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**Decentralization:
A Survey from a Child Welfare Perspective**

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Decentralization: A Survey from a Child Welfare Perspective

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Executive Summary

The notion of decentralization of government has flourished in popularity since at least the early 1980s. This is true both in the official statements and, to a lesser extent, the practice of governments around the world. Of the 75 developing and transitional countries with populations over five million, all but 12 claim to have embarked upon some transfer of power to subnational governments. Moreover, experience suggests that it is the services of particular relevance to children, including schools and health care, that tend to be decentralized.

The objective of this paper is to enable assessments of the impact of decentralization of government functions on child welfare. The basic task is to identify the primary dimensions that affect the impact of decentralization and to establish a framework that could be used to evaluate outcomes.

In defining 'effective decentralization' from the perspective of child welfare, two notions are included. First, what is conventionally described as delegation, that is, assignment of decision-making authority for specific functions and second, thoroughgoing devolution of responsibilities. In establishing whether a system is decentralized, however, there is no single simple criterion, but rather an amalgam of fiscal, institutional and political indicators. These can be used to assess the overall situation of local government in a particular country or the circumstances of a specific sector: both approaches require a detailed country focus.

A framework for assessing the impact of decentralization in education on child welfare is developed. This clarifies the routes which welfare impacts might be expected to follow, while drawing attention to exogenous effects and variables that need to be controlled for in a rigorous assessment. It is suggested that equity should be accorded greatest weight in terms of both equality of opportunity and progress in reducing disparities in access. The notion of allocative efficiency, which has figured prominently in the economics literature about the merits of decentralization and has affected the views of such agencies as the World Bank, is shown to have limited value if we accept the existence of externalities and public goods in the provision of basic services. From a child welfare perspective, we can simply assume that the expansion of access to schooling and preventive health care, to take the prime examples, is a right that is not to be overridden by individual (parental/taxpayer) preferences that might prefer less education expenditure in return for a lower tax burden, for example.

Technical efficiency is more important, although caution is required in interpreting trends in unit costs, particularly in the context of fiscal adjustment.

A review of existing studies about the impact of decentralization in education on child welfare reveals some important insights, although we are limited to evidence that is partial. Available evidence for the Asian and transition countries under consideration is largely limited to financial rather than outcome indicators. It is nonetheless clear that there is a significant risk that the equality of opportunities and of outcomes is adversely affected by decentralization of education. The negative repercussions for equity can be traced to approaches to intergovernmental transfers that fail to secure sufficient resources for poorer regions, together with the effect of increased reliance on user fees associated with decentralized financing of basic levels of education.

The handful of studies of trends in costs associated with decentralization, with few exceptions, fail to control for changes in quality of provision and outcomes. At best we might conclude that the evidence on the impact of decentralization on costs is limited and mixed.

The data requirements for a comprehensive evaluation of the impact of decentralization are clearly demanding. The lack of reliable longitudinal data on outcomes poses a particular problem. Unfortunately, this has tended to mean that observers fall back on their prior beliefs about the impact of decentralization. Yet, this is not inevitable. In particular, the impact of decentralization on equity of access, controlling for exogenous and other effects, could be investigated using regional data on the distribution of education by income, rural/urban residence, gender and so on. This is increasingly feasible with the wider adoption of reliable household surveys that capture educational attainment of members. An overall comprehensive evaluation that captures efficiency, as well as equity effects, is admittedly much more difficult, but not impossible. There are a number of studies that have successfully measured different aspects of the proposed framework. The challenge now, from a child welfare perspective, is to join these separate elements in an integrated approach.

The foregoing suggests that a rich research agenda remains to be exploited. Evaluations along the lines of the framework that is suggested above would complement the existing UNICEF work, which focuses on procedural and planning aspects, and would put child welfare at the fore. Country case studies appear to be the most fruitful route, given the data demands. Countries with similar ostensible starting points – e.g. levels of human development – could be usefully compared, ideally within the same region.

Abstract

The notion of decentralization of government has flourished in popularity since at least the early 1980s. This paper develops a framework by which the impact of decentralization on child welfare can be assessed. Consistent with the child welfare perspective, it is suggested that equity should be given greatest weight in terms of both equality of opportunity and progress in reducing disparities in access. Allocative efficiency, a notion that has figured prominently in the economics literature about the merits of decentralization, is shown to have limited value once we accept the existence of externalities and public goods in the provision of basic services. The review of available evidence for Asian and transition countries suggests that there is a significant risk that equity can be adversely affected by the decentralization of education and the associated financing arrangements.

Key words: Decentralization, Education, Child Welfare, Economic Transition

JEL classification: D63, H11, H7, I22

Introduction

The notion of decentralization of government has flourished in popularity since at least the early 1980s. This is true in both the official statements and, to a lesser extent, the practice of governments around the world. Of the 75 developing and transitional countries with populations over five million, all but 12 claim to have embarked upon some transfer of power to subnational governments (Dillinger, 1994, p. v). Moreover, experience suggests that it is the services of particular relevance to children, including schools and health care, that tend to be decentralized (UNDP, 1993).

The objective of this paper is to enable assessments of the impact of decentralization of government functions on child welfare. We do not attempt a thoroughgoing review of the extensive literature on decentralization which, while providing some important insights, is characterized largely by the lack of quantitative and rigorous studies on this topic.¹ A more useful task is to identify the primary dimensions that affect the impact of decentralization and to establish a framework that could be used to evaluate outcomes. It is then appropriate to set out a possible agenda for research that might guide those interested in decentralization and child welfare.

Such an assessment of decentralization immediately faces a series of problems and some underlying issues that bear upon the tractability of the

¹ Global reviews include Rondinelli, Nellis and Cheema (1984), Conyers (1983), Castillo (1995), Klugman (1994); there are also a number of regional (e.g. Wallich, 1992, on transition economies) and many country-specific studies.

proposed task. These range from the fundamental – such as the extent to which child welfare outcomes can be attributed to government action at any level – to defining ‘true’ decentralization and identifying its existence and more practical problems surrounding the availability and reliability of the relevant data. The resolution of these types of issues creates a divide between what would be ideally undertaken in the assessment of the impact of decentralization and what is feasible.

It is difficult to measure child welfare directly. Any quantification will inevitably be crude, just as the Human Development Index reduces human development to three equally weighted elements, *viz* life expectancy, literacy and real income. An ‘objective’ assessment of child wellbeing could use the Convention on the Rights of the Child (CRC) to identify the key elements that would maximize the scope of the individual’s future choices. This is analogous to Sen’s capabilities approach that has been operationalized, to some extent, in the UNDP’s *Human Development Reports*. Similarly, here we can identify the factors that are pre-conditions for the maximization of child welfare, which would range across health, nutrition and education to a supportive home environment and child civil rights. Intermediate indicators might also be used, particularly in the absence of alternative measures or where the impact of changes over a relatively short period of time is concerned. These include, for example, attendance rates at different levels of education and immunization coverage.

An analysis of the impact of decentralization would ideally encompass all the relevant dimensions of child welfare and somehow integrate the effects in order to derive a measure of net impact. However, this is not only difficult in practical terms (e.g. isolating the impact of decentralization on household income), but requires inevitably controversial philosophical choices about the relative weight of different elements (e.g. education versus income versus health). A more feasible approach is to take selected elements of child welfare separately and measure the impact of decentralization on relevant proxies (such as education outcomes) through equity, efficiency and other effects.

Government financing and provision of basic services affect each of the child welfare components to varying extents. The importance of access to such services, regardless of income, gender or social class, is recognized in the CRC. However, public interventions are not the only, or even the primary, determinants of child welfare outcomes in the spheres of literacy, health, and nutrition, since the family environment and incomes are generally at least as important.² The government contribution to such outcomes through the

² The exact extent of the contribution of government to individual (child) welfare is somewhat controversial (see Behrman, 1995, for a useful review).

provision of social services is nonetheless the instrument of public policy of greatest direct relevance to both governments and international organizations such as UNICEF in promoting the Rights of the Child.

Education outcomes, for example, are significantly affected by family and peer group influences, so that governments' roles in determining the outcomes at the individual child level have been argued to be limited. However, the latter conclusions come from student performance in standardized test scores in cross-section studies in the US (Hanushek, 1989). The same results do not follow when we examine the impact in changes of education spending over time. Card and Krueger (1992) found, in the US, that if a state increased spending or lowered class size, over time wages increased, as did the returns to education. Murray (1996) matched data on student outcomes to school district resources over the 1970s and 1980s to find that greater resources significantly increased high school completion rates (p. 197).

Moreover, in the typical developing country where enrolment is not universal and where parents are less likely to be literate, public provision of school places will have a significant effect on access to education. We can thus assume that there exists a positive correlation between specific government interventions and child outcomes, say, increasing the number of primary school places and literacy, and further, between the level of expenditure on the specific intervention and outcomes, although certain public interventions will inevitably be more effective than others.³ This seems to be a plausible assumption in countries where overall human development achievements are low (e.g. those in the 'low HDI' category), though possibly less tenable at higher levels of development, as we discuss further below.

In sum, there is a significant risk that equality of opportunities and of outcomes is adversely affected by decentralization of education. These conclusions are supported by recent reviews of Bray (1996a, p. 7) and Fiske (1996, p. 28). Available evidence for the countries under consideration is largely limited to financial rather than outcome indicators, however. The negative repercussions for equity can be traced to approaches to intergovernmental transfers that fail to secure sufficient resources for poorer regions, together with the effect of increased reliance on user fees associated with decentralized financing of basic levels of education.

■ 1.1. *Motivation underlying decentralization*

The contemporary interest in decentralization derives from a number of sources and appears compatible with a range of political ideologies. Although the

³ In the health context, for example, cross-country evidence over time reveals a positive correlation between coverage of immunization and child mortality (World Bank, 1993, Chapter 1).

improvement of child welfare has not figured directly, the primary motivations behind the introduction of decentralized arrangements point to the potential implications of such shifts for children.⁴

First and perhaps foremost, decentralization has been a reaction against the perceived failure of centralized planning to meet official and popular expectations about the benefits of development. The popularity of such trends as decentralization, privatization and the general rollback of government functions can be traced to this increasingly widespread perception. Decentralization has been advocated by the IMF, for example, as a route to 'smaller government' (Tanzi, 1995).

Second, the fiscal strictures imposed by stabilization and adjustment since the 1980s have encouraged central governments to reduce recurrent expenditures in various ways. A similar motivation is evident in the economies in transition in the 1990s. One response to perceived fiscal crises has been to transfer various spending responsibilities to subnational levels of government and back to the household sector through cost recovery. 'Decentralization, like privatization, is widely seen as an instrument of budgetary retrenchment' (Campbell et al. 1991).

Third, decentralization has been linked to democratization, insofar as local decision-making institutions lead to greater citizen involvement in issues of direct concern to citizens.⁵ This link is apparently favoured among donors and international agencies which began explicitly to push for Western style elections in the 1980s in Africa and elsewhere. A similar theme has been evident in a number of transition economies. Yet, broad based local participation does not necessarily follow decentralization, and much depends on the specific circumstances. One well known case in point is the Pinochet military dictatorship in Chile; another is the Phillipines, where local governments were seen primarily as a device to consolidate the power of the national regime after the declaration of martial law in 1972, and in Uzbekistan today, where the oblast khokims (provincial governors) are appointed by the President (former Party Secretary).

The decentralized systems of governance and financing that we observe today are an amalgam of these and probably other motivations. Some advocates combine arguments for participation, decentralization and cost-effectiveness. Indeed, a convenient link (now often seen in World Bank documents) has been made between 'participation through cost-sharing' and fiscal adjustment.

