

**INTERGOVERNMENTAL FISCAL TRANSFERS: SOME LESSONS FROM
INTERNATIONAL EXPERIENCE**

by

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1. Introduction

Intergovernmental fiscal transfers are important in many countries. Whether the results of transfers are good or ill depends upon the incentives that transfer systems create for both central and local governments.² Section 2 of this paper discusses the objectives of intergovernmental fiscal transfers. Section 3 then sets out a few of the key aspects of the underlying context within which transfers must function. Against this background, Section 4 of the paper considers briefly some of the key elements of transfer design. Section 5 summarizes the principal conclusions. Although we do not attempt in this paper to review in detail the varied, complex, and country-specific transfer systems found in many countries, where appropriate some country experiences are used for illustrative purposes.³

2. The Role of Transfers

Intergovernmental fiscal transfers are neither inherently good nor inherently bad. What matters are their effects on such policy outcomes as allocative efficiency, distributional equity, and macroeconomic stability. If, for example, the sole objective of fiscal decentralization is the efficient delivery of public services, then what matters is how transfers affect the effectiveness and efficiency of public sector operations. The most critical aspect of intergovernmental transfers is thus not who gives them or who gets them but their *effects* on policy objectives. These effects depend upon both the design of transfers and the conditions in which they operate.

Since circumstances and objectives differ from country to country, no simple, uniform pattern of transfers is universally appropriate. Experience around the world reinforces the common sense argument that for services to be efficiently provided, those receiving transfers need a clear mandate, adequate resources, and sufficient flexibility to make decisions. They must also of course be held accountable for results. To satisfy these conditions, transfers must be properly designed.

The basic task in transfer design is to get prices “right” in the public sector – right, that is, in the sense of making local governments fully accountable -- at least at the margin of decision-making – to both their citizens and, where appropriate, to higher levels of government. Transfers that are properly designed can achieve this goal even if they finance 90 percent of local expenditures. Poorly-designed transfers will not,

² In this paper, we use the term “local governments” to encompass all governments below the national (central) level.

³ Much of this paper is based on an earlier review of these issues in the Latin American context in Bird (2000). For a more extended review encompassing many other aspects of intergovernmental fiscal relations, see Bird (2001). Since many of the questions discussed here are far from settled in the literature, readers may also wish to consult two other recent -- and very different -- discussions of the role and design of transfers in developed countries: Carlsen (1998) and Duncombe and Yinger (1998). The examples used in the paper are taken from earlier reviews of transfer systems in various countries, both developed and developing.—for example, Bird (1986), Shah (1994), Bird, Ebel and Wallich (1995), Ahmad (1996), Ter-Minassian (1997), and Bird and Vaillancourt (1998) – and may not reflect the current situation in the countries mentioned.

even if they finance only 10 percent of expenditures.⁴

The implications of this approach for the design of transfers may be illustrated by considering briefly some of the basic tasks assigned to transfers in most fiscal systems: closing the fiscal gap, equalization, pricing externalities, and achieving political objectives.

2.1. Closing the Fiscal Gap

Transfers are how most countries achieve vertical fiscal balance, that is, ensure that the revenues and expenditures of each level of government are approximately equal.⁵ Such fiscal gaps may in principle be closed in other ways -- by transferring revenue-raising power to local governments, by transferring responsibility for expenditures to the central government, or by reducing local expenditures or raising local revenues. In most countries, however, sufficient mismatch in the revenues and expenditures assigned to different levels of government remains for some balancing role to be assigned to intergovernmental fiscal transfers (Boadway and Hobson 1993).⁶

No matter what its stated purpose may be, *any* transfer from higher-level to lower-level governments will help close the fiscal gap. For many purposes, however, it is useful to think of vertical fiscal balance as being achieved when expenditures and revenues (including transfers) are balanced for the *richest* local government, measured in terms of its capacity to raise resources on its own (Bird 1993). Fiscal gaps will of course still remain for all poorer local governments, but such gaps are better considered as part of the problem of achieving *horizontal* fiscal balance within the local government sector rather than vertical balance between levels of government.

2.2. Equalization

Horizontal fiscal balance, or equalization as it is usually called, is controversial both because different countries have very different preferences in this respect (Bird 1986) and because it is a concept with many different interpretations. For example, if horizontal fiscal balance is interpreted in the same gap-filling sense as vertical fiscal balance, what is implied is that sufficient transfers are needed to equalize revenues (including transfers) and the *actual* expenditures of each local government. Such "fiscal dentistry," as this approach has been called by Rao and Chelliah (1991), makes no sense.

Equalizing the actual outlays of local governments in per capita terms (raising all to the level of the richest local government) in effect ignores differences in local preferences and hence one of the main rationales for decentralization in the first place. It also ignores local differences in needs, in costs, and in own revenue-raising capacity. Equalizing actual outlays would discourage both local revenue-raising

⁴There is no analytical rationale for the argument sometimes made that accountability requires, say, half or more of local expenditures to be financed from local sources. Jha (1999) found that the higher the ratio of central grants to total expenditures, the lower the tax effort in major Indian states, but this finding appears mainly to reflect certain institutional features in India.

⁵Vertical imbalance refers to the difference between expenditures and own-source revenues at different levels of government. Horizontal imbalance refers to the differences between the resources available to governments at the same level, that is, regional inequalities.

⁶For a discussion of how this gap-filling role may be largely eliminated by better design of local revenue systems, see Bird (2000a).

effort and local expenditure restraint, since under this system those with the highest expenditures and the lowest taxes get the largest transfers.

A grant system can thus create poor incentives for local governments to raise their own revenues. This effect is most obvious in a revenue-pooling system, such as that used in Germany, Russia, and other countries, in which a given share of locally-collected taxes is distributed among all local governments. In such a system, local governments receive only a fraction of the revenue collected in their own jurisdictions, with the rest distributed to other governments, usually through an equalization formula of the sort discussed in Section 3 below. Since the cost of local taxation is higher than the benefit to the local treasury, the marginal cost of public funds appears artificially high to the local government.

This disincentive effect is so clear that such revenue pooling arrangements seem never to be used when local governments can influence the tax rate levied on shared bases. But problems can arise even when tax rates are set by the central government if the revenues are actually collected by local governments. Barette, Huber, and Lichtblau (2000), for example, have argued that this incentive has led to observably lower rates of tax collections by state governments in Germany. Similar problems led to the centralization of VAT collection in Mexico, where originally the central VAT was supposed to be collected by the state governments. And of course such disincentives have also been prominent in those transitional countries (such as China before 1994 and Russia still) in which central revenues are collected by tax administrations which are significantly influenced by local governments (Bird, Ebel, and Wallich 1995).

To avoid such problems, most countries which have formal equalization transfers avoid revenue-pooling and generally aim either to equalize the *capacity* of local governments to provide a certain level of public services or the actual *performance* of this level of service by local governments. The performance criterion, which adjusts the transfer received in accordance with the perceived *need* for the aided service (and which may also allow for cost differentials) is generally more attractive to central governments because the level of service funded is then in effect determined centrally, and transfers can be made conditional on the provision of that level of service. Unfortunately, unless adequate adjustment is made for differential fiscal capacity, with this system once again that government which tries least will receive the most.

