Chapter 2

Towards EFA: assessing progress

This chapter provides an assessment of global progress towards achieving the six EFA goals. It uses the most recent data on education systems for 2000, updating last year's analysis and extending it in important respects.

Reflecting the report's theme, the analysis gives particular attention to the gender goals and how they affect the implementation of all Dakar's educational aims. Gender parity at primary and secondary levels is an objective for 2005, and equality throughout all education is to be achieved over the following decade. So the discussion of each of the goals adopts a gender focus wherever the data allow.

The chapter is in seven sections. After a look at trends in ECCE, three sections assess progress towards higher enrolments, quality and gender parity at the primary, secondary and tertiary levels of education. Discussion of life skills and literacy programmes is then followed by some recent evidence on trends in educational quality. The final section attempts to compare the overall progress being made by different nations and regions. It focuses on how far the goals for gender parity are within reach for 2005, and introduces a new EFA Development Index to give a more aggregated comparator of national progress towards the education targets.

Early childhood care and education

Goal 1. Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children.

Early childhood care and education is a diverse area of learning. It ranges, on the one hand, from formal pre-primary education, which is integrated with the national education system, via kindergartens where care, play and education are all included, to more informal and often home-based activities. Internationally comparable data are currently available for formal pre-primary enrolments in around three-quarters (152) of all countries. Although efforts are being made to collect information on more informal activities for the pre-primary age group (usually 3 to 5 years), only fifteen countries are as yet able to supply these data (Statistical annex, Table 3). A third indicator – the percentage of new entrants to primary Grade 1 who have

Table 2.1. Pre-primary education: grouping of countries according to gross enrolment ratio (2000)
(in each box countries are listed in increasing order of GER)

	Levels of GER				
Regions	**≤ 30%**	**30.1%-50%**	**50.1%-70%**	**70.1%-90%**	**Above 90%**
Sub-Saharan Africa	D. R. Congo, Niger, Burkina Faso, Burundi, Mali, Comoros, Ethiopia, Togo, Rwanda, Côte d'Ivoire, Congo, Madagascar, Senegal, Guinea-Bissau, Sierra Leone, Uganda, Eritrea, Benin, Cameroon, Gabon, Lesotho, Gambia, Namibia, Equat. Guinea (24)	South Africa, Zimbabwe, Kenya (3)	Cape Verde, Ghana, Liberia (3)		Mauritius (1)
Arab States	Yemen, Djibouti, Algeria, Oman, Saudi Arabia, Iraq, Libyan A. J., Syrian A. R., Egypt, Tunisia, Sudan, Qatar (12)	Jordan, Palestinian A. T., Bahrain (3)	Morocco (1)	Lebanon, U. A. Emirates (2)	Kuwait (1)
Central Asia	Tajikistan, Kazakhstan, Kyrgyzstan, Azerbaijan, Mongolia (5)	Georgia (1)			
East Asia and the Pacific	Myanmar, Cambodia, Lao PDR, Papua New Guinea, Indonesia, China (6)	Philippines, Tonga, Samoa, Viet Nam, Brunei Darussalam, Malaysia (6)	Palau (1)	Vanuatu, Rep. of Korea, Thailand, Japan, Cook Islands (5)	Macao (China), Australia, Niue (3)
South and West Asia	Nepal, Isl. Rep. of Iran, Bangladesh, India (4)	Maldives (1)	Pakistan (1)		
Latin America and the Caribbean	Bahamas, Honduras, Nicaragua (3)	Belize, Colombia, Dominican Rep., El Salvador, Bolivia, Panama, Venezuela (7)	Guatemala, Argentina, Saint Lucia, Uruguay, Trinidad and Tobago, Brazil, Peru, Ecuador (8)	Mexico, Chile, Barbados, Jamaica, Paraguay, Costa Rica, Neth. Antilles (7)	Suriname, Aruba, Cuba, Guyana (4)
North America and Western Europe			Finland, Cyprus, United States, Canada, Portugal (5)	Greece, Sweden, Norway, United Kingdom, Austria, Denmark (6)	Switzerland, Italy, Netherlands, Malta, Spain, Germany, Iceland, Israel, Belgium, France, Luxembourg (11)
Central and Eastern Europe	Turkey, The FYR of Macedonia (2)	Serbia and Montenegro, Rep. of Moldova, Croatia, Albania, Poland (5)	Lithuania, Latvia, Bulgaria (3)	Romania, Slovenia, Hungary, Slovakia, Belarus, Russian Federation (6)	Czech Rep., Estonia (2)
Total number of countries 152	56	26	22	26	22

General note: See source table for detailed country notes.
Source: Statistical annex, Table 3.

attended some form of organized early childhood development programmes – is available for rather more (forty-three) countries. Although these broader indicators of participation are becoming increasingly available, the gross enrolment ratio (GER) in pre-primary education is still the main indicator that can be used to monitor progress towards the first Dakar goal.

Enrolment in pre-primary education

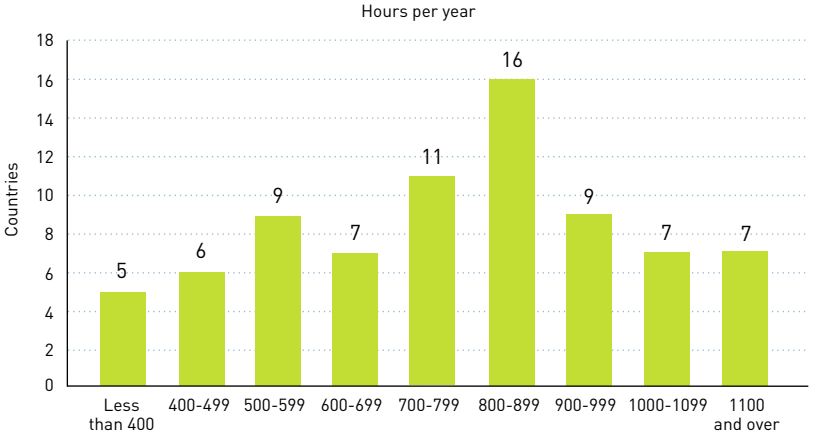
Pre-primary education is defined as programmes of organized instruction which are school- or centre-based, occupying at least two hours per day and 100 days per year. By their very nature these data are difficult to collect. First, many programmes are dispensed privately – accounting for all pre-school enrolments in some countries. Private providers, including NGOs, local communities and religious institutions, are not always easy to include in the surveys, and may often not be recognized by the authorities as valid providers.[1] Second, even in the public sector, programmes provided under the responsibility of authorities other than ministries of education – the main UNESCO counterpart with regard to annual statistical surveys – are not always reported in replies to surveys.

Thus it is possible that statistical information on pre-primary education does not give the full picture in many countries. Moreover, even within the relatively homogeneous category of programmes provided by the public sector, their duration, curriculum and teacher qualifications are so diverse as to make international comparisons difficult.

Table 2.1 shows countries grouped according to the level of their enrolment ratios in pre-primary education. More than one-third of the countries (56 out of 152) have very low pre-primary enrolments (fewer than 30% of the age group), almost half of these being in sub-Saharan Africa. With the exception of Georgia, all countries in Central Asia are also in this category, many of which have had declining enrolments since 1990. All countries in North America and Western Europe and most of those in Central and Eastern Europe have enrolments equivalent to more than half the pre-school age group. Half of the former group have GERs greater than 90%, indicating that pre-schooling in these richer nations is virtually universal.

The intensity of instruction also varies greatly between countries. Table 2.2. shows, for seventy-seven countries, the average numbers of hours taught during the pre-school year. The average duration of the school year varies from lows of 195 hours in Iraq and 231 hours in Tajikistan to highs of 1,260 to 1,560 hours in Colombia, Cuba and Saint Kitts and Nevis. As shown in Figure 2.1, almost half (thirty-six) of the countries fall within the range 700 to 999 hours.

Figure 2.1. Distribution of countries according to duration of pre-primary schooling, 1999 (in hours per school year)



Source: Answers to UIS workshop questionnaires on the duration of schooling (2000).

Comparisons between 1990 and 2000

Enrolments in pre-primary schooling have generally increased considerably over the last decade. Figure 2.2 shows that the GERs increased consistently between 1990 and 2000 in all regions, particularly in Latin America and the Caribbean, where pre-primary education provision – already well developed by the early 1990s – continued to grow. This trend has not, however, been universal. Enrolment ratios fell in one or two African and Latin American countries. But the setbacks were substantial and widespread in Central Asia and Central and Eastern Europe, where the real value of state expenditures in education, as in other sectors, has been in decline[2] (see Box 2.1).

1. In sub-Saharan Africa and in some Arab States, but also in countries with a large Muslim population, Koranic schools are particularly relevant in this category. In the Niger, for example, in 2001, of almost 34,000 new entrants who had experienced some kind of ECCE over 80% came from Koranic schools, and this proportion has been increasing over the last three years for which data are available (Niger, 2002*a*, p. 18). It is not always possible to ascertain to what extent the centres or institutions providing this type of instruction are included in the surveys.

2. This remains true over the decade despite some recovery in certain countries since 1998.

Table 2.2. Duration of schooling in pre-primary education, by country (1999)

Country	Hours per week (1)	Days per week (2)	Weeks per year (3)	Days per year (4)	Hours per year (5) = (1) x (3)
Sub-Saharan Africa					
Benin	23	4.5	34	154	782
Burkina Faso	21	6	37	222	777
Cameroon[1]	*30*	5	36	180	1 080
Ethiopia*	*23.1*	5	42	210	971
Gambia	20	5	39	195	780
Ghana	27.3	5	40	200	1 092
Guinea-Bissau	24	5	35	175	840
Kenya	...	5	39	195	...
Liberia	25	5	37	185	925
Mali	26	5	38	190	988
Mauritania	30	5	36	180	1 080
Mauritius	25	5	40	200	1 000
Namibia	...	5	39	195	...
Niger	25	5	36	180	900
Nigeria	20	5	40	200	800
Sao Tome/Principe	25	5	36	180	900
Senegal	22.3	5	35	175	781
Seychelles	26.2	5	40	200	1 046
Sierra Leone	20	5	35	175	700
South Africa	...	5	41	205	...
Togo	21.3	5	40	200	852
U. R. Tanzania	17.3	5	42	210	727
Zambia	17.3	5	34	170	588
Arab States					
Iraq*	*5*	6	39	234	195
Kuwait	25	5	34	170	850
Lebanon[2]	26.3	5	32	160	840
Libyan A. J.	21	6	28	168	588
Morocco*	*32.3*	6	35	210	1 131
Saudi Arabia	22.3	5	29	145	647
Sudan	21	6	39	234	819
Syrian A. R.	32	6	36	216	1 152
United Arab Emirates	22	5	33	165	726
Yemen	20	5	28	140	560
Asia and the Pacific					
Central Asia					
Kazakhstan[1]	24	5	33	165	792
Mongolia	10	5	34	170	340
Tajikistan	7	5	33	165	231

Country	Hours per week (1)	Days per week (2)	Weeks per year (3)	Days per year (4)	Hours per year (5) = (1) x (3)
East Asia and the Pacific					
Cambodia[2]	12	5	38	190	456
Cook Islands	10	5	41	205	410
Fiji	15	5	41	205	615
Lao PDR[2]	10	5	36	180	360
Macao, China*	*14.2*	*5.3*	*40.5*	*213*	*575*
Marshall Islands	15	5	36	180	540
Myanmar	...	5	36	180	...
Niue	12	3	40	120	480
Papua New Guinea[2]	10	5	41	205	410
Palau	17.3	5	34	170	588
Samoa	15	5	40	200	600
Tuvalu	15	5	40	200	600
Vanuatu*	*15*	5	39	195	585
Viet Nam	15	5	33	165	495
South and West Asia					
Bangladesh	12	6	37	222	444
Bhutan	22	5	39	195	858
Maldives	7.3	5	40	200	292
Nepal	24	6	36.7	220	881
Pakistan*	*28*	5.5	30	165	840
Latin America and the Caribbean					
Anguilla	15	5	39	195	585
Antigua and Barbuda	25	5	39	195	975
Bahamas*	25	5	*38*	*190*	950
Barbados	25	5	38	190	950
Belize	15	5	36	180	540
Bolivia*	*25*	5	44	220	1 100
Colombia	30	5	42	210	1 260
Costa Rica	14	5	44	220	616
Cuba[3]	32	5	41	205	1 312
Dominica	25	5	40	200	1 000
Dominican Republic	20	5	44	220	880
Ecuador	20	5	40	200	800
El Salvador	30	5	40	200	1 200
Guatemala	17.3	5	36	180	623
Guyana	20	5	39	195	780
Jamaica	22.3	5	38	190	847
Netherlands Antilles*	*23*	5	40	200	920
Nicaragua	20	5	43.5	218	870
Panama	25	5	42	210	1 050
Peru	20	5	36	180	720
Saint Kitts and Nevis	40	5	39	195	1 560
Saint Lucia	20	5	40.4	202	808
Suriname	20	5	42	210	840
Trinidad and Tobago	22.3	5	39	195	870
Turks and Caicos Is	20	5	39	195	780

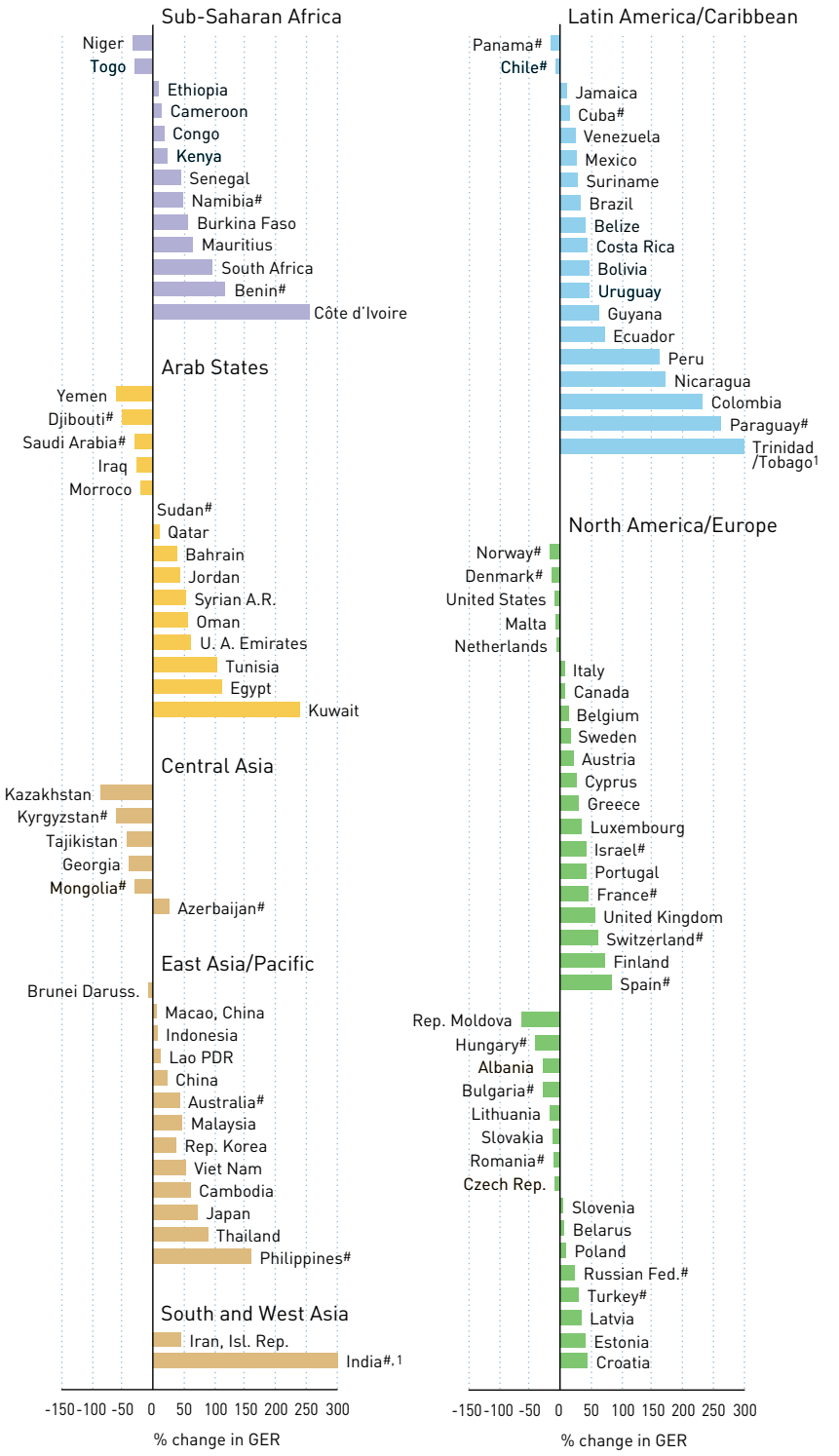
* Figures in italics are average durations calculated from varying durations at different grades, cycles or programmes.
1. The number of weeks per year is taken from the education database of the International Bureau of Education (UNESCO-IBE, 1999).
2. The number of hours per week has been recalculated, based on actual teaching time per hour.
3. Including playtime and time devoted to hygienic and cultural habits.
Source: Answers to UIS workshop questionnaires on the duration of schooling (UNESCO Institute for Statistics, 2000).

In North America and Western Europe, declines are evident for Norway and Denmark, probably explained by changes in the reference age groups used in the calculation of the ratios (see Table 2.3) as well as, to a more limited extent, in Malta, the Netherlands and the United States.

It must be emphasized, however, that some of these changes are more apparent than real. On the one hand, the definition of pre-primary education adopted in the revised International Standard Classification of Education (UNESCO, 1997) has slightly changed, and it is possible that new categories of pre-primary education provision, previously unreported, are now included in the replies to the UNESCO Institute for Statistics (UIS) surveys, reflecting the growing emphasis since the Jomtien conference in 1990 on a broader notion of ECCE.

Of even greater significance, however, is that changes in the reference age groups used in the denominator of the GER will have significantly affected the reported value of the indicator. Table 2.3 shows the countries where such changes were made for the data shown for 1990 and 2000. For the Philippines, the GER in 1990 was calculated relative to the two-year age-group population (5–6). However, in 2000 it is obtained on the basis of the single year cohort of 5-year-olds, which, with no other changes, would roughly double the estimated GER. In Switzerland, the GER in 1990 was calculated with respect to those aged 4–6 years while the estimate for 2000 uses only the 5–6 age group. This explains a good amount of the reported 59% increase in the GER. India is a special case, where the increase exceeds the limits of the scale shown in Figure 2.2. Here, the change in the age group (which is increasing rather than decreasing) does not explain its more than six-fold increase in GER since 1990. It is probably the case that new categories of enrolment (particularly of children younger than 4 years) are included in the data, as well as signifying a real increase in pre-school activity. A closer analysis of the national situations is necessary to further explain such exceptional variations between the two years.

Figure 2.2. Pre-primary education: percentage changes in gross enrolment ratio between 1990 and 2000 (only countries with data available for the two years)



# Indicates a change in the reference age group between 1990 and 2000 and therefore data for the two years are not strictly comparable. Precise changes in age groups are given in Table 2.3.

1. In India the change was 647% and in Trinidad and Tobago 612%.

Source: Statistical annex, Table 3.

Box 2.1. Trends in pre-primary education in transition countries

By 1989, the enrolment of children in pre-schools was already quite uneven in transition countries, with high rates in Central Europe and much lower rates in the Caucasus and Central Asia. Across the region, pre-school enrolments fell as employment levels among the population decreased, fees were raised and more parents began to look after their children full time. In the countries of Central Europe and the Baltic states, pre-school enrolment rates began to recover in the mid-1990s and by 2000 had returned to their 1989 levels, although, as the population of young children in these countries had sharply declined, the number of pre-school places was considerably lower in 2000 than in 1989. More severe reductions occurred in the Republic of Moldova, Ukraine, the Caucasus and Central Asia. In Kyrgyzstan, pre-school education suffered greatly from funding cuts, resulting in the closure of large numbers of schools. In the Republic of Moldova, increased fees for pre-school education reduced the demand for places. On the other hand, by the late 1990s, Georgia and Azerbaijan had began to experience a revival in enrolment rates in pre-school education, albeit from very low levels.

Source: UNICEF (2002*a*).

Primary entrants with ECCE experience

The indicator for the percentage of pupils entering primary education who have experienced some form of ECCE was included in the 2000 assessment exercise and subsequent UIS surveys in order to appraise the coverage of ECCE programmes. The response rate was one of the lowest in the EFA assessment and it unfortunately remains rather low. Figure 2.3 shows the values for this indicator, for the forty-two countries with available data.[3] Given the important benefits provided by ECCE programmes in preparing children for basic education and helping with the socialization process, it can be seen that children entering primary schools in the various regions are very differently equipped to face their new environment.

Two contrasting patterns emerge. In sub-Saharan Africa, very few children have been exposed to ECCE, although Mauritius and the Seychelles report a proportion of 100%.

At the other extreme, the figures from Latin America and the Caribbean exceed 50% in most countries and approach 100% in Anguilla, Barbados, Cuba, Dominica, Guyana and the Turks and Caicos Islands. On the other hand, in the Arab States the figure is between 90% and 100% in Kuwait and Lebanon, but very low in Algeria and Djibouti.

As regards differences by gender, it can be seen from Figure 2.3 that girls receive ECCE

3. Data are not collected for North America and the European countries in the annual UIS survey, with the exception of the Russian Federation.

Table 2.3. Pre-primary education: age groups and gross enrolment ratio (1990 and 2000) and percentage changes in GER (1990–2000), selected countries

Region/country	1990 Age group	1990 GER (%)	2000 Age group	2000 GER (%)	% change in GER
Sub-Saharan Africa					
Namibia	6-6	14.4	3-5	21.4	49
Benin	3-5	2.6	4-5	6.1	131
Arab States					
Djibouti	4-5	0.7	3-5	0.4	-50
Saudi Arabia	4-5	7.2	3-5	5.0	-31
Sudan	5-6	19.7	4-5	*22.2*	13
Central Asia					
Kyrgyzstan	3-6	33.5	3-5	14.2	-58
Mongolia	4-7	39.1	3-7	28.7	-27
Azerbaijan	3-6	19.5	3-5	*24.1*	23
East Asia and the Pacific					
Australia	5-5	71.3	4-4	98.0	37
Philippines	5-6	11.7	5-5	30.2	159
South/West Asia					
India	4-5	3.5	3-5	*25.8*	647
LAC					
Panama	5-5	53.0	4-5	47.1	-11
Chile	5-5	82.4	4-5	77.5	-6
Cuba	5-5	101.1	3-5	108.8	8
Paraguay	6-6	27.1	3-5	*83.0*	206
N. America/W. Europe					
Norway	4-6	88.4	3-5	79.3	-10
Denmark	6-6	99.0	3-6	89.9	-9
Israel	2-5	85.4	3-5	112.6	32
France	2-5	83.3	3-5	114.4	37
Switzerland	4-6	59.7	5-6	95.2	59
Spain	2-5	59.4	3-5	101.8	71
Central/Eastern Europe					
Hungary	3-5	113.4	3-6	79.5	-30
Bulgaria	3-5	91.6	3-6	67.9	-26
Romania	3-5	76.0	3-6	73.0	-4
Russian Federation	3-6	74.0	4-6	87.2	18
Turkey	4-5	4.6	3-5	5.7	25

Source: Statistical annex, Table 3; UNESCO (1999).

proportionately slightly more than boys. This is so in just over half of the forty-two countries with available data by gender. In contrast, in only five countries is the female percentage lower than that for males, and in fifteen countries boys and girls with ECCE experience are in the same proportion.

The above information covers a broad variety of programmes offered to children of pre-school age. Closer examination of individual countries can provide insight as to the range and type of ECCE provision offered to pupils entering primary education. As Table 2.4 shows, in the case of the Niger, only 16.6% of new entrants to primary education in 2001 have received some form of ECCE. Much of this is provided in Koranic schools, which cater for over three-quarters of the pupils concerned. During a period of rapid expansion of primary entrants – by more than one-third over the three years 1999–2001 – the proportion having had some prior ECCE fell only slightly. Of the new entrants having had some ECCE, 43% were girls in 2001 – a slightly higher proportion than among new entrants as a whole.

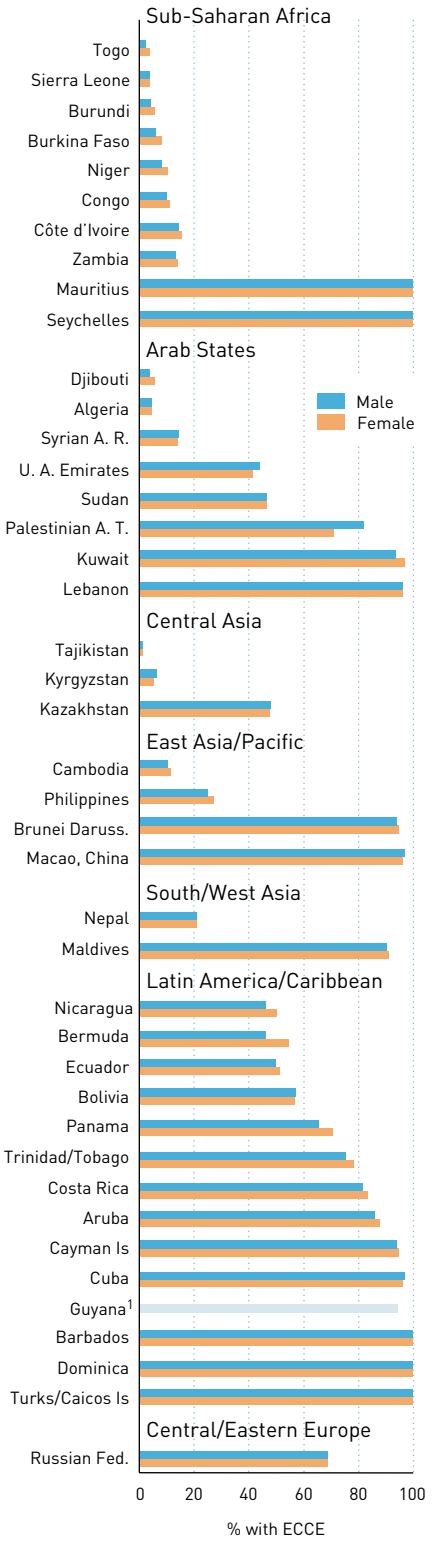
ECCE is often distributed very unequally within countries – more so than other levels of educational provision (see Box 2.2). Rural–urban differences are particularly marked, as indicated by data from the UNICEF Multiple Indicator Cluster Survey (MICS) for 2000. Table 2.5 shows that differences between urban and rural attendance are generally more significant than the gender differences, which, in three of the five countries shown, favour girls.

Pre-primary enrolment in private institutions

The share of expenditure on pre-primary in comparison with other types of education is low in many developing countries. In OECD countries, where pre-primary education is well developed, the share of GDP devoted to pre-primary institutions is, on average, 0.4%, compared with 2.3% to primary and lower secondary education. In the World Education Indicators (WEI)[4] countries, where pre-primary is better established than in other developing countries, this proportion is 0.2% on average (UNESCO Institute for Statistics/OECD, 2003*a*, p. 184).

Private funding and management is high in pre-primary, compared with other levels of education.

Figure 2.3. New entrants in primary Grade 1 who have experienced some form of ECCE programme, by gender (2000)



1. Refers to both sexes.
Source: Statistical annex, Table 3.

ECCE is often distributed very unequally within countries – more so than other levels of education.

4. The World Education Indicators (WEI) programme was launched in 1997 by a number of countries together with UNESCO and OECD and with financial support from the World Bank. The aim of the programme is to contribute to the conceptual and developmental work carried out by OECD and UNESCO in the field of education indicators. Eighteen countries currently participate in this programme.

Table 2.4. The Niger: new entrants to primary education having experienced some form of ECCE programme (1999 and 2001)

	1999				2001				Increase 1999-2001
	Total	Boys	Girls	% girls	Total	Boys	Girls	% girls	(%)
Kindergartens, pre-primary classes	6040	3126	2914	48.2	6762	3605	3157	46.7	12.0
Koranic schools	19553	11131	8422	43.1	27137	15794	11343	41.8	38.8
Total	25593	14257	11336	44.3	33899	19399	14500	42.8	32.5
Koranic schools as % of total	76.4	78.1	74.3		80.1	81.4	78.2		
Total number of new entrants	145581	87601	57980	39.8	204069	120563	83506	40.9	40.2
% having received some form of ECCE	17.6	16.3	19.6		16.6	16.1	17.4		

Source: Niger (2002*a*, p. 18).

Table 2.5. Percentage of children aged 3 to 5 attending some form of organized early childhood education programme, by urban/rural area and by gender (2000)

	Total	Boys	Girls	Urban	Rural
Azerbaijan	11.4	12.2	10.5	19.1	3.5
Bolivia	17.3	16.6	17.9	18.2	15.9
Côte d'Ivoire	6.2	6.8	5.7	12.9	1.2
Kenya	15.6	14.1	17.3	30.1	11.0
Philippines	29.2	25.9	32.5	33.7	25.5

Source: UNICEF (2000).

This reflects the fact that governments, especially those in developing countries, do not feel obliged to provide for this level of education. It is not usually included in the domain of compulsory schooling and, unlike primary and secondary education, pre-primary education has not been defined, historically, as a government responsibility in international human rights treaties (Tomasevski, 2003, p. 16). Across all countries, higher GERs are associated with lower proportions of pre-primary pupils in private schools.[5]

Figure 2.4 shows variation of the proportion of pre-primary pupils enrolled in privately managed institutions.[6] The median values are highest in the Arab States (85%), where ECCE is often provided by religious institutions. However, sub-Saharan Africa, and East Asia and the Pacific also have high median values (just above 60%). South and West Asia, and Latin America and the Caribbean each have a wide range of values (between 3% for India and 100% in the case of Bhutan and many Caribbean states. In North America and Western Europe, private institutions never cater for more than 70% of the total enrolment, with the lowest value being in Denmark (2.7%) where the share of public funding represented 82% in 1999 (UNESCO Institute for Statistics/OECD, 2003*a*, p. 185). As expected, the lowest shares of private enrolments are found in Central and Eastern Europe and Central Asia, where these services have historically been provided by the state (Figure 2.5).

5. This negative relationship, although not strong, holds for all countries and for developing countries separately ($R^2 = 0.1$).

6. Note that an institution is defined here as private if it is privately managed, whether or not it receives financial contributions from the state. Thus, countries with a high proportion of enrolments in private institutions may nevertheless provide substantial public support to ECCE.

Box 2.2. National averages conceal considerable inequality

National averages can hide considerable variation in availability and use of ECCE opportunities within countries. Urban parents are more sensitized to the benefits of pre-primary-schooling provisions than are rural parents. From the supply point of view, pre-primary education provisions concentrate in urban and richer areas of a country. Thus, in Cameroon, enrolment ratios, which stand at 12% as a national average, vary from lows of 1% to 3% in the poorer Extrême-Nord and Adamaoua provinces, to highs of 41% and 32% in the richer Centre and Littoral provinces, as shown in the table below. The high costs of public pre-primary education, and the even higher costs of private education, make it a domain reserved for the richest segments of the population. Note, however, that gender parity across provinces does not vary as greatly as does the level of enrolment, with GPI ranging from 0.90 in Nord province to 1.08 in Est province.

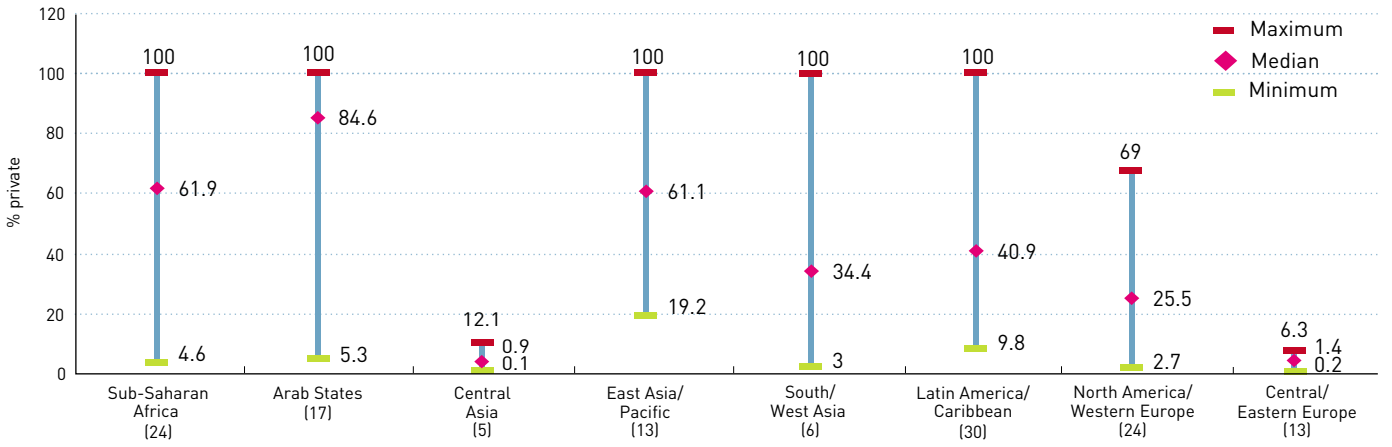
Cameroon: gross enrolment ratio in pre-primary education, by province (1999)

Provinces	GER (%) Both sexes	GPI[1] F/M
Adamaoua	3	0.98
Centre	41	0.95
Est	19	1.08
Extrême-Nord	1	1.02
Littoral	32	0.99
Nord	4	0.90
Nord-Ouest	6	1.06
Ouest	15	0.97
Sud	19	0.97
Sud-Ouest	9	0.97
Country total	12	0.97

1. Calculated on female and male enrolments.

Source: Cameroon (2001).

Figure 2.4. Percentage of private enrolment in pre-primary education (2000): median values and variation within regions



Source: Statistical annex, Table 11.

Gender disparities

In most of the countries with available data, gender disparities in favour of boys are less pronounced in pre-primary education than other levels of education. Furthermore, marked disparities in favour of girls are reported in several countries. Less than one-third of countries (51 out of 145) report gender disparities where the gender parity index (GPI) – which measures the ratio of female-to-male value of a given indicator – is below 0.96 or above 1.04. Table 2.6 shows that in very few of these are the disparities really significant (below 0.90 or above 1.10). Morocco, where pre-primary education is purely private and mostly provided by Koranic schools, has the highest disparities in favour of boys (GPI = 0.57). The others are Liberia (GPI = 0.89), Tajikistan (0.84), Nepal (0.79) and Pakistan (0.74). In contrast, Djibouti reports the highest disparity in favour of girls (GPI = 1.44) but in relation to very low levels of enrolment. Other high disparities in favour of girls (GPI > 1.10) are found in sub-Saharan Africa (Namibia) and Asia and the Pacific (Bangladesh, Malaysia, Mongolia and Tonga).

As shown later in this chapter, girls' access to ECCE is considerably better than to primary education. How can this be explained?

Data available for Senegal can help to address this question. In 1998, total enrolment in formal pre-school stood at 2.7% of all children. The private share accounted for 2 percentage points and the public share a mere 0.7. The GPI was in favour of girls, with a value of 1.06 (in 1999).

