

Chapter V EDUCATION

1. Educational opportunities have rapidly expanded in the twentieth century. Since 1960, worldwide enrolment in primary and secondary schools has risen from an estimated 250 million children to more than 1 billion. The enrolment in higher education more than doubled in the past 20 years, from 28 million students in 1970 to more than 60 million today. The number of literate adults has almost tripled, from approximately 1 billion in 1960 to more than 2.7 billion.¹ Formal education has become a major tool for developing human capabilities, transmitting knowledge and cultural heritage, and improving the quality of life. But both educational opportunities and knowledge remain unequally distributed within and among countries, contributing to persistent inequality in employment opportunities and incomes and to social tension.

2. The 1990s have witnessed a renewed quest to broaden the scope and improve the quality of basic education and to make it more widely accessible. Thus in 1990 at the World Conference on Education for All,² held in Jomtien, Thailand, 155 countries committed themselves to providing primary education for all children and to reducing adult illiteracy significantly by the end of the decade. Signatories of the World Declaration on Education for All and the Framework for Action to Meet Basic Learning Needs have recognized the importance of providing skills, the critical foundation for lifelong learning. Basic learning needs, as defined by the Conference, include knowledge, skills, attitudes and values, which are viewed as key conditions for survival and determinants of the quality of life.

3. In keeping with these objectives, this chapter briefly reviews the current state of formal education, examining enrolment, quality of education and public expenditures in this sector. In keeping with the current focus on "basic learning needs", adult illiteracy will then be briefly examined. The chapter concludes with a short discussion of emerging policy issues.

A. STATUS OF FORMAL EDUCATION

4. The progress made in implementing the goals of the Jomtien Conference was appraised in June 1996 at the mid-decade meeting of the International Consultative Forum on Education for All, held in Amman, Jordan. The report presented a mixed picture.

1. Enrolment

5. The aggregated data on gross enrolment show that almost all regions have managed to increase the combined enrolment ratio between 1990 and 1993 (see box 5.1 and table 5.1). East and South Asia have shown the most impressive growth, increasing their overall enrolment ratios by more than 3 percentage points. Other regions, with the exception of sub-Saharan Africa, have also performed well.

Primary education

6. The total number of primary schoolers has increased in most regions of the world, especially in the developing countries (see table 5.1). Total enrolment in primary education in developing countries grew from 495.5 million in 1990 to 544.6 million in 1995. The growth in enrolment has outpaced the growth of the population aged 6 to 11 years in all developing country regions with the exception of sub-Saharan Africa, where the total number of children out of school in 1995 was nearly 2 million higher than the 1990 level. As a group, developing countries still face the enormous task of integrating into the school system 109 million children, most of whom are girls without access to primary education. In fact, despite some improvement in net enrolment ratios, a considerable share of primary-school-age children in developing countries remain outside the school system (table 5.2). The most disturbing situation is in sub-Saharan Africa, where almost 30 per cent of children who are of primary-school age do not go to school.

7. The developed countries and the countries with economies in transition have traditionally enjoyed high enrolment ratios in primary education. This trend, however, was not sustained in some transition countries during the first half of the 1990s. Albania, Georgia and Ukraine are examples (see figure 5.1).

Box 5.1 CALCULATING ENROLMENT RATIOS

Gross enrolment ratios are obtained by dividing the number of students enrolled in school by the country's population of school-age children. Although there is no universal consensus, most countries consider primary-school age to be 6 to 11 years, secondary-school age to be 12 to 17 years. The third level enrolment ratio is the number of students enrolled in post-secondary schools and universities divided by the population aged 20 to 24 years. Gross enrolment ratios therefore include all students enrolled in a given school level regardless of their age. Net enrolment ratios, on the other hand, use only the relevant school-age group as the numerator. The UNESCO data used in this chapter were calculated according to the different national systems of education and schooling at the first and second level. At the third level figures for the population aged 20 to 24 were used throughout. Second level education includes general, teacher-training and vocational education. Third level education includes universities and other institutions of higher education.

TABLE 5.1. GROSS ENROLMENT RATIOS, BY LEVEL OF EDUCATION AND GENDER, 1990 AND 1993

Regions	Years	All levels		First level		Second level		Third level					
		Total	Male	Female	Total	Male	Female	Total	Male	Female			
Developing countries	1990	52.2	57.0	47.2	98.9	105.6	91.8	41.9	47.5	35.9	7.0	8.5	5.5
	1993	54.7	59.2	50.0	98.6	104.4	92.6	45.7	51.1	40.1	8.8	10.7	6.8
Sub-Saharan Africa	1990	39.8	44.0	35.5	72.6	79.2	66.0	21.8	25.0	18.6	3.0	4.1	1.9
	1993	40.4	44.5	36.3	72.8	79.2	66.3	23.4	26.4	20.5	3.4	4.7	2.2
Arab States	1990	58.3	65.3	51.0	89.1	98.5	79.3	53.7	60.8	46.3	12.5	15.5	9.3
	1993	59.2	65.6	52.5	90.6	99.2	81.6	54.6	60.7	48.3	13.1	16.7	9.5
Latin America and the Caribbean	1990	67.0	67.6	66.5	106.8	108.6	105.0	51.7	49.5	54.0	17.1	18.2	16.0
	1993	69.2	69.6	68.9	110.0	112.1	107.8	54.8	52.2	57.4	18.0	18.2	17.9
East Asia and Oceania	1990	54.3	57.2	51.2	118.1	121.8	114.2	46.0	50.3	41.5	4.8	5.6	3.9
	1993	57.6	60.1	55.0	113.1	115.3	110.8	51.5	55.1	47.7	7.2	8.5	5.8
South Asia	1990	47.6	55.7	38.8	88.7	100.4	76.3	39.4	48.5	29.5	6.8	9.2	4.1
	1993	50.9	58.6	42.5	92.7	102.8	81.9	43.7	52.8	34.0	8.2	11.5	4.7
Least developed countries	1990	34.0	39.0	28.8	67.4	75.3	59.4	17.4	21.8	12.9	2.6	3.8	1.4
	1993	35.1	40.3	29.8	70.1	78.3	61.8	17.8	22.3	13.2	3.3	4.8	1.7
Developed countries and economies in transition	1990	80.8	79.8	81.9	99.4	99.7	99.1	95.1	93.9	96.4	44.3	42.2	46.5
	1993	82.3	80.9	83.7	101.3	101.5	101.0	94.7	93.0	96.5	47.4	44.7	50.2

Source: UNESCO, Statistical Yearbook, (Paris, UNESCO, 1995).

TABLE 5.2. ESTIMATES OF NET ENROLMENT IN
PRIMARY EDUCATION, 1990 AND 1995
(Percentage)

Regions	1990	1995
East Asia and Oceania	85.0	90.7
South Asia	74.6	80.3
Latin America and the Caribbean	85.4	90.8
Sub-Saharan Africa	56.5	61.1
Arab States	74.9	79.8

Source: UNESCO, 1996.

Note: Net school enrolment is the percentage of children of primary-school age (between 6 and 11 years) who are currently enrolled in school.

Secondary education

8. Developing countries also increased enrolment in secondary education (see table 5.1). In South Asia, for example, the gross enrolment ratio grew from 39.4 per cent in 1990 to 43.7 per cent in 1993. In East Asia and Oceania it grew by more than 5 percentage points. In 1993 the highest secondary education enrolment ratio among the developing regions was in Latin America and the Caribbean, closely followed by the Arab States. Despite economic difficulties, sub-Saharan Africa has also managed to increase its secondary education enrolment rate by almost 2 percentage points. Still, none of the developing regions has yet reached the enrolment level of the industrialized countries.

9. In the countries in transition, the situation in secondary education was mixed. In 10 of 15 countries there was a decline in secondary education enrolment between 1990 and 1994 (figure 5.2). Enrolment has fallen most dramatically in Georgia and Ukraine, by 19 and 16 percentage points.

10. The developed countries experienced a slight decline in the gross enrolment ratio in secondary education. But they made some progress with respect to net enrolment ratios. The number of young people remaining in the educational system beyond the minimum school-leaving age has grown, especially in Europe.³ In the United Kingdom, for example, the share of 16-year-old males attending school on a full-time basis grew from 64 per cent in 1991-1992 to 71 per cent in 1993-1994, and the share of females from 72 per cent to 77 per cent. The increase in the participation rate of all young people aged 16-24 was 5 percentage points.⁴

Tertiary education

11. With the exception of Asia, enrolment ratios in tertiary education did not change significantly during 1990-1993 (see table 5.1). On the other hand, female enrolment in higher education grew noticeably in Latin America and the Caribbean, East Asia and Oceania. But the increase in female participation in higher education was most noticeable in the developed countries, 3.7 percentage points between 1990 and 1993.

