Earmarked grants and accountability in government

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Abstract

Over the years the number and importance of earmarked grants has at times risen and at times fallen in different countries. The conventional theory of fiscal federalism, which sees earmarking largely as a means to deal with positive spillovers in local expenditures, explains neither the level of such grants nor the trends over time. Nor can it readily account for the existence of non-matching, but still categorical, block grants. In this paper, we explore several alternative perspectives that interpret earmarking as a response to information failures between governments and, even more fundamentally, to accountability issues that arise between governments as well as between governments and voters.

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1. Introduction

Money matters. Indeed, in many ways who has the money and who gets the money (and under what conditions) lies at the very heart of intergovernmental fiscal relations. The structure of intergovernmental grants is thus a critical issue in most countries – one that shapes not only who does what but also how and to what extent different things are done. The 1990s witnessed a broad trend in the grant formulas of many OECD countries away from earmarked and matching grants, and toward block grants that were comparatively simple in structure, lump-sum in nature, and were associated with relatively few conditions or mandates from the centre (Blöchliger and King 2006). While a number of factors may explain this trend, many practitioners and academics clearly agreed that earmarked matching grants constituted a distortionary central intrusion into the decision-making sphere of recipient governments and that block grants were both less damaging and a useful means of controlling grant costs for central governments.² More recently, there is some evidence that earmarking and matching are on the rise again, at least in certain categorical areas (Bergvall et al. 2006). As Blochiger and Vammalle (2009, 11) note, "recently, the financial and economic crisis has triggered a surge in the use of discretionary earmarked grants in national stimulus packages, as these have proven to be very flexible fast instrument[s] to address exceptional situations, which require timely, geographically targeted responses." In Canada, for example, as Snoddon and Hobson (2009) document, infrastructure financing, almost all of which is both earmarked and matching, constitutes a significant fraction of the "stimulus" package put forward by the federal government to cope with the current economic downturn.

In this paper we suggest some factors that may explain the recurrent demands for earmarking and other forms of conditionality in intergovernmental grants. The standard textbook treatment of fiscal federalism argues that matching and/or earmarked grants should be reserved for situations in which there are significant positive spillovers from expenditures by government in one jurisdiction to residents of other, neighbouring jurisdictions so that there is a case for grants to act as "Pigouvian" subsidies (Oates, 2005). In other circumstances, matching/earmarking is generally held to be counterproductive, since the ultimate effects of conditionality are apt either to be small (because of the fungibility problem) or undesirable (because matching grants distort local priorities).

However, the limited role of matching grants to address spillovers from the Pigouvian perspective neither explains the number and importance of earmarked grants nor the changes observed over time in different countries in the importance of earmarking. Nor does it explain the extensive use of categorical block grants and closed-ended matching grants which do not as a rule affect spending choices directly, as the Pigouvian argument requires. We therefore consider in this paper three alternative roles for matching and earmarking in grants, drawing on what Oates (2005) labels "the second generation theory of fiscal federalism" which emphasizes the role of information and incentive problems between governments and with voters.

^{1&}quot;The moment they say it's not about the money...it's about the money!"

² For example, this view is stated clearly by Kim and Lotz (2007, 32) as well as Blöchinger et al (2007, 21). For a particularly strong characterization of conditional grants as "instruments of occupation", -- that is, one way by which central governments in effect take over subcentral powers and functions -- see Breton (2006, 94).

First, we consider the potential role of **earmarked and matching grants as a substitute for expenditure need grants.** Matching grants and tightly conditional categorical block grants may allow central governments to target grants to places where expenditure need is highest. Where cost drivers or need factors are difficult for the granting authority to measure accurately, designing a grant that simply shares in actual costs, such as a matching grant, may provide a second best way of targeting funds to where need is highest (Bucovetsky, Marchand and Pestieau 1998; Huber and Runkel 2006).

Second, we consider the role of **earmarked and matching grants as a substitute for commitment** in grants policy. Matching or cost-sharing grants are in effect a rules-based, non-discretionary means of sharing fiscal risks between governments and among regions. Other forms of grant systems could in principle be designed to deal with the insurance problem. For instance, the central government could simply adjust block grants from time to deal with local cost pressures as they arise. However, such discretion in block grants implies a "soft budget" constraint and hence creates a moral hazard. Local authorities will soon recognize and take advantage of the dependence of the grants they receive on actual spending patterns, thus creating a serious difficulty for the centre – the risk that it will be seen to reward bad behaviour by increasing grants to its more profligate local governments. To avoid this undesirable outcome, a formal system of matching grants may provide a rules-based insurance mechanism to local authorities without recourse to "bailouts" and the moral hazard problems they may create. To put it another way, such grants may perhaps be said to represent a "soft commitment" response to the "soft budget" problem.

A third perspective emphasizes the potential role of earmarked grants as a substitute for **electoral accountability** – that is, as a means of creating stronger incentives for public service delivery and cost control than would exist otherwise through the political process. Even when untied (generalpurpose) block grants might be the optimal transfer mechanism based on purely economic considerations (as a means of closing the optimal vertical fiscal gap, for example), such grants may nonetheless be undesirable if political failures imply that recipient government officials are insufficiently accountable to local voters. In these circumstances, when local accountability mechanisms are weak, earmarked grants may offer one important means by which central governments can strengthen local accountability to local voters. Moreover, even if local accountability mechanisms are strong, voters may want reassurance that governments at all levels are working on the "hard problems" – that is, those that are high on the political agenda such as health. If so, meddling in the affairs of lower-tier governments in such ways as earmarking more grants and imposing tighter conditionality may be an important way in which the national government can demonstrate its competence and accountability to voters. Central government officials may thus use earmarked grants directed to politically salient program areas as a way to demonstrate their own competence and relevance to voters (Pincus 2008).

The three alternative views of earmarking just sketched are quite disparate. Arguably, however, each of them may well be more useful in explaining the actual practice of earmarking in some situations than is the Pigouvian approach of the textbooks. Moreover, these alternative views are also associated with rather different welfare implications and hence suggest rather different views of where and to what degree earmarking may be normatively desirable.

³ This is, for example, how block grants to government-funded hospitals have often been determined in the Canadian province of Ontario. As Rattso (2003) shows, a similar pattern can also be seen in Norway.

The plan of the rest of the paper is as follows. Section 2 deals with preliminaries, offering a framework for thinking about earmarking and block grants, and presenting the traditional view of earmarking as a Pigouvian device for addressing spillovers in a decentralized system of governments. The three alternative views of earmarking based on informational, commitment, and accountability considerations are presented in Sections 3 through 5. Section 6 concludes.

2. Earmarking: The traditional view

2.1 Preliminaries

Before discussing what the theory of fiscal federalism implies for design of intergovernmental grants, it is useful to define the types of grants we analyze and to state explicitly the fundamental problem of fungibility that is at the heart of the theory and practice of grant design. In particular, for purposes of this paper, we define

- An *earmarked grant* -- sometimes called a *categorical* or *specific-purpose* grant -- as any grant for which the amount received is conditional in some way on the spending decisions of the recipient government.
- Any grant that is not earmarked in this sense is a *general-purpose grant*.

