

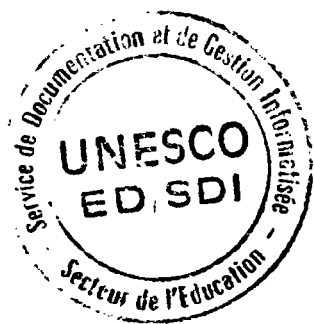
# EDUCATION, ADJUSTMENT AND RECONSTRUCTION: OPTIONS FOR CHANGE

*Fernando Reimers and Luis Tiburcio*



EDUCATION ON THE MOVE

**Education, adjustment and reconstruction: options for change**



Education,  
adjustment and  
reconstruction:  
options for  
change

A UNESCO policy  
discussion paper

*Fernando Reimers and  
Luis Tiburcio*

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# Preface

Summarizing the social situation in Africa in his 1991 report to the General Assembly on the implementation of the United Nations Programme of Action for African Economic Recovery and Development (1986–90), the Secretary-General noted that in sub-Saharan Africa the decline in primary-school enrolment and completion rates and the rise in the absolute number of illiterates from 133.6 million in 1985 to 138.8 million in 1990 were largely a result of ‘severe cuts to the education sector, as well as the adjustment policies of cost-recovery and containment’.

Increasingly, the problems faced by developing countries in the education sector – arising in part from ill-conceived structural adjustment and stabilization policies – are assuming crisis proportions and are compromising the prospects for national economic recovery and development as well as the welfare of a very large number of young people.

UNESCO shares the growing belief that national policies and practices and international co-operation must be radically reoriented so that education becomes the main focus of efforts to achieve sustainable development, with special attention being given to the most vulnerable social groups.

The availability of human resources for endogenous development depends to a crucial extent on access to knowledge. Education is also an essential determinant of demographic growth. Greater emphasis on innovative teacher training and upgrading and on non-formal systems of education can help to meet the challenge of ensuring quality education for all by the end of the century.

This discussion paper has a twofold purpose.

It is intended, on the one hand, to stimulate the dialogue within the United Nations system and the donor community with a view to enhancing the effectiveness of development co-operation.

It is likewise aimed at increasing awareness among policy-makers about possible options for change and UNESCO's potential role in the context of the renewal and prioritization of education.

A handwritten signature in black ink, appearing to read 'F. Mayor', positioned above the printed name.

FEDERICO MAYOR  
Director-General of UNESCO

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The opinions expressed in this document are our own and not necessarily those of UNESCO.

F. REIMERS and L. TIBURCIO  
*May 1993*

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# 1. Introduction

This publication is a contribution of UNESCO to the international and national debate on the educational consequences of structural adjustment. It examines the background of the adjustment programmes, reviews some of the studies that documented the impact of adjustment on education, offers a systematic analysis of the differences in performance between adjusting and non-adjusting countries during the 1980s in a number of educational indicators and proposes a number of policy options to promote educational development in a context of structural adjustment and economic restructuring.

The announcement in 1982 that Mexico could not continue servicing its foreign debt obligations marked a rupture with the existing environment facing governments in the Third World. As it became clear that many countries had been borrowing (and banks lending) too much, commercial banks became more reluctant to lend money. Faced with mounting pressure from interest payments countries turned to multilateral banks who were willing to lend them more funds to support efforts to stabilize and adjust their economies. For many nations economic adjustment was the marking sign of the 1980s.

Adjustment policies refer to both policies aimed at closing fiscal and trade deficits (stabilization) and/or policies to change the structure of incentives in the economy (structural adjustment). Stabilization policies have an intrinsic short-term focus, aiming at reducing the inflation rate and closing fiscal and trade gaps. Structural adjustment has a longer term horizon, attempting to restore economic growth by improving allocation of resources and increasing efficiency (World Bank, 1988, p. 11). In practice stabilization and structural adjustment programmes work simultaneously. The main institutions financing these programmes have been the World Bank and the International Monetary Fund (IMF). While the IMF supports stabilization efforts, the World Bank has funded structural adjustment loans. For specific structural adjustment in a sector, the World Bank has also funded sec-

tor adjustment loans. The Bank requires an IMF stabilization programme before supporting a structural adjustment programme. For this reason, it is difficult in practice to analyse separately the effects of these two interventions.

Many countries adopted adjustment programmes with World Bank funding during the 1980s, as seen in Table 1. Most of these countries were in Africa, Latin America or Asia. Only two programmes (in Hungary and former Yugoslavia) were outside these regions.<sup>1</sup>

Adjustment programmes have had a relatively short-term focus, mostly because adjustment was initially thought to be a short-term problem. A United Nations Children's Fund (UNICEF) study for Latin America points out:

The experience with adjustment programmes, however, has not been satisfactory. While these programmes should not be seen as the cause of the economic decline of the 1980s, they clearly have not been able to reverse the adverse developments in the living standards of the poor, nor in most cases have they led to resumed economic growth. In addition, these adjustment programmes have generally made no explicit efforts to prevent deteriorations in human conditions. Thus there is still considerable debate on the possibility of continuing progress in health, nutrition and education under these adverse economic conditions and on the nature of the macro-economic policies and health measures needed to foster such progress (Albanez et al., 1989, p. 1).

Austerity has resulted in reduced government funding for public education programmes, lower personal incomes and family budgets available for education, and an increased focus on encouraging private educational initiatives, which only some can afford. In many developing countries quality and equity in the provision are losing out to an increasingly 'economistic' interpretation of efficiency targets. In such critical situations, international donor and financing agencies have been advised to focus their co-operation on programmes and projects aimed at furthering the satisfaction of basic human needs of which primary education and literacy are major components.

However, such good intentions have rarely been put into practice because stabilization programmes have limited government counterpart funds available for such activities. Financing agencies now tend to postpone decisions on educational projects, pending the results of financial and human resource feasibility studies regarding the absorption and management capacities of the educational agency or institution. We are approaching a situation where the circle has become

1. In this paper the regional groupings adopted for analytic purposes are those used by UNESCO; see *World Education Report 1991* (UNESCO, 1991b).

vicious; what educational donors conceive as 'conditionality', educational decision-makers in many of the least-developed countries (LDCs) often perceive as 'blackmail'.

TABLE 1. Summary of World Bank structural adjustment and sector adjustment loans by region

Adjusting countries or territories	Non-adjusting countries or territories
<p><i>Africa</i> Algeria, Angola, Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, Sudan, Togo, Tunisia, Uganda, United Republic of Tanzania, Zaire, Zambia, Zimbabwe</p>	<p>Botswana, Cape Verde, Comoros, Djibouti, Ethiopia, Lesotho, Liberia, Libyan Arab Jamahiriya, Namibia, Seychelles, South Africa, Swaziland</p>
<p><i>North America</i> Costa Rica, Dominica, Guatemala, Haiti, Honduras, Jamaica, Mexico, Panama</p>	<p>Antigua and Barbuda, Bahamas, Barbados, Belize, British Virgin Islands, Canada, Cuba, Dominican Republic, El Salvador, Grenada, Nicaragua, Saint Christopher and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago, United States</p>
<p><i>South America</i> Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Uruguay, Venezuela</p>	<p>Paraguay, Peru, Suriname</p>
<p><i>Asia</i> Bangladesh, China, Indonesia, Jordan, Republic of Korea, Lao People's Democratic Republic, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, Turkey</p>	<p>Afghanistan, Bahrain, Bhutan, Cambodia, Cyprus, Hong Kong, India, Islamic Republic of Iran, Iraq, Israel, Japan, Democratic People's Republic of Korea, Kuwait, Lebanon, Malaysia, Maldives, Mongolia, Myanmar, Oman, Palestine, Qatar, Saudi Arabia, Singapore, Syrian Arab Republic, United Arab Emirates, Yemen</p>

The Salzburg Round Table of September 1986 organized by the United Nations Development Programme (UNDP)<sup>1</sup> recommended that the objective of adjustment programmes must be to achieve economic growth while protecting and promoting human development and pursuing equity-oriented policies. Unfortunately, while within a long-term perspective the social and economic dimensions of development are often complementary and not competitive, we are living in a world increasingly characterized by short-term decisions which tend to undermine human capacities.

Social and political tolerance for further restraining the development of human potential is sharply deteriorating at national and regional levels, and the human costs of current adjustment packages, which have also a very short-term horizon, are becoming unacceptable from a humanitarian perspective. They aim at restoring equilibrium in the economy as quickly as possible at the expense of the long-term objective of sustainable growth. As stated in the Khartoum Declaration, 'Africa cannot wait for the attainment of external equilibrium and fiscal balance before seeking to improve the human condition, nor can long-term human investment to strengthen the institutional, scientific, technical and productive capacity operating in environmental balance be postponed'. (International Conference..., 1988, p. 21, para. 20.)

According to the Economic Commission for Africa (ECA), structural adjustment programmes contributed to the deterioration of both economic and human development indicators that took place in Africa during the 1980s. Between 1980 and 1988, forty-five African countries had a stand-by arrangement facility or an extended fund facility from the IMF and fifteen had structural adjustment loans from the World Bank. At the same time, Africa slid into a socio-economic crisis of unprecedented proportion, and there is growing evidence that stabilization and structural adjustment failed to restore the internal and external balances of the countries where they have been implemented. According to ECA's 1989 statistics, during the period 1987-88, sub-Saharan countries with strong structural adjustment programmes (SAP) had a negative annual average growth rate of -0.53 per cent, contrasted with a positive 2 per cent for countries with weak SAPs and a relatively strong rate of 3.5 per cent for non-adjusting countries.

A few figures can illustrate the extent of the crisis faced by the African continent. Africa's already low per capita income and con-

1. See Salzburg Statement, Salzburg Round Table on Adjustment and Growth with Human Development, 7-9 September 1986.

sumption levels fell on the average by 2.6 per cent per annum throughout the decade. Inflationary pressures have intensified as a result of measures recommended in adjustment packages, mainly devaluation of currencies and removal of subsidies. By 1989, the debt stock reached almost \$260 million, amounting to one-third of the exports of goods and services. The recession, especially in the manufacturing activity, lowered tax receipts, hence rendering impossible the stabilization of government budgets.

More catastrophic has been the worsening of human development indicators on the continent. The adjustment policies coupled with poor climatic conditions created food shortfalls that significantly lowered nutritional levels; it is estimated that 150 million people were undernourished at the end of the decade. Employment levels dropped by 16 per cent during the decade while real wages had fallen by 30 per cent. Gross enrolment ratios in primary education declined and the quality of schooling became severely affected by budget cuts in education expenditure. The number of LDCs in Africa increased from seventeen to twenty-eight, a most telling testimony to the impoverishment of the continent. These problems of human development were further compounded by wars, civil strife, cross-border conflicts and ethnic upheavals which created millions of refugees.

Africa's chronic underdevelopment led African governments to re-examine their development strategies. In 1979, an Organization of African Unity (OAU) symposium held in Addis Ababa, followed by the Lagos Plan of Action for Economic Development for Africa, formulated a set of development objectives and strategies that paved the way to self-reliant and inward-looking development strategies. Concerned with the disasters provoked by orthodox SAPs, the ECA came up in 1989 with an 'African Alternative Framework to SAP for Socio-Economic Recovery and Transformation' (AAF-SAP) that follows the lines of the Lagos Plan. AAF-SAP, as well as the Khartoum Declaration, clearly condemns SAPs for their limited objectives and short-term perspectives. The underlying theoretical assumptions of SAPs rest exclusively on classical economic theory; but in the context of developing economies, economic aggregates (output, employment, prices, exchange rates) are not best determined by the free play of market forces and prices are not the most effective instrument for the efficient allocation of resources.

The development of education and its related long-term investments rather than short-term macro-economic stabilization must be the top priority in the development process. Economic adjustment policies are weakening government infrastructures in the education

sector in the area of policy formulation, in their capacity for absorbing education and other projects and in co-ordination with other sectors.

Co-ordination of donor efforts will only lead to greater cohesion, harmonization and impact if government capacities in this area can be enhanced simultaneously through comprehensive and integrated training, and research and development (R&D) programmes. Countries need assistance in setting up and/or strengthening national mechanisms for monitoring and minimizing the human, social and cultural costs of short-term adjustment programmes. This would also imply the need for supporting community-based mechanisms of participation based on local conditions, value systems and competencies, in harmony with the socio-cultural environment.

Referring to two reviews of World Bank experience with structural adjustment, Ribe and Carvalho conclude:

These reports concluded that since domestic inefficiencies have proved to be more intractable than previously thought and external uncertainties have continued, there is need to shift the *focus of adjustment lending from short term crisis management and stabilization (which dominated the last decade)*, to more fundamental issues of long term growth, development, and poverty reduction (Ribe and Carvalho, 1990, p. 15. Emphasis added).

UNICEF and UNDP have issued position papers on the subject of structural adjustment. UNICEF's interest in adjustment issues goes back to the early 1980s, when several field offices began sending reports indicating that the situation of children and other vulnerable groups was deteriorating rapidly. The basic conclusions of the studies undertaken by UNICEF (Cornia et al., 1987) show that the extent of the deterioration was largely dependent upon the type of adjustment policy adopted. The negative impact of stabilization and adjustment on growth and income distribution is inherent in the programmes. Short-term programmes, aimed at correcting internal and external imbalances, prevail, while the emphasis should be on changing the structure of the economy to foster economic growth which requires at least a five-year period.

UNICEF recognizes that adjustment policies have proven incapable of sustaining short- and medium-term growth. In terms of human conditions, there is evidence that SAPs are not neutral in terms of distribution – a disproportionate cost of adjustment is borne by the most vulnerable groups. In general, prevailing adjustment programmes tend to increase aggregate poverty. Access of vulnerable groups to basic health and educational services has deteriorated as a result of both falling per capita expenditure on the social sectors and inadequate allocation of resources within these sectors. Most of the



countries studied in depth by UNICEF exhibit clear signs of increasing malnutrition, falling primary school enrolment rates and, in some countries, increased infant mortality.<sup>1</sup> To overcome such a situation, UNICEF suggests some major policies and strategies (which will be referred to in Chapter 4).

The authors of the UNDP policy discussion paper on development and adjustment (Chapelier and Tabatabai, 1989) remark that SAPs have been criticized on three main grounds: first, their ideological bias, and uncertain theoretical and empirical foundation; second, their single-minded concentration on a narrow set of objectives; and third, their excessive political/social and economic costs. UNDP's analysis also leads to policy prescriptions that urge trade liberalization, price reforms and promotion of the private sector. At the same time, it insists on the necessity of transitional measures, pointing out that measures which are too drastic and too quickly implemented threaten the sustainability of adjustment. Moreover, the increasingly unfavorable international economic environment has been a major obstacle to the successful implementation of structural adjustment. In this context, developing countries must make a virtue of necessity and seize the opportunity of inevitable adjustment to pursue a more autonomous development path which would be less vulnerable to external shocks.

The social dimension must receive considerable attention while designing SAPs. Although much of the increase in poverty and food insecurity occurred during the pre-adjustment period, as the economic crisis deepened, SAPs have done little to alter the trend and have in some instances tended to prolong or intensify it. Orthodox adjustment policies are too costly and place an undue share of the burden on the most vulnerable sections of the population. In the short run, they lead to a rise in unemployment and poverty, and a deterioration of social services, and they aggravate the inequality of income distribution. Consequently, UNDP clearly supports the recent inclusion of ad hoc measures in SAPs, aimed at partially compensating the poor for the damage that the adjustment process may inflict upon them.

However, the assessment of SAPs is a controversial matter, both theoretically and empirically. Much of the discussion about the social impact of adjustment programmes centres on whether it is in fact possible to attribute the observed decline in social indicators of development to adjustment programmes since it is hard to know, it is argued,

1. See, for instance, Albanez et al. (1989, p. 1), concerning Latin America.

how would things have turned out in the absence of adjustment.<sup>1</sup> This argument proposes the need of an appropriate 'counterfactual', a comparative scenario of how the country would have turned out to be had adjustment not taken place (Noss, 1991).

But the argument of the need of a 'counterfactual' misses a more basic point; the issue should not be whether adjustment is to blame for the decline in social indicators when this is observed, it should be whether adjustment can take any credit for improvements in those indicators. Since the purpose of structural adjustment was to restore long term growth, an appropriate test of whether SAPs achieved their mission is to identify improvements in those factors that contribute to such growth. It is clear that education and human resources development are one of those fundamental requirements of economic and social development. Are countries doing better, as they should after a decade of policies aimed at improving the allocation of resources and economic efficiency, in terms of education and human resources development? That is the issue for which structural adjustment should be given due credit . . . or blame.

1. 'In order to understand the process through which adjustment affects education, a comparative dynamics approach is required, i.e. one that incorporates the dynamics of the effects of change internal to the system on outcomes. An ideal methodology would determine how specific adjustment measures affect education supply and demand, and in turn how the interactions between supply and demand factors translate into sector outcomes. Even when correlation is evident, analysts must delve deeper to determine what happened, why did it happen, was the outcome intended, and is the direction of change positive or negative. In addition, it is necessary to estimate likely education outcomes in the absence of adjustment programs, in order to establish causal links between indicators and adjustment programs . . . Finally, it is virtually impossible to isolate the effects of adjustment from those of other simultaneous influences on the sector. Given the complexity of adjustment, combined with data constraints, it may be impossible to develop a general methodology to analyze how adjustment programs affect education' (Noss, 1991, p. ii).

## 2. Brief review of current research<sup>1</sup>

Given its importance for long-term development, there is in fact relatively little literature examining the educational consequences of economic adjustment. There is some debate about the appropriate methodology to assess these links, some on the need to specify the type of adjustment being examined, and some on the inadequacy of before-after comparisons and the need to have a 'counterfactual' scenario, a baseline of comparison providing evidence on what would have happened to the education sector had the economy not adjusted in the way it did (Behrman and Deolalikar, 1991). A recent World Bank publication on the subject questions the feasibility of examining the effects of adjustment on education, given that it is difficult to isolate the impact of adjustment from other influences and that data are scanty (Noss, 1991, p. ii).

An analysis of the effects of adjustment on various input and output indicators in ten countries (Botswana, Brazil, Chile, Ghana, Jamaica, Peru, the Philippines, the Republic of Korea, Sri Lanka and Zimbabwe) between 1979 and 1983 showed that out of seven countries for which indicators of access to education were available three showed decline in enrolment ratios (Chile, the Philippines and Sri Lanka), two showed no change (Ghana and Peru) and two showed improvement through specially targeted programmes (the Republic of Korea and Zimbabwe). For the six countries which had indicators of educational attainment (Brazil, Ghana, Jamaica, Peru, the Philippines and Sri Lanka), all showed declines (Cornia et al., 1987, pp. 24-6).

Another study directly examined the hypothesis that debt service payments lead to reductions of public expenditures on long gestation social investments such as education and health. Using a data set from 125 countries for the period 1975-85, the analysis is based on regressions of education, health and government expenditures on debt servicing as a percentage of government expenditures. The study con-

1. This chapter is based on Reimers, in press (*a*).

cludes that there were declines in the level of government investment, and these were sharper in Latin America where indebtedness levels are higher. It also concludes that there is a significant impact of debt servicing levels on reductions in education expenditures as a percentage of total government expenditure (Psacharopoulos and Steier, 1987).

A study of the impact of adjustment on education in sub-Saharan Africa between 1970 and 1983 concludes that expenditure on education as a percentage of GNP by 1983 had fallen back to 1970 levels, after increases in the 1970s. Similarly, expenditure on education as a percentage of government expenditure declined between 1980 and 1983 (Tilak, 1990).

An analysis of the changes in public government financing of education in Latin America between 1970 and 1985 concludes that the adjustment led to disproportionate cuts in expenditure on education as a percentage of government expenditure or of GNP. Within education, capital expenditure suffered disproportionately, as did expenditure on non-salary items, while increasingly more countries reduced expenditure at the level of primary education disproportionately (Reimers, 1991e).

A study of the financing crisis in Central America between 1979 and 1989 concludes that most of the countries (except Honduras) show a tendency to spend a smaller percentage of GDP on education, that teachers' salaries have depreciated in real terms with losses of about two-thirds and that at the end of the decade most of the budget in primary education goes to salaries. The resulting levels of public educational finance are insufficient to achieve universal primary education (Sanguinety, 1991).

