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Improving Primary Enrollment Rates among the Poor

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This policy brief discusses evidence for policy making within the context of attaining the Millennium Development Goal (MDG) of universal primary enrollment. Despite recent progress, many developing member countries (DMCs) will not attain this goal by 2015. Unsurprisingly, some of the biggest enrollment deficiencies within countries occur at the bottom end of the income distribution. Empirical evidence indicates that children from poorer families are on average almost three times more likely to be out of school versus those from richer families (UNESCO 2005). What this implies is that universal primary enrollment cannot—and will not—be attained without an explicit focus on inclusiveness. In addition, for many DMCs, there are serious concerns regarding the quality of basic education.

Given this backdrop, the brief summarizes a simple analytical framework introduced in the theme chapter of the *Key Indicators* (ADB 2006). The framework can be used to address the following questions: (i) How can policymakers improve primary enrollment rates among the poor? (ii) What methods are available to identify constraints to increasing enrollment among the poor? (iii) What do we know about the effectiveness of various corrective policies aimed at improving enrollment rates?

The applicability of the analytical framework is quite general, and it can be adapted to any particular sector or policy challenge. The framework underscores the utility of using a combination of a macro cross-country perspective with a micro evidence-based approach to devise, implement, and monitor policies; and given the emphasis now among multilaterals on measurement and accountability for outcomes, this is consistent with the overall Management for Development Results (MfDR) framework.

In terms of policy implications, the brief argues that a strategy for improving enrollment rates among the poor will require several components. First among these is a greater focus on measuring the extent to which there are enrollment inequalities, and how these are distributed spatially within countries. Second, countries where enrollment inequalities are high may need to reevaluate their priorities and focus on allocating public expenditure so as to have more of a direct benefit for the poor, e.g., by emphasizing primary over tertiary

expenditure in public spending, and improved targeting of the latter. Third, corrective policy making needs to be grounded in empirical evidence on what some of the key binding constraints are and what interventions would be the most effective in overcoming these. Finally, policymakers must be held accountable to ensure that efforts to improve outcomes among the poor do indeed occur.

Identifying Problems and Looking for Solutions: An Analytical Framework

Box 1 summarizes the key elements of the analytical framework. First, the framework underscores the need to look at relevant outcomes from a cross-country macro perspective; this is represented by the box on the top left-hand side of the schematic. This basically entails “situating” the country among its comparators: is enrollment in a given country worse than that of other countries at similar income or public education expenditure levels? Can we identify policy-relevant factors from such a cross-country perspective that could explain why primary enrollment inequality is lower in some countries versus others?¹

The second component of the analytical framework, shown on the top right-hand side of the schematic in Box 1, looks at evidence for policy making from a within-country micro perspective. This would entail measuring the extent of enrollment inequality in the population as well as looking at spatial disaggregations to identify key regions that may need special attention. This would also include looking at both supply- and demand-related constraints to improving enrollment rates among the poor. From a supply perspective, since governments tend to be dominant in the provision of primary education in most DMCs, evaluations of policies might look at how pro-poor the composition of public education expenditure is: Are the poor benefiting from public spending? From a demand perspective, the focus would be on identifying key determinants of primary enrollments.

¹ These “vertical” comparisons can potentially be important. Economic growth may lead to increases in returns to education and thereby cause a rise in demand for schooling and enrollment. variations across countries. However, variations across countries having similar level of income, or across countries spending the same amount on education, can suggest that there are other factors at play that may be important from a policy-making perspective.

Finally, another key methodological input into evidence-based policy making is that of impact evaluation analysis, which focuses specifically on issue of attribution of outcomes to policy interventions, and are usually carefully designed to ensure that causality can be revealed.² As depicted in the schematic in Box 1, impact evaluations are an important source of information for the design and implementation of corrective policy interventions. For instance, if low household income is a key constraint, would cash transfers boost enrollment rates? Are school meals effective in boosting enrollment rates for the poor? Would provision of free books be an effective strategy?