Earmarked grants may be further differentiated on the basis of the manner and extent to which they depend on recipient spending:

- An *open-ended matching* (or cost-sharing) grant is an earmarked grant for which the amount paid is a fixed share of the amount spent on the assisted category.
- A *closed-ended matching grant* is an earmarked grant for which spending increases are similarly matched up to some upper limit but above that preset amount are not subject to matching.
- A *categorical block grant* is a non-matching grant that is conditional on the recipient government meeting certain conditions with respect to its spending in the targeted category. One such condition, for instance, might be to spend an amount no less than the grant received.

This categorization is related to the standard terminology for grant types employed by the OECD (e.g. Bergvall et al. 2006). However, using that terminology in the present context may obscure some of the key economic points at issue. For example, the OECD distinguishes between non-matching earmarked grants, which under the terms of the grant must be spent on a specific program or activity, and "non-earmarked block grants" which, though given for a specific purpose or program, come without legal restrictions over the grant money is to be spent. Although this distinction may at times have important legal and political ramifications, as we argue later there is essentially no difference in economic terms between these two types of grants. Both are designated for a given purpose; however, in the presence of fungibility problems, there is no reason to expect non-matching earmarked grants to have any greater incremental effect on spending than block grants unless there are very tight restrictions on how other spending may change in response to the grant. And one of the property is the presence of the grant of the

⁴ In addition, the OECD further divides each category into mandatory and discretionary. For our purposes, however, the distinction between mandatory and discretionary, which relates to the budget flexibility of the central government, is not

OECD distinction between 'general purpose' and 'block' non-earmarked grants mean much in practice, as indeed Blochliger and Vammalle (2009) note. In contrast, in our terminology, which focuses more sharply on the different ways in which linkages between grants and spending may be established, we distinguish what we label above as categorical (sectoral) 'block' grants – as well as what the OECD calls 'non-matching earmarked' grants — as examples of 'weak' earmarking, as opposed to the 'strong' earmarking of a matching grant (whether open-ended or 'closed-ended'). As we discuss below, the traditional Pigouvian explanation is particularly unhelpful in explaining such weak earmarking, although it is precisely this sort of earmarking which is found most commonly with respect to grants.⁵

Earmarked grants, as defined here, are thus grants that are notionally tied to the provision of certain spending programs by recipient governments. The allocation of funds among jurisdictions may also be tied to caseload or other factors deemed related to spending in those program areas. In the province of Ontario, Canada, for example, a significant fraction of education grants to local school districts are earmarked for certain expenditures, such as capital grants, grants for or for such specific programs as second-language instruction in English and French, special education, and certain so on. These earmarked grants are allocated on a different basis than the main "foundation grants" designated specifically for "education in the classroom." On the other hand, in a characteristically complicated way, other education grants that appear on the surface to be earmarked, being designated for such purposes as, for example, "continuing education" or "language", although they may be allocated among districts to some extent on the basis of certain 'needs' criteria, are not in fact earmarked for the designated programs. Although these grants are nominally tied to the delivery of programs in these specific areas, there is no mechanism that constrains recipient governments to spend the grants on incremental programs within the assisted area – or even to have a special program to be eligible to receive the grants earmarked for that program. Such earmarking in the end is little more than one way to explain why a particular allocation formula is used for the grant, which is tied to particular case load factors or other "needs" criteria and cost drivers.

In addition to being tied at least nominally to spending on the designated activity, earmarked grants of all types may sometimes carry with them other conditions less tightly tied to the amount spent and more related to how it is spent. For example, recipient governments may be required to make grantaided services available to all citizens, whether residents in the jurisdiction or not, or they may be required to provide such services at specified levels or in specified ways. Grants that are earmarked in this sense – related to recipient spending decisions – may be further distinguished from output-related block grants that may, for instance, tie the grant in one budget period to the performance level, measured against some predetermined standard, in earlier periods. And so it goes: in almost every jurisdiction, the world of intergovernmental grants turns out to be a complex and convoluted confusion of labels, intentions, and realities.

The key analytical distinction that we stress in this paper is that general-purpose grants are lump-sum transfers in the sense of consumer theory, whereas earmarked grants — whether block or matching — are not. Obviously, in practice this distinction is not always easy to make: for example, a broad categorical grant with loose conditions that are very weakly enforced may at times be difficult to distinguish from an unconditional lump-sum transfer. In many cases, therefore, it is appropriate (as the OECD classification does) to think of categorical grants as effectively equivalent to non-earmarked and

relevant. Nor is the further distinction made in the OECD data between current and capital grants.

5 A more detailed classification of varieties of earmarking may be found in Bird (1997)

lump-sum grants. In other cases, however, it is not, and it is critical to keep this distinction in mind in appraising the actual and potential role of earmarked grants.

This is true despite the fact that a central idea in the theory of fiscal federalism is that *all* grants, earmarked or not, are essentially *fungible* in the sense that they may in effect be reallocated to other than the targeted spending categories – or indeed result in local tax reductions instead of spending increases of any sort– as a result of the policy decisions made by recipient governments, given the grants they receive. The potential for grant funds to crowd out spending that the recipient government would otherwise undertake in the targeted area is generally less for open-ended matching grants, which lower the relative price of targeted spending, than for the other forms of earmarked grants — closed-ended matching and categorical block grants — distinguished above. In the conventional theory, the effects of both categorical block grants and closed-ended matching grants should be little different than those of general-purpose grants, since in all these cases grants have an income effect on recipients but no price effect. In other words, despite their nominal earmarking to particular expenditures both categorical block grants and closed-ended matching grants (as defined above) have no marginal effect on local spending decisions and are thus essentially simple income transfers. As we discuss below, however, even such nominal earmarking may turn out to have real and important allocative effects when viewed through the perspective of 'second-generation' fiscal federalism theory.

2.2 Earmarking and spillovers

In the traditional theory of fiscal federalism, although both matching and block grants have a place in a well-designed system of intergovernmental transfers, the role for matching grants is narrowly circumscribed. While subcentral expenditure responsibilities should in the traditional view generally be confined to local public goods and services, in some situations such local expenditures will have some (positive) spillover effects on residents and businesses in other jurisdictions. In these instances, matching grants may act as Pigouvian subsidies that internalize the positive externalities from local expenditures to the rest of the nation, thus raising local spending to the nationally optimal level. In effect, such grants are a way in which the central government can, as it were, ensure that local decision-makers make the nationally "right" decisions because their budget constraint is adjusted to ensure that they face the nationally "right" (subsidized) prices.