12. In most countries female students concentrated in education and the humanities. For instance, in 1992 the percentage of female students in these fields were, respectively, 53 and 44 per cent in India, 73 and 74 per cent in Japan, and 57 and 53 per cent in Malaysia.⁵

13. In many transition countries there has been a noticeable shift in the distribution of students from fields such as engineering and medical sciences to economics, finance and law. In the Russian Federation and Ukraine, for instance, higher technological and medical schools have suffered a drastic reduction in the number of applicants in the past four years. Many prominent schools which have trained students in fundamental sciences are now experiencing a deep crisis. In Lithuania, for example, the percentage of graduates who acquired engineering degrees declined from 28.5 per cent in 1990 to about 22 per cent in 1994.⁶

Duration of compulsory education

14. Since 1990, the duration of compulsory education has changed little, except in Jordan and Sri Lanka. The gap in the duration of compulsory schooling between the developing and the developed countries remains significant (table 5.3). In most developing countries education is compulsory for between four and eight years, while in the developed countries, it is compulsory for at least eight years. Only a few developing countries (Bahrain, Gabon, Malaysia, Namibia, Peru, South Africa, Sri Lanka and Venezuela, for example) have been able to close this gap.

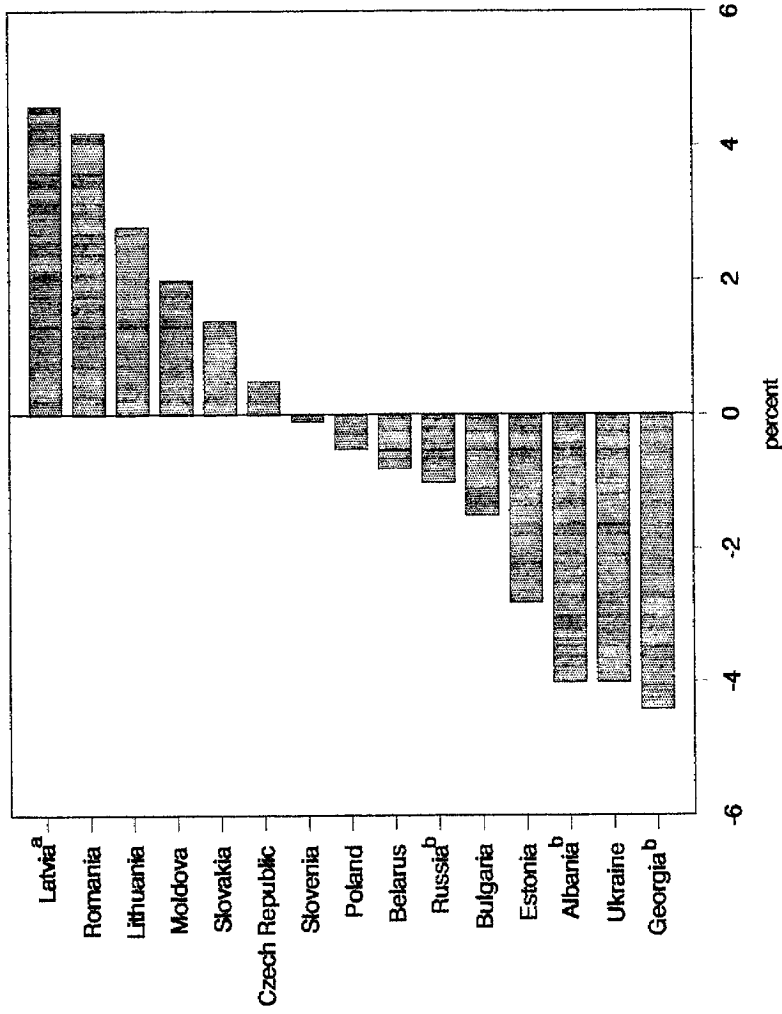
Social and gender differences

15. The dynamics and composition of enrolment highlight several problems that must be addressed. One of the most serious tasks that developing countries face is improving gender equality in access to education. As table 5.1 shows, female enrolment ratios are usually lower than male enrolment ratios. This phenomenon, however, varies in magnitude across regions and countries. While female and male enrolment ratios are roughly equal in Latin America and the Caribbean, female enrolment ratios are persistently lower in the other developing regions. Some progress, however, has been observed in the Arab States and in South Asia, particularly in primary and secondary education. On the other hand, the gender gap in tertiary education increased in these two regions between 1990 and 1993.

16. In some developed and developing countries additional efforts are needed to eradicate significant urban-rural, ethnic and class differentials in school enrolment. Children of poor families, especially those in rural areas, and children of minorities tend to have lower enrolment rates and to drop out of school more frequently than those from wealthy families or from the dominant majority. In many low-income countries the widespread use of child labour (in both rural and urban areas) very often interferes with children's attendance at school. According to ILO estimates, the world's number of working children of primary-school age was 128 million worldwide in 1995. About 50 per cent of secondary-school-age children were engaged in some form of economic activity.⁷ And drop-out rates in such countries are extremely high. For instance, the percentage of first-graders from the 1991 cohort reaching fifth grade was less than 25 per cent in Ethiopia, 28 per cent in Madagascar, 45 per cent in Haiti and 47 per cent in Nepal.⁸

17. In most countries, school enrolment and drop-out rates are much worse in rural areas than in urban areas. According to some estimates the coverage of secondary education in rural areas in Chile was 49 per cent in 1993 compared with 85 per cent in urban areas. In Brazil, for

Figure 5.1. Differences in secondary education enrolment rates in selected countries in transition, 1990 and 1994



Source: UNICEF, "Poverty, Children and Policy: Responses for a Brighter Future", Economies in Transition Studies, Regional Monitoring Report No. 3, (Florence, UNICEF, 1995), p. 147.

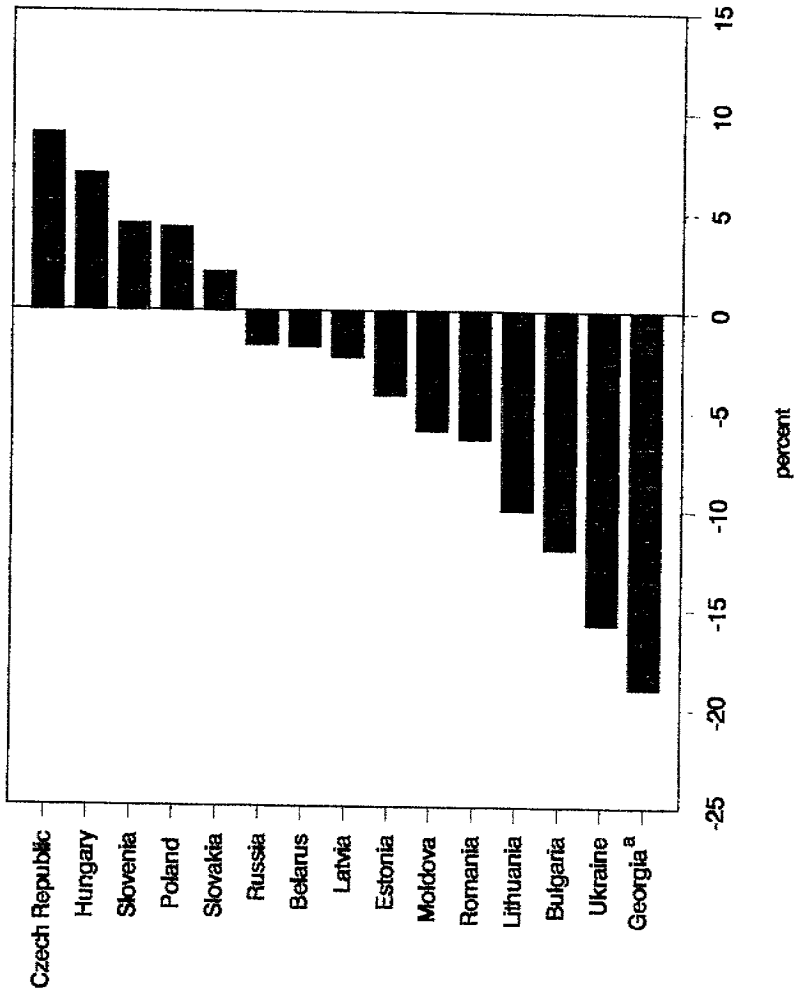
a. 1991

b. 1993

Years of compulsory education												
4	5	6	7	8	9	10	11	12				
		Philippines		Ukraine		Seychelles						
		Senegal		Yemen		Slovakia						
		Sudan		Zimbabwe		Sweden						
		Syrian Arab Republic				Switzerland						
		Thailand				Tajikistan						
		Togo				Tunisia						
		United Arab Emirates				Tuvalu						
		Uruguay										
		Vanuatu										
		Zaire										

Source: UNESCO, Statistical Yearbook, 1995 (Paris, UNESCO, 1995), table 3.1.