A study of the consequences of adjustment identified reductions in education expenditure and in net enrolment ratios in twenty-five intensely adjusting countries between 1980 and 1985, in contrast with the trends in the same countries prior to adjustment and with the changes in non-adjusting countries (Kakwani et al., 1990, p. 44).

A study of the impact of structural adjustment on education in Nigeria showed how enrolments in primary education declined from 14.7 million in 1983 to 12.5 million in 1986. Relations between the Ministry of Education and teachers soured; some teachers left their job while others were fired. The budget categories for educational materials, buildings and furniture almost disappeared (Hinchliffe, 1989, p. 9). The same report indicates that universities have suffered the financial squeeze as well, with impact on the supply of scientific equipment and materials, books and journals, staff development and research.

A case-study of the situation in Zambia concludes that public education finance suffered as a result of economic adjustment. Per pupil expenditure in 1985 in real terms was half that in 1970. The impact of this adjustment was greater in primary and secondary schools than for universities. The basic education budget became increasingly equivalent to a payroll. Capital expenditure also fell disproportionately and Zambia became increasingly dependent on donors for teaching materials (Hoppers, 1989). According to this study, one outcome of this situation has been an increasing role for parents and communities in financing of education. In general quality of education has worsened (Hoppers, 1989, p. 18).

A comparative analysis of the cases of Costa Rica and Venezuela between 1980 and 1987 shows striking similarities in the ways in which adjustment affected education in these two countries, which both have a strong commitment to public education in their constitution. In both cases basic education suffered more than higher education. In Costa Rica educational expenditures for basic education declined in real terms at an average of 5 per cent per year between 1980 and 1987, while for higher education the annual decline was 0.3 per cent. In Venezuela real expenditure per student in primary education declined by 7 per cent between 1980 and 1986, while for higher education the decline was 2 per cent. Indicators of educational quality also show decline during this period (Reimers, 1991*d*).

In 1991 a UNESCO–International Labour Organisation (ILO) task force commissioned a number of case-studies to examine the impact of structural adjustment on education. The case-study of Brazil found that the impact of adjustment on education followed a political rationale. Urban élites were better able to protect themselves from impact of budget cuts, by increasing the share for higher education and shifting their children to private schools at the lower levels, while public resources for primary education declined (Amadeo et al., 1992).

A case study of the effects of structural adjustment in Costa Rica (up to 1990) found that public education spending fell in the recession of 1980–82 and did not recover afterwards. 'By 1990, only spending on university education was at or above 1980 levels, and total real educational spending was at 1978 levels, about 70 percent of the 1980 high' (Carnoy and Torres, 1992, p. 2). This study, based on detailed information from primary sources and interviews with the main participants in policy formulation in Costa Rica, concluded that policy decisions in education have aimed primarily at reducing expenditure and meeting the goals of structural adjustment rather than at improving quality (Carnoy and Torres, 1992, pp. 69 and 75).

The case-studies for Hungary and United Republic of Tanzania found no impact of structural adjustment on the financing of education (Hethy et al., 1993; Samoff and Sumra, 1992) and a case-study of Senegal found that while the share of education expenditure in the public budget was maintained through adjustment, education declined in real terms given that public expenditure itself as a percentage of GNP declined.

As suggested by one of the participants in the task force:

the factual evidence presented is somewhat richer for Brazil, since this case study was at the origin of the overall research, generating some of the hypotheses subsequently tested in the others. Quite clearly, generalizations based on these countries are not warranted. Their choice was arbitrary and their number is too small. However, as we examined our sample, some features reappeared again and again, suggesting some common features in the countries (de Moura Castro and Alfthan, 1993, p. 4).

Among the principal findings extracted from the case-studies are that (a) budget cuts do not promote efficiency, (b) they follow a different logic from increases, (c) they are not random but follow political criteria and (d) they do not promote equity (de Moura Castro and Alfthan, 1993).

In sum, the existing studies identify two main channels through which economic adjustment programmes can influence the provision of education in a country. The first is through the impact of adjustment on households. As policies succeed in contracting aggregate demand, the living conditions of many families deteriorate, reducing the income they have available for school supplies (uniforms, tuition, textbooks, etc.) and at the same time increasing the need for additional members of the family (children for instance) to contribute to the household economy. This type of impact influences external and internal efficiency and equity. Poorer families have to withdraw their children from school. The reduction in the ability of households to contribute can also lead to internal inefficiencies, not only due to the reductions in inputs available to learning, but also owing to diminished efficiency in the mix of inputs. For instance, the effectiveness of teachers' instructional practices may be reduced if students have no textbooks or notebooks, hence constraining the teaching effectiveness of teachers.

The second mechanism linking economic adjustment and educational provision is the changes created in public education finance that result from pressures to reduce public spending. Overall cuts in public spending may result in disproportionate cuts in education expenditure, *vis-à-vis* other government expenditure. The short-term

structural rigidities in the education budget make it easier to cut non-recurrent expenditures and non-salary items. This has a negative impact on the internal efficiency of education as it leads to inefficient changes in the mix of inputs. It is difficult for teachers to compensate for deteriorating buildings or to preserve educational quality in the face of insufficient textbooks and materials.

There are also institutional rigidities that can lead to reductions in total resources for education, increasing inequities in educational spending. For instance, urban students and schools are typically more vocal, better organized and closer to the distribution centres of the Ministry of Education. Hence, reduction in the available instructional supplies is likely to be met with increased pressures from urban parents to preserve their initial allotments, thereby increasing their share of a declining total pie. The implication is that rural schools – or those attended by students who have less political leverage – will have to face disproportionate reductions in their supply of chalk and other learning resources. Similarly, universities have more leverage, both political and technical, to increase their share in a shrinking pie of total resources for education.

The next chapter offers a systematic examination of these stylized facts, using a cross-country database covering all countries in the world for which data are available and comparing the performance of adjusting and non-adjusting countries.

### 3. Systematic evidence of the incidence of adjustment on education

Using the same regional groupings adopted for analytic purposes in Table 1, this chapter examines the performance of adjusting and non-adjusting countries in a number of education indicators reported in UNESCO's *World Education Report 1991*. For both groups of countries two types of analyses were performed.<sup>1</sup> First, within each region the proportions of adjusting and non-adjusting countries where the indicator had decreased or increased in the period examined were compared, which gave a measure of association of adjustment with the probability of increase or decrease in the respective indicator. Second, within each region, unweighted averages were obtained of each educational indicator in adjusting and non-adjusting countries by region, which allowed an examination of the average differences between adjusting and non-adjusting countries.

The analysis deals with seven elements. It first examines decline in living conditions stemming from decline in per capita income which in turn constrains the ability of households to contribute to the work of schools. Secondly, it reviews the incidence of adjustment on education expenditure, examining the impact on education expenditure as a percentage of national product, as a percentage of total government expenditure and in real terms. Thirdly, the allocation of budget cuts within education is examined, comparing the performance of adjusting and non-adjusting countries as regards the share of education expenditures for recurrent expenditures and examining the share going to different levels of education.

The fourth section reviews the effects of adjustment on access to different education levels, examining the differences between adjusting and non-adjusting countries in apparent intake rates, net enrolment rates in primary education, transition from primary to secondary

1. This methodology and analytic strategy is based on Reimers, in press (*b*).



education, gross enrolment rates in secondary education and access to higher education. Fifthly, the impact of adjustment on the percentage of students who repeat is looked at and unit costs at the primary level are reviewed and their impact on quality and inefficiency explored. The sixth section examines the impact on the teaching environment, examining evidence on teacher salaries in different countries. Finally, the analysis examines the impact of adjustment on equity, examining the relative expenditure per pupil in primary education and in higher education, and the rates of boys and girls reaching Grade 4 in primary education.

To have an appropriate frame of reference for the evidence which will follow, it is important to take stock of the remarkable achievements made by most countries in expanding access to education prior to 1980, as summarized in Table 2.

The progress achieved prior to 1980 should not suggest that there were no challenges left for the education systems of the world. Education is by definition a dynamic sector. In order to keep up with population growth the sector has to continue to improve access and internal efficiency. Maintaining levels of education in quantitative and qualitative terms is the result of the combination of contributions from the state and from households; when contributions decline on one side, compensatory increases are necessary on the other to maintain education provision.

The basic framework proposing the links between adjustment and education has been outlined elsewhere (Reimers, 1991*c*). On the supply side, education provision is a function of the proportion of government revenue allocated to education, as well as of the structure of the education budget. On the demand side, education involves direct costs to parents and opportunity costs as well, both of which will be influenced by the economic alternatives facing families.

On the cost side, a critical factor is the real incomes of the poor, since the lower the income, the greater the costs appear. There is evidence that the direct costs of education alone can be quite high in relation to incomes of poor households: for example, in three West African countries, parental costs of primary education amounted to from 7 to 14 per cent of average per capita GNP. This would be equivalent to 30 per cent or more of the income of low-income households. Thus any reduction in incomes of the poor can be expected to reduce demand for education. Moreover, the indirect costs, or loss of income from children's work, may be of greater importance to poor households, although this can be offset by lesser economic opportunities for children in these households (Stewart, 1993, pp. 4-5).

TABLE 2. Gross enrolment ratios by level of education between 1970 and 1990 (percentages)

	1970	1975	1980	1985	1990
<i>Primary education</i>					
Developing countries	83.5	92.8	94.9	98.2	98.1
Sub-Saharan Africa	46.3	58.1	77.1	71.0	66.7
Arab states	62.5	73.1	79.9	81.8	83.4
Latin America/Caribbean	90.7	97.0	105.0	106.0	109.0
Eastern Asia/Oceania	101.0	113.0	110.0	117.0	120.0
Southern Asia	70.8	75.8	77.0	85.1	88.4
Developed countries	104.0	101.0	101.0	102.0	102.0
Northern America <sup>1</sup>	103.0	99.0	99.0	100.0	102.0
Asia/Oceania	101.0	100.0	102.0	102.0	102.0
Europe/former USSR	105.0	102.0	103.0	103.0	102.0
<i>Secondary education</i>					
Developing countries	23.9	31.1	35.3	37.2	44.1
Sub-Saharan Africa	7.1	9.9	16.8	18.7	17.5
Arab states	20.4	28.3	38.0	47.1	52.7
Latin America/Caribbean	25.5	36.6	44.9	50.7	57.6
Eastern Asia/Oceania	28.5	41.2	43.8	41.0	53.3
Southern Asia	22.3	23.8	26.7	32.6	38.4
Developed countries	76.8	84.6	84.4	88.6	93.6
Northern America	93.1	99.8	89.4	98.1	98.9
Asia/Oceania	85.2	90.3	91.5	94.8	96.8
Europe/former USSR	72.7	81.6	83.6	86.4	93.1
<i>Higher education</i>					
Developing countries	3.0	4.6	5.7	6.8	8.3
Sub-Saharan Africa	0.5	0.8	1.3	1.7	1.9
Arab states	4.1	6.9	9.5	10.8	12.6
Latin America/Caribbean	6.3	11.7	13.5	15.9	18.7
Eastern Asia/Oceania	1.3	1.8	3.3	4.7	6.1
Southern Asia	4.9	6.5	6.7	7.4	8.9
Developed countries	23.4	28.4	30.3	32.9	36.8
Northern America	45.4	53.2	54.3	60.4	70.4
Asia/Oceania	17.5	25.8	29.7	28.1	32.8
Europe/former USSR	17.3	20.3	22.1	24.3	27.3

1. Throughout this book the term 'Northern America' means Canada and the United States of America.

Source: UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991.

## The impact of adjustment on households

The 1980s was a decade of increased austerity, both in adjusting and non-adjusting countries. Income per capita decreased in many countries in all regions of the world. Hence living conditions deteriorated in many countries. This is important as it effectively reduced the potential for contributions from the household to the work of the school. The implication is that in a scenario of households facing austerity, the efforts of the state to maintain the same levels of education provision should be more, not less.

Per capita GNP decreased in 62 per cent of the countries in Africa. Adjusting countries were slightly more likely to have declining rates of growth; while 68 per cent of the adjusting countries had declining rates of growth, only half the non-adjusting countries had declining growth rates.<sup>1</sup> In North America some 43 per cent of the countries had declining rates of growth of per capita GNP; adjusting countries are twice as likely to have declining growth rates as non-adjusting countries. Some 75 per cent of the countries in South America had negative rates of growth, non-adjusting countries being 1.6 times more likely to have negative growth rates than adjusting countries. In Asia 29 per cent of the countries had negative growth rates, with non-adjusting countries three times more likely to have negative growth rates than adjusting countries. Table 3 summarizes annual growth of per capita GNP between 1980 and 1988 by region and in non-adjusting and adjusting countries. On average, adjusting countries in Africa, North and South America had negative rates of growth of per capita GNP.

In highly inequitable economies, declining per capita income may lead to further inequities. UNICEF has estimated that a 2–3 per cent decline in average income in Africa means quintupling such a drop for the poorest (UNICEF, 1984). The same negative multiplier effect has been proposed for Latin America:

1. The analysis supporting each section follows the same structure. Data for each indicator are presented in a table in the appendices, grouped by region by adjusting and non-adjusting countries for 1980 and 1988. The analysis refers first to the number of countries in which there were increases or decreases in the indicator, and the different likelihood of change for adjusting and non-adjusting countries. Then average change is compared for adjusting and non-adjusting countries in each region in a summary table presented in the body of the document. This chapter borrows freely from Reimers (1993).

TABLE 3. Annual growth of per capita GNP between 1980 and 1988 in adjusting and non-adjusting countries for different regions of the world

	Average growth of GNP per capita (%)	Number of countries
<i>Africa</i>	-0.83	45
Non-adjusting countries	0.01	14
Adjusting countries	-1.21	31
<i>North America</i>	1.05	21
Non-adjusting countries	1.64	15
Adjusting countries	-0.42	6
<i>South America</i>	-1.77	12
Non-adjusting countries	-2.77	4
Adjusting countries	-1.27	8
<i>Asia</i>	1.53	28
Non-adjusting countries	0.58	19
Adjusting countries	3.55	9

*Source:* UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991. Adjustment data derived from Appendix 1; see Appendix 2 for data by country.

Even small economic losses may have significant consequences for health if they affect primarily the poor, whereas much more severe recessions can have little impact if their burden is equitably shared or affect mostly the non-poor. With few exceptions there is a tendency for the bottom 20 per cent to 40 per cent of the urban population (a considerable proportion of the total population in Latin America) to be hit the hardest. This is due to the operation of a series of negative multipliers, which reflect the fact that minimum wages drop faster than do average wages, that the prices of essentials are subject to greater increases than is the Consumer Price Index, that the newly unemployed frequently also suffer the loss of health coverage and that cuts in public expenditures are typically asymmetrical. In terms of child welfare, these biases are further aggravated by the fact that poorer families generally have a larger than average number of children.

If one takes into account the combined effect of these multipliers, it is easy to see that, in the absence of deliberate policy efforts to correct these biases, for a child of a low-income family a 5 per cent to 10 per cent decline in GDP may result in a net drop in resources three to four times larger (Albanec et al., 1989, pp. 17-18).

In Latin America real wages fell significantly in most countries, often to below their 1980 level. The same happened in Africa, where wages on average declined 25 per cent between 1980 and 1985 (Stewart,

1993, p. 19). In Latin America, for instance, real salaries in manufacturing declined 8.4 per cent between 1980 and 1985, in construction they declined 19 per cent, the minimum salary declined 11 per cent and informal sector earnings declined 27 per cent (Stewart, 1993, p. 19). Between 1981 and 1988 urban minimum wages in real terms declined 33 per cent in Brazil, 46 per cent in Mexico and 40 per cent in Peru. In sub-Saharan Africa non-agricultural average and minimum wages declined 25 per cent between 1980 and 1985 in two-thirds of the countries (Cornia et al., 1992, p. 17).

All of these changes increase the marginal contribution of the work of children to poor households (even if their work will generate less income because of reduced demand) and diminish the ability of parents to further contribute to education by paying for school supplies and uniforms, and making in kind or in cash contributions to the school. The combined effect of these two factors is to increase pressure to withdraw children from school and send them to work.

There are an estimated 40 million street children in Latin America (Reimers, 1991a, p. 250). In Brazil, for instance, 30 per cent of all children are estimated to be working; the need to work is the reason given by 53.3 per cent of the pupils who dropped out of secondary schools (Amadeo et al., 1992). In Costa Rica, a study of a sample of school drop-outs notes that in rural areas one-third of those sampled said they had dropped out in order to earn additional income; in urban areas, 37 per cent declared that economic causes were the main reason for dropping out (Carnoy and Torres, 1992). In Venezuela, the percentage of children aged 10–14 not attending school for economic reasons increased from 15 per cent in 1978 to 23 per cent in 1985 (Reimers, 1990b, p. 16).

In Zimbabwe, the significant rise in drop-out rates at the secondary level has been attributed to the increasing cost of fees along with a rise in the cost of living (Graham-Brown, 1991). In the United Republic of Tanzania, new family contributions and the restoration of fees contributed to increase the rate of non-completion of primary school and to the proportion of children outside the school system (Samoff and Sumra, 1992).

## Incidence of adjustment on educational expenditure and financing

### *The vulnerability of educational spending*

Facing pressure to close fiscal gaps, governments in many countries reduced expenditure on education. This reflected both overall reductions in government expenditure (net of interest payments) and disproportionate reductions in the sector. Two factors contributed to the impact on the sector. One was the high wage composition of education budgets: stabilization and adjustment policies aimed at curbing domestic demand by decreasing the wage bill of the government. The second was the short-term focus of adjustment, which did not allow for any special treatment of the education sector. The net result was that education expenditure declined as a percentage of GNP, as a percentage of government budgets and in real terms.

Education expenditure as a percentage of GNP diminished significantly more in countries which underwent adjustment than in those that did not. In Africa twenty-one countries underwent adjustment and ten did not. A decline in the share of education relative to GNP was three times more likely among adjusting countries than among non-adjusting countries. While the share of education relative to GNP declined in 62 per cent of the adjusting countries between 1980 and 1988, this share declined only in 20 per cent of the non-adjusting countries. Conversely, this share increased in 70 per cent of the non-adjusting countries but only in 38 per cent of the adjusting countries. On average, education's share of GNP increased 1.26 per cent; it did not increase in adjusting countries as a group.

In North America decreases in the share of GNP for education are equally likely in the five adjusting and in the ten non-adjusting countries. However, on average in adjusting countries this share declines by 0.62 per cent, while it increases by 0.47 per cent in non-adjusting countries. In South America decreases in this indicator occur in four of the seven adjusting countries; there was no decrease among non-adjusting countries. Increases of this share, on the other hand, are 1.74 times more likely among non-adjusting countries than among adjusting countries. While three of the four non-adjusting countries increase this share, only three of the seven adjusting countries increase it. On average, in adjusting countries this share decreases by 0.47 per cent, while it increases by 0.95 per cent in non-adjusting countries. In Asia, decreases in this share are also twice as likely among adjusting countries, while increases are 40 per cent more

likely among non-adjusting countries. On average, in non-adjusting countries this share increases more than four times more (0.65 per cent) than in adjusting countries (0.15 per cent).

Table 4 summarizes the differences as regards changes in education expenditure as a percentage of GNP among countries that had some adjustment operation<sup>1</sup> between 1980 and 1988. There are also differences in most regions in the likelihood that adjusting and non-adjusting countries reduced the share of government expenditure on education (Table 5). One reason for this is that adjusting countries faced heavy obligations to pay interest on debt, which, together with pressure to reduce overall government spending, reduced the amount of 'discretionary spending'. Once governments faced the need to reduce discretionary spending, cuts were influenced by a political economy of adjustment; for instance, reducing defence budgets was more difficult than reducing social budgets. Another reason for the disproportionate cuts stems from the high wage composition of the education budget, which makes it particularly vulnerable to wage-reducing policies.

