and factor flows across state borders (e.g., the Agreement on Internal Trade in Canada), unless such behaviour is already restricted by constitutional provisions, as in the USA. A similar agreement might establish common principles for social policies (e.g., Social Union Framework Agreement in Canada). In principle, there could be agreements on the limits to deficit financing and debts accumulated, analogous to the Growth and Stability Pact in the European Union. For whatever reason, such agreements have typically not been used in federations. The tendency has been to rely on the cruder tool of balanced-budget legislation or constitutional provisions instead. Finally, institutions might exist that serve an advisory function on federal-state fiscal relations, such as the Commonwealth Grants Commission in Australia or comparable bodies elsewhere.

Federal-state fiscal arrangements serve various objectives. In the broadest sense, their purpose is to facilitate the decentralization of fiscal responsibilities to the states so as to take advantage of the benefits of decentralization, while at the same time ensuring that national objectives are satisfied. These national objectives, in addition to the standard provision of public goods and services at the federal level, include such far-reaching goals as the efficiency of the economic union, the appropriate extent of equity in the social union, and goals of social citizenship and national solidarity that reflect the national consensus. While these broader objectives may not be stated explicitly in the constitution, nonetheless, they are presumed in most nations to be the responsibility of the national government.

More specifically, the federal-state fiscal arrangements can be designed to allow the states as much freedom as possible to pursue their legitimate legislative objectives on behalf of their citizens in an accountable and responsible manner, while at the same degrees of state discretion over rates and rate structures. This can best be achieved when states and the federal government both have access to the tax base in question, since then the federal government can coordinate harmonization among the states. The harmonization of transfers, including refundable tax credits, can also be achieved by federal-state agreement.

In practice, federal-state tax and transfer harmonization is implemented by a series of individual state-federal agreements (e.g., Canada and the USA). Harmonization of social policies is more difficult to the extent that states have legislative supremacy over social policy programs. Harmonization may be achieved by the federal government attaching broad conditions to the transfers it makes to the states in support of social programs. Indeed, encouraging states to abide by national standards in the design of their social programs is one of the main purposes of such transfers.

Another critical role of the federal-state transfer system is to equalize differences in fiscal capacity across states that arise from decentralization of revenue and expenditure responsibilities. The more decentralization there is, the greater the disparities there will be. There are two main dimensions to that. One arises from the fact that different states will inevitably have different ongoing fiscal capacities. In this case, the federal government can make equalization transfers so that all states are able to provide comparable levels of public services using comparable tax rates should they so choose. In the absence of equalization, fiscal inefficiency can arise as households and business have an incentive to locate in regions of greater fiscal capacity simply to take advantage of lower tax rates and/or higher public service levels. As well, fiscal inequity applies in the sense that otherwise comparable persons residing in different states are treated differently by their state governments. Note the critical point that equalizing for such inequities involves accepting the idea that citizens are entitled to roughly comparable fiscal treatment — subject to inevitable differences in the mix of public services and taxes that states choose given their fiscal capacities — regardless of their state of residence. This can be viewed as a dimension of social citizenship or solidarity for which varying degrees of consensus might exist. In some federations, the requirement that states have the ability to provide comparable levels of public services to their citizens is actually written into the national constitution (e.g., Canada, Germany, South Africa).

The second reason for equalization transfers is to provide a form of insurance to states when they are subject to temporary idiosyncratic shocks. The presumption is that the federal government is better able to provide such insurance than states themselves, given its superior ability to pool risks and its better access to capital markets. This stabilizing property of equalization is an important macroeconomic feature of federations that is missing in economic unions without a strong central government. In the latter cases, responses to shocks require more costly forms of adjustment, such as changes in wage rates or unemployment.

The need for transfers to address problems of differing fiscal capacities and idiosyncratic shocks, as well as to enable the federal government to have some influence over nationally important state policy decisions, entails that there should be a vertical fiscal gap: the federal government should raise more revenue than it need for its own spending programs so that it can make equalizing and conditional transfers to the states. In a well-functioning federation, the use of these transfers by the federal government will respect the legitimate responsibilities of the states. As well, it will

sacrificing one of the presumed aims of federalism. They are allegedly less accountable if they rely on funds from elsewhere to finance their spending: they are certainly not accountable to the federal taxpayers or the federal legislatures who provide the funds. If state revenue-raising power is very limited, they have limited accountability for even marginal spending decisions where arguably there is the possibility for determining the size of their budget. To the extent that they try to exercise discretion over marginal fiscal choices, they may over-rely on narrow(choicC80874 8(ited, th to being responsible for state and local public goods, states typically also provide important public services of a social nature, such as education, social services and health care. They may also be responsible for targeted transfers, such as welfare and disability payments. These social programs make up the bulk of state program spending, and constitute a main component of redistributive program spending in the federation. How state social programs are designed and delivered is of relevance to the nation as a whole to the extent that national norms of redistribution, social insurance and equality of opportunity apply.