⁴ This list is by no means exhaustive. Fiske (1996) describes nine different countries that have pursued educational decentralization, for nine different reasons.

⁵ In a number of countries, decentralization has evidently been linked to the need of the central government to ward off secessionist tendencies. This was the case in the Philippines, Vanuatu and the Solomon Islands, as well as Papua New Guinea and, possibly, the Russian Federation.

The structure of this paper is as follows. Section 2 reviews alternative definitions of decentralization, drawing attention to the fuzziness that almost inevitably exists in practice and proposing an amalgam of criteria to measure the extent of decentralization. Section 3 addresses financing – resource raising and allocation – mechanisms, which have important repercussions for equity. Section 4 proposes a framework within which empirical questions about decentralization from a child perspective can be posed and investigated. Section 5 reviews selected evidence about the impact of decentralization in education, focusing on the countries of South and South East Asia and economies in transition. The final section concludes and suggests a research agenda for those interested in public policy and child welfare.

2. Defining Decentralization

Before proceeding, we need to clarify what is meant by the term decentralization. It is customary to distinguish among deconcentration, delegation and devolution of responsibility (Rondinelli, Nellis and Cheema 1984). This demarcation appears to be well accepted in the literature and can be summarized as follows.

- *Deconcentration* – spatial relocation of decision-making – is the transfer of some authority to lower bureaucratic levels *within* central government agencies. Within a national Ministry of Education, for example, schools could be operated by staff directly employed by and subject to the central ministry. While some routine decisions are taken by staff who have a local physical presence, these staff are simply acting as lower level officials within a unified bureaucratic hierarchy.
- *Delegation* – assignment of decision-making authority – is the transfer of responsibility for specific functions to local governments. For example, local authorities may have responsibility for administering, staffing and even financing primary schools within the guidelines set by the centre which establish teacher salaries, pupil-teacher ratios, curriculum and so on.
- *Devolution* – transfer of responsibility for governing to subnational governments – means that local authorities have substantive public policy responsibilities within their geographical jurisdiction that in turn lie outside the direct control of the central government. Typically, devolution is viewed with respect to the entirety of local government expenditure and revenue raising activities, rather than specific services. Federal systems of government where the role of the centre is constitutionally or otherwise limited in authority provide the clearest examples of devolved government.

These definitions raise several points for clarification at the outset. First, which of these modes should be considered 'effective' decentralization? Deconcentration of provision is obviously inherent with respect to many public services. Schools and clinics have a local existence whose administration, even in the most centralized of regimes, must to some extent be physically situated in the locality. This is generally not regarded as a 'genuine' form of decentralization, however, and observers typically focus on the third type (see, for example, Castillo, 1995, and Winkler, 1989). Yet, delegation of decision-making responsibility is of interest here if it extends to the social services relevant to child welfare. For example, even if local governments lack authority in setting rates of taxation, their control of the local school system may have significant effects on child welfare.

Second, effective local decision-making authority requires the capacity to ensure that decisions are implemented. If local authorities lack adequate financial resources, then authority to make decisions may have little positive impact on outcomes. However, while some view local authority to raise revenue as a necessary element of devolution (Winkler, 1989), it is not a sufficient condition for effective decentralization. Indeed, we argue that fiscal self sufficiency is not characteristic of well-functioning decentralized systems and that central financial transfers play a critical role in determining the impact of decentralization on child welfare.

Third, the foregoing definitions do not accord any specific attention to participation at the local level. This stands in contrast to the literature in which participation is the key dimension of decentralization.⁶ Indeed, participation and decentralization are often linked, if not muddled, by commentators. It is worth distinguishing between the values of participation from two perspectives. The *instrumental* value of local participation as a *means* to affect the appropriateness of local public decisions is linked to our concern about the allocation of public expenditures and stands in contrast to a focus on participation as an *end in itself*. While the latter is important and indeed recognized in Articles 12-15 of the CRC, our primary interest here lies in the impact of local decisions on outcomes.

Fourth, which level of subnational government is of interest? We focus initially on the second tier (province or state), for which data are more often available, and on the third tier (district or area) when the case studies allow. Comparisons are often complicated by the variance of size of subnational units, particularly at the second tier, even within countries, and across countries given differing geographic and demographic circumstances.

⁶ This is true of the recent work on behalf of UNICEF (Castillo, 1995), as well as a number of World Bank studies of participation.

Fifth, in practice an eclectic model tends to prevail. In many countries we can observe parallel decentralized and centralized elements, even within one sector. For example, primary education may be provided under a national system, while secondary education is partly provided by local communities from their own resources; this is the case in Kenya, for example. We may find the same diversity within the child care sector with a variety of providers and sources of finance.

In the light of these issues, how should we establish whether decentralization has taken place? The foregoing suggests that we should employ an amalgam of factors to judge whether or not a particular system is decentralized, since any single indicator is potentially misleading. From a child welfare perspective, we can propose the following collection of criteria:

- *Fiscal*: The share of local in total public expenditure in a particular sector, or the share of local government in total public expenditure, is a useful indicator of the degree of decentralization. While the precise figure is inevitably arbitrary, a fiscal criterion might be used to indicate that a service which is, say, 60 percent financed out of the local budget is effectively decentralized.⁷
- *Institutional*: The actual division of responsibilities between central and local levels of government – the degree of local responsibility for, and, conversely, the extent of central control over, service provision – is critical. If norms for recurrent expenditures and the budget planning process are highly centralized, even if the local share of expenditure is apparently high, effective decentralization is not present.
- *Overall political context*: The extent of effective local control over ostensibly local decisions must be examined in terms of the degree of democratization and local participation. Decision-making responsibility may have been transferred to local authorities, but the local leaders are handpicked by the centre.

It follows that there is no uniform threshold, but rather a range of factors that need to be taken into account in order to judge whether a specific system is decentralized or not. Moreover, there can be two levels of inquiry: the overall situation of local government and the circumstances in the specific sectors of interest. After elaborating the institutional criteria in the education context, the rest of this section investigates the case of education in the former Soviet Union to illustrate the complexities faced in assessing whether or not a system is decentralized.

⁷ Other fiscal measures, such as the share of local in total government revenue, are of interest and discussed below, but do not necessarily reveal the extent of decentralization.

Decentralization of responsibility does not require that all decisions related to the nature of provision be devolved to the local level. Indeed, the literature suggests that the central government will play a key role in ensuring minimum or core standards. Table 1 illustrates a possible division of responsibilities within the education sector under a hypothetical decentralized system. Note that the local government referred to here would typically be the state or provincial level of government.

Table 1: *A possible assignment of responsibilities in a decentralized system of education*

Type of decision	Central government/ ministry of education	Local government
Curriculum	Specifies content of the core curriculum.	Adds local requirements to core.
Textbooks and teaching materials	Specifies text requirements to match core curricula; provides an approved list of texts.	Selects texts from the approved list.
Teacher training	Ensures adequate pre-service training; may offer in-service training.	May determine in-service training needs.
Teacher recruitment and pay	May establish minimum conditions of employment.	Recruits and dismisses teachers as appropriate. Negotiates pay. Appoints school head.
Testing	Designs test instruments; ensures tests take place and disseminates results.	
Programme supervision	May supervise school performance and provides assistance to remedy problems.	School head is appointed by local government or elected by the local community.
School construction and maintenance	May set minimum standards and monitors compliance.	
Financing and budgeting	Establishes minimum levels of expenditure. May provide central transfers (tied or block) to help finance schools. Sets accounting standards required for audit and reviews results. Monitors variations in expenditure and advises Ministry of Finance on transfers for education.	Plans and budgets local spending. Maintains proper accounts.

Source: Based on Winkler, 1994, Table 2.1.

The establishment of compulsory schooling requirements and the structure of basic and secondary schooling (e.g. number of years) tend to be a central responsibility, as does teacher training. A standard curriculum need not imply centralized control over textbooks and teaching materials. In a decentralized system the head of the school could be locally appointed; or even centrally appointed and given considerable autonomy over resource allocation. One could also envisage a system of education that transferred greater responsibility to the local levels of government than that portrayed in Table 1.

By way of illustration, the typology of functions in Table 1 can be used to characterize the model of education in the Soviet Union. The system was highly centralized in terms of 'the extent of control exercised by the central authorities and the degree of uniformity enforced in principle and practice throughout the length and breadth of [the country]' (Grant, 1964, p. 31). Education, to serve national political and economic needs as interpreted by the Supreme Soviet, was kept firmly in central hands. Until 1966, while there was no all-Union ministry of education, the Council of Ministers in Moscow, acting on behalf of the Supreme Soviet, passed directives down the line for implementation. Despite the high degree of uniformity with respect to schools, textbooks, curricula and teaching methods, a perceived need for greater synchronization led to the creation of the Soviet Ministry of Education in 1966. Its express responsibilities included the 'management of pre-school, primary and secondary education, ...determination of the content of general secondary and polytechnic education, ...[and] preparation of textbooks.... [At the Republican level] the Ministries of Education plan the development of educational establishments, draw up regulations concerning school work and supply and maintain school equipment' (Tomiak, 1972, p. 44). In Moscow, the Soviet planning agency, Gosplan, analysed the proposals submitted by the Republics, then prepared a draft plan, which ranged across the number of students and schools at each level to number of staff, volume of investment and the necessary finances.

There were nonetheless specific local institutional and financial responsibilities in Soviet education. Direct control over the schools was exercised at the local level by the oblast (provincial) and raion (municipal) departments of education through programme supervision and their jurisdiction over the school directors. Almost 60 percent of the total volume of funds spent on education in the mid-1960s came from the local budgets, compared to 28 percent from the Republican budget and about 5 percent from the Union budget. Yet, these figures do not take account of the fact that the norms for recurrent expenditures and the budget planning process were highly centralized, so that a simple fiscal criterion of whether or not decentralization

has taken place would be quite misleading. Taking into account the institutional and political criteria, we would conclude that Soviet education was highly centralized.

Evidence on the allocation of decision-making authority is typically only available on a country-by-country basis. A recent inventory of OECD countries provides interesting comparisons for one, albeit important, educational function: the setting of educational goals and curriculum.⁸ Table 2 reveals a large variation in the levels at which education goals are formulated. While some countries set curriculum guidelines at the central level, others appear to allow lower levels of the system, right down to the individual school, to undertake this task, albeit typically alongside higher levels.

Table 2: *Level of formulation of educational goals*

	National	State, province, canton	District, local community	School
Austria	X	X		
Belgium	X			
Denmark	X			
France	X		X	
Italy	X			
Netherlands	X			X
New Zealand	X		X	X
Norway	X		X	X
Sweden	X			
Switzerland		X		
United States	X	X	X	X

Source: OECD, 1995, Table 5.1.

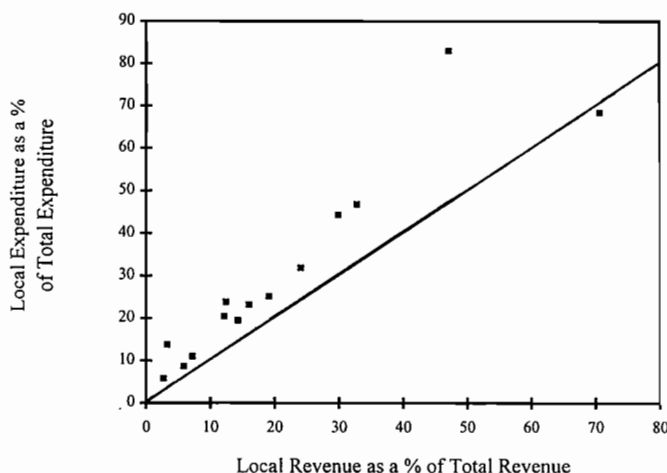
In defining decentralization, we have suggested that what is conventionally described as delegation, that is, assignment of decision-making authority for specific functions, as well as thoroughgoing devolution of responsibilities, might be considered effective decentralization from the perspective of child welfare. In establishing whether a system is decentralized, however, there is no single simple criterion. An amalgam of fiscal, institutional and political indicators has been proposed. This can be used to assess the overall situation of local government in a particular country or the circumstances of a specific sector. Both approaches require a detailed country focus.