TABLE 4. Difference in expenditure on education as a percentage of GNP in 1988 and the same ratio in 1980 for countries undergoing adjustment and other countries in different regions

	Change (%)	Countries
<i>Africa</i>		
Non-adjusting countries	1.26	10
Adjusting countries	0.70	21
<i>North America</i>		
Non-adjusting countries	0.47	10
Adjusting countries	-0.62	5
<i>South America</i>		
Non-adjusting countries	0.95	4
Adjusting countries	-0.47	7
<i>Asia</i>		
Non-adjusting countries	0.66	16
Adjusting countries	0.15	8

*Source:* UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991. Adjustment data derived from Appendix 1; see Appendix 3 for data by country.

1. Including structural adjustment and sector adjustment, as reported in Noss (1991).

In Africa the likelihood that a country would reduce this share is 23 per cent higher in adjusting countries. On average, education as a percentage of government expenditures decreased 0.19 per cent in adjusting countries, while it increased 0.4 per cent in non-adjusting countries. In North America adjusting countries are twice as likely to reduce this share as non-adjusting countries; on average in adjusting countries this share decreases 0.2 per cent, while in non-adjusting countries it increases 1.7 per cent. In South America this share decreases in 60 per cent of the adjusting countries, while it increases in all the four non-adjusting countries. While on average, in adjusting countries this share decreases 1.9 per cent, in non-adjusting countries it increases 1.9 per cent. In Asia this share is two and a half times as likely to decrease in adjusting countries. On average in non-adjusting countries it increases 3.2 per cent, while in adjusting countries it decreases 0.24 per cent.

TABLE 5. Difference in education expenditure as a percentage of government expenditure in 1988 and the same ratio in 1980 for countries undergoing adjustment and other countries in different regions

	Change (%)	Countries
<i>Africa</i>		
Non-adjusting countries	0.40	7
Adjusting countries	-0.19	17
<i>North America</i>		
Non-adjusting countries	1.70	6
Adjusting countries	-0.20	3
<i>South America</i>		
Non-adjusting countries	1.87	4
Adjusting countries	-1.90	5
<i>Asia</i>		
Non-adjusting countries	3.77	16
Adjusting countries	-0.24	5

Source: UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991. Adjustment data derived from Appendix 1; see Appendix 4 for data by country.

In Africa, a decrease in educational expenditure in real terms is two and a half times more likely among adjusting countries than among non-adjusting countries. In effect, while education expenditure declined in twelve of the twenty-eight adjusting countries, a similar decline took place in only two of the twelve non-adjusting countries.



On average education expenditure increases more than three times as much (4.9 per cent per year) in non-adjusting countries than in adjusting countries (1.5 per cent per year) (Table 6). In North America a decrease in education expenditure is 1.8 times more likely in adjusting than in non-adjusting countries. On average, in non-adjusting countries expenditure on education increased 2.9 per cent per year, while in adjusting countries it decreased 0.28 per cent per year. In South America a drop in expenditure on education is two and a half times more likely in adjusting than in non-adjusting countries. On average, while education expenditure decreases 1.22 per cent per year in adjusting countries, it increases 1.45 per cent per year in non-adjusting countries. In Asia there are very small differences in the rate of growth of expenditure on education between adjusting and non-adjusting countries. On average the increase is 6.7 per cent in non-adjusting countries and 7 per cent in adjusting countries.

TABLE 6. Average annual growth rate of educational expenditure in real terms between 1980 and 1988 for countries undergoing adjustment and other countries in different regions (%)

	Average annual growth rate (%)	Countries
<i>Africa</i>		
Non-adjusting countries	4.93	12
Adjusting countries	1.46	28
<i>North America</i>		
Non-adjusting countries	2.95	12
Adjusting countries	-0.28	5
<i>South America</i>		
Non-adjusting countries	1.42	4
Adjusting countries	-1.22	8
<i>Asia</i>		
Non-adjusting countries	6.74	16
Adjusting countries	7.14	8

Source: UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991. Adjustment data derived from Appendix 1; see Appendix 5 for data by country.

These findings are consistent with those of other studies that have looked at the impact of adjustment in spending on education (World Bank, 1990a). A World Bank analysis of the impact of structural adjustment found that:

Expenditures on health and education have increased in non-adjusting countries. Most of the intensely adjusting countries . . . show a decline in per capita expenditures for health and education . . . [these] are cause for concern, especially for those countries that, by any account, need significant improvement in their social sector infrastructure. In Brazil and Mexico these declines took place against the background of a growing government sector, relative to GDP. Greater emphasis needs to be given to the protection of the social sectors during the course of adjustment to avoid a further slideback. Because providing health and education services is an *investment* in human capital, such greater emphasis can be fully comparable with adjustment policies that aim at long-term sustainable growth (Kakwani et al., 1990, pp. 21–3).

### *The allocation of budget cuts within education*

Faced with declining resources for the sector, ministries of education had to decide how to allocate the cuts. It was easier to cut funds for investments than for salaries and hence the share of recurrent expenditures increases.

In Africa non-adjusting countries were 1.7 times more likely to increase the share of recurrent expenditure than adjusting countries (Table 7). On average the share of recurrent expenditure increased 8 per cent in non-adjusting countries between 1980 and 1988, while in adjusting countries it decreased 3.6 per cent. In North America non-adjusting countries are 1.2 times more likely to increase the share of recurrent expenditure than are adjusting countries. Between 1980 and 1988, on average the share of recurrent expenditure increased 6 per cent in non-adjusting countries, while it increased only 2 per cent in adjusting countries. In South America non-adjusting countries are 1.25 times more likely to increase the share of recurrent expenditure than are their adjusting counterparts. While this share increased 2 per cent in non-adjusting countries, it decreased 1 per cent in adjusting countries between 1980 and 1988. In Asia there are virtually no differences between adjusting and non-adjusting countries in the changes in the share of recurrent expenditure; it increased on average over 4 per cent between 1980 and 1988 in both types of countries.

This observed increase in the share of recurrent expenditures is consistent with evidence discussed by Stewart (1993), who explains it in this way:

The tendency for greater cuts in capital expenditures is partly due to bureaucratic and political pressures. But it is also a rational response to a crisis that can be expected to be temporary. However, if the crisis is prolonged – as has been the case over the past decade – then heavy cuts of capital expenditures may have seriously adverse effects over the long run (Stewart, 1993, p. 16).

TABLE 7. Difference in share of recurrent expenditure out of all education expenditure 1988 and the same ratio in 1980 for countries undergoing adjustment and other countries in different regions

	Difference recurrent/ total (%) 1980-88	Number of countries
<i>Africa</i>		
Non-adjusting countries	8.32	11
Adjusting countries	- 3.67	17
<i>North America</i>		
Non-adjusting countries	6.27	9
Adjusting countries	1.97	4
<i>South America</i>		
Non-adjusting countries	2.22	4
Adjusting countries	- 1.12	5
<i>Asia</i>		
Non-adjusting countries	4.43	15
Adjusting countries	4.34	7

*Source:* UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991. Adjustment data derived from Appendix 1; see Appendix 6 for data by country.

As resources for education in real terms decline, ministries of education experienced different pressures to alter the budget structure among levels and types of expenditures. Although there is no consistent pattern in allocations among levels, there is a tendency for the share for salaries to increase at the expense of the share for teaching materials in Africa. There are no differences between adjusting and non-adjusting countries in the changes in the share going to primary, secondary and university education and in the levels of those shares in 1988. The share of recurrent expenditure for teachers' salaries increased proportionately more in adjusting countries in Africa, where this share increased in 62 per cent of the adjusting countries, but only in 20 per cent of their non-adjusting counterparts. In North America, South America and Asia there are no differences between adjusting and non-adjusting countries.

The case-studies undertaken by the UNESCO-ILO Interagency Task Force on Adjustment, Austerity and Human Resources confirmed the short-run tendency to increase the share accorded teachers' salaries. Costa Rican teachers went on strike in 1989 to resist to cuts in their real incomes (Carnoy and Torres, 1992). In Brazil, the share of the budget of the Ministry of Education allocated to the payroll

rose from 43 to 66 per cent between 1986 and 1989 (Amadeo et al., 1992).

## Effects on access, quality and equity of education

### *Adjustment and access to education*

Adjusting countries are more likely to show reductions in the opportunity of access to first grade between 1980 and 1988 than non-adjusting countries, in all regions but Asia (Table 8). Access to first grade decreased in 54 per cent of the countries in Africa, where adjusting countries are 1.27 times more likely to show decreases than are non-adjusting countries. Some 39 per cent of the countries in North America show decline in the intake rate (adjusting countries are 3.4 times more likely to show decline). In South America 64 per cent of the countries show decline in intake rates, with adjusting countries are 1.5 times more likely to show decline than are non-adjusting countries. Intake rates declined in 37 per cent of the countries in Asia, where non-adjusting countries are 1.4 times more likely to show decline.

This decline in access to first grade is particularly a problem in Africa which still has not reached universal access to first grade. In 1988, on average, in adjusting African countries three out of ten children did not enter school, while in non-adjusting countries only one in ten children did not enter school.

Note that in some groups of countries the apparent intake rate exceeds 100% because enrolment data in first grade include children repeating the grade. In addition, adjusting countries made less progress expanding access to primary school than did non-adjusting countries (Table 9). Net enrolment rates decreased in 32 per cent of the countries in Africa, where adjusting countries are 3.3 times more likely to show declining enrolment rates than are non-adjusting countries. Some 36 per cent of the countries in North America show decline in net enrolment rates, with non-adjusting countries 1.7 times more likely to show declining rates. In South America only one country had declining enrolment rates and in Asia five countries (all non-adjusting) had declining net enrolment rates.

TABLE 8. Access to first grade of primary school in 1988 and changes in access between 1980 and 1988 (apparent intake rates) in adjusting and non-adjusting countries

	Change in intake 1980-88 (%)	Average intake rate 1988 (%)	Number of countries
<i>Africa</i>	- 3.51	75	37
Non-adjusting countries	- 0.91	87	11
Adjusting countries	- 4.65	69	26
<i>North America</i>	0.61	119	13
Non-adjusting countries	3.22	124	9
Adjusting countries	- 5.25	107	4
<i>South America</i>	- 5.09	121	11
Non-adjusting countries	3.75	121	4
Adjusting countries	- 10.14	120	7
<i>Asia</i>	3.33	100	27
Non-adjusting countries	4.60	97	20
Adjusting countries	- 0.29	109	7

*Source:* UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991. Adjustment data derived from Appendix 1; see Appendix 7 for data by country.

Net enrolment rates increased on average in all regions (because the increases in countries where these rates grew compensated the decline in the countries where they did not); progress, however, was substantially faster in non-adjusting countries in Africa, and North and South America. At the end of the decade there was a 10 per cent gap between adjusting and non-adjusting countries in Africa and South America. In adjusting countries in Africa, for instance, one in two children of primary school age did not have access to primary school, while in non-adjusting countries fewer than two in five children did not have access.

Many of the children who finish primary education do not go on to secondary school. In 1988 in Africa transition rates were only 40 per cent; while they were 46 per cent in non-adjusting countries, they were 38 per cent in adjusting countries. There is a similar gap in Asia, where transition rates near 80 per cent, and a larger gap between these two groups of countries in South America, as seen in Table 10, where they are 74 per cent.

TABLE 9. Net enrolment rates in primary education in 1988 and changes in net enrolment between 1980 and 1988 in adjusting and non-adjusting countries

	Net enrolment rates		Number of countries
	Change 1980-88 (%)	Average 1988 (%)	
<i>Africa</i>	2.04	60	25
Non-adjusting countries	5.50	66	8
Adjusting countries	0.41	56	17
<i>North America</i>	3.45	86	11
Non-adjusting countries	4.14	88	7
Adjusting countries	2.25	83	4
<i>South America</i>	4.43	88	7
Non-adjusting countries	9.00	93	3
Adjusting countries	1.00	84	4
<i>Asia</i>	4.50	85	18
Non-adjusting countries	4.23	85	13
Adjusting countries	5.20	87	5

Source: UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991. Adjustment data derived from Appendix 1; see Appendix 7 for data by country.

TABLE 10. Transition rates from primary to secondary education in adjusting and non-adjusting countries in 1988

	Transition rate (%)	Number of countries
<i>Africa</i>	40.78	32
Non-adjusting countries	45.67	12
Adjusting countries	37.85	20
<i>North America</i>	73.78	9
Non-adjusting countries	74.25	4
Adjusting countries	73.40	5
<i>South America</i>	74.00	2
Non-adjusting countries	88.00	1
Adjusting countries	60.00	1
<i>Asia</i>	80.93	15
Non-adjusting countries	83.00	11
Adjusting countries	75.25	4

Source: UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991. Adjustment data derived from Appendix 1; see Appendix 8 for data by country.

Enrolments in secondary education relative to the population diminished proportionately more in adjusting countries, as a result there is a widening gap in access<sup>1</sup> to education to this level between adjusting and non-adjusting countries. In Africa access to secondary education diminished in six out of forty countries, all of which were adjusting countries. Increases in gross enrolment rates in secondary education were 1.4 times more likely in non-adjusting than in adjusting countries. In North America, non-adjusting countries are 1.5 times more likely to increase access to secondary education than their adjusting counterparts. In South America only one of the countries (adjusting) diminished access to secondary education. In Asia non-adjusting countries are also slightly more likely to increase access to secondary education than are their adjusting counterparts. Table 11 summarizes the differences in the average increase between 1980 and 1988 in gross enrolment ratios and the average gross enrolment ratios in secondary education in 1988.

TABLE 11. Average increase between 1980 and 1988 in gross enrolment ratios (GERs) in adjusting and non-adjusting countries

	Increase GER (secondary) (%)	Average GER 1988 (%)	Number of countries
<i>Africa</i>	5.15	22	40
Non-adjusting countries	9.42	30	12
Adjusting countries	3.32	19	28
<i>North America</i>	6.93	58	14
Non-adjusting countries	9.67	64	9
Adjusting countries	2.00	47	5
<i>South America</i>	10.42	55	12
Non-adjusting countries	10.00	59	4
Adjusting countries	10.62	44	8
<i>Asia</i>	7.75	55	32
Non-adjusting countries	8.13	59	23
Adjusting countries	6.78	44	9

Source: UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991. Adjustment data derived from Appendix 1; see Appendix 8 for data by country.

1. Gross enrolment ratios have been used as a proxy for access to secondary education as net enrolment ratios were not available.

Access to higher education was not affected by adjustment. While the number of university students per 100,000 in the population diminished in a few of the countries in each region, adjusting and non-adjusting countries are equally likely to see reductions in this figure. There are no differences either in the relative number of university students in adjusting and non-adjusting countries in South America and Asia; in Africa and North America adjusting countries have relatively fewer university students than non-adjusting countries.

### *The persistence of inefficiency*

Inefficiency, in the form of students who repeat or drop out of school, is in part a reflection of low quality of the education systems. Many students do not learn the essential minimum to be promoted to the next grade, and as a result have to repeat; repeated failure of this type leads to drop-out. One important reason why children do not learn is because schools do not provide the minimum quality to promote learning. Quality refers both to the quality of the inputs (teachers, textbooks, curriculum and teaching materials) and of the process.

The main impact of the decline in education resources is that it did not allow improvement of the inefficiencies which characterized the sector prior to adjustment. The budget cuts reduced the likelihood that education systems would explore ways to improve internal efficiency. As total education budgets declined in real terms, increasing portions of the budget went to teachers' salaries which in turn deteriorated considerably in real terms. This is not a climate propitious to experimentation, evaluation and problem-solving (Reimers, 1991*d*, p. 326). To the extent that quality did not improve, inefficiencies continued.

Reductions in expenditure per pupil, resulting in some inputs to the education process being forgone, would be enough to reduce the quality of the education provided. In addition, the structural rigidities of education budgets compound the inefficiencies resulting from changes in the mix of inputs which lead to teachers without teaching materials, classes in dilapidated buildings, students without scholarships, textbooks or notebooks, and lack of supervision and training for teachers.

To the extent that there are limits in the degree to which some inputs can compensate for losses in others (for instance, a well-trained teacher may compensate somewhat for certain losses in teaching materials, but even a very creative teacher will have a hard time teaching if there is no chalk and if students have nothing to write on or



with), a basic quality package is the minimum a country should maintain in order to have the minimum conditions to promote learning.

Unit costs for primary education, relative to per capita GNP, are more likely to decline in adjusting countries. In Africa they declined in 72 per cent of eighteen adjusting countries, but only in 57 per cent of seven non-adjusting countries. In North America they are twice as likely to decline in adjusting countries than in non-adjusting countries. In Asia they are 1.5 times more likely to increase in adjusting countries. In secondary and higher education unit costs declined in most countries, but there are no differences between adjusting and non-adjusting countries. Declared repetition rates remained relatively high throughout the decade; there was no significant change between 1980 and 1988 and no differences between adjusting and non-adjusting countries. The rates are higher in Africa where they exceed 21 per cent, on average; in North and South America and in Asia they are around 10 per cent.

### *The degradation of the teaching environment*

Teacher salaries declined in most countries in sub-Saharan Africa and in Latin America as shown in Table 12. In most countries primary-school teachers' salaries declined; in about half of the cases this decline was more than 20 per cent in real terms. This is confirmed by other studies of the same subject. In Argentina salaries of primary-school teachers in 1982 were 55 per cent of their 1980 value; in 1987 they were up to 97 per cent of their 1980 level. In Bolivia primary-school teachers' salaries in 1987 were 73 per cent of their 1980 levels. In 1987 salaries in Costa Rica were 67 per cent and in Guatemala 54 per cent of their levels in 1980 (Corvalan, 1990).

TABLE 12. Percentage of variation in primary-school teacher salaries in a number of countries in Africa and Latin America in real terms (1980-87)

Percentage change	Sub-Saharan Africa	Latin America
-20 or more	9	8
-19 to -10	4	3
-9 to 0	5	3
0 to +9	1	—
+10 to +20	1	1
+20 or more	2	3
Average change	-13	-14

Source: Teresa Mariano Longo, *Politiques d'ajustement structurel et professionnalité des enseignants*, Paris, UNESCO, 1993, p. 18. (Pour la formation des enseignants, 1.)

Tibi (1989a) examined the extent of the decline in teachers' real salaries at all levels of education in seven countries. He concluded that in all but one country, teachers endured losses ranging from 40 per cent to more than 70 per cent during the period 1970–85. The trend started in the early 1970s in several countries but accelerated in the early 1980s as a result of adjustment policies (Table 13).

In many African countries, the salaries of teachers fell by some 30 per cent in real terms during the 1980s (MINEDAF VI, 1991a). This reduction was compounded in a number of cases by failure to ensure regular payment; in the United Republic of Tanzania, for instance, teachers are required to travel to far off headquarters to collect their salaries, taking as much as an entire day, and in some districts payments can be delayed for months.

TABLE 13. Evolution of teachers' salaries (average) in seven countries (constant prices)

Country	Primary				Secondary				Higher			
	1970	1975	1980	1985	1970	1975	1980	1985	1970	1975	1980	1985
Colombia	100	123	92	103	100	123	92	103	100	—	—	—
Congo	100	76	43	29	100	75	44	28	100	75	45	41
Côte d'Ivoire	100	124	88	57	100	132	101	60	100	108	81	53
Indonesia	100	42	26	41	100	42	25	39	100	42	22	3
Mexico	—	100	63	47	—	100	71	35	—	—	—	—
Togo	100	80	66	50	100	80	66	50	100	80	66	50
Zambia	100	103	80	55	100	94	77	41	100	92	74	40

Source: C. Tibi, 'Conditions in the Teaching Profession: A Current Problem', *IIEP Newsletter* (Paris), Vol. VII, No. 4, 1989, p. 1.

In Tanzania, the 1987 level of a starting teacher was just 29 per cent of the 1977; that of someone at the top of the scale was only 23 per cent of the 1977 level. In Kenya, teacher salaries fell by 30 per cent, and in Zimbabwe by 40 per cent, but the falls were much smaller in Malawi and Zambia. In Costa Rica, between 1980–1987, the salary level of a primary school teacher fell by 30 per cent and a secondary school teacher by 35 per cent. Data for real recurrent expenditures per teacher (a broad indicator of teacher wage-levels) show declines in forty countries, especially concentrated in African and Latin American countries (Stewart, 1993, p. 18).