Figure 5.2. Differences in secondary education enrolment rates in selected countries in transition, 1990 and 1994



Source: UNICEF, 'Poverty, Children and Policy: Responses for a Brighter Future', Economies in Transition Studies, Regional Monitoring Report No. 3, (Florence, UNICEF, 1995) p. 147.
 a. 1993

example, the enrolment in secondary education for children aged 12 was 91 per cent in urban areas and 75 per cent in rural areas in 1990, and for children aged 15, 73 per cent and 45 per cent, respectively.⁹

18. In almost all multi-ethnic countries the drop-out rates among some ethnic minorities is higher than that of dominant groups or the majority. For example, in the United States the number of Hispanic and Black high school drop-outs was, respectively, 12.7 percentage points and 3 percentage points higher than the national average in 1993.¹⁰ Similar trends have been observed in the countries with significant indigenous populations—Latin American countries, the Russian Federation, Australia and New Zealand. In Mexico, for example, the average drop-out rate for primary school in the areas heavily populated by indigenous peoples was twice the average rate in areas where non-indigenous people prevail.¹¹

19. Evidence shows that in many countries children from the low-income strata lag behind in educational achievement. A recent study on seven Latin American countries indicated that young people from households falling into the two bottom quartiles of the income distribution had completed four years less of formal education than those from households falling into the top two quartiles.¹² Group-targeted efforts are needed to correct such imbalances and to ensure access to education for all.

2. *Public expenditures on education*

20. Despite strongly expressed commitments to basic education, many developing countries have been unable to make access to education universal. Developing countries have increased public expenditures on education as a share of GNP since 1980, with the exception of South Asia (see figure 5.3). On a per capita basis East Asia and Latin America and the Caribbean raised their public expenditures on education more rapidly than the other developing regions (see figure 5.4). East Asia more than doubled public expenditures on education per inhabitant, while Latin American countries raised it by 30 per cent between 1980 and 1992. In the sub-Saharan African and South Asian countries, however, per capita public expenditures on education have declined since 1980. But a word of caution is necessary.¹³ The data presented here are based on nominal values and, consequently, do not take into consideration the effect of price inflation on education spending. Thus, once inflation is taken into account, the increase in expenditures on education, in real terms, would probably be less spectacular in East Asia and Latin America, and the decrease more dramatic in sub-Saharan Africa and South Asia than the figures presented here suggest.

21. The gap between the developing and developed countries in per capita public expenditures on education widened in 1980-1993. During that period the developing countries' average per capita public expenditures on education declined from 6.4 per cent to 4.0 per cent of that of the developed countries.¹⁴

22. It should be noted that many developing countries may have difficulty in further increasing public funding to education as their national incomes remain relatively low. In several countries the need to undergo fiscal adjustment because of unsustainable fiscal deficits and mounting payment obligations on their external debt has constrained Governments' ability to increase the educa-

tion budget. Attempts to solve the resource shortage by shifting costs to families and communities have also run into difficulties. The extremely low per capita incomes in some countries have limited the ability of communities and households to contribute more to the education of their children than they have been doing. The additional burden on low-income households may have a negative effect on school enrolment, especially enrolment of girls, as the demand for primary education is price-sensitive.

23. Many developing countries have been trying to extend public primary education without raising its costs by employing different approaches. For example, Colombia, Senegal and Zimbabwe have begun to hire teachers who have less formal education but more in-service training, hence reducing salary costs. Other countries (Zambia and Bangladesh, for example) raised pupil-teacher ratios and introduced double shifts, thus noticeably reducing capital costs.¹⁵ Many developing countries have reviewed the distribution structure of funding within the education sector and made changes favouring primary education. In Chile, for example, the share of secondary and higher education in public education expenditures was reduced from 18 and 33 per cent in 1980 to 13 and 21 per cent in 1993. Bangladesh diminished the share of higher education (from 13 per cent in 1980 to 8 per cent in 1992), but increased funding to primary and secondary education.¹⁶

24. Countries in transition have shifted education costs, especially those of higher education, to parents. This shift has been achieved mainly by partially privatizing public education, both secondary and higher. Such an approach, however, may jeopardize the universal accessibility of education and equality of opportunity.

25. In developed countries public expenditures on education as a percentage of GNP did not change significantly between 1985 and 1993. In view of current budget constraints and demographic trends, it is unlikely that this group of countries will dramatically increase public funding. There has been, however, growing pressure on the public educational system to accommodate the specific needs of diverse social groups in some countries. This would require additional funding or changes in the allocation of resources among expenditures (teachers' salaries, teaching materials, capital costs and others).

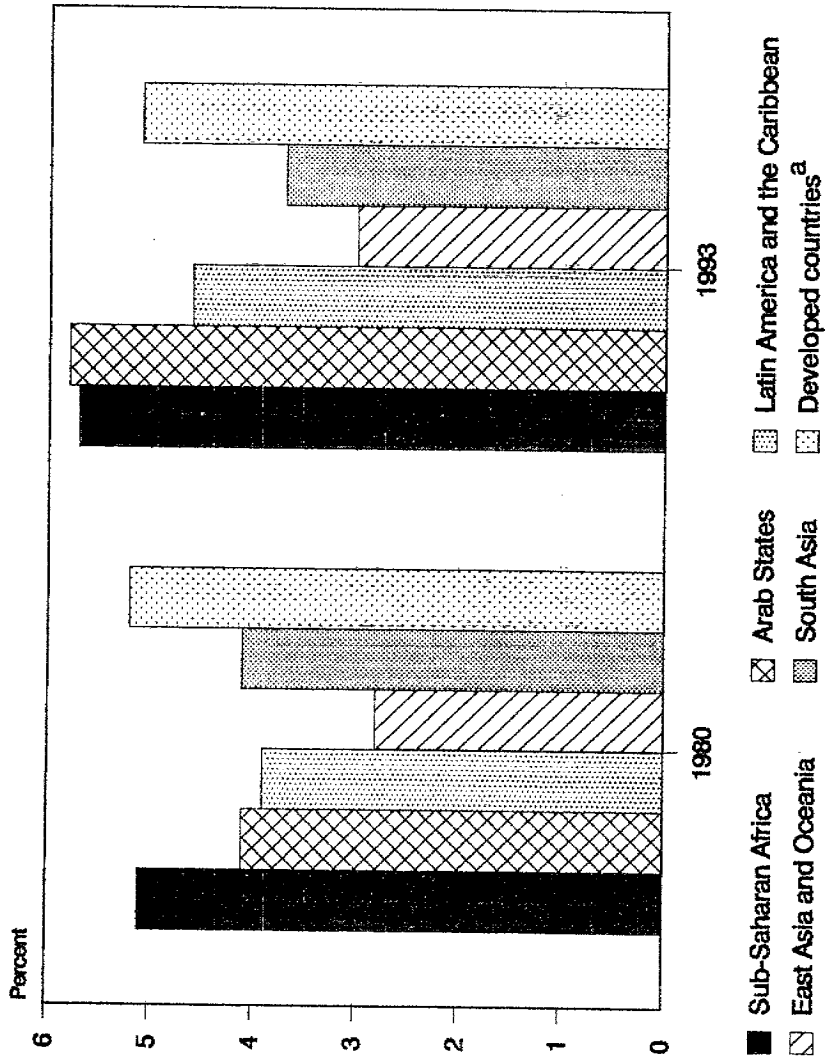
B. ADULT ILLITERACY

26. Despite enormous efforts to eradicate adult illiteracy, the absolute number of illiterate adults has increased from 877 million in 1980 to 885 million in 1995, the majority of which (872 million) live in developing countries (see figure 5.5).