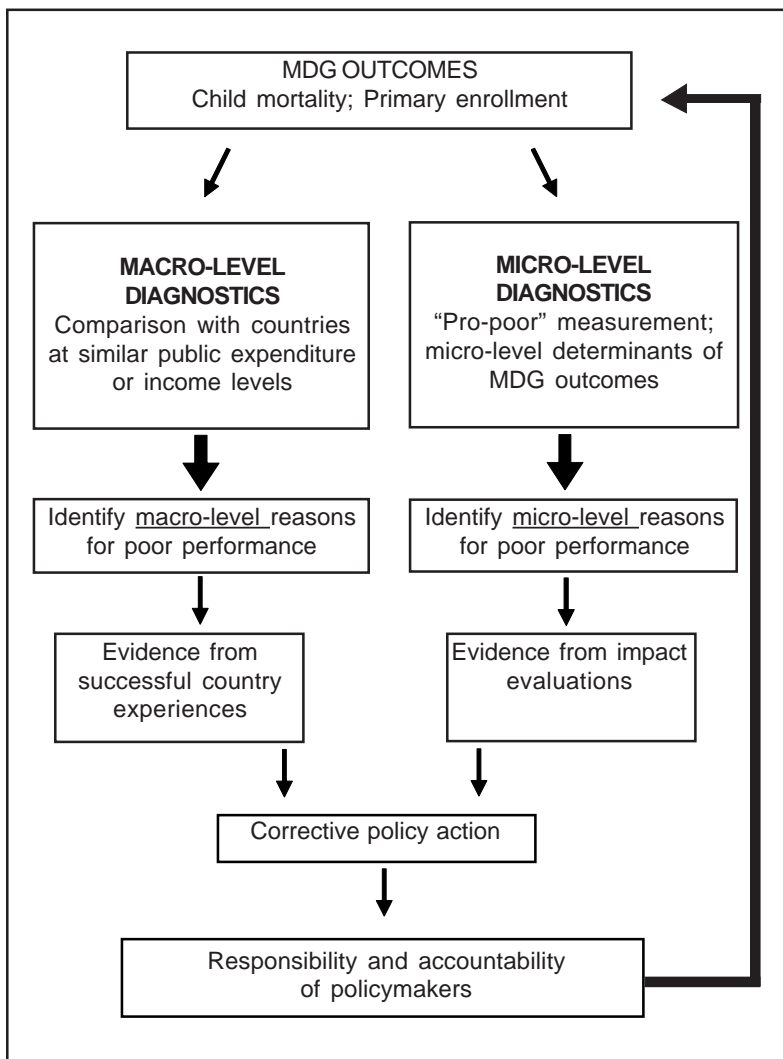
Measurement for Management

Measurement for management is a key component of the analytical framework elaborated above. We argue that a focus on inclusiveness requires measurement not only of national averages and gender decompositions but also of what the enrollment rates are among the \$1-a-day and \$2-a-day poor, for example. Increased knowledge, awareness, and dissemination of such disaggregated measures could itself catalyze the implementation of corrective policy actions, an insight gleaned from the application of social accountability tools such as “citizen report cards” (these being surveys of citizen experiences with government providers of social and other services; the findings are disseminated widely with an eye at informing and stimulating improvements) (World Bank 2004b). In addition, spatial disaggregation of indicators can also be extremely informative from a targeting perspective.

Figure 1 shows an example of disaggregated primary enrollment/attendance rates among those in the bottom versus the top economic quintile as estimated from household survey data from selected DMCs. As can be seen, there are significant disparities with regard to inequalities in primary enrollment, even among countries that do not differ significantly in their levels of income and public education

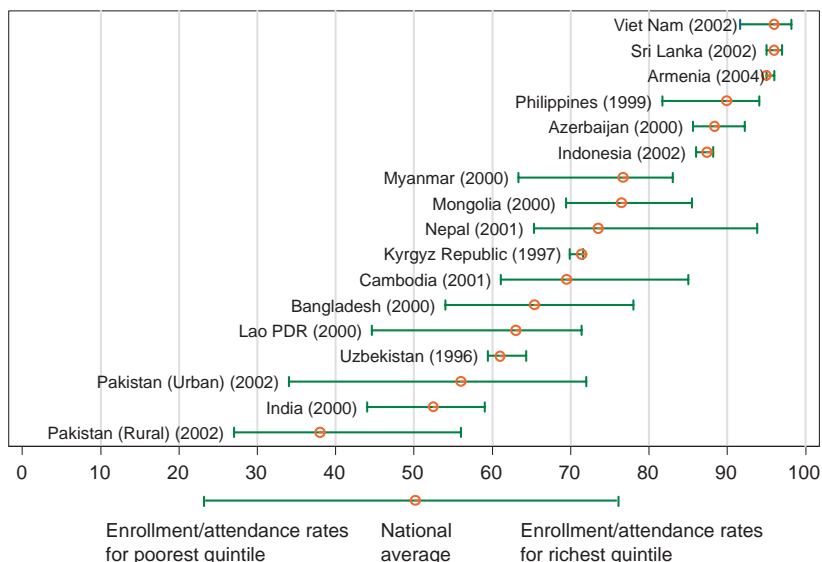
² Some of the demand studies elaborated in the previous subsection can also reveal information as to the effectiveness of specific policy interventions and can qualify as impact evaluations as long as all other determinants of enrollment outcomes have been controlled for.