In contrast, under capacity equalization the aim is to provide each local government with sufficient funds (own-source revenues plus transfers) to deliver a centrally-predetermined level of services.⁷ (Differentials in the cost of providing services may or may not be taken into account.) Transfers are based on a measure of each jurisdiction's *potential* revenue-raising capacity (such as assessed values for property taxes or measured tax bases for other taxes) and not on actual revenues. Provided revenue capacity is measured accurately – often not an easy task – such transfers will create no disincentive for local governments to raise revenues because at the margin the local government still bears full fiscal responsibility for expenditure and taxing decisions – essentially because transfers are lump-sum (inframarginal) in nature.

Of course, if local governments can directly or indirectly manipulate the proxies for capacity used in the transfer formula, capacity equalization too may induce undesirable incentive effects. Indeed, Smart and

⁷ Note that it is important to distinguish fiscal capacity equalization (among jurisdictions) from considerations of horizontal equity (among individuals) since the two are not necessarily connected: Some U.S. literature (for example, Oakland 1994) appears to blur this distinction, perhaps because the United States is the only developed federal country with no general federal equalization system.

Bird (1997) and Smart (1998) have argued that capacity equalization may drive local tax rates higher than is desirable from a national point of view. Consider for example the “representative tax system” (RTS) formula for equalization, as used in Canada, Australia, and in a number of U.S. states. Under the RTS approach, each local government receives a transfer equal to its deficiency in the measured tax base relative to the national average, multiplied by a target tax rate that is considered appropriate (usually the national average tax rate). If all governments choose the target tax rate then capacity differences are fully equalized, and all jurisdictions have the same (per capita) fiscal resources. But measured tax bases will generally decrease as tax rates rise – for instance as higher taxes are capitalized in property values and as economic activity moves to other jurisdictions (or more lightly taxed transactions). Consequently, local governments that raise their tax rate above the target will see their tax bases depressed and their transfers rise in consequence. To put this another way, when the local tax is just at the target level, the marginal excess burden of higher taxation perceived by the local government is zero because of the transfer effect, although it is strictly positive for the nation as a whole.⁸

The magnitude of such effects is an empirical question. There has been little formal investigation of the impact of capacity equalization on the tax policies of recipient governments, although there is some anecdotal evidence in Canada that provinces that receive equalization payments set higher tax rates on some bases than non-recipients. Moreover, Boadway and Hayashi (2000) found that recipient provinces were less likely than non-recipient provinces to respond to business tax cuts by other provinces despite the potential for lost revenues through tax base flight. This finding is consistent with the hypothesis that this form of equalization may induce excessive taxation.

Full equalization as defined above in the sense of closing all gaps will be achieved only if the standard revenue-raising capacity which the grant is intended to provide is set at the level of the richest local government. In most countries, budgetary constraints lead to lower standards, such as the average revenue-raising capacity of local governments. In such cases, localities with below-average capacities obviously remain disadvantaged.⁹

Equalization transfers may have two distinct rationales. The first is to provide the necessary underpinning for decentralization in general (and, as discussed below, for matching transfers), by equalizing to some level the fiscal capacity of territorial entities, thus putting all closer to being on the same footing with respect to incentives. A second rationale might be to provide sufficient resources to enable all local governments, even the smallest and poorest, to provide a basic package of local services.¹⁰ From a purely economic point of view, the second of these objectives may appear to make

⁸ Courchene (1994) and others stress a related disincentive effect in capacity equalization. Local governments will be discouraged from attracting new investment, since 100 percent or more of any resulting additional revenues will be “taxed back” through the equalization formula.

⁹ An exception is when the positive transfers required to bring those below the average up to the average are financed by negative transfers from those above the average (as in the *finanzausgleich* of Germany and the similar system in Denmark). More generally, the effects of any grant system are obviously determined in part by how the grants are financed (Musgrave 1961), but this important question cannot be discussed further here.

¹⁰ The objective of providing similar public services regardless of location may conflict with the desirability of migration from less (privately) productive to more productive locations. Although this subject has been discussed extensively (if not very conclusively) in the literature, it is not further considered here on the assumption that in current conditions in many developing countries the relatively small differences in location-specific public service bundles (excluding education and health, which are

little sense. Often, however, small rural areas are simply not able to provide any significant local services solely without such transfers. It is important not to confuse this lack of local resources with a lack of local capacity to make and implement suitable expenditure decisions. As Fiszbein (1997) and Faguet (2001) show, there is strong evidence in some countries that even some poor areas may manage surprisingly well if they are enabled and encouraged to do so.

2.3. Matching Grants

The rationale for transfers with the strongest basis in the economic literature is that local services may spill over to other jurisdictions. In order to induce local governments to produce the right amount of such services what is needed is some form of matching grant that in effect provides a unit subsidy just equal to the value at the margin of the spillover benefit. Although matching (or conditional) transfers make local governments more susceptible to central influence and control, they also have the important political advantage of introducing an element of local involvement, commitment, accountability, and responsibility for the aided activities. Such grants may be particularly important with respect to capital investment projects (where they may either substitute for or supplement subsidized loans).

If a central government wishes to use its scarce budgetary resources to attain given standards of expenditure on certain services provided by local governments, it should pay only as much of the cost as is needed to induce each local government to provide that level of service. With a grant of m percent of cost, the effective price to the locality is $1-m$. To ensure maximum total (local plus central) expenditure on any service, given a fixed total central government contribution, the optimal way to allocate the total among localities will be to vary it inversely to the price elasticity of local demand for the service (assuming no cross-price elasticity effects).

Another rationale for matching grants is to equalize differences in need or in preferences for spending where such differences are unobservable by the central government. For example, the central government may wish to increase spending on health. One way to do so is (as was done in Canada) to match local health care expenditures – say, on a dollar-for-dollar basis -- essentially on the grounds that those who choose to spend more on health are, by definition, more deserving of assistance. As with a tax deduction for health-related expenditures by individual taxpayers, more benefits thus flow to those who demonstrate their need (or preference) for the favored activity.

In principle, the correct matching rate, or the proportion of the total cost paid by the central government, should be determined by the size of the spillovers (or, alternatively, the strength of the preferences of the central government for the aided activity). This rate may decline as the level of expenditure rises if the externalities diminish or if the central preference is only for a basic or minimum national standard of service. It may also vary across localities if there are reasons to expect greater externalities in some places than in others or if there is reason to expect a higher local price elasticity of demand for the service in question in some areas. Basically, however, a matching grant program designed to encourage the optimal provision of public services would be expected to vary primarily with the nature of the activity, that is, the matching rate should depend upon the level of associated externalities.

Unless local fiscal capacities are fully equalized, however, a uniform matching grant -- which in effect offers the same price to different local governments -- discriminates against poor regions. Indeed, even if revenue bases were fully equalized, there might still be grounds in terms of need or cost differentials for

assumed to be portable) that might result in different locations from an equalization program are unlikely to be significant factors in migration decisions

including an equalization element in matching grant formulas. For example, per capita grants for roads in sparsely populated and mountainous regions should generally be larger because the per capita cost of achieving any particular standard of road service will obviously be higher.

Matching grants are sometimes inversely correlated to the income level of the recipient government. The rationale is to ensure that all local governments, regardless of their fiscal capacity, provide a similar level of certain specified public services to their residents. The basic idea is simply to set the price of the service to each local government in such a way as to neutralize differences in capacity by varying the matching rate. The higher the income elasticity of demand for the service, the higher the matching rate needed for low-income recipients (to offset the higher expenditures out of local resources on the aided service in higher-income areas), and the higher the price elasticity, the lower the matching rate needed to achieve a given level of total expenditures. There may thus be a case for introducing an equalizing element by varying matching rates inversely with income levels (Feldstein 1975).