27. In relative terms, adult illiteracy is declining in all regions (see table 5.4), although it remained markedly high in some developing regions. The illiteracy rate of people 15 years and over has fallen in the developing world from 42 per cent in 1980 to 30 per cent in 1995. The most noticeable improvement has occurred in sub-Saharan Africa, where the decrease in illiteracy since 1980 was the largest (17 percentage points) and in the Arab States (16 percentage points). In South Asia the adult illiteracy rate fell by 11 percentage points between 1980 and 1995.

28. In all regions, including the developed countries, the incidence of illiteracy among women has been much

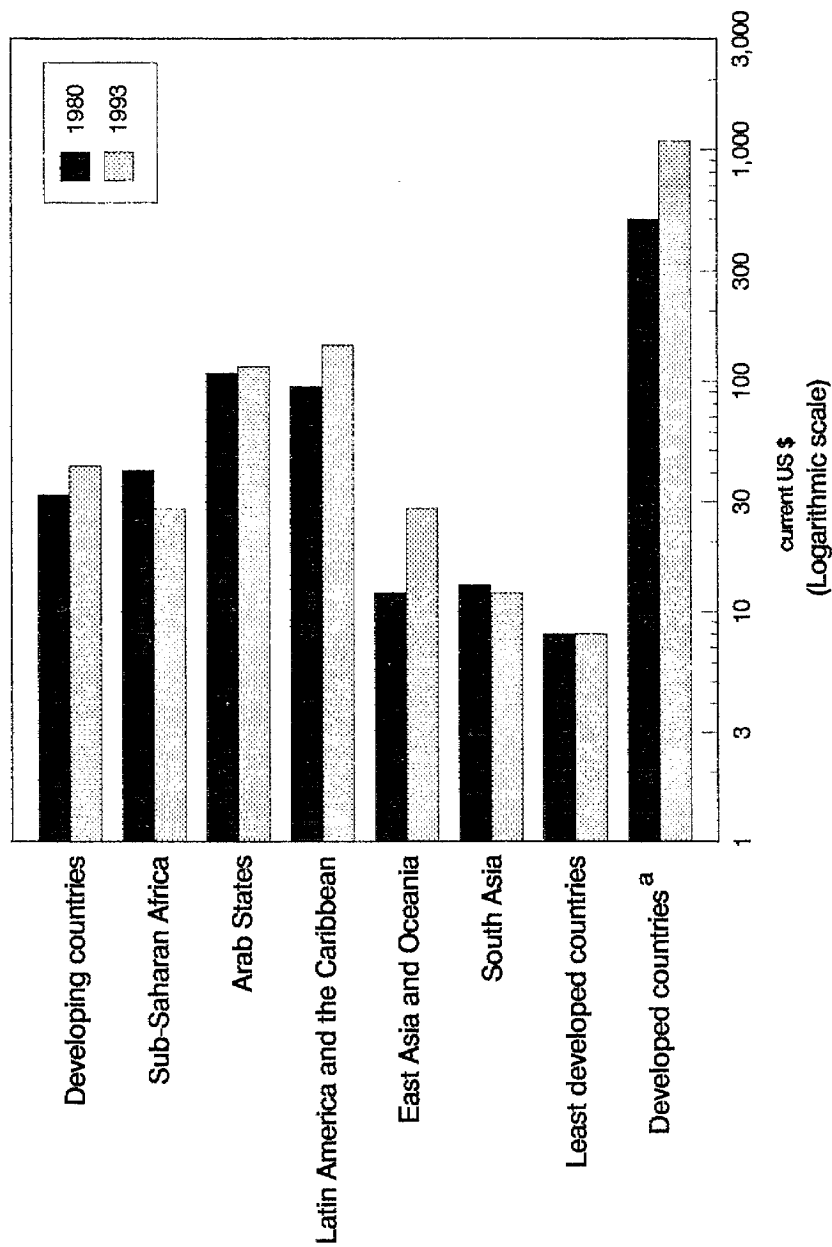
Figure 5.3. Public expenditures on education as a percentage of GNP, 1980 and 1993
(Based on current market prices)



Source: UNESCO, Statistical Yearbook 1995, (Paris, UNESCO, 1995).

a. Includes the economies in transition.

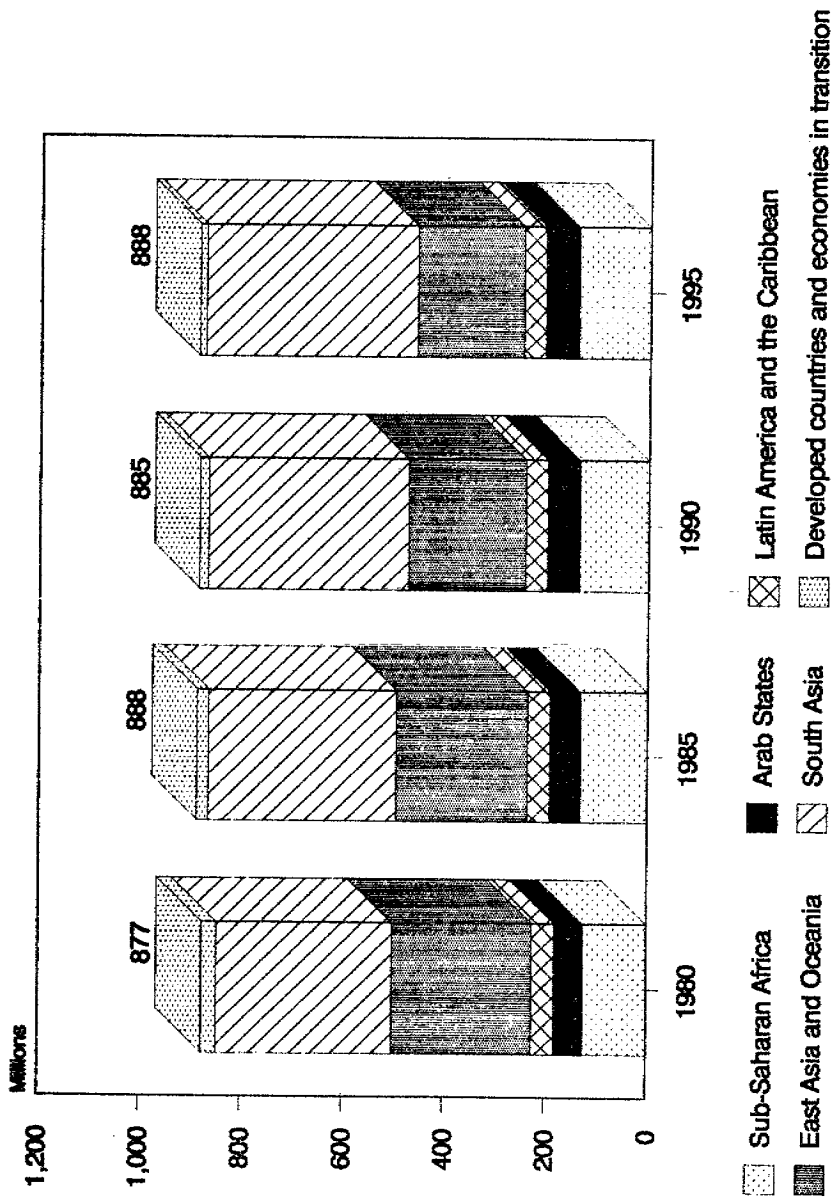
Figure 5.4. Public expenditure on education per inhabitant, 1980 and 1993



Source: UNESCO, Statistical Yearbook 1995, (Paris, UNESCO, 1995).

a. Includes the economies in transition.

Figure 5.5. Illiterate adults, 1980-1995



Source: UNESCO, Statistical Yearbook 1995, (Paris, UNESCO, 1995).

TABLE 5.4. ADULT ILLITERACY RATE, BY REGION, 1980, 1990 AND 1995
(Percentage)

Region	1980	1990	1995
World	30.5	24.7	22.6
Developed countries ^a	3.4	1.8	1.3
Developing countries	42.0	32.8	29.6
Sub-Saharan Africa	59.8	48.7	43.2
Arab States	59.2	48.3	43.4
Latin America and the Caribbean	20.3	15.1	13.4
East Asia and Oceania	30.7	19.7	16.4
South Asia	60.9	53.4	49.8

Source: UNESCO, Statistical Yearbook 1995, (Paris, UNESCO, 1995), table 2.2.