Table 2.6. Pre-primary education: gender parity index of gross enrolment ratio (2000) (countries with GPI below 0.96 and above 1.04)

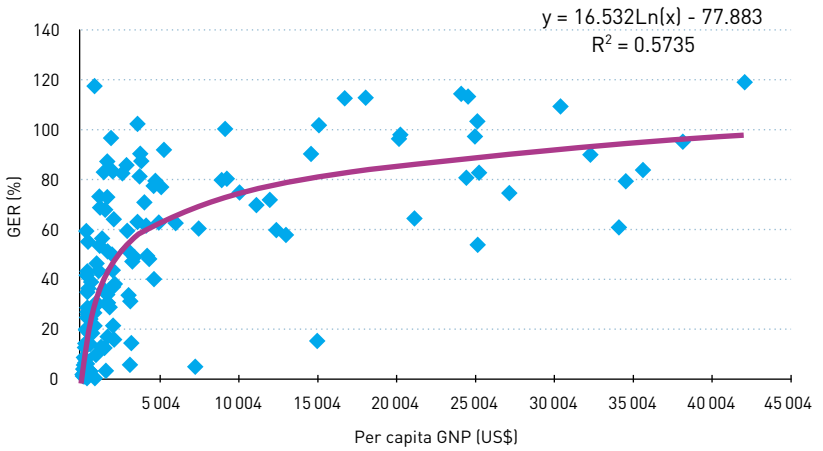
Countries with GPI below 0.96 and above 1.04			
Countries with disparities in favour of boys		Countries with disparities in favour of girls	
Countries	**GPI**	**Countries**	**GPI**
Sub-Saharan Africa		Sub-Saharan Africa	
Liberia	0.89	Guinea-Bissau	1.05
Gambia	0.90	Congo	1.06
Eritrea	0.91	Cape Verde	1.06
Benin	0.95	Burkina Faso	1.07
Burundi	0.95	Comoros	1.08
		Namibia	1.15
Arab States		Arab States	
Morocco	0.57	Djibouti	1.44
Oman	0.90		
Jordan	0.91		
Yemen	0.92	Asia and the Pacific	
Syrian A. R.	0.93	*Central Asia*	
Qatar	0.93	Mongolia	1.11
Saudi Arabia	0.93	*East Asia and the Pacific*	
Palestinian A.T.	0.94	Philippines	1.05
Bahrain	0.94	Cambodia	1.07
Egypt	0.95	Lao PDR	1.09
		Vanuatu	1.09
Asia and the Pacific		Samoa	1.09
Central Asia		Palau	1.10
Tajikistan	0.84	Malaysia	1.18
East Asia and the Pacific		Tonga	1.30
Viet Nam	0.92	*South and West Asia*	
Niue	0.93	Iran, Isl. Rep.	1.07
Macao, China	0.93	Bangladesh	1.12
China	0.93		
Papua N. Guinea	0.94	LAC	
South and West Asia		Saint Lucia	1.05
Pakistan	0.74	Honduras	1.05
Nepal	0.79	Belize	1.06
		Barbados	1.07
Central/Eastern Europe		Bahamas	1.09
Turkey	0.94		
Latvia	0.94	N. America/W. Europe	
Russian Fed.	0.94	Norway	1.06
		Central/Eastern Europe	
		Albania	1.07

Source: Statistical annex, Table 3.

Figure 2.5. Pre-primary education: share of private and public enrolment in gross enrolment ratio (2000)

Note: The number next to each bar represents the percentage of pre-primary enrolments in private schools.
Source: Statistical annex, Table 11.

Figure 2.6. Pre-primary education: per capita GNP and gross enrolment ratio (2000)



Source: Statistical annex, Tables 1 and 5.

Much higher, at 8.1% of all children, stood enrolment in the non-formal sector, consisting of special NGO-supported programmes (UNESCO, 2003*b*). This larger group is not yet covered by official statistics, and the GPI is not known for it. However, girls are likely to enrol in roughly equal numbers to boys in such targeted programmes because reduction of gender inequality and empowerment of women are often among their explicit goals.

Senegal's large non-formal ECCE sector is not alone. The Integrated Child Development Services (ICDS) project in India, for example, began as a small programme for the poorest groups and eventually served 16 million children in 1992 (Consultative Group on ECCD, 1993). These programmes typically consist of thousands of small locally managed projects, each serving fifteen to twenty children (Eming Young, 2002).

The formal ECCE sector tends to be rather small in poor countries, as Figure 2.6 clearly illustrates. Yet, as has been shown, the share of private provision can be high in countries with low overall enrolment (Figure 2.5). Gender ratios tend to be relatively balanced in private ECCE. Myers (2001) confirms that access to ECCE depends strongly on family income. Those parents who can afford to send their children to private ECCE centres are less likely to be forced to be selective by enrolling only their sons.

Two sub-sectors of ECCE are thus found in poorer regions where the greater part of total enrolments are concentrated: non-formal programmes, which often target poorer groups, and private formal provision. In both, gender parity is likely to be high, albeit for different reasons. This is much less so in the case of primary schooling, where there is little targeted support and where children of primary age are more at risk of being out of school for economic reasons than are younger children.

Girls' access to early childhood education is much better than their access to primary education.

Universal primary education and the gender goals

Goal 2. Ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete free and compulsory primary education of good quality.

Goal 5. Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality.

Parity and equality – what are the differences?

Gender parity and gender equality in education mean different things.

Gender parity and gender equality in education mean different things. The first is a purely numerical concept. Reaching gender parity in education implies that the same proportion of boys and girls – relative to their respective age groups – would enter the education system and participate in its different cycles.

Gender equality, on the other hand, means that boys and girls would experience the same advantages or disadvantages in educational access, treatment and outcomes. In so far as it goes beyond questions of numerical balance, equality is more difficult to define[7] and measure than parity.

The achievement of full gender equality in education would imply:

- *equality of opportunities*, in the sense that girls and boys are offered the same chances to access school, i.e. parents, teachers and society at large have no gender-biased attitudes in this respect;
- *equality in the learning process*, i.e. girls and boys receive the same treatment and attention, follow the same curricula, enjoy teaching methods and teaching tools free of stereotypes and gender bias, are offered academic orientation and counselling not affected by gender biases, profit from the same quantity and quality of appropriate educational infrastructures;
- *equality of outcomes*, i.e. learning achievements, length of school careers, academic qualifications and diplomas would not differ by gender;
- *equality of external results*, i.e. job opportunities, the time needed to find a job after leaving full-time education, the earnings of men and women with similar qualifications and experience, etc., would all be equal.

The last condition, while not strictly part of a notion of educational equality, is nevertheless entailed by it: the persistence of gender discrimination in the labour market prevents the attainment of equality of access, treatment and outcomes in education by affecting the relative costs and perceived benefits of educating girls and boys. Accordingly, if full gender equality in education were to be achieved, it is probably the case that ending labour market discrimination, in all its gendered forms, would be required.

These, then, are ambitious implications of the EFA gender goals, the fuller ramifications of which are explored in Chapters 3 and 4 of this report. For present purposes, the concern is how to assess progress towards them. Gender parity is measured by the ratio between the female and male values for a given indicator (such as enrolment or intake rates). This gender parity index indicates male advantage for values less than unity and female advantage for higher values. On the other hand, measuring gender equality in education is much more complicated. Indicators for some of its aspects are already available for some countries. These are being standardized and their application extended elsewhere, as with the indicators of educational outcomes and learning achievements (see 'Educational quality' below).

Other aspects, however, will need indicators of a more qualitative nature than those currently in use. These might include the perceptions of students, teachers and parents as regards treatment of girls and boys; their expectations with respect to the benefits of boys' and girls' schooling; the reasons offered by the same groups for boys' and girls' drop-out, non-attendance or incomplete schooling, and so on.

At present, most internationally comparable data focus on parity. These are discussed and compared for secondary and tertiary education

7. For a thorough discussion on equity and equality and on relevant indicators, see Hutmacher et al. (2001, Introduction p. 7).

in the next two sections of this chapter. The present section assesses progress towards gender parity at primary level and considers broader aspects of the progress being made towards universal primary education (UPE).

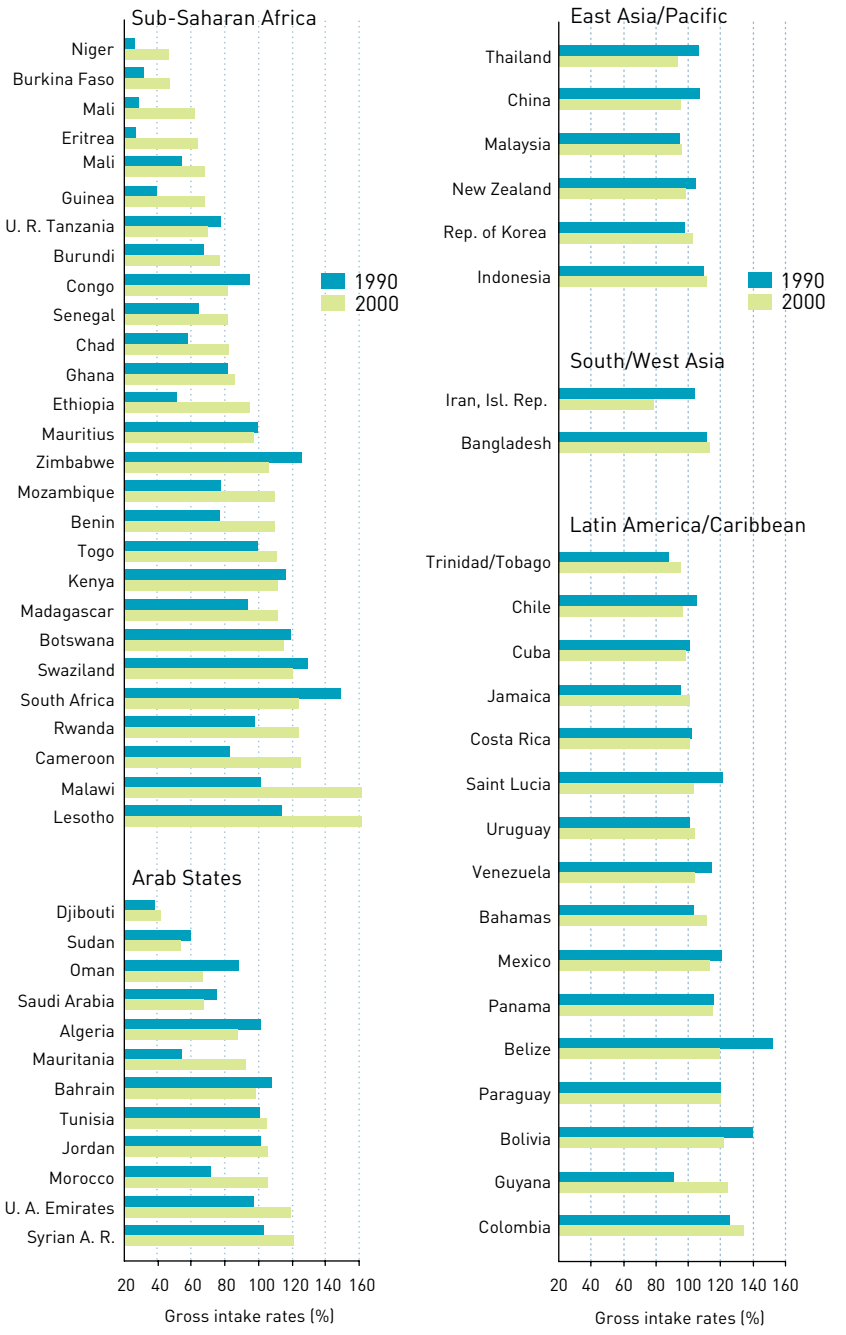
Access to primary education

Universal enrolment of children in school cannot be achieved unless first-grade intakes approximate 100% of the starting age range. Accordingly, gross and net intake rates provide useful indicators of one aspect of progress towards EFA. In what follows the focus is on the gross intake rate (GIR), mainly because age-adjusted net intake rates (NIR) are less widely available. Secondly, however, the NIR depends very much on the selection of the reference age. In many developing countries the 'official' entrance age means little. The high proportion of late entrants in sub-Saharan Africa and Latin America and the Caribbean implies that the NIR often underestimates the actual access. For example, in 1996 in Chile, where the official entrance age is 6 years, the NIR for 6-year-olds was 38%, as against 60% for 7-year-olds. In Lesotho (1996) the values were respectively 30% for the official entrance age and 35% for one year older. In other countries the proportion of under-age enrollees may be significant (Indonesia, Morocco, Ukraine) (UNESCO, 1999, Table II.10). On the other hand, when there are many early or late entrants the GIR may effectively overestimate access. Thus the two indicators have to be interpreted with care.

Figure 2.7 shows that, since 1990, school intakes expressed in terms of GIR have increased in the majority of developing countries (about 60% of those with comparable data). Some of these increases have been quite substantial, the most outstanding having occurred in Lesotho, where the GIR, already high in 1990 (114%), jumped to 183%, due to the introduction of fee-free education in 1999. Other notable increases (30 points or more) were reported in Benin, Cameroon – where school fees were abolished in 2000 – Eritrea, Ethiopia, Guyana, Malawi, Mali, Mauritania, Morocco and Mozambique.

Declines were however registered in about 40% of the countries, often where the GIR had exceeded 100% in 1990 and values moved back towards 100%. Some Latin American and Caribbean countries were among them (Bolivia,

Figure 2.7. Primary education: gross intake rate to Grade 1 (1990 and 2000)[1]
(countries with data for the two years, in increasing order of GIR in 2000)



General note: See source table for detailed country notes.
1. Not including North America and Europe.
Source: Statistical annex, Table 4.

Once enrolled in school, girls tend to perform as well as, or better than boys.

Chile, Saint Lucia, Venezuela) but also Bahrain, China, South Africa and Zimbabwe. Thus these decreases may partly reflect a regularization of the pupils' school-entrance age, through a reduction in the number of late entrants.[8]

On the other hand, some decreases in the GIRs reflect a real decline in access to school, as in the Congo and the United Republic of Tanzania in sub-Saharan Africa; the Islamic Republic of Iran and Thailand in Asia; and Algeria, Oman, Saudi Arabia and the Sudan among the Arab States. It is disturbing to note that in certain cases these values were already rather low in 1990, as in the United Republic of Tanzania, where the decline – which began in the 1980s with the introduction of school fees – has brought the GIR to only 70%. This compares with 95% in 1975, when UPE was within reach.

Variation within regions

Access to school is still extremely low in many countries, although wide variations can be observed across different regions. Figure 2.8 and Statistical annex Table 4 show that the range of GIRs is widest in sub-Saharan Africa, with exceptionally high values in Lesotho and Malawi, associated with measures abolishing school fees. In those transition countries for which data are available the GIR is always above 95%, with the exception of the Republic of Moldova (92%), and Georgia (88%) in Central Asia, and Serbia and Montenegro (67%) and Croatia (87%) in Central and Eastern Europe. Equally, GIRs in North America and Western Europe are seldom below 98% and, when this is so (e.g. 94% in Switzerland and 95% in Italy) it is not clear whether residual categories of children remain out of school, whether particular categories are not included in the reporting of primary pupils, or whether it is due to errors of reporting.

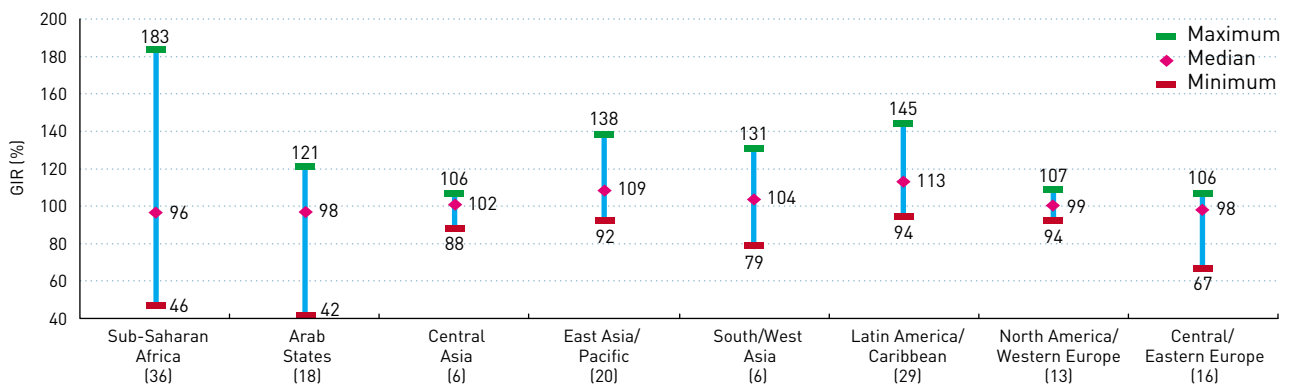
While the GIR can suggest an inflated picture of access to primary schooling (as in the case of Lesotho and Malawi), the net intake rate, which only includes official school-entrance age children in its calculation, may underestimate the extent to which children of different ages eventually enter school. The values are nevertheless disturbingly low in some countries (Yemen 28%, Burkina Faso 21%, Angola 17.5%).

Gender disparities in access to school

It is obvious that the relative schooling outcomes for girls and boys are heavily determined by whether parents send them to school in the first place. However, the circumstances determining access are given particular importance by the fact that once enrolled in school, girls tend to perform as well as, or better than, boys. As Figure 2.9 shows, there has been a significant shift towards greater gender parity of intakes since 1990. The most remarkable gains have been registered in Bangladesh, Benin, Chad, Guinea, Mali, Mauritania and Morocco. Rather unusually, girls' disadvantage has increased in Burundi and Djibouti and, to a lesser extent, in Cameroon. In some countries where the GPI showed an imbalance in favour of girls in 1990, the situation now appears to be in favour of boys (Colombia, Lesotho, Madagascar).

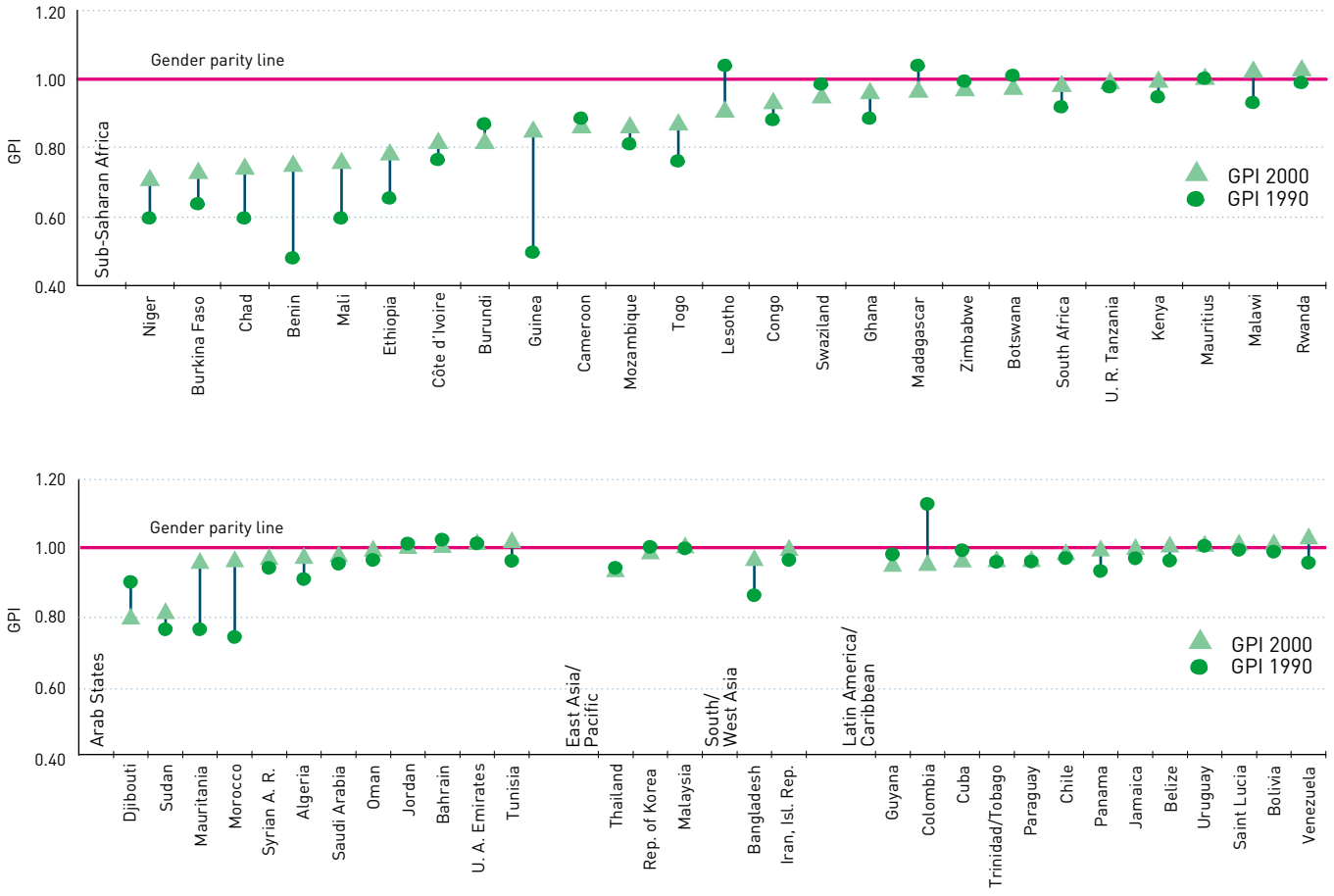
8. Although European countries are not shown in Figure 2.7, access to education is almost universal and GIRs were generally around 100% both in 1990 and 2000, with the exception of Serbia and Montenegro. The increase to 100% in Cyprus and Romania, up from GIRs of 88% and 85% respectively, is the most noteworthy over the decade.

Figure 2.8. Primary education: gross intake rate, median values and variation within regions (2000)



Source: Statistical annex, Table 4.

Figure 2.9. Primary education: gender parity index of gross intake rate (1990 and 2000)
(developing countries with data for 1990 and 2000)



Source: Statistical annex, Table 4.

Summary of the situation in 2000

Achieving gender parity in intake rates is a necessary, but not sufficient, condition to reach parity in participation in, and completion of, primary education.[9] This means that, in order for a country to achieve UPE by 2015, intakes to the first grade should reach 100% around the year 2010. Similarly, gender parity in primary enrolment by 2005 would have required intake parity by 2000.

Prospects for achieving these outcomes, therefore, are suggested by Table 2.7, which demonstrates clearly that discrimination in access to schooling is sharply concentrated on girls. Eleven countries, seven of which are in sub-Saharan Africa, report female intake rates which were less than 80% of the male rates in 2000. The lowest values of GPI (below 0.74) are found in three sub-Saharan African countries (Mali, the Niger, Burkina Faso) followed by Pakistan, Chad, Guinea-Bissau, Benin – all with GPI of 0.75 or just below. Yemen, Ethiopia, Suriname and Djibouti – with GPIs between 0.76 and 0.80 – also have far to go to achieve intake parity in primary schooling. Fourteen countries had GPIs between 0.80 and 0.90, most of which are in sub-Saharan Africa, but also include India, the Lao People's Democratic Republic and the Sudan. Here, although intake rates are higher it seems that parity of enrolments throughout the system cannot be achieved by 2005, given the present and historically unequal intake rates. In contrast, disparities to the disadvantage of boys appear to be a much less significant feature in primary education as the GPI in no case exceeds 1.04.

9. Although initial intake inequalities could be counterbalanced by later imbalances in rates of drop-out from school, this would not be a desirable way to achieve enrolment parity.

Table 2.7. Primary education: gender parity index of gross intake rate (2000)
(countries with GPI below 0.98 – in favour of boys; or above 1.02 – in favour of girls)[1]

Countries with GPI below 0.98

Countries	GIR GPI
Sub-Saharan Africa	
Niger	0.71
Burkina Faso	0.73
Chad	0.75
Guinea-Bissau	0.75
Benin	0.75
Mali	0.76
Ethiopia	0.78
Côte d'Ivoire	0.82
Burundi	0.82
Eritrea	0.84
Guinea	0.85
Comoros	0.86
Cameroon	0.86
Mozambique	0.86
Togo	0.87
Angola	0.88
Lesotho	0.91
Congo	0.93
Gambia	0.95
Swaziland	0.95
Ghana	0.96
Sierra Leone	0.97
Madagascar	0.97
Zimbabwe	0.97
Arab States	
Yemen	0.76
Djibouti	0.80
Sudan	*0.82*
Iraq	*0.89*
Mauritania	0.96
Morocco	0.97
Syrian A. R.	0.97
Egypt	0.97

Countries	GIR GPI
Asia and the Pacific	
Central Asia	
Tajikistan	0.94
Kyrgyzstan	0.96
East Asia and the Pacific	
Lao PDR	0.88
Philippines	0.94
Thailand	0.94
Cambodia	0.94
Indonesia	0.95
Viet Nam	0.95
Samoa	0.96
Fiji	0.96
Macao. China	0.97
South and West Asia	
Pakistan	0.74
India	*0.84*
Nepal	0.90
Bangladesh	0.97
Latin America and the Caribbean	
Suriname	0.77
Dominican Rep.	0.91
Bahamas	*0.92*
Nicaragua	0.94
Guyana	*0.95*
Colombia	0.96
El Salvador	*0.96*
Cuba	0.97
Trinidad/Tobago	0.97
Paraguay	0.97
Guatemala	0.97
Western Europe	
Malta	0.97
Central and Eastern Europe	
Estonia	0.96

GPI ≤ 0.80 | 0.80 < GPI ≤ 0.90 | 0.90 > GPI ≤ 0.97

Countries with GPI above 1.02

Countries	GIR GPI
Sub-Saharan Africa	
Cape Verde	1.03
Malawi	*1.03*
Rwanda	1.03
Namibia	1.03
Latin America and the Caribbean	
Venezuela	1.03

Countries	GIR GPI
Western Europe	
Luxembourg	1.04
Switzerland	1.04
Central and Eastern Europe	
Serbia and Montenegro	1.04

1.10 > GPI ≥ 1.03

1.The following countries have values between 0.98 and 1.02 (countries listed in increasing order of GPI):
Sub-Saharan Africa: Botswana, Gabon, South Africa, Senegal, United Republic of Tanzania, Kenya, Mauritius, Zambia.
Arab States: Algeria, Lebanon, Saudi Arabia, Oman, Kuwait, Jordan, Bahrain, Palestinian Autonomous Territories, United Arab Emirates, Tunisia.
Central Asia: Azerbaijan, Georgia, Kazakhstan, Mongolia.
East Asia and the Pacific: Republic of Korea, Myanmar, Tonga, New Zealand, Vanuatu, Malaysia, Brunei Darussalam, Palau.
South and West Asia: Maldives, Islamic Republic of Iran.
Latin America and the Caribbean: Costa Rica, Netherlands Antilles, Aruba, Chile, Ecuador, Barbados, Panama, Honduras, Argentina, Jamaica, Mexico, Peru, Belize, Uruguay, Saint Lucia, Bolivia.
North America and Western Europe: Austria, Iceland, Netherlands, Italy, France, Germany, Ireland, Finland, Denmark, Cyprus.
Central and Eastern Europe: Republic of Moldova, Albania, Belarus, Hungary, Bulgaria, Lithuania, Czech Republic, Croatia, Romania, Latvia, Slovenia, Poland, Slovakia, The former Yugoslav Republic of Macedonia.
General note: See source table for detailed country notes.
Source: Statistical annex, Table 4.

In conclusion, Figure 2.10 shows that countries with the highest disparities (GPI below 0.80) also tend to be those with the lowest values as regards intake rates to education. Those shown in Figure 2.10 are mainly West African countries. As indicated in an earlier report (UNESCO, 2002*b*), they tend also to be the most disadvantaged countries in economic terms: they belong to the group of least developed countries, having a per capita income of less than US$1 a day and decreasing, for most of them, during the last decade (see Statistical annex, Table 1). They are also part of the group of the heavily indebted poor countries (HIPC). As indicated later in this report, poverty is one factor, although not the only one, which negatively affects girls' access to and participation in education.

Participation: total enrolment by region

Total enrolment in primary education increased from 596 million in 1990 to 648 million in 2000, an overall increase of 8.7% in ten years (Table 2.8). This increase is essentially due to gains in developing countries. The highest relative increase occurred in sub-Saharan Africa (38%) with smaller but significant increases in South and West Asia (19%) and the Arab States (17%). In these regions the gains in enrolment significantly outpaced the increase in the school-age population, resulting in rising enrolment ratios over the decade (Table 2.9). Latin America and the Caribbean registered a decline of 6%, largely due to the changes in the classification of primary education occurring between 1990 and 2000 in many countries of the region (see Statistical annex, Table 5). Thus in Brazil and Chile the duration of primary education was taken to be eight grades in 1990. This compares with a duration of four grades in Brazil and six grades in Chile in 2000. In Venezuela the duration was nine years in 1990, compared with six years in 2000, which explains why enrolment ratios show an increase during the period. In countries in transition, on the other hand, a substantial decrease in enrolment was registered (–21% in Central and Eastern Europe) owing largely, but not exclusively, to the parallel demographic decline.

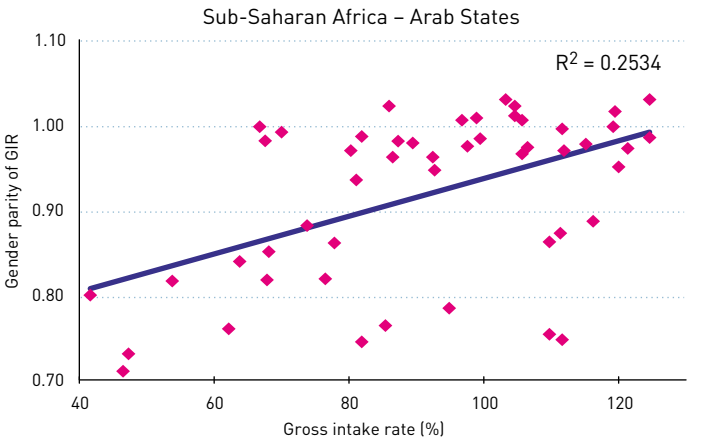
Nevertheless, sub-Saharan Africa remains furthest from achieving UPE. Enrolment gains in South and West Asia and the Arab States have been significant, but almost 20% of the age group in these regions remain out of school. East Asia

and the Pacific was in 1990 one of the regions closest to UPE, but the increases in enrolment over the decade were insufficient to prevent the NER falling from 96% to 93%. China accounted for most of this disappointing progress. Latin America and the Caribbean registered striking GER and NER gains of 18 points and 10 points respectively. Net enrolments of 97% by 2000 indicate that the region as a whole is very close to having achieved UPE.

The gender ratios of enrolments (as with the intake rates discussed earlier) are lowest in South and West Asia, sub-Saharan Africa and the Arab States. In each of these regions the gender parity index for GERs remains less than 0.9. Table 2.9, however, shows that the GPIs are consistently better for NERs than GERs – implying that pupils outside the official age range tend more often to be boys than girls. This is partly generated by repetition rates being higher for boys.

At the global level, girls' enrolments have increased faster than those of boys over the decade to 2000. As a result, the GPI for GER increased from 0.89 to 0.93 and for NER from 0.88 to 0.94. More particularly, in the three regions where gender inequalities are greatest (sub-Saharan Africa, Arab States and South and West Asia) disparities seem to have eased substantially, especially as regards the NER in South and West Asia, where the GPI rose from 0.67 to 0. 85. Gains have also been significant in East Asia and the Pacific, where the gender gap in GER has now been removed. Furthermore, in developed and transition countries, a GPI of around unity for both GER and NER indicate that, here too, gender parity in primary education has been achieved in these countries since 1990.

Figure 2.10. Primary education: intake rate and gender parity (2000)



Source: Statistical annex, Table 4.

Out-of-school children

An estimated 104 million children of primary-school age (as defined by each country) were not enrolled in school at the turn of the millennium.[10] Almost all these children lived in developing countries. Overall, their numbers fell by around

An estimated 104 million children of primary-school age were not enrolled at the turn of the millennium.

Table 2.8. Enrolment (millions) in primary education, by region (1990 and 2000)

	Enrolment					
	1990			2000		
	Total	Female	% F	Total	Female	% F
World	595.5	273.2	45.9	647.5	302.7	46.7
Developing countries	505.0	229.1	45.4	562.2	261.2	46.5
Developed countries	61.3	29.8	48.6	62.3	30.3	48.7
Countries in transition	29.3	14.3	48.9	23.0	11.1	48.6
Sub-Saharan Africa	62.0	28.0	45.2	85.8	39.9	46.5
Arab States	30.5	13.2	43.4	35.7	16.4	46.0
Asia and the Pacific						
Central Asia	5.1	2.5	49.1	6.7	3.3	48.7
East Asia and the Pacific	206.7	97.4	47.1	211.2	100.9	47.8
South and West Asia	134.9	56.0	41.5	160.5	70.7	44.1
Latin America and the Caribbean	75.0	36.6	48.8	70.3	34.1	48.5
North America and Western Europe	50.1	24.3	48.6	52.7	25.7	48.7
Central and Eastern Europe	31.2	15.1	48.5	24.5	11.8	48.0

Note: Comparisons between the two years should be made with caution as the classification of primary education has changed for many countries. In particular, some countries reported a duration of more than six years in 1990, often equating primary to basic education. The duration for these countries has now been reduced to six grades or less. See indications of changes by country in the source table.
Source: Statistical annex, Table 5.

10. The numbers of out-of-school children have been re-estimated by the UIS in 2003, based on the latest data revision. They include all children of official primary-school age, in each country, who are not enrolled in school. The present estimate of 104 million out-of-school children in 2000 is considerably lower than the estimate of 115 million for 1999, given by the *EFA Report 2002* (UNESCO 2002*b*: p. 52). This is a consequence of a change in the duration of primary schooling in China, India and Russia, amongst other countries. In each of these cases, the official length of the primary span was reduced by one year, thereby reducing the size of the school-age population and, thus (for any given enrolment ratio), the number of children counted as being out-of-school.

Table 2.9. Gross and net enrolment ratio in primary education, by region (1990 and 2000)

	1990				2000				1990				2000			
	GER (%)			GPI	GER (%)			GPI	NER (%)			GPI	NER (%)			GPI
	Total	Female	% F	F/M	Total	Female	% F	F/M	Total	Female	% F	F/M	Total	Female	% F	F/M
World	99	105	93	0.89	101	104	97	0.93	82	87	77	0.88	84	86	81	0.94
Developing countries	99	106	92	0.87	101	105	96	0.92	80	86	73	0.86	82	85	79	0.93
Developed countries	103	103	102	0.99	102	102	102	1.00	97	97	97	1.01	97	97	97	1.01
Countries in transition	95	95	94	0.99	100	100	99	0.99	88	88	88	1.00	90	89	91	1.02
Sub-Saharan Africa	74	81	67	0.83	82	87	76	0.88	55	59	51	0.86	58	61	56	0.92
Arab States	87	97	78	0.80	92	97	86	0.89	76	84	68	0.82	81	85	77	0.90
Asia and the Pacific																
Central Asia	85	86	85	0.99	100	100	99	0.99	81	82	81	0.99	91	91	90	0.99
East Asia and the Pacific	117	120	114	0.94	110	111	109	0.99	96	98	94	0.96	93	93	93	1.00
South and West Asia	92	104	79	0.76	96	104	87	0.84	73	87	58	0.67	81	87	74	0.85
Latin America and the Caribbean	105	106	104	0.98	123	125	122	0.97	87	87	86	0.99	97	97	96	0.99
North America and Western Europe	103	104	103	0.99	102	103	102	1.00	96	96	97	1.01	96	96	97	1.01
Central and Eastern Europe	98	98	97	0.98	100	101	98	0.97	90	90	89	0.99	92	92	92	1.00

Source: Statistical annex, Table 5.

The number of African children out of school increased by 17% over the decade.

4% over the decade 1990–2000 – but their regional characteristics differ strongly across the world (Table 2.10). First, out-of-school children are strongly concentrated in the countries of sub-Saharan Africa and South and West Asia: fully three-quarters of them live in these two regions. The trend within these regions is, however, different. In South and West Asia, schooling systems expanded rapidly over the 1990s such that, notwithstanding population growth, the number of out-of-school children fell by about 20%. In sub-Saharan Africa, on the other hand, expansion was slower, and population growth stronger. Accordingly, the number of African children out of school increased by 17% over the decade.