Such equalization differs from the general equalization argument discussed earlier in three ways. First, specific services are designated -- either because they are thought to entail spillovers or because they are considered especially meritorious. Education and health have been singled out in this way in a number of countries. Second, the specific level of service to be provided is also established by the donor government. Third, the payment of the grant is conditioned on that level of the specified services in fact being provided.¹¹

Under such a program, the matching rate for each program may have two components. As noted earlier, the basic matching rate for each service would reflect the degree of central government interest in the provision of that service (whether that interest is motivated by concern over spillovers, the merit good nature of the activity, or simply the desire to implement some plan). This basic rate may then be increased inversely to some appropriate measure of fiscal capacity. Capacity is preferable to macro measures of income because what matters is the ability of the local government to raise local revenues from local citizens, which may be only loosely related to the level of per capita income or regional GDP.

The matching rate faced by any particular locality for any particular program would then be higher the greater the degree of central interest and the lower the (expected) degree of local enthusiasm (price-elasticity) and ability (income-elasticity) to support the program. The exact structure of the final formula for any service could likely be determined only after a period -- perhaps a prolonged period -- of trial and error, of observing the results of formulas such as those now in place and adjusting them as necessary to approximate more closely to the (centrally) desired outcomes. Although again there have been relatively few empirical studies of the effects on local expenditures of matching grants, it appears that local governments are often more responsive to grants for capital projects such as roads than to grants for such social services as education and welfare (Slack, 1980).

In reality, as noted in section 4 below, there are few good examples of matching grants in developing countries. One reason may be because even important interjurisdictional spillovers may largely be inframarginal, and the appropriate subsidy (matching) rate is of course that which applies at the margin. Another reason is that in practice in many countries redistributive concerns, not efficiency concerns, determine matching rates. Poor localities get more assistance because they are poor, not because a higher matching rate is required to induce them to produce the socially optimal amount of the service in question.

¹¹ For a detailed proposal for such a system in Colombia, see Bird and Fiszbein (1998).

Perhaps the most basic problem with the matching approach, however, is that it is quite demanding in terms of information. Ideally, its application requires a clear specification of the level of service to be provided. In one province of Canada, for example, 29 different types and levels of primary education service are specified in the education grant. In addition, fairly accurate and up to date estimates of the costs of providing each level of service are needed. Moreover, local governments need to have a fair degree of tax autonomy if they are to be able to respond appropriately to the incentives. In addition, standard tax rates need to be carefully specified, estimates of local fiscal capacity must be made, and, ideally, some idea of the probable effect of income differentials on local responses to differential matching rates (the price of the aided service) is needed. As a rule, even the abundant information available in developed countries is insufficient to determine the precise matching rate appropriate for particular expenditure programs, let alone how those rates should be varied in accordance with the very different characteristics of different local governments.¹² Whatever their theoretical merits, in practice in many countries conditional transfers seem to have become so detailed and onerous as to hamper effective local government.¹³

2.4. The Political Dimension of Grants

Analysis of intergovernmental fiscal relations must also recognize the reality of political transfers. It may be necessary, for example, to transfer some resources to jurisdictions that do not really need them, in order to make it politically feasible to transfer needed amounts to other jurisdictions. It may also be essential to transfer resources simply in order to keep some economically non-viable local governments alive for political reasons -- to salvage regional pride, to provide jobs for local supporters, or for some other reason.

From an economic perspective, the problem is to avoid inflicting collateral damage in the course of achieving such political objectives. As one example, transfers that simply finance local deficits or that are entirely discretionary in nature are invariably bad. A quite different example is when the function of financing local infrastructure (new water systems, roads, schools or hospitals) is assigned to an automatic and permanent transfer not linked to coverage needs. This practice creates two problems. First, the central government loses a potentially important tool to implement its development goals and to direct resources to those regions with the most important coverage gaps. Secondly, the construction of infrastructure is a discrete event and all too often other central policies ensure that local governments lack the flexibility to allocate these resources to other uses, such rigidity in funding may in the end lead to even more allocative distortions. An additional important political concern arises when transfers are changed. Since it is much easier to give someone more than to take away what they now have, revenue-neutral transfer redesign is hard to achieve. In most instances, a substantial transitional period -- with perhaps a longer transition for losers than for winners -- may prove necessary, and a common result is a short-term increase in total transfers.

¹²For a recent example of the problems even with the exceptionally rich data base available in the United States, see Duncombe and Yinger (1998).

¹³As McCarten (forthcoming) notes with respect to India, "the vast number of such schemes, their high administrative overhead costs, and rigid eligibility criteria, have undermined effectiveness and distorted state priorities." (Of course, the aim of such transfers is precisely to "distort" state priorities!)

3. The Context of Transfers

How any particular country organizes its public sector is a function of geography, political balance, policy objectives, and other characteristics that vary sharply from country to country. Since most countries have more than one level of government, they also have some kind of intergovernmental fiscal system and hence share certain problems: Who should do what? Who should collect what taxes? How should vertical imbalances be rectified? And what, if anything, should be done about horizontal imbalances? Large countries tend to have more complex and formal systems of intergovernmental finance. Developing countries tend to face problems, and possibilities, different from those of developed countries—problems often associated with political instability and lesser technical capacity. And countries that are in transition from a central-planning to a more “market-oriented” environment have still different problems—for example, with respect to privatization and the allocation of assets among governments.

Of course, some key features of intergovernmental fiscal relations tend to be similar across countries—for example, the pervasive problems of vertical and horizontal imbalance. But the optimal (and feasible) solutions are different from country to country and depend upon both where the country starts and what it is trying to do.¹⁴ Comparative analysis may be helpful in understanding just how and why certain institutional structures work (or do not work) in particular circumstances, but it is most unlikely to yield a clear prescription for what should be done at any time in any particular country.

3.1 Perspectives on Decentralization

Intergovernmental fiscal transfers are only part of a complex political, economic, administrative system. Their design, role, and effects can be understood only in the specific institutional context in which they operate. Transfers have quite a different role, for example, if local governments are viewed as agents of the central government, executing certain functions on its behalf, or if, alternatively, not only implementation but also the authority to decide what is done is in the hands of local governments, or, to put it another way, local autonomy prevails.

At one extreme, for example, the results of a transfer system may be judged by assessing how closely the expenditure pattern of recipient governments matches that desired by the donor government. Unless the goals of central and local government precisely coincide, however, and all decision-makers face exactly the same incentives as in a centralized system, there are bound to be some differences in outcome. Conflicts between central and local governments are inevitable if each government tries faithfully to serve the interests of its (different) constituents.

Alternatively, some may consider decentralization itself to be intrinsically desirable. From this perspective, whatever outcomes emerge from a decentralized system of decision-making must be right. Local people may make wrong decisions from the perspective of the central government or of an outside observer, but if *they* make them, the decisions must, by definition, be assumed to be right for them. From this perspective, the results of a good process must themselves be good.¹⁵

¹⁴Compare, for example, the very different intergovernmental systems in neighboring countries that are similar in many respects -- for example, Canada and the United States, Switzerland and Germany, India and Pakistan, and Argentina and Brazil (all of which, incidentally, have formally federal structures).