^a Includes the economies in transition.

higher than among men (see figure 5.6). South Asia had the world's highest incidence of female illiteracy in 1995, with 64 per cent. In the Arab States and sub-Saharan Africa more than half of the female adult population has remained illiterate. Some progress, however, has been registered since 1980; the female illiteracy rate in these regions has fallen by 18 percentage points.

C. IMPACT OF EDUCATION

29. There is no single measurement of the impact of education on people's lives. Empirical studies, however, found that there are strong correlations between, for example, the level of education and earnings, between education and unemployment incidence, and between education and quality of life.¹⁷

30. A major trend over the past three decades has been a rise in qualification requirements for employment, driven by technological change. In all economic sectors a premium was put on those who were able to respond to and cope with the rapidly changing structure of labour demand. Data for selected developed countries indicate that earnings increased with the level of education during the 1980s and the early 1990s (table 5.5). The incidence of low wages among workers with less than upper secondary education was typically more than twice the average for all workers in OECD countries, varying from 10 per cent in France to 32 per cent in the United States.¹⁸ A similar trend has been observed in many developing countries.¹⁹ In Peru, for example, an estimation of a basic earnings function gave an overall rate of return to education of 5.7 per cent in 1993. The difference in the rates of returns to education between those who completed only primary school and those with some higher education was 58 per cent.²⁰ Additionally, the incidence of unemployment has become strongly correlated with the initial level of education. A study of the United States, for instance, found that among people aged 27 the average rate of unemployment since age 18 was higher among high-school drop-outs (6.2) than among college graduates (3.7) of the same age.²¹

31. The qualitative aspects of human life have also been influenced heavily by education. Numerous studies on poverty provide evidence that one of the most important characteristics of the poor is their lack of education or the low quality of education they received. In Nicaragua, for example, more than half of the extremely poor people in rural areas and more than a third in urban areas are illiterate. In Tunisia more than 90 per cent of the heads

of poor households have not completed primary education. In Poland poverty incidence was three times higher in the population group with eight years of schooling than in the population group with 14 years of schooling.²²

32. There is also a relationship between poverty, fertility behaviour, child mortality and female education. In most poor countries high female illiteracy is correlated with high fertility and high infant mortality rates. The latter tend to decline with a rise in female literacy (see figure 5.7).

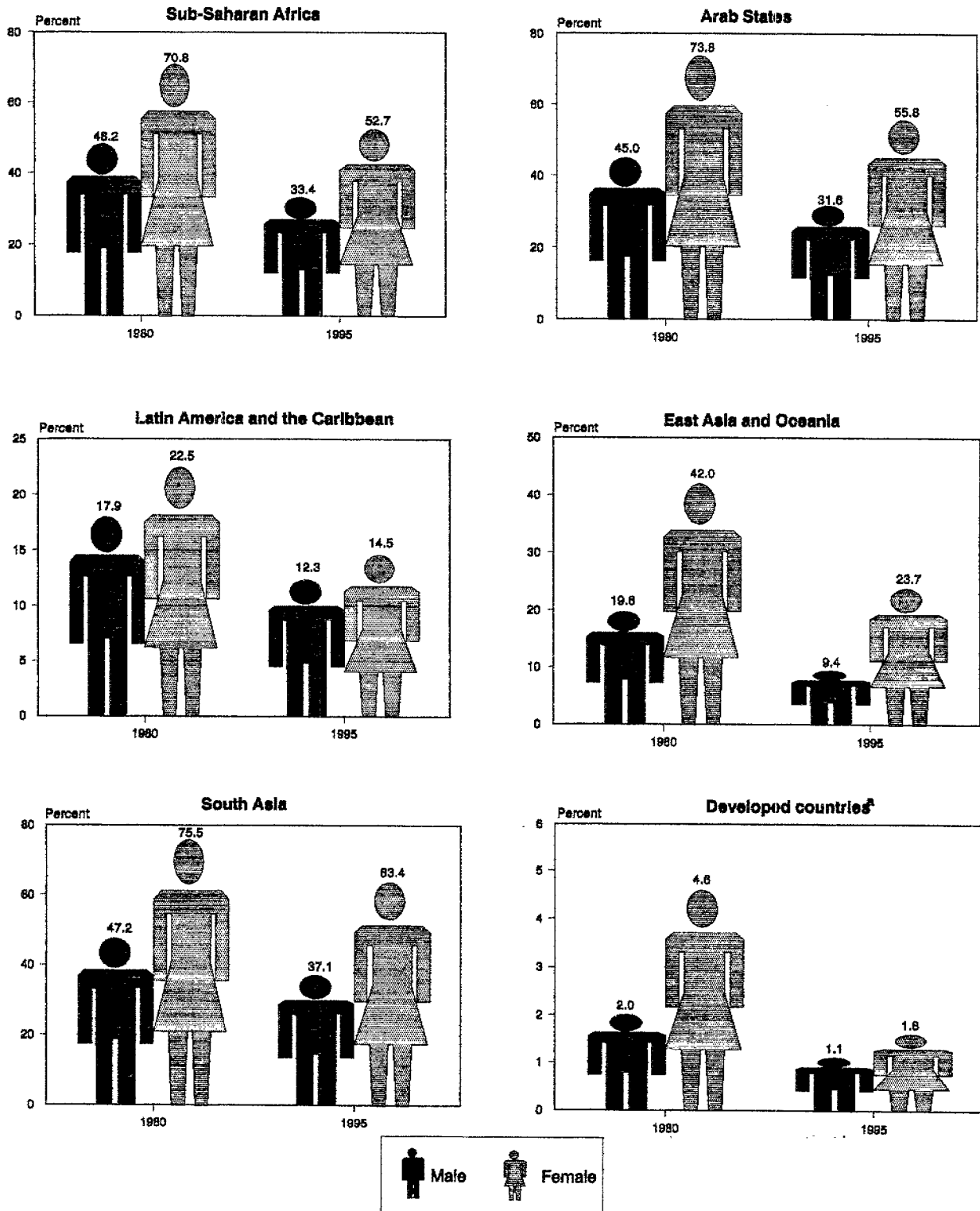
D. SUPPLY AND DEMAND CONDITIONS

33. The quality of a given educational system can be assessed in terms of current demand, national or global, or in terms of future demand. It can also be assessed in terms of private and social returns. Recent debates on the quality of education in Latin America, for instance, gave considerable attention to the growing mismatch between the quality and the structure of knowledge and skills acquired through education and the needs of national economies competing globally. That is, there is a mismatch between supply of and demand for skills. In some Latin American countries, earnings differentials stemming from differences in educational attainment have been narrowing, thus undermining the incentives for acquiring knowledge through formal education. Such a trend is an indication of another mismatch between the private expectations of returns to education and actual gains. At the same time, it has been acknowledged that although the countries of the region benefited enormously from advancements in education in terms of labour productivity and stabilization of population growth, Latin American countries, without furthering progress, will not be able to sustain economic recovery and increase their competitiveness in the global market. Hence, there is a need to make current educational systems more responsive to the needs of the national economy.

34. Ideally, educational systems should enable people to acquire the skills necessary to adapt to rapidly changing socio-economic conditions, both nationally and globally. But education in most countries does not fully meet such requirements, although the magnitude of the problem may differ significantly from country to country.

35. In some developed countries the relatively high incidence of functional illiteracy indicates that educational systems have not fully succeeded in delivering proper training and in keeping up with the evolving needs of the economy. The percentage of adults with limited

Figure 5.6. Adult illiteracy rates, by gender, 1980 and 1995



Source: UNESCO, Statistical Yearbook 1995, (Paris, UNESCO, 1995).
 a. Includes the economies in transition.