In reality, however, the list of government activities with significant interjurisdictional spillovers is probably a small one. Intercity and interstate transportation is one obvious example. When residents are mobile, redistributive tax and benefit policies – for instance with respect to education – is another. For example, tax competition may leave subcentral governments with inadequate revenue to finance education at desired levels. If a country wishes to deal with the revenue competition argument while still leaving education spending in the hands of subcentral governments, on the whole it is probably better advised to establish some form of general revenue equalization grant rather than a special matching grant for education spending.

Even for activities that clearly give rise to interjurisdictional spillovers the paucity of reliable estimates of the extent of such spillovers is in most countries as striking as the number of grants that provide matching rates much greater than seem warranted in spillover terms. For instance, matching

⁶ A recent cogent statement of the traditional view is Oates (2005). For our own earlier take on this issue in the context of developing countries, see Bird and Smart (2002).

rates are often observed as part of categorical grant formulas for spending such as health programs for which economic studies find little or no evidence of significant spillovers among individuals or across jurisdictions. Moreover, even where spillovers seem more plausible matching rates typically exceed the levels that might be justified based on Pigouvian considerations (Bergvall et al. 2006) Excessive matching rates for activities giving rise to spillovers are as ill-advised as using matching grants at all for other activities. In both cases, the result is to distort the relative prices of the different activities from the perspective of local governments – and hence their spending priorities as well.⁷

Even though categorical non-matching block grants represent about one-third of total grants in OECD countries (Oates 1999), there is no place for such grants in the traditional theory. Because grant funds are in principle fungible in the hands of recipient governments, such earmarking is irrelevant to actual total expenditures. Grants that are tied to local spending in a particular functional category but that do not change the marginal "tax price" of spending to the local government have a Pigouvian role only if conditionality is so restrictive that the constraints are indeed binding. In this case, since recipient government spending is then no more than the amount of the grant, grant funds are effectively no longer fungible. Alternatively, additional legal restrictions may be put in place by the centre to limit fungibility – for example, in the form of the "maintenance of effort" rules found in many US categorical grants. The effectiveness of such regulatory attempts to confine money to its designated silo seems unlikely to be high, however, so in most cases, it is unlikely that grants from the centre cause incremental spending in the assisted category.

The Pigouvian view that earmarked grants exist to correct underspending due to interjurisdictional spillovers thus seems demonstrably wrong with respect to most actual grant programs. Indeed, even in the few cases in which this view may be plausible, there is little or no evidence that the matching rates established correspond to the interjurisdictional spillovers generated or that local spending decisions respond to such grants fully at the margin. (See Box 1 on the 'flypaper' effect.).

Block grants are, by definition, even less tightly tied to effects on spending. Of course, block grants may be allocated on the basis of many things – particularly proxies for expenditure need such as those discussed in Bird and Vaillancourt (2007). As we discuss further in Section 3, such allocation formulas, although having no direct effect on expenditure patterns, may nonetheless play an important role in overcoming the inevitable information asymmetry between donor and recipient. Similarly, these and other characteristic features of categorical grants, as we develop in Sections 4 and 5, despite being mainly 'symbolic' in terms of their effects on expenditure patterns may nonetheless constitute an important part of the institutional structure ensuring adequate accountability between governments and citizens.⁸

⁷ As mentioned, the case for matching is more general in the presence of interjurisdictional competition for mobile tax bases – a positive spillover (e.g. Wildasin 1991). However, any matching feature in grants driven by this concern should be tied to revenues from specific tax bases, not to spending. Moreover, other grants may be more effective as a corrective for tax competition (Koethenbuerger 2002; Bucovetsky and Smart 2007).

⁸ For an extended discussion of the difference between 'substantive' earmarking, which results in incremental changes in expenditures, and 'symbolic' earmarking, which does not have such direct effects on expenditures, see Bird (1997) and, with application to Korea, Bird and Jun (2007).

Box 1 The "Flypaper" Effect

The "flypaper effect" is the notion that "money sticks where it hits" in the sense that grants do not simply crowd out spending that would otherwise have been undertaken by the recipient government but result in incremental spending. In the U.S. for example, a survey of a number of studies found that, on average, a marginal dollar of categorical grants induced an increase in public spending of \$0.64 (Hines and Thaler 1995). Lump-sum block grants thus tend to result in larger increases in spending by recipient governments than can be explained by income effects alone. Similarly, categorical block grants tend to increase spending in the assisted category rather than simply being reallocated to other spending programs (or even to tax cuts) through fungibility.

A number of ingenious explanations have been proposed to reconcile theory to fact. Some authors, for example, have proposed alternative theories in which an increase in federal grants induces a change in political equilibrium and therefore different local spending decisions than would a corresponding increase in local private incomes. Others (Moffitt 1984) have questioned whether the empirical regularity of the flypaper effect constitutes a true causative effect of grants on local spending, suggesting that many grants have implicit or hidden matching components that induce price as well as income effects on local behavior. Still others (Chernick 1995) stress the problematic nature of estimating the behavioral response to federal grants in general. Estimates using cross-section or time-series variation in the level of grants for identification may partly capture "permanent" differences across jurisdictions in spending propensities or changes in underlying economic environments in the case of across-the-board transfer reforms. Occasionally, however, reforms yield a natural experiment from which to gauge their behavioral impacts. For example, Baker, Payne and Smart (1999) examine a reform that converted a matching grant to a block grant for some provinces in Canada but not others and found robust evidence that assisted spending was lower under the block grant than the matching grant.

Much of the evidence for and against a flypaper effect comes from high-income, federal countries, where subcentral governments often have considerable fiscal resources of their own, as well as long traditions of independent decision making that may stand in sharp opposition to federal objectives. In many countries, however, subcentral authorities are far more dependent on federal transfers and have less autonomy in decision making. In Colombia, for example, which imposes tight conditions on the way in which grants are spent by local authorities, Chaparro, Smart and Zapata (2005) examined a reform in the grant program that reallocated funds among municipalities to estimate the extent to which such conditions are binding. They find that on average in most communities, additional funds were allocated to spending areas in almost exactly the proportions specified by federal legislation. For large urban municipalities, however, there was much more evidence of reallocation across programs. This is unsurprising, since it is only the large urban governments in Colombia (as elsewhere) that have sufficient own fiscal resources to undo the effects of federal grants and for which money is truly fungible.

While the flypaper effect is undoubtedly a real phenomenon in some cases and undermines to a certain extent the sharp distinction we draw between matching and (earmarked or general-purpose) block grants, further exploration of this subject is outside the scope of this short paper: see Gamkhar and Shah (2006) and Inman (2008) for recent surveys. In any case, all we need to motivate the present discussion is the simple observation that in many cases even very specifically earmarked grants are non-incremental in terms of their effects on spending on the designated function. How can earmarking "make sense" in such situations? That is the question discussed here.