State responsibility for public services of a social nature follows from basic subsidiarity arguments for decentralization: states can more efficiently deliver services to persons, can do so in more cost-effective ways, can better target to those in need, and can better innovate. Moreover, they are subject to the discipline of fiscal and yardstick competition from neighbouring states, which discourages waste. The federal contribution to redistribution through expenditures tends to focus on the transfer system, including transfers delivered through the income tax system, transfers that are relatively easy to administer on a large scale, like public pensions, and transfer programs for which risk-pooling is important, like unemployment insurance. Of course, not all federations have identical expenditure assignments. Some federations centralize welfare payments, while some decentralize unemploy7.6(e)1.5(desnti6eTJa la(e)9.2

Rather than being a residual between expenditure and taxation decisions, a vertical fiscal gap may be desirable in its own right, and its size may be a consequence of the explicit choice of federal-state transfers. These transfers serve three main purposes. The traditional role is as a device to encourage states to spend on programs that have spillover benefits to residents of other states, though this is a minor role in practice.

A second role is to equalize the fiscal capacities of states that have different abilities to raise revenues and different expenditure needs. This role becomes more pressing, and at the same time more difficult to fulfill, the more decentralized is the federation. In

Revenue-sharing can be particularly constraining if shared revenues make up a substantial portion of state revenues. The states must then typically rely excessively on narrow forms of tax to vary their desired revenues, and this can lead to distorting taxation.

5.2 State Access to Decentralized Taxes

States are typically allowed discretionary access to certain tax bases, either exclusively or in co-occupation with the federal government. They may choose to harmonize their taxes among themselves or with the federal government, the consequences of which we discuss in the next subsection. Taxes assigned to the states vary across federations. They include both broad taxes capable of generating substantial revenues and taxes on narrow transactions. They may also include taxes that fulfill a redistribution role, as well as taxes on relatively immobile tax bases.

The fiscal federalism literature provides some guidance on the ideals of tax assignment, though there is far from consensus about the optimal assignment in practice. Roughly speaking, taxes regarded as most suited for states include those on immobile bases, those that are primarily revenue-raisers rather than instruments for redistribution, and those that more closely reflect benefit taxation. Indeed, an influential line of argument, inspired by the classic Tiebout model[5] is that benefit taxation is the ideal benchmark for state taxation.[6] However, given the amount of own revenues that states must raise in many federations, the need is for broad-based revenue sources that almost certainly have redistributive consequences. Moreover, given that a high proportion of state spending is on public services of a redistributive nature, implementing benefit taxation financing would be counterproductive.

There are a large number of potential tax bases states could deploy. A brief summary of them follows.

Property Tax

States and their municipalities are typically assigned responsibility for property taxes. This has often evolved from systems where municipalities are fully responsible, to harmonized systems where common bases are applied within states (e.g., market value assessment in Canada), and property evaluation and collection are done by a provincial agency, while municipalities are allowed to choose their own rates. Given the immobility of real property and the tendency to view property taxes at least partly as benefit taxes, this is reasonable. Local

States also often have access to payroll taxes, typically earmarked for social insurance programs. In fact, payroll taxes satisfy many of the ideal properties of decentralized taxes. They are relatively immune to tax competition, are easy to administer, and have could remain centralized. Integration is l to resource revenue decentralization owing to the fact that natural resources are typically very unequally distributed among states. This gives rise to two serious concerns. First, the horizontal imbalance resulting from the unequal pattern of state resource endowments leads to the potential for fiscal inequity and fiscal inefficiency unless equalization transfers are able to offset it. Undoing the horizontal resource imbalance is costly and strains the viability of the equalization system. It also effectively undoes the property rights of the states over the natural resources in their jurisdictions that lead to the states' right to tax them in the first place. This stress between state ownership of natural resources and the constitutional obligation of the federal government to equalize state fiscal capacities has led to enormous amounts of unresolved tension in the Canadian case. Second, decentralization of natural resource revenues exacerbates the so-called resource curse. State governments seem unable to resist using them for current spending rather than saving them in a resource fund whose capital income is spent, as in the case of Norway. Moreover, the state spending is likely partly devoted to infrastructure spending designed to build state industries, and to attract factors of production from other states. There is no apparent reason why non-resource development should be induced to locate in resource-rich states. These problems can be at least partially avoided if the lion's share of natural resources revenues accrues to the federal government.

