Financing Education in Developing Countries[1]

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Education is an economically and socially productive investment. In many developing countries, it is financed and provided predominantly by the government. The expansion of education therefore depends on fiscal resources. In recent years, however, adverse macroeconomic conditions and keen inter-sectoral competition for public funds have reduced most governments' ability to continue expanding education. At the same time, the potential contributions of households are limited by the current financing arrangements. The results are underinvestment in education and an untapped willingness of households to pay for education. In countries where the population is growing rapidly, enrolment ratios, particularly in primary schools, might even decline and thus reverse achievements in the development of education.

The current financing arrangements also result in the misallocation of public spending on education. There is evidence, deriving from the effect of schooling on earnings and productivity, that in many countries the average dollar invested in primary education returns twice as much as the one invested in higher education. Yet governments in these countries heavily subsidise higher education at the expense of primary education. In higher education, investment in some specialisations yields better returns than in others, but public spending is not distributed accordingly. As a result, too many graduates are produced in some fields while there is a shortage in other fields.

Evidence also suggests that resources are not being used in schools as efficiently as they might be. In many developing countries, public spending is channeled to schools according to standard funding formulas that do little to encourage efficient use. Staffing rules, pay scales, and allocations for other school inputs are fixed so that school principals have little budgetary leeway. And often, too little is spent on these other inputs relative to teachers' salaries. Similarly, school principals have little flexibility to adapt centrally set norms (regarding teachers' qualifications, curricula, textbooks, timetables, and so forth) to suit local conditions. This problem is reinforced by the lack of competition between schools: because school managers are only remotely accountable to students and their parents, they have little incentive to find the most cost-effective way to provide the type of education families desire.

Offering across-the-board subsidies to students of all academic and economic backgrounds is inequitable as well as inefficient. Although many countries provide free education, talented students from poorer homes still find it hard to enrol because they cannot afford to forgo income or to pay for textbooks, transport, uniforms, and incidentals. The lack of a credit market for education makes this problem worse. Since poorer students cannot borrow against their future income to finance their current education, many have to drop out. Often, their places are taken by others who are less motivated and less prepared academically.

Some Policy Options

This book examines three broad policy options that could remedy the above problems. It is argued that they would result in an increase of resources flowing to education, improve their use, and ensure more equitable access to schooling. Although the suggested reforms need to be phased in gradually, and their specific content will differ among countries, the package includes three elements:

Recovering the public cost of higher education and reallocating government spending on education toward the level with the highest social returns.

Developing a credit market for education, together with selective scholarships, especially in higher education.

Decentralising the management of public education and encouraging the expansion of private and community-supported schools.

Recovering Costs and Reallocating Resources

Fees could be introduced or increased for higher education. In countries where students receive tuition-free higher education and allowances for living expenses, a useful first step would be to reduce these allowances and to restrict them to low-income students. A second step would be to charge tuition to

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recover at least part of the cost of providing higher education. Given the excess demand for higher education, these charges would generate substantial revenues without reducing enrolments. In some countries, the present pattern of public spending on secondary education also generates inefficiencies and social inequities. Depending on local conditions, a policy of increased cost recovery in secondary schools might be justified.

The fiscal resources thus raised should be reinvested where the social returns are highest. In general, they should be reinvested in education because the social payoffs to additional investments are at least comparable with the returns to alternative investments in physical capital and social infrastructure. Retaining the resources in the education sector would also make the most sense politically: cost-recovery policies are generally unpopular with the public. Unless their political costs are balanced by the prospect of more funds for education, ministries of education would probably be reluctant to accept such policies.

Within the education sector, the social profitability of additional investments will differ by level of education. In many countries, particularly where primary school enrolments are low, such as in sub-Saharan Africa, expanding primary education or possibly raising its quality would yield the highest social payoff. In some other countries, even if primary education is not universal, it might be profitable to expand secondary education as well as selected fields in higher education. This is partly because when coverage at the primary level is extended to a geographically and academically diverse population, the unit cost tends to rise and the marginal returns tend to fall. In such situations, it would be efficient to use some of the extra funds to expand primary schooling, but allocate the rest for expanding postprimary education. Finally, in countries — such as some in Asia and Latin America — where primary education is universal and of high quality, most of the extra funds could be reinvested in secondary education and specific fields of higher education.