¹⁵Stringent and improbable conditions must be satisfied for this argument to be persuasive. For example, the local decision-making process must be fully democratic in the sense that the costs and benefits of

What one sees when one looks at transfers thus depends in part upon what one is looking for. Whether one wishes to implement central policy more effectively or to foster local autonomy, however, the correct design of intergovernmental fiscal transfers is critical to ensure that clear lines of accountability are established for public sector decisions. Good local government depends, on one hand, on the ability of citizens to compare governments in terms of the services they provide and the tax-prices they charge and, on the other, on the ability of citizens to be able to affect and alter the decisions of government (Breton 1996). Democracy is, of course, one important mechanism for accountability. But democracy without good information is not enough. Nor is information without democracy. Even in countries without well-established democratic institutions, in which decentralization may be simply another instrument of the central government, good information is essential to ensuring enhanced service outcomes. Experience suggests that the more that is known, and the more publicly it is known, the better the outcome of decentralization, whatever its rationale, is likely to be. It is thus important that transfers should be as *simple, comprehensible, and reliably predictable* as possible.

The economic literature on fiscal federalism essentially sets out a normative model in which, in effect, the central government, acting as the benevolent interpreter of the will of the people, structures the institutional rules of the intergovernmental system – the incentive structure – in an effort to ensure that local-government agents act as the central government (and presumably the people as a whole) wish. Even if the central government is seldom that benevolent in the real world, this literature may provide some useful guidelines (Bird 1993).

Under this approach, local governments may for most purposes be considered to be agents of the central government—or, in some federal countries, of state governments—rather than independent actors. France and Britain illustrate this pattern among developed countries (Bennett 1990), while Indonesia at least until recently offered a good example among developing countries (Shah and Qureshi 1994) as does Vietnam among the transitional countries. Among the transitional countries, China seems to be intermediate between the “loose” system in Russia and the more controlled system in Vietnam in this respect, although clearly closer to the latter—and apparently, judging by the 1994 reform, it wishes to be even closer to it.¹⁶ The appropriate analytical framework to analyze this model is agency theory (Ma, 1996).

An example of an instance in which the fiscal federalism model is a good fit is Indonesia. Until the recent changes, Indonesia had had the same government since 1965. Authority was highly concentrated in the central government, which confirmed the appointments of the governors to the 27 provinces and had officials dispersed throughout the country. The government consistently emphasized both economic growth and regional development, including a marked degree of centrally directed decentralization. Although financial autonomy—the share of local expenditures financed by local revenues—varies widely across provinces (from 8 to 70 percent), on average local governments raised less than one-quarter of their own resources (Shah and Qureshi 1994). Their major revenue source is a local property tax that is actually collected by the central government. Funds to provinces or localities were intended to promote

decisions are transparent and that everyone affected has an equal opportunity to influence the decision. In addition, the costs of local decisions must be fully borne by those who make the decisions, that is, there is no tax exporting and no funding at the margin from transfers from other levels of government. Moreover, the benefits (like the costs) of local decisions must not spill over jurisdictional boundaries without explicit and transparent compensation being paid.

¹⁶ See the discussion of the Chinese situation in Bird and Chen (1998). Vietnam is discussed in Rao, Bird and Litvack (1998, 1999) and Russia in Bird (2000b).

regional autonomy and improve local infrastructure, but could only be spent subject both to the central government's general guidelines and to the requirement that they be spent in specific sectors.

Among the stated rationales for transfers in Indonesia are two that require explicit conditionality to be effective: (1) the alleviation of inefficiencies that arise from interjurisdictional spillovers and (2) the equal provision of minimum standards in services. In line with these objectives, most transfers in Indonesia allocate funds by formula but require the funds to be spent on specified objectives. For example, specific grants are provided for provincial and district road improvement. The program is designed to provide minimum standards of road service across the nation and to facilitate the development of an internal common market. The grant allocation formula is related positively to indicators of poor roads and to low motor vehicle registrations (proxies for road expenditure needs). Local discretion in the use of the grant is restricted to the repair and upgrading of existing roads: new roads must be financed from other sources and require central approval.

In contrast, for countries like Canada in which there are important geographic or ethnic differences, Bird and Chen (1998a) have argued that what they call the "federal-finance" model of decentralization is more appropriate than the fiscal-federalism model. In such countries, some degree of local autonomy is likely to emerge in practice in order to achieve and maintain political stability, even if the constitutional structure is formally unitary.

In the traditional world of fiscal federalism (or multilevel finance), as set out by Oates (1972), in principle everything—boundaries, assignments, the level and nature of transfers—is subject to revision by the central government in its search for efficiency and, perhaps, equity. In the federal-finance model, however, jurisdictional boundaries and the assignment of functions and finances have to be taken as determined at some earlier (constitutional) stage and not open to further discussion in normal circumstances.

Where a federal structure is required to hold a country together politically—as in the case of Canada or Switzerland (Bird 1986, Dafflon, 1977) -- the central concern in designing intergovernmental fiscal relations is invariably not allocative but rather the extent to which they contribute (or not) to political stability (Breton 1996). The federal-finance setting is thus not one of principals and agents but one of bargaining between principals (who are not necessarily equal) or what one Canadian author (Simeon 1972) has called, in a useful analogy with the world of international relations, "federal-provincial diplomacy." The appropriate analytical framework is that of negotiation among equals—in the words of Wheare's classical treatment of federalism (1969) among federal and state governments that are "...each, within a sphere, co-ordinate and independent."

In the fiscal-federalism model, for example, the central government's policy preferences are clearly dominant. In the federal-finance model, however, matters such as the degree to which the central and state fiscal or regulatory regimes should be harmonized, or even the extent to which there should be an internal common market, are in effect determined jointly by both levels of government in some appropriate political (or constitutional) forum.¹⁷ In addition, both levels of government may properly pursue their own distributive policies (Tresch 1981), again with no presumption of central-government dominance. In this setting, intergovernmental transfers are appropriately often both equalizing and unconditional, as Shah (1994) emphasizes. It is this model that best characterizes relations between the

¹⁷. Contrast Ahmad (1996), who simply assumes that a unified market is a sine qua non of any federal system, with Bird (1989), who argues that Canada's market is in some respects less unified than that of the European Union (even before the Euro).

central government and the provinces or states in both Canada and, to a lesser extent, Australia, two countries with well-developed systems of regional equalization.

Given the essentially centralized political regime existing in most Asian countries, however, the more appropriate analytical framework is clearly that of principal-agent relations. In this framework, the principal (the central government) can unilaterally alter any existing arrangements it may have with its agents (local governments) in order to overcome the familiar agency problems of information asymmetry and differences in objectives between its agents and itself. Indeed, China's 1994 reforms have done just this—unilaterally altered both the revenue and expenditure responsibilities of local governments and intergovernmental fiscal relations (Bahl 1999).

If one views intergovernmental relations in a principal-agent framework, however, then neither equalization transfers nor unconditional transfers seems to have a clear rationale. The accepted argument for equalization transfers in the fiscal-federalism literature, for instance, is basically that they are necessary to ensure the provision throughout the country of comparable bundles of public services at comparable tax rates (Boadway and Flatters 1982). This argument may be appealing to many in principle. But there is clearly no universal agreement on either the desirability or the effects of general intergovernmental transfers intended to achieve this goal¹⁸ -- a point illustrated by the absence of transfers of this kind in the United States. The political and social stresses that have arisen from unbalanced regional growth may shortly require Indonesia, and perhaps even China, to pay more attention to this problem, and one result might be the a formal, transparent grant system.¹⁹ Alternatively, as has so far been true in Russia (Treisman 1999) the central government in countries such as China or Vietnam may simply continue to deal with intergovernmental relations in the same discretionary way as in the past.