Second, girls comprise 57% of all out-of-school children, down 6 points from the level a decade ago. The steepest reduction occurred in East Asia and the Pacific, where the percentage has fallen from 71% to 49%; the negative side of this apparently favourable trend is the more than threefold increase in the number of out-of-school boys in that region, compared with a more moderate increase in the corresponding number of girls. The number of out-of-school girls is highest in sub-Saharan Africa (23 million), followed by South and West Asia (21 million). The latter region, however, still has the highest share of out-of-school girls, who account for two-thirds of its out-of-school children (down from three-quarters in 1990). In other regions the out-of-school numbers are mainly falling – with the exception of East Asia and the Pacific, where the

Table 2.10. Estimated number of out-of-school children, by gender and by region (1990 and 2000)

	Out-of-school children (thousands)							
	1990				2000			
	Total	Male	Female	% F	Total	Male	Female	% F
World	108782	40169	68613	63	104189	45144	59045	57
Developing countries	103301	37311	65990	64	100169	42862	57307	57
Developed countries	1831	1020	811	44	1829	1035	794	43
Countries in transition	3649	1837	1812	50	2191	1247	944	43
Sub-Saharan Africa	37647	17225	20422	54	44025	20797	23228	53
Arab States	8531	3121	5410	63	7408	2971	4437	60
Asia and the Pacific								
Central Asia	1120	555	566	50	623	323	300	48
East Asia and the Pacific	7091	2046	5044	71	14023	7114	6909	49
South and West Asia	39917	10087	29830	75	32411	11094	21317	66
Latin America and the Caribbean	9390	4558	4832	51	1949	850	1099	56
North America and Western Europe	1809	1001	807	45	1808	1021	788	44
Central and Eastern Europe	1576	1702	52	52	1943	974	969	50

Source: UIS estimates, 2003 revision.

figure doubled from 7 million to 14 million over the 1990s. This is almost entirely explained by the reduction of primary-school enrolments in China – which has caused its NER to decrease from 97% to 93% over the decade.

A closer look: analysis of primary GER by country

No single statistic is adequate for the task of monitoring progress towards UPE. Historically, the GER has been used since 1980 (the year of the Addis Ababa plan) as the leading indicator of progress. More recently, however, as countries progress towards UPE, more and more of them have GERs exceeding 100%, their values being inflated by the number of early and late entrants and repeaters in school.

The NER also has drawbacks. Thus, where the official entrance age is different from the usual entrance age, an underestimation of actual school participation results. By including only children of primary-school age, the NER does not take into account other children who will eventually complete primary education. Thus, both indicators need to be examined in relation to each other and together with other parameters, such as the percentage of over-age pupils, the percentage of repeaters, and the survival and completion rates. Each of these tells important and complementary parts of the story.[11]

11. For further discussion, see 'Measuring and monitoring UPE' (UNESCO 2002*b*, Box 2.2, p. 55).

Table 2.11. Primary education: grouping of countries according to gross enrolment ratio (2000)
(in each box countries are listed in increasing order of GER)

Regions	Levels of GER			
	≤ 80%	80.1%-95%	95.1%-100%	Above 100%
Sub-Saharan Africa	Niger, Burkina Faso, Eritrea, Mali, U. R. Tanzania, Ethiopia, Burundi, Guinea, Chad, Angola, Senegal, Central African Rep., Zambia, Côte d'Ivoire (14)	Ghana, Gambia, Guinea-Bissau, Comoros, Mozambique, Kenya, Zimbabwe (7)	Benin, Congo (2)	Madagascar, Cameroon, Botswana, Mauritius, South Africa, Namibia, Lesotho, Rwanda, Liberia, Equatorial Guinea, Togo, Swaziland, Uganda, Malawi, Cape Verde, Gabon (16)
Arab States	Djibouti, Sudan, Saudi Arabia, Oman, Yemen (5)	Mauritania, Kuwait, Morocco (3)	Lebanon, U. A. Emirates, Egypt (3)	Jordan, Iraq, Bahrain, Qatar, Palestinian A. T., Syrian A. R., Algeria, Libyan A. J., Tunisia (9)
Central Asia			Georgia, Kazakhstan, Mongolia (3)	Azerbaijan, Kyrgyzstan, Tajikistan (3)
East Asia and the Pacific		Papua New Guinea, Myanmar, Thailand (3)	Cook Islands, Malaysia, Niue, New Zealand (4)	Japan, Rep. of Korea, Australia, Samoa, Macao (China), Brunei Darussalam, Viet Nam, Vanuatu, Fiji, Indonesia, Cambodia, Palau, Philippines, Tonga, Lao PDR, China, Kiribati (17)
South and West Asia	Afghanistan, Pakistan (2)	Isl. Rep. of Iran (1)		Bangladesh, India, Nepal, Maldives (4)
Latin America and the Caribbean		Bahamas, Grenada (2)	Jamaica (1)	Trinidad and Tobago, Venezuela, Cuba, Guatemala, Chile, Nicaragua, Honduras, Costa Rica, Neth. Antilles, El Salvador, Uruguay, Barbados, Aruba, Panama, Saint Lucia, Colombia, Paraguay, Mexico, Ecuador, Bolivia, Guyana, Argentina, Dominican Rep., Suriname, Peru, Belize, Brazil (27)
North America and Western Europe			Cyprus, United Kingdom, Greece, Canada (4)	Italy, Luxembourg, United States, Norway, Finland, Denmark, Iceland, Austria, Germany, France, Belgium, Spain, Malta, Switzerland, Netherlands, Sweden, Israel, Ireland, Portugal (19)
Central and Eastern Europe	Serbia and Montenegro (1)	Rep. of Moldova, Croatia (2)	Romania, The FYR of Macedonia, Poland (3)	Slovenia, Latvia, Turkey, Lithuania, Hungary, Slovakia, Estonia, Bulgaria, Czech Rep., Albania, Belarus, Russian Fed. (12)
Total number of countries 167	22	18	20	107

Source: Statistical annex, Table 5.

Countries where the number of repeaters and over-age pupils is high are still far from having all their children in school.

As regards the GER, it can be seen from Table 2.11 that twenty-two countries still have GERs that are lower than 80%. Two-thirds of them are in sub-Saharan Africa and a further quarter are Arab States. For some of them the situation is particularly critical: not only is their GER very low but participation is exaggerated by the presence of a high proportion of repeaters (e.g. Burundi, Chad, Côte d'Ivoire). However, almost two-thirds of the countries with available data have a GER above 100%. Yet countries in this group with high GERs are not necessarily close to UPE. Some countries, where the number of repeaters and over-age pupils is high (e.g. Cambodia, Cameroon, the Lao People's Democratic Republic, Madagascar, Nepal, Rwanda, Togo), remain far from having all their school-age children enrolled.

Table 2.12. Primary education: grouping of countries according to net enrolment ratio (2000)
(in each box countries are listed in increasing order of NER)

	Levels of NER			
Regions	**≤ 60%**	**60.1%-80%**	**80.1%-95%**	**Above 95%**
Sub-Saharan Africa	Niger, Burkina Faso, Angola, Eritrea, U.R. Tanzania, Ethiopia, Guinea, Guinea-Bissau, Burundi, Mozambique, Central African Rep., Comoros, Chad, Ghana (14)	Côte d'Ivoire, Senegal, Zambia, Madagascar, Kenya, Gambia, Benin, Equatorial Guinea, Lesotho, Zimbabwe (10)	Namibia, Botswana, Gabon, South Africa, Togo, Swaziland, Mauritius (7)	Cape Verde (1)
Arab States	Djibouti, Sudan, Saudi Arabia (3)	Mauritania, Oman, Yemen, Morocco (4)	Kuwait, Lebanon, U. A. Emirates, Egypt, Iraq, Jordan (6)	Bahrain, Syrian A. R., Palestinian A. T., Algeria, Tunisia (5)
Central Asia			Kyrgyzstan, Kazakhstan, Mongolia, Azerbaijan (4)	Georgia, Tajikistan (2)
East Asia and the Pacific			Lao PDR, Myanmar, Papua New Guinea, Cook Islands, Macao (China), Cambodia, Thailand, Vanuatu, Tonga, Indonesia, China, Philippines (12)	Viet Nam, Australia, Samoa, Malaysia, Niue, Palau, Fiji, New Zealand, Rep of Korea, Japan (10)
South and West Asia		Pakistan, Nepal, Isl. Rep. of Iran (3)	India, Bangladesh (2)	Maldives (1)
Latin America and the Caribbean			Nicaragua, Bahamas, Grenada, Guatemala, Honduras, Venezuela, Colombia, Chile, Uruguay, Costa Rica, Neth. Antilles, Paraguay, Trinidad and Tobago, Dominican Rep., Jamaica (15)	Brazil, Bolivia, Aruba, Cuba, Guyana, Belize, Suriname, Ecuador, Mexico, Argentina, Barbados, Saint Lucia, Peru, Panama (14)
North America and Western Europe			Ireland, Austria, United States, Cyprus (4)	Luxembourg, Greece, Malta, United Kingdom, Switzerland, Denmark, Netherlands, Sweden, Spain, Italy, France, Canada, Israel, Norway, Belgium, Iceland, Finland, Portugal (18)
Central and Eastern Europe	Serbia and Montenegro (1)	Rep. of Moldova (1)	Croatia, Slovakia, Hungary, Czech Rep. Latvia, The FYR of Macedonia, Romania, Slovenia, Bulgaria, Lithuania (10)	Albania, Estonia, Poland, Belarus (4)
Total number of countries 151	18	18	60	55

Source: Statistical annex, Table 5.

Net enrolment ratios

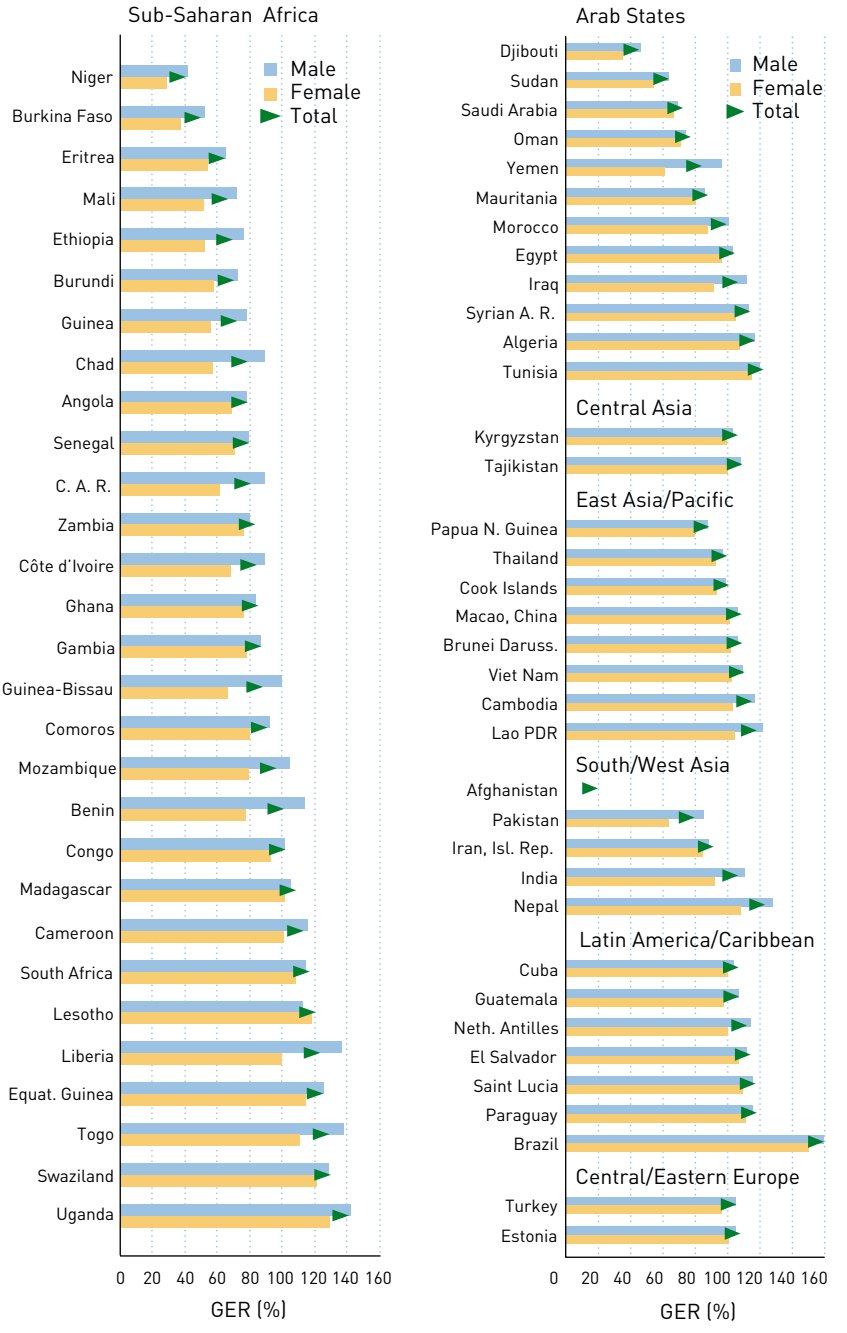
Table 2.12 shows primary net enrolment ratios (NER). One-quarter of the countries with available data have less than 80% of the primary age-group enrolled in school. Fourteen of these countries, with a NER of 60% or less, are African. They remain very far from reaching the UPE goal. African countries also comprise over half of those with a NER between 60% and 80%, where children are frequently out of school. In contrast, almost all countries of North America and Western Europe have high NERs, in excess of 95%, as do half of those from Latin America and the Caribbean and a number from East Asia and the Pacific.

Gender disparities in gross enrolment ratios

Figure 2.11 presents gross enrolment ratios by gender for 2000. In order to highlight countries with the greatest inequalities, only those with a GPI of 0.96 and below and those with a GPI of 1.04 and above are included. Those countries which are very close to achieving gender parity do not appear in the graph.

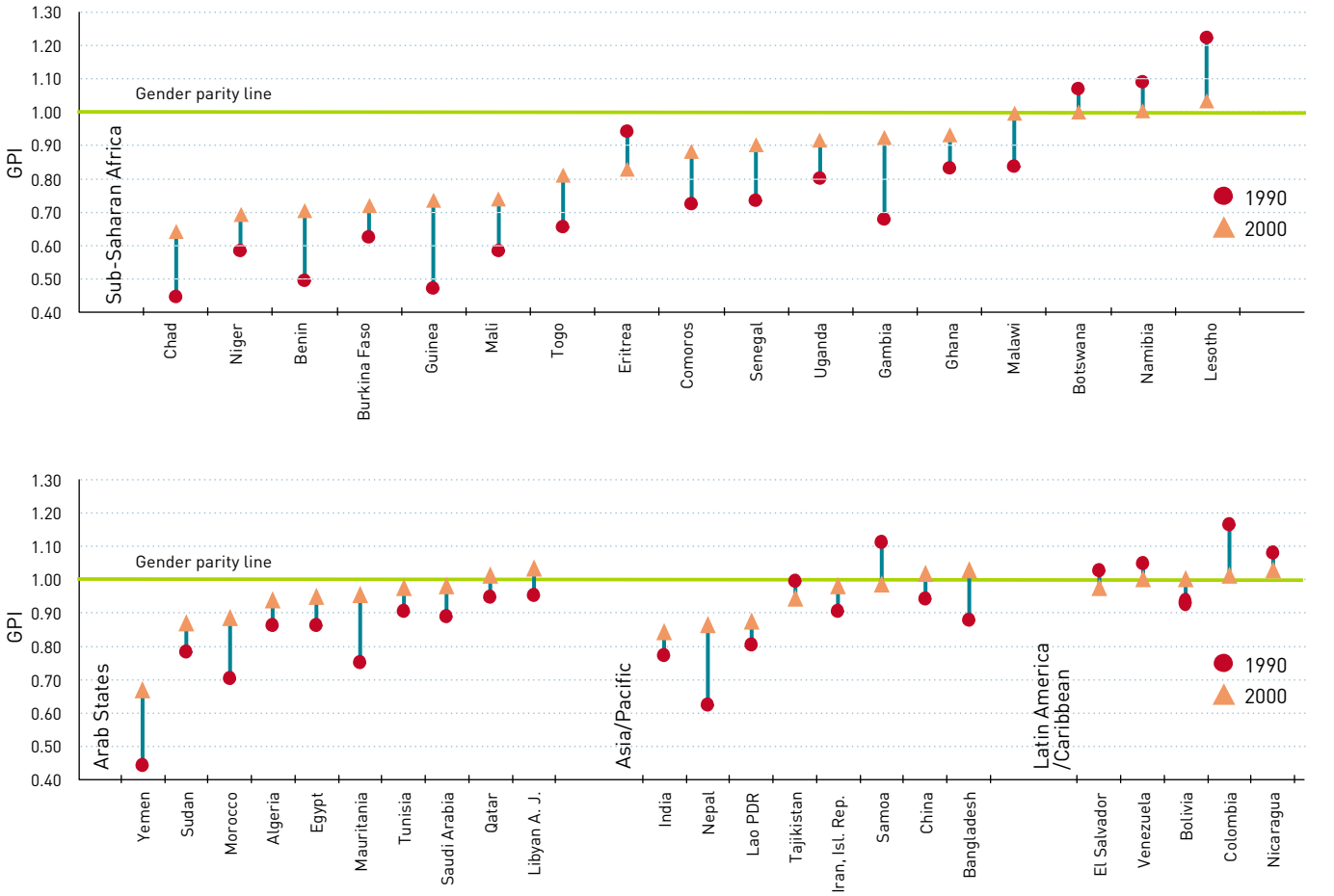
Gender disparities in primary enrolment are overwhelmingly to the disadvantage of girls. Sub-Saharan Africa has low GERs and strong inequalities in enrolments. In one-third of the countries shown, female ratios are around three-quarters of the male ratio or less (a GPI below 0.76). These are Chad, Burkina Faso, Mali, Ethiopia, Guinea, Guinea-Bissau, Benin, the Central African Republic and Liberia. Of the remaining seventeen countries having significant gender disparities, only one (Lesotho), shows a disparity in favour of girls. The Arab States have some of the lowest GERs (Djibouti and the Sudan) and the largest gender disparities (Yemen and Djibouti, with a GPI of 0.63 and 0.76 respectively). In Asia and the Pacific, a majority of countries have reached gender parity, or are close to doing so. However very large disparities remain in South and West Asia, especially in Pakistan (GPI = 0.74), followed by Nepal (0.85) and India (0.83). Values below 0.90 are also found in Cambodia (0.88) and the Lao People's Democratic Republic (0.86). In Latin America and the Caribbean, almost all countries have reached gender parity in primary education. This is also the case in North America and Europe except for Turkey, with a GPI of 0.92.

Figure 2.11. Primary education: gross enrolment ratio by gender (2000)
(not including countries with GPI between 0.97 and 1.03, i.e. very close to parity, in increasing order of total GER)



General note: See source table for detailed country notes.
Source: Statistical annex, Table 5.

Figure 2.12. Changes in gender disparities of gross enrolment ratios between 1990 and 2000
(countries with changes of 5 percentage points or more, in increasing order of GPI in 2000)



Source: Statistical annex, Table 5.

In summary, significant gender disparities to the disadvantage of girls are widespread in sub-Saharan African countries, certain Arab States and several countries of South and West Asia. Not surprisingly, these are the same group of low-income countries for which gender disparities in school access are most pronounced and access levels are themselves the lowest.

Many countries do not appear in Figure 2.11 because they are at, or very close to, gender *parity*. As indicated above, this does not, of course, mean that gender *equality* has been reached. An example of the distance that can separate the two concepts is given by Saudi Arabia. This country, with a GPI of 0.96, up from 0.87 in 1990, is on the verge of reaching gender parity. However, when examining the national orientation of the education system, one may wonder whether gender equality is progressing in the same way. Thus the country's national report on the development of education (Saudi Arabia, 2001, pp. 17, 18) sees the aim of girls' education as follows: 'The aim of girls' education is to bring her up in a sound Islamic way so that she can fulfil her role in life as an ideal wife and good mother, and to prepare her for other activities that suit her nature, such as teaching, nursing and medicine'. Similar obstacles in the progress towards equality in education can be found in some other countries fairly close to achieving gender parity (see Chapter 3).

Comparisons with 1990

Comparisons between the two reference years should be made with caution due to the introduction of the revised ISCED and particularly to the different classification approaches adopted by UIS. Even though the ISCED revision has affected primary education less than other levels of education (particularly secondary and tertiary,

see Box 2.5), a stricter approach has been adopted to reporting the duration of primary education in order to make it closer to the ISCED definitions. Consequently, in sixty-three countries the duration of primary schooling and/or the school age group changes between 1990 and 2000. In some cases this is a consequence of changes at the country level, and in others it is a result of more careful reporting.[12] These differences pose problems for comparing enrolment growth over the decade, but less so for gender disparities, which are not so strongly affected by changes in duration.

Figure 2.12 shows countries that have had significant success or failure in making progress towards gender parity (i.e. where changes in GPI have been of at least 5 percentage points over the 1990s). It can be seen that such improvements were, in certain cases, quite substantial. This was particularly so in Benin, the Gambia and Guinea in sub-Saharan Africa; Mauritania, Morocco and Yemen among the Arab States; in Nepal and, to a lesser extent, Bangladesh in South and West Asia. These are promising examples showing that well-focused policies aiming at improving girls' participation in school can yield satisfactory results.[13] Decreases in the GPI have almost all occurred in countries where the disparity was in favour of girls (Botswana, Lesotho and Namibia in sub-Saharan Africa, Colombia, and Samoa) thereby resulting in a shift closer towards gender parity. It is, however, disturbing to note the extent to which the conflict in Eritrea resulted in a major increase in gender disparities in its education system.

The conflict in Eritrea sharply increased gender disparities in the country's education system.

Enrolment and attendance

Estimated enrolment ratios, both gross and net, are based on the number of pupils formally registered, usually surveyed at a date close to the beginning of the school year. This does not, however, convey information about actual school attendance, which is collected during censuses or sample surveys. A comparison of net enrolment ratios and attendance indicators for twenty-two African countries shows that the attendance rates are lower in sixteen cases (Table 2.13).[14] Differences in some cases exceed 25 points (Angola and Togo).

12. The countries affected are shown in the Statistical annex, Table 5.

13. For examples of policy measures taken in some of these countries, see Cussó (2003). See also the discussion of Bangladeshi experience in Chapters 3 and 4.

14. See also UNESCO (2002*b*) for a comparison with earlier data.

Table 2.13. Estimates of primary-school enrolment and attendance (2000)

Country	MICS and DHS year	Age group	UIS NER (%) Total	UIS NER (%) Male	UIS NER (%) Female	UIS GPI F/M	MICS and DHS NAR (%) Total	MICS and DHS NAR (%) Male	MICS and DHS NAR (%) Female	MICS and DHS GPI F/M	Difference NAR-NER (Percentage points)	Difference GPI NAR - GPI NER
Angola	2000	6-9	36.9**	38.6**	35.1**	0.91**	64.2	63.8	64.6	1.01	27.3	0.10
Burundi	2000	7-12	53.7	58.8	48.7	0.83	46.5	49.3	43.8	0.89	-7.2	0.06
Central African Republic	2000	6-11	54.7**	64.3**	45.0**	0.70**	42.9	46.5	39.1	0.84	-11.8	0.14
Chad	2000	6-11	58.2	69.6	46.7	0.67	39.2	45.5	32.8	0.72	-19.0	0.05
Comoros	2000	6-11	56.2**	60.0**	52.3**	0.87**	33.7	33.6	33.8	1.01	-22.5	0.13
Côte d'Ivoire	2000	6-11	62.2	70.9	53.6	0.76	57.3	61.5	52.4	0.85	-4.9	0.10
Egypt	2000	6-10	92.6**	94.9**	90.3**	0.95**	85.1	87.0	83.1	0.96	-7.5	0.00
Ethiopia	2000	7-12	46.7	52.8	40.7	0.77	30.2	32.8	27.5	0.84	-16.5	0.07
Gambia	2000	7-12	68.7	71.1	66.3	0.93	46.3	48.5	44.2	0.91	-22.4	-0.02
Guinea	1999	7-12	47.0	52.4	41.5	0.79	39.3	45.3	33.3	0.74	-7.7	-0.06
Guinea-Bissau	2000	7-12	*53.5*	*62.6*	*44.5*	0.71	41.1	44.4	37.7	0.85	-12.4	0.14
Kenya	2000	6-12	68.5	67.8	69.3	1.02	73.8	72.7	74.8	1.03	5.3	0.01
Lesotho	2000	6-12	78.4	75.0	81.8	1.09	65.0	62.1	68.0	1.10	-13.4	0.00
Namibia	2000	6-12	81.6	78.8	84.5	1.07	86.2	85.9	86.5	1.01	4.6	-0.07
Niger	2000	7-12	30.4	36.3	24.4	0.67	30.2	35.8	24.6	0.69	-0.2	0.01
Senegal	2000	7-12	63.1**	66.3**	59.9**	0.90**	47.3	50.6	44.0	0.87	-15.8	-0.03
Sudan[1]	2000	6-11	49.5**	54.0**	44.7**	0.83**	55.2	56.6	53.8	0.95	5.7	0.12
Swaziland	2000	6-12	92.8**	92.1**	93.6**	1.02**	70.7	70.8	70.6	1.00	-22.1	-0.02
Togo	2000	6-11	92.3	100.0	83.3	0.83	63.0	67.0	58.9	0.88	-29.3	0.05
United Rep. of Tanzania	1999	7-13	46.7**	45.8**	47.6**	1.04**	48.9	47.2	50.7	1.07	2.2	0.04
Zambia	1999	7-13	65.5	65.8	65.2	0.99	60.1	60.0	60.2	1.00	-5.4	0.01
Zimbabwe	1999	6-12	79.6	79.6	79.6	1.00	84.9	84.0	85.8	1.02	5.3	0.02

1. Northern Sudan for MICS data.
** UIS estimate.
Explanatory notes: Net attendance rate (NAR): UNICEF Multiple Indicator Cluster Survey (MICS); USAID Demographic and Health Survey (DHS).
Net enrolment ratio (NER): UIS data. See Statistical annex, Table 5, for detailed country notes.

Box 2.3. Gender disparities in attendance across Indian states

India's two National Family Health Surveys (NFHS), undertaken in 1992–93 and 1998–99, reveal that school attendance rates among 6- to 14-year-olds have improved from 68% at the time of the first survey to 79% by the second. They also show that, during the 1990s, gains have been particularly evident for girls, thereby reducing India's gender gap in education. However, these all-India data can be misleading because – as with other national, social and economic indicators – they mask considerable differences in educational performance at the state level. The table below summarizes the recent state-level experience for school attendance rates, for the population aged 6–10 – the age corresponding to primary schooling – for boys and girls separately.

It can be seen that variation is considerable, particularly for girls: attendance levels in Kerala and Himachal Pradesh, for example, are almost twice the levels in Bihar. More generally, it is clear that the four large northern states of Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh are the laggards in terms of overall educational attendance and gender parity. However, the table also shows that a recent process of catch-up has occurred among the lagging states. Attendance rates increased particularly strongly for girls in Rajasthan, Bihar and Uttar Pradesh, which resulted in their female/male attendance ratios (as measured by the GPI) increasing by 21, 16 and 17 percentage points, respectively. The table also illustrates Kerala's well-documented educational superiority, although it shows that Himachal Pradesh appears to have had an even more successful record in recent years, and that other southern states, particularly Tamil Nadu, are no longer far behind.

India: School attendance rate by state and gender, population aged 6–10 (1992–93 and 1998–99)
(states ranked in increasing order of attendance GPI in 1998–99)

	Male			Female			GPI		
	1992-93	1998-99	increase (% points)	1992-93	1998-99	increase (% points)	1992-93	1998-99	increase (% points)
Rajasthan	72.4	87.7	15.3	42.4	69.6	27.2	0.59	0.79	0.21
Bihar	60.6	69.3	8.7	38.5	55.0	16.5	0.64	0.79	0.16
Uttar Pradesh	71.1	83.7	12.6	50.2	73.7	23.5	0.71	0.88	0.17
Andhra Pradesh	73.4	88.2	14.8	59.9	82.6	22.7	0.82	0.94	0.12
Madhya Pradesh	66.0	83.1	17.1	55.2	77.1	21.9	0.84	0.93	0.09
Orissa	77.9	85.4	7.5	65.5	81.2	15.7	0.84	0.95	0.11
Gujarat	82.6	86.8	4.2	70.5	80.4	9.9	0.85	0.93	0.07
Haryana	87.5	92.5	5.0	76.7	89.9	13.2	0.88	0.97	0.10
Assam	75.7	81.8	6.1	67.3	77.9	10.6	0.89	0.95	0.06
Karnataka	79.9	87.7	7.8	71.1	85.2	14.1	0.89	0.97	0.08
West Bengal	72.5	83.7	11.2	66.6	82.1	15.5	0.92	0.98	0.06
Maharashtra	87.5	92.7	5.2	82.2	90.3	8.1	0.94	0.97	0.03
Himachal Pradesh	94.4	98.9	4.5	89.1	98.9	9.8	0.94	1.00	0.06
Tamil Nadu	92.0	95.8	3.8	87.4	95.6	8.2	0.95	1.00	0.05
Punjab	85.7	94.1	8.4	81.6	94.1	12.5	0.95	1.00	0.05
Kerala	95.2	97.0	1.8	95.5	98.0	2.5	1.00	1.01	0.01
India		85.2			78.3			0.92	

Source: Derived from Goujon and McNay (2003).

The two sets of data also allow a comparison of gender parity estimates for the two indicators. The GPI is higher for the attendance rate in sixteen cases out of twenty-two; the most significant differences – 10 percentage points or more in the GPI – are found for Angola, the Central African Republic, the Comoros, Côte d'Ivoire, Guinea-Bissau and the Sudan. This seems to suggest that, once enrolled, girls' attendance rates are higher than those of boys in these countries. The 'Educational quality' section of this chapter further investigates differences between boys and girls in the motivation for learning and the time invested in it.

National examples of geographical disparities

National GERs are, of course, for the country as a whole. Particularly in the poorer countries, there is often tremendous variation in enrolments in different parts of the country.

Box 2.3 shows the strong variation in school attendance rates among different Indian states. Similarly, for Cameroon, Table 2.14 shows that those areas and provinces with difficult living conditions (landlocked areas, hard climatic conditions, housing difficulties) have the lowest enrolment ratios. Thus, while GERs of over 100%

Table 2.14. Cameroon: gross enrolment ratio and GPI in primary education, by province (1999/2000)

	GER (%) Both sexes	GPI F/M*
Adamaoua	54	0.89
Centre	123	0.89
Est	84	0.79
Extrême-Nord	53	0.77
Littoral	116	0.74
Nord	56	0.75
Nord-Ouest	67	0.97
Ouest	107	0.93
Sud	123	1.03
Sud-Ouest	64	0.83
Country total	83	0.91

Source: Cameroon (2001).
* GPI data re-estimated from source by EFA Report Team.

are found in well-off provinces such as Centre, Littoral, Ouest and Sud, they compare with ratios of only 53%–56% in Extrême Nord and Nord. Also, the gender parity index (0.91 at the national level) varies between 0.74 and 1.03 among provinces, in ways that seem unrelated to the general level of education availability.

Geographical disparities interact with socio-economic status. Thus while urban areas are usually considered privileged in relation to rural areas, inequalities are, of course, significant within urban areas too. Recent statistics and survey results from Burkina Faso demonstrate that while the capital, Ouagadougou, is the best-off town in terms of school provisions and enrolment ratios, peripheral areas differ significantly from central areas (Kaboré and Pilon, 2003). Although peripheral areas vary greatly in terms of socio-economic status, they are characterized by a higher percentage of immigrants from rural areas, heads of household active in the agricultural sector, often illiterate, and frequently of Muslim faith. In these areas the demand, taking into account the school-age population, exceeds the supply. Thus in peripheral areas, where the supply of public schools is insufficient, parents have the choice between sending their children to costly private schools, as do parents in more residential peripheral areas, or letting them remain out of school.

Repetition in primary education

High levels of access and enrolment do not themselves guarantee that the achievement of Goal 2 is at hand. In order for 'all children ...' to 'have access to and complete free and compulsory primary education of good quality ...' it is necessary that pupils proceed through the educational ladder as smoothly and efficiently as possible. All countries, particularly those with very low levels of primary participation, are concerned that their limited resources are well utilized. While time spent by pupils repeating grades is not necessarily wasted, it is undeniable that efforts to reduce rates of repetition and drop-out are crucial parts of any UPE strategy.

In most countries, boys repeat more than girls.

In countries where resources are limited, school places occupied by repeaters may keep others out of school. Figure 2.13 shows that the incidence of repetition is highest in sub-Saharan Africa – above 15% in about half of the countries – with repeaters sometimes one-quarter of the enrolment. Repetition rates tend to be particularly high where access has expanded rapidly, perhaps in response to abolishing fees (as in Cameroon), or in post-conflict situations (as in Burundi, Chad, Mozambique and Rwanda). In North America and Europe, a policy of automatic promotion is applied in most countries. There, for countries with available data, only Albania and France have repeat rates as high as 4%.

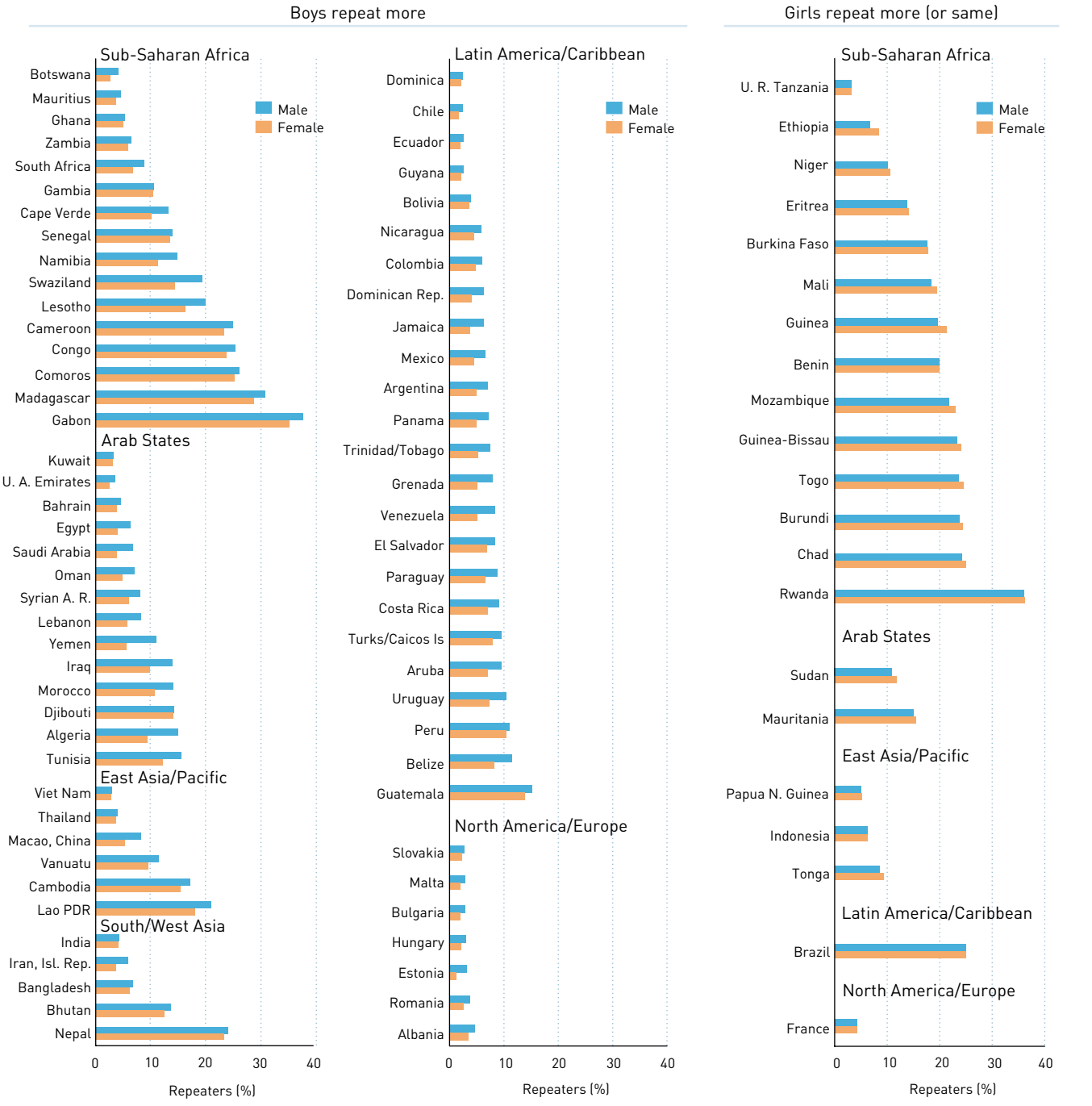
As regards gender disparities, in most countries, boys repeat more than girls. Gender gaps are particularly large in some sub-Saharan African countries, some Arab States and Latin America and the Caribbean. The countries where girls repeat more than boys are almost exclusively in sub-Saharan Africa, and most of them have high repetition rates (15% or more). Finally, in North America and Europe, where rates are very low, boys repeat as much as or more than girls, in all countries with the exception of The former Yugoslav Republic of Macedonia.