With increased cost recovery in higher and possibly secondary education, the economy's total (public and private) resources for education would increase. At the same time, this policy would permit a reallocation of public spending toward the levels and types of education with the highest social returns. The shift toward greater private financing would improve the quality of student selection and student performance because students would have a greater financial stake in their studies. This policy would also improve equity if the extra funds are used to expand education at the lower levels, where the lower-income groups are most widely represented. In conjunction with increased cost recovery, selective scholarships could be used to protect the access to postprimary education among talented students from poor families.

Providing Loans and Selective Scholarships

In higher education, it would be desirable to complement the shift toward greater private financing with the provision of widely available student loans and a limited number of selective scholarships. Loans enable students to finance their current studies against future income. Thus selection into higher education would not be limited to applicants with the necessary funds at the time of enrolment. To avoid this selection bias, the government could provide scholarships ample enough to finance tuition as well as living expenses. But such a generous scholarship scheme is not sustainable in the long run: over time, as an increasing number of lower-income students enrol in higher education, its fiscal cost becomes prohibitive. Thus a better complement to increased cost recovery is widely available student loans, coupled with selective scholarships that are awarded on the basis of economic need and academic potential. Such a package provides performance incentives to all students in higher education and also helps ease the financial burden of students from poor families.

By enabling students and their families to finance current studies out of future income, student loans encourage educational investments. If the returns to higher education are high, the availability of student loans will increase the demand for higher education. In turn, increased demand will further increase the flow of private resources into education through tuition charges.

Experience with education loans in developing countries is limited, and establishing effective schemes will take time. Collection costs are likely to be high, at least initially, and default rates may also be substantial. Usually, governments must provide or guarantee funds for loan programmes since the risk and cost of lending to students may be too large for private banks to absorb without prohibitive interest charges. Although many governments have subsidised student loans, this practice impairs the long-term financial viability of student loan schemes, and it is less efficient than, say, direct grants to individuals. In countries with collection problems, an alternative might be repayment in kind through national service.

In secondary education, loan schemes are probably less feasible because of the difficulty of administering a large number of relatively small loans. Thus a policy of increased cost recovery should be accompanied by a selective scholarship scheme. Because tuition and living expenses are usually much lower in secondary than in higher education, the government can sustain a substantial programme of selective scholarships to the needier students even if the student population is large.

Decentralising Management

In many developing countries, public school management is highly centralised, and the government restricts the operation of community-run and private schools. Such restrictions range from outright prohibition to strict control over fees, curricula, teachers' qualifications and salaries and accreditation. When consistent with political systems, prohibition of private schools might be relaxed. Other restrictions on the administration and financing of both local and private schools should be assessed to increase efficiency. Some oversight may be needed to thwart fraudulent operators, maintain standards, and promote national unity. But overly stringent controls discourage community-run and private schools from contributing to educational development. Easing these controls mobilises additional private and local resources for education without excessively increasing the government's fiscal burden.

Greater decentralisation, including more leeway for private and community schools, would also improve efficiency within schools by encouraging greater competition among them. If competition increases, more educational services would be offered, costs would fall, and parents and students would have a wider choice of schools. Within the school, efficiency would increase with managerial accountability.

These policy reforms suggest a need to relax, not abrogate, central government authority. First, for newly emerging nations where national unity is still fragile, fairly rigid standards regarding curricula may be needed. Second, decentralisation, whether through private, community, or local public schools, gives parents and students a greater role in choosing the quality and type of education they want and the means of delivery. To choose wisely, they must have information about educational alternatives. An important role for the central authorities would be to provide this information. They could, for example, display the results of common systemwide examinations or withhold accreditation for noncomplying schools (without necessarily prohibiting their operation). In secondary and higher education, it may be useful to provide the results of tracer studies across schools to show what types of jobs graduates obtain.