Local governments in many developing and transitional countries are often subject to so many conflicting and unattainable rules that they could not behave efficiently even if they wanted to do so. Moreover, such rules often change from place to place and time to time, depending upon the shifting winds of political favor. Counterbalancing this, despite the plethora of rules the central government's capacity to monitor behavior may be so limited that local governments are really subject to no effective controls at all—an approach that is equally flawed if one's aim is to attain the objectives of the central government efficiently and effectively. The picture in many countries is one of ad hoc negotiation between governments and regions, of considerable instability in intergovernmental relations, and of substantial difficulty in knowing exactly what is going on. None of this should come as news to students of intergovernmental fiscal affairs in most Asian countries in recent years.

Finally, as Bird, Ebel, and Wallich (1995) emphasized, those concerned with intergovernmental fiscal institutions in transitional countries such as those in Central Asia face at least three problems that do not confront their counterparts elsewhere. First, transitional countries are almost invariably in the process of downsizing government. It is difficult to restructure incentives constructively when budgets are being cut. Moreover, it is virtually inevitable that establishing effective local governments is not high on the priority list of hard-pressed central governments. Second, a critical part of the transition process is to develop not just an effective private market economy but also an effective public sector to work with, and guide, that economy. It is hard enough to create a public sector in this sense at one level of government; to do it at more than one level is doubly (or triply) difficult. If political liberalization is part of the

¹⁸On this, see the recent debate between Oakland (1994) and Ladd and Yinger (1994).

¹⁹As has been urged by many authors in China, such as Lou (1996). For a more skeptical view, see Bird and Chen (1998).

transitional process, this effort may have to be made in any case in order to prevent the development of separatist movements, particularly in the more prosperous parts of the country. But if the political system remains centrally controlled, as in China, such concerns are again likely to fall to the end of the queue. Finally, both downsizing and disentanglement require a clear separation of business from government—something that has definitely not yet occurred in either China or Vietnam to any significant extent.

3.2 Central Government Policy

The institutional setting within which local governments in developing countries function has been characterized as falling into one of three categories: (1) the over-controlled local public sector, (2) the under-controlled local public sector, and (3) the perversely regulated local public sector.²⁰ The first of these situations seems most common in developing countries, not least in Asia. Central governments control most details of local government -- who they hire, what they pay, where and when the buses run, etc. -- and leave little or no freedom of action for local initiative. Similarly, central governments often either finance local services directly or so earmark and restrict local finance that they might as well do so. In such circumstances, local citizens look to the central government to fix potholes on their street, and they are right to do so. Such micro-control generally produces weak and incapable local governments.

While less common, the opposite ill of under-control has emerged in some countries as a result of inappropriate decentralization strategies. For example, a number of transitional countries in eastern Europe have given local governments large shares in national revenues as well as responsibility for important public service functions, without at the same time setting up an adequate institutional structure to ensure that central funds are being properly spent in, say, maintaining minimum standards of service in such areas of overriding national concern as education or health. Some have characterized the situation in the Philippines along similar lines.

Finally, all too frequently local governments receive perverse signals from central governments. In some countries, for example, the amount of transfers received depends upon the size of the local budget deficit, an obviously perverse incentive. In others, national funding is available for infrastructure investment at no cost but no funds are available for operation and maintenance. As mentioned in section 2.4, this preference for new investment is perverse because it pays localities not to maintain existing facilities (which they would have to do out of their own funds) in order to strengthen their apparent need for new ones (which the central government will pay for).

Of course, even when the incentives facing local government are wrong-headed, local efforts and policies may sometimes make a real difference. In Brazil, for example, some cities are well-run and efficiently provided with services, while others, superficially similar in character and resources, are badly-run and poorly equipped. In Colombia, some departments provide superior health services than others with similar resources. Almost everywhere, some local governments do much better than others. The reason may be simply historical circumstance: for one reason or another they started to do something well some time ago, and they continue to do so. An outstanding example is the state of Kerala in India (Dreze and

²⁰See World Bank (1995). Carlsen (1998) discusses the theoretical arguments for maintaining some degree of central control and the methods of doing so. Bird and Fiszbein (1998) analyze the importance of such controls in determining the outcomes of alternative transfer designs. As usual in economics, interior solutions involving tradeoffs seem generally preferable to either of the corner solutions of complete central or complete local control.

Saran, 1993). Or, as in the case of the well-known Orangi project in Pakistan, good results may be achieved owing to a caring and charismatic local leader or some other chance circumstance (Habitat, 1996).

Such experiences emphasize two important points. First, even in the perverse situation in which many local governments are placed by inappropriate central policies, there is usually some scope for local initiative. Second, such local initiatives may make a real difference in the lives of local people. One of the most important concerns in designing intergovernmental fiscal transfers is to make it easier for such "good examples" to occur and to be emulated elsewhere.

In doing so, it is important to recognize more explicitly the diversity of local governments than is now done in many countries. "Local government" is a term that covers a wide range of realities in most countries. Cities of 10 million people, villages with 200 inhabitants, densely populated rural and urban areas, sparsely populated territories -- all are, as a rule, organized in one form of local government or another. Some localities are rich, some are poor. Some have strong local community spirit, some have none. Some are run by well-intentioned, well-trained people; others by incompetent and corrupt officials. Unfortunately, the diversity of local government reality is seldom matched by equal diversity in central government rules governing local governments. Even though some areas may manage to break out of the inappropriate mold into which they have been put, most will not. Successful decentralization must recognize the diversity and heterogeneity of the local government universe and allow for an equally diverse and heterogeneous set of responses to particular decentralization initiatives, including accommodating home-brewed solutions to particular local problems.

In some circumstances, a useful approach to this problem may be through contracts, or the making of specific agreements with different areas in accordance with their capacities and interests. At its best, such an approach can focus pragmatically on what may work rather than on attempting to fit everyone into the same centrally-determined box. It may thus be sensible for central governments to make individual contracts with particular local governments (preferably for a period of years rather than on an annual basis and preferably arrived at in an open and mutually-agreed fashion). Indeed, given the diversity found within many countries and the usual political necessity to have nominally uniform laws, only something like this contract approach may be able to provide the necessarily non-uniform terms needed to secure the desired outcomes at least cost. On the other hand, it can be difficult to distinguish such a "contract" system from a purely discretionary system. Unfortunately, the design, and limits, of such asymmetrical fiscal federalism has so far received little analytical attention.²¹ The optimal design of transfers in such cases might appear on the surface to be as complex, diverse, and apparently arbitrary as the transfers that actually exist in many countries. But the complexity and diversity would almost certainly be quite different in character from that found in practice, and the system would be both more transparent and predictable.

3.3.Accountability

If decentralization is to work as advertised in the literature, those charged with providing local infrastructure and services must be accountable *both* to those who pay for them and to those who benefit from them -- two groups that are not identical when there are transfers. Enforcing such dual accountability is not easy. It requires not only clear and correct incentives but also the provision of adequate information to local constituents, as well as the opportunity for them to exercise some real

²¹ For some case studies, see Bird and Stauffer (2001).

influence or control over the service delivery system. As De Soto (1989) has emphasized, informal organizations almost by definition must be structured like this or they cannot exist. But it is a considerable challenge in the political and social circumstances of many developing countries to introduce a similar degree of responsiveness into formal governmental organizations.