Cuts in the real level of teachers' incomes result in low morale in the profession, and reduced motivation and effectiveness, with serious implications for school quality. In addition, teachers may be forced to take on second jobs or activities, often leading to increased absen-

teeism and to reduced time for preparing classes, correcting papers and being available for students. The erosion of income also leads to trained staff leaving the profession. Scientific, mathematical and technical subjects are particularly affected.

As a result of both lower wages and degradation of working conditions, the attractiveness of teaching as a career has been considerably reduced. UNESCO's *Statistical Yearbook 1991* (UNESCO, 1991a) indicates a declining proportion of students enrolled in teacher training at the second level of education. Between 1980 and 1989, enrolment in teacher training as a percentage of total enrolment declined from 7.2 to 6.6 per cent in Africa and from 4.1 to 3.2 per cent in Latin America.

An option used to cut back on teacher costs has been to increase the proportion of young, inexperienced and temporary teachers, with the effect of reducing the average salary paid. Using untrained teachers in countries where large numbers are already without qualification is unlikely to contribute to the quality of the system. In Costa Rica, for example, better educated teachers have been gradually replaced by *aspirants*, high school graduates without adequate training. At the secondary level, these *aspirants* represented 23.9 per cent of the teaching force in 1990, up from 9.7 per cent three years earlier (Carnoy and Torres, 1992). In the United Republic of Tanzania, during the Universal Primary Education Campaign, a large number of teachers were only prepared through distance training. Currently, only a minority of primary-school teachers have completed secondary education: most had not been selected for admission to secondary level (Samoff and Sumra, 1992).

### *The concern for equity*

Because some groups in society have more capacity to resist attempts at reducing their share of the public education budget than do others, equity can suffer in a context of declining resources. For instance, urban schools are closer to the centres of distribution of supplies and materials, and more likely therefore to increase their share of a declining pie of overall resources; supervisors and district authorities may be only too happy to increase the share of resources going to urban schools as reductions in their own transportation budgets and in resources for per diem payments make it more difficult to provide for distant schools.

One of the areas in which intrasectoral equity can be examined is in the ratio of per pupil expenditure in higher education to per pupil expenditure in primary education. Africa and Asia used adjustment as

an opportunity to reduce this gap, while there were no changes in North or South America during the decade. While 63 per cent of the countries in Africa reduced this gap between 1980 and 1988, 65 per cent of adjusting countries did so, compared to 57 per cent of non-adjusting countries. In North America 57 per cent and in South America 80 per cent of the countries reduced this gap, but in very small levels as seen in Table 14. In Asia all adjusting countries reduced this gap, while 42 per cent of the non-adjusting countries did not.

Table 14 summarizes the average change in unit expenditures in higher to primary education between 1980 and 1988, and the levels of these ratios in 1988. The gap is largest in Africa, where in adjusting countries a university student costs forty-seven times as much as a primary-school student, and in non-adjusting countries thirty-two times as much. While the opportunity to enter a primary school is a first step in that direction, it is still a long way from true equality of educational opportunity. Many students enter schools of such low quality that failure is the most probable outcome, they repeat grades and eventually drop out of school. In this way the themes of quality of education and internal efficiency are related. Also, to the extent that certain groups show systematic school disadvantage, equity is also a function of quality and internal efficiency.

TABLE 14. Ratios of per pupil expenditure in university education to per pupil expenditure in primary education in 1988 and changes between 1980 and 1988 in adjusting and non-adjusting countries

	Ratio university/ primary education	Change 1980-88	Number of countries
<i>Africa</i>	43	-17.69	24
Non-adjusting countries	32	-11.51	7
Adjusting countries	47	-20.23	17
<i>North America</i>	7	-1.36	14
Non-adjusting countries	5	-2.15	10
Adjusting countries	12	0.62	4
<i>South America</i>	7	-1.57	10
Non-adjusting countries	6	-3.41	3
Adjusting countries	8	-0.79	7
<i>Asia</i>	8	-5.01	20
Non-adjusting countries	6	-1.13	12
Adjusting countries	10	-10.82	8

Source: UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991. Adjustment data derived from Appendix 1; see Appendix 9 for data by country.

A study of the impact of structural adjustment in sub-Saharan Africa found that between 1980 and 1988 the percentage of boys reaching Grade 4 declined in thirteen countries, increased less than 1 per cent in seven countries and more than 1 per cent in seven countries (Reimers, 1993) (Table 15). The percentage of girls reaching Grade 4 declined in eleven countries, increased less than 1 per cent a year in eight countries and more than 1 per cent a year in nine countries. The percentage of boys completing primary school declined in fifteen countries, increased less than 1 per cent per annum in six countries and more than 1 per cent in eight countries. The percentage of girls completing primary school declined in thirteen countries, increased less than 1 per cent per annum in six countries and more than 1 per cent in nine cases.

TABLE 15. Percentage of children reaching Grade 4 and completing primary school in 1980 and 1988

	Percentage reaching Grade 4		Percentage completing primary	
	1980	1988	1980	1988
<i>Boys</i>	76	66	74	61
Average	80	71	77	63
Median	24	21	37	8
Minimum	100	97	100	98
Number of cases	34	34	35	3
				5
<i>Girls</i>	74	60	73	58
Average	78	67	77	63
Median	24	12	29	7
Minimum	100	95	100	99
Number of cases	34	34	35	35

Source: F. Reimers, *Education and Structural Adjustment in Sub-Saharan Africa*, Cambridge, Mass., Harvard Institute for International Development, Development Discussion Papers, 1993.

While there are no differences between differing adjusting countries in the growth during the decade in the percentage of boys who complete Grade 4, Table 16 shows significant differences in the percentage of girls who complete Grade 4. The percentage of girls completing Grade 4 increased 0.67 per cent a year for countries which did not adjust, while it increased less than half that rate (0.30 per cent) for intensely adjusting countries.

TABLE 16. Annual rate of growth of the percentage of girls completing Grade 4 by type of adjusting country

Years of adjustment	% Annual Growth	Number of countries
0	0.66	7
1-2	0.16	5
3-4	0.52	12
5 or more	0.29	5

Source: F. Reimers, *Education and Structural Adjustment in Sub-Saharan Africa*, Cambridge, Mass., Harvard Institute for International Development, Development Discussion Papers, 1993.

There are significant differences between adjusting and non-adjusting countries in the annual rate of growth during the decade of the percentage of boys and girls completing grade 4 for countries undergoing different forms of adjustment (Table 17). While the percentage of boys completing primary school increases by 1.3 per cent a year for countries that did not adjust, this rate grew by one-fourth of the rate in intensely adjusting countries, and declined in other adjusting countries. For girls, the impact of adjustment is more severe: in non-adjusting countries primary completion rates increased by 2.4 per cent a year, while in all adjusting countries they declined.

Table 17. Annual rate of growth (1980-88) of the percentage of boys and girls completing primary education by type of adjusting country

Years of adjustment	Annual growth (%)	Number of countries
<i>Boys</i>		
0	1.34	7
1-2	-0.81	5
3-4	-1.53	12
5 or more	0.29	5
<i>Girls</i>		
0	2.42	7
1-2	-1.90	5
3-4	-0.77	12
5 or more	-0.31	5

Source: F. Reimers, *Education and Structural Adjustment in Sub-Saharan Africa*, Cambridge, Mass., Harvard Institute for International Development, Development Discussion Papers, 1993.

In sum, in countries undergoing adjustment programmes the percentage of children completing primary school declined, and this

decline was stronger for girls than for boys. Similarly, the percentage of girls completing Grade 4 increased by less in countries undergoing adjustment programmes than in non-adjusting countries.

Most of the equity impact is probably the result of the disproportionate direct consequences of adjustment on poor households, stemming from the negative multiplier effects discussed earlier and from the lack of compensatory policies at school level to protect the children of the poor. This impact is the least documented in the existing studies. In Costa Rica, for example, while 30 per cent of the poorest households captured 31 per cent of education resources in 1977, by 1986 their share had declined to 27 per cent. By contrast, 40 per cent of the richest households increased their share from 38.6 per cent in 1977 to 45.4 per cent in 1986 (Reimers, 1991*d*, p. 336).

### Summary: the impact of adjustment on education

The 1980s were a decade of austerity in all countries. Austerity, however, was greater in adjusting countries, which means that these are the countries where households suffered a greater decline in their ability to contribute to the financing of education. A series of negative multiplier effects compound the impact of diminished incomes per capita for the poorest groups.

While the decline in household incomes, particularly those of poor households, would have required increased efforts from the state to maintain levels of education financing compensating for those losses, in fact in adjusting countries education expenditure tended to decline in real terms, as a percentage of government expenditure and as a percentage of GNP. This expresses the fact that education was not a central concern of adjustment programmes.

Facing reductions in funds, education ministries cut disproportionately the shares for construction and maintenance of buildings, and then for teaching materials. Eventually teachers' salaries also deteriorated in real terms. This made the provision of education more difficult, not only because teachers saw class sizes increase but also, because it changed the organization of the teaching process, teachers had less time to prepare classes and fewer teaching resources, taught in buildings in increasing disrepair and faced students tired from increasing household responsibilities, sometimes hungry and sick, and with fewer things to bring from home, such as notebooks and textbooks, that could help them learn.

These changes in the teaching conditions in schools and in the realities affecting households in adjusting countries led to reductions in the relative number of children entering school. That means educational opportunity to enter primary school diminished. Furthermore, the opportunity to move from primary to secondary education was substantially lower in adjusting than in non-adjusting countries. There were no effects of adjustment on the opportunity to gain access to higher education.

The impact of adjustment should be assessed not just in terms of what deteriorated, but also in terms of what did not improve. The high levels of internal inefficiency and inequity (in completion rates, and in gaps in per pupil expenditure between primary and university students) continued in a context of declining resources. The costs of adjustment for the education sector were not just direct costs as discussed in this chapter, but also the costs of missed opportunities.



## 4. Improving education under adjustment and economic restructuring: what options?

In this chapter we understand structural adjustment in the sense defined earlier, that is as a long-term process aimed at restructuring the economy to put in place incentives to promote growth. The development of human resources is of paramount importance for this type of restructuring. However, in practice 'structural adjustment' programmes have too often been associated with the short-term stabilization component of adjustment policies. For this reason 'structural adjustment' may have become a term with a distorted meaning and it may be necessary to refer to 'economic restructuring' in order to underline the long-term emphasis of some adjustment policies. In this sense, this chapter assumes that many countries will choose to undergo economic restructuring, whether in the frame of conventional adjustment programmes or not.

The evidence examined here supports the view that educational development has suffered in countries undergoing adjustment programmes during the 1980s. A number of reasons may account for this; one possibility is that the deteriorating economic conditions, independent of adjustment, account for part of this decline. But even in that case adjustment has failed to redress that decline. Whether education has suffered because of adjustment or in spite of it, the point remains that the deterioration of the human resource base, particularly of Africa and Latin America, poses growing challenges to the task of restoring long-term economic growth, and social and political development.

Economic restructuring programmes need to place human resource development at the centre of the transformation strategies. This calls for a new approach to thinking about restructuring and for the participation of a new set of actors in the restructuring debate at the national and international level. This chapter proposes some lines of action to support the centrality of human resource development in the restructuring efforts.

## Do countries have a choice?

The changes in education discussed here should be seen as the result of choices made at different levels. At one level, governments can choose whether to adjust and how to adjust. The perception of growing interest payments as an uncontrollable portion of the budget which automatically reduces the amount left for 'discretionary spending' is a choice, one that values responding to international financial obligations on a different scale from responding to obligations to national constituencies.

Although we do not intend to review alternative forms of adjustment, it is clear that the adjustment programmes supported and promoted by the World Bank and the IMF during the 1980s have not worked for many countries. Lip service to a new emphasis on social development and rhetoric about difficulties in establishing causality between adjustment and deterioration in living conditions have to give way to a new sense of accountability. International financial institutions are supposed to be part of the solution to the challenges of adjustment, not part of the problem, and their record has to be assessed by the number of success stories they can claim, not by whether they can or cannot be blamed for the failures.

While it is not questionable that a country must live in equilibrium between resources and expenses, there is considerable scope for disagreement as to the speed and mechanisms by which severely distorted economies are to be brought back into equilibrium (see UNICEF's proposal further below). A standard recipe that fits all situations should not be promoted by international financial institutions – actual situations obtaining in different countries are different and may require context-specific solutions. International organizations should engage in dialogue with national counterparts in the search for solutions that fit the particular economic, social and political situation of each country.

Countries also have a choice also in how they treat the education sector within adjustment, or in how the education sector itself adjusts to new economic realities. A good number of adjusting countries chose to increase education spending as a percentage of GNP (including Bangladesh, Brazil, Burundi, Colombia, Gabon, Gambia, Ghana, Jamaica, Morocco, Nepal, Pakistan, Panama, the Philippines, Tunisia, Uganda, Uruguay and Zimbabwe).

International financial institutions can too easily become scapegoats on which to blame the results of the lack of national capacity to develop programmes to restructure the economy so as to promote

long-term growth. The promotion of human resource development is not a simple task, nor is it a simple result of increasing financial resources; the sector is complex and its transformation requires understanding and know how. Sector policy adjustment lending is an easy way out, one which can allow ministries of finance to pretend they address education without having to work out a plan to transform the sector.<sup>1</sup>

There is nothing inevitable about how education is to fare under adjustment as there is no magic or universal solution for how the education sector should be treated or 'protected' from adjustment. The sections that follow attempt to raise some of the issues that can be considered in the development of national strategies that suit the specific conditions of each country.

## Options for policy-makers

The issues to be considered in identifying the specific options that suit each country best centre around the processes of policy-setting, financing, management, quality and equity of education.

### *Improving policy-setting*

From the point of view of the countries involved, one option is to have the best talent in the education sector of the country participate in the design of programmes of change for the sector under adjustment and economic restructuring. This is to say, the country needs to give participation in the preparation of education adjustment programmes a strategic importance. In the past, officials of international organizations have sometimes been able to fulfil their requirements of government participation with the collaboration of isolated bureaucrats in the ministry of education or finance who agree to the preparation of loans of little use to transform the sector.

This option poses a special challenge to governments that have little access to high-level national technical advice, relying instead their own people. The transformation of education systems is a long-term task with consequences for large segments of the population, and accurate design is more likely if the government does not just rely on the

1. UNDP has recently attempted to resolve some of the limits inherent in project lending by proposing a programme approach which can have a horizon beyond four to five years and within which specific projects can be developed. It is still early to assess the merits of this strategy.

talent available within the circle of friends of those in power, but instead seeks out the best talent the country can provide. Creating a high-level unit or group, as technically excellent as possible, to act as counterparts in the dialogue with the representatives of international financial institutions is a first step in sending a signal that the country expects to be treated seriously by financing institutions and demands high-level technical talent at the other end of the table.

Too often projects are poorly designed because governments lack the capacity to identify options, prepare programmes and co-ordinate among donors. The task of donor co-ordination is critical in a context of adjustment and should not be left to the donors themselves, as is currently the case in many countries, but should be done by the government on the basis of technical analysis conducted by the government itself or on its behalf.

In some countries ministries of education may find that they lack a unit of the adequate technical level to support the production of a strategic framework for sector reform. In the short run an ad hoc unit can be structured with participation from the best possible talent which can be found in the country, relying for instance on universities, private think tanks, or staff in other ministries. The consolidation of such a unit inside the ministry of education should receive priority among the reform activities. The education sector needs a brain to know which way to go, one that can provide the leadership and the sense of mission that should drive the reform efforts.

Opening up the process of development of a strategic education framework and of project preparation to people and institutions on the basis of technical excellence will be a first step towards a new style of formulating education policy and may by itself have important beneficial effects for the quality of the design and the feasibility of implementing the project.

One of the functions of this unit will be to increase the participation of the education sector in the structural adjustment negotiations, from a position of strength. Too often the internal dialogue between the ministries of education and of finance is weak, reflecting in part the weaknesses of education in technical analysis and in negotiation skills. This unit could also promote donor co-ordination and lead negotiations with other relevant actors in the country to foster support for an education reform agenda.

### *Developing a strategic education policy framework*

One option centres around developing interventions in a project mode or in a programme or sector mode. Whichever format is chosen, the

complexity of the sector needs to be addressed in the identification of solutions. Sometimes the programme or lending policy is too far removed from the education sector. As international financial institutions have increased the magnitude of their education portfolio, there will be increasing pressures for a clear lending policy. On the other hand, foreign-funded projects sometimes create areas of prosperity that operate as islands in a deteriorating education system, isolated with limited linkage and prospects of institutionalization. It is essential that the fundamental problems of the sector, in all their complexity, be considered by addressing issues of institutionalization and large-scale impact. A strategic education policy framework can be developed to provide guidance for project preparation and to co-ordinate foreign assistance.

The national strategic framework should approach the transformation of the education sector as a systemic reform. The deterioration suffered by the education sector in the countries most likely to attempt efforts in this area has been such that incremental change will not set the inertial decline back on the road to progress. It is necessary to consider policy interventions that address simultaneously the objectives of the reform, finance, management and quality. There are complementarities between interventions in these areas, and the overall effectiveness of any one-sided intervention will be reduced by the lack of a systemic approach to the reform process.

In the identification of the objectives of reform, it is crucial to look outside the education sector. The strategic framework has to take account of, and be responsive to, the new economic and political realities. The contribution of education to the preparation of human resources for increased national competitiveness in an increasingly global economy should be one of the main objectives of the projects of educational transformation. The development of values, in addition to skills and abilities, must receive explicit attention in a world where violence is one of the main sources of instability and constraints to development.

The formulation of a strategic framework of objectives as described above should clearly incorporate views beyond those of a team inside the ministry of education or the party in power. A process of national dialogue, efficiently conducted, with the key actors in the political, social and economic spheres, is necessary in order to elaborate a national strategy rather than a strategy reflecting only the views of one government.

A long-term strategy to increase national productivity and to reduce poverty must give priority attention to the employability and productive skills of the labour force. Education policy has the potential to make substantial contributions to economic growth and equality of

opportunity. To realize this contribution, the leadership of the country and of the education sector needs to develop a vision of the role education will play in society's efforts to restore growth and development. This vision should include a specific definition of policy options, an analysis and commitment to make the necessary resources available to implement the policies, and the administrative capacity to translate policies into effective and concrete changes in schools.

The construction of this vision will be the result of a collective national dialogue that can be stimulated by the strategic education policy framework proposed here. In preparing this framework, analysis of alternative policy options should attempt to satisfy three criteria:

First, what is the impact of the policy on the external efficiency of education? In other words, to what extent does the policy contribute to increasing labour productivity, access to the labour market, or other desirable social and political goals (such as citizenship or democratic participation, health, reduction in population rates and environmentally sustainable economic activities)?

Second, what is the impact of the policy on the internal efficiency of the education system? Or, to put it differently, how does the policy help the education system achieve maximum results with available resources?

Third, what is the impact of the policy on equity? That is to say, how does the policy improve real access to educational opportunities for the population and to what extent does it contribute to correcting pervasive limits to social and economic participation based on gender, ethnicity and socio-economic background?

A policy framework should select a mix of options that are mutually reinforcing and consistent. In this sense, any policy intervention should be understood as part of a 'system'; its impact will be influenced by the support from other policies in effect. For instance, policies to promote access by opening more schools or expanding bilingual education should be supported by financing policies that increase resources in real terms for basic education, or by management policies that promote the development of administrative capacity at the central, regional and local level.

This framework should consider four general lines of policy options: education finance policies; policies to improve educational management and information; policies to promote the quality and efficiency of education; and policies to promote equity.

### *Education finance policies*

The financing of education is another area which can be considered in the definition of a national reform strategy. The question of levels of finance is only in part a technical one; society's well-being would improve as long as the returns to education at the margin exceed the returns of alternative forms of investment. Deviations from what seem to be good technical reasons to allocate more resources to education can be explained as a function of priorities, history, politics or taste. Countries at war, for example, may assign greater value to investing in military personnel and equipment than to the development of human resources. The end of hostilities is usually not sufficient to rearrange priorities – the interest groups that developed prior to peace continue to be influential.