The overall percentage of repeaters in primary education is the total number of repeaters in primary education in a given year, expressed as a percentage of the total enrolment at the same level *in the same year*.

The repetition rate by grade is the number of repeaters in a given grade in a given year, expressed as a percentage of the total enrolment in the same grade *in the previous year*.

Figure 2.13. Primary education: percentage of repeaters by gender (2000)

(not including countries where repeaters are less than 2% of enrolment[1], in increasing order of male repeaters)



1. Countries where repeaters are less than 2%:
Sub-Saharan Africa: Seychelles;
Arab States: Jordan, Palestinian Autonomous Territories;
Central Asia: all countries;
East Asia and the Pacific: Brunei Darussalam, China, Myanmar, Philippines, Samoa;
Caribbean: Anguilla, British Virgin Islands, Cuba, Montserrat, Saint Lucia;
Western Europe: Austria, Cyprus, Finland, Germany, Ireland, Italy, Switzerland;
Central and Eastern Europe: Belarus, Croatia, Czech Republic, Latvia, Lithuania, Poland, Serbia and Montenegro, Republic of Moldova, Slovenia, The former Yugoslav Republic of Macedonia.

General note: See source table for individual country notes.
Source: Statistical annex, Table 6.

Repetition rates by grade

Repetition varies from one grade to another, but, across countries, some important patterns emerge. Table 2.15 shows that the highest rates are usually found in Grade 1. This is particularly so in East Asia and the Pacific and South and West Asia: in Nepal almost half of the pupils repeat Grade 1, while Cambodia and the Lao People's Democratic Republic have repetition rates around 30%. Repetition is also common in Latin America and the Caribbean, but more mixed patterns emerge elsewhere.

For example, while about one-third of the countries of sub-Saharan Africa and the Arab States have their highest repetition rates in Grade 1 – being particularly high in Rwanda (42.5%), Chad, the Comoros, Lesotho, Madagascar and Togo – for roughly another third of the countries they are found in the last grade of primary school. In Burkina Faso, Burundi, Djibouti, Mozambique and the Niger, repeaters account for about one-third of primary pupils in the last grade (Table 2.15).

School survival

School survival is a crucial indicator of the system's ability to retain pupils. Table 2.16 shows that survival rates to Grade 5 in sub-Saharan Africa are lower than elsewhere. Equally, this is the only region where they are more often higher for boys than for girls, particularly in Guinea-Bissau, Malawi and Mozambique. Very low survival rates (at or below 50%) are also found in several Asian countries, notably India, the Lao People's Democratic Republic and Myanmar. India has the highest survival disparity in favour of boys (GPI = 0.81). In the Arab countries for which data are available, the rates are all above 90% with the exception of Mauritania and Morocco. In contrast, in Latin America and the Caribbean, where universal primary access is almost attained, survival rates are often below 80% and are an obstacle to the full achievement of UPE.[15] For industrialized countries, rates of survival are not systematically calculated. However, the few data available show levels close to 100% and values of GPI close to parity.

Survival and completion

Survival rates have been the main measure of progress through education systems for many years. More recently, attention has been given to the calculation of completion rates, partly in response to the prominence given to the notion of primary completion in the Dakar and Millennium goals.

School survival is a crucial indicator of the system's ability to retain pupils.

The main difference between these two concepts is that the first measures the survival to Grade 5 *among children who enrol in school*. It therefore does not take into account the sometimes large proportion of children who do not have access to primary school. The second measures the proportion *of all children* who 'complete' primary school. However, because of data problems, a proxy is typically used, which measures the proportion who reach Grade 6, or Grade 5 in the case of shorter systems (Box 2.4).

There are a number of problems with the ways in which it is proposed to measure and use the primary completion rate. First, and most obviously, the proxy statistic does not, in fact, provide a measure of primary completion because it ignores those children who reach the final year, but who drop out of school before the end of it. Thus, it provides an estimate of access to the final grade, just as the gross intake rate measures access to Grade 1. Work is under way in the UIS to investigate the possibility of collecting useful data on 'graduates' from primary school. This concept is not necessarily

15. This is notwithstanding the fact that survival rates in Latin America and the Caribbean increased during the 1990s, owing to the enlargement of pre-school education and the introduction of automatic promotion in many countries.

Box 2.4. Survival and completion rates

The survival rate to Grade 5 is the percentage of children starting primary school who eventually attain Grade 5. The estimate is based on transition rates derived from data on enrolment and repeaters for two consecutive years.

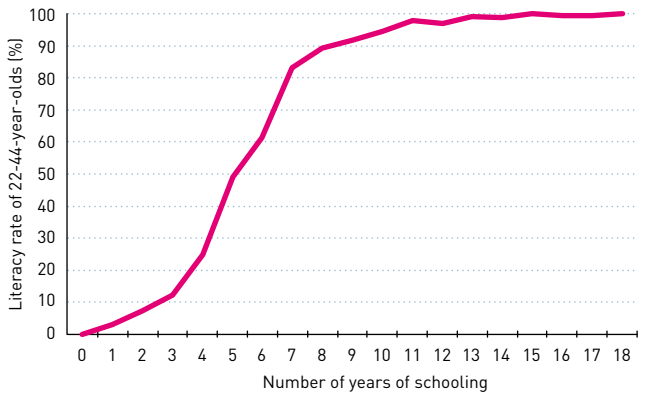
The primary completion rate (PCR) is the total number of students successfully completing, or graduating from, the last year of primary school in a given year, expressed as a proportion of the total number of children of official graduation age in the population.

Because it is difficult to obtain reliable and comparable data on completion or graduation, a proxy primary completion rate (PPCR) has been agreed as follows:

The PPCR is the total number of students enrolled for the first time in the final year of primary school – i.e. enrolment minus repeaters – as a proportion of the total number of children of official graduation age in the population.

Sources: UNESCO (1998*b*), UIS (2003).

Figure 2.14. Literacy rate of 22- to 44-year-olds in the Central African Republic, according to years of schooling (2000)



Source: UNICEF MICS data (2000).

comparable across countries, partly because practice differs as regards certification at primary level. It may be that the notion of school-leavers would be a simpler one to operationalize statistically. Meanwhile the estimates of access to the final grade that are currently available (Bruns, B. et al.; 2003) are generally over-estimates of 'true' rates of primary completion.

Second, the emphasis on completion of primary schooling as the sole indicator of Millennium Development Goal (MDG) achievement is unsatisfactory. This is partly because the statistic cannot fully take account of the quality of schooling. The clear link between finishing the primary cycle and educational achievement is supported by UNICEF MICS data. Nevertheless, taking the standard ISCED 1 primary cycle of six years, among those who have finished six years of education the literate proportion is still well below 100%. In sub-Saharan Africa, for example, this figure is 70% in the Central African Republic (see Figure 2.14) and 85% in Togo.

Third, as the completion rate focuses on only one year in the primary-school system, variations in enrolment over the previous five years are ignored. Because enrolment fluctuations can be quite sharp (in both directions), the statistic fails to provide a reliable guide to the coverage of the system at any particular time. As currently measured, the completion rate is a useful indicator of historical access to schooling and retention within the system.[16] However, both the GER and the NER (measured over time) are indispensable additional criteria to use in assessing progress towards goal achievement.[17]

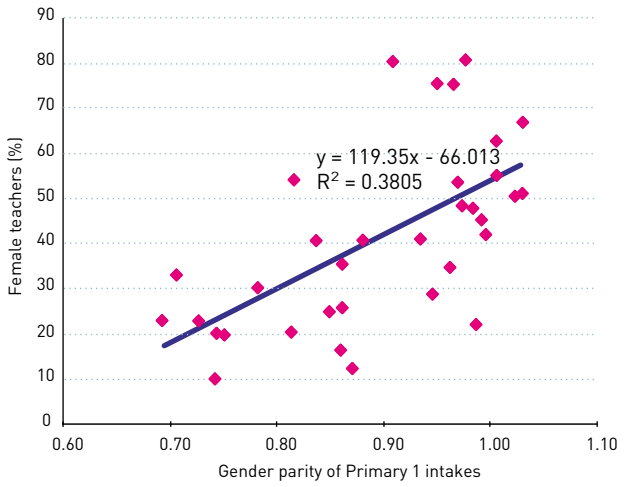
16. The statistical background document for MINEDAF VIII uses an indicator corresponding to the proxy primary completion rate which it calls 'Access rate to Grade 6' (see UNESCO-BREDA, 2002).

17. For further discussion of these latter issues see 'Measuring and monitoring UPE' (UNESCO, 2002*b*, Box 2.2, p. 55).

Gender balance among teaching staff and its relationship to gender parity in enrolments

One indicator potentially important for gendered outcomes in schooling is the proportion of primary-school teachers who are female. Girls' enrolments rise relative to boys as the proportion of female teachers rises from low levels. Figure 2.15 indicates that in sub-Saharan Africa those countries with roughly equal proportions of male and female primary teachers also tend to have rough equality in primary intakes between boys and girls. In contrast, where the proportion of female teachers is around 20% of the total, school intakes are much more unequal, with intakes of only seven or eight girls for every ten boys. Cause and effect here are difficult to disentangle: increasing proportions of educated women emerging from the schools will affect the number of women available to work as teachers, as well as household demand for girls' schooling. Nevertheless, the relationship appears to be robust, at least in Africa, after controlling for other relevant variables such as per capita income (Colclough et al., 2003, pp. 69–70). Thus, there is strong suggestive evidence that moves towards equalizing gender balance among teachers will promote gender parity (see Chapters 3 and 4).

Figure 2.15. Sub-Saharan Africa: percentage of female teachers and gender parity in access to schools (2000)



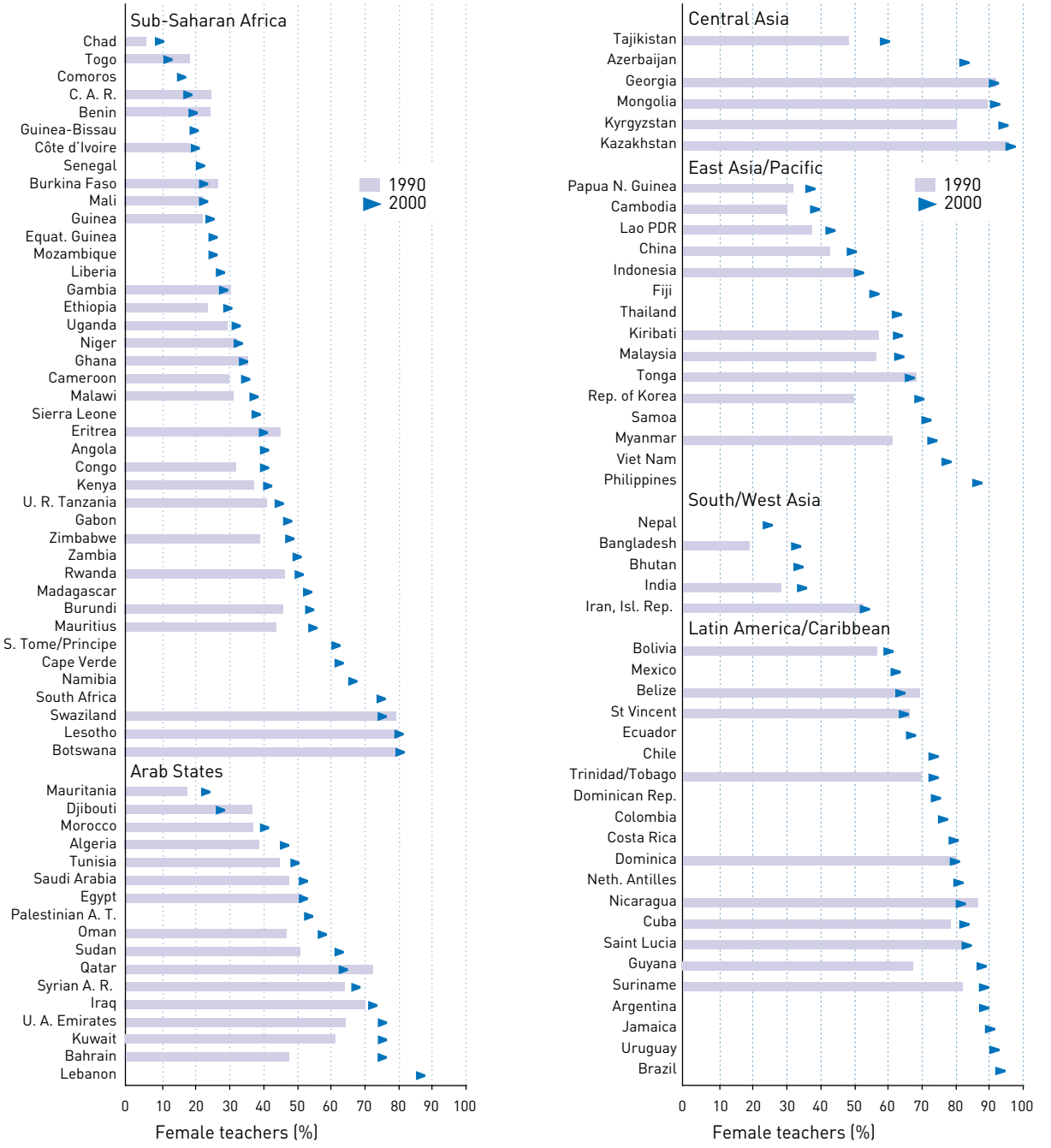
Source: Statistical annex, Tables 4 and 10.

Table 2.15. Primary education: repetition rate by grade (1999/2000)

	Duration of primary	Repetition rates (%)						
		Gr. 1	Gr. 2	Gr. 3	Gr. 4	Gr. 5	Gr. 6	Gr. 7
Sub-Saharan Africa								
Angola	4	25.2	**26.2**	25.0	20.5			
Benin	6	14.7	21.2	25.5	24.0	**29.8**	28.3	
Botswana	7	4.3	2.5	1.9	**10.7**	1.6	1.2	0.3
Burkina Faso	6	12.2	12.8	17.4	16.0	18.6	**41.6**	
Burundi	6	24.1	23.3	22.9	22.8	32.2	**39.7**	
Cameroon	6	*31.2*	*24.2*	***32.2***	*24.6*	*28.4*	*26.5*	
Chad	6	**31.4**	26.9	26.5	24.9	21.0	28.7	
Comoros	6	**33.9**	27.7	26.3	21.8	20.5	27.7	
Congo	6	32.8	21.6	**38.5**	33.5	28.6	14.2	
Côte d'Ivoire	6	19.6	18.8	21.4	19.0	**24.1**		
Eritrea	5	**22.2**	11.1	11.1	11.8	6.4		
Ethiopia	6	**16.2**	6.9	6.4	8.5	8.7	5.7	
Gambia	6	***16.1***	*10.6*	*10.3*	*9.0*	*8.6*	*6.6*	
Ghana	6	**8.0**	5.1	4.6	4.1	3.6	3.8	
Guinea	6	20.9	19.8	23.1	20.2	21.4	**27.9**	
Guinea-Bissau	6	*23.9*	*26.9*	*24.4*	*23.9*	*20.6*	***27.9***	
Lesotho	7	**30.0**	21.9	20.0	20.4	15.7	12.4	17.4
Madagascar	5	**39.1**	27.4	29.5	24.1			
Mali	6	*11.1*	*11.7*	*18.2*	*21.3*	***26.0***		
Mozambique	5	26.9	25.4	25.5	21.4	**31.2**		
Namibia	7	15.6	12.0	11.2	12.0	**19.3**	11.5	10.1
Niger	6	1.1	6.5	9.6	10.5	15.3	**38.8**	
Rwanda	6	**42.5**	31.0	32.3	37.2	41.7	30.4	
Senegal	6	10.0	12.5	12.5	12.9	16.1	**29.5**	
Seychelles	6	0.1	0.1	0.1	0.2	**0.3**	...	
South Africa	7	**11.6**	7.6	7.1	7.4	6.7	5.3	4.5
Swaziland	7	19.5	17.7	**20.0**	18.3	16.5	16.7	10.5
Togo	6	**30.7**	25.4	26.5	20.5	20.8	19.7	
U. R. Tanzania	7	3.3	2.2	1.5	**12.7**	0.1	0.0	0.0
Zambia	7	4.3	4.8	5.0	6.3	6.3	7.0	**12.3**
Arab States								
Algeria	6	12.2	9.9	10.5	11.5	12.0	**17.0**	
Bahrain	6	4.6	4.0	3.7	4.3	4.6	**4.8**	
Djibouti	6	*8.9*	*9.3*	*9.9*	*9.5*	*9.7*	***33.7***	
Jordan	6	*0.3*	*0.2*	*0.2*	*0.6*	*1.3*	***1.4***	
Kuwait	4	3.3	3.1	**4.0**	2.5			
Lebanon	6	4.8	6.1	7.2	**9.3**	7.5		
Mauritania	6	14.1	13.9	14.1	12.9	15.4	**25.8**	
Morocco	6	**16.9**	14.5	14.6	11.7	10.1	7.0	
Oman	6	7.0	**7.8**	6.1	6.2	4.8	3.9	
Palestinian A. T.	4	1.1	1.1	2.2	**3.4**			
Saudi Arabia	6	**8.2**	5.6	7.1	5.1	5.0	1.6	
Sudan	6	*10.0*	*10.5*	*12.1*	***14.0***	*13.1*	*11.4*	
Syrian A. R.	6	**13.4**	9.8	6.8	4.1	3.5	4.2	
Tunisia	6	10.8	12.5	13.4	11.3	15.7	**18.0**	
U. A. Emirates	6	3.4	3.4	2.3	**4.0**	3.4	2.4	
Asia and the Pacific								
Central Asia								
Azerbaijan	4	***0.5***	*0.4*	*0.4*	*0.4*			
Georgia	4	0.2	0.3	0.2	**0.3**			
Kyrgyzstan	4	0.2	0.2	**0.3**	0.2			
Mongolia	4	**1.0**	0.6	0.3	0.3			
Tajikistan	4	0.2	0.5	0.5	**0.6**			
East Asia and the Pacific								
Brunei Darussalam	6	0.0	0.0	0.0	0.0	0.0	0.0	
Cambodia	6	**29.5**	18.0	15.1	9.3	5.8	2.9	
China	5	**1.9**	1.1	0.2	0.1	0.1	0.2	
Cook Islands	6	***5.1***	*0.5*	*0.3*	*2.4*	*1.7*	*3.2*	
Indonesia	6	**12.2**	7.9	6.6	5.0	3.5	0.4	
Lao PDR	5	**34.3**	19.9	11.9	7.5	5.4		
Macao, China	6	2.4	3.4	5.8	8.0	**10.5**	8.7	
Myanmar	5	**1.3**	0.7	0.6	0.4	0.2		
Philippines	6	***4.3***	*2.3*	*1.5*	*0.9*	*0.8*		
Samoa	6	**2.8**	0.7	0.4	0.6	0.5		
Thailand	6	***9.2***	*3.8*	*2.1*	*2.1*	*1.9*		
Vanuatu	6	11.5	10.7	9.9	8.8	6.5	**17.2**	
Viet Nam	5	**5.9**	3.0	2.1	2.2	0.4		
South and West Asia								
Bangladesh	5	6.7	5.6	**7.9**	6.7	5.4		
Bhutan	7	**15.6**	14.7	14.7	12.3	14.6	13.2	9.7
India	5	*3.7*	*2.7*	***5.6***	*4.3*	*3.9*		
Iran, Isl. Rep.	5	**7.9**	5.4	3.6	4.0	2.5		
Nepal	5	**45.9**	15.8	12.1	12.2	10.1		
Latin America and the Caribbean								
Argentina	6	**9.8**	6.9	6.1	5.2	4.6	3.8	
Aruba	6	**14.1**	10.3	8.7	7.2	7.1	3.0	
Belize	6	**14.1**	8.3	8.3	9.8	8.8	9.1	
Bolivia	6	**6.3**	2.8	2.8	3.0	3.0	4.6	
Chile	6	0.9	**3.8**	0.8	2.5	2.3	1.6	
Colombia	5	**9.6**	5.2	4.2	3.3	2.4		
Costa Rica	6	**14.7**	8.5	6.8	8.4	6.4	0.9	
Cuba	6	1.9	**2.7**	0.3	1.8	0.9	0.3	
Dominica	7	5.0	0.8	0.5	0.7	0.7	0.8	**6.1**
Dominican Rep.	6	*2.6*	*3.0*	***11.0***	*6.1*	*4.8*		
Ecuador	6	**4.3**	3.2	2.0	1.6	0.9	0.5	
El Salvador	6	***18.6***	*7.3*	*4.4*	*3.3*	*2.3*	*2.1*	
Grenada	7	*3.9*	*5.2*	*4.3*	*4.2*	*3.7*	***8.4***	
Guatemala	6	**27.5**	14.4	11.0	7.7	4.9	2.0	
Guyana	6	***4.0***	*2.6*	*2.6*	*1.7*	*1.2*	*2.0*	
Jamaica	6	6.0	2.4	2.0	**10.5**	2.0	5.9	
Mexico	6	**8.9**	8.3	6.0	4.6	3.2	0.4	
Nicaragua	6	**8.5**	4.9	4.5	4.2	3.2	1.8	
Panama	6	**10.7**	9.4	6.4	4.0	2.9	1.0	
Paraguay	6	**13.1**	10.1	7.9	5.9	3.6	1.7	
Peru	6	5.9	**18.3**	15.0	10.4	8.3	4.0	
Trinidad and Tobago	7	**10.4**	6.2	5.9	5.2	6.7	6.8	1.3
Uruguay	6	**17.3**	12.1	7.5	6.5	4.9	2.5	
Venezuela	6	**9.5**	7.6	8.8	6.8	4.6		
North America and Western Europe								
Austria	4	**1.8**	1.7	1.4	1.2			
Cyprus	6	**1.6**	0.1	0.0	0.0	0.0	0.0	
Finland	6	0.9	**1.0**	0.5	0.2	0.2	0.2	
France	5	*5.6*	***6.2***	*3.1*	*2.5*	*3.4*		
Germany	4	1.7	**2.3**	1.6	1.2			
Ireland	6	1.2	**3.4**	2.3	1.3	1.0	0.9	
Italy	5	**0.4**	0.4	0.2	0.2	0.4		
Malta	6	0.8	0.8	1.3	1.2	0.6	**8.4**	
Switzerland	6	1.1	**2.5**	2.4	2.0	1.6	1.0	
Central and Eastern Europe								
Albania	4	**5.2**	4.2	3.0	3.3			
Bulgaria	4	1.6	**3.5**	2.0	2.0			
Croatia	4	**1.0**	0.4	0.3	0.2			
Czech Republic	5	**1.5**	1.0	0.9	1.0	1.1		
Estonia	6	1.0	1.2	1.7	2.1	2.6	**4.0**	
Hungary	4	**4.7**	2.1	1.5	1.6			
Latvia	4	**4.0**	1.4	1.1	1.0			
Lithuania	4	**1.5**	0.4	0.3	0.3			
Poland	6	0.7	0.2	0.2	0.6	0.9	**1.0**	
Romania	4	**5.3**	2.6	2.1	1.9			
Slovakia	4	**4.3**	1.9	1.5	1.7			
The FYR of Macedonia	4	**0.1**	0.0	0.1	0.1			

General note: See source table for detailed country notes. Bold figures indicate the grade where the repetition rate is highest.
Source: Statistical annex, Table 6.

Figure 2.16. Primary education: percentage of female teachers (1990 and 2000)



General note: See source table for detailed country notes.
Source: Statistical annex, Table 10.

Table 2.16. Primary education survival rate to Grade 5, by gender (1999) (countries shown in increasing order of GPI within regions)

Higher survival for boys					Same survival rates					Higher survival for girls				
	Survival rate to Grade 5 (%)					Survival rate to Grade 5 (%)					Survival rate to Grade 5 (%)			
Regions	Total	Male	Female	GPI		Total	Male	Female	GPI		Total	Male	Female	GPI
Sub-Saharan Africa														
Malawi	49.0	55.3	42.6	0.77	Mali	*79.3***	*79.7***	*78.7***	0.99	Namibia	92.2	91.5	92.9	1.02
Mozambique	42.7	47.0	37.2	0.79	Eritrea	60.5	60.8	60.1	0.99	Madagascar	*51.1*	*50.7*	*51.6*	1.02
Guinea-Bissau	*38.1***	*41.2***	*33.8***	0.82	Côte d'Ivoire	77.7	77.9	77.4	0.99	Swaziland	84.2**	82.9**	85.4**	1.03
Gambia	*69.2***	*75.2***	*62.8***	0.83	Ethiopia	63.8	63.9	63.8	1.00	U. R. Tanzania	81.8**	80.4**	83.2**	1.03
Chad	53.9	57.5	48.3	0.84						Rwanda	39.1	38.3	39.9	1.04
Guinea	84.4	90.4	77.0	0.85						Burkina Faso	69.1	67.6	71.3	1.06
Benin	84.0	88.7	77.5	0.87						Botswana	86.6	84.3	89.0	1.06
Togo	73.8	78.1	68.7	0.88						Lesotho	74.5	68.2	80.5	1.18
Senegal	72.3	75.0	69.3	0.92										
Niger	74.0	75.8	71.2	0.94										
South Africa	64.5**	66.5**	62.5**	0.94										
Zambia	80.6	83.1	78.1	0.94										
Ghana	66.3	67.3	65.2	0.97										
Burundi	58.4	58.9	57.9	0.98										
Arab States														
Mauritania	61.2	67.6	55.0	0.81	Jordan	*97.7*	*98.0*	*97.4*	0.99	Oman	95.9	95.2	96.7	1.02
Bahrain	98.9**	100.0**	97.8**	0.98	Saudi Arabia	93.7	93.9	93.5	1.00	Morocco	80.0	79.1	81.0	1.02
					Syrian A. R.	92.1	92.2	92.0	1.00	Sudan	*86.8***	*85.6***	*88.2***	1.03
					U. A. Emirates	98.1	98.1	98.2	1.00	Lebanon	96.9	95.2	98.8	1.04
					Egypt	99.0**	98.8**	99.2**	1.00					
					Algeria	97.2	96.9	97.5	1.01					
					Tunisia	93.1	92.4	93.8	1.01					
East Asia/Pacific														
Samoa	*82.6*	*89.0*	*77.3*	0.87	Cambodia	62.8	62.9	62.7	1.00	Lao PDR	53.2	52.6	53.9	1.02
Vanuatu	82.9**	84.4**	81.3**	0.96	Myanmar	55.2	55.3	55.2	1.00	Thailand	*94.1***	*92.3***	*96.0***	1.04
					Brunei Daruss.	91.8	91.9	91.8	1.00	Indonesia	95.1**	90.8**	100.0**	1.10
					Macao, China	99.4	98.9	100.0	1.01					
South/West Asia														
India	46.8**	51.2**	41.7**	0.81	Iran, Isl. Rep.	97.5	98.2	96.8	0.99	Bhutan	90.4	88.9	92.2	1.04
										Bangladesh	64.9	60.3	70.1	1.16
										Nepal	62.2	56.8	70.1	1.23
Latin America/Caribbean														
Guyana	*94.8*	*100.0*	*89.6*	0.90	Chile	99.9	100.0	99.9	1.00	Cuba	95.3	94.5	96.2	1.02
Uruguay	90.8	93.3	88.4	0.95	Belize	81.5	81.5	81.5	1.00	Mexico	88.5	87.5	89.5	1.02
Bolivia	83.0**	84.5**	81.5**	0.96	Argentina	90.3	90.1	90.5	1.00	Trinidad/Tobago	98.2	96.5	100.0	1.04
Dominica	86.2	87.5	84.9	0.97	Panama	91.9	91.5	92.4	1.01	Aruba	98.1	96.5	100.0	1.04
Peru	87.4	88.2	86.6	0.98						Ecuador	77.8	76.4	79.4	1.04
										El Salvador	*70.7***	*69.4***	*72.2***	1.04
										Jamaica	88.9	87.0	90.8	1.04
										Paraguay	78.1**	76.2**	80.2**	1.05
										Guatemala	56.0	54.5	57.7	1.06
										Venezuela	*90.8*	*87.6*	*94.3*	1.08
										Colombia	66.6	64.0	69.3	1.08
										Costa Rica	80.2	76.7	84.2	1.10
										Dominican Rep.	*75.1***	*71.4***	*79.1***	1.11
										Nicaragua	48.4	44.6	52.6	1.18
Europe														
Italy	99.2	100.0	98.5	0.98	France	*98.0*	*98.4***	*97.5***	0.99	Ireland	98.5	97.6	99.4	1.02
Czech Rep.	99.2**	100.0**	98.4**	0.98	Switzerland	99.6	100.0	99.2	0.99					
					Estonia	99.2	99.7	98.5	0.99					
					Poland	99.3	99.4**	99.2**	1.00					
					Cyprus	99.4	99.2	99.6	1.00					
					Malta	99.5	99.1	99.8	1.01					
					Finland	99.4	98.8	100.0	1.01					

General note: See source table for detailed country notes. ** UIS estimate.
Source: Statistical annex, Table 6.

The lowest level of feminization of primary teachers is in countries where gender disparities are highest.

Figure 2.16 shows the degree of feminization of the teaching staff and the changes that occurred between 1990 and 2000.

The table confirms that the lowest levels of feminization of primary teaching staff are found in countries where overall enrolment levels are the lowest and gender disparities highest. Women hold only one-third, or less, of teaching posts in sixteen countries of sub-Saharan Africa – representing 40% of those having the data. With the exception of Nepal, there are no countries in any other region of the world where the gender ratios among teachers are as low as this.[18] In the primary-school systems of fourteen of these sixteen African countries, the average GPI for net primary enrolments is 0.79, and the highest such value is 0.93 (in the Gambia). In contrast, in the southern African countries of Botswana, Lesotho and Swaziland, where gender ratios in school enrolments in favour of girls are found, the teaching profession is strongly feminized too, with over three-quarters of teachers being women.

Outside sub-Saharan Africa, low levels of female representation are also found in some Arab countries of North Africa (Djibouti and Mauritania); East Asia and the Pacific (Cambodia and Papua New Guinea), as well as South and West Asia (Bangladesh, Bhutan, India and Nepal).

Finally, a very different situation exists in thirteen out of seventeen Arab States, where female teachers are in the majority. This is also true throughout Latin America and the Caribbean and in most Central and East Asian countries, where feminization of the teaching profession reaches levels similar to those observed in the industrialized countries, at four-fifths, or more, of the total.

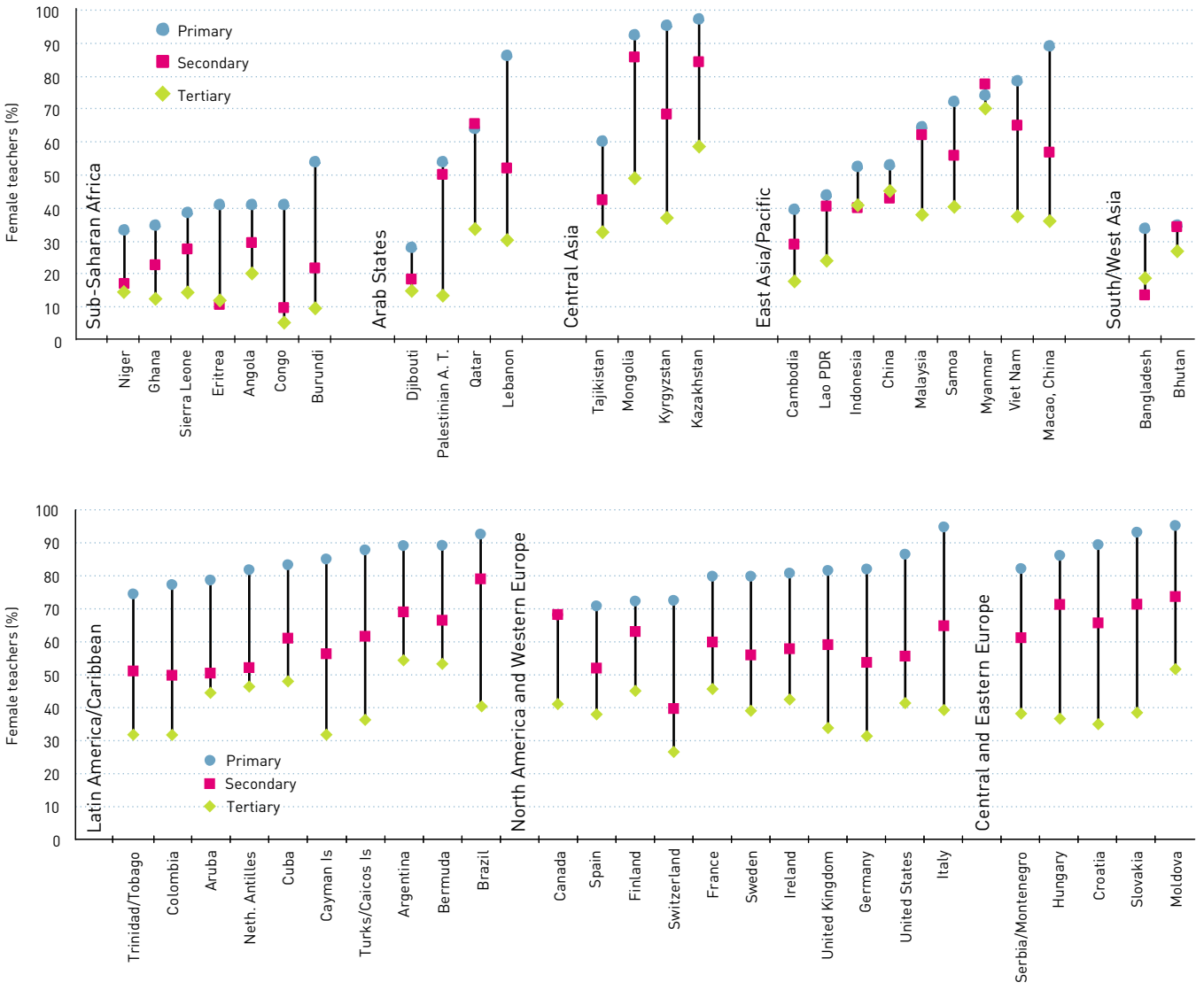
As regards trends since 1990, female participation in the teaching profession has increased in almost all countries where data are available for both years. In some cases – as in Bangladesh – this is the result of deliberate, well-focused policy measures designed to encourage girls' schooling by increasing the number of women teachers, particularly in remote or difficult areas (Cussó, 2003).

More worryingly, it appears that a decrease has occurred in a number of countries where the percentages of women were already among the lowest in 1990 (Benin, Burkina Faso, the Central African Republic, Djibouti and Togo).

In countries where women have low socio-economic status, the feminization of the teaching profession provides a means of empowering women and, at the same time, some encouragement both for parents to educate girls and for young women to pursue their studies. In more developed regions, where the teaching profession at lower levels of education has been highly feminized for many years, salaries at primary level are often less attractive. In contrast, at higher levels of education, where teachers are more highly paid, women remain comparatively less numerous, as shown in Figure 2.17. It can be seen that in all countries their presence decreases as one moves from primary to secondary to higher education, where women teachers are generally in the minority. The only exceptions, among countries in the graph, are Argentina, Bermuda, Kazakhstan, Myanmar and the Republic of Moldova.

18. Note, however, that the values of the gender ratios for teachers in Bangladesh and India are only slightly higher than one-third.

Figure 2.17. Percentage of female teachers by level of education (2000)
(in increasing order of percentage female in primary education)



General note: See source table for detailed country notes.
Source: Statistical annex, Table 10.

Transition rates where girls are in the majority are not uncommon, particularly in Latin America and the Caribbean.