Effects of the Policy Package

As Table 1 shows, charging tuition for higher education without reinvesting the revenue in education will improve student selection and equity. Since in most countries students enrolled in higher education belong to the higher-income groups, tuition charges will increase the financial stake of these students and their families in education, thus encouraging more talented and motivated students to enrol. Dropout among qualified students from poor families can be mitigated by coupling the tuition increase with a selective scholarship scheme. On balance, equity will be enhanced, unless the government favours higher-income groups in spending the revenue from increased fees.

If the extra revenue from charging tuition for higher education is spent on education at all levels in the same proportions as before, the policy reform will increase the total resources flowing to education but will not improve resource allocation within education or efficiency within schools.

If the revenue from tuition is spent for the lower levels of education, particularly primary education, the positive effects will be greater. First, the total resources going to education will further increase because public spending on primary education mobilises supplementary private resources. Second, resource allocation will improve because returns at the lower levels of schooling are higher. Third, equity will improve because additional primary school enrolees will come from income groups lower than those of the average students at higher and secondary levels.

Introducing loans for higher education adds benefits on almost all counts. Loans mobilise more resources for higher education by tapping graduates' future earnings, even when default rates and administrative costs of loan schemes are high. They improve resource allocation because students will tend to enrol in the courses with the highest returns. And when augmented by selective scholarships, loans improve student selection and equity by allowing talented students from poor families to compete for places in higher education.

Decentralising management and encouraging community and private schools also mobilise more resources for education from families and other local sources. But this policy's most important contribution is improved efficiency through increased competition among public schools and between private and public schools.

Policy Implementation

The policy package suggested here can have substantial beneficial effects on efficiency and equity in both the short run and the long run. But its implementation will not be easy, at least in some countries. There are three main reasons for this difficulty. First, the suggested policies go against a long-established tradition of free education. Second, some of the policies may conflict with a country's political regime; for example, encouraging the private sector might not be acceptable in a socialist country. Third, the institutional limitations in a country may mean that administering some of the proposed policies, such as launching a student loan scheme,

Table 1 **Cumulative Effects of Reforms**

Policy	More funds to education	Improved resource allocation across educational levels	Improved efficiency of schools: In using school inputs	Improved efficiency of schools: In selecting students	Equity
Keeping the present system	0	0	0	0	0
Charging tuition for higher education (but not reinvesting in education)	0	0	0	+	+
Spending the extra revenue on all levels of education	+	0	0	+	+
Spending the extra revenues on lower levels of education	++	+	0	+	++
Introducing loans (and selective grants) for higher education	+++	++	0	++	+++
Decentralising management and encouraging community and private schools	++++	++	+	++	+++

Note: 0 indicates no effect; the number of +'s indicates the relative stength of positive effects.

would be difficult.

To facilitate the political and especially the institutional aspects of implementation, the policy package could be phased, with priority given to policy reforms that have the lowest administrative and political costs. The sequence and timing of steps will vary from country to country. In some countries the entire package of proposed policies is not likely to be fully implemented. For example, full recovery of student loans is unlikely for several reasons: default, dropout, repetition, temporary unemployment, and unexpectedly low earnings of graduates. But even if recovery were only partial, these policies are a significant improvement over the present situation in which students in higher education contribute little or nothing to the public cost of their education. Moving in the right direction — by beginning to reform the financing of education — is better than continuing the existing situation in most countries. If the efficiency and equity gains from the policy reforms are large enough, governments can find ways to overcome political opposition and implement the package most appropriate to the country's conditions.

Need for Further Analysis

In many developing countries, changes in the financing of education along the lines suggested here will improve efficiency and equity. More analytical work is nevertheless needed to design policies appropriate to individual country conditions. Focus on the following questions would be especially helpful in this regard:

What are the major sources of inefficiency in the current system of providing and financing of education?

How socially equitable are the present financing arrangements?

What are the possibilities for recovering costs? How willing are parents and students to pay? What is the likely magnitude of the extra revenue?

How can alternative financing arrangements improve efficiency and equity?