Deciding the appropriate overall spending for education is only one step towards improving education systems. It is equally important to determine how those funds should be used and how much should go to each level of education. This question can be partly answered by looking at the returns to different levels of education, which will provide a sense of relative scarcities. It is also important to define the basic quality package for each specific country and the costs of providing this package.

Within each level, resources should also be allocated to activities with the highest marginal returns. Funds could be used to appoint more sports teachers in urban schools or more bilingual teachers in rural schools. In some countries it is fairly evident that society's well-being would improve more by doing the latter than the former. However, the choices facing ministries of education are not always so clear-cut and hence the need for ministries of education to have information plus the capacity to carry out cost/benefit analyses of alternative forms of investment in order to optimize resource utilization. We will develop this point further later.

The last question in finance concerns who should pay. Sources of finance can include the state<sup>1</sup>, the beneficiaries of education and the private sector in general (industry, for instance, benefits from certain types and forms of education of the labour force). The appropriate pol-

1. The principal reason why the state should contribute is that education has benefits that exceed those which accrue to individuals as direct returns; these are called externalities. For instance, expanding education opportunities, which in turn leads to increased opportunities for employment and a reduced crime rate, is of interest not only to those who have direct access to the education and employment opportunities but also to others who benefit from living in cities with lower crime rates.

icy mix to define the degree of contribution from each sector should vary by level and type of education. For instance, very specialized forms of vocational and technical education should be financed by the firms which are likely to benefit from those forms of training or by the beneficiaries if such training leads to high-paying jobs. University education, which is one of the most expensive forms of education and where most of the benefits translate to higher salaries for graduates, should be financed by beneficiaries to a larger degree than basic education.

Children and their families generally make substantial contributions to their own primary education: they contribute their time (which has clear opportunity costs where children help with crops, household chores, or taking care of siblings to allow their parents to work), they contribute school supplies and uniforms or some clothing to attend school and, in many cases, they make contributions in kind or cash to the teacher and for school maintenance. Thus the real policy choice is not between private contributions or no contributions to the finance of basic education; rather, it concerns the degree to which families should be asked to contribute.

In countries with high levels of unemployment and in which families have experienced severe setbacks in real income, it is not advisable to increase *in cash* contributions to finance school activities at the primary level. However, the participation of the community can be promoted to increase the efficiency in the use of resources and the quality of the education that their children receive. More will be said about this below, in the section dealing with management.

Increasing private financing of education has been advocated by the World Bank on the grounds that it will improve both efficiency and equity. It is argued that charging fees directly to those who benefit from a service (rather than indirectly through the tax system) will cause parents and pupils to value the quality of schooling more, will give educational institutions a strong incentive to be more efficient and will ensure that those who, in the future, will enjoy substantial financial benefits from better job prospects, will in fact pay for that investment rather than receiving a subsidy from poorer taxpayers with lower earnings and opportunities.

There are many counter-arguments. Although school fees may reduce pressure on government budgets, critics believe this has damaging implications for equity through its disproportionate impact on poor families, who have more children of school age and lower incomes than rich families. The result of cost-recovery measures is likely to reduce access to education among this group and in many societies to affect adversely the enrolment of girls. In least developed countries,



where the poor can hardly afford to feed their children, even very small fees charged for primary education can damage equity and access for the poorest. It may contribute to increased drop-out among poor children and thus to their remaining in poverty by excluding them from job opportunities requiring educational qualifications.

Given the widespread political commitment to free elementary education and the high level of economic returns to investment in primary schooling, it is acknowledged that fees must be introduced selectively. In fact, there are strong arguments for continuing to subsidize primary and basic education. It is at the higher levels of education, which offer substantial private returns and in most countries disproportionately benefit the children of the rich, where there is greatest scope for shifting the financial burden through cost recovery, combined with carefully targeted scholarships or bursaries for students from low-income families.

Yet, under the pressure of structural adjustment programmes, governments were induced to introduce or increase cost-recovery measures at all levels of education. The United Republic of Tanzania can be taken as an illustration of this tendency. In the context of the Economic Recovery Plan, and on the advice of the World Bank and the IMF, primary school fees (abolished in 1973) were restored in 1984 as a development levy. Tuition fees were introduced at the secondary level in 1985 (Samoff and Sumra, 1992). In Jamaica, high schools instituted a system of school fees to supplement government financing with disastrous effects: some parents cannot afford to keep their children in school; students can not take all the subjects they would like to (Government of Jamaica, 1989). In Zimbabwe, school fees and charges at the secondary level are around Z\$250 per pupil per year, while many rural households have monthly incomes below Z\$100. Examination fees are particularly heavy and constitute a major cause for dropping out (Graham-Brown, 1991). Recent evidence suggests that reforms to increase private contributions in the form of student fees at the lower levels have regressive effects in discouraging enrolment by children from poor families.<sup>1</sup>

The debate on the role of private contributions to the finance of basic education has been very much alive during the last ten years and still continues. A recent review of alternative forms of finance concludes:

From the evidence provided in our historical paradigms, it would seem that decentralization or privatization at the primary level would not be a desirable

1. Malawi was one of the first countries to increase student fees significantly in the 1970s. Recent evidence shows that this inhibited enrolment growth.

trend, but, rather, that it should be considered for secondary and higher education. This is because of the role of education in supporting national culture and relative lack of diversity at primary as opposed to higher levels of education (Cummings and Riddell, 1992, p. 5).

Student loans, especially for higher education, are one method proposed for transferring costs from the state to individuals or for providing financial aid to enable poor students to pay fees and living expenses. The World Bank has advocated greater use of student loans rather than grants in higher education on the ground that they do not involve transfers of income from poor taxpayers to those who, in the future, will enjoy the financial benefits of higher than average earnings (Psacharopoulos et al., 1986; Woodhall, 1983). On the other hand, experience with student loans schemes in many developing countries cast doubt on their effectiveness as a means of cost recovery. Where interest rates on student loans are highly subsidized and default rates are high, loans contribute little to cost recovery and in extreme cases, owing to high administrative costs, may even cost governments more than scholarships or grants. In these circumstances a graduate tax has been advocated on the grounds that it could bring in significantly more revenue than traditional loan programmes (Albrecht and Ziderman, 1993).

Student loans now exist in more than fifty countries and experience shows that they are feasible as a way of financing higher education; however, they will increase resources for education only if loan programmes are well designed and efficiently managed. Reviews of experience of student loans in Africa, Asia and Latin America (Woodhall, 1991*b*, 1991*c*, 1992, 1993; Carlson, 1992) show that some loan schemes work well but others are marred by poor loan recovery and administrative problems. In many cases inflation and interest rate subsidies have reduced the financial viability of loan programmes, so that the idea of a 'revolving fund' seems unattainable.

Requirements for effective management of student loans include sound legal, financial and administrative structures to ensure efficient loan recovery and careful targeting, so that subsidies benefit students from low-income families or in fields of study which have highest priority in the labour markets. Other options include a graduate tax, a payroll tax for employers of graduates (Colclough, 1990) or differential fees, such as have been introduced in the University of the Philippines, where fees are related to family income and poor students are heavily subsidized while those from rich families pay more.

*Policies to improve educational management and information*

Another area that should be considered in the preparation of a national strategy of education reform is that of management. Effective implementation of the new policy directions identified by the new 'brain' of the ministry will require appropriate management competencies. For example, student loans for university students require the institutional means to recover costs, administer means tests to identify deserving students who need assistance, management of loan programmes that ensure recovery, and even communication and negotiation skills among those proposing the policies so that they can engage in a constructive dialogue with representatives of the universities in order to negotiate agreements on this subject. Similarly, programmes that target poor students require specific management skills to identify those students and deliver the special services.

In addition to the above, resource use can also be improved significantly by changes in the management of the education sector. Management policies deal with the use of the resources allocated for education. Generally, management issues are associated with internal management of the ministry of education, which is not surprising since the ministry uses most of the resources specifically assigned for management. The most frequently considered policy option focuses on the centralization *v.* decentralization of educational services. It is generally believed that the efficiency of educational spending will increase by locating the decision points closer to the schools. Under conditions of adjustment and restructuration, an important consideration would be to review management options with the aim of maintaining the basic quality package described earlier.

While there are merits to the option of decentralizing educational services, it is important to recognize that the options cover a range of shades from black to white. The centralist tradition includes the education systems of the Prussian state, reflected in the current German system, France and Japan. The two best examples of the decentralized tradition are the United Kingdom and the United States. Recent experience in Latin America has shown that decentralization is not a panacea or a cure-all solution to the problems of education systems.<sup>1</sup> Recent

1. In Chile, for instance, the military regime of General Pinochet promoted the most extreme decentralization (municipalization) of education services in the Latin American region. Most Chilean specialists recognize that this led to an increase in inequities in the provision of education. While municipalities with well-educated and financially able parents did better under the new system, those with lower levels of education and resources were worse off under the decentralized system than before.

reviews of decentralization policies argues for the need to differentiate between macro and micro levels of analysis of decentralization:

Confusion between these two levels is what accounts for the irony of the two most decentralized educational prototypes, the U.S. and the U.K., advancing on the one hand, towards greater centralization of their systems [with a renewed emphasis on national standards, a national curriculum, and national testing], in the name of efficiency, whilst on the other hand, experiencing strong decentralizing and privatizing pressures, namely, in the choice movement, and its offshoots. There is a lesson for the Third World in the difference between the two levels and the requirements of efficiency (Cummings and Riddell, 1992, p. 4-5).

From a strictly *technical* perspective, it can be argued that some aspects of governance should be centralized, but others should be decentralized. The most effective governance system is one that gives the persons with the most information about the particular situation requiring a decision the authority to decide how best to achieve objectives set at a higher level.

Teachers are the persons who have the most information about students' progress in learning; they should have the authority to decide which methods to use and the pace and sequence of lessons.

Principals are the persons with most information about conditions in the whole school; they should have the authority to decide about matters that affect the whole school.

Teachers know more about teaching and curriculum, but parents know more about local values and economic requirements of the community.

District supervisors or education officers know best the overall problems of the district and the resources available to distribute, but school principals have more information about the kind of teacher required in their particular school.

The central ministry may have more information about the overall requirements for school construction, but district officers will know better where new buildings should be located.

From this perspective, centralization is excessive when decisions are located too far from the source of information. Decentralization, on the other hand, is excessive when decision-makers do not have information about the effects of their actions on others (McGinn and Borden, 1993, p. 150).

Much of the decentralization debate has lost focus of a critical concept to improve efficiency: school autonomy. Greater autonomy of the school and better linkages between the school and the community hold great potential to improve the opportunities for learning. Unfortunately, it is possible to decentralize education services in ways that inhibit further, rather than promote, school autonomy. Decentralized units that mimic the style and behaviour of central ministries are unlikely to increase teacher accountability and community involve-

ment. On the other hand, it is possible to promote school autonomy and greater community participation in centralized systems.<sup>1</sup>

With all these options, an issue of concern is maintaining quality and central standards; management reforms to decentralize services require efforts to improve capacity at the central level to design policy and monitor implementation. As part of management reforms, the theme of administrative corruption needs to be faced head on. As the largest employer of the government, the ministry of education has attracted all kinds of groups and developed all kinds of aberrations that preclude the delivery of quality education. For instance, in many ministries of education unions or political parties control the appointments of personnel. This has resulted in overstaffed and underqualified ministries. Ministries of education need to recover their mission, a sense of purpose. Any interest that is extraneous to that of providing the best opportunities to develop human potential should be purged from the sector.

The control of the administrative machinery by unions or political parties to serve narrow party or group interests is a serious problem that will only be solved as a result of wide national consensus and support. Unless ministries of education can pay high-level talent well and unless that talent receives the support that comes from working with talented colleagues, the sector will continue to show poor results. Ministries of education have too often become dumping grounds for political cronies. Downsizing the administrative bureaucracy and purging it of incompetent staff will allow higher salaries to be paid, thereby attracting a professional cadre of planners and managers who can design, implement and monitor an educational transformation.

Transforming the ministries of education may require organizational analysis to identify those functions that are necessary, specify the staff positions that are needed to handle those functions and select the best candidates for those positions. Too many ministries of education are the result of evolutionary change whereby new units have been added to old ones, which themselves perform functions that are no longer necessary. For instance, statistical units often have excess staff to perform manual tabulations but lack people who can operate a computerized database.

An essential issue to consider in the area of administrative reform is the institutionalization of strategic planning capacity in the ministry. This will require computerized modern information systems including information on education statistics, student achievement (where avail-

1. Current efforts of education reform in France are aimed at increasing school autonomy along those lines.

able), financing, infrastructure and personnel records. Strategic planning will further require skilled personnel in project preparation, costing, evaluation, monitoring and research.

Along with streamlining and professionalizing the ministry of education, the teaching force needs to be professionalized as well. A first step to identifying potential savings is to set up an appropriate information system tracking personnel appointments and payments. The problem of 'ghost teachers' in many countries reflects the absence of the most basic information system providing data on who is employed in the sector.

Once the payroll includes only the teachers who are actually teaching, a next step is to develop a structure of teacher promotion based on rewarding training and productivity, and not just seniority. A new teaching statute will be necessary in most cases to attract and retain the best possible teachers. The level of teacher remuneration has to be analysed and considered in the preparation of the statute. Clearly the quality of those attracted to the teaching profession will be to a considerable degree a function of the salaries offered, relative to those offered by competing occupations for similar skills and training.

Improving resource use may also involve experimenting with or supporting alternative forms of delivery. For example, *Fe y Alegría* is a non-governmental organization that has operated in twelve countries in Latin America for over thirty years. It mobilizes contributions from the community and from religious groups and government support to provide quality education to the poor.

In some countries of the region (such as Bolivia and Venezuela), the government has recognized several advantages of schools organized by organizations like this: (1) they utilize resources more efficiently than does the public sector; (2) they diversify sources of finance; and (3) they establish important links with the community. Because of this, some governments have promoted the rapid expansion of this type of private school, using public funds to pay the teachers and increasing the rate of growth of teacher appointments for those schools relative to the rate of growth of teacher appointments in government-managed schools.

In El Salvador the Ministry of Education has been supporting community-managed schools (*Educo*) with apparently good results. The ministry's concern is less with reducing costs than with increasing results. From the point of view of efficiency, it is justifiable to promote rapid growth of these private facilities with full subsidies if service delivery consistently shows better quality and equity than that provided by state schools.

### *Policies to promote the quality and efficiency of education*

Policies to promote quality education include those that improve opportunities for children to learn. They include those making the curriculum easier to deliver, training and selecting teachers, improving classroom management, reducing student and teacher absences, providing teaching and learning materials to teachers and students, reforming student assessment, improving supervision of schools and increasing learning time in school.

Improving quality is generally consistent with improving the internal efficiency of education in view of the fact that one of the reasons why so many children repeat is that they learn an insufficient portion of the curriculum during the school year; hence teachers make students repeat in the hope that in a second year they will learn the portions they missed the first time around. Reallocating school budgets to increase the supply of textbooks and materials may lead to better use of teachers' time, and thus to lower drop-out or repetition rates.

Developing teacher capacities in order to ensure that they teach effectively in the face of students' diverse social and cultural backgrounds is one of the options to improve quality. The effectiveness of most changes to increase learning opportunities are a function of what the teacher does in the classroom. This option requires revising the type of training programmes of teacher-training institutions as well as existing programmes for in-service training.

Correcting inefficiencies such as high rates of repetition and drop-out may be just as important as finding new sources of finance. Indeed, the two strategies must go hand in hand. It is difficult to justify new methods or sources of funding if existing resources are not used as efficiently as possible. There are many examples of efforts to use existing buildings and equipment more intensively, such as double- or even triple-shift schooling, the use of primary- or secondary-school buildings for adult and community education in the evenings or school holidays, and more intensive use of university and college facilities by increasing part-time and continuing education.

In some countries higher education resources can be used more efficiently by increasing the average size of classes or institutions to exploit economies of scale through lower unit costs and increased student-teacher and student-staff ratios. In China, for example, World Bank studies demonstrated the significance of economies of scale in higher education: small, highly specialized colleges or universities often have student-teacher ratios as low as 4 : 1 and the ratio between students and all staff, including administrative, technical and manual workers, is 2 : 1; specialization also results in very low utilization of

some laboratories and equipment, and unit costs are relatively high. In such cases, there is scope for more intensive use of existing facilities through mergers or internal restructuring to achieve economies of scale.

Shortages of equipment or materials mean that technical and vocational schools in many countries operate below their full capacity. The problem is intensified when vocational courses are so specialized that expensive equipment stands idle for much of the time. Increasing the flexibility of such courses, through curriculum reform, can lead to better use of resources as well as more adaptable graduates better equipped to respond more effectively to changing labour market needs.

### *Policies to promote equity*

To have an opportunity to learn, it is not enough to have the opportunity to enrol in a school. While the latter is a first step for educational opportunity, there are great disparities in the opportunity to learn for children from different socio-economic backgrounds, and for those living in urban and rural areas. As a result, while many children enrol in primary school at some point in their lives, many enrol in schools that put them at such disadvantage – compounded by their own social disadvantage – that school failure is the most probable outcome; many of these children learn little, repeat several times and eventually drop out of school.

Policies to improve educational opportunity also include developing programmes of bilingual education in multilingual societies in order to increase the opportunity to learn for those who speak different languages at home. If the child speaks one language at home and the curriculum he or she is meant to learn is taught in another, that child will experience increased difficulty learning.

Educational opportunity for girls can also be made more equal to that of boys in some societies by ensuring that female teachers have the same training opportunities as male teachers, that schools for girls have at least the same level of resources as those for boys and, in general, that schools and teachers are equipped to attract and retain girls in school to compensate for the effect of social customs that may give less support to female than to male students to continue their education.

Expanding preschool education is an option with the effect of improving children's readiness to learn when they begin primary school and thereby decreasing over-age in the schools. Why do so many children fail a grade when they are just beginning school? A substantial amount of development takes place before children enter school. Child



development can be facilitated by planning systematic activities. While this is true of all children, it is especially true of those who receive fewer experiences at home conducive to cognitive development.

## Focus on international co-operation: the role of UNESCO

### *Developing frameworks to promote educational development and alternative forms of adjustment*

The World Declaration on Education for All, adopted at the World Conference on Education for All, Jomtien, 1990, constitutes an important reference point stimulating concern and support for education development. The declaration expresses a worldwide consensus on the necessity, on both ethical and economic grounds, of education for all, and stresses education's potential to contribute to solving world problems of the 1990s such as the threat of economic stagnation, the growing gap between rich and poor nations, and environmental degradation. Article 2 of the declaration asserts that 'to serve the basic learning needs for all requires more than a recommitment to basic education as it now exists'.

An 'expanded vision' that encompasses the following strategies is required:

Universalizing access and promoting equity. Democratization of education implies not only increasing the number of beneficiaries but also reducing educational disparities among different groups of society and providing the same quality of service for all.

Focusing on learning and on the outcomes of education. Education should be made relevant to the needs of the beneficiaries.

Enhancing the environment for learning and improving non-school factors.

Broadening the means and scope of basic education, through all kinds of delivery systems.

Strengthening partnerships. The declaration underlines that education for all cannot be left to market mechanisms. Hallak considers that it implies *de facto* the definition of a new social responsibility which commits governments, donors, families and non-governmental organizations to permit the implementation of education for all (Hallak, 1991a).

As mentioned earlier, there is no single formula that can be applied to all countries: strategies to attain education for all will differ widely

according to country circumstances. For instance, the Sixth Conference of Ministers of Education and those Responsible for Economic Planning in African Member States (Dakar, 1991) proposed three different strategies for African countries:

- The first strategy refers to countries with net primary education enrolment rates (NPEER) below 50 per cent and focuses on expansion. The development of low-cost basic education programmes should boost quantitative expansion and permit meeting the minimum learning needs of both children and uneducated adults.
- The second is intended for countries with NPEER between 50 and 70 per cent, and focuses on universalization. At this stage, considerable efforts have to be made to promote literacy and enhance the quality of learning.
- The third strategy is for countries with NPEER above 70 per cent and focuses on consolidation. In those countries that have achieved universal elementary schooling, stress should be laid on equality of opportunity in order to eradicate illiteracy and on educational outcomes.