**Box 1. Identifying Problems and Looking for Solutions:
An Analytical Framework**



expenditure.³ Inequalities in enrollment are particularly high in Pakistan (both rural and urban), Lao PDR, Bangladesh, Nepal, and Cambodia. Inequalities are far less pronounced in some of the Central Asian republics as well as in Sri Lanka and Viet Nam.

Figure 1. Inequalities in Net Primary Enrollment/Attendance Rates, Selected DMCs (percent)



Sources: Estimates compiled from Angel-Urdinola et al. (2006); Deolalikar (2005a); Pakistan Federal Bureau of Statistics (2006); UNICEF (1999, 2000a-d, 2005); and World Bank (2004a, 2005, 2006).

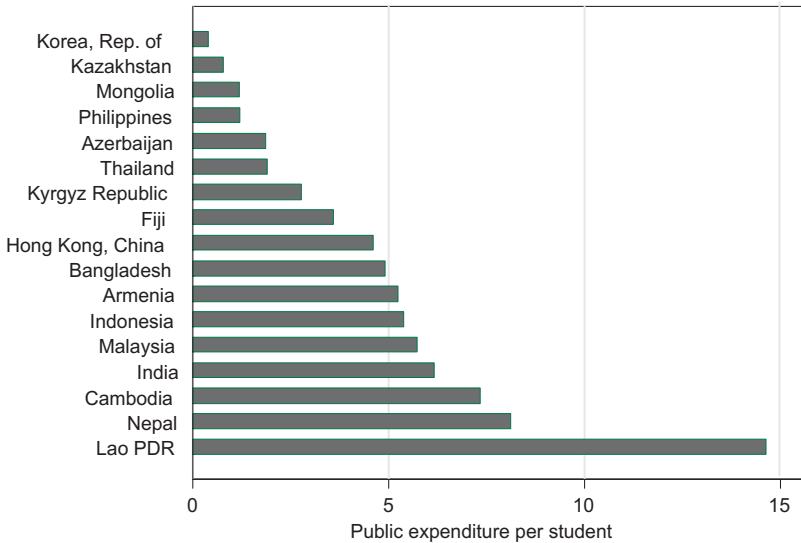
³ The net primary enrollment/attendance rates reported in the figure are not always comparable to the MDG net primary enrollment rates. The former are estimated from survey data that often collect information on attendance rather than on enrollment.

Supply-side Determinants of Primary Enrollment Inequalities

Differences in enrollment outcomes can be related to the extent to which governments are pro-poor or due to some other localized factors. For example, as Figure 2 shows, several of the DMCs that have the biggest problems with enrollment inequalities (e.g., Cambodia, India, Lao PDR, and Nepal) are also those which emphasize tertiary over primary education in their public spending.

Does this imply that resources should be moved away from tertiary to primary schooling? Not necessarily so, at least as long as the budgetary situation can allow for more spending on primary education without reducing expenditure on tertiary education. But it does suggest that this lack of a pro-poor focus of the government may itself be a binding constraint and this may be a very difficult issue to address. Empirical evidence suggests that lower income inequality and lower ethno-linguistic fractionalization in the population could be key factors in explaining pro-poor government orientations (Addison and Rahman 2001). Income inequalities are, more often than

Figure 2. **Public Expenditure per Student:
Ratio of Tertiary vs. Primary, 2000–2004**



Source: UIS Online Database (UNESCO 2006).

not, also related to inequalities in access to political power. One implication from this would be that making education policies more pro-poor would require institutional reforms aimed at keeping the influence of elites in check.

A related issue is whether or not allocated primary education expenditures are actually reaching the poor. This can be revealed using benefit-incidence analysis, which connects outlays with users to estimate the extent to which expenditures are pro-poor, i.e., if the share of expenditure received by the poor is greater than their share in the population. Results of benefit–incidence analyses across several DMCs indicate the pro-poor inclinations of public expenditure in countries that have low enrollment inequalities such as Indonesia, Sri Lanka, and Viet Nam. However, some high-inequality DMCs such as Pakistan, Cambodia, and Bangladesh also had pro-poor primary education allocations, suggesting that there may be other factors at play (e.g., not enough spending, household demand determinants, quality issues) that are influencing enrollment outcomes.

Provider surveys such as those assessing the quality of schools and teaching can also be informative in assessing the (in)effectiveness of public provision. In a recent study across six countries, Chaudhury et al. (2006) found very high teacher absenteeism levels in public primary schools: 16% in Bangladesh, 25% in India, and 19% in Indonesia. Teacher absenteeism was generally higher in poorer regions, but lower in regions where parental literacy rates were high.

Demand-side Determinants of Primary Enrollment

From the demand side, measurement of effectiveness of policies typically focuses on deriving valuations of schooling choices using micro-level household data. Evidence from such analyses indicates that the decision to enroll children in schools cannot be taken for granted. The effectiveness of public policies aimed at improving enrollment rates is often a direct result of the extent to which such policies affect the costs and benefits of schooling from a household's perspective, and this is particularly true for the poor.