3. Earmarking and expenditure need

To begin with, we consider an alternative approach that has received much attention in the theoretical literature in recent years. This approach views matching and earmarked grants not as a way of 'pricing' externalities but instead as a means – and perhaps even in some instances an optimal mechanism – that central governments may employ to achieve their allocative objectives in the face of imperfect and asymmetric information about the appropriate allocation of grant funds among jurisdictions. That is, earmarked grants may be viewed as a substitute for block grants that seek to redistribute among jurisdictions on the basis of exogenous differences in costs, in expenditure needs, or in local demands for public services.

In the presence of imperfect information about cost drivers -- the real and necessary unit costs of government services at the local level -- it may be difficult for the centre to design a lump-sum (block) grant that redistributes among residents of different jurisdictions appropriately in accordance with the sorts of caseload factors usually assumed to determine "expenditure need" (Bird and Vaillancourt 2007). One aim of expenditure need grants is in a sense to insure all citizens against localized fiscal "shocks" in the form of differential costs and needs for particular services. While no country goes so far as to guarantee precisely equal service levels to all people regardless of where they live and how much the provision of such services might cost, many countries (for example, Germany and to a lesser extent Australia) do make considerable efforts to ensure that local residents do not have to bear locally all the cost of providing equal services when cost and need factors are out of line with those in other localities. If the central government has such an objective, but does not have the necessary information to implement it satisfactorily, it may make sense to make grants depend positively on local expenditures within some spending categories, as a matching grant does. In effect, actual spending thus serves as a proxy for its exogenous determinants.

In this vein, Bucovetsky, Marchand and Pestieau (1998) study a theoretical model in which the taste for local public goods is known by local governments, but not by the centre, which in turn wishes to target grants to high-demand communities to insure against such local "taste" shocks. In a related study, Huber and Runkel (2006) study an environment in which local governments differ in their cost of supplying public services, and the centre can observe neither the cost nor the quantity of public goods provided at the local level. In both cases, an optimal grant scheme is one which, in certain cases at least, depends positively on actual local spending levels, as in a matching grant. There is thus a tradeoff between the better targeting of grant funds as a result of matching and the distortions to local decision-making that result from the moral hazard resulting from matching.

Moreover, Huber and Runkel (2006) observe that an optimal grant scheme in their setup, while admittedly stylized, is consistent with the structure of closed-ended matching or categorical block grants, as opposed to either general purpose block grants or open-ended matching grants. To take a simple example, a categorical grant for local labour training programs in effect targets districts with high unemployment in precisely the same way as the theory of second-best income support programs shows that an in-kind subsidy targets the needy (Blackorby and Donaldson 1988).

Such models are based on a fundamental asymmetry of information about spending. Local governments are assumed to be better informed about local preferences or local costs than is the centre.

While this is an assumption often made implicitly or explicitly throughout much of the literature on decentralization, it is not clear whether it is persuasive or even plausible in some cases. Presumably a central government concerned with the allocation of grants could gather the same information about local environments as a local government concerned about spending. For example, it might perhaps be suggested that what may be called the Nordic model of "administrative federalism" (Rattso 2002) in a sense finesses this point by assuming that in effect the institutionalized structure of central and local cooperation in countries such as Denmark suffices to ensure that both levels of government are both seeking to achieve the same objectives and acting on the basis of the same information. In these circumstances – which of course do not hold in other fiscally decentralized countries such as Canada and the United States – it is not at all clear why a first-best centralized allocation may not be equally feasible.

At a more practical level, the usefulness of spending as a proxy for expenditure need – and therefore the role of matching grants in targeting expenditure need – is reduced to the extent that there are other, extraneous factors that also drive cost differences among recipient jurisdictions. Chief among these for many spending functions is probably revenue capacity. Government spending increases in local incomes and revenue capacities, and separating expenditure need from tastes in this sense is difficult. While some matching grant programs do attempt to adjust parameters to reflect capacity differences, doing so is difficult. One might therefore expect to see matching and earmarked grants serving as a substitute for expenditure need grants especially in cases in which capacity differences are small – either because local income differences are small, or because significant general-purpose equalization grants are in place. Such equalization grants, by reducing effective differences in revenue capacity, correspondingly reduce the distortionary effects of such differences on cost functions in localities with different income and revenue levels.

This view suggests that matching should be most prevalent when inequality among jurisdictions is small, and when the central government's desire for regional redistribution is large. This last prediction is certainly consistent with the experience in Canada during the 1990s, when a move to block grants coincided with a significant shift at the centre away from the demand for redistribution across provinces. Similar shifts in regional politics may perhaps lie behind the move to (or from) block grants in other OECD countries (Blöchliger and Vammalle 2009)

On the other hand, as Blöchliger and Vammalle (2009, 11) also note, earmarked grants are often employed on a temporary basis to "help building capacity at the SCG [sub-central government] level during decentralisation processes, when new tasks are assigned to SCGs, or [to] finance recovery policies after crisis or natural disasters.". Thus earmarked grants are especially useful when the central government seeks to grow expenditures of all governments in the targeted category. This "life cycle" model of grant formulas can be explained by the asymmetric information perspective, given that the centre may use matching to "target" local funds where they are most needed and to encourage local program development in particular areas. Once such programs mature, however, there is no longer a

⁹ Of course, as Smart (1998) and others have noted, equalization grants may themselves introduce other distortions in revenue structures.

¹⁰ In addition, as we discuss further below, an intended result of the shift to block grants was to reduce both federal spending in the assisted areas and, more importantly perhaps, to stabilize federal budgetary risks, relative to the previous system of matching grants.

need for central matching and the grant is converted to a block grant.

This interpretation seems consistent with the history of several major grant programs in Canada and the United States. For example, with the introduction of a national publicly funded health care system in Canada in 1966, open-ended matching grants financing a given percentage of provincial health spending were made to provincial governments. Subsequently, in 1977 when these programs were deemed to have become "established" (and the federal government faced budgetary pressures of its own), the federal health transfer was converted to a block grant. Likewise, in the United States the elimination of federal matching grants for state welfare spending under the Aid to Families with Dependent Children (AFDC) in 1996 occurred at a time when a primary policy goal appeared to be reduction in federal spending on welfare programs.

The notion that shifting to block grants is a way to reduce federal spending is seriously incomplete. As we discuss further in the next section, in some circumstances a shift to block grants might actually *increase* in the share of spending financed through grants from the centre since matching has stimulative effects on recipient government spending. Converting grants to block form may reduce fiscal risks for the centre, but it is likely to prove an effective way to shift fiscal effort to lower level governments. In the present section, we have emphasized the role of matching as a means of targeting spending to where cost or need is greatest. In effect, from this perspective a matching grant may be seen as a sort of self-selection mechanism under which, through their own actions in terms of spending more on the designated activity, those whose need, taste, or cost is greatest get the largest grants. Equity may thus be improved, albeit at the cost of introducing further distortion in local spending decisions. The utility of such self-targeting is presumably greatest in the early years of a program, when information on real local needs and costs most limited. This approach is, as we noted earlier, most likely to be revealing of reality when, as in Canada in the 1960s, a substantial general-purpose equalization grant system is already in place so that the effects of regional income inequality on spending levels are muted. 11 Once a program has matured, however, historical experience provides considerable information on spending patterns, and a block grant allocated based on past spending may be in some instances relatively well attuned to need.