Secondary education and the gender goals

As shown earlier in this chapter, there was a substantial increase in primary enrolment during the 1990s, which outpaced population growth in some developing regions, including sub-Saharan Africa, the Arab States and South and West Asia. The continued priority given to the achievement of UPE by national plans and internationally established goals is set to intensify the existing demand for secondary education provision in many countries over the coming years as larger cohorts of pupils leave the primary system.

Transition from primary to secondary education

Rates of transition from primary education indicate the percentage of a cohort of pupils which proceeds from the last year of primary to the first year of secondary education. The calculation is based on data on new entrants (enrolment minus repeaters) to secondary education in a given year, expressed as a percentage of enrolment in the last grade of primary school the previous year.

Transition rates to secondary schooling are almost always above 95% in industrialized and transition economies, and almost always above 50% in other regions except for sub-Saharan Africa, where much lower rates are often found.[19] Figure 2.18 shows that disparities in transition rates in favour of boys are frequent in sub-Saharan Africa and some Arab States. However, transition rates where girls are in the majority are not uncommon – particularly in Latin America and the Caribbean.

A comparison of the gender parity of primary and secondary intakes reveals that those at secondary level are much more equally balanced between the sexes than are intakes to primary schooling. This is particularly so in regions where primary enrolments are low and gender imbalances at primary level are high. Figure 2.19 compares the GPI of primary intake and secondary transition rates in sub-Saharan Africa and the Arab States.

In most of the countries shown, the gender disparities in intake rates are much reduced at secondary level in comparison with primary. This suggests that the difficulties hindering girls' access to primary education do not prevent them from performing as well as, or better than, their male peers once they are enrolled.[20] This does not imply, however, that a smooth school career in secondary education for girls will automatically follow. At this level of education other problems – puberty, early marriage, pregnancy – have a strong influence on the gendered patterns of school participation and retention.

Participation in secondary education

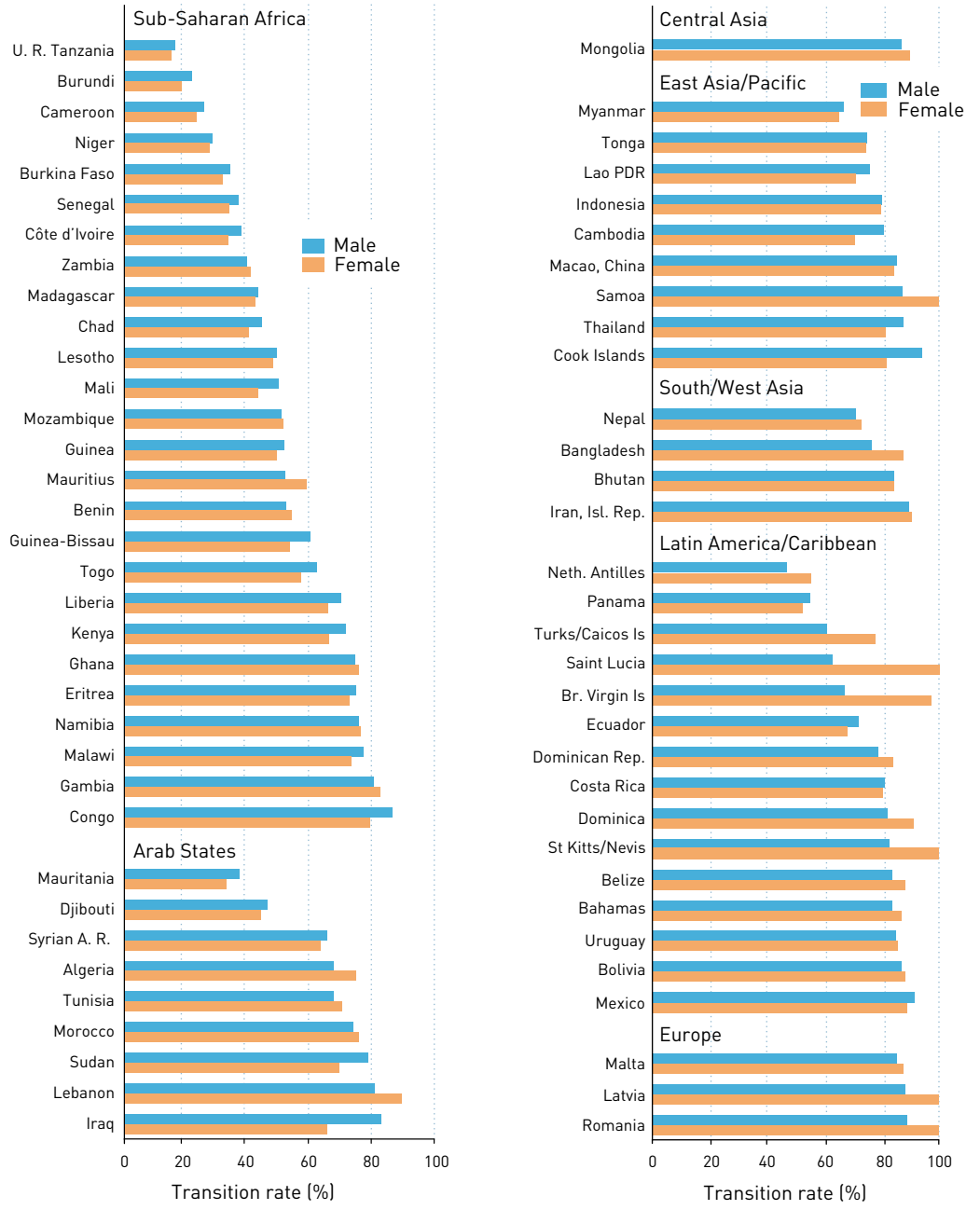
There is greater variation in enrolment levels across the world at secondary than at primary level. Enrolments are equivalent to less than 30% of the age group in twenty-six countries – nineteen of which are in sub-Saharan Africa, while in a further seventeen countries they cover less than half the school-age group. The Arab States and Latin America tend to have higher enrolments, with GERs greater than 70% in a majority of them. In contrast, OECD and most other European countries are at, or close to achieving, universal secondary enrolment, with GERs typically above 90% (Table 2.17).

Because of the classification changes indicated in Box 2.5, it is impossible to accurately compare secondary enrolments in 1990 with those in 2000. However, the gendered characteristics of enrolments – being less affected by such changes – may be compared. This is done in Figure 2.20, which shows that there have been significant moves towards gender parity in enrolments at secondary level in all developing regions over the 1990s. Except for Ethiopia, all the countries where girls were at a strong enrolment disadvantage in 1990 saw progress, with very significant changes (of more than 20 points in the GPI scale) in Algeria, Bangladesh, Malawi, Mauritania, Nepal, the Niger, Pakistan, Rwanda, Sierra Leone and Tunisia. Elsewhere, the most marked progress has occurred in Bangladesh (GPI rising from 0.52 to 1.05 over the decade), where disparities have been reversed and where girls are now in the majority at secondary level (see Chapter 3). Where disparities were markedly in favour of girls – as in several Latin American and Caribbean countries and some sub-Saharan African countries – the GPI has usually moved

19. It should be recalled that several different forms of secondary education are often available to students, including general, technical and vocational education, and teacher training. While data for the first grade of secondary education are usually available for general programmes, this is often not the case for technical and vocational programmes. Some underestimation of transition rates is therefore likely where such programmes exist for primary leavers. This may be the case, *inter alia*, for Bolivia, Côte d'Ivoire, Djibouti and the United Republic of Tanzania.

20. Note that where enrolments of girls are very low relative to boys, selection bias may mean that those girls who do gain access are brighter than the boys, making it more likely that they will succeed.

Figure 2.18. Transition rates from primary to secondary education, by gender (1999)
(countries where either male or female rates, or both, are below 90%[1]; in increasing order of male rates)



1. Male and female transition rates exceed 90% in the following countries (listed in increasing order of transition rate):

Sub-Saharan Africa
South Africa
Swaziland
Ethiopia
Botswana
Seychelles

Arab States
Oman
Palestinian A. T.
Kuwait
Jordan
U. A. Emirates
Bahrain
Saudi Arabia

Asia and the Pacific
Central Asia
Azerbaijan
Tajikistan
Georgia
Kyrgyzstan
East Asia/Pacific
Brunei Daruss.
Rep. of Korea
China
Viet Nam

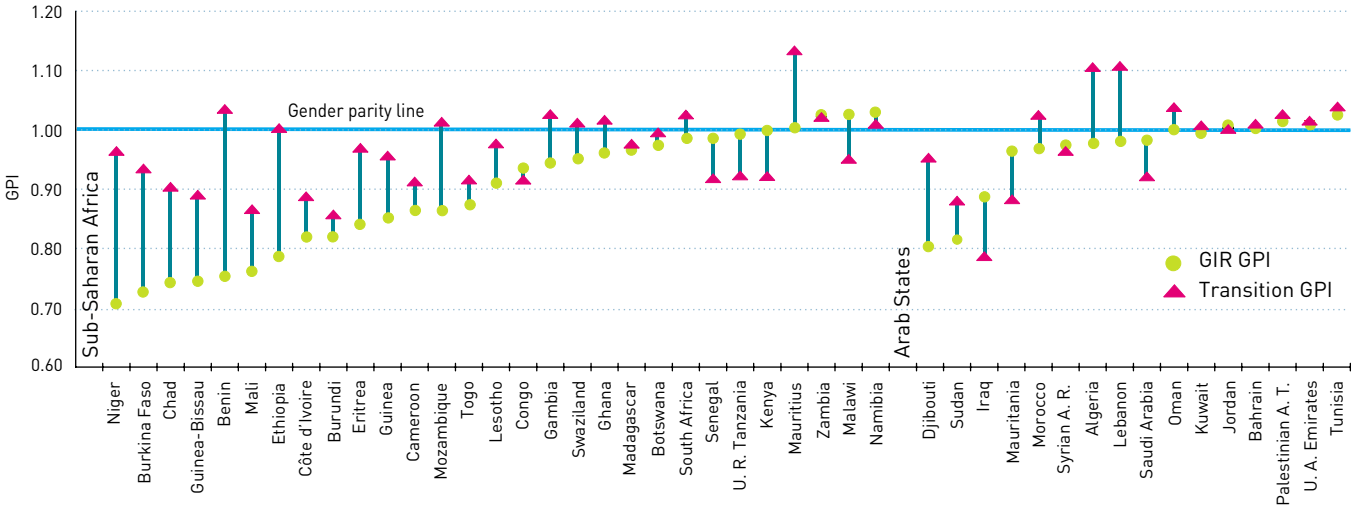
LAC
Venezuela
Colombia
Argentina
Cuba
Guatemala
Cayman Is
Paraguay
Peru
Trinidad/Tobago
Jamaica
Aruba
Chile
Anguilla
St Vincent
Barbados
Nicaragua

N. America/W. Europe
Austria
Ireland
Netherlands
Germany
France
Switzerland
Denmark
Cyprus
Finland
Italy

Central/Eastern Europe
Lithuania
Albania
Estonia
Bulgaria
Slovakia
Belarus
Czech Republic
Hungary
Croatia
Slovenia

General note: See source table for detailed country notes.
Source: Statistical annex, Table 6.

Figure 2.19. Sub-Saharan Africa and Arab States: gender parity index for access to primary (2000) and transition rate from primary to secondary education (1999/2000)
(in increasing order of gender parity for access to primary)



Source: Statistical annex, Tables 4 and 6.

Box 2.5. ISCED 1976 compared with ISCED 1997: impact on enrolment comparisons

ISCED 1976		ISCED 1997	
Levels		**Levels**	
0	Education preceding the first level	0	Pre-primary education
1	Education at the first level	1	Primary education or first stage of primary education
2	Education at the second level, first stage	2	Lower secondary or second stage of basic education
3	Education at the second level, second stage	3	Upper secondary education
		4	Post secondary, non-tertiary education
5	Education at the third level, first stage, of the type that leads to an award not equivalent to a first university degree	5	First stage of tertiary education (not leading directly to an advanced research qualification)
6	Education at the third level, first stage, of the type that leads to a first university degree or equivalent		
7	Education at the third level, second stage, of the type that leads to a postgraduate university degree or equivalent	6	Second stage of tertiary education (leading to an advanced research qualification)
9	Education not definable by level		

The changes of classification introduced in the 1997 revision of the International Standard Classification of Education (ISCED) are summarized above. The new categorization affects the comparability of statistics over time, particularly for secondary and tertiary education. Primary and pre-primary education are unaffected. But higher levels, including secondary education, are now grouped in different ways, making comparison of enrolments difficult or impossible at Level 3 and above.

Table 2.17. Secondary education: grouping of countries according to gross enrolment ratio, by region (2000)
(in each box countries are listed in increasing order of GER)

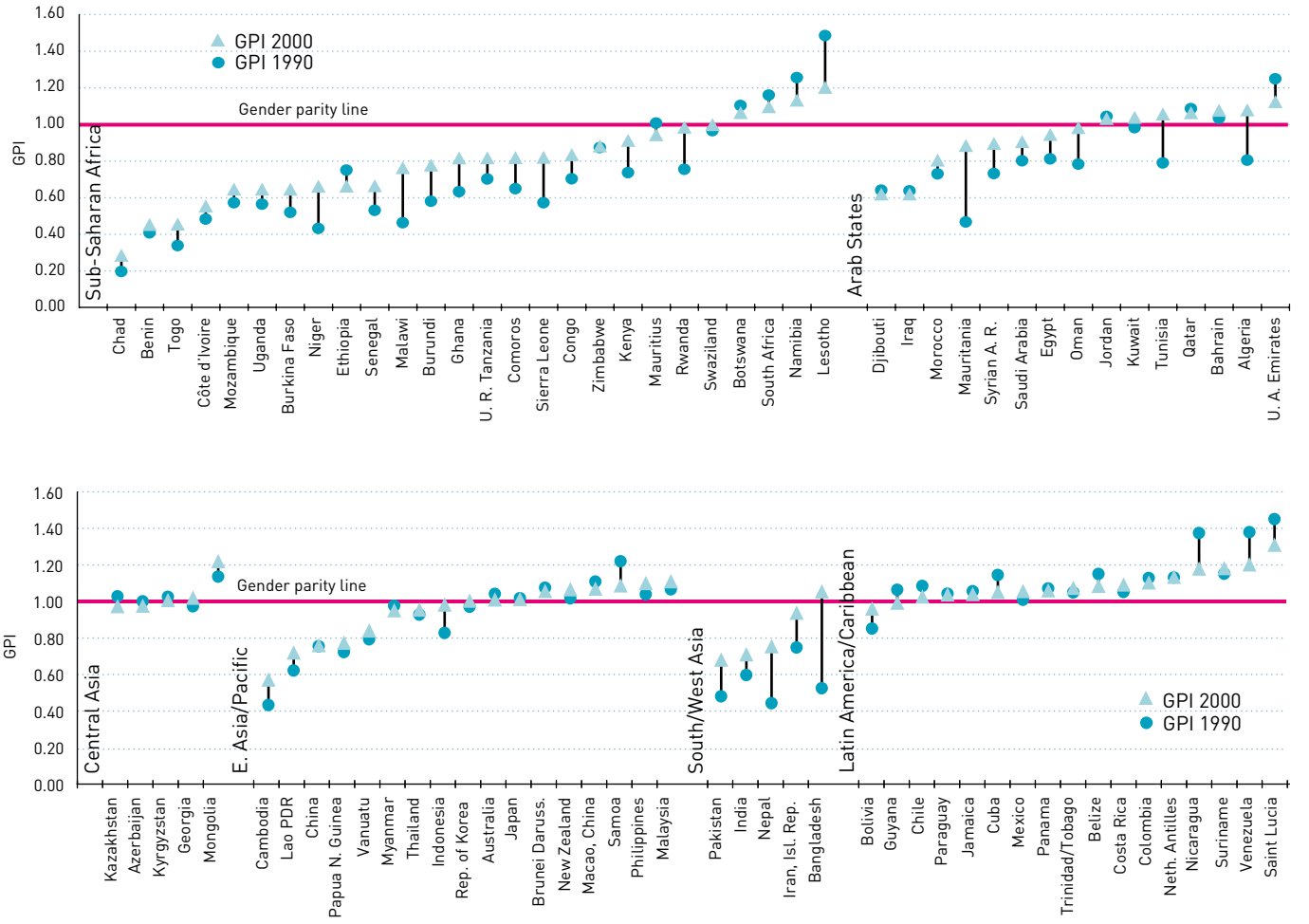
Regions	Levels of GER				
	≤ 30%	30.1%-50%	50.1%-70%	70.1%-90%	Above 90%
Sub-Saharan Africa	U. R. Tanzania, Niger, Burkina Faso, Burundi, Chad, Mozambique, Rwanda, Uganda, Angola, Senegal, Ethiopia, Guinea-Bissau, Comoros, Benin, Liberia, Côte d'Ivoire, Zambia, Sierra Leone, Eritrea (19)	Kenya, Equatorial Guinea, Lesotho, Malawi, Ghana, Gambia, Togo, Congo, Zimbabwe (9)	Gabon, Swaziland, Namibia (3)	Cape Verde, Mauritius, Botswana, South Africa (4)	
Arab States	Djibouti, Mauritania, Sudan (3)	Iraq, Morocco, Syrian A. R. (3)	Kuwait, Saudi Arabia, Oman (3)	Algeria, U. A. Emirates, Lebanon, Tunisia, Palestinian A. T., Egypt, Jordan, Qatar (8)	Bahrain (1)
Central Asia			Mongolia (1)	Georgia, Tajikistan, Azerbaijan, Kyrgyzstan, Kazakhstan (5)	
East Asia and the Pacific	Cambodia, Papua New Guinea, Vanuatu (3)	Lao PDR, Myanmar (2)	Indonesia, Cook Islands, Viet Nam, China (4)	Samoa, Malaysia, Philippines, Fiji, Thailand, Brunei Darussalam, Macao (China), Palau (8)	Rep. of Korea, Niue, Tonga, Japan, New Zealand, Australia (6)
South and West Asia	Pakistan (1)	Bangladesh, India (2)	Nepal, Maldives (2)	Isl. Rep. of Iran (1)	
Latin America and the Caribbean		Guatemala (1)	Nicaragua, El Salvador, Ecuador, Venezuela, Dominican Rep., Paraguay, Costa Rica, Grenada, Panama, Colombia (10)	Belize, Mexico, Bolivia, Trinidad and Tobago, Jamaica, Neth. Antilles, Cuba, Chile, Peru, Suriname, Saint Lucia (11)	Argentina, Aruba, Uruguay, Barbados, Brazil, Guyana, Bahamas (7)
North America and Western Europe				Malta (1)	Israel, Cyprus, Luxembourg, United States, Italy, Greece, Austria, Germany, Switzerland, Belgium, Canada, France, Iceland, Portugal, Norway, Spain, Ireland, Netherlands, Finland, Denmark, Sweden, United Kingdom (22)
Central and Eastern Europe			Turkey, Serbia and Montenegro (2)	Rep. of Moldova, Albania, Romania, Croatia, Russian Federation, Belarus, The FYR of Macedonia, Slovakia (8)	Latvia, Estonia, Bulgaria, Czech Rep., Lithuania, Hungary, Poland, Slovenia (8)
Total number of countries 158	26	17	25	46	44

Source: Statistical annex, Table 7.

closer to unity. Finally, in North America and Europe, which are not shown in Figure 2.20, changes have not been particularly striking, as enrolments were already close to parity in 1990. However it is worth noting the widening of the enrolment gaps in favour of young women at secondary level in some countries. This is particularly notable in Sweden and the United Kingdom (where GPI has moved from 1.05 to 1.26 and from 1.06 to 1.17, respectively).

In addition to examining time trends, it is of interest to compare patterns of disparity between primary and secondary education. This is done in Figure 2.21, which shows the gender parity index values for primary and secondary enrolments.

Figure 2.20. Secondary education: changes in gender parity index of gross enrolment ratio (1990–2000)



General note: See source table for detailed country notes.
Source: Statistical annex, Table 7.

It shows that:

- Countries with large disparities in favour of boys in primary education – typically those in sub-Saharan Africa, but also including Cambodia, India, Iraq, the Lao People's Democratic Republic, Nepal and Pakistan – further accentuate these disparities in secondary education.
- Countries with moderate disparities in favour of boys in primary education appear to have reduced them or filled the gap (some Arab States and several in Asia and the Pacific).
- Countries very close to parity or with low disparities in favour of girls at primary level tend to either fill the gap or reinforce the female advantage in secondary education. Latin America and Caribbean countries are the most pronounced examples, but some European countries also fall into this category, notably Finland, Sweden and the United Kingdom.

These generalizations can also be adduced from Figure 2.22: at values of the primary GPI of up to 0.95 the secondary GPI has a lower value. For values of around unity for primary, those for secondary become higher, and the size of the gap increases with the value of the primary GPI.[21] Nevertheless, the first of the above points, which concerns countries with large disparities in favour of boys at primary level, may seem to

21. This relationship is very strong in each of the regions, with the exception of Latin American countries, where there is no significant relationship between primary and secondary GPIs. For this reason, LAC countries are not shown in the graph.

Figure 2.21. Gender parity indices for gross enrolment in primary and secondary education (2000)
(in increasing order of primary GPI within regions)

General note: See source tables for detailed country notes.
Source: Statistical annex, Tables 5 and 7.

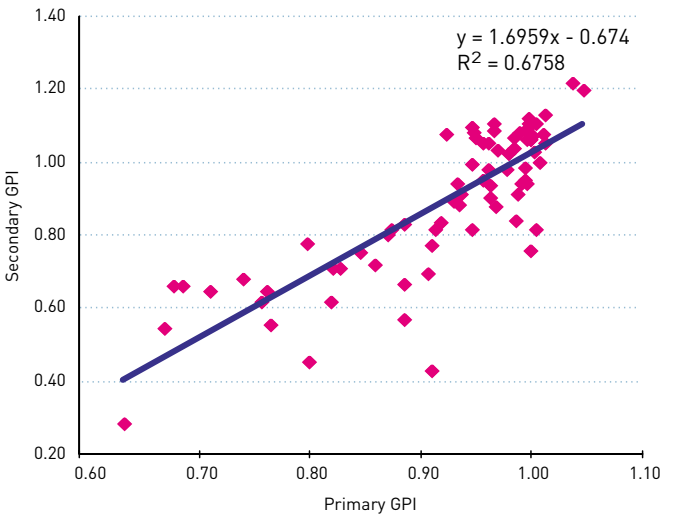
contradict the pattern emerging from Figure 2.19, which indicates that in such cases the transition rates to secondary school are closer to parity than the primary intake rates. There is, however, no necessary relationship between intake rates and enrolments across the system. It may be that, in low enrolment countries, strong discriminatory pressures appear during the secondary age-cycle, whereby economic circumstances and social and cultural values conspire to result in higher drop-out from schools among girls than boys (see Chapter 3).

Repetition and drop-out in secondary education[22]

As regards general secondary education, Figure 2.23 shows that boys repeat grades more frequently than girls. The main exceptions are in sub-Saharan Africa, where girls outnumber boys in the schools, and in the West and Central African subregions, where gender disparities are most acute and where the girls who gain access to secondary schooling are probably less well-prepared academically (owing to more extensive home duties and greater absenteeism at primary level) than the boys.

22. It is difficult to assess the internal efficiency of the secondary-school cycle. The existence of various 'streams' at this level makes it difficult to follow the flow of a cohort from one grade to the next. Thus the only aspect of school efficiency that it is possible to analyse, based on UIS data, is the percentage of repeaters in secondary general education.

Figure 2.22. Developing countries, excluding Latin America and the Caribbean: relation between GPIs of primary and secondary gross enrolment ratios in 75 countries (2000)



Source: Statistical annex, Tables 5 and 7.

Pregnancy is often cited by girls as a motive for dropping out of school.

Although there are no internationally comparable data on rates of drop-out from secondary schooling, there is much evidence from household surveys concerning the different pressures on boys and girls, which lead to differential rates of drop-out. In general, the main reasons cited for boys dropping out, in both urban and rural areas, are economic factors – either connected with the need to look for a job, or to the difficulty of meeting school costs.

For girls, studies from Latin America indicate that 'family reasons' were given by girls as the first or second main factor determining their dropping out. Among such, pregnancy or motherhood was quoted by 33% of urban girls in Chile and 6% of those in Paraguay (compared with 20% and 3% in rural areas) and by 11% of urban girls in Venezuela. In the same surveys, the lack of schools is given as a motive for drop-out in rural areas more often by girls than by boys, indicating that the journey time to school is a more significant concern for parents in the case of their daughters than of their sons.[23]

23. For Latin American evidence see ECLAC (2002); African evidence is summarized in Colclough et al. (2003).

Technical and vocational education and their share in total secondary enrolment

Technical and vocational education is highly diverse, organized not only by ministries of education but also by other ministries (labour, health, agriculture) and by private authorities. This diversity of providers implies that data are patchy and that some – perhaps many – programmes are not included in the available international data. For these reasons, the data in Statistical annex Table 7 provide only a rough guide to the incidence of these types of education programme.

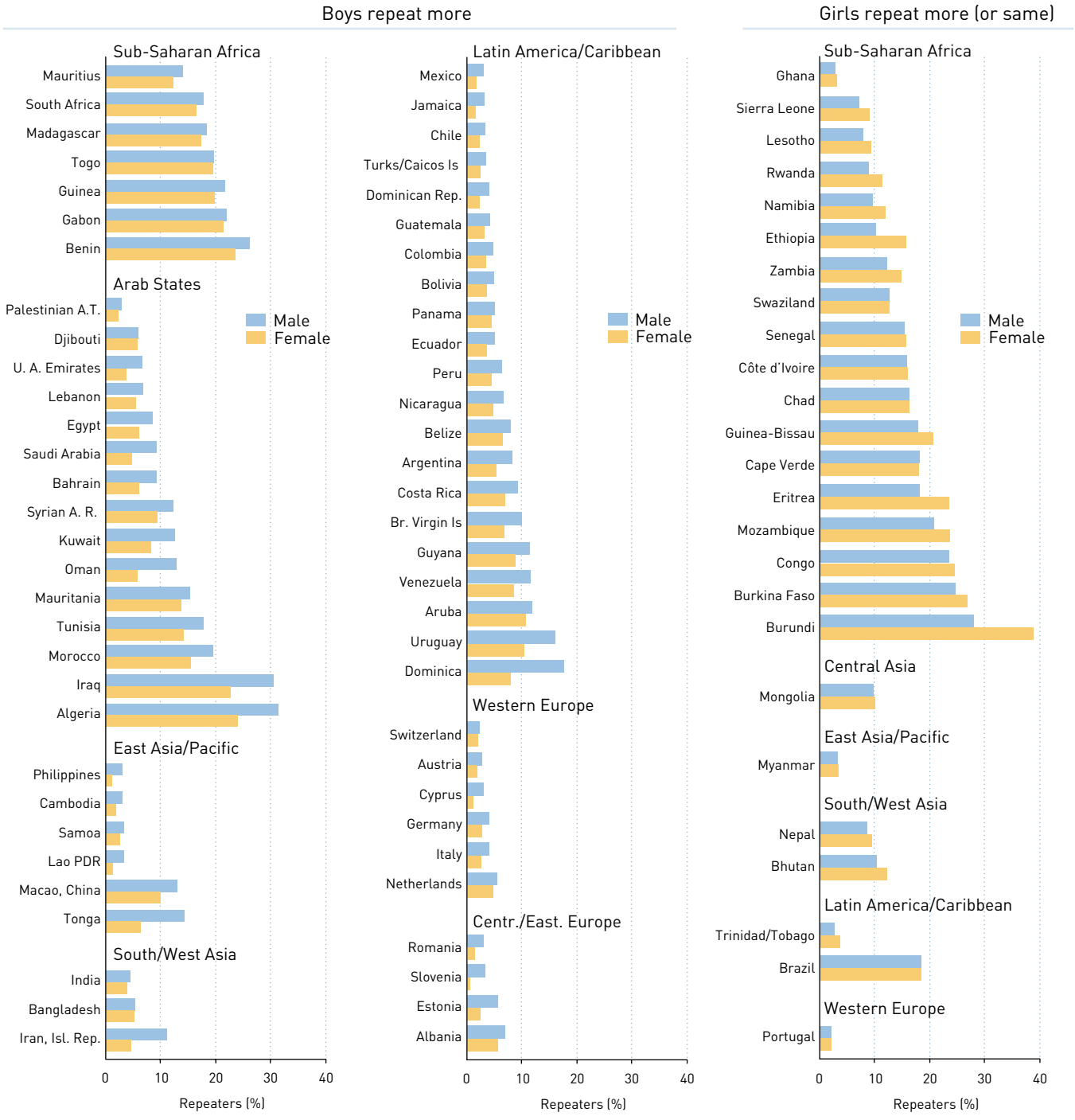
However, it is clear that enrolments in technical and vocational education are high in the more industrialized countries and most Central and Eastern European countries. Students in this track represent one-quarter or more in most of these countries, and almost half of total secondary enrolments in Australia and the United Kingdom. However, their share is significantly lower in developing countries. Only in Egypt, and some parts of the Caribbean (Netherlands Antilles, Panama and Suriname) are the figures close to or slightly above 30%.

With regard to former Soviet Union countries, historical trends available from other sources (UNICEF, 2002*a*), indicate that enrolment in technical and vocational education, having been quite significant until the end of the 1980s, declined drastically over the following decade.

Women in technical and vocational education

Table 7 in the Statistical annex provides a rough indication of the participation of women in technical and vocational education. This type of education includes many different fields of study – from teacher training in certain developing countries, to commercial studies (secretarial, accountant programmes) to more technical fields relating to industry and engineering. Thus, a global percentage of female enrolment in this type of education is not sufficient in itself to fully inform a discussion on female parity, let alone equality. For that, more comprehensive information, covering the different fields of study in which women and men tend to enrol, would be necessary.

Figure 2.23. Secondary general education: percentage of repeaters by gender (2000)
(not including countries with percentage repeaters below 2%, in increasing order of male repeaters)



General note: See source table for detailed country notes.
Source: Statistical annex, Table 7.

Box 2.6. Gender and vocational/technical studies in France

In France, despite increases of the female presence in most fields, there remains a traditional differentiation between 'masculine' and 'feminine' fields of study. In 2001 overall disparities were in favour of young women in upper secondary education, where women represented close to 54% of total enrolment. More disaggregated figures however show that their share was 58% in general education, 65% in scientific and technological education and 43% in the professional baccalaureate. These figures conceal great inequalities as regards programme orientation.

France: Percentage of female graduates in upper secondary education by programme orientation (1995–2001)

	Programme orientation / Type of baccalaureate								
	General			Scientific and technological				Professional baccalaureate	
Year	Sciences	Humanities	Economic and social	Administration	Industry	Laboratory	Socio-medical	Production	Services
1995	41.5	80.7	62.0	65.4	6.4	45.8	96.9	9.9	71.6
2001	44.5	83.0	64.6	65.2	7.9	45.8	96.0	10.2	70.1

More detailed data on programme orientation are available for graduates. As the table shows, in the professional baccalaureate, the female share is only 10.2% in production programmes, compared with 70.1% in service programmes (with close to 100% in health-related and secretarial courses). Even in general secondary education, girls are over-represented among humanities graduates (83%) and slightly under-represented in science programmes (44.5%). The proportion of girls is lowest in courses associated with higher labour market rewards: the scientific and technological baccalaureate, and in those with an industrial orientation (7.9%), whereas the medically and socially oriented studies are highly feminized at 96% of graduates. It should be mentioned that the proportion of girls is relatively higher among graduates than among enrollees because girls perform better than boys in all types of secondary examinations.

The French gender pattern of subject selection described above is found, in broad terms, in many other Western European countries.

Source: Ministère Français de l'Éducation Nationale (2002).

Female participation in vocational and technical training is lowest in sub-Saharan Africa and South Asia.

Nevertheless the Statistical annex data show that, in all regions, female students in these programmes represent less than half of the total in most countries, with the exception of Latin America and the Caribbean where about half of the countries have more female than male students. On average, female participation in these programmes is lowest in sub-Saharan Africa and South Asia, and greatest in Latin America and the Caribbean and the European countries.

As indicated above, information on enrolment in specific fields of study would be particularly interesting from a gender perspective, because the orientation of young people at this stage of the school process has an important bearing on their subsequent transition to the labour market and to professional life in general. Unfortunately this type of information is not produced systematically at international level.

With respect to earlier evidence, data for ninety countries in a UNESCO paper published in 1995 (UNESCO, 1995*b*) on female participation in technical and vocational education by field of study in 1980 and 1992 showed that while, on average, female participation represented 44% of enrolment in this type of education, women continued to represent at least two-thirds of the students in traditionally 'female' fields. These included commercial studies – very important in terms of total enrolments, especially in Asia and the Pacific and the Latin America and Caribbean regions – health programmes and home economics, with the latter markedly less significant in terms of total enrolment. Men represented at least three-quarters of enrolments in the broad field of 'industrial production and engineering' (as reflected in the more detailed and recent data for France in Box 2.6) and in agricultural programmes. Although the changes between the two reference years were not considered to be very important, there was a certain progression of women into more 'technical' fields, especially in European countries and the Arab States.

Post-secondary, non-tertiary education

In many countries, particularly those in the more developed regions, graduates from secondary education are offered education programmes which prepare for trade or for specific vocational fields. Usually these programmes last less than two years and straddle upper secondary and tertiary education levels. They are classified at Level 4 in the revised ISCED (see Box 2.5).

In most developing countries, ISCED Level 4 students seldom represent more than 10% of total enrolments in secondary education. Among countries with available data this is so in only two African countries (Seychelles and Sierra Leone), Bhutan, some Caribbean countries, and Belarus, Canada and the Russian Federation. Whereas OECD countries offer such programmes to upper secondary graduates in twenty-six cases out of thirty (OECD, 2002*b*, p. 218 and Table C1.1, p. 220), they are less frequently found in developing countries (about 40% of the total).

As regards female participation at this level, Annex Table 7 suggests that women are in the majority in one-quarter of sub-Saharan African countries, one-third of the Arab States, and about half of the countries in East Asia and the Pacific, South and West Asia and the transition and more industrialized countries. In Latin America and the Caribbean, female participation in these programmes exceeds that of men in all countries for which data are available – mostly in the Caribbean – with the exception of Grenada and Barbados.

Thus, women appear to be roughly at parity with men in terms of participation in post-secondary (non-tertiary) education. Again, it would be appropriate to know more about the types of programme in which men or women predominate: they are highly valued in the labour market and closely relevant to subsequent professional careers.

Women are at parity with men in terms of participation in post-secondary education.

Tertiary education and the gender goals

During the last decade, enrolments in higher education worldwide have continued to increase, from an estimated 69 million in 1990 to 88 million in 1997.[24] Total enrolment rose by about 50% in developing countries over those years (from 29 million to 43.4 million), while the increase was much slower in developed countries (up 13%, from 39.5 million to 44.8 million). Over this period, women continued to progress towards achieving parity with men. Their share in tertiary enrolment rose from 46% to 46.8% at the world level. In developing countries women registered the highest gains in absolute terms (an increase of 6.2 million, as against 3.5 million in developed countries), but in the developed countries their participation – already representing more than half of total enrolment (51.2% in 1990) – increased by 1.7 points, to reach 52.9% of total enrolment. It is likely that the overall trend observed from 1990 continued during more recent years.

Caution is necessary in comparing 2000 data with 1990 owing to changes introduced in ISCED 1997 (see Box 2.5). However, a rough comparison of 1990 and 2000 enrolment ratios in countries with comparable data seems to confirm an increase in the tertiary GER in practically all the countries having the data.

24. 1997 is the latest year for which estimates at the world level are available and comparable with past series. See UNESCO (1999, Table II.S.3).