5.3 Harmonized Tax Base Sharing

Many of these problems with state taxation can be overcome, while at the same time affording the states considerable revenue-raising discretion, by allowing both states and the federal government to have independent access to a common broad tax base with a single tax administration. There are various ways in which this can be done, varying in the amount of discretion given to the states. A critical condition required for the success of harmonized federal-state tax systems is cooperation between the two levels of government. State and federal participation are demand as a price for participation.[9] The states could, in fact, voluntarily and unilaterally harmonize their income tax bases with that of the federal government simply to economize on administrative costs. This is largely done in the Canadian province of Quebec, where maintaining an independent tax authority is highly valued. However, in the absence of a single tax authority, important collection and compliance benefits are not achieved since taxpayers must report to two separate agencies.

The form of income tax harmonization that leaves least discretion to the states is a state surtax on federal tax liabilities. This is simple to administer by a national tax agency, it assures a common base and also maintains the progressivity of the federal rate structure. The only discretion the states have is over their rate, so limited accountability is achieved. States are vulnerable to changes in their tax revenues when the federal government changes its rates, and to that extent accountability and predictability of tax revenues are compromised. This system was used by nine out of ten Canadian provinces until the early 1

The exact allocation of profits among states will likely not accurately reflect the source of income. However, this will be of little concern to the states in federations in which corporate income tax is equalized using a representative tax approach. As discussed below, differences in corporate tax base across Canadian provinces are equalized at the national average provincial corporate tax rate, but this only applies for provinces with tax capacities below the average. For them, any shortfalls of allocated corporate income from its true value will be fully equalized unless the province's tax rate differs from the average. This also applies to allocations of the personal tax base, as well as of harmonized sales taxes, to which we now turn.

Sales Tax Harmonization

General sales taxes, like payroll taxes, would seem to be excellent candidates for decentralization to the states. The sales tax base is broad and the only apparent source of fiscal competition is cross-border shopping, which would be a minor concern in large federations. However, there are significant administrative challenges that apply if states adopt VATs for sales taxation. There are strong economic reasons for the VAT as the sales tax of choice, especially their ability to avoid taxing producer inputs, and to treat domestic products on a par with imported products by taxing imports and zero-rating exports. The problem, as discussed above, is that in a federation without state border controls, the taxing of imports and zero-rating of exports gives rise to serious problems in the absence of carefully designed harmonization measures.

Decentralized VATs in situations without border controls have been deployed both in some federations (e.g., Brazil, Canada and Indiaderationsed bot a3s2nd n aun4.6ions Brazil,7 -1.153

tax on subsequent sales.[11] There is little evidence on the importance of this problem in the Canadian context, but the possibility can be avoided by the next method of harmonization.

The second method of harmonization avoids the break in the VAT chain at state borders and minimizes administrative costs by using a single tax-collecting authority for all state and federal VATs, while sacrificing the true destination approach within the federation. The Canadian Harmonized Sales Tax (HST) illustrates the beneficial properties of this approach as well as its prerequisites. The HST has been adopted by five of the ten provinces. It consists of a federal GST component of 5 percent and a provincial component that varies from 7 to 10 percent. The participating provinces have been allowed to exempt certain necessity products that are not exempt under the

6.1 Equalization

Most modern federations (apart from the USA) have explicit equalization systems, whereby transfers to states are related to states' fiscal capacities, and other transfers such as bloc transfers and revenue-sharing are implicitly equalizing. There is a substantial literature on equalization that emphasizes both the social value judgments required to validate equalization and the technical difficulties involved in implementing those judgments.[13] A stark way to see the difficulties is to imagine as a requires some national consensus, and this could be strained the more decentralized the federation.