Achieving education for all requires more resources for education, whatever the effectiveness of the strategies adopted. A study by Colclough and Lewin (1990) estimates the additional cost requirements for achieving primary schooling for all children by the year 2000. In the favourable case of adequate reforms and cost savings accompanied by the reallocation of resources, basic education for all would require an additional cumulative amount of US\$58 billion during the decade 1990–2000, based on what was spent in 1990. The costs of adult education – US\$20 to \$30 billion – and of preschool education for a reasonable number of children should be added to this.

Two United Nations agencies have contributed to the debate on alternative adjustment frameworks. The adjustment with a human face strategy advocated by UNICEF combines promoting economic growth and protecting the vulnerable with macro-economic adjustment within a policy framework that covers several possible policies. The objective of UNICEF's approach is to combine structural adjustment with the protection of the vulnerable and the restoration of economic growth. This approach proposes five groups of policies.

#### *Expansionary macro-economic policies*

The appropriate package of macro-economic policies varies according to country circumstances. However, the general point here is that deflation must be minimized. Consequently, adjustment with a human face is associated with less strict targets on budgetary balance and credit creation than is the case with orthodox adjustment. This objec-

tive of sustaining levels of output and investment implies a different timing of adjustment with more gradual correction of imbalances. As stated earlier, longer adjustment periods are necessary, especially for the poorest and least diversified countries, in order to tackle the underlying structural causes of disequilibria. The success of more expansionary policies depends largely on external factors. More gross lending, more aid, debt rescheduling and lower interest payments are involved, and medium-term external financing plays a crucial role in the adjustment process. Three types of external finance can be distinguished:

*Human face finance* would cover some of the costs of social programmes such as essential drugs, primary health care, basic education and literacy, and supplementary feeding.

*Compensatory finance* is designed to sustain the incomes of those severely affected by structural adjustment. For instance, some compensation must be granted to laid off workers and producers affected by falling commodity prices.

*Structural adjustment and balance of payments finance* is reserved for investment and import purposes, with the objective of sustaining the necessary structural transformation over the medium term.

### *Meso policies*

These are neither macro- nor micro-economic policies but middle-range policies designed to fulfil priorities in meeting the needs of vulnerable groups and promoting economic growth. The underlying idea is that policies should be applied selectively and not by means of global macro-economic signals as in the case of orthodox adjustment. Fundamental meso policy measures include three elements:

Increasing the access of the poor to productive assets, in particular to land, credit and skills. This might require land reform, redirection of credit facilities towards small producers and additional training opportunities.

Increasing the returns on assets held by the poor by means of appropriate input and product pricing, and carrying out infrastructure work which affords the poor greater access to markets.

Promoting the creation of employment opportunities through incentives or public employment schemes.

### *Sectoral policies*

Sectors where a majority of the poor are to be found must receive considerable support through specific measures. There is evidence that the restructuring of the urban informal sector and the small farmer sector

can extend employment and raise the income of low-income households.

#### *Public sector restructuring*

The application of meso policies has considerable potential for increasing the efficiency and equity of government spending. Restructuring must take place both between and within sectors. Globally, a clear priority has to be given to the social sectors and, within those sectors, expenditure should be reallocated towards low-cost, high-efficiency measures such as child feeding, immunization or literacy programmes. Redirecting subsidies from generalized to targeted schemes, introducing cost-recovery measures for high-income services and encouraging community financing for local services are consistent on equity grounds and allow substantial savings to be realized.

#### *Compensatory programmes*

These are fast-acting measures which protect the basic living standards that tend to deteriorate in the short run as a result of structural adjustment and restructuring. Two major elements of compensatory programmes are public work schemes and nutrition interventions.

UNICEF insists on the successful examples of alternative approaches to structural adjustment programmes both at micro and macro levels so that adjustment with a human face appears a realistic proposition. Many UNICEF country offices have established work programmes related to adjustment with a human face; they have assisted governments in their negotiations with the IMF and the World Bank, helped them in the design and implementation of poverty alleviation programmes, and organized seminars and workshops on the effects of structural adjustment programmes. Thanks to UNICEF's effort, the concept of adjustment with a human face has gained acceptance among other agencies and there is now an international consensus to incorporate protection of vulnerable groups at the design stage of adjustment programmes.

UNDP has also contributed to developing alternative adjustment frameworks. Its greater engagement in policy dialogue with the World Bank, IMF and bilateral donors through the round tables and consultative groups has promoted the discussion of the human requirements of adjustment programmes.

A current regional programme – Social Dimensions of Structural Adjustment in sub-Saharan Africa – appears as a significant step towards addressing these issues and provides a good illustration of UNDP's technical co-operation in structural adjustment programmes.

The objective of the programme is to strengthen the capacity of governments to (i) develop and maintain adequate statistical databases on the social dimensions of adjustment, (ii) carry out policy studies with a view to assessing the evolution of socio-economic conditions for different groups during the course of adjustment, and (iii) design and assist in the implementation of adjustment programmes which take better account of the needs of the poor.

UNDP unambiguously advocates the integration of social dimensions at the time of formulation of the structural adjustment programmes and is willing to provide advice on options and alternatives at this stage. The need for adjustment can be viewed as an opportunity for a comprehensive integration of social concerns in the restructuring efforts. This requires major reforms to address the principal causes of poverty and hunger affecting large groups of the population. For example, land reforms, investment in the food sector, and reforms of the educational and health systems could become features of adjustment programmes.

In its *Human Development Report 1991*, UNDP launched the idea of a new style of aid giving: human development assistance. Governments willing to change existing priorities in favour of human development usually face a difficult period of transition both economically and politically. Shifting government expenditure towards human development priorities is likely to impose additional burdens on the budget and to increase the aggregate demand which in turn sustains inflationary pressures and aggravates balance of payments difficulties. In addition, some groups – the defence establishment or certain bureaucrats – can oppose the reforms. The purpose of human adjustment loans is to make the transition less painful and disruptive. The assistance would be used to enhance the health and education endowments of people, and to promote growth by raising skills, productivity and employment.

*Developing policy-oriented research with regard to education,  
adjustment and sustainable human development*

UNESCO is in a privileged position to analyse comparative data on country performance. This can build on the long and successful tradition of maintaining an international education statistics database, which serves the World Bank, other United Nations agencies and various governments and organizations. In addition, these data could be made available to governments, research institutions or international organizations to promote a rich dialogue with multiple voices based on the analysis of the impact of the adjustment on education indicators.

More refined indicators to document the impact of adjustment could be developed, as well as new methodologies for the analysis of the educational consequences of adjustment. Publications such as the *World Education Report 1991* are valuable tools to monitor education progress and to identify relevant policy issues and options. The case-studies of International Labour Organisation (ILO)–UNESCO Inter-agency Task Force on Austerity, Adjustment and Human Resources (for instance, Carr-Hill and Lintott, 1985, and Carton et al., 1992) (and this policy paper) also contribute to the debate on the educational consequences of adjustment.

*Assisting countries within the framework of structural adjustment programmes and economic restructuring*

This could involve supporting country-specific processes of negotiation of structural adjustment programmes, with a view to assisting the countries in defining the fixed core of educational and social policies deemed necessary to preserve human development goals, and to incorporate them in structural adjustment programmes with minimum damage to economic growth, employment and the welfare of the most vulnerable groups.

UNESCO could provide technical assistance to governments at the stage when policy paper frameworks are designed for adjustment loans. This assistance would bring in lessons from similar experiences in other countries, and would assist in the identification and organization of a national group of high technical level to develop the strategic framework outlined earlier. More generally, in the international forum, UNESCO could support all initiatives aimed at alleviating the debt burden (such as the UNDP proposal to set up an international debt refinancing facility which, through appropriate mechanisms, would contribute to transferring the costs of the refinancing of the debt of the developing countries to the entire international community).

UNESCO could also contribute to promoting a new vision for education development among donors. Donors must stretch contributions over longer periods of time and not expect immediate results. In addition, interventions need greater complexity to promote the systemic reforms discussed earlier. This is necessary if aid is to support long-term national development plans and master plans. There are already some first attempts being made in this direction; the Djakarta Plan of Action on Human Resources Development, set up in 1988, is taking the important step of lengthening time frames to thirteen years. UNESCO could also promote a renewed sense of the importance of national capacity building among the donor community – too often

development assistance is an indirect subsidy to consulting firms or individuals in the donor country rather than a tool to promote institutionalization or to obtain the maximum impact on the education system of the receiving country at the minimum cost.

Most of the burden for the co-ordination of action in human development is therefore likely to fall back on agencies. However, co-ordination of donor efforts will only lead to greater cohesion, harmonization and impact if government capacities in this area can be enhanced simultaneously through comprehensive and integrated training and R&D programmes. Countries need assistance in setting up and/or strengthening national mechanisms for monitoring and minimizing the human, social and cultural costs of short-term adjustment programmes. This would also imply the need for supporting community-based mechanisms of participation based on local conditions, value systems and competencies, in harmony with the sociocultural environment.

#### *Supporting the development of national capacity*

The improvement of educational opportunities in a context of adjustment in each country will be the result of plans and programmes specifically worked out for that country, reflecting the capacity, creativity and commitment of the national and international officials involved. UNESCO can do much to contribute to the development of cadres of technical excellence in ministries of education. Specifically, UNESCO can contribute to develop national capacity to empower the country to:

1. Analyse policy options and their long-term implications.
2. Improve management information systems, including the statistical data for monitoring and evaluation.
3. Improve techniques for managing resources efficiently.
4. Engage in dialogue and negotiations with donors and co-ordinate donor interventions.
5. Develop a broad-based consensus and build alliances to support the necessary reforms.

One way in which UNESCO can support national capacity is by calling on national capacity more frequently to implement its own assistance.

In this field, helping countries help themselves, seeing that their response to adjustment is a matter of choice and illuminating the choices that are made is probably the most appropriate intervention for UNESCO.

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## Appendices

## APPENDIX 1. World Bank funded economic adjustment programmes

Country	Years
Algeria	1990
Angola	1990
Argentina	1986, 1987, 1988, 1989
Bangladesh	1980, 1981, 1982, 1983, 1984, 1986, 1987, 1989, 1990
Benin	<u>1989</u>
Bolivia	<u>1980</u> , 1986, 1987, 1988
Brazil	1984, 1984, 1986
Burkina Faso	1985
Burundi	<u>1986</u> , <u>1988</u> , 1989, 1990
Cameroon	<u>1989</u>
Central African Republic	<u>1987</u> , 1988, <u>1988</u>
Chad	1989, 1989, 1990
Chile	<u>1986</u> , <u>1987</u> , <u>1988</u>
China	1988
Colombia	1985, 1986, 1988
Congo	<u>1988</u>
Costa Rica	1983, <u>1985</u> , <u>1989</u>
Côte d'Ivoire	<u>1982</u> , <u>1984</u> , <u>1986</u> , 1990, 1990, 1990
Dominica	<u>1987</u>
Ecuador	1986, 1988
Equatorial Guinea	1986, <u>1990</u>
Gabon	<u>1988</u>
Gambia	<u>1987</u> , <u>1989</u>
Ghana	1983, 1984, 1985, 1986, <u>1987</u> , 1987, 1988, <u>1989</u> , 1990
Guatemala	1990
Guinea	<u>1986</u> , <u>1988</u> , 1990
Guinea-Bissau	1985, <u>1987</u> , <u>1989</u>
Guyana	<u>1980</u> , <u>1990</u>
Haiti	1987
Honduras	<u>1989</u>
Hungary	1986, 1988, <u>1990</u>
Indonesia	1987, 1988, 1989
Jamaica	1980, 1981, <u>1982</u> , 1983, <u>1983</u> , <u>1985</u> , 1987, 1987, 1990
Jordan	1990
Kenya	<u>1980</u> , <u>1983</u> , 1986, 1988, 1989
Korea, Republic of	<u>1982</u> , <u>1984</u> , 1985
Lao People's Democratic Republic	<u>1989</u>



Country	Years
Madagascar	1985, 1986, 1987, 1988
Malawi	<u>1981</u> , 1983, <u>1984</u> , <u>1986</u> , 1988, 1990
Mali	1988, 1989
Mauritania	1985, 1986, <u>1987</u> , 1990, 1990
Mauritius	<u>1981</u> , <u>1984</u> , 1987
Mexico	1983, 1987, 1988, 1988, 1988, 1989, 1989, 1989, 1989, 1990, 1990, 1990
Morocco	1984, 1985, 1986, 1986, 1987, 1988, <u>1989</u> , 1990
Mozambique	1985, 1988, 1989, 1990
Nepal	<u>1987</u> , <u>1989</u>
Niger	<u>1986</u> , 1987
Nigeria	1984, 1987, 1989, 1990, 1990
Pakistan	1981, <u>1982</u> , 1985, 1986, 1989, 1989, 1989, 1990
Panama	<u>1984</u> , <u>1987</u>
Philippines	<u>1981</u> , <u>1983</u> , 1985, 1987, 1988, 1989
Rwanda	1990
Sao Tome	<u>1987</u> , <u>1990</u>
Senegal	<u>1981</u> , <u>1986</u> , <u>1987</u> , 1990, <u>1990</u> , 1990
Sierra Leone	1984
Somalia	1986, <u>1989</u>
Sri Lanka	1990
Sudan	1980, 1983, 1990
Thailand	<u>1982</u> , <u>1983</u>
Togo	<u>1983</u> , <u>1985</u> , <u>1988</u>
Tunisia	1987, 1987, <u>1988</u> , 1989, 1990
Turkey	<u>1980</u> , <u>1981</u> , <u>1982</u> , <u>1983</u> , <u>1984</u> , 1985, 1986, 1987, 1988
Uganda	1980, 1982, 1983, 1984, 1988
United Republic of Tanzania	1981, 1987, 1989
Uruguay	1985, <u>1987</u> , <u>1989</u>
Venezuela	<u>1989</u> , 1989
Yugoslavia (former)	<u>1983</u> , 1984
Zaire	1986, <u>1987</u>
Zambia	1984, 1985, 1986, 1986
Zimbabwe	1983

Source: World Bank adjustment operations data, cited in A. Noss, *Education and Adjustment. A Review of the Literature*, Washington, D.C., World Bank, 1991. This table includes all adjustment operations (including sector adjustment), the underlined years refer to specific structural adjustment loans.

APPENDIX 2. Growth in per capita GNP between 1980 and 1989  
in constant terms in US\$

	Growth GNP per capita 1980-89		Growth GNP per capita 1980-89
<i>Africa</i>		Mauritania	-2.2
<i>Non-adjusting countries</i>		Mauritius	5.3
Algeria	0.0	Morocco	1.3
Angola	—	Mozambique	-6.0
Benin	-1.8	Niger	-5.0
Botswana	6.7	Nigeria	-3.6
Cameroon	0.7	Sao Tome and Principe	-5.7
Cape Verde	3.2	Senegal	0.0
Chad	3.9	Sierra Leone	-3.2
Comoros	-0.6	Somalia	-1.3
Djibouti	—	Sudan	-1.8
Egypt	—	Togo	-2.4
Ethiopia	-1.1	Tunisia	0.6
Lesotho	-0.5	Uganda	-1.0
Liberia	—	United Republic of Tanzania	-1.6
Libyan Arab Jamahiriya	-9.9	Zaire	-1.6
Namibia	—	Zambia	-3.8
Rwanda	-1.9	Zimbabwe	-0.8
Seychelles	1.7		
South Africa	-0.8	<i>North America</i>	
Swaziland	0.6	<i>Non-adjusting countries</i>	
<i>Adjusting countries</i>		Antigua	6.4
Burkina Faso	2.3	Bahamas	2.3
Burundi	1.6	Barbados	1.5
Central African Republic	-1.5	Belize	0.4
Congo	0.1	British Virgin Islands	—
Côte d'Ivoire	-3.0	Canada	2.6
Equatorial Guinea	—	Cuba	—
Gabon	-2.6	Dominican Republic	-0.1
Gambia	-1.0	El Salvador	-1.1
Ghana	-0.8	Grenada	5.6
Guinea	—	Guatemala	-2.6
Guinea-Bissau	1.5	Honduras	-1.2
Kenya	0.4	Nicaragua	—
Madagascar	-2.6	Saint Christopher and Nevis	6.6
Malawi	-0.1	Saint Lucia	4.5
Mali	1.0		

	Growth GNP per capita 1980-89		Growth GNP per capita 1980-89
Saint Vincent and the Grenadines	4.8	Hong Kong	5.7
Trinidad and Tobago	- 7.3	India	3.2
United States	2.2	Iran, Islamic Republic of	—
Adjusting countries		Iraq	—
Costa Rica	0.4	Israel	1.4
Dominica	3.1	Japan	3.5
Haiti	- 0.7	Jordan	- 3.0
Jamaica	- 1.7	Korea, Democratic People's Republic of	—
Mexico	- 1.5	Kuwait	- 2.1
Panama	- 2.1	Lao People's Democratic Republic	0.0
<i>South America</i>		Lebanon	—
Non-adjusting countries		Malaysia	1.9
Paraguay	- 1.5	Maldives	5.9
Peru	- 1.6	Mongolia	—
Suriname	- 5.7	Myanmar	—
Venezuela	- 2.3	Oman	5.3
Adjusting countries		Palestine	—
Argentina	- 1.6	Qatar	- 10.5
Bolivia	- 3.5	Saudi Arabia	- 5.9
Brazil	0.9	Singapore	5.7
Chile	1.0	Sri Lanka	2.4
Colombia	0.9	Syrian Arab Republic	- 2.1
Ecuador	- 0.5	United Arab Emirates	- 8.2
Guyana	- 6.6	Viet Nam	—
Uruguay	- 0.8	Yemen	—
<i>Asia</i>		Adjusting countries	
Non-adjusting countries or territories		Bangladesh	0.7
Afghanistan	—	China	8.2
Bahrain	- 4.6	Indonesia	3.6
Bhutan	7.8	Korea, Republic of	8.8
Cambodia	—	Nepal	2.1
Cyprus	4.6	Pakistan	2.9
		Philippines	- 1.8
		Thailand	4.5
		Turkey	3.0

Source: UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991.