⁸ Knutsen (1995) presents more detailed results for responsibility by level of government for different types of aims and objectives, including 'fundamental principles and values' and 'attainment of cross-curricular competencies' for several OECD countries (p. 182).

3. Financing Mechanisms

The distribution of revenue sources and expenditure responsibilities among different levels of government means that local public expenditures often exceed own-source revenues. This tends to be true in both developing and industrial countries. The resulting vertical imbalance calls for central transfers, which may be conditional or tied to certain purposes and can thereby limit local financial autonomy. The extent of central transfers is depicted graphically in Figure 1 for the transition and developing Asian countries for which IMF *Government Financial Statistics Yearbook* (1995) data are available.⁹ For local authorities in the majority of countries, their share in total expenditures exceeds that in total revenue, revealing vertical fiscal gaps. The two outliers are India, where local expenditure amounts to 83 percent of total, and Russia, where local revenue and expenditure represent 71 and 68 percent of the respective totals. Both cases are evaluated below.

Figure 1: *Local revenue and expenditure as a share of the consolidated budget, selected Asian and transition countries*



Source: IMF (1995). See Annexe 2, columns 1 and 2, for the figures by country.

⁹ Local government expenditure data are not available from the IMF GFS for a number of countries in the regions of interest, including China, Kazakhstan, Malaysia, Myanmar, Nepal, Pakistan, Papua New Guinea, and Uzbekistan.

In this section, we consider three sources of local finance (a) taxation, (b) user charges and (c) central transfers. (We exclude municipal borrowing.) Given our interest in child welfare outcomes, we highlight the impact of alternative financing mechanisms on regional equity.

■ 3.1. *Local taxation*

Available evidence suggests that local tax systems tend to be fragmented and constrained by central restrictions, as well as weak administrative capacity. Urban localities appear to perform somewhat better given their access to more lucrative taxation bases, in particular, property tax.

Figure 1 shows that the share of local in total revenue ranged from about 3 (Indonesia and Philippines) to 33 percent for the transition and Asian countries for which IMF data are published (excluding outlying India and Russia). For the Asian countries in this group, local revenue as a percentage of total revenue was only in single figures.

Administrative capacity tends to limit the revenue raising efforts of all levels of government in developing countries (see Newbery and Stern, 1988). In order to evaluate the impact of decentralization, we would assess the extent to which the problems of low compliance and inadequate enforcement exist at the central versus local levels. Available evidence is, however, more anecdotal in nature. Administrative weakness in tax capacity (see Rondinelli, Nellis and Cheema, 1984, and World Bank, 1988) do appear to be relatively worse at the local level due to a combination of low pay, location and poor career prospects. Enforcement powers at the local level may also be relatively weaker. There are also cases where the power of local interests has affected the assessment and collection of property taxes and exemptions (cases in the Philippines are reported by Ruland and Sajo, 1988).

Shared taxation is popular in a number of transition countries, as well as some OECD nations. Sharing may be effected on a derivation basis (in proportion to the amount of revenue collected in the location), or in accordance with some formula that takes expenditure need into account. The former approach tends to favour more well off localities with more productive tax bases and is to that extent counter-equalizing. This has been observed in Poland, for example, where the sharing of the profit tax has benefited those localities with a more prosperous industrial base. In Germany, the heavy reliance on shared taxes is accompanied by a complex equalization mechanism. A similar, though perhaps less transparent, approach is taken in Uzbekistan, where the revenue sharing rate varies across oblasts in inverse relation to need, so that poorer oblasts retain a higher share of taxes collected. Several oblasts, generally considered as poorer, retain all revenue collected on the territory,

whereas the capital and several other oblasts remit considerable portions to the central budget (World Bank, 1995a).

■ 3.2. User charges

User charges may be collected by local governments, consistent with the direction encouraged by the World Bank and others over the past decade or so. The first of four criteria listed in the 1988 *World Development Report* for local revenue raising is that 'the cost of providing local services should be recovered, to the extent possible, from charges on the beneficiaries' (p. 159). This is said to be 'especially important at the local level because, being closer to beneficiaries, local public services are more amenable to such charges than services provided by higher levels of government.' The same report found that in 25 countries surveyed, user charges amounted to almost one-third of local revenue.¹⁰ Cost sharing can extend to in-kind contributions, as well as monetary payments. A fuller exposition of the rationale for cost recovery with respect to social services can be found in Jimenez (1987).

The World Bank's *Participation Sourcebook* (1996) refers to 'participation through cost sharing' (p. 233). However, experience to date is described as 'mixed'. It is noted, for example, that project costs may be understated when the opportunity cost of voluntary time and effort is high. Evidence is not cited to support the conclusion that additional costs are 'generally offset by subsequent gains in efficiency' (ibid.).

Significant equity concerns surround the introduction of such charges for basic social services, given evidence from a range of settings that poor children can be denied schooling because of direct and indirect costs (Cornia, Jolly and Stewart, 1987; Brooks and Thant, 1996). Recent World Bank studies of educational decentralization have recognized that 'inequalities are inherent in the whole concept of community financing' (Bray, 1996a, p. 39).¹¹ When decentralization is motivated by fiscal adjustment, parental contributions may be required to compensate for falling public expenditure. While the visible benefits principle of taxation may facilitate the collection of local user charges, fees for basic services may well be regressive in impact and limit access among disadvantaged groups in the community.

Bray (1996b), reviewing data on the proportion of household expenditure consumed by education in nine East Asian countries, concluded that the poor in

¹⁰ This figure appears to be an overestimate in that both consumption-related and benefit-related charges are included. The latter are one-off payments for a particular project such as betterment levies that in some ways are more akin to a tax and likely have different distributive effects.

¹¹ The term 'community financing' is used broadly by Bray to cover private contributions to public schools, as well as privately established and operated schools.

all countries are hit hard whether per capita GDP is relatively high (Thailand) or low (Vietnam) and that rich families spend less in proportional terms. In Indonesia, for example, in 1989 direct primary school costs represented 38 percent of per capita incomes of the poorest quintile, compared to 17 percent of the richest quintile, and in Vietnam direct primary school costs per pupil equalled 22 percent of nonfood consumption of the poorest quintiles, almost double that of the richest quintile (p. 40). Thus, to the extent that countries follow external advice to finance decentralized provision by user charges, we might expect adverse repercussions for child welfare that run contrary to the CRC provision that primary education should be compulsory and free to all (Article 28).

■ 3.3. *Intergovernmental transfers*

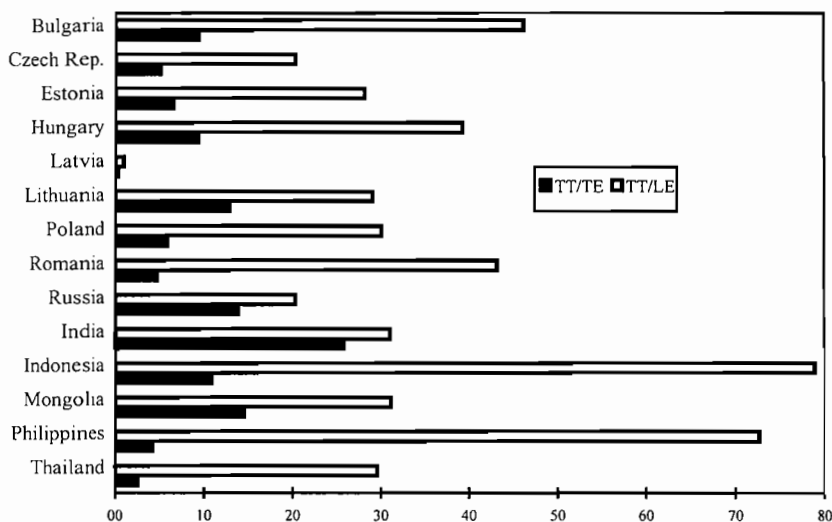
Variations in resource endowments and incomes leading to differences in local fiscal capacity, together with the limited local revenue raising capacity that creates vertical fiscal gaps, suggest the need for central transfers. The existence of externalities point in the same direction. On the other hand, some stress that local financial autonomy is necessary in order to ensure that local decisions are truly 'independent' and sensitive to both costs and local priorities. If this concern is valid, then intergovernmental transfers may appear counter to the attainment of efficiency goals. However, the extent of such a trade-off depends on the nature of the grant system. Most obviously, tied grants may have more far-reaching repercussions for autonomy than do lump sum transfers, depending on the degree of fungibility in practice. The stability and predictability of transfers are another key factor.

The IMF's *Government Financial Statistics Yearbook* (1995) provides an indication of the significance of intergovernmental transfers. Figure 2 presents, for a sample of transition and Asian countries for which data have been published, the share of central transfers in both local expenditure and consolidated budget expenditure. This reveals a significant range, even within this relatively small sample. It is worth noting that central transfers account for an even greater share of local revenue in industrial countries than in developing countries (Wasylenko, 1987).

Mere *volume* of central transfers tells only part of the story, however. The design and operation of the system of intergovernmental transfers will have significant repercussions on equity and efficiency. Transfers may be in block form, or categorical and tied to specific purposes and also matched to local revenue needs. Most importantly, given our interest in child welfare outcomes, transfers may be based on an assessment of needs that help improve regional equity. The rest of this section presents some examples of transfer mechanisms

drawn mainly from Eastern European and Asian regions, focusing on the distributive implications.

Figure 2: Central transfers as a share of local and consolidated budget expenditure, selected Asian and transition countries, early 1990s



Note: Data are for 1994, except for Indonesia and the Philippines (1993), India (1992) and Hungary (1990). 'TT/TE' refers to total transfers as a percentage of total expenditures. 'TT/LE' is total transfers over local expenditures.

Source: IMF (1995).

In Russia, a transfer formula introduced in 1994 has not met its ostensible aim of alleviating significant differences in public expenditure across the country (World Bank, 1995b; Stewart, 1997). The volume of central transfers is small: in 1995, amounting to only about 12 percent of oblast budget revenue (Stewart, 1997). Moreover, the size of the transfer required is judged according to expenditure in the base year (1993), so that lower spending oblasts are deemed to require lower transfers. Overall, it seems that, while central transfers have gone to regions with greater needs, where needs are defined as lower per capita revenues or greater demands on public services (such as higher numbers of children and greater rural population share), the net effect of central transfers is far from sufficient to offset differences in revenue (Stewart, 1997).

Even where quite simple formulae are used, the outcomes may not match the ostensible determinants. In Bangladesh, population and land size of the locality

were supposed to govern the allocation of grants, but detailed empirical analysis found that the distribution did not accord to either criterion (Uddin, 1989). The study concluded that the distribution was 'implemented in a more or less random manner' (p. 270). Moreover, central transfers tended to be highly unstable from year to year.

In India, the formula used to govern central transfers gives weight to population (60 percent), per capita income and relative poverty. At the same time, a substantial proportion of transfers flow outside this formula. Rao and Sen (1996) found that the aggregate effect of central transfers was equalizing in that the Gini coefficient of net revenue (including transfers) was lower than that of own revenue. However, the degree of equalization is not high enough to offset the fiscal disabilities (varying per capita income) of the poorer states, so that significant expenditure disparities persist.