Since accountability is the key to improved public sector performance, and information is the key to accountability, the systematic collection, analysis, and reporting of information that can be used to verify compliance with goals and to assist future decisions is a critical element in any decentralization program.²² The need for such information has not been sufficiently taken into account in most countries.

Good information is essential both to informed public participation through the political process and to the monitoring of local activity by central agencies responsible for supervising and (usually) partially financing such activity. Unless local publics are made aware of what is done, how well it is done, how much it cost, and who paid for it, no local constituency for effective government can be created.

Similarly, unless central agencies can competently monitor and evaluate local performance, there is no assurance that functions of national importance are adequately performed once they have been decentralized. Somewhat paradoxically, an important feature of any decentralization program should thus be an improvement in national evaluation capacity. Decentralization and improved central evaluation and assessment of local activities are not substitutes; they are complements. Hard budget constraints are needed to induce efficient local decisions.²³ One element of such a constraint in most countries is adequate central enforcement capacity in the shape of credible information-gathering and evaluation. The carrot of central financial support of local efforts must be accompanied by the stick of withdrawn support if performance is inadequate – a policy which of course requires both some standard of adequacy and some way of knowing how performance measures up.

Several possible mechanisms for building such evaluative capacity into a decentralization program are suggested by experience around the world:

One approach may be to build in sunset provisions into any transfer program, that is, to provide that transfers to local institutions are subject to renewal in a number of years, provided they pass some kind of independent evaluation of their performance.

Another approach may be to use the likely need for some centrally-supported access to capital markets for infrastructure finance not only as a screening device to reject obviously flawed projects but also an evaluation system to build up ratings of local capacity and effort.

Yet another may simply be to assemble and publicize reliable comparative information on local government performance. For reasons discussed in section 4.2 below, however, it is unlikely to make sense to attempt to utilize such information directly in the distributive formula of transfers.

4. The Design of Transfers

Three critical aspects of intergovernmental fiscal transfers that need attention in any jurisdiction are the size of the "distributable pool," the basis for distributing transfers, and the role of conditionality and matching grants.

²²The obvious absence of such information in many countries can often be explained by the absence of any coherent decentralization strategy in the first place.

²³ For detailed discussion, see Rodden and Litvack (forthcoming).

4.1. Determining the Distributable Pool.

An important characteristic of any good system of intergovernmental grants is *stability*. Another is *flexibility*. How can both these characteristics be achieved simultaneously? Basically, there are only three ways to determine the total amount to be transferred (sometimes called the distributable pool or the primary distribution): (1) as a fixed proportion of central government revenues; (2) on an ad hoc basis, that is, in the same way as any other budgetary expenditure; and (3) on a formula-driven basis, that is, as a proportion of specific local expenditures to be reimbursed by the central government or in relation to some general characteristics of the recipient jurisdictions.

In the *Philippines*, for example, most funds transferred to local governments come from a pre-determined share of national taxes -- the Internal Revenue Allocation -- and are allocated according to population, area and equal share (the weights used are 70 percent, 20 percent, and 10 percent). For the most part, these transfers are not conditional, except for the requirement that 20 percent should be used for "development purposes". Since local governments seem to be using part of their 20 percent development fund for a variety of medical, nutrition, social welfare, cultural, youth and sports expenditures, this condition does not seem to be very onerous in practice (Bird and Rodriguez 1999).

Similarly, *Colombia* distributes 25 percent of (non-earmarked) national current revenues to departmental (intermediate-level) governments in part in equal portions and in part on the basis of population. Colombia also distributes 30 percent of value-added tax revenues to municipal governments largely on the basis of population. The first of these transfers is earmarked specifically to financing education and health services. The second, while nominally designated for "social infrastructure," is in practice heavily influenced by numerous central government laws and regulations relating to local finance (Bird and Fiszbein, 1998).

Similar systems operate with respect to most major taxes in some developed countries. Examples are *Austria*, where local governments receive about 12 percent of income and value added taxes, and *Japan*, where local governments receive 32 percent of income and alcohol taxes. In both cases, the resulting total is distributed in accordance with a formula that takes into account such factors as population and community size. Large federal countries such as *Brazil* and *Nigeria* also tend to use such systems.

Many other countries (such as most of the transitional countries of central and eastern Europe) have so-called "tax sharing" (revenue-pooling) systems that distribute a fixed share of certain national taxes -- e.g. the income tax or the value added tax -- among local governments. Although many of these systems attempt to allocate all or part of the total thus determined in accordance with the origin (or "derivation") of the tax revenues being shared, others (e.g., in *Germany* and *Morocco*) allocate the total set by the shared tax amount in accordance with a formula that attempts to take into account both needs and capacity.

An alternative system was used in *Canada* with respect to the largest federal transfer to the provinces (the so-called CHST, or Canada Health and Social Transfer). This transfer was initially set in per capita terms to be equal in amount to certain (matching) transfers it replaced, and was subsequently adjusted as a function of a three-year moving average of nominal GDP growth. Under increasing budgetary pressure, the federal government both weakened the link to GDP growth (the adjustment factor was altered to GDP growth less 3 percent) and for some years imposed a "cap" on the absolute amount of transfers going to the richest provinces. Such measures may relieve federal finances, but they obviously vitiate to some extent the stability of revenue flow accruing to the provinces. Yet another approach might be to have a

"horizontal equalization" transfer, as in *Germany*, *Denmark*, and to some extent *Chile*, under which, in effect, rich local governments directly transfer resources to poor localities without directly affecting central revenues.

From the perspective of central government, the best system would likely be one in which is determined annually in accordance with budgetary priorities. With this system, however, recipient governments will neither be able to budget properly nor will they face an appropriately hard budget constraint. On the other hand, any system in which the total transferred is "demand-driven" or "open-ended" – driven, for example, by local expenditures or revenues (like the Canadian equalization system) – is unlikely to be popular with central governments in developing countries. On the whole, the best way to provide both some degree of stability to local governments and some degree of flexibility to the central government is to establish a fixed percentage of all central taxes (or current revenues) to be transferred. sharing specific national taxes is less desirable than sharing all national taxes because experience shows that it leads central governments over time to tend to increase more those taxes which they do not have to share.

4.2. The Distributive Formula.

Any good transfer system should distribute funds on the basis of a formula. Discretionary or negotiated transfers are always undesirable. The essential ingredients of most formulas for general transfer programs (as opposed to matching grants which are specifically intended to finance narrowly-defined projects and activities) are *needs*, *capacity*, and *effort*. Often, needs may be roughly but adequately proxied by some combination of population and the type or category of local government. A more difficult, but conceptually critical, problem is usually to include some measure of the capacity of local governments to raise resources, given the revenue authority at their disposal. In order to remain transparent, formulas should not be too complex. As discussed further below, effort may be taken into account in a formula including capacity. Any desired degree of inter-jurisdictional equalization can be build into such a formula.

A possible aim of such a transfer system might be to provide each local government with sufficient funds (own-source revenues plus transfers) to deliver a (centrally) predetermined level of services. Because capacity-based transfers are in principle based on measures of *potential* revenue-raising capacity (not on actual revenues), no disincentive to fiscal effort is created by this approach.²⁴ Differentials in needs and in the cost of providing services (for example in rural or less densely-populated areas) may be taken into account as desired -- although caution is necessary in this respect since it is all too easy to turn a simple, transparent formula into an obscure and manipulable one by introducing too many refinements.