¹¹ Of course, as May (1969) noted long ago, countries may differ markedly in their "taste" for such regional equalization.

4. Grant design and soft budget constraints

As discussed in the previous section, matching grants may be viewed as a means of sharing fiscal risks between the centre and local governments – in effect, providing some insurance against fiscal factors (shocks) that might affect the costs of government services differently in different localities. In periods of fiscal restraint, central governments may view a shift from matching to block grants as a way not only to reduce their own spending but to harden local budget constraints, thereby exerting restraint on local spending as well. In principle, given sufficient information and sufficient power of commitment, the central government could still design these block grants to help insure local government against fiscal shocks. For example, the central government could simply adjust block grants from time to time in order to deal with local cost pressures as they arise (Rattso 2003).

However, such discretionary changes in block grants create the potential for a "soft budget constraint" problem (Pettersson-Lidbom 2009). If not immediately, then soon, local authorities may recognize and take advantage of the dependence of local grants received on actual spending patterns by inflating spending in the (justified) expectation of being bailed out -- rewarded by increased grants -- for doing so. This commitment failure in the negotiation of block grants between governments thus results in a potentially significant moral hazard. In these circumstances, again there may be a role for earmarked and matching grants to take the place of block grants - this time essentially as a means of substituting rules for discretion in determining how the centre will respond to future fiscal shocks. From this perspective, a formal system of matching grants provides a rules-based insurance mechanism for local authorities without affording them recourse to "bailouts" and the moral hazard problems they may create.

The problem of commitment to block grants has a neat illustration in the recent history of federal transfers for health and social services in Canada. Federal transfers to provinces in Canada have historically been characterized by the usual mix of matching and lump sum grants, with the latter being divided into general purpose (equalization) and categorical grants. As already mentioned, since 1977 the federal government has increasingly relied on block grants in place of matching for major social programs. This trend culminated in 1995 with the conversion of all federal grants for health and social services into a single block fund, the Canada Health and Social Transfer (CHST), which was allocated among provinces on a basis close to their population shares. ¹²

The principal objective behind establishing CHST as a block fund was to rein in federal spending commitments, in response to the generally difficult fiscal position then facing the federal government (Lazar 2008). Federal officials wanted to reduce the fiscal risks to which they were exposed through matching grants. Converting to block funding created perfect certainty – in the minds of federal officials at least -- about the magnitude of future transfer expenditures. Arguably, another federal objective was to sharpen incentives for the provinces to control spending increases, relative to what had occurred under the previous regime of matching grants. ¹³

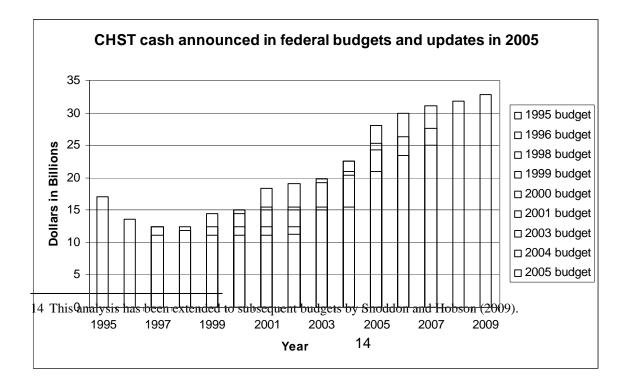
¹² Provinces with above-average revenue capacity have received somewhat less than their population shares.

¹³ Coincident with these budgetary changes, the federal government promised greater flexibility to the provinces in the assisted policy areas, and restricted use of the federal "spending power" to influence provincial priorities. In this respect, policy developments in Canada at the time paralleled those in the United States, where the 1996 reform that replaced federal matching grants for state welfare programs under Aid to Families with Dependent Children (AFDC) was labelled the "New Federalism" by its proponents.

However, actual experience with block grants in Canada has been rather different. Since Canada engages (albeit somewhat sporadically) in multi-year budgeting, it is possible to compare the federal government's announced intentions for the program to what has actually evolved over time. We report in Figure 1 the level of cash transfers under the CHST (since 2004 separated into the eponymous CHT and CST programs) set in each federal budget from 1995 through 2005. ¹⁴

It is evident that conversion to block grants was associated with a federal desire for fiscal retrenchment – indeed, nominal transfers actually declined up to 1997-98. By 1997, however, the era of belt-tightening was over. The federal fiscal balance improved quickly thereafter, and pressure from recipient governments to restore transfers to the previous growth track was pronounced. Subsequent federal budgets have repeatedly announced a plan for stable or even declining transfers under CHST over the medium term, only to have those commitments overturned and replaced by higher spending tracks in the next fiscal update or budget. In the face of higher-than-forecast surpluses, federal officials faced exceptional pressure from the provincial governments to "pay their fair share" of increasing health expenditures. Their response was to introduce a curious accounting device under which ongoing transfer increases were "booked" against surpluses of previous years. Frequently, such transfer increases resulted from deals negotiated directly among First Ministers (the federal prime minister and the provincial premiers) at their annual meetings – as was notably the case in 2000, 2003, and 2004.

Figure 1



The result is a transfer system that has very different effects than those envisaged at the time of the original shift from matching to block grants in 1995. Far from ensuring predictability of federal spending commitments, CHST cash transfers increased by nearly \$17 billion in nominal terms between 1997 and 2004, to \$28.1 billion from \$11.1 billion. Far from sharpening incentives for provincial governments through hard budget constraints, it is federal transfers rather than provincial own-source revenues that have financed the majority of incremental provincial health care expenditures. Over the same period, provincial government spending on health care rose by only \$28.8 billion (in nominal terms), so that 58.9 per cent of the increase was effectively financed by federal transfers and only 41.1 per cent by provincial taxes.

In effect, then, the federal health care grant has, unofficially, been operating just like a matching grant – indeed, much like the dollar-for-dollar matching grant that existed officially prior to 1977. ¹⁵ In the post-1995 period, it is provincial spending that is pushing federal transfers higher, rather than the reverse, but the effect on the federal budget and on provincial incentives is arguably the same as if a formal matching grant were in place.