In Indonesia, the INPRES programme of central transfers injected significant amounts into local budgets, peaking in the early 1980s at over 30 percent. The criteria governing the interprovincial allocation gave a high weight to population, while account was also taken of development 'need' (Booth, 1994). However, the minimum amounts available meant that the smaller provinces tended to receive larger per capita amounts. 'Need' was interpreted so that provinces with better infrastructure and more wet rice land tended to receive greater allocations, in accordance with the growth objectives of the government. Thus, up to the early 1980s there was no evidence that per capita regional subsidies compensated for differences in per capita income, since income was not part of the allocation criteria (Booth, 1994). Nonetheless, over the same period, central transfers facilitated the expansion of public services and infrastructure and likely contributed to the narrowing of interprovincial disparities in income and social indicators (Booth, 1994; Ranis and Stewart, 1994).

To conclude the evaluation of financing mechanisms, we have seen that the possibly disequalizing effects of decentralization of financing responsibility are a genuine concern from a child welfare perspective. We have observed that local revenue efforts tend to be limited relative to expenditure needs, because of both restricted tax bases and weak institutional capacity, and that there can be significant variation in taxable capacity among localities. User charges have been advocated by some as an ideal revenue source for local government activity, but, especially with respect to basic social services, this runs the risk of adverse repercussions for the welfare of children in disadvantaged groups. In this context, intergovernmental transfers will play a critical role in offsetting the potentially disequalizing effects associated with decentralization. However,

available evidence from Asia and transition countries suggests that this is a difficult goal to attain.

4. A Framework for Evaluating Decentralization

We now propose a framework for the empirical evaluation of decentralization that is consistent with our ultimate interest in outcomes for child welfare. We focus on education, although the approach could be readily adapted to health and other sectors relevant to child welfare.¹² Recalling the amalgam of fiscal, institutional and political indicators that is proposed to assess whether a system is decentralized, clearly a case study approach is needed. While the framework does not purport to encompass the entire range of potential impacts of decentralization, the aim is to establish measures of the impact of decentralization on child welfare that enable comparisons across countries and over time. There are two key elements – equity and efficiency – both of which are analysed in depth below. Equity is interpreted in terms of access, that is, enrolment or attendance rates for schools. As we argue below, allocative efficiency, in the sense of consistency with local preferences, is not a major issue with respect to basic services in countries with low levels of human development.¹³ Hence, we address technical efficiency primarily, which is normally interpreted in terms of inputs per unit of output, such as the ratio of expenditure or staff per pupil. Limited public resources mean that efficiency of provision may well be critical for equity and access, subject to appropriate interpretation, as discussed below.

A distinction needs to be drawn between the ideal and feasible data needs for the assessment of impact. Indeed, this theme underlies much of the ensuing discussion. The review of the evidence on the effects of decentralization in the next section helps to illuminate what types of assessment are presently available, while highlighting what might be feasible with alternative research methodologies.

It has become common practice in some circles to distinguish between efficiency and effectiveness. This is common in literature emanating from the World Bank, for example. However, the use of these two concepts can be

¹² At the same time, health care provision and financing may raise a more difficult set of issues than education. For example, whether the mode of financing of local health care providers is based on reimbursement or on population size or some other rule has significant incentive effects and therefore implications for the efficiency of provision, as well as access.

¹³ To the extent that allocative responses on the part of local governments are more in accord with local preferences, we would expect this to be captured under changes in indicators such as school enrolment (which we include under equity).

confusing,¹⁴ and since they appear to accord to allocative and technical efficiency, respectively, it seems better to dispense with the distinction.

The suggested framework for the evaluation of schools under decentralization is presented in Figure 3. The focus is on basic education, that is, the primary and lower secondary levels. It is immediately obvious that evidence providing an unambiguous indication of the impact of decentralization will likely be scarce. It is nonetheless useful to highlight the relevant factors and possible causal links that should be traced in order to measure the impact of decentralization on child welfare.

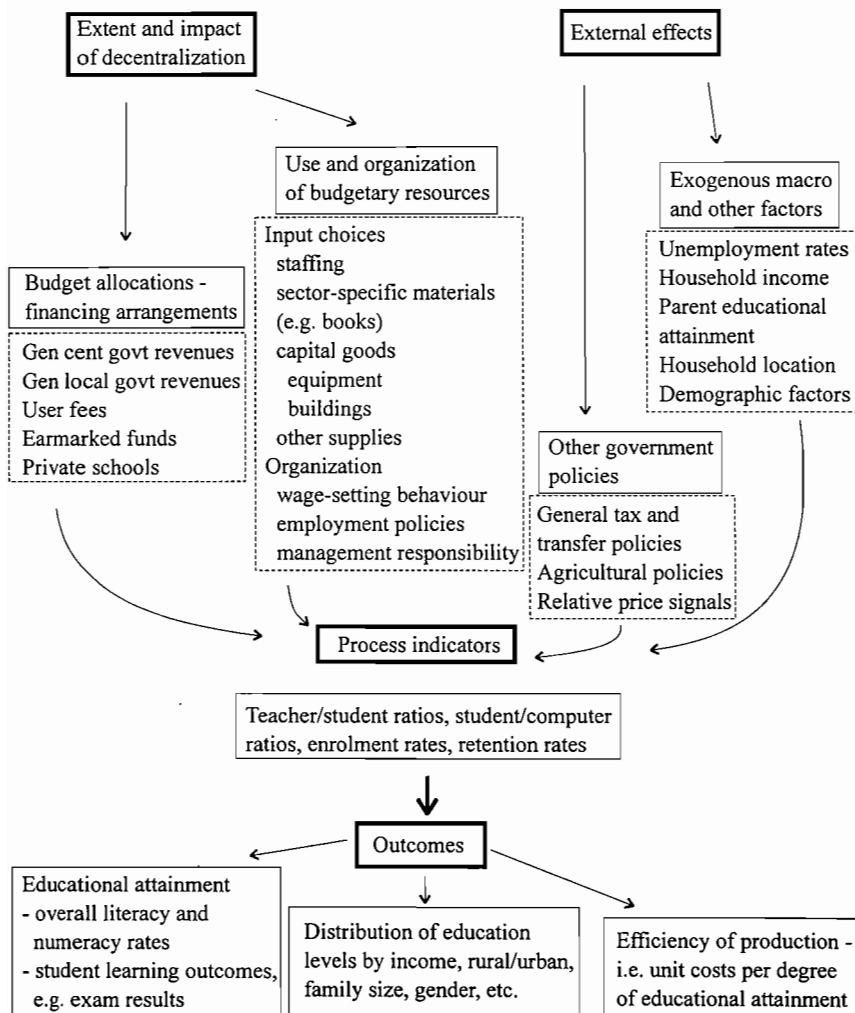
Figure 3 is largely self-explanatory, although we can highlight the following points.

- The *extent and impact of decentralization* are seen to flow through two major sets of variables: (a) budgetary allocations and financial arrangements and (b) the use and organization of budgetary resources. The former mainly affects the volume of resources available in aggregate and by locality, which will affect outcomes through various process indicators. The use and organization of budgetary resources are the route by which technical efficiencies might be obtained, noting that there may well be central constraints on local decisions.
- *External effects* are thus labelled to the range of factors, outside decentralization, that would be expected to affect child welfare and, more specifically, education outcomes. General government policies significantly influence the parameters within which local authority and household decisions are made. A simple example is public sector wage policy. The exogenous macroeconomic and other effects are a further range of factors not directly subject to government control. This raises the issue of demand-side effects at the individual household level, such as the rate of unemployment and parental educational attainment. In measuring the impact of decentralization, external effects, as well as exogenous macroeconomic and other factors, should be somehow controlled for.
- A number of possible *process indicators* are listed, though not exhaustively. School enrolment, attendance and retention rates may be readily available, yet problematic, given the influences of student (and parental) perceptions of the value of schooling and alternative workforce and other opportunities, so that short-term shifts need to be interpreted with

¹⁴ For example, Winkler (1989) refers to effectiveness and efficiency at the outset, then goes on to write that 'efficiency arguments typically focus on high unit costs of primary and secondary education provided by central government... [while] the effectiveness rationale for decentralization argues that centralized planning policies, popular in the 1960s, have resulted in expensive education and declines in quality' (p. 2).

care. They are nonetheless useful, particularly in countries where the baseline rates are low. Other useful indicators might be available; for example, household level survey data could allow comparison of the status of the enrolled versus the non-enrolled populations.

Figure 3: An evaluation framework for the impact of the decentralization of education on child welfare



- *Outcomes* need to be considered both in aggregate and on a regional basis. We include measures of both equity and efficiency as indicated by, for example, literacy and numeracy rates. We are interested in distributive outcomes – not only regional – but disaggregated to the level of income, rural/urban residence, and so on. Finally, but not least, the unit cost of production is important. Public expenditures have opportunity costs, e.g. what is spent on schools cannot be spent on health clinics.

There is a range of outcomes relevant to child welfare which we have grouped, for convenience, under overall educational attainment, the distribution of attainment, and the efficiency of production.¹⁵ Indicators of overall educational attainment would include literacy and numeracy and learning outcomes as reflected in, for example, examination results. The last relies upon a national examination that could trace trends at the aggregate and local levels, though ideally one would control for various exogenous effects.¹⁶ Trends over time in location-specific tests might also be used to reflect changes in learning outcomes.¹⁷

Equity of outcomes in terms of the distribution of education levels by socioeconomic group, as well as by region, is a key aspect of the proposed framework. However, in countries where basic school enrolments and literacy and numeracy are close to universal, as in industrial and most transition countries, as well as a growing number of developing nations, more sophisticated measures are needed. There are several possible ways to incorporate trends in the regional variation in education attainment for identified priority groups, such as indigenous peoples or girls. Secondary retention rates are one candidate. The appropriate indicator will obviously vary across countries.

Caveats that limit the general applicability of this framework have already been hinted at. First, the appropriate type of indicator may well differ between countries with close to universal provision, such as those in the West and the former Eastern bloc, and poorer countries with less than complete coverage. The suggested outcome measures of overall literacy and numeracy are obviously too crude a measure, at least at present, for the transition countries which attained virtually universal enrolment decades ago. Recent dramatic

¹⁵ We do not seek to capture the wider externalities of local social provision in terms of the labour productivity of a mobile, healthy and literate workforce.

¹⁶ Most national assessments collect information on background variables such as school and nonschool factors that may contribute to student achievement, as well as cognitive outcomes (subjective matter competence) and, increasingly, 'affective outcomes' (student attitudes and values): Greaney and Kellaghan, 1996, p. 51.

¹⁷ The intention is not to compare test results across localities to identify 'good' and 'bad' performers, but to investigate trends over time.

deterioration in enrolments in Vietnam and Mongolia remind us that we cannot be complacent, however, even where enrolment was close to universal. By 1993, only 78 percent of the age cohort was enrolled in Vietnam, while negligible non-enrolment and drop-out in Mongolia have risen to 30 percent in grades 1-10 (Bray, 1996a, p. 46). Process indicators, such as attendance and retention rates, might shed valuable light on present trends. The distribution of levels of education attainment by socioeconomic group would also be of interest, especially if measures of quality, such as examination results, could be obtained.