Table 2.18. Tertiary education: grouping of countries according to gross enrolment ratio, by region (2000)
(in each box countries are listed in increasing order of GER)

Regions	Levels of GER: ≤ 15%	15.1%-30%	30.1%-45%	45.1%-65%	Above 65%
Sub-Saharan Africa	Guinea-Bissau, Mozambique, Angola, Chad, Comoros, Burundi, Niger, Ethiopia, Eritrea, Rwanda, C.A.R., Madagascar, Sierra Leone, Zambia, Lesotho, Equatorial Guinea, Kenya, Uganda, Ghana, Benin, Togo, Zimbabwe, Botswana, Cameroon, Congo, Swaziland, Namibia, Mauritius (28)	South Africa (1)			
Arab States	Djibouti, Mauritania, Oman, Morocco, Iraq (5)	Tunisia, Saudi Arabia, Qatar, Palestinian A. T., Jordan (5)	Lebanon (1)	Libyan A. J. (1)	
Central Asia	Tajikistan (1)	Azerbaijan (1)	Kazakhstan, Mongolia, Georgia, Kyrgyzstan (4)		
East Asia and the Pacific	Cambodia, Lao PDR, Tonga, China, Viet Nam, Samoa, Myanmar, Indonesia (8)	Brunei Darussalam, Malaysia (2)	Palau, Philippines, Thailand (3)	Japan, Macao (China), Australia (3)	New Zealand, Rep. of Korea (2)
South and West Asia	Afghanistan, Nepal, Bangladesh, Isl. Rep. of Iran, India (5)				
Latin America and the Caribbean	Trinidad and Tobago, Honduras, Neth. Antilles (3)	Costa Rica, Jamaica, Brazil, Paraguay, El Salvador, Mexico, Colombia, Cuba, Venezuela, Aruba (10)	Panama, Bolivia, Uruguay, Chile, Barbados (5)	Argentina (1)	
North America and Western Europe	Luxembourg (1)	Cyprus, Malta (2)	Switzerland (1)	Ireland, Iceland, Italy, Portugal, Israel, France, Netherlands, Austria, Belgium, Denmark, Canada, Spain, United Kingdom, Greece (14)	Norway, Sweden, United States (3)
Central and Eastern Europe		Albania, Turkey, The FYR of Macedonia, Serbia and Montenegro, Romania, Rep. of Moldova, Czech Republic (7)	Slovakia, Croatia, Hungary, Bulgaria (4)	Lithuania, Poland, Belarus, Estonia, Slovenia, Latvia, Russian Federation (7)	
Total number of countries 128	51	28	18	26	5

Source: Statistical annex, Table 8.

Other sources using consistent data series report decreases in enrolments in several OECD countries since 1995 (e.g. France and Germany), owing to a decrease in population in the relevant age group, in Turkey (OECD, 2002*b*, p. 225) and, since 1990, in some countries of Central Asia (Armenia, Turkmenistan and Uzbekistan) (UNICEF, 2002*a*, p. 77). The same sources report growth in other transition countries, particularly those in Central and Eastern Europe.

Table 2.18 shows the striking differences in overall levels of participation between industrialized, transitional and developing countries. While thirty-one countries, mainly from OECD and transitional Europe, have GERs at tertiary level above 45%, the great majority of developing countries have values below 30%, and almost two-thirds of them have ratios less than 15%.

No countries in sub-Saharan Africa (with the exception of South Africa) or South and West Asia have GERs higher than 15% – indeed all countries of sub-Saharan Africa, with the exceptions of Mauritius, Namibia and South Africa have the equivalent of fewer than 5% of the age group enrolled. In East Asia, too, a number

Table 2.19. Tertiary education: gender parity index of gross enrolment ratio (2000)

Higher male enrolment (50 countries)			
Countries	GER GPI	Countries	GER GPI
Sub-Saharan Africa		**Asia and the Pacific**	
Congo	0.13	*Central Asia*	
Eritrea	0.15	Tajikistan	0.32
Chad	0.17	Georgia	0.99
Guinea-Bissau	*0.18*	Azerbaijan	0.99
C. A. R.	*0.19*	*East Asia and Pacific*	
Togo	*0.20*	Cambodia	0.38
Benin	*0.24*	China	*0.52*
Ethiopia	0.27	Rep. of Korea	0.59
Niger	0.34	Lao PDR	0.59
Burundi	0.36	Viet Nam	0.74
Sierra Leone	0.40	Indonesia	0.77
Ghana	0.40	Macao, China	0,84
Equat. Guinea	*0.43*	Japan	0.85
Zambia	0.47	*South and West Asia*	
Rwanda	0.50	Nepal	0.27
Uganda	0.52	Bangladesh	0.55
Zimbabwe	0.60	India	*0.66*
Angola	*0.63*	Iran, Isl. Rep.	0.93
Comoros	*0.73*		
Kenya	0.77	**Latin America and the Caribbean**	
Mozambique	0.79	Chile	0.92
Madagascar	0.84	Mexico	0.96
Swaziland	0.87		
Botswana	0.89	**North America and West. Europe**	
		Switzerland	0.78
Arab States			
Mauritania	0.20	**Central and Eastern Europe**	
Iraq	*0.54*	Turkey	0.73
Djibouti	0.70		
Morocco	0.80		
Palestinian A. T.	0.96		
Libyan A. J.	0.96		
Tunisia	0.97		

Higher female enrolment (72 countries)			
Countries	GER GPI	Countries	GER GPI
Sub-Saharan Africa		**North America and West. Europe**	
South Africa	1.23	Netherlands	1.07
Namibia	*1.24*	Greece	1.10
Mauritius	1.36	Austria	1.14
Lesotho	1.76	Spain	1.15
		Belgium	1.16
Arab States		Luxembourg	1.19
Lebanon	1.09	France	1.23
Jordan	*1.14*	United Kingdom	1.27
Saudi Arabia	*1.29*	Ireland	1.27
Oman	1.40	Malta	1.30
Qatar	2.97	United States	1.32
		Italy	1.32
Asia and the Pacific		Canada	1.34
Central Asia		Denmark	1.35
Kyrgyzstan	1.04	Cyprus	1.35
Kazakhstan	1.19	Portugal	1.37
Mongolia	1.74	Israel	1.39
East Asia and Pacific		Sweden	1.52
Samoa	1.05	Norway	1.52
Malaysia	1.08	Iceland	1.74
Thailand	1.11		
Australia	1.24	**Central and Eastern Europe**	
Tonga	*1.28*	Czech Republic	1.05
New Zealand	1.52	Slovakia	1.09
Myanmar	1.75	Croatia	1.14
Palau	1.81	Romania	1.20
		Serbia/Montenegro	1.24
Latin America and the Caribbean		Hungary	1.27
Colombia	1.09	Rep. of Moldova	1.29
Cuba	1.14	Russian Fed.	1.29
Costa Rica	1.21	Belarus	1.29
El Salvador	1.24	TFYR Macedonia	1.32
Brazil	1.29	Slovenia	1.35
Honduras	1.31	Bulgaria	1.35
Paraguay	1.36	Poland	1.44
Neth. Antilles	1.38	Lithuania	1.51
Venezuela	1.46	Estonia	1.55
Aruba	1.49	Latvia	1.65
Trinidad/Tobago	1.53	Albania	1.69
Argentina	*1.64*		
Panama	*1.67*		
Uruguay	1.83		
Jamaica	1.89		

General notes: See source table for detailed country notes. Shadowed countries are those with the highest disparities, i.e. those where the female GER is two-thirds the male GER or less, or those where the female GER is higher than the male GER by one-third or more.
Source: Statistical annex, Table 8.

of countries including Cambodia, China and Viet Nam have tertiary GERs lower than 10%.

Table 2.19 ranks countries within each region in increasing order of gender disparities – from the highest disparities in favour of men to the highest in favour of women. On the left are countries where male enrolment ratios are highest, and on the right those where females are ahead.

The priorities in Africa and South Asia are to increase the female share in tertiary education.

It appears from Statistical annex, Table 8 and Table 2.19 that female tertiary students outnumber males in 59% of the countries. However, in sub-Saharan Africa women are poorly represented at tertiary levels, except in some southern African countries, where they are in the majority. In the Arab States there are wide variations – from Mauritania, where women represent about two students out of ten, to Qatar, where the female GER is three times that of males. One explanation for this is that many male students from Qatar pursue their studies abroad. In several countries of Asia and the Pacific the female GER is less than two-thirds of the male GER. These are Cambodia, China, the Lao People's Democratic Republic and the Republic of Korea in East Asia; Bangladesh, India and Nepal in South and West Asia, and Tajikistan in Central Asia. There are however a number of countries where female enrolment exceeds male enrolment, sometimes significantly so – as in Mongolia, Myanmar, New Zealand and Palau. In Latin America and the Caribbean, female rates are generally higher than male rates. Finally, in almost all the countries of North America and Europe, female rates distinctly exceed male rates – often substantially so – with the exception of Switzerland and Turkey, where female enrolment ratios are roughly three-quarters those of males.

Thus, the gender balance of enrolments is somewhat different at tertiary levels than lower down the education system. Many countries have shifted from having a majority of male students to the balance being strongly in favour of women. The priorities in Africa and South Asia are to increase the female share. In many of the richer parts of the world, however, enrolments of men will need to increase significantly if parity at tertiary level is to be achieved.

Distribution of students by gender and type of programme

The decisions students make about their preferred tertiary studies can have a strong influence on their future lives, their jobs and the roles available to them in society. The gender composition of enrolments by level and by field of study is examined below.

As shown in Box 2.7, ISCED 1997 divides tertiary education into two stages, each of which includes distinctively different programmes. Data in Statistical annex Table 8 show that students in the first stage of tertiary education concentrate on programmes of type 5A, i.e. those which are theory-based. Programmes of type 5B, which are more practically oriented, designed for direct entry into the labour market, and usually of shorter duration, are generally less popular, accounting for about 20% of enrolments at this level worldwide. This reflects the labour market advantages of more theory-based studies of the type leading to traditional university degrees. However, there is considerable variation across countries, with students in 5B-type programmes accounting for about half, or more, of enrolments at this level in some countries.[25]

As expected, Level 6 programmes, which are oriented towards advanced studies and research, account for less than 1% of tertiary enrolments worldwide. Programmes at this level are most well established in the industrialized countries, where they account for about 5% of tertiary enrolments. In contrast, they do not exist, or are not reported, in many developing countries, particularly those in sub-Saharan Africa and the small islands of the Pacific and the Caribbean.

25. These include, *inter alia*, Belgium, China, Cyprus, Kenya, Malaysia, Mauritius, Namibia, Republic of Korea, Sierra Leone and Slovenia.

Box 2.7. Tertiary education: definition of ISCED Levels 5A, 5B and 6

5 FIRST STAGE OF TERTIARY EDUCATION

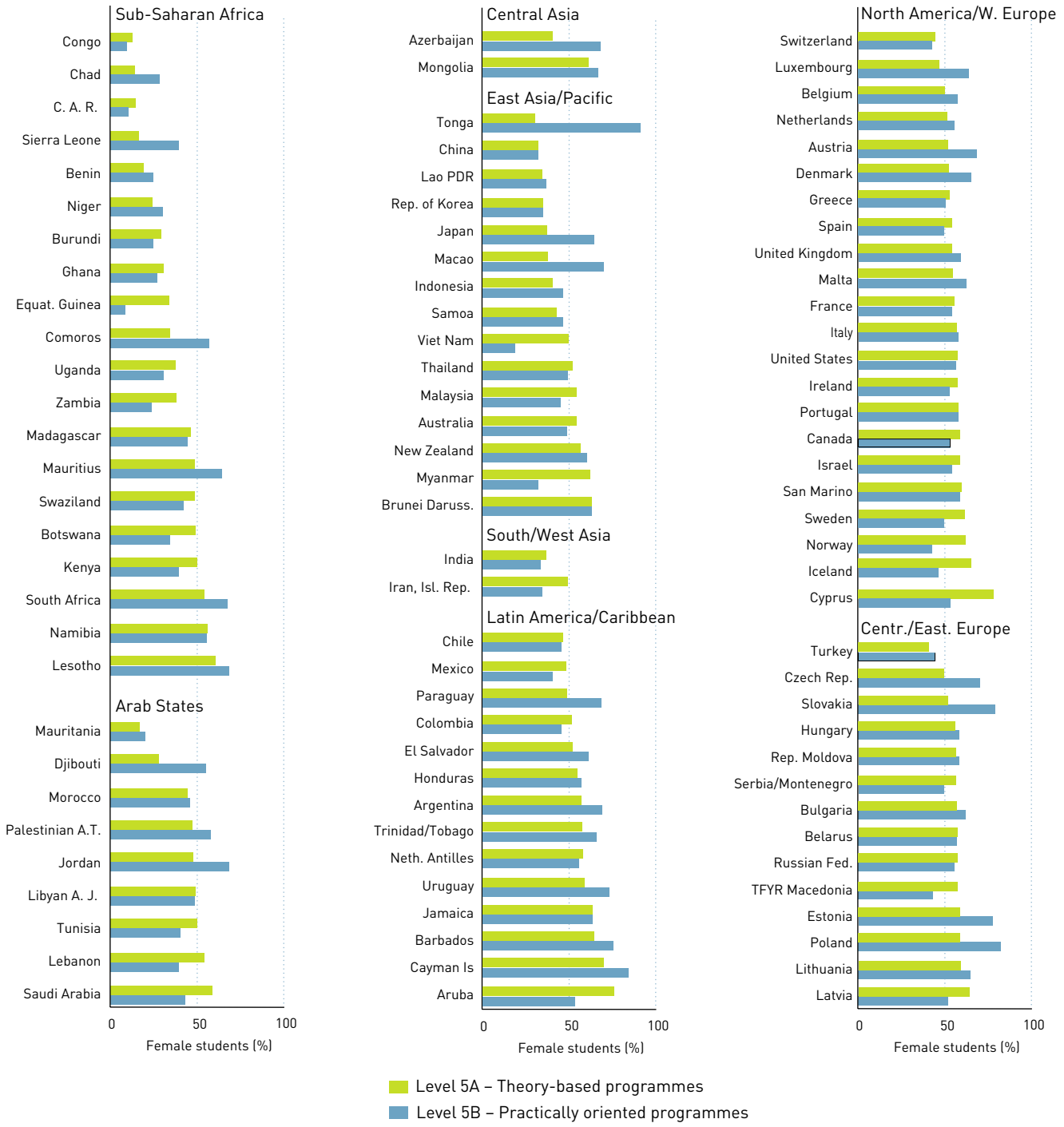
5A ISCED 5A programmes are largely theory-based and are intended to provide sufficient qualifications for gaining entry into advanced research programmes and professions with high skill requirements.

5B ISCED 5B programmes focus on practical, technical or occupational skills for direct entry into the labour market.

6 SECOND STAGE OF TERTIARY EDUCATION

Tertiary programmes at this level are devoted to advanced studies and original research. They lead to the award of an advanced research qualification.

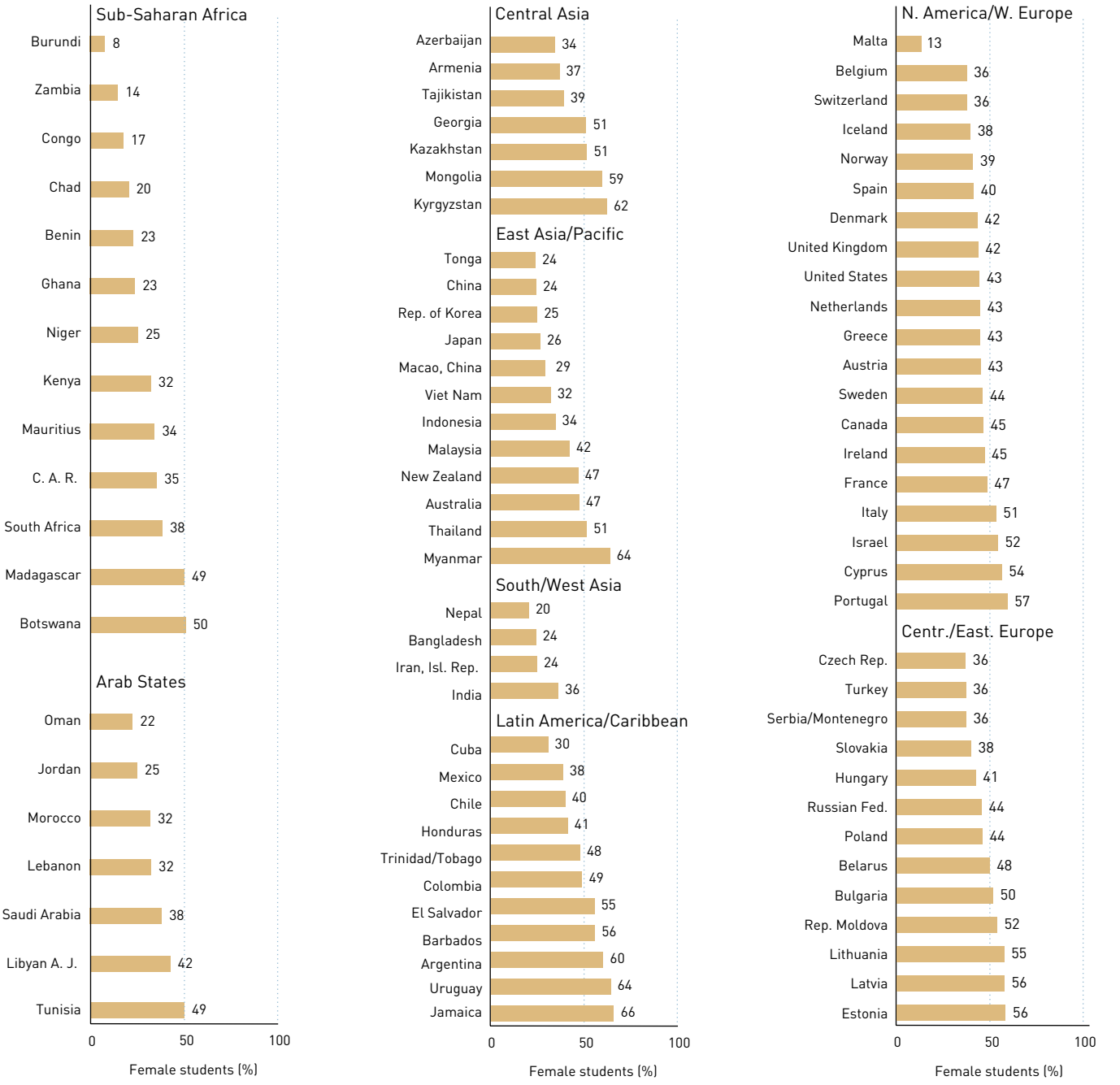
Figure 2.24. Tertiary education: ISCED Level 5 – percentage of female students in type A and type B programmes (2000)
(in increasing order of female percentage in type A programmes)



General note: See source table for detailed country notes.
Source: Statistical annex, Table 8.

Figure 2.24 indicates the extent of female participation in these two broad types of tertiary education programme. It shows that in sub-Saharan Africa, women are generally a minority in both of them, except in Lesotho, Mauritius and South Africa. Elsewhere, ratios are more balanced. However, women are more likely to outnumber men significantly in type B

Figure 2.25. Tertiary education: females as percentage of all students in advanced research programmes – ISCED Level 6 (2000)



General note: See source table for detailed country notes.
Source: Statistical annex, Table 8.

programmes (practically oriented programmes preparing for direct entry into the labour market). There are several examples of this pattern in each region. There are also many countries, especially in Latin America and the Caribbean, and North America and Western Europe, where women are in the majority in type A programmes as well. Nevertheless, the gender pattern in terms of career choice would be clearer if programmes could be examined not only in terms of level but also in terms of field of study within each level.

The situation is different as regards programmes preparing for advanced research qualifications (ISCED Level 6). Here, women are much more often in the minority – even in more industrialized countries (Figure 2.25). The exceptions are provided by about half of the countries shown in Latin America, the Caribbean and Central Asia, where women comprise the majority of Level 6 students, and by a quarter of the European countries shown.[26]

It may be concluded, that, although with wide variability between and within the different regions, there is a pattern whereby female participation in higher education tends to diminish as one moves from ISCED Level 5B (practically oriented programmes of shorter duration) to Level 5A (theory-based programmes) to Level 6 (advanced research programmes).

Female enrolment by field of study

The gender pattern in the selection of fields of study in tertiary education is a key issue in debates about gender equality. The question as to whether differences in this pattern reflect gender preferences or 'specialization', or whether they are a more direct result of cultural and social stereotypes, is one of the aspects of the debate (see discussion in Chapter 3). Analysis of the main gender patterns in the choices of, or orientation towards, specific fields of study is, therefore, essential to inform the debate.

The gender pattern in the choice of fields of study in tertiary education is a key issue in debates about gender equality.

Table 9 in the Statistical annex shows the distribution of enrolments among the different fields of study and the level of female participation in each field. In general, although the distribution changes across countries, the broad field of 'social sciences, business and law' attracts the largest number of enrolments (often more than one-third of the total) in almost all countries. It is generally followed by 'education' in sub-Saharan Africa and by 'humanities and arts' in many countries of the Asia and Pacific region, while 'engineering, manufacturing and construction' programmes come second in most

Table 2.20. Tertiary education: regional estimates of female participation in each broad field of study (1982 and 2000)

	Year	No. of countries	Total all fields	Fields of study: Education	Social sciences, Humanities, Services	Natural sciences and engineering	Agriculture	Health
			Percentage female					
Africa, incl. Arab States[1]	1981	26	31	40	32	19	26	37
Africa, incl. Arab States[1]	2000	12	38	32	42	27	20	46
Asia, incl. Arab States[2]	1982	25	29	53	31	16	14	36
Asia, incl. Arab States[2]	2000	13	43	61	49	23	35	61
Oceania[3]	1982	2	45	68	49	22	25	56
Oceania[3]	2000	2	55	77	58	30	43	76
Mexico	1982	1	36	53	44	14	23	47
Mexico	2000	1	49	66	55	30	28	61
Europe[4]	1982	28	45	69	52	24	34	55
Europe[4]	2000	23	55	75	59	30	47	74

1. Data for both years exclude Nigeria.
2. Data for both years exclude Bangladesh and China. Those for 2000 also exclude India and Pakistan.
3. Data refer to Australia and New Zealand in both years.
4. Not including the former Soviet Union, or its constituent countries.

Sources: 1982 data: UNESCO (1985). 2000 data: Statistical annex, Table 9.

26. It should be recalled that these proportions often refer to a comparatively low enrolment.

Female presence is weakest in engineering, manufacturing and construction courses and in science and agriculture.

countries of Latin America and the Caribbean, North America and Europe. The fields 'health and welfare' and 'science' follow, in this order, for most countries, while the lowest enrolments are reported in 'agriculture' and 'services' programmes (accounting for less than 5% of the total in most countries).

As regards female participation, Statistical annex Table 9 shows that women are most numerous in the field of education, where they often represent three-quarters or more of enrolments, especially in industrialized and transition countries. Sub-Saharan Africa is an exception, however: in only three countries (Botswana, Mauritius and Swaziland) do women account for more than half of the total enrolments in education programmes. In most of the other regions the second field chosen by women is health and welfare, where women often represent between two-thirds and three-quarters of the students. Again, sub-Saharan Africa is an exception, where the proportion of women exceeds 50% in only four countries (Angola, Botswana, Madagascar and Swaziland) – perhaps because many health-related programmes are provided at ISCED Level 5B, in the form of short programmes of professional orientation. The next most frequent choice for women is humanities and arts. In contrast, female presence is weakest in engineering, manufacturing and construction courses and in science and agriculture. The first of these is widely variable, often being around 20% in North America and Western Europe, but higher in transition countries.

Notwithstanding these variations, women have undoubtedly made enormous progress in scientific and technological disciplines over the last few decades. Table 2.20 shows rough estimates of the weighted average female participation rates in the various fields of study for 2000. These values have been compared with the regional averages obtained for the same regions in 1982 (UNESCO, 1985).

The data must be used with caution as the countries included in the regional groupings are often not exactly the same for the two years. Moreover, it was not always possible to identify exactly the countries included in the 1982 figures. For Latin America and the Caribbean, Mexico was the only populous country with comparable data available for 2000.

Nevertheless, even if the table has only illustrative value, it strongly suggests that the female presence has increased everywhere, with the exception of the fields of education and agriculture in Africa. Women have continued to progress in their traditional fields, such as social sciences, humanities, services and health-related programmes. However progress has also occurred in natural sciences and engineering and – outside Africa – in agriculture. It would, of course, be necessary to examine more detailed statistics to determine in which particular disciplines women made most gains and where they still lag behind.

Foreign students

The rapidly increasing international circulation of goods, people and knowledge has reinforced the demand for study abroad. This reflects the wish of young students, both from developing and developed countries, to broaden their knowledge and skills, sometimes encouraged by there being limited educational provision at home. Host countries receive direct benefits from tuition fees paid by foreign students and sometimes from increased scale economies in tertiary education services. In addition, useful links with the elite of developing countries may stem from supplying such programmes to foreign youth. There may be benefits to the sending countries too – but usually only if the students return home. However, students are often able to work and stay in host countries long after their studies are completed. This 'brain drain' brings considerable costs to many of the sending countries concerned.

Data on foreign students are reported by sixty-seven countries, and data by gender by forty-seven of these. Some developed countries accommodate a substantial number of foreign students. Five of them (Australia, France, Germany, the United Kingdom and the United States) are reported to receive just over two-thirds of all such students (Statistical annex, Table 8).

It has been shown that women often represent the majority of tertiary students in industrialized countries. However, among foreign students the overall proportion of women is somewhat lower (45.5%). In the two major host countries, the United States and the United Kingdom, the proportion of female foreign students is 42% and 48% respectively (which compares with 56% and 55%, respectively, among their total student populations). In other words, young women pursue foreign study less frequently than their male colleagues.

It would be useful to know more about the gender composition of foreign students by country of origin, but no such statistics are yet available. The analysis of more qualitative factors that determine the decision to study abroad (family and social factors, academic support or counselling) or that attract selectively male or female students (particular disciplines, social and cultural environment of certain host countries) would also be helpful.

The rapidly increasing international circulation of goods, people and knowledge has boosted the demand for study abroad.

Learning programmes for life skills and literacy

Goal 3. Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes.

Goal 4. Achieving a 50% improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults.

Monitoring enrolment is less complex than monitoring outcomes.

Goal 4, on adult literacy, cannot easily be excluded from the discussion about Goal 3. This is, first, because the learning programmes for youth and adults in which literacy skills are enhanced often embrace skills also addressed by Goal 3. Second, there is a question as to how 'life skills' (to which the text of Goal 3 refers), relate to literacy skills. Are literacy skills a subset of life skills? Or should they be regarded as separate? Finally, there are questions about literacy rates as such. What precisely do they measure, and to what extent can they be seen as an expression of countries' policies regarding adult learning?

This section first discusses these conceptual and methodological issues. It then examines data regarding literacy among youth and adults, mindful of the caveats mentioned earlier, and concludes with a review of learning programmes with some emphasis on those that are specially targeted at young and adult women. Chapter 4 discusses some of these programmes in more detail.

Monitoring Goals 3 and 4

Box 2.8 discusses various interpretations of the term 'life skills', and suggests a way of 'unpacking' it. The box shows that there are strong links between Goals 3 and 4 regarding the *learning programmes* in which the various skills can be acquired. On the other hand these *skills as such* are treated distinctly in the Dakar Framework of Action. This is indicated in Box 2.9, which maps the kind of sources and indicators that are needed to monitor Goals 3 and 4. It also explains why most of the necessary indicators are currently scarce or unreliable.

When comparing the data situation in the upper half of Box 2.9 (access to learning programmes) with that in the lower half (skills or other outcome measures), the former area seems the more promising in the medium term for monitoring progress on Goals 3 and 4. LAMP will take time to spread its new methodology from the few pilot countries to a greater area, while internationally comparable data on generic and especially 'contextual' skills are likely to remain very scarce for some time.

The gathering of basic information about enrolment in learning programmes seems feasible. Monitoring enrolment is genuinely less complex than monitoring outcomes, in that it does not require consensus-building regarding universal (as opposed to culture-specific) definitions of competences, operationalization and development of test items.

Perhaps more importantly, the outcomes of monitoring 'equitable access' – as Goals 3 and 4 both put it – can be linked to policy development without too much ambiguity. Once a country has some overview of which groups are enrolled in which kind of programme, there will also be an indication of under-enrolment and exclusion among other groups. Policies can then be adjusted.

For literacy rates (and for measures of other skills), the link with policy is much more ambiguous. If a person is literate, this can be a result of having attended primary education; of having participated in a learning programme for youth and adults; or of having acquired literacy skills informally. Illiteracy can be a result of not having attended school or a learning programme; of having attended a school or programme of poor quality; or of having lost the skills over time. Literacy rates as such do not provide information about these underlying causes.

Only 'genuine' literacy data, based on direct assessment and supported by information on the 'educational history' of the individual, will overcome such problems. In the absence of such data and of macro-level information on access to learning programmes, this report will continue with the two-tiered approach it chose in 2002:

- to analyse trends in literacy rates, mindful of the caveats highlighted above (lower right cell of Box 2.9);
- to identify and describe learning programmes for youth and adults in a more qualitative way, combining Goals 3 and 4 (upper half of Box 2.9).

Box 2.8. Life skills

The term 'life skills' is currently used by many governments, organizations and individual authors. It has become an important element in the discourse on learning and development. In various empirical applications of the term, a certain dissatisfaction with regular education as being too theoretical is evident, as well as a wish to make education and learning programs more relevant to the lives of children and adults. Education and learning programs are thought by some people to have focused too strongly on the cognitive elements ('learning to know' as the Delors Commission put it – UNESCO, 1996). Other dimensions of learning are said to deserve more attention, such as learning to apply knowledge and skills; learning to co-operate with other groups; and learning to develop oneself as an autonomous person. The Delors Commission and the DeSeCo project (Rychen and Salganik, 2001; OECD, 2002*a*) each articulated this broader notion of learning, even if their terminology and conclusions are not quite identical.

While this critique of educational practice may be widely acknowledged, there is little agreement on what life skills means. Indeed, it has no central place in the work of either the Delors Commission or the DeSeCo project.

The term appears to be used in one of the following five ways, sometimes combining some of the categories.

- The term 'life skills' is often used to capture skills such as problem-solving, working in teams, networking, communicating, negotiating, etc. Their generic nature – their importance throughout life, in varying contexts – is held in common with literacy skills. Sometimes these generic skills are therefore referred to as the 'fourth box', in addition to the three main components of literacy: reading, writing and numeracy. These generic skills are seldom, if ever, acquired in isolation from other skills.
- The term life skills is also often used to refer to skills needed in daily life that are strongly connected to a certain context. Examples are livelihood skills, health skills, skills related to gender and family life, and environmental skills. These can be termed 'contextual skills', while accepting that skills are in practice never purely contextual or purely generic. Moreover, these contextual skills seldom exist in isolation from certain generic and literacy skills. Thus, to sustain a livelihood may not only require practical skills such as the ability to grow crops or to repair equipment, but also a generic skill such as negotiation, and a literacy skill such as numeracy. It is also in the *acquisition* of these contextual skills that the links with other types of skill are important (Oxenham et al., 2002; Oxenham, 2003), not least when women are the target group (Robinson-Pant, 2003).
- Because of these links, some see the contextual skills as composite skills that *include* generic and literacy skills. This is expressed in the use of terms such as legal literacy, family literacy, health literacy, money literacy, environmental literacy, visual literacy and, tautological as it may seem, word literacy (Hanemann, 2003). However, this notion of multiple literacies tends to undervalue the 'common denominator of skills involved in reading and writing, and the fact that these skills will be of special importance because it is their applicability to a wider variety of situations that makes them basic (Lauglo, 2001). For reasons of measurement and monitoring it seems important to distinguish generic and literacy skills from contextual skills, notwithstanding the benefits of linking the three in the praxis of skills acquisition.
- The term life skills is also used in the school context. Here, the term is used to refer to any subject matter other than language or mathematics, e.g. science and technology, civic sense, community development, health, nutrition, HIV/AIDS and related behavior.
- Finally, one finds other miscellaneous skills being referred to as life skills, such as cooking, making friends and crossing the street.

It can be concluded that generic and 'contextual' skills are the more important and robust subsets of skills among those that are usually referred to as life skills. There is merit in distinguishing these from one another and from literacy skills, while acknowledging the links between the three in practice.

Source: 'Understanding Goal 3'. Analysis by the EFA Global Monitoring Report Team (to be posted on the Report's website).

Box 2.9. Sources and indicators for monitoring Goals 3 and 4

	Goal 3	Goal 4
Monitoring access to learning programs	Given the fact that learning programs for youth and adults often address literacy as well as other skills, the monitoring of access to these programs could be one and the same activity for both goals. Information is needed on aspects such as: • demand for, enrolment in and target groups of these programs; • providers (e.g. government, communities, NGOs, private providers), initiators and longevity of the programs; • duration, costs and fees; • content, learning objectives and themes. The NFE-MIS project has been initiated to address such information needs in the future. The shorter term processes such as the CONFINTEA Mid-Term Review are crucially important (www.unesco.org/education/uie/activities/CONFVReviewindex.shtml), as are regional initiatives such as the Shadow Report by the International Council for Adult Education (www.icae.org.uy/icaepdfs/table.pdf). But at present, any indications of the *scale* of learning programs relative to the size of the adult population are lacking. Case studies are still the only sources. Although these often contain figures on enrolment, they cannot be used to construct a picture at macro-level, nor help to identify excluded groups. For secondary and tertiary education, and for the vocational courses and studies within these, official enrolment statistics can be used.	
Monitoring acquisition of skills or other outcomes	Measures of life skills: • Generic skills. Some internationally comparable measures will be available in the near future from the Adult Literacy and Life Skills Survey (www.ets.org/all). But a low coverage among developing countries in such surveys is foreseen for the medium term. • 'Contextual' skills. Some national measures are available (see UNESCO, 2002*a*, Box 2.7). Proxy measures are also available such as the number of certificates issued or the number of learners who find a job. But internationally comparable outcome measures are less feasible because of the context-specific nature of these skills. Secondary and tertiary education: • Completion and graduation rates can be used as outcome measures.	Literacy rates: • These have a relatively high coverage among developing countries. • But the validity of literacy rates is questioned. Often, literacy rates are based on self-proclaimed literacy, or on the assumption that an individual is literate when he or she has completed a certain number of years of basic education. From various school surveys it can be concluded that this assumption is too optimistic. • An important initiative to improve data on literacy is therefore the Literacy Assessment and Monitoring Programme (LAMP). Starting in a small number of pilot countries, LAMP will seek to introduce and expand a new methodology for literacy assessment (see Box 2.10).

Literacy rates

It is estimated that in 2000 there were 862 million illiterates in the world. This represented a reduction of about 2% over the decade, and a further reduction (around 7%) is expected by 2015 (Table 2.21).

At present, almost half of the world's illiterates live in South and West Asia. Their numbers are still increasing, and mainly reflect the situation of Bangladesh, India and Pakistan. The East Asia and the Pacific region accounts for almost a further quarter. However, the number of illiterates in China fell by 22% between 1990 and

Box 2.10. Literacy Assessment and Monitoring Programme (LAMP)

LAMP seeks to specify what literacy is and to improve its measurement, in order to inform policy-making at the national and international level, and to support the design of literacy programmes.

Most national literacy statistics, such as those used in this report, are based on a mix of self-declarations and on educational attainment proxies. These measures can be unreliable. Declaration by an individual or by a household head is subject to bias, and many children complete primary school without acquiring the ability to read.

Furthermore, some of these statistics are based on the current UNESCO definition that literacy is the ability to read and write, with understanding, a short simple statement relate to one's daily life. However it is now recognized that the concept of literacy embraces a continuum of skills, in a variety of dimensions, at different levels of mastery and for different purposes. Indeed, is a person who can only sign literate? What about someone who is familiar with medication names but who struggles with reading a short story?

LAMP will build a broader notion of literacy. It will develop a methodology, currently being tested in a small number of countries, to measure skills directly through assessments. It aims to provide participating countries with literacy data of high quality. Using a framework of five levels of mastery, LAMP is compatible with the International Adult Literacy Survey (IALS) that has been undertaken in industrialized countries. This common framework is intended to become a world standard for literacy assessment.

However, this standard differs from the current 'dichotomous' measures – imposed by the data presently available – by which people are designated literate or illiterate. Given the change in methodology it will not be possible to make direct comparisons between LAMP results and current data. Retrospective estimates will be used to assess the progress of the participating countries against Goal 4. But comparisons with countries not using the LAMP methodology will require even more caution.

Source: UNESCO Institute for Statistics (www.uis.unesco.org).