TABLE 5.5. EARNINGS RATIOS, BY EDUCATIONAL QUALIFICATION, IN SELECTED COUNTRIES, EARLY 1980S AND EARLY 1990S

Country	Early 1980s		Early 1990s	
	Male	Female	Male	Female
Australia				
Level E/level A	1.74	1.70	1.79	1.71
Level E/level B	1.65	1.52	1.62	1.61
Canada a				
Level E/level A	1.90	2.22	2.08	2.23
Level E/level B	1.70	1.82	1.71	1.80
Denmark				
Level E/level A	1.58	1.46	1.61	1.36
Level E/level B	1.39	1.33	1.31	1.21
Japan a				
Level E/level A	1.36	1.59	1.36	1.62
Level E/level B	1.28	1.36	1.28	1.38
Norway				
Level E/level A	1.43	1.26	1.35	1.25
Level E/level B	1.35	1.19	1.26	1.26
Sweden				
Level E/level A	1.37	1.49	1.55	1.51
Level E/level B	1.22	1.47	1.36	1.54
United States a				
Level E/level A	2.33	2.15	2.47	2.32
Level E/level B	1.73	1.64	1.89	1.83

Source: OECD, The OECD JOBS STUDY, Evidence and Explanations, (Paris, OECD, 1994).

Notes: Level A - Incomplete secondary

Level B - High School

Level E - University

a. Middle / late 1980s

basic literacy skills in some developed countries with long-standing public education is large (figure 5.8). It ranges from about 8 per cent in Sweden to 21 per cent in the United States. In Poland the rate is alarming: almost 43 per cent. One of the reasons for such a disappointing outcome has been the failure of educational systems to keep children in school.

36. Declining average test scores also show that the national educational systems of some developed countries have been unable to sustain high standards of training. In the United Kingdom, for example, only 54 per cent of young people (aged 19 to 21 years old) met national targets for education and training in 1991.²³ In the United States, only 8 per cent of those high-school students who had taken the 1994 Scholastic Aptitude Test scored 600 or above (maximum score, 800; minimum score, 200) in the verbal test, while 42 per cent scored below 400.²⁴

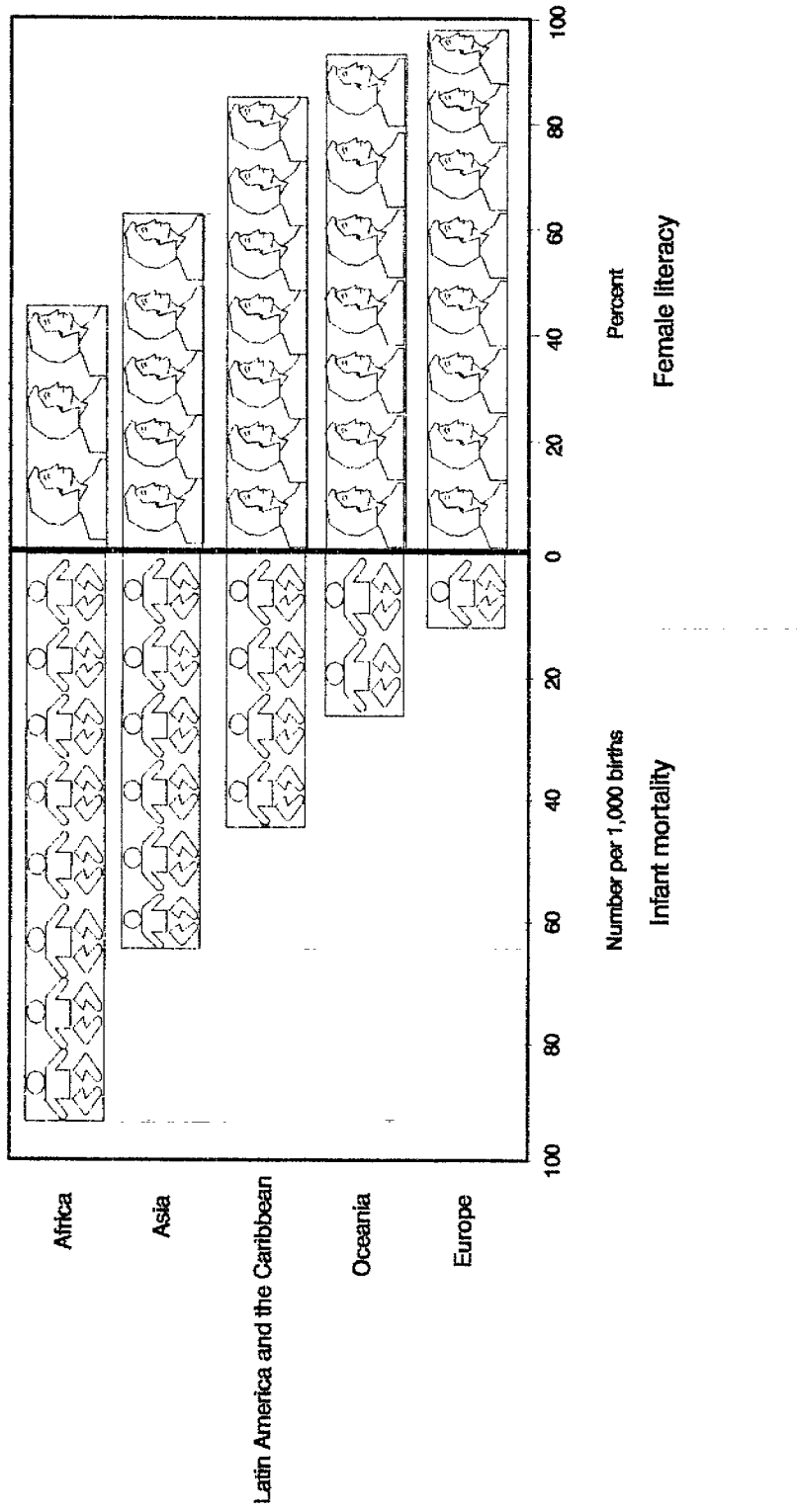
37. In most developing countries the low quality of formal education has been a chronic problem. Several

reasons have been offered: the relatively short duration of compulsory education, a shortage of schoolteachers, limited school facilities and overcrowding. In sub-Saharan Africa and South Asia, for example, the average teacher-pupil ratio was less than half that in developed countries in the early 1990s (see table 5.6).

38. The lack of well-qualified teachers also contributes to high repetition and drop-out rates in some developing countries. This situation is particularly severe in some sub-Saharan African countries (figure 5.9). Additionally, many teachers in developing countries must contend with the near absence of basic school supplies. There is a chronic shortage of textbooks, pens and paper.

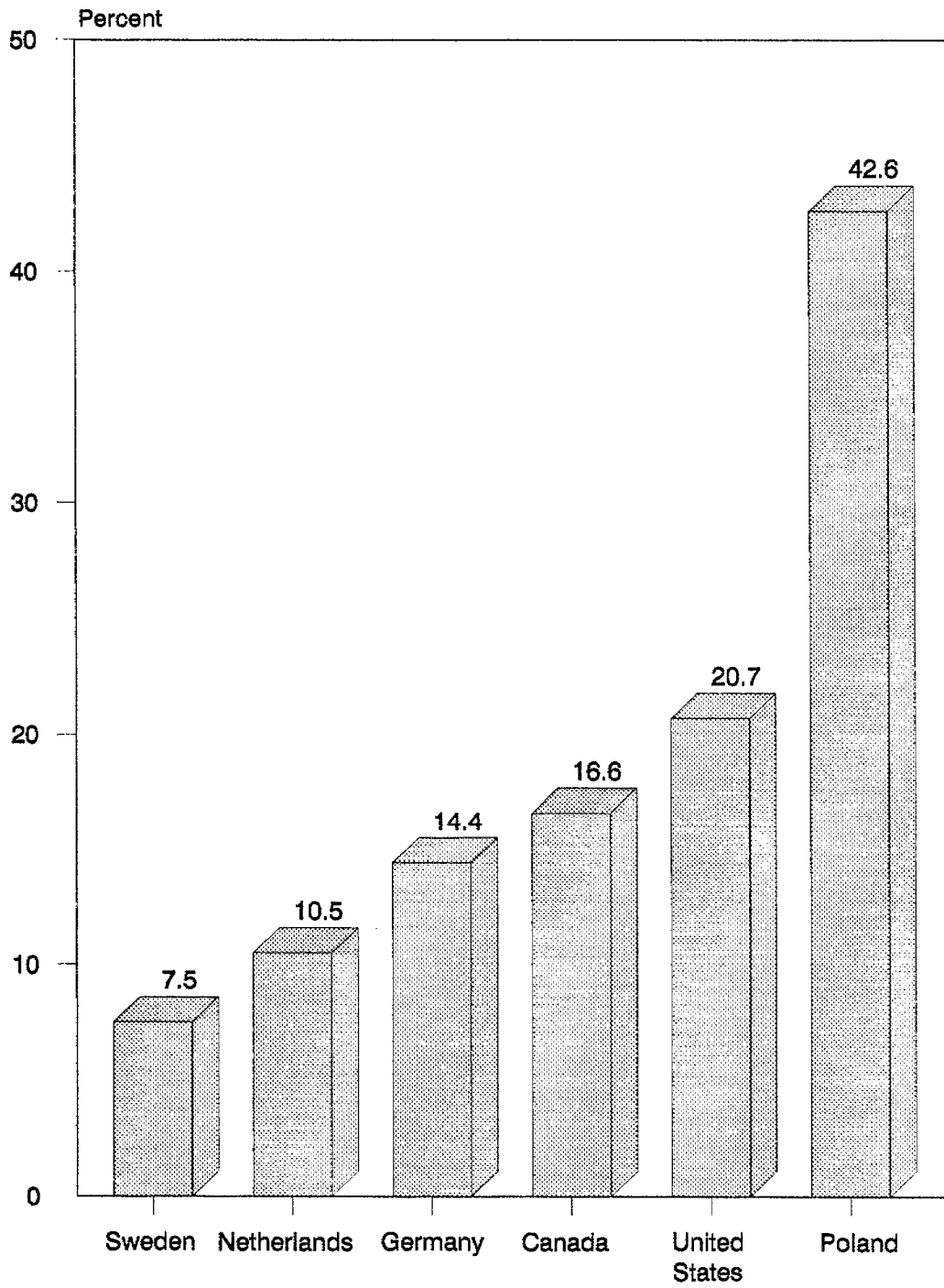
39. Teachers' purchasing power has dramatically deteriorated in most developing countries and countries in transition. Cuts in government expenditures and inflation have meant lower real wages for teachers in many African and Latin American countries. In Argentina, the Central African Republic, Kenya and Madagascar, teachers'