The notion that block grants weaken the commitment power of grantor governments and may ultimately result in "softer" budget constraints is not confined to the Canadian provinces. For example, Rattso (2003) discusses how the use of block grants to finance hospitals in Norway led to excessive discretion for the central government to adjust grants in response to fiscal shocks, with a resulting increase in pressures for renegotiation of grants and weakening of incentives for cost control. In recent years, reflecting the increasing dislike of many for the input orientation of traditional categorical grants (Blöchliger et al., 2007, 21), considerable attention has been paid to the desirability of making more use of performance indicators in government (Shah 2006). Some have suggested that the move to output-based budgeting in place of input-based budgeting should be mirrored with respect to grants by moving to performance-based grants (Steffensen 2009). However, this approach simply cannot work for most intergovernmental grants. There may be a limited role for a "reward" system of grants, in which those who behave best in terms of the performance standards established get the most. But such a post-hoc approach is unlikely to amount to much in a world in which most local governments depend on secure (pre-committed) grant funding to carry out many of their activities, in which many grants are intended in large part to meet "needs" rather than to reward those who have already succeeded in doing so, and in which, in any case, "good performance" invariably lies in part in the eyes of the beholder. (See Box 2)

Box 2 Performance-Based Grants

In a decentralized setting, to make performance-based grants work, substantial prior consultation with potential recipients would appear to be a sine qua non. As Lazar (2008) discusses (in a somewhat different context), such consultation would ideally encompass a wide range of matters and for success would appear to require, prior agreement between both sides (donor and recipients) on (1) objectives – the desired results, (2) results-oriented accountability provisions, (3) performance indicators that will be used by all to measure

15 1

¹⁵ CHST transfers have in principle been linked to provincial expenditures on post-secondary education and social services, as well as to health care, so that the effective matching rate for all assisted expenditures is somewhat lower than reported here. However, education and social service expenditures have grown little compared to health, and provincial demands for federal transfers have been based on health care costs rather than the other expenditure components. It therefore seems appropriate to include only health care expenditures in the denominator of the calculated effective matching rate.

such results, and (4) who will gather such information, and how (as well as the provision of adequate incentives to insure that this is actually done). In addition, ideally all should agree to make regular public reports to residents, and not just to central government, on progress relative to the desired results. Moreover, in all likelihood to make progress with this agenda the central government would have to agree to observe the fine but important line between monitoring and control by, for example, agreeing not to reduce grants for recipients who make slower progress towards results. That is, to implement performance-based grants in a decentralized setting it may be necessary to decouple grants from performance within some specified time period (say, three or five years). Of course, both parties might agree to renegotiate the arrangement within a shorter period if they do not like the results.

Operating a performance-based grant system might work very differently in a context in which, in effect, subcentral governments are essentially implementing central government policy under contract. In such circumstances, for example, one might perhaps envisage operating a performance-based reward system with increased grants going to those who perform best according to predetermined standards. However, even in this case in order to reduce the obvious bias arising from unequal local access to own resources and differential program needs, either a substantial equalization system must be in place or a kind of 'handicap' system (perhaps, as in Australia, adjusting for needs and cost differentials) in order to make the contest fair by bringing all potential 'contestants' up to the starting line on equal terms.

Committing to block grants is difficult for governments that cannot determine the decisions of future governments, and commitment failures can lead to significant moral hazard and block any efforts to control grant outlays. It is unclear that the idea suggested above -- that matching grants may be in some circumstances be seen as an alternative to commitment -- has actually influenced the thinking of government officials. It may, or may not. It might be argued, for example, that in the Nordic model of "administrative federalism" set out by Rattso (2002) – an essentially integrated system under which redistributive spending is centrally-financed but locally administered – under which central and subcentral governments in effect work almost as one, it is unlikely that any local authority would be able to – or expect to be able to – obtain a bailout by increasing spending. Commitment failures are thus not a serious problem. On the other hand, as much experience in the rest of the world suggests, such problems are clearly endemic in many decentralized systems (Rodden, Ekesland, and Litvack 2003). The idea sketched in this section thus appears to deserve further consideration as a possible normative rationale for the prevalence of earmarked matching and conditional grants in many countries.

Certainly, in many cases the non-incrementality of conditional grants from the centre is so clear that other explanations for the existence of such grants than the traditional Pigouvian one must clearly be sought. Often, indeed, it is tempting to conclude that central grants policy is not really intended so much to "do something" about spending within the assisted category as to be seen by voters as a signal that something is being done. As Lazar (2008) points out, the federal government in Canada increased its block grants to provinces for health expenditures substantially between 1997 and 2005, while doing essentially nothing to ensure that the new federal funds actually resulted in incremental provincial spending. He suggests that the federal government was quite content to see federal grant dollars simply replace spending that would otherwise have been financed from provincial own-source revenues, because this outcome nonetheless resulted in a significant increase in the proportion of spending financed from the centre and thus met provincial demands for the federal government to "pay its fair share" of program costs. What Searle and Martinez-Vazquez (2007, 411) call federal "public relations conditions" were thus served by increasing federal grants for health, even if the increases had no

incremental effects at all on provincial health spending. 16

Clearly, if such interpretations are correct, to a considerable extent the explanation for the level and structure of grants must lie in political accountability considerations rather than in simple economics. Such grantsmanship games may be comparatively benign. For example, one might argue that the real purpose of such broad categorical block grants may be simply to close the (presumably optimal) vertical fiscal gap in the federation. After all, when it comes to closing a fiscal gap, a dollar is a dollar, no matter what label it carries. Labelling funds as being "for health care" may primarily serve the purpose of enabling the federal government to provide voters with a more understandable explanation for the federal role than simply gap-filling as a result of the Oatesian mismatch between the optimal decentralization of revenues and expenditures. At least in the case of Canada, this explanation also serves nicely to explain both why over the years the broad federal-provincial categorical grants have gradually moved closer and closer to simple per capita grants and why so little effort has been made to enforce even the very loose "conditions" attached to those grants. Vague as they may be, such considerations appear to provide a better explanation of grants than is to be found in the traditional fiscal federalism literature. In the next section, we consider further the question of whether there may perhaps even be a persuasive normative rationale for such symbolic earmarking.

5. Earmarked grants and electoral accountability

Our analysis of earmarking thus far has been fundamentally an economic one: the structure of the transfer system affects the budget constraints facing recipient governments either directly (e.g. through explicit matching grants, as in the traditional view) or indirectly (through the informational and renegotiation constraints on redistributive grants policies). We noted earlier that the conventional economic effects of earmarking may be small especially with respect to categorical block grants, since such earmarking is essentially non-binding on recipient governments due to fungibility. Even in such cases, however, earmarked grants may have a role in mediating political issues as well as economic ones. Earmarking may play a role in reinforcing accountability mechanisms between levels of government, and between voters and their governments.

Earmarking injects the central government into decision-making over local spending and makes local officials accountable in part to the central government for spending. Thus, even in cases where untied block grants might be the optimal transfer mechanism based on purely economic considerations (as a way of implementing the optimal vertical fiscal gap, for example), earmarking and matching may nonetheless be an appropriate way to alter local decision-making. This is particularly the case in systems of so-called "administrative federalism" (Rattso 2002) in which with respect to much of local expenditure local officials are responsible explicitly to the centre but not directly to voters.¹⁷ The same

¹⁶ Of course, other, less overtly political, motives may also have been in the minds of federal politicians such as attempting to assure the delivery of services to citizens or compensating provincial governments for costs incurred in carrying out centrally-desired programs. But PR does seem the most plausible explanation.