Table 2.21. Estimated number of adult illiterates – population aged 15 and over (1990, 2000 and 2015)

	Adult illiterates (15+)							
	1990		2000		2015		Percentage change	
	Total (thousands)	% F	Total (thousands)	% F	Total (thousands)	% F	1990 to 2000	2000 to 2015
World	879 130	63	861 966	64	799 152	63	-2.0	-7.3
Developed and transition countries	21 970	70	14 895	67	7 521	61	-32.2	-49.5
Developing countries	857 159	63	847 071	64	791 631	64	-1.2	-6.5
of which:								
Sub-Saharan Africa	131 380	61	135 980	61	132 844	61	3.5	-2.3
Arab States	62 400	63	67 473	64	70 803	64	8.1	4.9
East Asia and the Pacific	232 904	69	186 404	71	114 123	73	-20.0	-38.8
South and West Asia	382 151	60	412 242	61	436 704	62	7.9	5.9
Latin America and the Caribbean	41 932	56	39 254	56	33 055	54	-6.4	-15.8

Source: Statistical annex, Table 2.

2000. Owing to an expected further fall of around 43% by 2015, it is expected that, by that date, sub-Saharan Africa will have more illiterates among its population than East Asia and the Pacific.

The traditional UNESCO definition of literacy (see Box 2.12), still adhered to in many national population censuses, is somewhat outdated today when more and more countries are interested in collecting data on different levels of literacy skills according to their own national cultural, linguistic and educational contexts.

Table 2.22. Estimated adult literacy rate (population aged 15 and over) by gender, and gender parity index (1990, 2000 and 2015)

	1990				2000				2015			
	Literacy rates (%)			GPI	Literacy rates (%)			GPI	Literacy rates (%)			GPI
	Total	Male	Female	F/M	Total	Male	Female	F/M	Total	Male	Female	F/M
World	75.3	81.7	68.9	0.84	79.7	85.2	74.2	0.87	85.0	89.0	81.0	0.91
Developed and transition countries	97.7	98.5	96.9	0.98	98.6	99.0	98.1	0.99	99.3	99.4	99.2	1.00
Developing countries	67.0	75.9	57.9	0.76	73.6	81.0	66.1	0.82	81.3	86.5	76.1	0.88
of which:												
Sub-Saharan Africa	49.2	59.3	39.5	0.67	60.3	68.9	52.0	0.75	73.9	79.7	68.2	0.86
Arab States	50.2	63.8	35.8	0.56	60.1	71.7	47.8	0.67	71.7	80.1	62.9	0.79
East Asia and the Pacific	80.3	88.1	72.2	0.82	86.6	92.5	80.6	0.87	93.3	96.5	90.1	0.93
South and West Asia	47.5	59.7	34.5	0.58	55.3	66.4	43.6	0.66	65.6	74.5	56.3	0.76
Latin America and the Caribbean	85.1	86.8	83.4	0.96	88.9	89.9	87.9	0.98	92.9	93.2	92.5	0.99

Source: Statistical annex, Table 2.

Box 2.11. Interpreting the literacy goal

The goal set out in the Dakar Framework for Action of improving the literacy rates (LR) by 50%, means that in the case of countries where LR_{2000} exceeds 66.7%, achievement of the goal would seem to require an LR_{2015} of more than 100%. Thus, the target should be defined as requiring an increase of 50% for countries where LR_{2000} is ≤ 66.7%. However, in countries where LR_{2000} is > 66.7%, the target would be set at LR_{2015} = 100%.

The Jomtien formulation of the corresponding goal was: *Reduction of the adult illiteracy rate (the appropriate age group to be determined in each country) to, say, one-half its 1990 level by the year 2000….* This is not the same as increasing literacy rates by 50%. The Jomtien formulation was less ambiguous than its successor, because the target was equally relevant for all countries. Nevertheless, it implied the need for much greater efforts by the countries with the greatest proportions of illiterates among their populations. This unfortunate implication was successfully amended by the Dakar formulation of the goal.

Box 2.12. Traditional UNESCO definitions of literacy

Literacy

A person is literate who can, with understanding, both read and write a short simple statement on his or her everyday life.

Functional literacy

A person is functionally literate who can engage in all those activities in which literacy is required for effective function of his or her group and community and also for enabling him or her to continue to use reading, writing and calculation for his or her own and the community's development.

Source: UIS website. unescostat.unesco.org

Moreover, the methods of self-declaration and declaration on behalf of others, which are used in some censuses, are subject to bias.

Table 2.22 shows adult literacy rates. Progress has been extremely slow. In sub-Saharan Africa and the Arab States, they increased by about 20% over the decade to 2000. Elsewhere, increases were much less. Thus, on the basis of past trends and demographic expectations, the increases in literacy rates to 2015 are likely to be much less than 50%, even in those regions where rates are currently lower than 66.7%.[27]

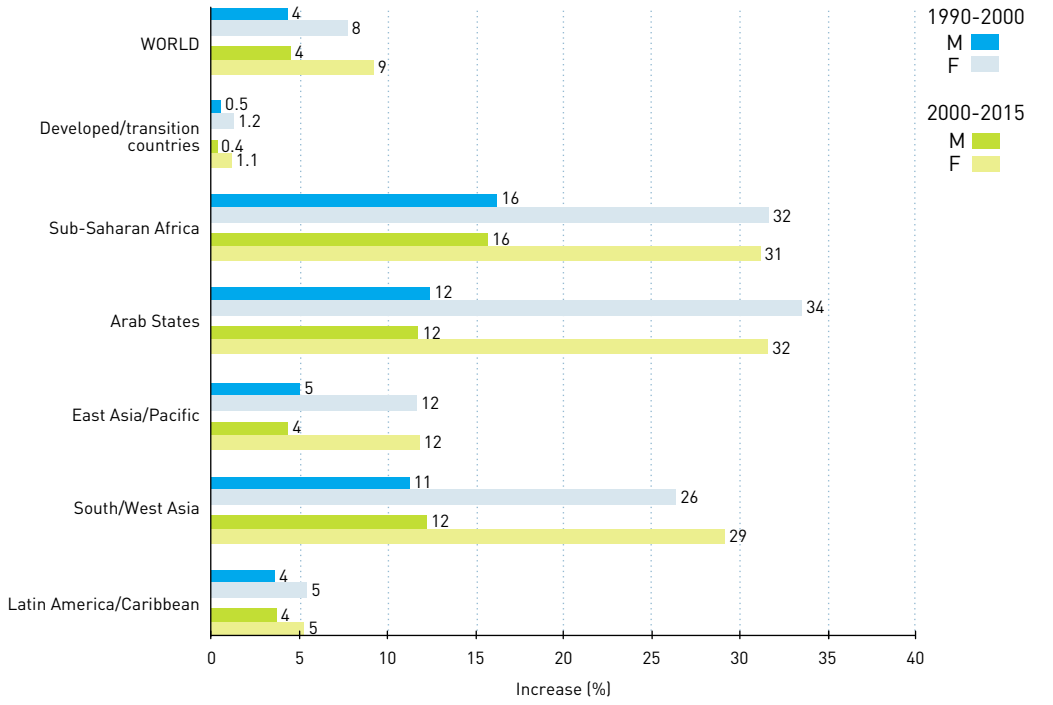
The increases represented in Figure 2.26 are the differences in literacy rates between the initial year and the final year, expressed as a percentage of the literacy rate in the initial year, i.e. the relative increase mentioned in the Dakar goal (see Box 2.11).

The increases in literacy rates have been, and are expected to remain, significantly and consistently higher for women than for men. However even for women, Figure 2.26 shows that regional literacy rates grew between 1990 and 2000, by at most one-third (in sub-Saharan Africa and the Arab States). Projected increases to 2015 (on the basis of past trends) do not, at present, exceed these values – although changes in national policies and the introduction of stronger literacy programmes could obviously affect those outcomes.

It can be seen that women account for almost two-thirds of the world's illiterates. This ratio is fairly stable across most regions, with the exception of Latin America and the Caribbean where they comprise a small majority of the total

27. These judgements are based on forecasts made by the UIS in 2002, essentially using literacy rates by gender and by age group obtained during national population censuses and household surveys, applying a methodology developed by UNESCO in 1994. For a description of the methodology used see UNESCO (1995*b*). Available on UIS website. unescostat.unesco.org

Figure 2.26. Percentage increases in adult literacy rate, by gender (from 1990 to 2000 and from 2000 to 2015)



Note: The world total also includes developed countries and countries in transition, where the increase in literacy rates has been very low, because the levels of literacy are estimated to be close to universal.
Source: Statistical annex, Table 2.

(Figure 2.27). Projections suggest that these proportions will remain fairly stable, except in East Asia and the Pacific, where women may comprise up to three-quarters of the total by 2015.

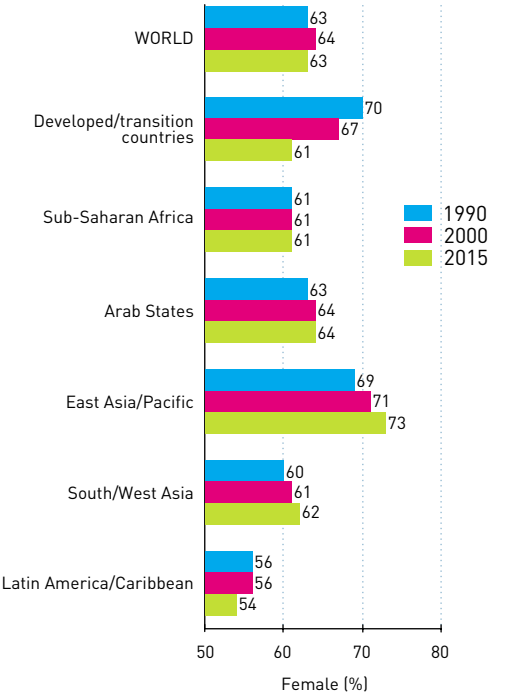
On the other hand, demographic characteristics strongly influence these statistics. Most notably, as women live longer than men, they make up the majority of the population in the older age groups, where illiteracy levels are highest. Accordingly, the GPI provides a better measure of gender disparities in rates of illiteracy than do head count comparisons.

Youth literacy

School enrolments have a potent impact on rates of illiteracy for the younger age groups, but not for older generations where illiteracy incidence is greatest.

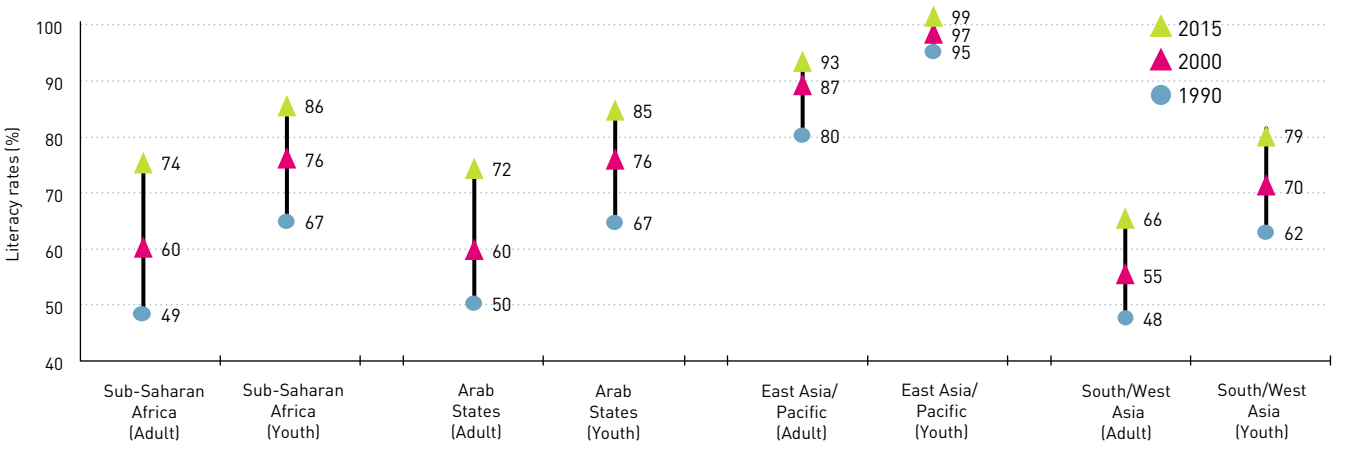
Figure 2.28 shows the extent to which the values of literacy rates are consistently higher among the 15–24 age group, in the four regions with the lowest levels of adult literacy. In East Asia and the Pacific, it can be seen that almost all the youth population is already literate.

Figure 2.27. Percentage of females among adult illiterates, by region (1990, 2000 and 2015)



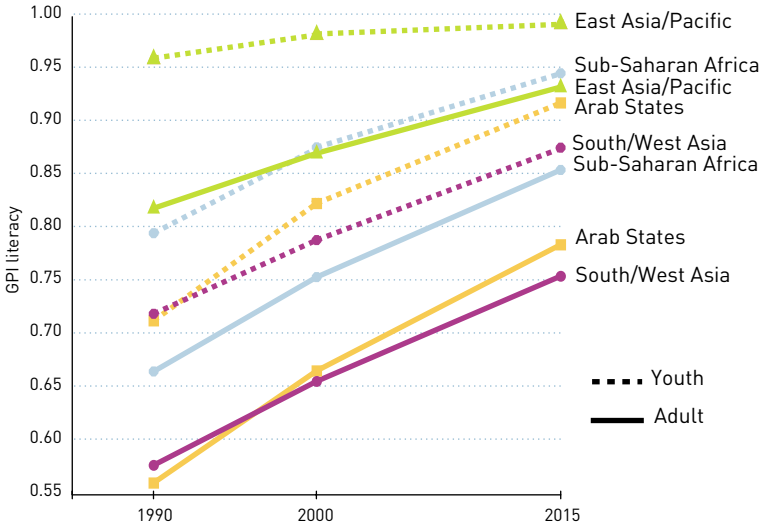
Source: Statistical annex, Table 2.

Figure 2.28. Estimated literacy rates, for adults and youth, in four selected regions (1990, 2000 and 2015)
(adults: age 15 and over; youth: age group 15–24)



Source: Statistical annex, Table 2.

Figure 2.29. Gender parity indices for adult and youth literacy rates (1990–2015)



Source: Statistical annex, Table 2.

Figure 2.29 shows that, in these same regions, adult literacy rates are moving towards gender parity – led by the impact of schooling on literacy rates and gender ratios for those aged 15–24. Although at present it seems that parity will not be reached on average in the four regions with the highest disparities, all are expected to exceed values of 0.85 for the GPI of youth literacy by 2015.

Situation at country level

Literacy rates in developed and transition countries are generally well above 95%, with very few exceptions. They are also generally high throughout much of Latin America and the Caribbean.

Figure 2.30 indicates the current levels of adult literacy rates by gender for countries in which three-quarters, or less, of the population were literate in the year 2000. It shows that literacy

Table 2.23. Nine countries with high illiteracy: trends and projections to 2015

	Adult literacy rates					Adult illiterates				
	%			% changes		(millions)			% changes	
	1990	2000	2015	1990 to 2000	2000 to 2015	1990	2000	2015	1990-2000	2000-2015
Bangladesh	34.2	40.0	47.2	16.9	17.9	41.9	50.6	64.9	20.6	28.4
Brazil	82.0	86.9	91.8	5.9	5.6	17.4	15.9	12.5	-8.5	-21.4
China	78.3	85.2	92.9	8.8	9.1	181.3	141.9	80.5	-21.7	-43.3
Egypt	47.1	55.3	65.9	17.4	19.2	17.9	19.6	21.0	9.8	7.3
Ethiopia	28.6	39.1	56.4	36.7	44.2	18.8	21.0	21.8	11.6	3.7
India	49.3	57.2	67.9	16.0	18.7	272.4	287.0	288.4	5.3	0.5
Indonesia	79.5	86.8	93.6	9.2	7.8	23.9	19.4	12.1	-19.0	-37.5
Nigeria	48.7	64.0	81.4	31.6	27.2	23.7	22.5	18.0	-5.1	-20.0
Pakistan	35.4	43.2	55.3	22.1	28.1	41.2	46.7	56.2	13.4	20.3

Source: Statistical annex, Table 2.

rates were below 40% in some countries of sub-Saharan Africa (Benin, Burkina Faso, Ethiopia, the Gambia, Guinea-Bissau, Mali, the Niger and Senegal) and Iraq. It can also be seen that substantial gender gaps, to the disadvantage of women, exist in all the countries shown: the GPI is below 0.50 in a number of them (Benin, Burkina Faso, Guinea-Bissau, Iraq, Mali, Mozambique, Nepal, the Niger, Pakistan and Yemen), indicating female literacy rates of half the male rates or less. The only exceptions are in four Central American countries, which report rates slightly in favour of women.

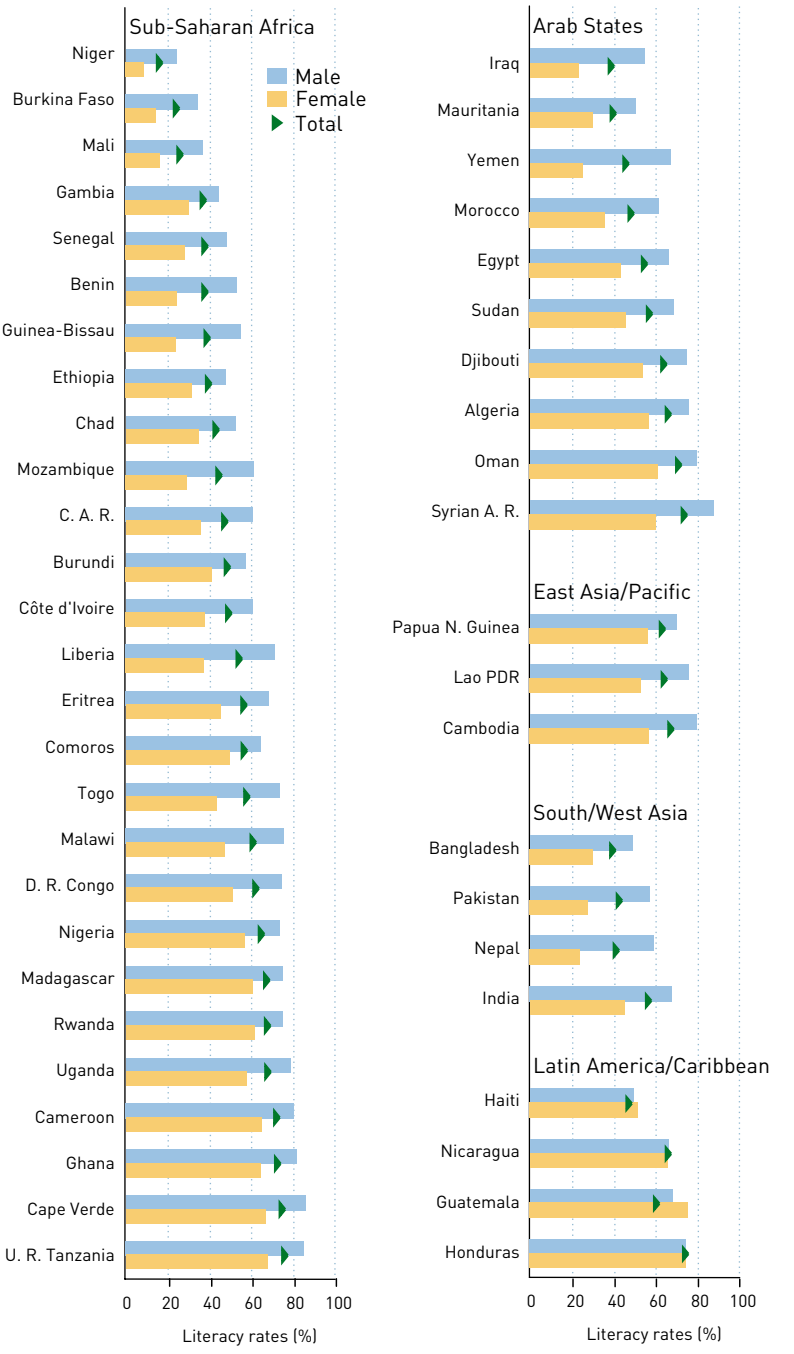
Table 2.23 presents estimated literacy levels as well as recent and projected trends for the nine countries with the largest numbers of illiterates.

China has seen an important decrease in the number of illiterates between 1990 and 2000 and this is expected to decrease further from 2000 to 2015. Its literacy rates are expected to improve from 85% in 2000 to 93% in 2015. Literacy rates have improved everywhere, particularly in Ethiopia and Nigeria (by 37% and 32%, respectively) and this trend is expected to continue through 2015. Despite the general improvement, the number of illiterates has continued to grow in Bangladesh, Egypt, Ethiopia, India and Pakistan, although a stabilization is projected for India by 2015 (Goujon and McNay, 2003). Their numbers have, however, declined in Brazil, Indonesia and Nigeria, sometimes quite considerably.

Figure 2.31 shows the youth literacy situation for the countries where adult literacy rates are 75% or less. It shows that, even for the younger generation, literacy is at a critically low level for a number of countries and is not expected to become universal by 2015, despite current efforts in many of these countries to expand primary education.

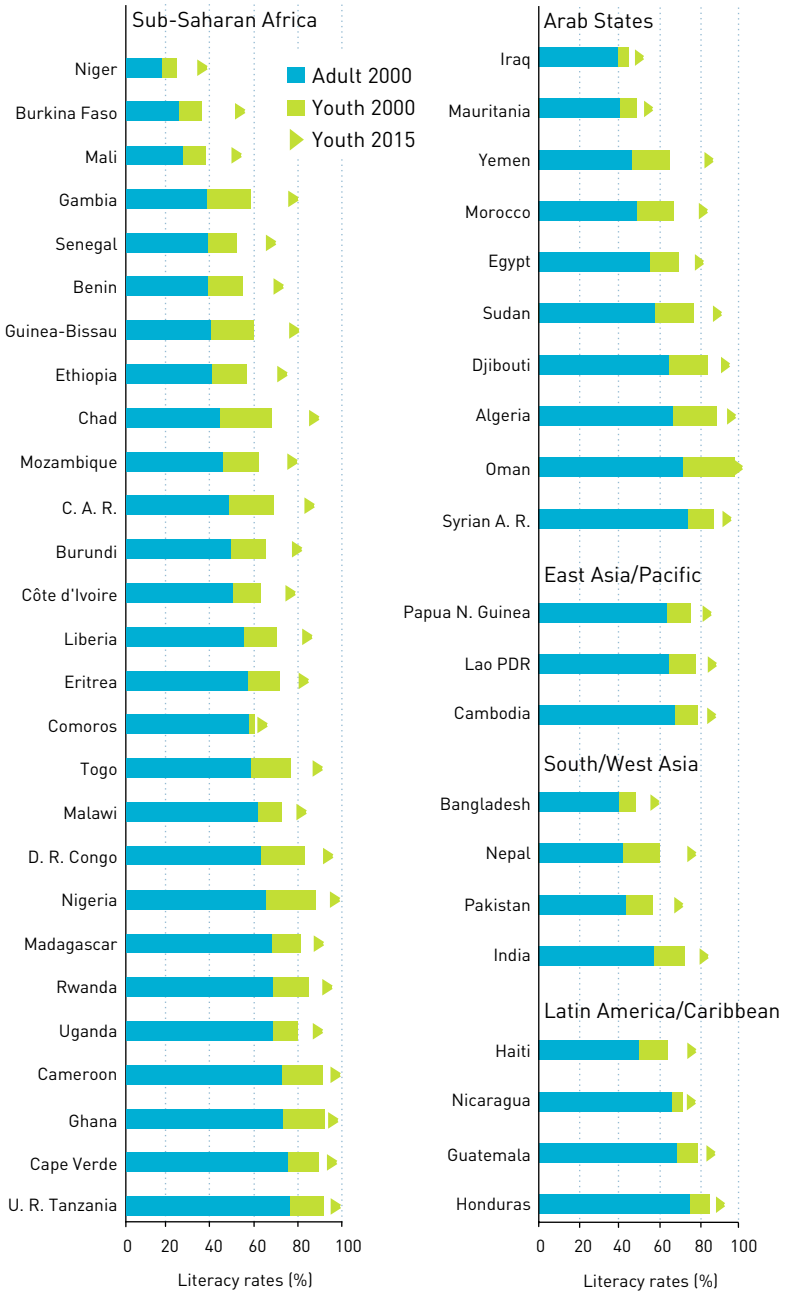
Figure 2.32 gives an insight into past and possible future improvements in gender parity for literacy. It shows the GPIs in adult literacy in 1990 and 2000 and those for 2015, estimated by projecting past trends of literacy rates, i.e. assuming that policy and context do not change. Only countries where the situation was most critical in 1990 (GPI of 0.75 and below) are included.

Figure 2.30. Adult literacy rate by gender (2000)
(not including countries with overall literacy rates above 75%)



Source: Statistical annex, Table 2.

Figure 2.31. Estimated adult and youth literacy rates (2000), and projections of youth literacy rate to 2015
(not including countries with overall adult literacy rate above 75%; in increasing order of adult literacy rate)



Source: Statistical annex, Table 2.

Significant progress towards gender parity can be seen during the last decade. Most noteworthy is that registered in Burundi, the Central Africa Republic, Chad, Oman, Saudi Arabia, the Sudan and Yemen (all over 0.14). Other increases, albeit more moderate (between 0.10 and 0.13) are reported in half of the sub-Saharan African countries, in most Arab States and Nepal. This upward trend is expected to continue during the next fifteen years. These countries will however remain some distance from achieving gender parity on current trends. In each region the GPI will exceed 0.80 in only half of the countries considered in the chart.

As expected, youth literacy levels are closer to the parity threshold. The pattern is shown in Figure 2.33, for the same countries as those shown in Figure 2.32. While for adults no country in this group is projected to reach gender parity by 2015, a number of countries, including some in sub-Saharan Africa and the Arab States, should approach that target for their younger generations.

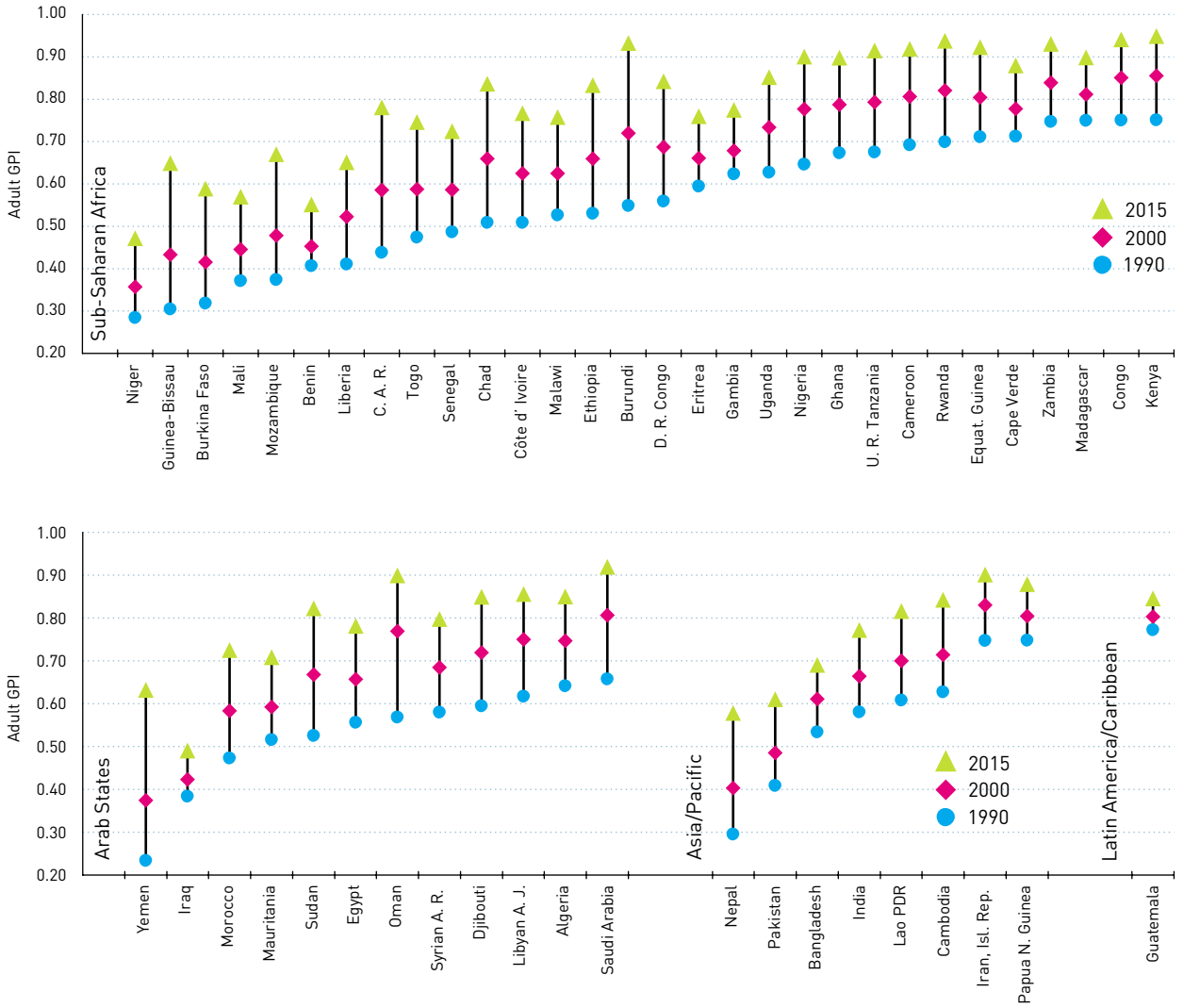
In conclusion, on present trends, the target of improving adult literacy rates by 50% seems unlikely to be reached in many developing countries. Gender disparities in literacy are easing, but at a very slow pace. This trend reflects the structural difficulty of achieving rapid progress in literacy due to the preponderance of older generations in the illiterate population, and the fact that a majority of this age group are women.

Learning programmes for youth and adults

As pointed out at the beginning of this chapter, literacy training cannot be seen entirely separately from training for other skills. Indeed, learning programmes for youth and adults usually address literacy and contextual and generic skills simultaneously. Exceptions are rare but include the following examples.

- Literacy. The classic example of activities exclusively focused on rapid gains in literacy is the mass campaign. Although the success of some of these literacy campaigns cannot be denied, there are doubts about their effectiveness (Lauglo, 2001). A high level of enthusiasm among both learners and teachers is crucial to success. Only in special

Figure 2.32. GPI of adult literacy rate by country (1990, 2000 and 2015)
(not including countries with GPI above 0.75 in 1990; in increasing order of GPI in 1990)



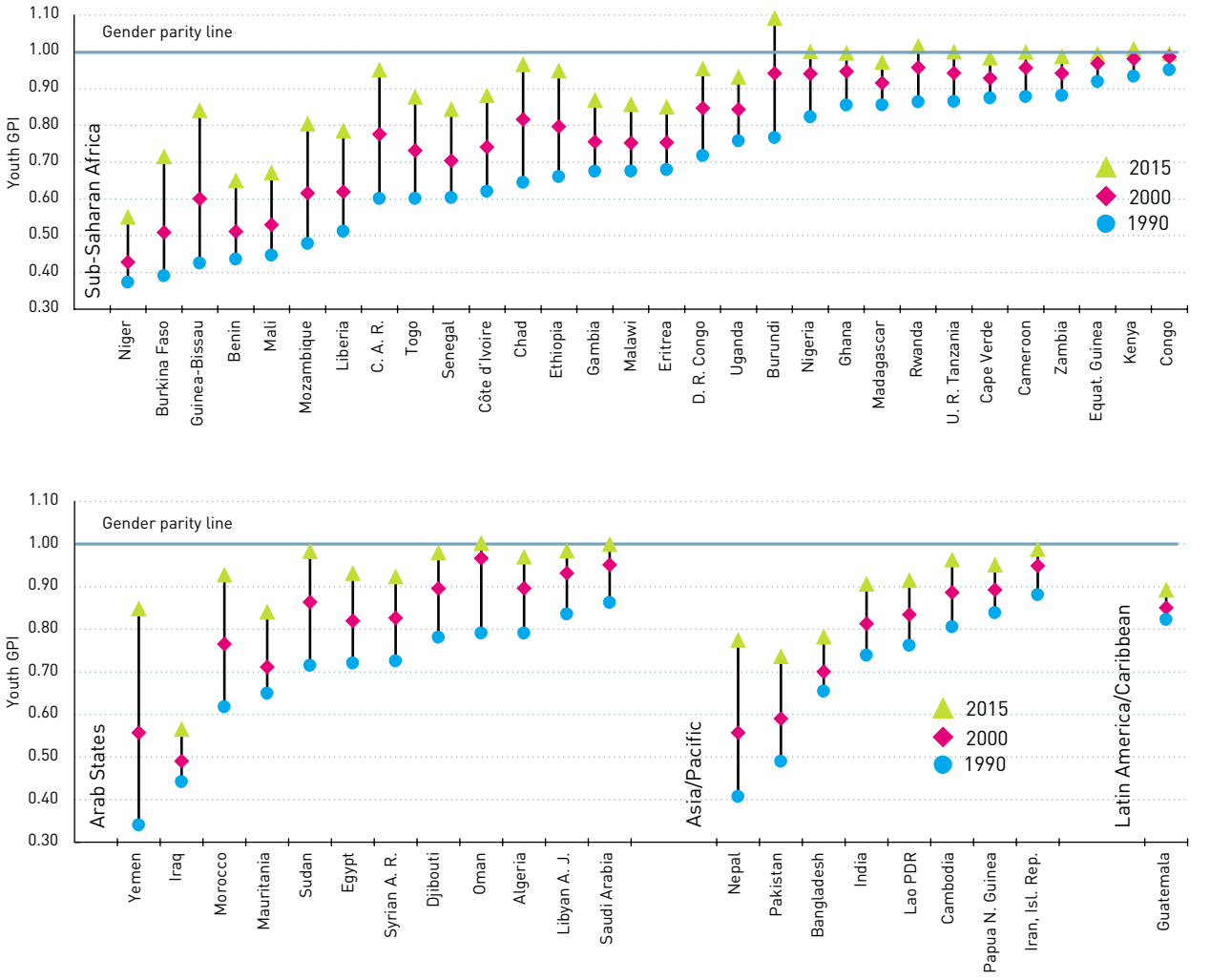
Source: Statistical annex, Table 2.

circumstances – such as when there is a revolutionary spirit – can such enthusiasm be sustained, and even then there are doubts about the long-term retention of literacy skills.

- 'Contextual' skills. The Self-Employed Women's Association (SEWA) in India runs programmes aimed at enhancing the capabilities for income generation among poor women without addressing literacy skills (Robinson-Pant, 2003). This is, however, an exceptional case in so far as lower level skills training is concerned. At higher levels, skills training is more likely to exclude literacy simply because literacy skills are present already. One of many examples is the Sofia project in Cuba, aiming to increase the proportion of female workers in entrepreneurial and managerial positions (Hanemann, 2003*a*).

- Generic skills. It is difficult to imagine a programme where people are successfully trained in generic skills without any relation to the context in which they live and work. Such programmes have not been found in the literature.

Figure 2.33. GPI of youth literacy rate by country (1990, 2000 and 2015)
(in increasing order of GPI in 1990)



Source: Statistical annex, Table 2.

Thus, most learning programmes link the three types of skill. But how precisely does this happen? There seems to have been a shift between two paradigms.

- In earlier programmes, the acquisition of literacy skills was central. But in order to attract and motivate the learner, a connection to a certain domain of application – such as income generation – was added in many cases. In practice, however, this often resulted in poorly resourced programmes run by teachers specializing in literacy rather than in the domain of application (Oxenham, 2003). This practice is reported to have contributed to high drop-out rates among women (Robinson-Pant, 2003).
- In later programmes, the 'contextual' skills became central to the programme, while literacy skills followed. The chances of skill-acquisition and retention are better in such circumstances as the learner often remains in the living and/or working context for which the programme is developed (Rogers et al., 1999).

An important aspect of the learner's context is language. In many communities (including those of immigrants to industrialized countries) the local language is different to the dominant national language. The latter may be indigenous, or it may be the language of the former colonial power. Sometimes both of these are relevant, in which cases a learner may face a choice of three languages.