While cost per unit of output is at least as important for poor as for rich countries, minimizing expenditure is not an appropriate goal. We know that education spending cuts can be associated with falls in enrolment and other worrying trends, as the experience of adjustment in Africa revealed in the 1980s (Cornia, Jolly and Stewart, 1987). At the same time, maximizing expenditure may not be an appropriate goal either. This raises questions about the allocatively efficient level of primary education in poor countries, that is, what level of primary education spending has the highest social return? This is difficult to determine, since it depends upon the productivity of educated people in the economy (which turns on the existence of complementary capital goods), the social gains in terms of, for example, home hygiene or contraceptive prevalence, and possibly the opportunity cost of the children's time (foregone wages). Further work is needed to elaborate useful measures of efficiency of service provision in poor countries. The initial question to be asked in a given country, however, is whether per pupil spending on the specific service is at reasonable levels or whether it is unduly low relative to, say, regional comparators with satisfactory education outcomes. It may be determined, particularly among countries at low levels of human development, that higher levels of expenditure per pupil would be allocatively more efficient.

Before proceeding, it is useful to contrast briefly the above framework with the approach adopted in UNICEF's recent surveys of decentralization.¹⁸ *The Children Here* is explicitly narrow in scope, addressing the extent to which countries have decentralized the process of formulating the national plans of action (NPA) that emerged following the 1990 World Summit for Children. The extent of de/centralization of development planning in general was not examined, nor the impact on service delivery. It is therefore possible that NPA decentralization could be undertaken – albeit ineffectively – in an otherwise centralized state structure. This was the case in Ecuador, for example. Hence,

¹⁸ This work, which is summarized and presented in the publication *The Children Here* (1995) by Carlos Castillo, accompanied a series of country case studies that were published as Innocenti Occasional Papers in 1994. See Annexe 1 for further elaboration of the approach taken.

the focus was on processes and on one aspect of the *means*, rather than the ends, of decentralization and its impact on child welfare.

■ 4.1. *Equity*

The definition of equity raises both conceptual and empirical difficulties. Equity in the decentralization context is closely linked to the role of intergovernmental transfers and the goal of equalization. Equalization, in turn, has been described as 'one of the most controversial topics in [fiscal] decentralization' (Rao and Sen, 1996).

At the conceptual level there are two broad perspectives.

- *Process equity*. This can be taken as equal opportunities. In the education context, this means that a child's chances for success in acquiring cognitive and social skills are independent of the school attended (McArty and Brazier, 1990), although they may depend on the student's own abilities, the encouragement she receives at home and her own efforts at school.
- *Outcome equity*. This implies that differential needs should be taken into account so that, for example, special measures are undertaken for disadvantaged students. At the extreme, this might require equality of education outcomes, although differential outcomes of decentralization (with respect to primary school completion, for example) could be disaggregated by socioeconomic group, ethnicity and so on, without adjusting for 'special needs'.

These alternative concepts of equity correspond to the distinction between opportunity sets and outcomes that is well established in the welfare economics literature and, as the above examples imply, are not necessarily consistent. A particular system of education may be equitable by some pre-determined standards, but the outcomes may not be, or at least may not be to a similar extent.

The seminal article making the case for intergovernmental transfers on equity grounds was Buchanan (1950). He demonstrated that, so long as there exist differences in fiscal capacity among states (localities), even where the central and state governments separately treat individuals equally, overall horizontal equity is violated. Fiscal equity was defined as equal treatment of equals. It could thus be attained either through tax rates which differ on a geographical basis (for example, through varying tax sharing rates), or through block transfers. Subsequent criticisms of this framework focused on (a) differing individual preferences (Scott, 1964) and (b) the assumption of complete information on the central government's part, which contravenes the basic efficiency arguments in favour of decentralization (Rao and Sen, 1996).

Nor are intergovernmental transfers a sufficient condition to ensure actual horizontal equity of outcomes.

From a child welfare perspective, interregional equality of opportunity is an appropriate policy objective. Indeed, it is consistent with Article 28 of the CRC that recognizes 'the right of the child to education and with a view to achieving this right progressively and on the basis of equal opportunity'. Such an objective has been legally prescribed by the courts in the US, and in Canada by the constitutional requirement that similar public services should be available to all citizens at similar tax costs. While equality of *outcomes* is generally regarded as infeasible with respect to educational attainment and health status and not an appropriate benchmark against which to judge educational and other child welfare outcomes, reductions of disparities in levels of attainment are an appropriate policy goal. It may also be useful to measure trends in regional wages and per capita income as an indicator of trends in outcomes.

In the absence of national assessments, it is difficult to obtain a direct measure of equality of opportunity in the sense of, for example, acquisition of social and cognitive skills at school. Instead, the focus tends to be on somewhat different indicators of equity: regional variations in enrolments or, more usefully, in attendance, repetition and school completion rates, as well as in public expenditure per capita (or, in the education context, per pupil). Often seen in empirical analyses of the impact of decentralization, these can be regarded as 'intermediate' indicators. Of course, variation in enrolment or even attendance is a very crude indicator of equity 'outcomes' even in the sense of process equity, since it neglects the quality of education.

Variations in service provision can arise either due to variations in resources on the revenue side, or due to variations in the costs of provision on the expenditure side. Differences in own revenues can arise from differing fiscal capacities (resource endowments, incomes, etc.), or differing tax effort. Differences in unit costs of provision may be due to such exogenous factors as distance and special needs, or may simply arise from the state's profligacy. In principle, *capacity* rather than performance (outcome) equalization could be sought. A province may choose to levy lower taxes and have a reduced standard of public services, for example, or a province which is relatively inefficient will not be able to provide an average level of service unless above average taxes are levied. This is the approach taken in Australia, for example, where state 'disabilities' – that is, influences beyond a state's control that require it to spend more per capita on the same service than other states or mean that it cannot raise as much per capita as other states at the same tax rates – are taken into account in determining the size of the central transfer. On the revenue side, differences in the range of taxes and the tax rates are not relevant

to disability, whereas differences in their economic and demographic positions are taken into account (for further details, see Searle, 1996).

The concept of comparative priorities that has gained some currency in the development literature may usefully indicate the impact of decentralization on equity, not least because relevant data are generally available.¹⁹ Consistent with the CRC, the hypothesis is that spending on the social sectors is 'good' (relative to spending on most other categories of government spending, except infrastructure) and that, within the social sectors, basic education and primary health care (priority services) are more likely to benefit lower income groups and have lower unit costs and higher social returns (see UNDP, 1991). Greater spending on priority social services could equally be justified on the basis of public good/externality grounds.

The social priority ratio is the share of public spending on primary education and primary health care in national income.²⁰ The central government's priority ratio is the share of central expenditure in national income, and the local ratio reflects the corresponding figures for subnational governments. The social priority ratio for central and local governments provides a way to compare the relative impact of different levels of government activity on child welfare. A higher ratio is assumed to be positively correlated with wider access to services of particular relevance to children and disadvantaged groups or, in other words, improved equity of opportunities.

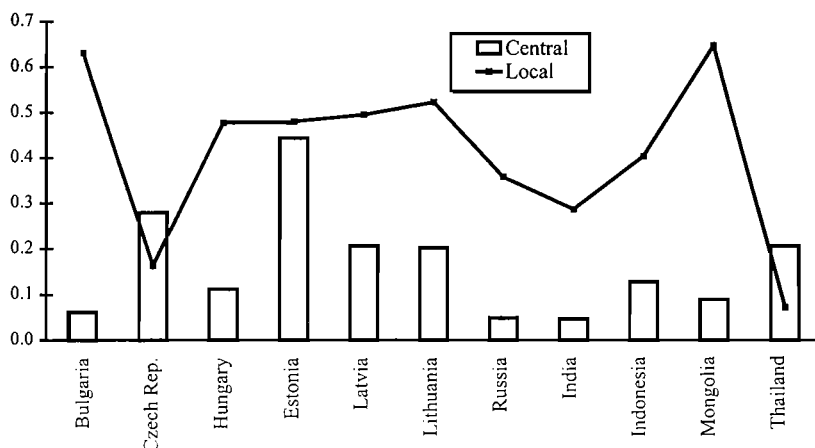
One might expect that the share of public expenditure going to basic services and also to social services would be higher for lower levels of government, though their share of spending in GDP would tend to be lower. The IMF's annual *Government Financial Statistics Yearbook* contains useful data for a number of countries. Figure 4 presents comparative social ratios for those Asian and transition countries for which the relevant data are published.²¹ It shows that, in all cases but two, the share of spending on social services (education and health) was higher in local than in central budgets. In a number of countries, local authorities appeared to place a significantly higher priority on social services. In Bulgaria, for example, local authorities directed almost two-thirds of their spending to social services, compared to about 6 percent of central government expenditure going to the same.

¹⁹ The general interest in expenditure priorities is reflected in the statistical tables of the World Bank's *World Development Reports* and the UNDP's *Human Development Reports*.

²⁰ See the 1992 *Human Development Report* (UNDP, 1992) and, for country examples, Klugman and Stewart (1993) for Zimbabwe and Ranis and Stewart (1994) for Indonesia.

²¹ Annexe 2 contains the relevant figures. Studies of the priority ratio, which require data on the breakdown of the education and health budgets at the local and central levels, typically depend on specific country studies.

Figure 4: Comparative social priorities of local and central government, selected Asian and transition countries



Source: IMF (1995). See Annexe 2, columns 5 and 6, for the figures by country.

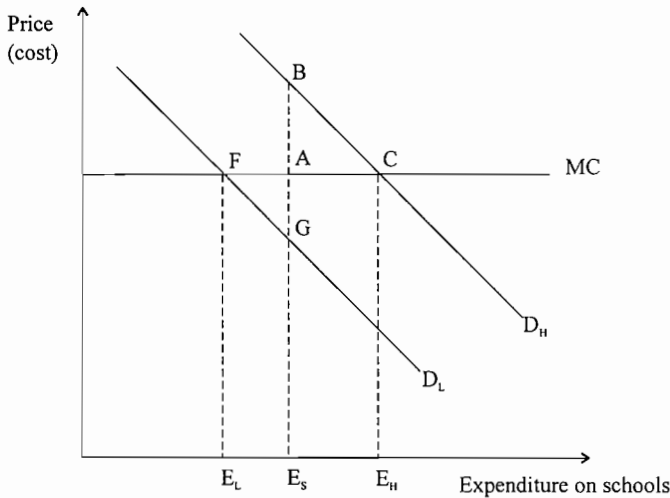
■ 4.2. Efficiency

Economists distinguish between (at least) two types of efficiency: allocative and technical. Allocative efficiency refers to the distribution of resources among different possible uses. For example, how much is spent on primary education versus roads versus the military. Technical efficiency refers to the way in which resources are used in the production of a particular good or service: for example, student-teacher ratios, with corresponding implications for unit costs. Decentralization may influence both types of efficiency. Local spending preferences may differ from those of the centre and therefore affect allocative efficiency, and the technical efficiency of government operations may be affected by the information held by decision-makers at different levels of government about the mode of provision. In principle, it is possible to measure changes in both types of efficiency. As the ensuing discussion reveals, however, there is a significant gulf between the theoretical economic literature and the available empirical evidence. We begin with a review of the theoretical literature to assess the insights provided from a child welfare perspective before going on to examine technical efficiency in more detail.

The neoclassical arguments in favour of decentralization revolve around the issues of preferences and information. These deserve some elaboration, since the assumptions and conclusions of this literature have significantly influenced

the expectations of, and discussions about, decentralization. The emphasis tends to be on the potential contribution of decentralization to allocative efficiency, because of local decision-makers' awareness of local priorities. The argument is that decentralization is better apt to take into account the different preferences of the community's members than are centralized states with their systematically uniform approach. Hence, if public provision of services departs from local preferences due to the imposition of a central standard, then a welfare loss will result (Figure 5).

Figure 5: *Efficiency losses flowing from central standards in a neoclassical framework*



Source: McArty and Brazer (1990).