Figure 5.7. Female literacy and infant mortality, 1990-1995



Source: UNESCO, Statistical Yearbook 1995, (Paris, UNESCO, 1995), and UN, World Population Monitoring 1996 (New York, UN, forthcoming).

Figure 5.8. Adults with only basic literacy skills in selected countries, 1995



Source: OECD data, 1995.

TABLE 5.6. NUMBER OF TEACHERS (ALL LEVELS) PER THOUSAND PEOPLE AGED 15-64, 1985 AND 1992

	1985	1992
World total	16	16
Developing countries	13	13
Sub-Saharan Africa	9	10
Arab States	17	19
Latin America/Caribbean	21	22
East Asia/Oceania	14	14
China	13	13
South Asia	9	9
India	9	9
Least developed countries	7	7
Developed countries ^a	23	24
North America	23	24
Asia/Oceania	23	25
Europe/ Russian Federation	23	24

Source: UNESCO, World education report 1995 (Paris, UNESCO, 1995), p. 108.

^aIncludes economies in transition.

purchasing power fell by 30 to 50 per cent between the early 1980s and 1993. We have seen similar trends in the transition economies. In the Russian Federation, for example, the ratio of a teacher's average monthly salary to the national monthly wage fell from 80 per cent in 1980 to 69 per cent in 1994.²⁵

40. In the developed countries there has been growing pressure on teachers to improve the quality of education, resulting in additional workloads and changes in methodology. At the same time, only marginal resources, at best, have been provided to upgrade teachers' skills. Worse, in searching for a solution to the problem of public budget deficits, attempts to reduce teachers' salaries have intensified, hence, undermining their economic incentives.

E. CURRENT POLICIES AND POLICY ISSUES

41. Education is fundamental to enhancing the quality of human life and ensuring social and economic progress. But because of large differences in levels of education and local demand for skills across regions, policy priorities also vary significantly.

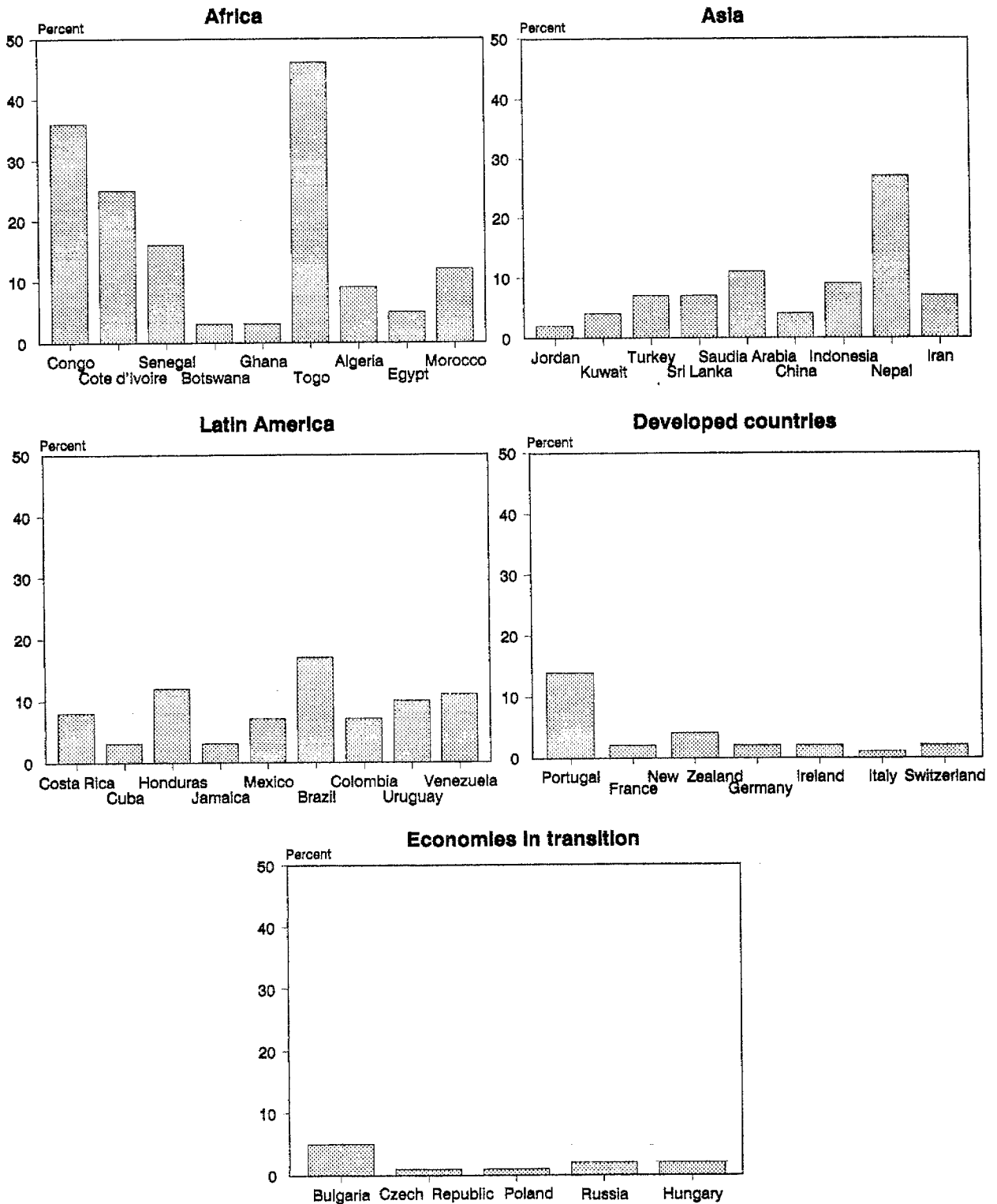
42. In most developing countries of Africa and Asia, for example, the current emphasis is on extending school coverage to achieve universal primary education. Integrating girls into school is another priority. Progress achieved by some Asian and African countries in expanding primary-school coverage was a result of joint efforts by Governments, donors and non-governmental organizations. Such increases were attained either by expanding the education budget or by changing the priorities, management and organization of education. Some countries, for example, combined targeting children in the poorest regions, and girls, with increased funding for primary education and the reorganization of education management. In Pakistan and Malawi, for instance, local commu-

nities helped to construct new schools and provide furniture, facilities and land for temporary schools. Parents helped to monitor school attendance and students' behavioural problems. In many instances, cultural attitudes were taken into consideration by identifying an appropriate package of "girl-friendly" measures—single-sex classes, appropriate learning materials and female teachers, among others.²⁶ The partnership between the Government, the community and the family appears to be an effective approach to solving problems of primary education.