From the perspective of schooling characteristics, studies from low-income countries show that a bricks-and-mortar approach based simply on building more schools does not always have a significant impact on enrollment rates. In fact, where average enrollment rates are low, such strategies may even have the perverse effect of increasing enrollment inequality if richer households capture the benefits of improved access (Filmer 2004). This is not to say that building schools is the wrong policy choice: what this implies is that, in addition to

building schools as required, there may need to be special provisions to ensure that the poor do not get left behind.

There are many other examples of country-specific demand analyses focusing on the issue of primary enrollment. Several micro-studies indicate that household characteristics such as parental education and income are usually far more important than access to schooling as determinants of primary school enrollment. Maternal education, in particular, tends to have a strong positive impact on the enrollment of girls, indicating the need to focus on adult literacy programs and social marketing campaigns aimed at improving knowledge and awareness of the benefits of education. For instance, evidence from Pakistan indicates that the presence of a school in the locality did not influence enrollment decisions once parental income and education were controlled for (Burney and Irfan 1995). A similar finding is reported by Deolalikar (2005b). He finds that improvements in schooling quality, proxied by the pupil–teacher ratio at the primary level, as opposed to improvements in access had more of a positive effect on school attendance in Pakistan. Child labor is also an issue with regard to schooling decisions, and Hazarika and Bedi (2003) find that in Pakistan lowering the costs to primary schooling did decrease the incidence of child labor, and increased enrollment. However, this held true only for extra-household labor. For children engaged in intra-household work, there was no effect of changes in the cost of primary education on enrollment. Other schooling characteristics such as the provision of mid-day meals were found to be important for boosting enrollment rates for girls in rural India (Dreze and Kingdon 2001).

Ethnicity and caste are also often an issue: evidence from India suggests that children from scheduled castes and scheduled tribes were less likely to be enrolled in primary schools even after controlling for parental education and income as well as schooling characteristics (Dreze and Kingdon 2001). This suggests a need for targeting based not only on income but also on other characteristics that might reflect a disadvantaged status.

What do we know about the effectiveness of corrective policies aimed at removing the binding constraints to improving enrollment rates for the poor? Evidence from impact evaluations suggests that carefully targeted, pro-poor, results-focused interventions such as conditional cash transfers, mid-day meal programs, school health interventions, and scholarships for girls have been highly effective in improving education outcomes among the poor. Examples of such interventions include the food-for-education program in Bangladesh where food transfers are made to poor households as long as the

children remain enrolled in primary school. Stipends and scholarships for girls have also been found to be effective in improving enrollments in Bangladesh and Cambodia. The provision of subsidized private schools for poor girls in Balochistan, Pakistan was effective in improving primary enrollment rates in urban areas (Alderman et al. 2003). With regard to improved service provision, simple monitoring mechanisms (e.g., the use of tamper-proof digital cameras to record the dates and times of teacher presence) combined with performance-based incentives were found to be highly effective in improving schooling outcomes in India (Banerjee and Duflo 2006).

Conclusions

Attaining the MDG of universal primary enrollment by 2015 will require a focus on inclusiveness as the biggest shortfalls in enrollment rates within countries exist at the bottom end of the income distribution. In order to address this challenge, this brief introduced a simple diagnostic framework that combines a macro situational analysis with a more informative micro-based approach to generating and utilizing evidence for policy making. Demand and other micro-based analyses can reveal what some of the constraints to improving enrollment might be. Impact evaluations can help inform the choice of effective policies designed to overcome some of these constraints to low enrollment.

One key point that we make is the importance of disaggregated measurement. Increased knowledge, awareness, and dissemination of what the enrollment rates are among the poor—and the contrast with comparator countries—can itself be a catalyst for corrective policy action. In addition, public expenditure compositions can often reveal whether or not the poor are benefiting from public spending. In some countries, though, high inequalities can exist despite expenditures on primarily schooling appearing to be pro-poor. Hence, it is important to look at both inequalities in outcomes as well as inequalities in public expenditure allocations.

Evidence from impact evaluation studies underscore the importance of carefully targeted pro-poor interventions aimed at improving enrollment rates among those that need it most. Costs and benefits of schooling are key factors influencing enrollment decisions for poorer households, and interventions that directly reduce costs or enhance the benefits from schooling appear to be the most effective. In this regard, conditional cash transfer, food for education, and targeted scholarships, in addition to the standard bricks-and-mortar focus on improving social infrastructure, can be highly effective in

raising enrollment rates among the poor. Furthermore, parental (and especially maternal) education is another key determinant suggesting that adult literacy may also need to be considered as a means of improving primary enrollment rates among the poor.

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