Figure 5, drawn from McArty and Brazer (1990), depicts two districts, one exhibiting a higher demand for education expenditures than the state-mandated level, and the other district having lower demand. Both are assumed to face the same constant cost of production of education. The state-mandated level of school expenditures is given by E_S ; the high- and low-demand districts' compensated demand curves are D_H and D_L , while the levels preferred by the districts, given their respective incomes, prices and preferences, are E_H and E_L . For both districts, there is a welfare loss associated with the imposition of a central standard. For the high-demand district, it is represented by the area ABC , the excess of the value to it of $E_S E_H$ units of education over their cost

$ACE_H E_S$, and for the low-demand district, by the area AFG and the excess of the cost of $E_L E_S$ expenditure over its value to the district, $FGE_S E_L$. The total welfare loss to society is given by the sum of the two triangles. It follows that to allow the high-demand district to spend more and the low-demand district to spend less than the state would have mandated would be more allocatively efficient.

This proposition requires fairly strong underlying assumptions, however, including that:

1. Preferences differ systematically across localities due to variations in the level of income and in tastes.
2. Mechanisms exist for the expression of preferences to local public decision-makers, who are in turn responsive. Such mechanisms require either direct voting (for example, referenda on school spending, as have taken place in the US), or individual and household geographical mobility (Tiebout, 1956).
3. Individual and household mobility enables those who are dissatisfied (because their preferences are shared by only a minority in the locality, or because government does not listen) to relocate. This in turn requires that there is adequate knowledge about the package of public services offered elsewhere.

It immediately becomes obvious that these conditions are unlikely to be met. It is perhaps equally clear, however, that the non/existence of these conditions would be very difficult to test. Winkler (1994) concluded that empirical evidence on the extent to which decentralization has met local preferences in developing countries is lacking.

The effect of central mandates and redistribution on allocative efficiency in a decentralized system has been the subject of debate in the United States. Education responsibility is highly devolved, the federal government traditionally financing only about 9 percent of total education spending. There are significant local variations in education expenditures which, some argue, are 'largely attributable to variations in [local citizen] demand [for schools]' (McArty and Brazer, 1990, p. 252). Demand in turn is seen as a function of income, preferences (which depend on the age structure of the population, education of parents and so on) and tax price.²² Under this interpretation, which assumes that education is a purely private good, welfare losses would follow the imposition of centralized standards that seek to equalize education expenditures (as depicted in Figure 4), suggesting that central transfers should

²² Tax price is defined as the cost to the median taxpayer of an additional dollar of expenditure per pupil for elementary and secondary education.

only compensate for differences in local income/resources, but not override community preferences.²³ In a similar vein, Winkler's (1989) review of decentralization in education states that it is appropriate for local voters to 'exercise choice over... how the budget is divided between education and other services' (p. 16).

There is a number of problems with this interpretation, however, some of which arise at an ideological or philosophical level. These problems have a bearing on the relevance of the allocative efficiency for a child welfare perspective and warrant some elaboration.

- First, the assumption that the preferences of parents for education of greater or lesser quantity or differing quality should be a key criterion of efficiency is questionable. It is well known that parental preferences for education depend on their own educational and socioeconomic background. Various studies have shown that there exists a reasonably well-defined demand curve for educational expenditures on the part of local communities that is characterized by positive significant income elasticity (Freeman, 1986, p. 382).²⁴ If one is interested in the expansion of educational opportunities, it may be appropriate, even efficient from a societal point of view, to override individual (parental) preferences in favour of a child rights approach. This would seem particularly persuasive with respect to basic levels of service, such as primary education, which States party to the CRC are obliged to make compulsory and free to all and to take measures to encourage regular attendance and reduce drop-out rates.
- Second, but relatedly, at low levels of development/welfare, it is plausible to regard individual preferences for food, primary education and other 'basic needs' as approximately uniform, in the sense that everyone would seek access to such goods and services. Again, this is consistent with the CRC provisions on education and health, the latter recognizing the right of the child to enjoy 'the highest attainable level of health and access to facilities for the treatment of illness and rehabilitation of health'. In any case, basic public services such as education can be thought of as merit goods which may exhibit a tendency toward under-demand. One might hypothesize that, especially in poor communities, this tendency is compounded by the inability of families to 'wait' for the higher returns in

²³ If equal expenditures are mandated and differing local preferences and demand are ignored, then efficiency losses follow. Note that the possibility of externalities and public good arguments is excluded.

²⁴ Indeed, McArty and Brazer include the proportion of the population who have less than a high school education as an indicator of preference.

the medium term associated with primary education and preventive health care.

- A third major, more practical objection, is the empirical difficulty involved in measuring preferences and disentangling the effects of 'objective' factors like income arising from, for example, parental education level. Some US studies have been able to utilize data on local preferences about the level of education spending expressed in special referenda, though this is obviously highly unusual, even in industrial countries.

Thus, a conventional neoclassical economic focus on allocative efficiency and individual preferences, if it excludes public goods arguments, does not take us far in assessing the actual benefits of decentralization for children.

In practice, the focus of governments and the international financial institutions has been directed to the impact of decentralization on technical efficiency, i.e. unit costs (see e.g. Commonwealth of Australia, 1997). Whether decisions are made locally or centrally may affect unit costs in a range of ways. Relative prices of different types of inputs may differ across localities, for example, or local variations in school opening hours may suit the needs of the community, thereby improving attendance rates and lowering unit costs. A centralized system of input procurement may not allow the adjustment of input combinations consistent with local prices. Teacher salaries could be set relative to the average wage in the locality, rather than on the basis of a uniform national pay scale which might create shortages and surpluses of teachers in different parts of the country. Local decision-making may reduce the time required for decisions to be made, as opposed to waiting for central authorities to receive the request and respond. Heightened competition between public and private providers or contracting out discrete services to private sector agents may help to reduce costs; but these activities lie outside the scope of this study.²⁵

Offsetting potential efficiency gains under decentralization is the risk of duplication of costs or loss of economies of scale (Tirole, 1994). Functions such as development of curriculum and teaching materials and setting and

²⁵ It is sufficient to note that effective competition may be absent outside major metropolitan areas; this is especially likely in formerly planned economies. The balance of evidence (taken mainly from industrial countries) suggests that contracting out can reduce costs (Domberger, 1994), though the cases studied are typically 'simple' services like refuse collection or hospital cleaning. Chile is an exception, where schools were transferred to local authorities at the same time as opening the field to competition to private providers who were reimbursed on equal terms as public schools. Overall costs per pupil fell, though partly because the rate of reimbursement failed to keep up with inflation; the effect of competition, per se, is unclear (Campbell et al., 1991, p. 23). Moreover, longitudinal evidence shows that learning outcomes, in terms of scores in national standardized tests, worsened during decentralization (Prawda, 1993).

marking major examinations may be more efficiently carried out on a centralized basis. The externalities and costs involved in service (education) development may be seen as equivalent to research and development in the theory of industrial organization (Ugaz, 1997). Potential efficiency gains may also be counteracted by lack of managerial and administrative skills at the local level.

The most costly input in schooling is typically the teacher (Tan and Mingat, 1992, p. 29). Levels and variations in salaries and pupil-teacher ratios therefore have a large influence on technical efficiency. We might expect real wage costs to be rigid, at least downwards, making significant cost reductions somewhat difficult. This may not always be the case, however, where, for example, teacher unions are weak or non-existent. Alternatively, the presence of high inflation readily allows reductions in real personnel costs through lags in indexation.

Strictly speaking, technical efficiency should be measured directly by comparing the total cost of providing a specific bundle of local public goods and services, or a particular service, under two regimes, that is, before and after decentralization or between similar programmes run by central and local authorities. However, data and practical conditions will rarely permit such strict comparability, not least because production costs will differ due to exogenous factors, such as population density. An alternative, less ambitious approach is to focus on selected aspects of the cost structure and consider the difference attributable to decentralization, such as personnel costs, as a partial measure of the impact on technical efficiency.

The cost of public provision is clearly important to children, as members of taxpaying households and as future taxpayers. Increasing technical efficiency is of potential benefit to child welfare: the resources thereby saved through lower unit costs in schools may be used to expand the particular service or directed to immunizations, for example.²⁶ Yet, in utilizing cost minimization as a criterion of better public provision, we should control for quality and outcomes: cost minimization is an appropriate goal, subject to the condition that quality of provision does not fall and child welfare outcomes do not deteriorate. Satisfactory measures of quality are, of course, difficult to derive and obtain. The cost of provision is also affected by such factors as geographical isolation and the nature of the clientele (e.g. diversity of the student population). Ideally, the different resource requirements of schools operating in different environments ought to be taken into account by disaggregating by school size

²⁶ How the cost savings are spent (or not) is a question of allocative efficiency. The objection that the money saved may be spent on the military (in the extreme case) goes to allocative efficiency and does not detract from technical efficiency.

(larger schools tend to have lower unit costs), location (rural and isolated versus metropolitan) and socioeconomic status of the students (Commonwealth of Australia, 1997).

We have proposed a framework for assessing the impact of decentralization in education on child welfare. The routes which welfare impacts might be expected to follow have been clarified, while drawing attention to exogenous effects and variables that need to be controlled for in a rigorous assessment. It has been suggested that equity should be accorded greatest weight, in terms of both equality of opportunity and progress in reducing disparities in access. Attention has been drawn to comparative priorities as a partial indicator of the implications of decentralization for overall access and equity associated with the expansion (or contraction) of spending on priority services. The notion of allocative efficiency, which has figured prominently in the economics literature about the merits of decentralization and has affected the views of such agencies as the World Bank, has been shown to have limited value if we accept the existence of externalities and non-local public goods in the provision of basic services. From a child welfare perspective, we can simply assume that the expansion of access to schooling and preventive health care, to take the prime examples, is a right that is not to be overridden by individual (parental/taxpayer) preferences that might favour less education expenditure in return for a lower tax burden, for example. Technical efficiency is more important, although caution is required in interpreting trends in unit costs, particularly in the context of fiscal adjustment.

5. The Effects of Decentralization on Education

This section brings together evidence to illustrate assessments of the effects of decentralization in terms of the above framework. Given the wealth of literature on the general topic of decentralization, a selective approach is appropriate. We concentrate in geographic terms on the countries in transition from planned economies (extending from Europe to China) and on South and South East Asia, without attempting to cover every country in the regions. The focus is on public primary and secondary education.²⁷

Evidence is limited, however. As a recent review of the impact of decentralization on rural poverty in Asia concluded, 'methodological problems of qualitative and quantitative analysis of impact existed and need to be

²⁷ This survey has excluded privately established and operated schools that are included under the heading of 'community financing' (see Bray, 1996b, pp. 10-16 for a review of the East Asian experience).

resolved' (CIRDAP, 1992). The same is true of education. No comprehensive studies have been found, so that the evidence is at best only partial. Equity, in terms of equality of opportunities through such proxies as expenditure, as well as available evidence on learning outcomes, is reviewed first, then efficiency, in particular technical efficiency.

■ 5.1. *The impact on equity*

The impact of educational decentralization on equity is ideally measured in terms of the degree and distribution of educational attainment. We would like to see interpersonal or interhousehold differences, as well as variations among provinces. In measuring impact, comparisons of local learning outcomes on an ongoing, consistent basis are rare, even for industrial countries (see Commonwealth of Australia, 1997, p. 38). In practice, we are often constrained to examine the interregional distribution of budget resources as a proxy indicator. (How budget allocations are related to outcomes will depend on the technical efficiency with which resources are utilized, as well as varying objective conditions such as degree of isolation and the incidence of disadvantaged students.) The review of the evidence suggests that there is a tendency for the distribution of local education spending to become increasingly disparate in a decentralized system. This tendency will be significantly affected by the stance of central government with respect to the size and direction of transfers.