Relatively few developing countries include explicit capacity measures in their formulas. *Nigeria* includes a measure of tax effort in the basic distributional formula to states, and *Colombia* has such an element in one of its transfer programs. *Chile* goes further and actually "taxes" richer localities to some extent by reducing their transfers and raising those granted to poorer localities. *Argentina* had some experience with a transfer formula from 1973 to 1988, distributing 65 percent in accordance with population, 10 percent in accordance with the inverse of population density, and 25 percent in accordance with an index of the "developmental gap", which in turn was based on measures of the quality of housing, the number of vehicles per inhabitant, and the level of education.

²⁴ In fact, as noted in section 2.2, there may be a stimulus to excessive taxation by recipient units.

Sometimes, cruder adjustments are made simply by reserving a larger share of the transfer for parts of the country considered to be especially poor or needy (e.g. mountainous regions or remote regions or those with large concentrations of particularly poor groups). The most common formula elements found in developing countries are population and land area, occasionally with some adjustment for some of the factors just mentioned (e.g. remoteness from central markets) or for the size of the municipality.

Capacity measures are more common in transfer formulas in developed countries. In *Spain*, for example, 25 percent of local transfers are allocated in accordance with local tax collections (and 70 percent on population). *Denmark* and *Sweden*, like *Canada* and *Australia*, explicitly calculate local transfers on the assumption that the average "national" local tax rate is applied, thus creating an incentive to levy at least average taxes since those localities that levy above average local taxes are not penalized while those that levy below average taxes are not rewarded. Of course, this approach makes sense only if local governments have the ability to vary local tax rates, at least within limits. The absence of much local autonomy with respect to local taxes combined with data difficulties probably explains the relatively few examples of transfer programs incorporating explicit capacity measures in developing countries.

In some countries, attempts are made to incorporate explicit measures of "fiscal effort" into distributive formulas. *Brazil*, for example, allocates some transfers in accordance with per capita income levels in the different states. *Korea* assumes that a standard tax rate is applied by cities and lowers the transfer if the actual rate is lower. In general, however, it is not advisable to include explicit measures of fiscal effort in such formulas, for a number of reasons. Conceptually, while it is not easy to define fiscal effort, it is probably most meaningfully understood as the ratio of actual taxes collected to potential taxes estimated on the basis of some standard measure of fiscal capacity and some standard (e.g., national average) tax rate. Even when so defined, the general absence of reliable empirical estimates of fiscal capacity renders the concept largely non-operational.

The measurement of fiscal effort is complex. If, for instance, tax bases are sensitive to tax rates, then the usual measures overestimate capacity in low tax-rate areas (and hence underestimate the effort needed to increase tax rates) because the base will decline if the rate is increased. Moreover, given the limited flexibility most local governments in developing countries have to alter their revenues through their own actions in any case, it is unclear to what extent it is meaningful to interpret the behavior of revenues as reflecting their effort. In addition, placing too much weight on fiscal effort in allocating grants often unduly penalizes poorer areas, where, by definition, a given percentage increase in effort (as usually measured) is more difficult to achieve (Bird 1976). The problem giving rise to the need for equalization in the first place is that the fiscal capacity (tax base) of poor areas is too low, not that their tax rates are too low. Imposing an additional penalty on poor localities in a transfer program that, given the shortage of resources in developing countries, will almost inevitably fall short of fully equalizing fiscal capacity seems hard to justify. On the other hand, experience in a number of countries suggests that introducing an effort correction into fiscal transfers may often give more to poorer areas -- that is, increase the redistributive effect of transfers -- because poorer areas, once their much smaller fiscal capacity is taken into account, often levy relatively higher taxes than their richer neighbors in any case in part perhaps because of the incentive for excessive taxation discussed in section 2.2 above.

Such arguments, combined with the fact that properly-designed equalization transfers in any case embody a strong implicit incentive for transfer recipients to levy taxes at least at average levels, suggest that it is neither necessary nor desirable to include explicit effort factors in transfer formulas -- even if such factors could be calculated in some reliable way. Nonetheless, it is of course important to take fiscal effort into account in a more general sense in designing transfers (Wiesner, 1992). The reason is not because of some technical worry about the substitutability of transfers for local resources. It is rather

because it seems essential to require local citizens to pay in some meaningful sense for what they get, if those who make local expenditure decisions are to be held accountable through local political institutions for their actions. So long as local governments are spending what they and their constituents view as "other people's money," they are unlikely to be under much local pressure to spend this money efficiently.

Experience everywhere suggests that people are more careful in spending money they have to earn (taxes they have to pay themselves) both because they are aware of the pain of taxation as well as the pleasure of expenditure and because they will feel more ownership of the activity. Local resource mobilization is thus an essential component of any successful decentralization exercise. Unless increased transfers are matched by a local contribution -- however small that contribution may be in the poorest communities -- the full efficiency benefits of decentralization are unlikely to be realized. People do not, it seems, take ownership of what is given to them in the same way as they do of things they have to pay for themselves, at least in part. And without local ownership, expenditure efficiency seems unlikely to be enhanced by decentralization.

4.3. Conditionality and Matching Grants.

Once the total amount to be distributed has been decided, and the basic distribution formula determined, the remaining question is whether the transfer should be made conditional on the provision of certain services at specified levels. Money is fungible, so even transfers based solely on need and capacity measures do nothing to ensure that the recipient governments will in fact use the funds they receive as the central government might wish unless receipt is conditioned on performance and compliance is monitored in some way. As a general rule, in the circumstances of most developing countries in which the agency model (see section 3.1) seems applicable, some conditionality therefore often seems desirable -- particularly when important national services such as education and health are provided by local governments (Bird and Fiszbein 1998).

When local governments are expected to play a major role in delivering social services, they inevitably depend in large part on central fiscal transfers to do so. The design of such transfers takes two quite different approaches. On one hand, to the extent the primary objective is to ensure that all regions have adequate resources to provide such services at acceptable minimum standards, simple lump-sum transfers, with no conditionality other than the usual requirements for financial auditing, are called for (Shah 1994). This "federalist" approach assumes that the funds flow to responsible local political bodies, that there is sufficient accountability, and that it is neither necessary nor desirable for the central government to attempt to interfere with local expenditure choices. On the other hand, when the central government uses local governments as agents in executing national policies, such as in providing primary education, then it makes sense to have transfers conditional on the funds actually being spent on education or on certain educational performance (Bird 1993).

The *Philippine* model seems close to the federalist approach. Most funds transferred to local governments come from the internal revenue allocation (also known as IRA). These transfers are allocated according to population, area and equal. The poorest region (Bicol) received slightly above the average, while the Cordillera Administrative Region received almost double the average regional transfer per capita. On the whole, there is not much apparent relation between per capita transfers and levels of regional poverty in the Philippines (Bird and Rodriguez 1999).

In *Indonesia*, general-purpose transfers represented only 23 percent of all transfers in 1990-91 (Shah and Qureshi 1994). Transfers per capita were lower than the average provincial transfer for the capital,

Jakarta (as for Metro Manila in the Philippines). On the whole, however, per capita transfers appear to be more closely related to poverty levels in Indonesia. The two poorest provinces in the country, in Timor, received quite different transfers, presumably reflecting in part the political situation. The frontier province of Irian Jaya received more than three times the average provincial per capita transfer.