¹⁷ As with labelling grants, each author appears to define decentralization differently to fit the circumstances being considered. Some distinguish administrative, economic, and political decentralization. Others (e.g. Bird 2001) distinguish deconcentration (administrative decentralization), delegation (the principal-agent case), and devolution (full political decentralization). Still others (Hellerberg et al. 2009) distinguish delegation (which they define as full agreement of both centre and local on policy), from contracts (where there are differences, but they can be negotiated – not necessarily symmetrically), and fiefdoms ('nested' or hierarchial structures under which each jurisdictional level, as in classic political

logic may also apply in cases in which political failures imply that recipient governments are inadequately accountable to local voters. Thus, for example, Kochar et al. (2009) find that earmarking and conditionality in grants in India have been effective in counteracting the potential for "capture" of local governments by local elites and so directing funds for redistribution to the neediest.

Central governments have various channels through which they may attempt to influence or control local government spending. They may, for example, regulate such spending in greater or lesser detail. Legislation may explicitly limit the choices local authorities can make with respect to procurement, employment, and so on. In addition, especially in the Nordic version of administrative federalism alluded to earlier, central and local authorities may engage in dialogue and consultation in order to achieve particular objectives. For example, in Denmark, the central government cooperates closely with the National Municipal Association in determining the precise balance between central control of the quality of services and local freedom to adjust to local conditions in the local delivery of services determined to be in the national interest. In addition, the central government may of course earmark grants. While the same objectives can usually be achieved through regulatory policies, one advantage of enforcing such controls through grant policy is that the built-in reporting back to the center of how grant funds are spent may make it easier to monitor what local governments actually do. Obviously, this objective will be most readily achieved when decentralized governments have a uniform and high standard of public finance management and are obliged both to announce their service objectives for each function and to report publicly on the extent to which they live up to them. (See also the discussion in Box 2.)

In some circumstances, however, excessive reliance on earmarking, matching, and mandates – funded or unfunded -- from the centre may weaken local accountability. Matching grants can induce a form of soft budget constraint among recipient governments, and inhibit adjustments at the local level that would be forced on officials through the political process in the absence of transfers. Some authors indeed find empirical support for the proposition that fiscal adjustment is slower among subnational jurisdictions that are more transfer-dependent (Stehn and Fedelino, 2008). Others find the evidence far from overwhelming. In any case, it is clear that earmarked grants may make it more difficult for voters to understand the assignment of expenditure responsibilities to governments in the federation or, in the case of formally shared responsibilities, to know which level of government to hold accountable for poor performance. Such ambiguities tend to weaken the link between government performance and re-election incentives and hence may result in worse outcomes overall (Joanis 2008).

A related perspective emphasizes the role of earmarking in strengthening the political accountability of the central government, rather than that of recipient governments. ¹⁹ Viewed from the perspective of the central government, the fungibility of grant funds is a significant obstacle to accountability: if it cannot be explained to voters on what cental grant money is ultimately being spent, then accountability for the funds may be weakened. Restrictive earmarking permits the central

federalism, has its own autonomous sphere of power). The reference in the text is specifically to the definition of administrative federalism in Rattso (2002) cited earlier in the text, which contrasts sharply with the traditional (essentially American) approach to fiscal federalism, which emphasizes the need for benefit taxation for local accountability in a context in which resources are mobile across jurisdictions

¹⁸ In Canada, for example, it is by no means clear that, over time, there has been any strong correlation between the transfer dependence of provinces and the extent of their adjustments to fiscal crises. On the contrary, one might equally well make the case that provinces with greater "own resources" have on the whole been slower to adjust.

19 For a related view, see Seabright (1996).

government to have a stake in particular spending categories that are of tangible benefit and salience to voters. It thus in a sense allows the central government to display its competence in selecting and managing spending projects in areas of local government responsibility. As Pincus (2008) argues in the Australian context, voters may be best served by having officials of all levels of government at work on issues of the highest salience – and earmarking of grants may be the best means available for central government officials to exert an influence given constitutional or conventional restraints on the direct spending power of the central government. As Pincus (2008) notes, echoing Breton (1996), the tendency for vertical overlap and duplication of efforts is often regarded as inefficient in a multi-level system of government: in reality, however, overlap may sometimes simply be an indication that vertical competition is operating.

There is, however, a contrary view. When the centre establishes an earmarked grant, it becomes involved in a program area that – at least in the less "integrated" versions of federalism found in many countries – is considered the responsibility of the subcentral government. ²⁰ This may indeed have swome beneficial effects, as postulated in the "vertical competition" literature (Breton 2006). On the other hand, it may also confuse citizens and create a sort of fiscal illusion that reduces transparency and accountability and makes it possible for both levels of government to exploit the situation to some extent. For example, we noted earlier the Canadian case in which prolonged political controversy followed the federal decision in 1995 to cut federal health and social transfers. To many observers, the emphasis placed by provincial officials on the need for federal transfers to be restored was an attempt to exploit fiscal illusion to "shift the blame" for health care cost increases to the higher level government (Smart 2005). When federal transfers were subsequently increased in 2004, Lazar (2008) suggests that the reason was because the federal government was equally content to exploit voters' fiscal illusion and that in fact the objective of the new federal grants was to crowd out provincial spending from own-source revenues, so that federal officials could demonstrate to voters that the federal share of program costs had increased substantially. The case that one level of government or another should be responsible for the program may be far from clear to economists: however, the impact on electoral accountability of being associated with "good" spending seems to be rather clearer to politicians at all levels.²¹

This diagnosis of the problem with block grants fits best a federation like Canada, where the high degree of co-occupancy of revenue bases means that the size of the "optimal" vertical gap is indeterminate. In the standard view of fiscal federalism, the central government may commit to an appropriate level of federal transfers simply by computing the appropriate level of vertical fiscal gap – the difference between the desired state expenditures and state revenues – and paying it to states as a block grant. This approach assumes that everyone can make the same calculation. However, it cannot work in a system in which major tax bases are shared between central and subcentral governments. In this situation, no one can easily assess whether the level of grants from the centre is

²⁰ This is the heart of the problem of "occupation" (Breton 2006) that arises in most federal countries in one way or another as a result of what is often called the federal "spending power" – the power of the central government to spend in areas that are constitutionally subfederal: see the discussion in Watts (1999). Of course, this problem does not really arise in highly decentralized unitary countries with only "administrative federalism" (Rattso 2002) rather than "real" federal systems in the sense of Wheare (1963).

²¹ As Rattso (2002, 279) notes, when it comes to spending mandated (cost-reimbursed) central redistributive funds, "...the local politicians have gladly accepted the increased responsibilities."

²² The following argument is based on Bird and Smart (2009), where it is developed in the context of a discussion about the appropriate degree of tax decentralization.

appropriate or not, and everyone can – and often does – assert his or her own views as if they were facts.