APPENDIX 3. Education expenditure as a percentage of GNP in 1980, 1988, changes over time and annual growth rate between 1980 and 1988 of constant expenditures in education

	Education expenditure/ GNP (%)		(2)-(1)	Annual growth rate (%) 1980-88
	1980 (1)	1988 (2)		
<i>Africa</i>				
Non-adjusting countries				
Algeria	7.8	9.9	2.1	6.6
Angola	—	—	—	—
Benin	—	—	—	—
Botswana	7.8	8.3	0.5	11.1
Cameroon	3.2	3.6	0.4	7.7
Cape Verde	—	2.9	—	7.4
Chad	—	—	—	—
Comoros	—	6.5	—	—
Djibouti	2.7	—	—	—
Egypt	5.7	5.2	-0.5	6.0
Ethiopia	3.3	4.4	1.1	4.9
Lesotho	5.0	4.0	-1.0	-1.7
Liberia	5.7	—	—	-2.0
Libyan Arab Jamahiriya	3.4	10.1	6.7	10.1
Namibia	—	—	—	—
Rwanda	2.7	3.5	0.8	2.0
Seychelles	5.8	8.5	2.7	7.0
South Africa	—	—	—	—
Swaziland	6.2	6.2	0.0	3.9
Adjusting countries				
Burkina Faso	3.0	2.9	-0.1	4.9
Burundi	3.0	3.2	0.2	3.9
Central African Republic	3.8	2.9	-0.9	-2.9
Congo	7.1	—	—	4.7
Côte d'Ivoire	7.0	—	—	-1.5
Equatorial Guinea	—	—	—	—
Gabon	2.8	5.9	3.1	12.1
Gambia	3.2	4.1	0.9	1.6
Ghana	3.1	3.6	0.5	7.3
Guinea	—	—	—	—
Guinea-Bissau	—	2.8	—	-0.5
Kenya	6.9	6.3	-0.6	4.2

	Education expenditure/ GNP (%)		(2)-(1)	Annual growth rate (%) 1980-88
	1980 (1)	1988 (2)		
Madagascar	5.4	3.5	-1.9	-4.6
Malawi	3.3	3.2	-0.1	4.4
Mali	3.7	3.3	-0.4	0.8
Mauritania	5.0	4.9	-0.1	0.7
Mauritius	5.3	4.1	-1.2	1.1
Morocco	6.1	7.3	1.2	6.2
Mozambique	—	—	—	—
Niger	3.1	—	—	-1.3
Nigeria	5.5	—	—	-4.4
Sao Tome and Principe	8.0	—	—	—
Senegal	4.5	3.7	-0.8	-0.2
Sierra Leone	3.8	2.0	-1.8	-9.2
Somalia	—	—	—	—
Sudan	4.8	—	—	-3.4
Togo	5.6	5.2	-0.4	-1.8
Tunisia	5.4	6.3	0.9	6.0
Uganda	1.2	4.4	3.2	16.0
United Republic of Tanzania	4.4	4.0	-0.4	-1.7
Zaire	3.6	1.4	-2.2	-14.7
Zambia	4.5	—	—	2.7
Zimbabwe	6.6	8.7	2.1	6.7

*North America*

## Non-adjusting countries

Antigua	3.7	—	—	—
Bahamas	—	—	—	—
Barbados	6.5	5.9	-0.6	0.5
Belize	—	—	—	—
British Virgin Islands	—	—	—	—
Canada	7.3	7.1	-0.2	2.8
Cuba	7.2	6.7	-0.5	—
Dominican Republic	2.1	1.5	-0.6	-2.1
El Salvador	3.9	—	—	-3.8
Grenada	—	—	—	—
Guatemala	1.8	—	—	-1.0
Honduras	3.2	4.8	1.6	7.8
Nicaragua	3.2	6.2	3.0	10.6
Saint Christopher and Nevis	5.0	6.0	1.0	4.9
Saint Lucia	—	7.5	—	4.5

	Education expenditure/ GNP (%)		(2)-(1)	Annual growth rate (%) 1980-88
	1980 (1)	1988 (2)		
Saint Vincent and the Grenadines	—	6.3	—	8.1
Trinidad and Tobago	4.0	5.5	1.5	-0.5
United States	6.7	6.8	0.1	3.6
<i>Adjusting countries</i>				
Costa Rica	7.8	4.3	-3.5	-5.0
Dominica	—	5.6	—	—
Haiti	1.5	1.6	0.1	4.1
Jamaica	6.9	7.2	0.3	-2.7
Mexico	4.2	3.6	-0.6	-1.0
Panama	5.0	5.6	0.6	3.2
<i>South America</i>				
<i>Non-adjusting countries</i>				
Paraguay	1.5	1.5	0.0	1.4
Peru	3.1	3.4	0.3	2.4
Suriname	6.7	10.1	3.4	2.3
Venezuela	4.4	4.5	0.1	-0.4
<i>Adjusting countries</i>				
Argentina	3.6	—	—	-0.2
Bolivia	4.4	3.1	-1.3	-6.5
Brazil	3.5	3.7	0.2	3.1
Chile	4.6	3.6	-1.0	-3.8
Colombia	1.9	2.7	0.8	5.2
Ecuador	5.6	2.8	-2.8	-5.7
Guyana	9.7	9.6	-0.1	-5.4
Uruguay	2.2	3.1	0.9	3.5
<i>Asia</i>				
<i>Non-adjusting countries or territories</i>				
Afghanistan	2.0	—	—	—
Bahrain	—	5.7	—	13.0
Bhutan	—	4.2	—	—
Cambodia	—	—	—	—
Cyprus	3.5	3.6	0.1	5.1
Hong Kong	2.5	—	—	7.7

	Education expenditure/ GNP (%)		(2)-(1)	Annual growth rate (%) 1980-88
	1980 (1)	1988 (2)		
India	2.8	3.3	0.5	8.3
Iran, Islamic Republic of	7.2	—	—	—
Iraq	2.6	3.8	1.2	—
Israel	8.0	5.8	-2.2	-1.5
Japan	5.8	4.9	-0.9	1.4
Jordan	6.5	6.9	0.4	4.8
Korea, Democratic People's Republic of	—	—	—	—
Kuwait	—	—	—	—
Lao People's Democratic Republic	2.4	5.5	3.1	11.4
Lebanon	—	—	—	—
Malaysia	—	—	—	—
Maldives	6.0	6.9	0.9	5.2
Mongolia	—	—	—	—
Myanmar	—	—	—	—
Oman	—	—	—	—
Palestine	2.1	4.0	1.9	25.0
Qatar	—	—	—	—
Saudi Arabia	3.3	5.6	2.3	—
Singapore	5.4	7.5	2.1	3.1
Sri Lanka	2.8	3.4	0.6	8.7
Syrian Arab Republic	3.1	3.1	0.0	5.9
United Arab Emirates	4.6	4.1	-0.5	-1.3
Viet Nam	1.3	2.4	1.1	5.0
Yemen	6.2	6.1	-0.1	6.1
<b>Adjusting countries</b>				
Bangladesh	1.5	2.0	0.5	9.0
China	2.6	2.3	-0.3	10.3
Indonesia	1.7	—	—	6.7
Korea, Republic of	3.7	3.3	-0.4	10.4
Nepal	1.8	2.8	1.0	—
Pakistan	2.0	2.6	0.6	13.8
Philippines	1.6	2.2	0.6	1.1
Thailand	3.4	3.3	-0.1	5.3
Turkey	2.8	2.1	-0.7	0.5

Source: UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991.

APPENDIX 4. Education expenditure as a percentage of government expenditure in 1980, 1988, and change between 1988 and 1980

	Education expenditure/ government expenditure (%)		(2)-(1)
	1980 (1)	1988 (2)	
<i>Africa</i>			
Non-adjusting countries			
Algeria	24.3	27.0	2.7
Angola	—	12.7	—
Benin	—	—	—
Botswana	16.1	15.9	-0.2
Cameroon	20.3	17.8	-2.5
Cape Verde	—	—	—
Chad	—	—	—
Comoros	—	13.2	—
Djibouti	11.5	—	—
Egypt	9.4	10.1	—
Ethiopia	10.4	9.4	0.7
Lesotho	14.8	—	-1.0
Liberia	24.3	—	—
Libyan Arab Jamahiriya	—	20.8	—
Namibia	—	—	—
Rwanda	21.6	22.2	—
Seychelles	14.4	15.2	0.6
South Africa	—	—	0.8
Swaziland	—	—	—
Adjusting countries			
Burkina Faso	19.8	14.9	-4.9
Burundi	17.5	16.7	-0.8
Central African Republic	20.9	16.8	-4.1
Congo	23.6	—	—
Côte d'Ivoire	22.6	—	—
Equatorial Guinea	—	—	—
Gabon	—	9.4	—
Gambia	9.7	8.8	-0.9
Ghana	17.1	25.7	8.6
Guinea	—	21.5	—
Guinea-Bissau	—	—	—
Kenya	18.1	27.0	8.9
Madagascar	—	—	—



	Education expenditure/ government expenditure (%)		(2)-(1)
	1980 (1)	1988 (2)	
Malawi	8.4	8.8	0.4
Mali	30.8	17.3	-13.5
Mauritania	—	22.7	—
Mauritius	11.6	10.4	-1.2
Morocco	18.5	25.0	6.5
Mozambique	—	—	—
Niger	22.9	—	—
Nigeria	24.7	—	—
Sao Tome and Principe	—	18.8	—
Senegal	23.5	—	—
Sierra Leone	11.8	17.5	5.7
Somalia	—	—	—
Sudan	9.1	—	—
Togo	19.4	21.2	1.8
Tunisia	16.4	14.8	-1.6
Uganda	11.3	22.5	11.2
United Republic of Tanzania	11.2	9.1	-2.1
Zaire	24.2	6.4	-17.8
Zambia	7.6	—	—
Zimbabwe	13.7	16.0	2.3
<i>North America</i>			
Non-adjusting countries			
Antigua	7.6	—	—
Bahamas	—	—	—
Barbados	20.5	—	—
Belize	—	—	—
British Virgin Islands	—	—	—
Canada	17.3	15.6	-1.7
Cuba	—	14.1	—
Dominican Republic	16.0	10.0	-6.0
El Salvador	17.1	—	—
Grenada	—	—	—
Guatemala	10.7	—	—
Honduras	14.2	16.4	2.2
Nicaragua	10.4	12.0	1.6
Saint Christopher and Nevis	9.4	18.5	9.1
Saint Lucia	—	—	—
Saint Vincent and the Grenadines	—	11.6	—

	Education expenditure/ government expenditure (%)		(2)-(1)
	1980 (1)	1988 (2)	
Trinidad and Tobago	11.5	—	—
United States	—	—	—
<i>Adjusting countries</i>			
Costa Rica	22.2	20.8	-1.4
Dominica	—	14.1	—
Haiti	14.9	20.4	5.5
Jamaica	13.1	—	—
Mexico	—	—	—
Panama	19.0	14.3	-4.7
<i>South America</i>			
<i>Non-adjusting countries</i>			
Paraguay	16.4	16.7	0.3
Peru	15.2	15.7	0.5
Suriname	22.5	22.8	0.3
Venezuela	14.7	21.1	6.4
<i>Adjusting countries</i>			
Argentina	15.1	—	—
Bolivia	25.3	20.1	-5.2
Brazil	—	17.7	—
Chile	11.9	—	—
Colombia	14.3	22.4	8.1
Ecuador	33.3	21.3	-12.0
Guyana	14.0	8.1	-5.9
Uruguay	10.0	15.1	5.1
<i>Asia</i>			
<i>Non-adjusting countries or territories</i>			
Afghanistan	12.7	—	—
Bahrain	10.3	—	—
Bhutan	—	—	—
Cambodia	—	—	—
Cyprus	12.9	11.5	-1.4
Hong Kong	14.6	—	—
India	10.0	8.5	-1.5
Iran, Islamic Republic of	15.7	19.2	3.5
Iraq	—	6.4	—

	Education expenditure/ government expenditure (%)		(2)-(1)
	1980 (1)	1988 (2)	
Israel	7.3	9.2	1.9
Japan	19.6	16.8	-2.8
Jordan	11.3	13.0	1.7
Korea, Democratic People's Republic of	—	—	—
Kuwait	8.1	12.1	4.0
Lao People's Democratic Republic	1.3	6.6	5.3
Lebanon	13.2	16.8	3.6
Malaysia	14.7	16.9	2.2
Maldives	—	8.5	—
Mongolia	—	—	—
Myanmar	—	—	—
Oman	4.1	14.9	10.8
Palestine	—	—	—
Qatar	7.2	—	—
Saudi Arabia	8.7	16.2	7.5
Singapore	7.3	11.5	4.2
Sri Lanka	8.8	7.8	-1.0
Syrian Arab Republic	8.1	13.1	5.0
United Arab Emirates	—	14.2	—
Viet Nam	—	—	—
Yemen	15.8	23.5	7.7
<b>Adjusting countries</b>			
Bangladesh	8.2	10.3	2.1
China	9.3	12.1	2.8
Indonesia	8.9	—	—
Korea, Republic of	23.7	23.2	-0.5
Nepal	12.4	10.8	-1.6
Pakistan	5.0	—	—
Philippines	10.3	—	—
Thailand	20.6	16.6	-4.0
Turkey	10.5	—	—

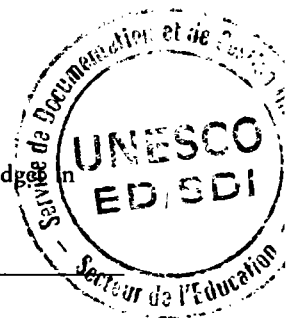
Source: UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991.

## APPENDIX 5. Annual Growth in education expenditures in real terms between 1980 and 1988

	Annual growth of education expenditure 1980-88 (%)		Annual growth of education expenditure 1980-88 (%)
<i>Africa</i>		Mali	0.8
Non-adjusting countries		Mauritania	0.7
Algeria	6.6	Mauritius	1.1
Angola	—	Morocco	6.2
Benin	—	Mozambique	—
Botswana	11.1	Niger	-1.3
Cameroon	7.7	Nigeria	-4.4
Cape Verde	7.4	Sao Tome and Principe	—
Chad	—	Senegal	-0.2
Comoros	—	Sierra Leone	-9.2
Djibouti	—	Somalia	—
Egypt	6.0	Sudan	-3.4
Ethiopia	4.9	Togo	-1.8
Lesotho	-1.7	Tunisia	6.0
Liberia	-2.0	Uganda	16.0
Libyan Arab Jamahiriya	10.1	United Republic of Tanzania	-1.7
Namibia	—	Zaire	-14.7
Rwanda	2.0	Zambia	2.7
Seychelles	7.0	Zimbabwe	6.7
South Africa	—		
Swaziland	3.9	<i>North America</i>	
Adjusting countries		Non-adjusting countries	
Burkina Faso	4.9	Antigua	—
Burundi	3.9	Bahamas	—
Central African Republic	-2.9	Barbados	0.5
Congo	4.7	Belize	—
Côte d'Ivoire	-1.5	British Virgin Islands	—
Equatorial Guinea	—	Canada	2.8
Gabon	12.1	Cuba	—
Gambia	1.6	Dominican Republic	-2.1
Ghana	7.3	El Salvador	-3.8
Guinea	—	Grenada	—
Guinea-Bissau	-0.5	Guatemala	-1.0
Kenya	4.2	Honduras	7.8
Madagascar	-4.6	Nicaragua	10.6
Malawi	4.4	Saint Christopher and Nevis	4.9

	Annual growth of education expenditure 1980-88 (%)		Annual growth of education expenditure 1980-88 (%)
Saint Lucia	4.5	Hong Kong	7.7
Saint Vincent and the Grenadines	8.1	India	8.3
Trinidad and Tobago	-0.5	Iran, Islamic Republic of	—
United States	3.6	Iraq	—
		Israel	-1.5
		Japan	1.4
Adjusting countries		Jordan	4.8
Costa Rica	-5.0	Korea, Democratic People's Republic of	—
Dominica	—	Kuwait	11.4
Haiti	4.1	Lao People's Democratic Republic	—
Jamaica	-2.7	Lebanon	—
Mexico	-1.0	Malaysia	5.2
Panama	3.2	Maldives	—
<i>South America</i>		Mongolia	—
Non-adjusting countries		Myanmar	—
Paraguay	1.4	Oman	25.0
Peru	2.4	Palestine	—
Suriname	2.3	Qatar	—
Venezuela	-0.4	Saudi Arabia	3.1
Adjusting countries		Singapore	8.7
Argentina	-0.2	Sri Lanka	5.9
Bolivia	-6.5	Syrian Arab Republic	-1.3
Brazil	3.1	United Arab Emirates	5.0
Chile	-3.8	Viet Nam	—
Colombia	5.2	Yemen	6.1
Ecuador	-5.7	Adjusting countries	
Guyana	-5.4	Bangladesh	9.0
Uruguay	3.5	China	10.3
<i>Asia</i>		Indonesia	6.7
Non-adjusting countries or territories		Korea, Republic of	10.4
Afghanistan	—	Nepal	—
Bahrain	13.0	Pakistan	13.8
Bhutan	—	Philippines	1.1
Cambodia	—	Thailand	5.3
Cyprus	5.1	Turkey	0.5

Source: UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991.



APPENDIX 6. Share of recurrent expenditures in public education budget in 1980, 1988, and change between 1988 and 1980

	Recurrent expenditure/ education budget (%)		(2)-(1)
	1980 (1)	1988 (2)	
<i>Africa</i>			
Non-adjusting countries			
Algeria	66.9	76.7	9.8
Angola	—	89.1	—
Benin	—	—	—
Botswana	75.2	72.3	-2.9
Cameroon	81.3	75.5	-5.8
Cape Verde	—	95.7	—
Chad	—	—	—
Comoros	—	66.4	—
Djibouti	76.5	100.0	23.5
Egypt	78.6	85.1	6.5
Ethiopia	79.5	83.6	4.1
Lesotho	79.9	91.5	11.6
Liberia	85.9	—	—
Libyan Arab Jamahiriya	63.0	79.6	16.6
Namibia	—	—	—
Rwanda	84.7	92.1	7.4
Seychelles	95.7	97.9	2.2
South Africa	—	—	—
Swaziland	76.4	80.3	3.9
Adjusting countries			
Burkina Faso	93.0	97.4	4.4
Burundi	86.9	95.7	8.8
Central African Republic	97.2	97.9	0.7
Congo	93.8	—	—
Côte d'Ivoire	83.5	—	—
Equatorial Guinea	—	85.0	—
Gabon	72.3	95.3	23.0
Gambia	88.1	70.1	-18.0
Ghana	—	91.9	—
Guinea	—	77.6	—
Guinea-Bissau	—	97.6	—
Kenya	92.1	96.0	3.9

	Recurrent expenditure/ education budget (%)		(2)-(1)
	1980 (1)	1988 (2)	
Madagascar	85.5	95.4	9.9
Malawi	75.6	72.9	-2.7
Mali	98.8	97.8	-1.0
Mauritania	—	—	—
Mauritius	89.9	94.7	4.8
Morocco	81.0	72.9	-8.1
Mozambique	—	—	—
Niger	47.0	—	—
Nigeria	80.0	—	—
Sao Tome and Principe	—	—	—
Senegal	—	—	—
Sierra Leone	—	—	—
Somalia	—	—	—
Sudan	92.2	—	—
Togo	96.4	93.8	-2.6
Tunisia	87.6	90.4	2.8
Uganda	88.3	97.5	9.2
United Republic of Tanzania	82.7	90.4	7.7
Zaire	98.3	95.7	-2.6
Zambia	95.1	—	—
Zimbabwe	97.4	9.4	-88.0
<i>North America</i>			
Non-adjusting countries			
Antigua	84.8	—	—
Bahamas	—	—	—
Barbados	82.8	92.0	9.2
Belize	—	—	—
British Virgin Islands	—	—	—
Canada	92.5	92.6	0.1
Cuba	89.5	93.5	4.0
Dominican Republic	75.4	96.4	21.0
El Salvador	94.1	—	—
Grenada	—	—	—
Guatemala	95.5	—	—
Honduras	91.0	97.7	6.7
Nicaragua	87.5	97.2	9.7
Saint Christopher and Nevis	99.5	99.7	0.2
Saint Lucia	—	94.4	—

	Recurrent expenditure/ education budget (%)		(2)-(1)
	1980 (1)	1988 (2)	
Saint Vincent and the Grenadines	—	93.4	—
Trinidad and Tobago	76.4	92.3	15.9
United States	—	91.7	—
Adjusting countries			
Costa Rica	91.3	95.7	4.4
Dominica	—	91.0	—
Haiti	80.1	99.6	19.5
Jamaica	99.6	79.2	-20.4
Mexico	—	—	—
Panama	93.7	98.1	4.4
<i>South America</i>			
Non-adjusting countries			
Paraguay	71.3	81.4	10.1
Peru	94.4	94.6	0.2
Suriname	100.0	99.5	-0.5
Venezuela	95.1	94.2	-0.9
Adjusting countries			
Argentina	84.5	—	—
Bolivia	96.0	—	—
Brazil	—	—	—
Chile	94.9	90.4	-4.5
Colombia	93.3	94.3	1.0
Ecuador	94.0	92.0	-2.0
Guyana	73.6	76.2	2.6
Uruguay	94.7	92.0	-2.7
<i>Asia</i>			
Non-adjusting countries or territories			
Afghanistan	90.0	82.7	-7.3
Bahrain	86.5	94.2	7.7
Bhutan	—	—	—
Cambodia	—	—	—
Cyprus	94.0	95.9	1.9
Hong Kong	88.1	—	—
India	98.8	98.5	-0.3
Iran, Islamic Republic of	88.4	89.1	0.7



	Recurrent expenditure/ education budget (%)		(2)-(1)
	1980 (1)	1988 (2)	
Iraq	—	90.6	—
Israel	92.3	92.5	0.2
Japan	—	—	—
Jordan	79.2	87.1	7.9
Korea, Democratic People's Republic of	—	—	—
Kuwait	93.1	95.5	2.4
Lao People's Democratic Republic	—	75.4	—
Lebanon	—	—	—
Malaysia	83.0	87.5	4.5
Maldives	—	88.3	—
Mongolia	—	—	—
Myanmar	—	83.7	—
Oman	81.3	89.5	8.2
Palestine	—	—	—
Qatar	75.5	79.5	4.0
Saudi Arabia	63.5	90.9	27.4
Singapore	85.6	88.6	3.0
Sri Lanka	83.8	74.8	-9.0
Syrian Arab Republic	—	—	—
United Arab Emirates	79.0	94.1	15.1
Viet Nam	—	—	—
Yemen	—	88.9	—
Adjusting countries			
Bangladesh	66.8	77.3	10.5
China	90.7	91.8	1.1
Indonesia	—	—	—
Korea, Republic of	84.3	86.2	1.9
Nepal	—	—	—
Pakistan	73.1	77.0	3.9
Philippines	96.0	88.6	-7.4
Thailand	70.6	86.5	15.9
Turkey	83.7	88.2	4.5

Source: UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991.