The case of Indonesia, a large and diverse country, reveals significant overall improvements in educational attainment over a period that included high economic growth, as well as episodes of structural adjustment. The record is impressive: between 1968 and 1993, the share of children aged between 7 and 12 in primary school rose from 41 to 93.5 percent (Booth, 1994). This was accompanied by reduced variability across the country. The variance in education achievements across provinces declined from 19 percent in 1978 to less than 14 percent in 1988 (Ranis and Stewart, 1994, p. 64).²⁸ Regression analysis investigating *INPRES* investment per capita in education has found a positive correlation with provincial income and the number of primary schools per capita and a negative relation to literacy rates in both 1983 and 1988, suggesting that central transfers played a role in reducing disparities in educational achievement.

Economic transition in China and many of the countries of the former Soviet Union period has been associated with downward shifts in financing and managerial responsibility: from the centre to provinces (oblasts) and from the

²⁸ This indicator appears to comprise primary school enrolment ratios and literacy over the age of 10 (p. 61), although this is not entirely clear.

provinces to county and township (raion) levels. Another familiar feature is that local authorities have been required to finance local services that were previously financed by agricultural collectives or state enterprises. In contrast to China, however, in the former Soviet Union this has taken place in the context of often sizeable declines in national income, fiscal retrenchment and attempts to shift rapidly to a market-based economy. It is therefore important to isolate the impact of decentralization of fiscal and decision-making responsibility from the wider exogenous and macroeconomic effects that would also be expected to affect educational provision and outcomes. The effect of declines in GDP and overall public expenditure can be excluded by using expenditure figures in terms of share of GDP and/or public expenditure, for example.

In China, the budgetary arrangements associated with decentralization have been seen as the cause of growing regional disparities. The provision of education services varies not only across provinces, but among counties within a province.²⁹ West and Wong (1995), comparing three provinces of varying levels of development and income, concluded that the gaps between more well off and less well off provinces in terms of quality of services and educational outcomes have been widening. For the rural population over 15 years of age in 1990, the illiteracy rate in Guizhou (41 percent) far exceeds that of Shandong (26 percent). In national examinations, only 22 percent of lower secondary school students achieve passes in the poorer province, compared to 76 percent in more well off Shandong; the gap is similarly wide for primary school students, at 38 and 89 percent, respectively.

The central Chinese government accounts for only about 10 percent of social sector spending, while rural governments at the county and township levels account for about 70 percent of the subnational share of social spending, or 60 percent of the total. Cities and townships tend to collect more revenue than they spend, whereas the converse is true of rural localities. Hence, while the range of revenue disparity is 'unusually large' at the provincial level, the disparities are greatest at the lowest administrative level (e.g. in Pudding province the richest township collects 29 times more revenue per capita than the poorest). Interregional disparities in expenditure are somewhat smaller, but still substantial (West and Wong, 1995). In the early 1990s the pattern was of declining transfers (less equalization), which in turn is linked by the authors to the observed distribution of educational outcomes. Still, the evidence is only partial; firmer conclusions could follow after controlling for exogenous

²⁹ China's system of fiscal decentralization is unusual in that local revenues exceed those of the centre, and transfers are made upwards rather than downwards.

macroeconomic and other effects, such as household income and parental educational attainment.

A number of studies of educational decentralization in the former Soviet republics cast some light on its equity effects. However, the focus has tended to be upon trends in financing, rather than outcome measures. This is understandable in that the latter might be expected to adjust relatively slowly, so that trends in financing would give an early signal. Nonetheless, information on process indicators – such as attendance and retention rates and the economic and demographic status of the enrolled versus the non-enrolled populations – would likely provide useful insights into the impact of decentralization. Available evidence on actual access tends to be more anecdotal in nature.

The intergovernmental financing arrangements in Kazakhstan have been associated with a steady increase in measures of disparity of education expenditure since 1992. The coefficient of variation doubled between 1992 and 1994 (Haque, 1995, Table 4.1), although there is no consistent ranking of oblasts over the period. The transfer formula appeared to favour more sparsely populated rural areas and therefore maintain a relatively equitable allocation of expenditure between rural and urban areas. The available studies of Kazakhstan do not, as yet, link the changes in budget allocations and financing arrangements to either intermediate or outcome indicators of education.

In the Russian Federation, selected financial and administrative responsibilities in education were transferred to the regions in 1992. The share of education expenditures originating at the territorial (oblast and raion) level increased from 66 to 80 percent between 1992 and 1994 (World Bank, 1995a). Over the same period, the coefficient of variation on education was volatile, increasing overall from 0.69 to 0.75 (Stewart, 1997). In fact, the pattern of social spending appears to be characterized by a few high spending regions and the majority of oblasts spending just below average. Since the high spending oblasts tend to be those with smaller, less densely located populations, this may simply reflect higher costs of service provision.

There are nonetheless concerns that, under the banner of increased choice, the Soviet achievements in terms of secondary completion for most urban children, including working class children with poor grades, have been undermined in Russia (OECD, 1997, p. 63). Several new sources of inequality that have emerged can be linked to the decentralized forms of financing and the associated rise of user fees; for example, desirable schools often give places to children whose parents make a substantial donation, and the tutoring of students by their own teachers for private fees is becoming increasingly accepted as school policy. Similar anecdotal reports have come from Kyrgyzstan in Central Asia. These practices point to diminished equality of opportunity,

especially for children in less affluent and less well connected families, regardless of merit (OECD, 1997, p. 64).

Uzbekistan is something of a counter-example in the former Soviet context, where decentralization has been limited in institutional and political terms. The budgetary process is also centralized in that national service standards and corresponding spending coefficients determine the level of funding in each oblast. The local budgetary process 'mechanically [applies] the expenditure coefficients to demographic characteristics such as population and age distribution. Deviations from the coefficients have to be approved by the Ministry of Finance' (World Bank, 1995a, p. 17). The resulting patterns of expenditure suggest that this relatively centralized political system has nonetheless achieved a relatively equitable interregional distribution. In 1994, total revenue per capita ranged from 509 to 698 sum (excluding the capital Tashkent at 965 sum), and, for total oblast expenditure, the range was 498 to 698 sum (again excluding the capital city). For education, the range of per capita (not per pupil) expenditure was somewhat less, from 155 to 207 sum.

There is nonetheless greater local autonomy in the Uzbek education system than appears at first sight. Budgets for schools are managed at a fairly decentralized (raion) level. While the wage tariff for teachers is set centrally in Tashkent, school directors are permitted to award bonuses (equal to 15 percent of salary) to reward the most productive staff. The norms which establish classroom size may not always be strictly observed. Many schools also operate their own special accounts, based on income received from enterprise sponsors and through such activities as rental of school facilities. Schools in rural areas may also generate revenue from their own agricultural production. This, together with in-kind contributions from parents, can be used to help maintain facilities. There is also evidence of innovation and change in the education system since independence. A much greater degree of streamlining has been introduced through the expansion of selective schools (gymnasias and lycees). All lycees and gymnasias, after being certified by the oblast education department, pay their teachers 50 and 20 percent above their normal salary which enables them to choose among better teachers.

In sum, there is a significant risk that equality of opportunities and of outcomes is adversely affected by decentralization of education. These conclusions are supported by recent reviews of Bray (1996a, p. 7) and Fiske (1996, p. 28). Available evidence for the countries under consideration is largely limited to financial rather than outcome indicators, however. The negative repercussions for equity can be traced to approaches to intergovernmental transfers that fail to secure sufficient resources for poorer

regions, together with the effect of increased reliance on user fees associated with decentralized financing of basic levels of education.

■ 5.2. *The impact on efficiency*

This section explores some of the limited evidence available on technical efficiency. Evidence on the impact of decentralization on costs is at best mixed. Difficulties in interpretation are revealed, especially in the context of fiscal adjustment.

The available evidence on the relationship between local construction and technical efficiency is mixed. Winkler (1989) asserts that the construction costs of locally constructed schools tend to be lower due to the use of lower cost materials and lower costs associated with contract administration (p. 19). The BRAC (Bangladesh Rural Advancement Committee) runs schools in simple structures – buildings made of bamboo or mudbrick without furniture – so that capital costs are low. However, there is evidence that lack of electricity and water in schools, even if reducing costs, worsens quality: children in schools with these amenities learn more than those without (Lockheed et al., 1990). Bray (1996b, p. 34) points to factors that suggest the greater cost-effectiveness of centrally imposed higher quality building designs, including protection of books and equipment, as well as superior longevity and lower maintenance costs.

Although outside the regions under direct scrutiny, a World Bank review of decentralization in Latin America has interesting conclusions on efficiency (Campbell et al., 1991). The findings of a ‘modest number’ of analytical studies suggested that the costs of locally selected, administered and financed projects were below those of central projects, though the results were ‘by no means uniform’. Moreover, the cost savings reflected a combination of technical efficiency, preferences for cheaper designs and harder budget constraints at the local level. Local budget constraints also forced cost reductions regardless of household preferences or efficiency, so that, for example, constraints on municipal borrowing meant that capital cost reductions resulted in higher future maintenance costs.

A study of local school financing in the Philippines (Jimenez et al., 1988) found that, for given levels of enrolment and quality, schools that relied more on local finance had higher technical efficiency. These schools had better achievement scores, though they also tended to be in more affluent and urbanized areas. Higher technical efficiency was attributed to:

- (a) A more appropriate input mix. Although teachers were assigned and paid centrally, local funding allowed schools to achieve a more appropriate balance between personnel and non-personnel costs.
- (b) An improved incentive structure. School administrators were responsible to local school boards where parents and local officials were represented and which were better able to monitor performance.

The interpretation of reductions in unit costs can be difficult, however, especially in the context of fiscal adjustment. It is important to control for changes in quality before concluding whether technical efficiency has actually improved. Unfortunately, longitudinal studies on test scores are rare. In Chile, one of the few cases of decentralization where such data are available, standardized test scores fell in the context of overall cost reductions (Prawda, 1993; Schiefelbein, 1997). Indonesia is a case where, despite falling central budgetary allocations for education between the mid-1970s and the mid-1980s, overall access to education continued to *improve* (Ranis and Stewart, 1994). While local budgets may have partially compensated for reduced central transfers for education, there is no evidence to test this, and it seems that greater technical efficiency in the delivery of education enabled continuing improvements in outcomes.

Decentralization of responsibility for service provision in the former Soviet countries appears to have been motivated largely by the desire to reduce central government expenditures; as a corollary, the transfer of functions has taken place without the transfer of commensurate revenue sources or increased central grants. By way of contrast, decentralization strategies adopted in the Latin American region in the 1970s and 1980s drove up central government costs, since 'revenue transfers have generally run ahead of expenditure or functional transfers, implying that, over the medium term at least, decentralization will add to [total budgetary] costs' (Campbell et al., 1991, p. 12).

Can reduced education spending in transition countries be interpreted as a massive gain in technical efficiency resulting from decentralization? Or does it simply reflect a collapse of budgetary funding? Greater technical efficiency may be impeded by continuing central controls. In Russia, for example, teacher salaries are still set centrally, though financed locally, and staffing norms are often set on federal standards (OECD, 1997).

In Kazakhstan, education expenditure fell from about 7 to less than 4 percent of GDP between 1991 and 1994 (Haque, 1995). Decentralization has not yet overcome significant efficiency problems, however. Spending allocations are still based on the old norms, thereby preventing adjustments in the combination of inputs to take advantage of local conditions and changed relative prices.