Suppose that we accept this notion of social citizenship and try to design an equalization system that, to borrow the wording from the Canadian constitution, enables all states 'to provide reasonably comparable levels of public services at reasonably comparable tax rates'. There is no perfect system, but some principles can be outlined. It is useful to distinguish the equalization of revenue capacity from the equalization of expenditure needs and costs. In both cases, a suitable approach for equalizing the capacity to provide comparable public services at comparable tax rates is to define representative fiscal capacities, that is, the ability to provide a standard bundle of public services by applying standard tax rates to standard tax bases. The standards reflect a representation of the public services that a typical state provides using typical tax bases and tax rates.

Revenue Equalization

Canada applies a *representative tax system* (RTS) approach to equalizing revenue capacities of provinces. Tax bases for inclusion in the formula are first defined. Currently there are five (personal income, corporation income, sales, property and natural resources), having recently been reduced from over 30 to simplify the system.[15] For all except natural resources, a standard tax base is defined, and the size of the tax bases in each province estimated.[16] Then, the national average provincial tax rate for each base is calculated by dividing total provincial tax revenues by the sum of provincial tax bases. A province's per capita equalization entitlement for base higher than average abilities to raise revenues, implying that fiscal equity is not satisfied. In the Canadian case, where horizontal imbalances are marked, this is a significant concern. This concern is exacerbated by the fact that only half of natural resource disparities are equalized. There are three purported reasons for special treatment. One is to respect the provincial ownership of natural resources. A second is affordability. Natural resources are the largest source of provincial disparities, and the federal government has limited access to revenues from natural resources to finance equalization. Their access is limited to income and sales taxes obtained from the resource sector. The third is that, given the extent to which the provinces can influence resource development, full equalization would impose a significant disincentive to such development. In principle, the problem of incentives should affect all equalized tax bases. Since the amount of a province's equalization depends on the size of its tax bases, to the extent that the latter is influenced by provincial fiscal decisions, there would be a disincentive to take measures that increase the tax base, such as reducing tax rates. In practice, this problem is particularly apparent in natural resources, given the direct control that provinces have.[18]

The RTS approach is formula-driven, including both the aggregate amount and the division among provinces. Occasionally the government has departed from this principle, either by arbitrarily reducing aggregate equalization payments in times of fiscal constraint, or by offering special discretionary treatment to particular provinces to deal with some contingencies. In either case, the predictability and transparency of the system is compromised, and in the case of special treatment the potential for provinces to exploit the federal government's inability to commit to a formula-based approach introduces the possibility of adverse incentives for provincial behaviour. More generally, governance issues have surfaced from time to time. Equalization is based on federal legislation and is renewed in five-year intervals. Because it involves spending, it is formulated as part of the annual budget process and is therefore subject to budget secrecy. This reduces the predictability and transparency of the program, and from time to time leads to abrupt changes that affect the provinces' finances. Concern has been expressed about this lack of transparency and the short-sightedness of the process, and proposals have been floated for a more open process, such as the establishment of an arms-length advisory body analogous to the Australian Grants Commission. But these have not been acted on, and policy remains firmly within the federal Department of Finance.

As a final comment, the RTS system becomes more complex and requires more administrative judgment the more diverse are state tax systems. It relies on the definition of representative tax bases, and this becomes more and more arbitrary as states choose different tax bases and rate structures. Moreover, when a representative tax base is formulated, its size then has to be estimated for each state. This is made much easier if the states have harmonized their tax bases. Absence of harmonization has been one of the difficulties faced in Canada in equalizing natural resource revenues. In highly decentralized federations, harmonization is more difficult to achieve and at the same time the need for equalization is greater. Alternatives to the RTS approach have been proposed, such as so-called macro-systems under which

[18] In principle, provinces also have an influence on the national average tax rate. This is only a concern where a province has a significant share of particular tax bases. In earlier years, when natural resource equalization was disaggregated by type of resource, this was a problem for selected resources (e.g. potash in Saskatchewan). Concessionary treatment existed to mitigate this problem.

equalization is based on some broad measure of revenue capacity such as per capita gross state product or disposable income.[19] Such approaches represent very imperfect measures of revenue-raising capacity, and they invite thinking about equalization as a means of equalizing disparities in state incomes rather than disparities in the ability to provide public services.