Frontier regions also receive strong attention from central governments in Argentina and Chile. In sharp contrast to Indonesia, however, only 14 percent of transfers to provinces were conditional in *Argentina* in 1992. As in Indonesia, the relationship of transfers and poverty was broadly positive, with poorer provinces receiving more support from the central government, though it was not the very poorest that gained most (Porto and Sanguinetti 1993). Per capita transfers to the poorest provinces (Chaco, Formosa and Santiago del Estero), which have around 40 percent of their populations under the poverty line, were only slightly higher than the average per capita transfer to all provinces, while some relatively wealthier provinces such as Catamarca received almost double the average per capita transfer.

As discussed in section 4.2, it is desirable to require local governments to cover some proportion of the cost out of their own funds for accountability and efficiency reasons. In addition, given that different localities have quite different capacities to finance services, it may (as noted in section 2.3) be appropriate to require different degrees of local finance (matching ratios). An example of such a system is in *Zambia*, where local governments receive a transfer which equals the difference between the estimated cost of providing a specified level of local services and the expected revenues to be raised locally by applying a standard set of local tax rates. A similar matching grant exists in *Korea*, and similar systems, with varying degrees of refinement, have been proposed in many other countries (e.g. *Hungary*) and to a limited extent already exist for some services in others (e.g. *Colombia*). As noted in section 2.3, the basic problem with this approach is that it is quite demanding in terms of information.

Transfers intended to finance particular types of service (e.g. road maintenance or education) are often linked to particular measures of need such as length of roads or number of students. At one extreme, this approach leads to the sort of "norms" found in *Vietnam* and a number of other transitional countries (e.g. *Hungary*), and gives rise to patterns (e.g. allocating funds on the basis of installed capacity) which may reflect past political decisions, rather than need. More careful determination of expenditure needs may have some role with respect to conditional grants -- e.g. for basic education -- but seems less likely to prove useful with respect to grants intended to finance general local expenditures.

Experience in countries such as *Australia* and *Canada* suggests that a considerable amount of reliable disaggregated data is required before the detailed "norm" approach makes sense. In the absence of such data, simpler approaches based on e.g. population and a simple "categorization" of localities (by size, by type, perhaps by region) seem more likely as a rule to prove useful in measuring general expenditure needs. A number of developing countries distribute transfers by a formula intended both to equalize public expenditures in localities with differing needs and capacities and to stimulate local fiscal efforts, although severe data problems often constrain the parameters employed in such formulas.. Simpler approaches -- like those used in *Morocco* and *Colombia* -- based on such generally available (and moderately reliable) factors as population and a simple "categorization" of localities (by size, by type, perhaps by region) have sometimes proved to be helpful guides to general expenditure needs.

4.4 Grants for Capital Projects

Finally, it is worth considering briefly the role of transfers in financing local capital investment. Central

governments have two reasons for being interested in what local governments do in financing infrastructure. First, some local infrastructure projects may involve significant externalities. Second, some such projects may constitute essential elements of national development programs. Infrastructure related to the provision of basic education and health services, for example, may qualify for both reasons, as may projects improving the level and quality of water supply and sewerage treatment. Support of local roads and some rural development projects may be justified as part of efforts to improve the economic productivity of poor rural areas.

In a decentralized system, in principle, local governments should identify infrastructure needs and execute projects. Financing large infrastructure projects from local resources alone may of course not always be possible, given the scanty current revenues of most local governments. Moreover, small localities seldom have much access to private capital markets. If they are to carry out costly public works, they must therefore as a rule rely heavily on grants (or subsidized loans) from higher-level governments. The assistance currently provided for purposes of capital expenditure in most countries, whether through transfers or subsidized loans, could be significantly improved in a number of ways (Bird 1994).

First, the terms and conditions of such transfers should require local governments to prepare both an adequate investment plan and an adequate maintenance plan (as well as an appropriate user charge policy). Second, the localities that receive such transfers should be selected not by political factors but by a systematic process that pays attention both to needs and to capacity as well as the economic evaluation (such as cost-benefit analysis) of the project in question. Third, adequate technical assistance should be made available to local governments (not necessarily, or indeed, not even desirably from central governments) to permit them to develop plans, arrange financing, manage construction, and operate the facility in the most efficient possible fashion. Fourth, the execution and operation of grant-aided work should be monitored and evaluated, with periodic progress reports, field inspections, and formal evaluations of outcomes. Finally, all local governments receiving such aid should be required to provide surveys of the condition of the infrastructure to which aid is to be directed in order to permit adequate assessment of future needs. Although meeting such conditions may seem like a counsel of perfection in the conditions of many developing countries, to the extent they are not satisfied, the results of central aid to local public works projects are unlikely to be satisfactory.

As noted in section 2.3, in theory a matching grant, in which the central government pays part of the cost of expenditure carried out by a local government is the best way to finance projects in which some of the benefits from the local activity in question spill over to other localities. Properly-designed matching grants also have the political advantage of introducing an element of local involvement, commitment, accountability, and responsibility for the aided activities. Money alone will not do the job, however. It has to be provided in the right framework, in the right amounts, and to the right recipients under the right conditions. For such a system to work, the central government needs both clear objectives and an operational system that can efficiently work with local governments interested in having access to these resources.

Unfortunately, few developing countries satisfy either of these conditions.

5. Conclusion

The principal lessons for transfer design that seem to emerge from international experience and the preceding discussion may be summed up as follows.

First, as a rule there is a role for both general purpose transfers and for special purpose matching grants (e.g. for infrastructure).

Second, it is generally advisable, from the points of view of both the grantor and recipient governments, that the total pool of resources to be distributed in general purpose transfers be set in a stable but flexible way (e.g. as a percentage of central taxes, adjustable every few years).

Third, general purposes grant should take into account both need and capacity, but it should do so in as simple, reliable, and transparent a fashion as possible.

Fourth, if the general purpose grant is properly designed, and if local governments have some discretion in tax policy, there is no need to include specific incentive features to encourage additional tax effort.²⁵

Fifth, as a rule no conditions should be imposed (e.g. through earmarking or mandates) as to how such general purpose grants are spent.²⁶

Sixth, on the other hand special purpose grants should usually have a matching component, which probably should vary both with the type of expenditure and the fiscal capacity of the recipient.

Seventh, in particular to the extent such grants are intended to finance infrastructure, recipients should be required to satisfy technical conditions sufficient to ensure that the money is properly spent.

Eighth, and finally, all local governments should be required to manage financial matters in accordance with standard procedures, to maintain adequate and current accounts, and to be audited regularly and publicly.²⁷ Similarly, although central governments should not pre-approve or direct in detail local government budgets and activities, they should maintain up-to-date and complete information on local finances and make such information publicly available. In the world of intergovernmental fiscal relations, better information is not a luxury. It is an essential component of a well-functioning system.

Countries that do all these things correctly will have good systems of intergovernmental fiscal transfers. Those that do not, will not.

²⁵Unless for some reason it is desired to expand the size of the local public sector beyond the level that would be chosen by local decision-makers (which may already, as noted in section 2.2, be too high).

²⁶ See Bird and Fiszbein (1998) for a detailed discussion of this and the next two conditions and for an illustration in the case of Colombia.

²⁷ This subject has not been discussed in detail in this paper: for an introduction, see Bird (2001).

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