43. The eradication of adult illiteracy by 2000 remains on the agenda of many developing countries. Approaches to this problem vary from country to country. The Government of India, for example, pioneered the National Open School, which offers basic, secondary and vocational education and life enrichment programmes to all those aged 14 and older. These schools have attracted members of marginalized groups, who constitute more than 50 per cent of their current enrolment. Some countries have begun to use a wide range of technologies for remedying both adult illiteracy and the poor basic education of young adults. Thailand, for example, set up an educational radio network in the 1980s. India is using satellite transmission to reach mass audiences and remote villages. China has been using national distance education programmes, while Côte d'Ivoire has introduced educational television.²⁷ Despite the advantages of these new approaches, an evaluation of some national experiences showed that they cannot replace formal education, although they can play an important complementary role.

44. The quality of education is of great concern to the developing and developed countries. There is a widespread perception that too many children learn too little in school. As expected, approaches to this problem differ from country to country, depending on the perceived causes and the availability of resources. In the developing

Figure 5.9. Percentage of repeaters at the first level of education, early 1990s



Source: UNESCO, Statistical Yearbook 1995, (Paris, UNESCO, 1995).

countries emphasis is placed on the quality of teachers' training and the services they render. In the developed countries the use of new technologies in teaching is expected to yield better results. In the countries in transition curriculum reform, decentralization and privatization are viewed as means to make educational institutions more responsive to the demand for skills.

45. Many countries target the efficiency of education as their top priority. The problem of drop-outs is very severe in most developing and in some developed countries. It is believed that in addition to better education quality, school retention programmes may help to reduce drop-out rates. In Latin America, for instance, the ratio of children reaching third and fourth grades rose because of such programmes. Overall, it appears that an output-oriented approach to educational issues will dominate the educational policies of most countries in future years.

46. There has also been growing concern with the link between education and employment. The problem extends beyond schools and young people. For example, the first International Adult Literacy Survey found that nearly one fifth of the population aged 16 to 65 in seven advanced economies could perform only at the most basic levels of literacy and numeracy. Such people clearly have a higher risk of unemployment, especially in an environment where skills must be upgraded constantly to cope with volatile labour market conditions. But encouraging investment in human capital, especially in situations where returns to some types of education may be low, is not an easy task. Moreover, there is currently a great deal of debate about the proper role of government in the social sectors and the trend is to avoid government involvement whenever possible. Education is unique, however, in that it is both a consumption and an investment good. Ensuring the proper quantity and distribution of educational resources may be a task with which the market needs considerable assistance from government.

47. In the developed economies, at least, an additional policy concern is that higher education has been devalued somewhat. The recent cycle of enterprise "downsizing", at least in the United States, has often resulted in the firing of college-educated, white-collar workers, while skilled machinists and other such blue-collar labourers remained in demand. But whether this trend marks the end of ever-increasing wage premiums for those with higher education in the long run remains to be seen.²⁸

NOTES

¹Jacques Delors, *Learning: The Treasure Within*, Report of the International Commission on Education for the Twenty-first Century (Paris, UNESCO, 1996), pp. 117 and 130.

²*Final Report of the World Conference on Education for All: Meeting Basic Learning Needs, Jomtien, Thailand, 5-9 March 1990*, Inter-Agency Commission (UNDP, UNESCO, UNICEF, World Bank) for the World Conference on Education for All, New York, 1990.

³The extent of compulsory education varies from country to country. In most European countries 8 to 10 years of education are required (see table 5.3).

⁴Central Statistical Office, *Social Trends: 1996 Edition* (London, HMSO, 1996), p. 75, table 3.19.

⁵UNESCO, *World Educational Report 1995* (Oxford, UNESCO Publishing, 1995), pp. 134 and 135, table 10.

⁶*Statistical Yearbook of Lithuania, 1994-95* (Vilnius, Methodical Publishing Centre, 1995), p. 25.

⁷ILO, *Child Labour* (Geneva, 1995).

⁸UNESCO, *World Educational Report 1995* (Oxford, UNESCO Publishing, 1995), p. 37, figure 2.8.

⁹Economic Commission for Latin America and the Caribbean (ECLAC), *The Strategic Role of Secondary Education in Achieving Well-Being and Social Equity* (LC/G.1919, 2 May 1996), p. 44, table A.7, annex.

¹⁰United States Department of Commerce, Economics and Statistics Administration, *Statistical Abstract of the United States, 1995. The National Data Book* (Washington, D.C., Bureau of the Census, 1995), p. 174, table 268.

¹¹George Psacharopoulos and Henry Anthony Patrinos, eds., *Indigenous People and Poverty in Latin America. An Empirical Analysis* (Washington, D.C., World Bank, 1994), p. 142, table 7.7.

¹²ECLAC, *The Strategic Role of Secondary Education in Achieving Well-Being and Social Equity* (LC/G.1919, 2 May 1996), p. 37.

¹³The information presented in figure 5.4 refers to expenditures on education of the central Government only. It therefore, excludes local government expenditures, which can be quite substantial in some countries.

¹⁴UNESCO, *Statistical Yearbook 1995* (Paris, 1995).

¹⁵Santosh Mehrotra, Ashok Nigam and Aung Tun Thet, *Public and Private Costs of Primary Education. Evidence from Selected Countries in Asia and Africa*, UNICEF Staff Working Papers No. 15 (Sales No. E.96.XX.USA.4, 1996), p. 6.

¹⁶UNESCO, *Statistical Yearbook 1995* (Paris, 1995), pp. 4-50, table 4.3.

¹⁷OECD, *The OECD Jobs Study: Evidence and Explanations*, Part II, *The Adjustment Potential of the Labour Market* (Paris, 1994); Frank Gaffikin and Mike Morrissey, *The New Unemployed: Joblessness in the Market Economy* (London, Zed Books, 1992); World Bank, *Poverty Reduction and the World Bank: Progress and Challenges in the 1990s* (Washington, D.C., 1996); Carl Jayarajah, William Branson and Binayak Sen, *Social Dimensions of Adjustment: World Bank Experience, 1980-93*, A World Bank Operations Evaluations Study (Washington, D.C., World Bank, 1996).

¹⁸OECD, *Employment Outlook, July 1996* (Paris, 1996), p. 71.

¹⁹See, for example: George Psacharopoulos and Henry Anthony Patrinos, eds., *Indigenous People and Poverty in Latin America: An Empirical Analysis* (Washington, D.C., World Bank, 1994); George Psacharopoulos and Zafiris Tzannatos, *Women's Employment and Pay in Latin America* (Washington, D.C., World Bank, 1992); Mihaly Simai and others, eds., *Global Employment: An International Investigation into the Future of Work* (London, Zed Books, 1995).

²⁰George Psacharopoulos and Henry Anthony Patrinos, eds., *Indigenous People and Poverty in Latin America. An Empirical Analysis* (Washington, D.C., World Bank, 1994), pp. 189 and 193.

²¹United States Department of Labor, *Monthly Labor Review*, vol. 116, No. 4 (April 1993).

²²World Bank, *Poverty Reduction and the World Bank. Progress and Challenges in the 1990s* (Washington, D.C., 1996), pp. 7, 111, 116.

²³As a result of educational reform, the situation improved significantly in the United Kingdom by 1994, and the percentage of young people meeting national targets increased to 64.1. Central Statistical Office, *Regional Trends 30*, 1995 edition (London, HMSO, 1995), table 4.16.

²⁴Scores are per thousand participants. United States Department of Commerce, Economics and Statistics Administration, *Statistical Abstract of the United States, 1995: The National Data Book* (Washington, D.C., Bureau of the Census, 1995), p. 175, table 271.

²⁵GOSKOMSTAT, *Rossiisky Statistichesky Ezhegodnik 1995* (Moscow, 1995), p. 81.

²⁶World Bank, *Levelling the Playing Field. Giving Girls an Equal Chance for Basic Education—Three Countries' Efforts* (Washington, D.C., 1996), pp. 2 and 4.

²⁷Jacques Delors, *Learning: The Treasure Within*, report of the International Commission on Education for the Twenty-first Century (Paris, UNESCO, 1996), pp. 170 and 171.

²⁸See, for example, Paul Krugman, "White collars turn blue", *New York Times Magazine* (29 September 1996).