Expenditure Equalization

Expenditure capacities can be equalized along with revenue capacities using a representative expenditures approach, but the procedure is inherently more complicated. For one thing, public services are very heterogeneous in make-up and quality, which complicates the definition of comparable levels of public services. This problem can be mitigated by concentrating on the main state expenditure categories, education, health and welfare, where the bundles of services offered by different states tend to be comparable. Nonetheless, taking account of quality differences is challenging, even relatively quantifiable ones like average classroom sizes and hospital wait times.

For another, the ability to provide comparable levels of public services contains different factors, and aggregating these into a single measure poses difficult problems. We can broadly aggregate the factors into two categories: needs and costs. Since different public services serve different segments of the population, states' needs for public services will differ according to their demographic composition: the young, the elderly, the disabled, the unskilled, etc. These are relatively easy to measure, and provided the cost per unit of public services is similar across states, equalizing for needs should be relatively straightforward. However, costs are likely to differ across states as well, reflecting wage costs, rental costs, population density, geographical terrain, and distance. Taking account of cost differences raises the issue of whether comparable public services ought to be the norm. As we have mentioned, even within states common levels of public services are not provided to all regions: because of cost differences there is an equity-efficiency trade-off. One way to deal with this issue is to equalize the ability to provide comparable levels of public services to comparable regions across states, and rely on how states actually treat different regions for how the equalization system should treat them.

The upshot is that equalizing for differences in expenditure capacity is very difficult, given the heterogeneity of public services provided, the differences in level of service in different regions within states, and the various sources of difference in costs and needs. In addition, one might expect that these factors would be to some extent offsetting. States with more need for public services, which tend to be the more disadvantaged ones, will generally have lower costs because wages and property values will be lower. This would suggest that disparities arising on the expenditure side will not be as great as those on the revenue side.

These factors have persuaded successive Canadian governments and policy prescribers, including the Expert Panel on Equalization (2006), to argue against expenditure equalization and to equalize solely on the basis of revenue capacity differences. Such a system is deemed to be more transparent and more reliable. It

[19] Barro (2002) had proposed such a system. For a critique of the macro approach to equalization, see Boadway (2002).

governance would favour determining the level and rate of growth of transfers according to some objective criteria whose interpretation reflects the purpose of the transfers. The absence of an objective criterion in the Canadian case has led to adversarial debates over the size of the transfer, as well as to discretionary changes by the federal government that, for example, have passed on federal deficit problems to the provinces. As well, reductions in the vertical fiscal gap are not easy to reverse. The Australian approach has been to earmark GST revenues for the states. While this leads to certainty, it is not an approach that reflects any underlying principle of the ideal fiscal gap, nor is it one that takes account of changes in the relative growth of state versus federal expenditures. A candidate that to some extent addresses these

In the end, conditional bloc transfers combined with equalization are the most effective ways for the federal government to fulfill its responsibility for achieving national economic and social objectives given that some of the important programs for that purpose are state responsibilities. These are most effective if they are formula-based, principles-based, transparent, and as non-intrusive as possible on provincial discretionary decision-making. They work best when there is substantial cooperation and agreement among the federal government and the provinces.

7. CONCLUDING REMARKS

As mentioned, the federal-state fiscal arrangements will ideally enable the states to exercise as much discretion as possible in areas of state legislative responsibility in a transparent and accountable way while at the same time ensuring that any adverse effects of state fiscal decisions on national equity and efficiency are mitigated. This is a daunting task given that state expenditure responsibilities in most federations are of the same order of magnitude as that of the federal government. The most challenging aspect of it is to decentralize revenue-raising responsibility to the states while at the same time avoiding the potentially disruptive effects of uncoordinated state tax and transfer decisions.

The Canadian case offers an example of how the benefits of fiscal decentralization can be achieved without sacrificing national standards of efficiency and equity, or social citizenship. The states can be given revenue-raising discretion for their own income taxes and VATs in a harmonized manner, provided the federal government retains enough tax room to provide leadership in establishing and maintaining harmonized tax-transfer systems. Some vertical fiscal gap is necessary to allow the federal government to manage the decentralization. It must be able to mount an effective equalization system to address the fiscal disparities that necessarily accompany decentralization. It must also retain enough transfer capacity to be able to encourage the states to abide by broad national standards of efficiency and equity. The ideal size pose difficult problems, given that both federal and provincial governments will necessarily play a part, and given that polluting industries are concentrated in the resource-rich areas of the country. Managing all these challenges will require maintaining some vertical fiscal gap so that the federal government can play its part in collectively addressing these issues.

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