APPENDIX 7. Intake rates in first grade and changes in intake and net enrolment rates in primary education and changes in net enrolments between 1980 and 1988

	Intake rate		Change	Net enrolment		Change
	1980	1988		1980	1988	
<i>Africa</i>						
Non-adjusting countries						
Algeria	87	92	5	81	89	8
Angola	168	—	—	70	—	—
Benin	79	71	-8	—	50	—
Botswana	107	120	13	77	97	20
Cameroon	96	96	0	73	80	7
Cape Verde	107	113	6	88	92	4
Chad	—	54	—	—	38	—
Comoros	90	68	-22	69	59	-10
Djibouti	—	44	—	—	37	—
Egypt	84	87	3	—	—	—
Ethiopia	61	59	-2	—	26	—
Lesotho	128	120	-8	66	74	8
Liberia	69	—	—	—	—	—
Libyan Arab Jamahiriya	—	—	—	—	—	—
Namibia	—	—	—	—	—	—
Rwanda	78	94	16	59	64	5
Seychelles	—	—	—	—	—	—
South Africa	—	—	—	—	—	—
Swaziland	120	107	-13	80	82	2
Adjusting countries						
Burkina Faso	22	36	14	15	28	13
Burundi	28	80	52	21	—	—
Central African Republic	70	62	-8	57	49	-8
Congo	—	—	—	—	—	—
Côte d'Ivoire	67	61	-6	—	—	—
Equatorial Guinea	—	—	—	—	—	—
Gabon	—	—	—	—	—	—
Gambia	56	54	-2	48	—	—
Ghana	97	85	-12	—	—	—
Guinea	29	32	3	23	23	0
Guinea-Bissau	83	56	-27	59	40	-19
Kenya	147	117	-30	91	—	—
Madagascar	—	103	—	—	66	—
Malawi	100	115	15	43	55	12

	Intake rate		Change	Net enrolment		Change
	1980	1988		1980	1988	
Mali	23	23	0	20	18	-2
Mauritania	35	48	13	—	—	—
Mauritius	113	100	-13	93	95	2
Morocco	71	64	-7	62	55	-7
Mozambique	111	75	-16	36	45	9
Niger	30	32	2	21	26	5
Nigeria	114	85	-29	—	—	—
Sao Tome and Principe	—	—	—	—	—	—
Senegal	45	52	7	37	50	13
Sierra Leone	58	—	—	46	—	—
Somalia	41	16	-25	20	—	—
Sudan	60	58	-2	—	—	—
Togo	101	98	-3	80	73	-7
Tunisia	94	95	1	83	95	12
Uganda	76	84	8	39	53	14
United Republic of Tanzania	83	69	-14	68	48	-20
Zaire	106	81	-25	72	59	-13
Zambia	91	94	3	77	80	3
Zimbabwe	—	—	—	—	100	—
<i>North America</i>						
Non-adjusting countries						
Antigua	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—
Barbados	99	—	—	97	—	—
Belize	—	—	—	—	—	—
British Virgin Islands	—	—	—	—	—	—
Canada	105	108	3	99	97	-2
Cuba	100	113	13	98	96	-2
Dominican Republic	172	128	-44	—	—	—
El Salvador	115	133	18	58	72	14
Grenada	—	—	—	—	—	—
Guatemala	105	141	36	58	—	—
Honduras	131	140	9	74	91	17
Nicaragua	173	144	-29	74	76	2
Saint Christopher and Nevis	—	—	—	—	—	—
Saint Lucia	—	—	—	—	—	—
Saint Vincent and the Grenadines	—	—	—	—	—	—
Trinidad and Tobago	87	99	12	88	87	-1
United States	99	110	11	94	95	1

	Intake rate		Change	Net enrolment		Change
	1980	1988		1980	1988	
<b>Adjusting countries</b>						
Costa Rica	113	105	-8	89	85	-4
Dominica	—	—	—	—	—	—
Haiti	—	—	—	36	44	8
Jamaica	96	94	-2	94	97	3
Mexico	135	119	-16	—	99	—
Panama	107	112	5	88	90	2
<b>South America</b>						
<b>Non-adjusting countries</b>						
Paraguay	122	126	4	87	90	3
Peru	118	141	23	76	97	21
Suriname	110	107	-3	—	96	—
Venezuela	121	112	-9	86	89	3
<b>Adjusting countries</b>						
Argentina	133	—	—	—	—	—
Bolivia	163	150	-13	77	83	6
Brazil	166	156	-10	81	84	3
Chile	137	116	-21	90	90	0
Colombia	144	116	-28	78	73	-5
Ecuador	140	141	1	84	—	—
Guyana	92	69	-23	90	—	—
Uruguay	74	97	23	—	91	—
<b>Asia</b>						
<b>Non-adjusting countries or territories</b>						
Afghanistan	42	28	-14	29	19	-10
Bahrain	96	95	-1	80	96	16
Bhutan	—	29	—	8	—	—
Cambodia	—	—	—	—	—	—
Cyprus	73	85	12	100	100	0
Hong Kong	108	113	5	95	—	—
India	122	139	17	—	—	—
Iran, Islamic Republic of	—	115	—	—	96	—
Iraq	87	91	4	100	84	-16
Israel	94	97	3	—	—	—
Japan	102	100	-2	100	100	0
Jordan	—	—	—	93	—	—

	Intake rate		Change	Net enrolment		Change
	1980	1988		1980	1988	
<b>Korea, Democratic People's Republic of</b>	—	—	—	—	—	—
<b>Kuwait</b>	99	92	-7	84	79	-5
<b>Lao People's Democratic Republic</b>	—	137	—	—	70	—
<b>Lebanon</b>	—	—	—	—	—	—
<b>Malaysia</b>	93	103	10	—	—	—
<b>Maldives</b>	—	—	—	—	—	—
<b>Mongolia</b>	111	105	-6	98	95	-3
<b>Myanmar</b>	—	—	—	—	—	—
<b>Oman</b>	80	95	15	50	82	32
<b>Palestine</b>	—	—	—	—	—	—
<b>Qatar</b>	82	70	-12	86	100	14
<b>Saudi Arabia</b>	66	73	7	50	56	6
<b>Singapore</b>	104	101	-3	99	—	—
<b>Sri Lanka</b>	99	100	1	—	100	—
<b>Syrian Arab Republic</b>	102	106	4	91	99	8
<b>United Arab Emirates</b>	68	114	46	73	93	20
<b>Viet Nam</b>	146	139	-7	95	88	-7
<b>Yemen</b>	84	104	20	—	—	—
<b>Adjusting countries</b>						
<b>Bangladesh</b>	118	118	0	58	62	4
<b>China</b>	—	123	—	—	100	—
<b>Indonesia</b>	116	120	4	88	100	12
<b>Korea, Republic of</b>	109	116	7	100	100	0
<b>Nepal</b>	—	116	—	58	64	6
<b>Pakistan</b>	74	69	-5	—	—	—
<b>Philippines</b>	132	134	2	94	98	4
<b>Thailand</b>	98	85	-13	—	—	—
<b>Turkey</b>	98	101	3	—	85	—

Source: UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991.

APPENDIX 8. Transition rates from primary to secondary education in 1988 and gross enrolment rates in secondary education and changes between 1980 and 1988

	Transition rate to secondary education	Gross enrolment rates		
		1980	1988	Change 1980-88
<i>Africa</i>				
Non-adjusting countries				
Algeria	82	33	62	29
Angola	—	13	—	—
Benin	38	16	16	0
Botswana	45	21	33	12
Cameroon	30	19	27	8
Cape Verde	45	8	17	9
Chad	40	—	6	—
Comoros	30	23	30	7
Djibouti	27	—	—	—
Egypt	—	54	68	14
Ethiopia	78	9	15	6
Lesotho	59	18	25	7
Liberia	—	23	35	12
Libyan Arab Jamahiriya	—	—	—	—
Namibia	—	—	—	—
Rwanda	4	3	6	3
Seychelles	—	—	—	—
South Africa	—	—	—	—
Swaziland	70	38	44	6
Adjusting countries				
Burkina Faso	33	3	7	4
Burundi	10	3	4	1
Central African Republic	31	14	11	-3
Congo	62	—	—	—
Côte d'Ivoire	23	18	18	0
Equatorial Guinea	—	—	—	—
Gabon	37	—	—	—
Gambia	32	11	16	5
Ghana	—	41	39	-2
Guinea	58	14	9	-5
Guinea-Bissau	73	6	6	0
Kenya	—	20	23	3

	Transition rate to secondary education	Gross enrolment rates		
		1980	1988	Change 1980-88
Madagascar	38	—	19	—
Malawi	7	3	4	1
Mali	44	9	6	-3
Mauritania	26	11	16	5
Mauritius	48	48	53	5
Morocco	61	26	36	10
Mozambique	34	5	5	0
Niger	31	5	7	2
Nigeria	—	19	23	4
Sao Tome and Principe	—	—	—	—
Senegal	39	11	16	5
Sierra Leone	—	14	18	4
Somalia	—	10	10	0
Sudan	—	16	20	4
Togo	27	34	24	-10
Tunisia	43	27	44	17
Uganda	—	5	13	8
United Republic of Tanzania	—	3	4	1
Zaire	—	34	24	-10
Zambia	—	16	20	4
Zimbabwe	—	8	51	43
<i>North America</i>				
Non-adjusting countries				
Antigua	—	—	—	—
Bahamas	—	—	—	—
Barbados	—	90	—	—
Belize	—	—	—	—
British Virgin Islands	—	—	—	—
Canada	—	93	105	12
Cuba	96	80	91	11
Dominican Republic	—	42	74	32
El Salvador	—	24	29	5
Grenada	—	—	—	—
Guatemala	—	18	21	3
Honduras	—	30	32	2
Nicaragua	94	43	42	-1
Saint Christopher and Nevis	—	—	—	—
Saint Lucia	34	—	—	—

	Transition rate to secondary education	Gross enrolment rates		
		1980	1988	Change 1980-88
Saint Vincent and the Grenadines	—	—	—	—
Trinidad and Tobago	73	68	82	14
United States	—	89	98	9
<i>Adjusting countries</i>				
Costa Rica	61	48	41	-7
Dominica	79	—	—	—
Haiti	61	13	21	8
Jamaica	—	59	63	4
Mexico	81	46	53	7
Panama	85	61	59	-2
<i>South America</i>				
<i>Non-adjusting countries</i>				
Paraguay	—	26	29	3
Peru	—	59	65	6
Suriname	—	35	53	18
Venezuela	88	41	54	13
<i>Adjusting countries</i>				
Argentina	—	56	74	18
Bolivia	—	36	37	1
Brazil	—	34	38	4
Chile	—	43	74	31
Colombia	60	44	56	12
Ecuador	—	54	56	2
Guyana	—	60	60	0
Uruguay	—	60	77	17
<i>Asia</i>				
<i>Non-adjusting countries or territories</i>				
Afghanistan	—	10	8	-2
Bahrain	95	65	85	20
Bhutan	—	—	5	—
Cambodia	—	—	—	—
Cyprus	99	95	87	-8
Hong Kong	—	64	74	10
India	—	32	41	9



	Transition rate to secondary education	Gross enrolment rates		
		1980	1988	Change 1980-88
Iran, Islamic Republic of	74	—	53	—
Iraq	56	57	47	-10
Israel	—	73	83	10
Japan	—	93	95	2
Jordan	91	76	—	—
Korea, Democratic People's Republic of	—	—	100	—
Kuwait	70	80	81	1
Lao People's Democratic Republic	—	21	27	6
Lebanon	—	59	66	7
Malaysia	—	48	57	9
Maldives	—	—	—	—
Mongolia	—	88	92	4
Myanmar	—	22	24	2
Oman	86	14	42	28
Palestine	—	—	—	—
Qatar	84	66	80	14
Saudi Arabia	—	30	44	14
Singapore	—	58	69	11
Sri Lanka	92	55	71	16
Syrian Arab Republic	72	47	57	10
United Arab Emirates	94	52	62	10
Viet Nam	—	42	42	0
Yemen	—	5	29	24
<b>Adjusting countries</b>				
Bangladesh	—	18	18	0
China	62	46	44	-2
Indonesia	—	29	48	19
Korea, Republic of	99	76	87	11
Nepal	—	22	30	8
Pakistan	—	14	19	5
Philippines	93	65	71	6
Thailand	—	29	28	-1
Turkey	47	35	50	15

Source: UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991.

APPENDIX 9. Ratio of per pupil expenditure in higher education to per pupil expenditure in primary education in 1980 and 1988 and change in this ratio between 1980 and 1988

	Ratio university/primary education per pupil expenditure		
	1980	1988	Change 1980-88
<i>Africa</i>			
Non-adjusting countries			
Algeria	18.89	—	—
Angola	—	10.66	—
Benin	—	—	—
Botswana	45.76	32.50	-13.26
Cameroon	39.78	31.00	-8.78
Cape Verde	—	—	—
Chad	—	—	—
Comoros	—	—	—
Djibouti	—	—	—
Egypt	4.92	5.50	0.58
Ethiopia	66.70	25.17	-41.53
Lesotho	76.88	28.43	-48.45
Liberia	59.50	—	—
Libyan Arab Jamahiriya	—	—	—
Namibia	—	—	—
Rwanda	82.00	83.43	1.43
Seychelles	—	—	—
South Africa	—	—	—
Swaziland	13.82	43.25	29.43
Adjusting countries			
Burkina Faso	71.30	66.14	-5.16
Burundi	62.33	86.75	24.42
Central African Republic	31.67	45.62	13.95
Congo	37.78	—	—
Côte d'Ivoire	16.86	25.90	9.04
Equatorial Guinea	—	—	—
Gabon	—	—	—
Gambia	—	—	—
Ghana	—	35.00	—
Guinea	15.33	61.54	46.21
Guinea-Bissau	—	—	—
Kenya	63.19	48.29	-14.90
Madagascar	49.40	27.33	-22.07

	Ratio university/primary education per pupil expenditure		
	1980	1988	Change 1980-88
Malawi	190.86	108.43	-82.43
Mali	25.59	15.38	-10.21
Mauritania	17.43	24.00	6.57
Mauritius	24.00	10.83	-13.17
Morocco	12.92	—	—
Mozambique	—	—	—
Niger	59.38	—	—
Nigeria	129.25	—	—
Sao Tome and Principe	—	—	—
Senegal	19.19	21.73	2.54
Sierra Leone	—	—	—
Somalia	—	—	—
Sudan	24.58	—	—
Togo	107.50	30.20	-77.30
Tunisia	17.64	12.43	-5.21
Uganda	249.00	123.33	-125.67
United Republic of Tanzania	—	106.93	—
Zaire	117.44	37.00	-80.44
Zambia	53.18	—	—
Zimbabwe	16.56	6.45	-10.11
<i>North America</i>			
Non-adjusting countries			
Antigua	—	—	—
Bahamas	—	—	—
Barbados	5.00	2.24	-2.76
Belize	—	10.36	—
British Virgin Islands	—	—	—
Canada	2.09	1.81	-0.28
Cuba	2.42	2.25	-0.17
Dominican Republic	12.00	4.67	-7.33
El Salvador	11.58	—	—
Grenada	—	0.21	—
Guatemala	8.20	—	—
Honduras	7.36	9.83	2.47
Nicaragua	3.29	9.69	6.41
Saint Christopher and Nevis	6.94	1.87	-5.07
Saint Lucia	30.42	20.36	-10.05
Saint Vincent and the Grenadines	—	0.11	—
Trinidad and Tobago	6.67	1.94	-4.73
United States	2.88	2.94	0.06

	Ratio university/primary education per pupil expenditure		
	1980	1988	Change 1980-88
<b>Adjusting countries</b>			
Costa Rica	6.33	6.60	0.27
Dominica	—	10.73	—
Haiti	22.00	16.71	-5.29
Jamaica	18.55	24.22	5.68
Mexico	—	—	—
Panama	2.50	4.31	1.81
<i>South America</i>			
<b>Non-adjusting countries</b>			
Paraguay	—	11.00	—
Peru	0.71	0.60	-0.11
Suriname	4.63	2.45	-2.17
Venezuela	17.75	9.80	-7.95
<b>Adjusting countries</b>			
Argentina	5.00	—	—
Bolivia	5.08	5.22	0.15
Brazil	7.12	6.70	-0.42
Chile	12.33	3.27	-9.06
Colombia	8.00	5.00	-3.00
Ecuador	4.17	3.17	-1.00
Guyana	18.53	27.65	9.12
Uruguay	3.43	2.13	-1.30
<i>Asia</i>			
<b>Non-adjusting countries or territories</b>			
Afghanistan	22.55	—	—
Bahrain	—	7.89	—
Bhutan	—	—	—
Cambodia	—	—	—
Cyprus	3.38	1.50	-1.88
Hong Kong	9.00	—	—
India	5.11	7.42	2.31
Iran, Islamic Republic of	6.81	7.00	0.19
Iraq	13.17	6.44	-6.72
Israel	5.62	4.22	-1.39
Japan	1.62	3.64	2.03
Jordan	6.33	8.40	2.07

	Ratio university/primary education per pupil expenditure		
	1980	1988	Change 1980-88
<b>Korea, Democratic People's Republic of</b>	—	—	—
<b>Kuwait</b>	6.33	4.14	-2.19
<b>Lao People's Democratic Republic</b>	—	—	—
<b>Lebanon</b>	—	—	—
<b>Malaysia</b>	13.55	9.79	-3.76
<b>Maldives</b>	—	—	—
<b>Mongolia</b>	—	—	—
<b>Myanmar</b>	—	5.30	—
<b>Oman</b>	—	13.91	—
<b>Palestine</b>	—	—	—
<b>Qatar</b>	—	—	—
<b>Saudi Arabia</b>	—	—	—
<b>Singapore</b>	6.14	6.88	0.73
<b>Sri Lanka</b>	6.90	4.60	-2.30
<b>Syrian Arab Republic</b>	9.50	6.89	-2.61
<b>United Arab Emirates</b>	—	—	—
<b>Viet Nam</b>	—	—	—
<b>Yemen</b>	—	5.82	—
<b>Adjusting countries</b>			
<b>Bangladesh</b>	17.20	5.50	-11.70
<b>China</b>	90.50	44.20	-46.30
<b>Indonesia</b>	—	—	—
<b>Korea, Republic of</b>	1.45	0.38	-1.07
<b>Nepal</b>	24.40	11.68	-12.72
<b>Pakistan</b>	13.00	7.75	-5.25
<b>Philippines</b>	2.60	1.83	-0.77
<b>Thailand</b>	4.00	1.75	-2.25
<b>Turkey</b>	14.37	7.83	-6.54

Source: UNESCO, *World Education Report 1991*, Paris, UNESCO, 1991.