Low student-teacher ratios have been maintained or even increased.³⁰ One would not therefore expect improvements in technical efficiency to flow, although measurement is obviously difficult since real unit costs (in particular salaries) have fallen so dramatically.³¹ Overall, then, it seems unlikely that changes in unit costs in education in Kazakhstan can be properly interpreted as gains in technical efficiency, although, to test properly this conclusion, we would need to obtain an appropriate measure of outcomes.

The system of strong provincial government in Papua New Guinea has been unsuccessful in education in terms of expanding access, as well as in terms of technical efficiency. Only about half the adult population can read; the coverage of education and health services is comparable to low-income African countries, and attrition rates appear to be high and rising at the primary level. This does not seem to be linked to low public expenditure, since the education budget was about 5.4 percent of GDP in 1992. Recent analysis suggests low technical efficiency in primary education: unit costs are high compared to South Pacific comparators and Asian and African averages (Leechor, 1996, Figure 1.4). Tan and Mingat (1992) noted that PNG's 'exceptionally high unit costs' at all levels of education made the country an outlier in the Asian region: unit operating costs for primary schools were triple the regional average in the mid-1980s.

Although a number of educational functions are devolved in PNG, the centre has maintained significant constraints on local autonomy which may impede local efficiency. Central transfers comprise the bulk of provincial budgets, some of which are tied to specific purposes. Local autonomy – and also technical efficiency – has been limited by centrally established personnel policy that sets the wage rates, service conditions and skill requirements of teachers and administrative staff.³² Average government pay is 6.8 times GDP per capita in PNG, compared to 1.6 in the Philippines and Sri Lanka and a regional average of 2-3. The provincial education budget goes almost entirely (95 percent) to personnel expenses. Technical efficiency may be further diminished by duplication of agencies; for example, there are both national and provincial high schools. In sum, commentators have generally tended to favour greater centralization of education in PNG (Bray, 1985, p. 193).

³⁰ Kazakhstan still had more than double the levels of teachers per student in Germany, Turkey or the United Kingdom, for example.

³¹ The average real wage index dropped to 65 in 1994 relative to 1990.

³² In mid-1996 responsibility for salary payment was to be transferred to the provinces, although it was unclear whether the provinces would be able to set payment rates. The stated rationale was to reduce the delays in payment (Statement to Parliament in September 1996 by the Honourable John Waiko, Minister for Education).

Winkler (1989) concluded that there is 'little evidence in either the social (allocative) or technical efficiency consequences of decentralization. [For allocative efficiency] there are no studies to determine the extent to which decentralization in fact alters the nature of education services offered and the degree to which beneficiaries are more or less satisfied.' This statement remains valid today with respect to allocative efficiency, given the methodological problems inherent in attempts to measure individual preferences and the efficiency of budgetary allocation among various possible uses. The handful of studies of trends in costs associated with decentralization, with few exceptions, fail to control for changes in quality of provision and outcomes. At best, we might conclude that the evidence on the impact of decentralization on costs is limited and mixed.

6. Conclusions

Our conclusions about the impact of decentralization on child welfare, in particular education, can be relatively brief. It seems more appropriate at this stage to highlight possible candidates for UNICEF's research agenda on decentralization.

Rigorous assessments of the impact of decentralization on child welfare outcomes are scarce. Indeed, with a few exceptions, child welfare outcomes have rarely been included in the studies of decentralization. This is true even of UNICEF's recent surveys of decentralization (Castillo, 1995). More typically, evidence about the interregional allocation of expenditures is presented, which is at best a crude proxy indicator. Other studies have focused almost exclusively on the procedural and institutional aspects consistent with a concern to promote community participation, but neglect evidence about outcomes. It is nonetheless possible to draw some tentative conclusions.

The allocation of responsibilities and the structure of public expenditure are such that local governments tend to focus on those services that are of greatest direct relevance to child welfare. A priori, then, we might expect that greater decentralization would promote the provision of such services. Yet, varying resource and other endowments among regions mean that the associated fiscal arrangements assume great importance. The evidence suggests that, by design or otherwise, such arrangements generally fail to enhance interregional equity and often lead to worsening disparities in various measures of service provision. This has been shown to be the case in both growing and severely distressed economies, though with some notable exceptions (including Indonesia).

The evidence does not support the commonly held assumption that decentralization would automatically promote both the efficiency and equity of government activities. Indeed, with respect to efficiency, it has been shown that the notion of allocative efficiency as articulated in the US literature is not relevant to child welfare in country contexts where the rights of the child to basic social services have not yet been achieved. Technical efficiency has greater relevance, yet reduced unit costs are subject to ambiguous interpretation in situations of transition and/or stabilization and adjustment. Trends in unit costs should be considered with appropriate controls for quality of service and outcomes.

The data requirements for a comprehensive evaluation of the impact of decentralization are clearly demanding. The lack of reliable longitudinal data on outcomes poses a particular problem. Unfortunately, this has tended to mean that observers fall back on their prior beliefs about the impact of decentralization. Yet, this is not inevitable. In particular, the impact of decentralization on equity of access, controlling for exogenous and other effects, could be investigated using regional data on the distribution of education by income, rural/urban residence, gender and so on. This is increasingly feasible with the wider adoption of reliable household surveys that capture educational attainment of members. An overall comprehensive evaluation that captures efficiency, as well as equity, effects is admittedly much more difficult, but not impossible. There is a number of studies that have successfully measured different aspects of the proposed framework. The challenge now from a child welfare perspective is to combine these separate elements in an integrated approach.

The foregoing suggests that a rich research agenda remains to be exploited. Evaluations along the lines of the framework that is suggested above would complement the existing UNICEF work, which focuses on procedural and planning aspects, and would put child welfare at the fore. Country case studies appear to be the most fruitful route, given the data demands. Countries with similar ostensible starting points – e.g. levels of human development – could be usefully compared, ideally within the same region.

Annexe 1

This annexe briefly reviews the approach adopted in the UNICEF publication *The Children Here* (1995) by Carlos Castillo, which accompanied a series of country case studies that were published as Innocenti Occasional Papers in 1994. *The Children Here* is explicitly narrow in scope, addressing the extent to which countries have decentralized the process of formulating the plans of action that emerged in the wake of the 1990 World Summit for Children. The findings and recommendations are limited to how to proceed with decentralization of the National Plans of Action (NPAs). The extent of de/centralization of development planning in general is not examined, nor the impact on service delivery. It is therefore possible that NPA decentralization could be undertaken – albeit ineffectively – in an otherwise centralized state structure. This was the case in Ecuador, for example. Hence, the focus is on processes and on one aspect of the *means*, rather than the ends, of decentralization and its impact on child welfare. This may be contrasted to the framework suggested above, where the focus is on outcomes for child welfare and the ways in which decentralized decision-making may impact upon those outcomes.

At the same time, it is assumed that local planning necessarily leads to more relevant and sustainable activity. Where problems are revealed, these are not regarded as inherent, but rather attributable to lack of experience (p. xi). Some potential disadvantages (such as worsening regional disparities) are acknowledged, but ‘all these risks need to be cautiously avoided by ensuring all mechanisms work toward empowering people, reducing costs, increasing the quality of services and promoting equity’ (p. 15). However, such mechanisms are not discussed or evaluated in any detail.³³

The patterns of decentralization of NPAs are in terms of the following dimensions, several of which appear to overlap:

- Technical: situation diagnosis, goal-setting and strategy design,
- Organization and Management: institutional capacity for implementation,
- Social mobilization,
- Communication and advocacy,
- Community participation: accountability through organized groups, and
- Finance.

The chapters, organized under these headings, elaborate each of these concepts. However, evidence on the impact of decentralization on the actual plans relevant to child welfare is not part of the analysis. For example, have local inputs based on local knowledge and information led to greater diversity in public service provision and more realism in goal setting? In the discussion of technical aspects, the importance of local information is recognized, but perhaps overstated: ‘...with an appropriate information system, it would be possible to optimize efforts and resources and improve services’ (p. 35). Moreover, the paper appears to assume, without explanation, that higher, more ambitious goals are better.

³³ There are scattered references to possible mechanisms: for example, that the resolution of conflict and disparities should take place through ‘the rule of a higher authority or shared decisions among peers’.

As one might expect, given the process-oriented approach to the topic, special attention is given to the roles of advocacy, social mobilization and community participation. The last is found to be rare or limited to once-off episodes. Social mobilization is accorded particular importance; indeed, it is seen as a way to 'overcome the lack of human and financial resources', though how and why this could follow in, for example, poorer regions are not revealed. Implicitly, the paper seems to accept the World Bank proposition of 'participation through cost-recovery'. For example, the scope for decentralization to reduce the dependence of localities on central allocations through the generation of local resources (user fees, etc.) is welcomed in the Overview (p. 22), apparently without recognizing the possible repercussions for equity.

Taal (1993), another document on decentralization published through UNICEF, outlines an approach for evaluating the impact of decentralization and community participation on access to social services. The starting point is that the 'key relationships in ensuring access to social services are state mobilization, local-level democracy and community participation' (p. 5), a general claim which is contradicted by a range of country experiences, from the former Soviet Union to Suharto's Indonesia. The participation of women and children is 'crucial if initiatives in community participation are to be genuine' (p. 17). Interestingly, equity in terms of access to the service either overall, or among disadvantaged groups, is not accorded specific attention. The decentralization of decision-making in education in Papua New Guinea, for example, is rated as excellent. The drawbacks of this approach become evident, however, once we note that the country's low and falling enrolments and extremely high unit costs have been neglected (also see above).

What does this earlier work of UNICEF reveal about the impact of decentralization on child welfare? Consistent with previous studies (see, for example, de Valk and Wekwete, 1990), it seems clear that attempts to implement a decentralized approach to development planning is unlikely to succeed in the absence of fiscal and institutional capacity. This is the case even where formal plans can be drawn up.

Annexe 2

Fiscal dimensions of decentralization, selected Asian and transition countries (percentages)

	Local revenue/ total revenue	Local expenditure/ total expenditure	Transfers/ consolidated budget expenditure	Transfers/local expenditure	Local social expenditure/ local expenditure	Central social expenditure/ central expenditure
Bulgaria	12.1	20.5	9.4	46.2	63.02	6.13
Czech Rep.	19.1	25.2	5.1	20.3	16.35	27.89
Estonia	16.0	23.2	6.5	28.2	47.99	44.32
Hungary	12.4	23.9	9.4	39.2	47.69	11.20
Latvia	24.0	31.9	0.3	0.9	49.44	20.57
Lithuania	29.9	44.3	12.9	29.1	52.23	20.12
Mongolia	32.8	46.9	14.6	31.1	64.59	8.88
Poland	14.3	19.5	5.9	30.1	n/a	n/a
Romania	7.2	11.1	4.8	43.1	n/a	n/a
Russia	70.7	68.4	13.9	20.3	35.72	4.83
India	47.1	83.0	25.7	31.0	28.57	4.63
Indonesia	3.3	13.8	10.9	78.9	40.29	12.71
Philippines	2.7	5.8	4.2	72.7	n/a	n/a
Thailand	5.8	8.7	2.6	29.6	7.16	20.53

Note: The data are for 1994, except for Hungary (1990), India (1992), and Lithuania, Indonesia and the Philippines (1993).

Source: IMF (1995). The data are presented by country. The relevant tables under each country headings, are Tables A, B and L.

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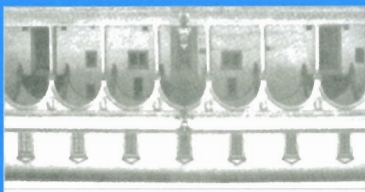
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