Indeed, when tax bases are "co-occupied" it is difficult to determine the appropriate level of intergovernmental transfers on any principled basis. ²³ Should federal personal income taxes rise to finance increased health care expenditures, or should states with access to the income tax base impose their own increased rates? In the absence of important inter-provincial spillovers in taxation or spending, the *economic* consequences of the two options are little different. When federal and state governments have access to essentially the same tax bases, there is no apparent reason why states should not raise their own tax rates to finance increased spending rather than relying on the federal government to do so. Vertical fiscal imbalance when there is base co-occupancy is thus fundamentally a political concept, not an economic one. Canadian reality is a very long way from the canonical "paternalistic federalism" model, in which revenue collection is centralized and transfers must finance the bulk of decentralized expenditures. Much the same is true in other decentralized federations in the developed world – such as the United States, and Switzerland – in which the major tax bases are largely co-occupied. Even in Germany local business taxes are levied on a base that is similar to the federal corporation income tax base.

When the appropriate vertical gap is essentially indeterminate, it is not surprising that governments have a difficult time in determining the appropriate level of central transfers, with the result of muddying accountability. Vertical overlap of taxes is of course also a source of potential waste, inefficiency, and citizen irritation. More importantly in the present context, rather than strengthening accountability such overlap may weaken it by sowing yet more doubt in voters' minds about who does what and exactly who is paying for it. To the extent it reinforces the idea that all responsibilities are ultimately federal, co-occupancy of tax bases may thus exacerbate the problems of soft budget constraints. On the other hand, as Breton (1996, 2006) has argued in general and Pincus (2008) has suggested in the Australian case, vertical fiscal competition between governments may equally well work in the opposite direction and end up improving both accountability and the efficiency of government spending and taxation at all levels.²⁴

If earmarking is at least in part a substitute for local accountability, we would expect to see greater use of it in environments of administrative federalism, or where for other reasons there is little direct accountability of local officials to local voters. One testable implication might be if there is a robust relationship between earmarking of grants and the rate of turnover among local elected officials.

For the other views of accountability sketched in this paper, however, it seems harder to develop either clear testable implications or welfare implications. Arguably, we should expect to observe more earmarking in spending areas – like health care in Canada and elsewhere – that are viewed as highly salient in the political process as well as, perhaps, in such highly visible "ribbon cutting" activities as new infrastructure projects. Perhaps survey information on changes in the "salience" of such

²³ By *co-occupancy of tax bases*, we mean a system in which real tax powers are shared, so that each level of government may make independent decisions about the tax, particularly with respect to rates. It is important to distinguish this case from revenue sharing systems, in which both levels of government may derive revenues from a single base, but decision-making is not shared.

²⁴ For a recent theoretical argument that, in certain circumstances, interregional redistribution can 'cure' the soft budget syndrome, see e.g. Akai and Silva (2009).

electorally relevant spending programs might provide a better explanatory rationale of the changes observed in the level and structure of different grant programs over time in different countries than does the traditional Pigouvian analysis. From a normative perspective, perhaps the major role of earmarking transfers might be to improve the accountability of governments by making taxpayers more aware of the costs of public services and making more transparent the way in which different governmental levels interact in funding and providing such services.

Earmarking may sometimes constitute unwarranted interference in local affairs. It may also at times reduce accountability by confusing voters as to who is responsible for what and who is paying for what. On the other hand, in times of crisis every level of government may be expected to become involved in the policy areas most salient to voters, so central governments are only to be expected to attempt to demonstrate their competence and relevance by engaging in earmarking in such areas. Voters are unlikely to care much about who does what, and they certainly are likely to expect more from the central government than a policy to maintain the optimal vertical fiscal gap based on Oatesian principles. All these considerations suggest that, even when earmarking cannot be rationalized by conventional economic arguments, some political benefits nevertheless remain. Indeed, given that fungibility limits the effectiveness of earmarking, it may generate substantial (first-order) gains in political accountability notwithstanding its small (second-order) negative consequences for the optimal functioning of a federal fiscal structure.

In general, this line of argument suggests that perhaps even economists should be devoting more attention to what Dafflon and Mischler (2007, 237) call the "efficiency in process" of grant systems than to the extent to which they affect specific outcomes or intergovernmental competition. In principle, the ultimate deciders of what is done should be those who are most directly affected, and the best that analysts can do to ensure that the relevant decision-makers make the "right" decision is to ensure that they and all those affected are made as aware as possible of all the relevant consequences. In this light, it is perhaps time to rethink the traditional reluctance of public finance experts to condone such 'misconceived' ideas as earmarked (but non-incremental) grants. Such practices undoubtedly have led to problems in the past in some countries. But past ill experience need not preclude more careful consideration of more explicit expenditure-revenue linkages in the future – even across governmental levels. Indeed, such linkages may not only be essential to determining good policy outcomes in a democratic setting, but subjecting them to more transparent reporting and electoral discussions may, over time, prove also to be one way in which the preferences of the people who are allegedly being served by the state may perhaps gradually enter more directly into the determination of state policies. As Richard Musgrave (2000, 89) once said "the bottom line ... is not whether the voting process will yield an optimal result, but whether it will be superior to an arbitrary solution." He went on (p. 101) to add "...I share Wicksell's underlying optimism...that society is capable of resolving its common concerns in a reasonably efficient, just and democratic manner," concluding that "I am aware this is not the best of times for that hypothesis, but there is more time to come." We must all hope that he was right and that time is on our side in developing a more comprehensive and normatively satisfactory perspective on the process and outcomes of the intergovernmental grant systems found in every country.

6. Concluding Remarks

In this paper we have sketched several alternative perspectives on earmarked grants that differ substantially from that found in the traditional fiscal federalism literature. That literature's Pigouvian approach to matching and categorical grants is normatively sensible but explains almost nothing about the real world of grants. Introducing asymmetric information considerations to treat such grants as a means of encouraging self-selection in terms of expenditure needs fits well within the accepted economics canon and perhaps moves us a step further towards understanding reality.

It does not, however, go far enough. In particular, it seems insufficient to explain the changing trends in grant patterns we noted at the beginning of this paper. We have argued that a fuller explanation of observed grant levels and structures and of changes in that pattern is probably best found by exploring in much more depth the potential role of grants in terms of improving government accountability in a multi-level system of government both between governments and, perhaps more importantly, between government at both levels and citizens. This perspective is obviously critical in normative terms since all allocative analysis implicitly assumes that government policies are ultimately intended to improve citizens' well-being – and who is better qualified (in a democratic setting) to judge success in these terms than citizens themselves? Exploring these perspectives is likely to lead those wishing to understand grants policy in any country into focusing more closely on the (perhaps changing) political-bureaucratic structure within which grant policy and practice is developed, carried out, and amended. Such work has just begun (see Hellerberg et al. 2009); there is much more that can and should be done.

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