This complicates learning programmes for youth and adults. For the local language, textbooks, learning materials or even written texts may be scarce. In these cases, learner-generated texts can become important. This, in itself, is a learning experience, while the materials can be used afterwards for other groups of learners. Storytelling (Mace, 2002) and oral literature (Hinzen, 1987) are important sources.

Often, however, the national language is regarded as the language of power. It may be seen as a language dominated by men, as they are more mobile, more involved in economic activity and have better access to schooling. The 'bi-literacy approach' does what its name suggests; it aims at simultaneously learning to read and write in the native and the national languages. The Bi-Literacy Centers in Bolivia, Guatemala, Mexico, Paraguay and Peru are operated by and for women (about 75% of enrolment) and men (25%) separately. Teachers and learners work together using gender-differentiated content and curricula, generating their own materials. At the last stage, the female and male groups share their texts, which results in a negotiating dialogue between the two groups (Hanemann, 2003*a*).

Whether the shift towards contextualized literacy acquisition has been instrumental in raising the efficiency of learning programmes is difficult to assess because of the paucity of data. But progress does seem undeniable. Research dating from as early as 1976 revealed very low ratios of learners passing examinations. An average pass ratio of 20% was found for the United Republic of Tanzania, 14% for the Islamic Republic of Iran, 25% for Ethiopia, 23% for Ecuador and 8% for the Sudan (UNDP/UNESCO, 1976). In the absence of more recent estimates, these outcomes had a strong impact on general opinion about the efficiency of learning programmes. Slightly better news came from studies in 1989 (Carron et al.) and 1991 (Carr-Hill et al.) but most positive are the outcomes of recent studies. The general impression provided (Diagne, 1999; Oxenham and Aoki, 2001) is that a completion rate of around 70% (with some high and low outliers) may be regarded as normal. Pass rates tend to stand at about 60% (Oxenham and Aoki, 2001).

Formal completion and passing an exam are not the same as achievement.

Formal completion and the passing of an exam, however, are not identical to achievement. Whether learners have really acquired literacy skills and generic skills has been assessed in relation to a programme in the United Republic of Tanzania. It was found that 60% of learners became able to read a short simple story and 75% of them could do a simple calculation. Of these good performers, 25% could also successfully complete a certain problem-solving task (Carr-Hill, 1991). Roughly the same scores were found in a Kenyan study (Carron et al, 1989). With Torres (2003), we conclude that the 'failure and wastage arguments' regarding adult learning have been set aside by most actors.

Adult learning brings benefits such as better livelihoods, improved oral and written communication, and better family health and education. However, the range of evidence on the impact of such programmes is still small in comparison with that concerning the formal system. Further research on these matters remains a strong priority.

Educational quality

Goal 6. Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.

Quality education can help bring about greater equality between men and women.

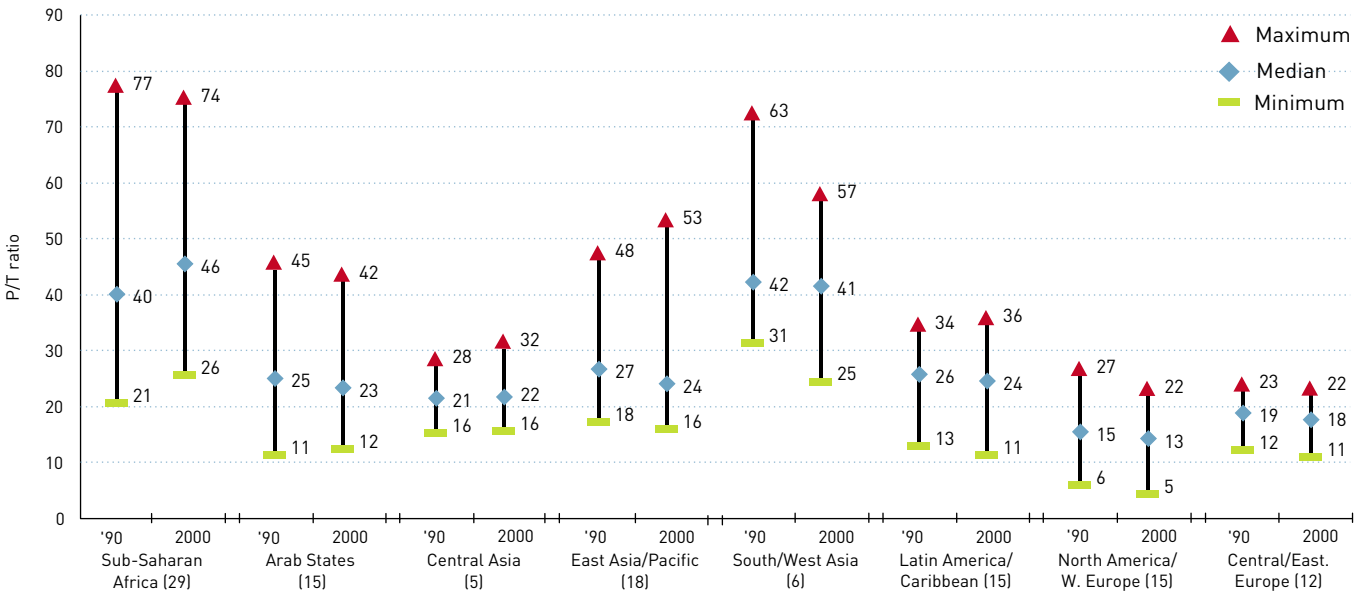
It is as important to keep track of educational quality as it is to monitor the expansion of education systems. However, the quality of education is difficult to capture. It is of interest because of what it can do for people: the difference between good and bad education matters in terms of what, how and how much people learn. It seems that this is particularly so in poorer societies, and for people from poorer backgrounds within them. The quality of education is thus an important potential instrument to help achieve greater equality – between those who start life with different sets of economic and social advantages and, indeed, between men and women.

Systematic assessment of international trends in the quality of education, however, is hampered by the lack of direct indicators. As regards educational inputs, two sets of 'proxies' for quality are to hand. The first concerns teachers – how many of them there are, in comparison with the total number of pupils, and their qualifications. The second concerns financial resources and, in particular, the amount of public spending on the school system. In general, it is assumed that lower pupil/teacher ratios, higher teacher qualifications and higher levels of public spending are each likely to be good for educational quality. However, there are reasons to believe that the connections are not quite so simple as is commonly assumed. As regards outputs, it is increasingly possible to compare the cognitive outcomes of education, at least at the school level, as a result of a series of educational achievement assessments that are growing in both number and size. Some of the latest results from these inquiries are summarized below.

Human resources

The existence of a teaching force which is well qualified and available in sufficient numbers is one of the main conditions for good quality educational provision. The analysis which follows focuses upon comparisons of pupil/teacher (P/T) ratios and the proportion of trained teachers among the teaching staff. It is strictly possible to refine P/T ratios based on head counts, by using

Figure 2.34. Pupil/teacher ratio in primary education, by region (1990 and 2000): median values and variation within regions
(in parentheses, the number of countries included in each region)



Source: Statistical annex, Table 10.

full-time equivalent numbers of teachers instead. This would be more accurate, but it requires information on part-time teachers which is not yet widely available.

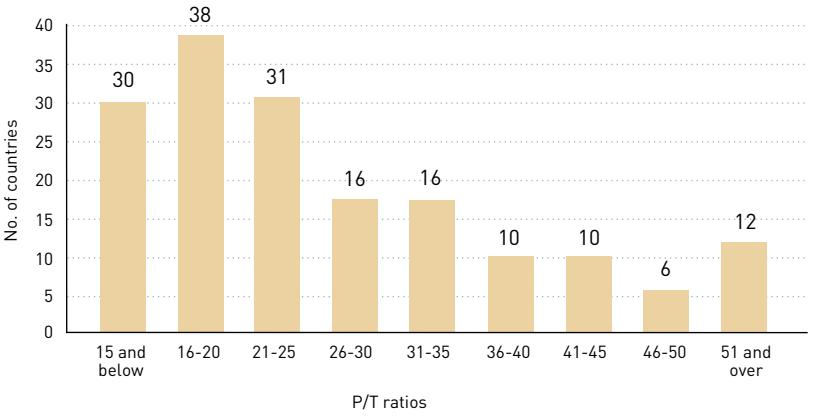
Figure 2.34 shows the variation in the P/T ratio at primary level, by region, for 115 countries with data available for both 1990 and 2000.[28] It shows that the largest variability occurs in sub-Saharan Africa. There are countries in this region where the average P/T ratio in 2000 was above 70 (the Central African Republic and Chad – which at that time had the highest P/T ratios in the world). These figures refer to national averages, so there will be very many instances of individual schools where the P/T ratio exceeds this number.[29]

Although in comparison with 1990, the range of P/T ratios in sub-Saharan Africa had narrowed somewhat by 2000, the median value had risen from 40 to 46 over the decade. This augurs badly for the quality of schooling in the region. Statistical annex Table 10 shows that decreases of about ten pupils per teacher occurred in some countries (Burkina Faso, Burundi and the Congo), which nevertheless still had P/T ratios around 50 in 2000. The largest decrease seems to have occurred in Togo (from 58 to 34 pupils per teacher). In contrast, the situation deteriorated in Benin, Cameroon, Côte d'Ivoire, Ethiopia and Mali, where increases of 10 to 19 pupils are reported, resulting in P/T ratios of between 54 and 63. In several of these countries, notably in Benin, Ethiopia and Mali, this is the negative side of notable improvements in school access during the same period.

The other region with dangerously high P/T ratios is South and West Asia. Again, there is some slight improvement since 1990, but it still has median values greater than 40. Declines of around seven pupils per teacher were experienced by Bangladesh and India, even though Bangladesh still had a P/T ratio of 57 in 2000 (Statistical annex, Table 10). Elsewhere, median values and the range of P/T ratios have slightly improved or remained broadly unchanged. The smallest ratios (on average less than 20) are found in Europe and North America, where there has also been a tendency towards further decline since 1990.

Figure 2.35 shows that in 60% of the countries one teacher is, on average, in charge of twenty-five pupils or less. Countries with such low P/T ratios are generally developed countries or those with low population density, such as Bermuda, Brunei Darussalam, Iceland, Saudi Arabia, etc. At the other end of the range, there are still over 10% of countries where it exceeds forty-five pupils per teacher, including many of the poorest and most populous states.

Figure 2.35. Distribution of countries according to number of pupils per teacher in primary education (2000)



Source: Statistical annex, Table 10.

The difficulties of improving this situation are considerable. Recruiting suitably qualified teacher-trainees takes time. Given budget constraints, some governments have recruited large numbers of untrained teachers, so that rapid rates of enrolment expansion may be sustained. A trade-off exists between a reasonable pupil/teacher ratio and teachers who are sufficiently qualified to ensure that the quality of education is not worsened by measures aimed at improving it.

The qualification level of teachers is often used to judge the quality of education.

Trained and untrained teachers

The level of qualification of teachers is often used as a criterion to judge the quality of the education provided. There are two possible indicators here: the first is the general level of educational attainment of teaching staff; the second is the percentage of teachers who are certified (or trained) to teach according to national standards. The two indicators measure different aspects of teachers' qualifications, with the first indicating their general educational qualifications, and the second focusing on their pedagogical training.

Information on the first indicator has been collected for countries participating in the WEI project.[30]

28. Comparisons between the two years need to be made with caution, owing to possible changes in the education structure or in the classification methods over the period.

29. It is, of course, possible that double-shifting reduces average class size well below these levels.

30. An analysis of this indicator for WEI countries was published in UNESCO Institute for Statistics/OECD (2001).

Figure 2.36. Percentage of primary teachers who have received pedagogical training, by gender (2000)
(in increasing order of total percentage trained within regions)

General note: See source table for detailed country notes.
Source: Statistical annex, Table 10.

With respect to the second indicator – the percentage of teachers having received at least the minimum pedagogical training required by each country – data availability is patchy, and completely absent for OECD countries. Furthermore, as the definition used is a relative one, only limited cross-national comparisons are possible.

Figure 2.36 shows the extent of qualification of primary teachers in developing countries according to national definitions. The chart includes seventy-two developing countries for which data are available. In the OECD countries, despite the absence of data, it is estimated that virtually all primary teachers have received the necessary training, according to national standards.

The picture that emerges from Figure 2.36 is only suggestive: not all countries appear in the chart, and some of the non-reporting countries may have lower percentages of trained teachers than those shown. However, it is noteworthy that there are still some countries in all developing regions where half of the teachers have received no pedagogical training. The proportions trained are particularly small in some sub-Saharan African countries such as Guinea-Bissau, Malawi and Namibia, and in many others less than three-quarters of the teachers are trained. In two-thirds of the countries having available data by gender, women are proportionally more trained than men, particularly in Ethiopia, the Gambia, Ghana and Lesotho.

Less than two-thirds of teachers are trained in some countries of the Asia and Pacific region (Bangladesh, Kyrgyzstan, the Maldives, Nepal and Vanuatu). Again, it appears that female teachers are more highly trained than their male peers in the Lao People's Democratic Republic, Macao (China), and Viet Nam.

The above values depict national averages, yet variations within individual countries (between richer and poorer regions, urban and rural areas), are likely to be as large or larger than those between countries. Moreover, while the qualifications formally required for teaching in most countries have risen over the years – especially in the middle-income countries of East Asia, the Pacific and Latin America – there has been a tendency to recruit an increasingly higher proportion of untrained and poorly qualified teachers in many low-income countries. This tendency, often dictated by fiscal constraints, has had potentially serious consequences for educational quality.

Expenditures on education

Improvements in the quality of education can often be secured by changing the ways in which classes, or other educational programmes, are organized and by improving the ways in which teachers interact with their pupils. However, particularly in resource-poor systems, most of the available options for increasing quality require larger expenditures. Accordingly, the extent of spending on education is sometimes taken to be a useful proxy indicator for educational quality.

Spending on education can be used as an indicator for educational quality.

The main difficulty refers to coverage, which theoretically should include both public expenditures by central and local authorities, and private expenditures. In reality, even as regards public expenditures, it is difficult to ensure that all are included. Concerning the central government itself, some countries report ministry of education expenditures only, thus excluding other central government authorities such as the ministries of social affairs, health, and agriculture, which may be responsible for some types of educational provision. Private expenditures are extremely difficult to report in the absence of special household expenditure surveys, which are costly to design and implement. Nevertheless, the sections below review the available information on these aggregates, partial though it is.

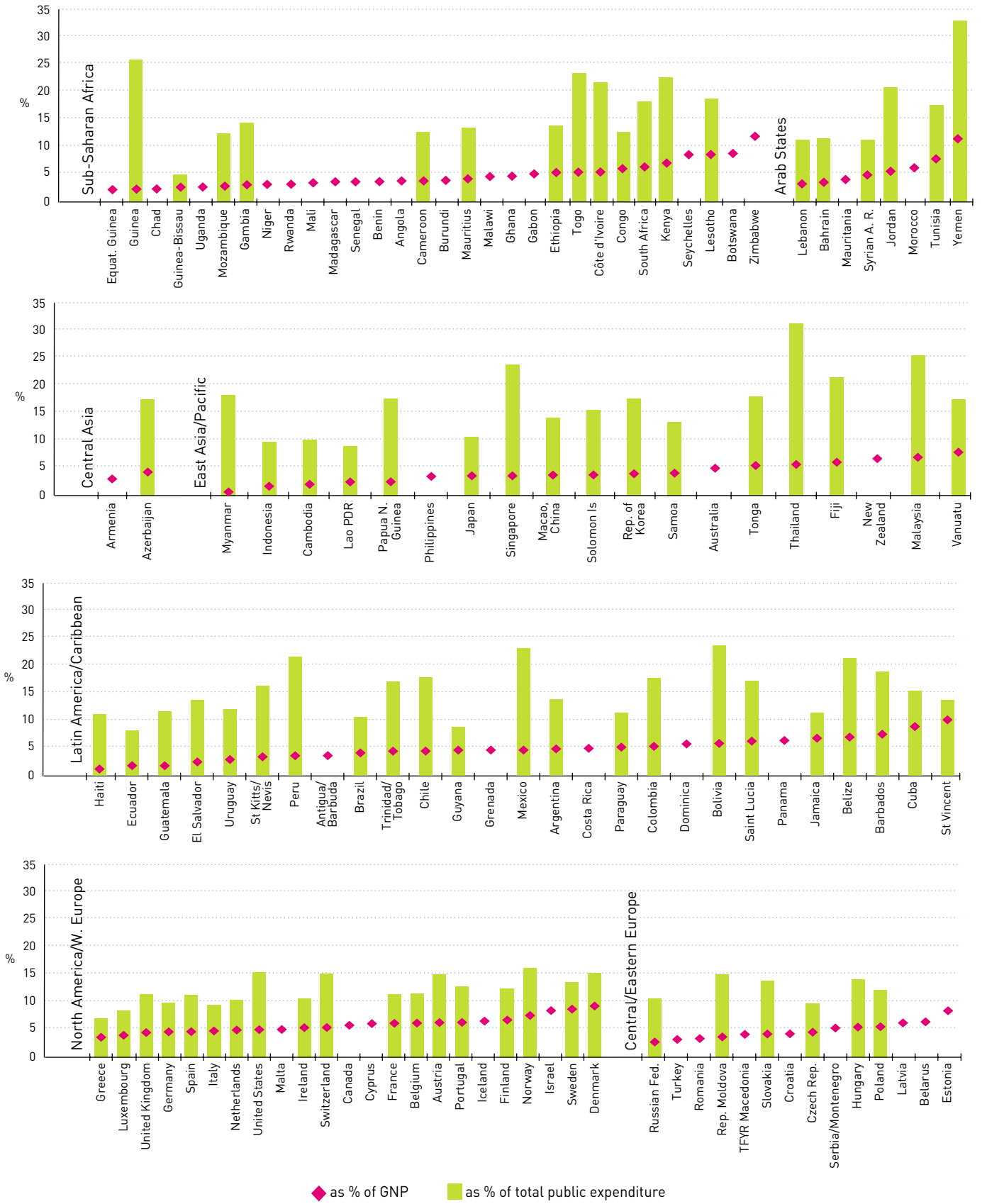
National educational expenditures

Figure 2.37 shows that public expenditure on education as a proportion of GNP varies widely from one country to another, and particularly between developed and developing countries.

Expenditure varies from 0.6% in Myanmar to 11.1% in Zimbabwe. However, half of the countries allocate between 3.4% and 5.7% of their national wealth to education. Whereas a good number of African and Asian countries allocate less than 4% of their national expenditures to education, most OECD countries, together with those of Central and Eastern Europe, allocate between 4% and 8%.[31]

31. Note also that, among a sample of fifty-five of the largest low-income countries, those designated as having achieved 'relative EFA success' spent, on average, 3.8% of their GDP on education (World Bank, 2003*b*, p. 51).

Figure 2.37. Public expenditure on education as percentages of GNP and of total public expenditure (2000)
(countries in increasing order of percentage of GNP within regions)



General note: See source table for detailed country notes.
Source: Statistical annex, Table 11.

The share of total public expenditure apportioned to education varies to a much greater extent – from 4.8% in Guinea-Bissau to 32.8% in Yemen. In this case, half of the countries report values of between 11.2% and 17.4%.[32]

Share of primary education in the public education budget and in national expenditure

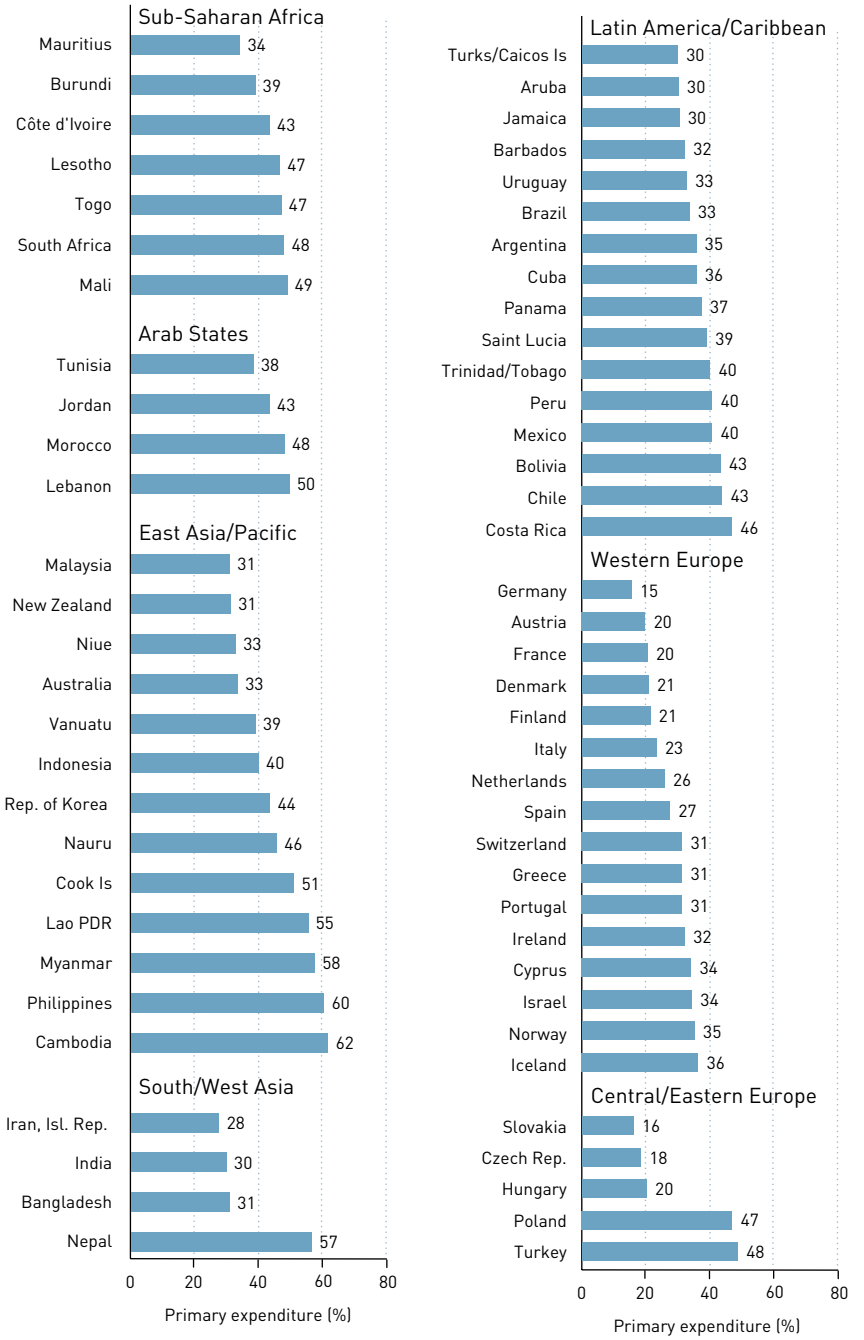
Primary-schooling budget shares, not surprisingly, reflect the structure of education systems around the world. As shown in Figure 2.38, the richer countries, having well-developed secondary and tertiary structures, tend to allocate a lower proportion of their education budgets to primary schooling (usually less than one-third). In contrast, most developing-country governments, where tertiary systems are less well-established, allocate between one-third and half of their education spending to the primary system.

Partly reflecting this, public spending on the primary system is often a higher proportion of GNP in developing countries than in those which are more industrialized. It ranges from below 0.5% in Bangladesh to over 3% in Belize and Lesotho. However, in half of the countries with available data, primary education receives between 1.1% and 2.2% of national resources (Figure 2.39).

Finally, as regards *unit expenditures as a proportion of per capita GNP*, there is an extremely wide variation in values for the countries shown in Figure 2.39. The range goes from below 5% in Bangladesh, Botswana, Indonesia and the Lao People's Democratic Republic to more than 25% in Norway, Poland and 32% in Cuba. For half of the countries the value lies-between 11% and 17% of per capita GNP.

To summarize, in the richer countries shares of GNP allocated by governments to primary education average 1.4%, while unit expenditures in relation to per capita GNP are estimated at 18% on average.[33] In less-developed regions the average share of primary educational expenditure in the national wealth, at 1.7%, is slightly higher than in industrialized countries. However, as this spending targets a comparatively larger student population, the per student expenditure in relation to per capita GNP is on average lower (12%) than in the more industrialized countries.[34]

Figure 2.38. Public current expenditure on primary education as percentage of public current expenditure on education (2000)



General note: See source table for detailed country notes.
Source: Statistical annex, Table 11.

32. This is somewhat lower than the 18.2% allocated by the best-performing EFA countries, as reported by the World Bank study (World Bank, 2003*b*, p. 61).

33. Averages mentioned in this paragraph are simple averages.

34. It is worth noting that in the World Bank's 'relative EFA success' countries, unit costs at primary level represented 11.8% of per capita GDP – not significantly different from this average for all developing countries indicated by the 2000 data (World Bank, 2003*b*, p. 51).

Figure 2.39. Public current expenditure on primary education as percentage of GNP and expenditure per pupil as percentage of per capita GNP (2000) (in increasing order of expenditure per pupil as percentage of per capita GNP)

General note: See source table for detailed country notes.
Source: Statistical annex, Table 11.

Learning achievement of girls and boys

While teachers and financial resources have an important influence on the quality of education, student achievement surveys provide a more direct measure of quality. Their limitations should however be kept in mind. Such surveys only evaluate measurable learning outcomes, not the broader impact of the school experience on the learner, nor the importance of the school as a social institution for the local community. And in looking at learning outcomes, they still tend to be limited to school subjects, particularly reading, mathematics and science.

These limitations are important in assessing gender disparities in school performance. Possible differences between girls and boys regarding those skills that transcend the school subjects – e.g. communication and teamwork – remain beyond our scope. The same goes for classroom practices which discriminate against girls – consciously or unconsciously – which are important constituents of quality.

Nevertheless, the following analysis of a number of surveys, together representing a reasonable global coverage, does allow some assessment to be made of the relative achievements of girls and boys.

PISA, the Programme for International Student Assessment (UNESCO Institute for Statistics/OECD, 2003*b*) examined the school performance of pupils at age 15. In 2003 it covered forty-two industrialized, transition and developing countries. It must be kept in mind that the NERs of most of the latter are higher than 95%, which may indicate the presence of a relatively well-developed education system.

For reading, girls performed better than boys in all the countries, while the disparities in most countries are substantial (see Figure 2.40). For mathematics, boys did better in thirty-four of the forty-two countries, but the differences were clearly smaller than for reading. For science, the performance of girls and boys was rather in balance.

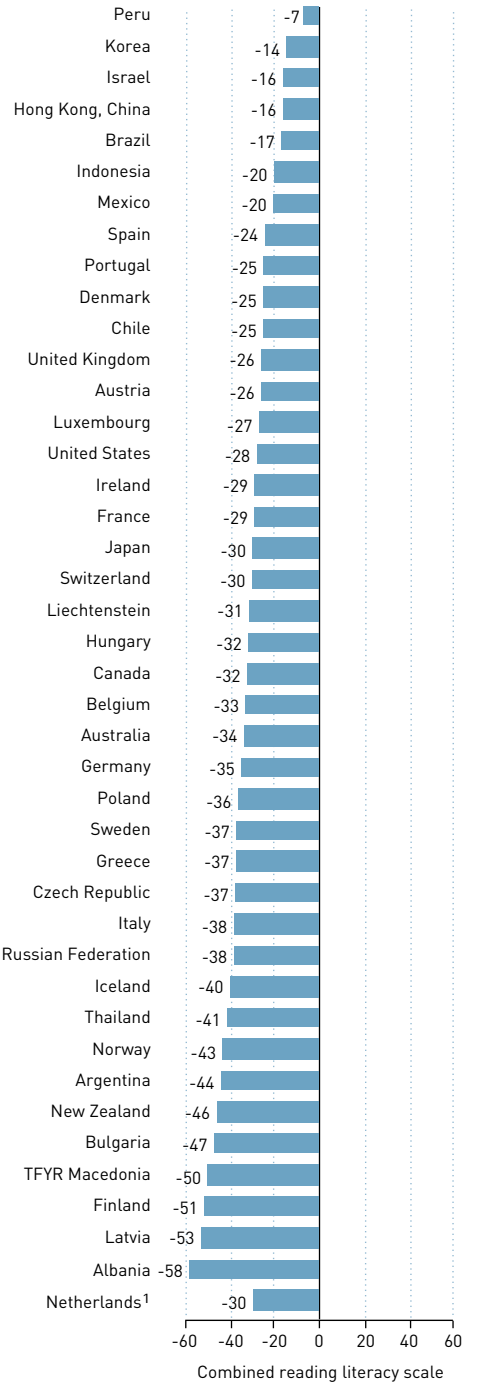
No generalizations can be made as to which countries have the larger performance gaps. For reading, where the differences are largest and in favour of girls, the developing and transition countries tend to be concentrated at both ends of the ranking, while most industrialized countries are found in the middle (Figure 2.40).

PIRLS, the Progress in International Reading Literacy Study (Mullis et al., 2003) examined reading performance in Grade 4 in thirty-five industrialized, transition and developing countries. Like PISA, PIRLS found that girls outperformed boys in all countries. Of the developing countries participating, Colombia had the smallest gap. In Turkey and Morocco, the gap was near the international average. And Belize, the Islamic Republic of Iran and Kuwait had the largest gaps of all countries. Of these six countries, the Islamic Republic of Iran, Kuwait and Morocco have NERs below 85%, suggesting that moderate and large performance gaps in favour of girls also occur in some countries with less-developed education systems.

TIMSS, the Third International Mathematics and Science Study (initially 1995 and repeated in 1999) found boys doing slightly better than girls in some of the developing countries that participated in the study. There was also a slight tendency for this difference to increase in higher grades (Mullis et al., 2000).

The outcomes of PIRLS (girls clearly better in reading) and of TIMSS (boys slightly better in mathematics and science) are generally in

Figure 2.40. Gender difference in performance on the combined reading literacy scale, PISA (2003)
(Male score – Female score)



1. Response rate is too low to ensure comparability.
Source: UNESCO Institute for Statistics/OECD (2003*b*, Figure 5.3).

accordance with the outcomes of PISA, although the overall performance of girls is better in PISA. This difference is attributed to the different nature of the tests. PISA laid more emphasis on life sciences, on scientific processes and application of knowledge, and contained more open-ended and contextualized items, which tend to favour girls. TIMSS chose a more theoretical approach and used more multiple-choice items, which favours boys.

The school surveys of the UNESCO Regional Bureau for Education in Latin America and the Caribbean (OREALC) found the same patterns: 'girls show better achievement in Language and slightly poorer achievement in Mathematics'. Overall, girls do better. These differences, though relatively small, do reach statistical significance (Casassus et al., 2002).

Surveys show learning achievement is related to socio-economic status.

The picture changes when less-developed countries are examined. Although the stronger affinity of girls for reading and the stronger affinity of boys for mathematics seem universal phenomena, the over-performance of girls does seem to be weaker or often absent in less-developed countries, in general.

The Monitoring Learning Achievement project (UNESCO/UNICEF, 2000) concludes for sub-Saharan Africa that gender differences are either small or insignificant, and are much smaller than disparities between countries. More recent data confirm this. In eight predominantly francophone African countries, MLA found slightly better performance for boys in the subjects for which boys usually have the greater affinity, such as mathematics, physics, chemistry and other sciences (UNESCO/UNICEF, 2003).

Studies by the Southern Africa Consortium for Monitoring Educational Quality (SACMEQ) found relatively small gender disparities in reading. These were in favour of boys in three of a group of five anglophone African countries, while in the other two they were slightly more pronounced and in favour of girls (Saito, 1998; UNESCO, 2000*e*).

In francophone African countries, the Programme d'Analyse des Systèmes Éducatifs de la CONFEMEN (Michaelowa, 2002, 2003) examined performance in reading and mathematics, and also found very limited gender disparities. In terms of grade repetition, disparities were insignificant too.

However, the group of countries examined by PASEC have relatively low GPIs for primary education. The possibility cannot be excluded that the girls, in particular, of the poorest families are enrolled less. It is known from several surveys that learning achievement is related to socio-economic status. Hence, it is possible that the exclusion of the presumably weakest learners raises the average performance of those girls that are in school and thus included in the study. As the enrolment gap closes, this may reveal a hitherto hidden performance gap to the disadvantage of girls. The same may be the case in the PIRLS study for the Islamic Republic of Iran, Kuwait and Morocco.

Relatively low GPIs are not found for other countries participating in the surveys discussed above. In these cases, the equal performance of girls in the poorer countries and their better performance in the richer countries is a genuine tendency.

This tendency suggests that girls benefit more than boys when education somehow moves to higher levels of development. And it raises the question whether it is a matter of time before girls will outperform boys in poorer countries as well. The International Adult Literacy Survey (IALS) (OECD/Statistics Canada, 2000) allows us to perform a quasi-longitudinal analysis, albeit mainly for industrialized countries (www.nald.ca/nls/ials/introduc.htm).

IALS examined the literacy competences of adults between 16 and 64 years old. By comparing the various age categories in the participating countries, in one sense it is possible to look back in time. It appears that men outperformed women in the age group 56–64, and that the reverse is the case for the age group 16–25. Thus, in industrialized countries, the turning point between male and female over-performance lies just a few decades behind us.

Speculation about the causes of this transformation are numerous. One hypothesis is that the feminization of the teaching workforce plays a role in boosting girls' school performance in the richer countries.

Figure 2.41 shows a clear correlation between per capita GNP and the proportion of female teachers in primary education. It has already been shown that feminization of the teaching profession is associated with higher female intakes to school (Figure 2.15).

But whether more female teachers is also associated with performance differentials between boys and girls remains unclear. The PASEC study has investigated this and demonstrated that the gender of the teacher had indeed a strong and divergent impact on achievement. If the teacher is male, then the difference in achievement between girls and boys is augmented by 6.5% of the mean score, in favour of boys (Michaelowa, 2002).[35]

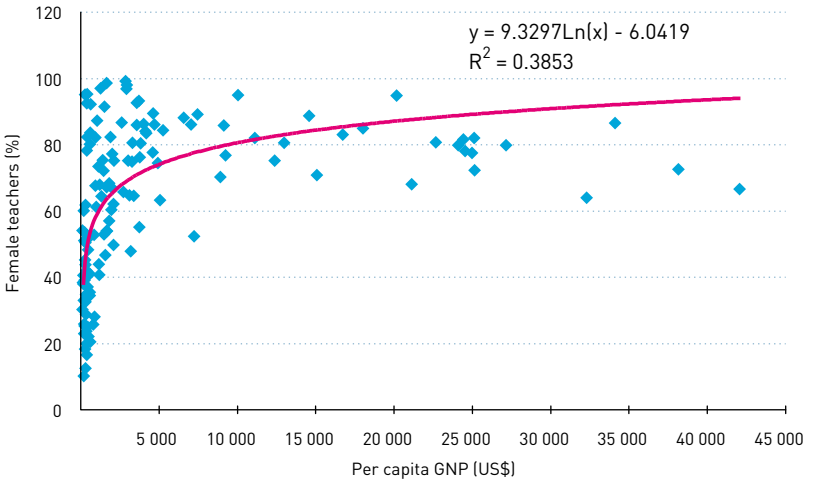
For the PISA study, in contrast, only a very weak correlation was found between the proportion of female teachers with achievement differentials for twenty-nine of the participating countries. The different findings for PASEC and PISA suggest that the influence of the gender of the teacher on gender differentials in learning outcomes is stronger in less-developed countries. Possibly this influence decreases as teaching methods and curricula develop in such a way that learning outcomes are less dependent on personal preferences and tendencies of the teacher. But this is rather speculative and more research is needed covering more countries and examining a broader range of variables.

Another hypothesis that deserves attention is that girls in poorer countries run a higher risk than boys of attending school less frequently, and having less time for homework. This would be caused by a greater need for girls to assist in the household, care for younger siblings and to help on the land. In its turn, this would be a result of parents attaching lower value to the education of girls compared with the education of boys.

PISA distinguished five performance levels. Figure 2.42 focuses on the lowest of these levels for reading, and shows the proportion of boys and girls at this level for the forty-two countries.

It shows there is no exception to the rule that there are more low-performing boys than girls in a country. But the size of the gap differs from country to country. Very large gaps, of 40% or more, are found in Albania, Indonesia, Thailand and The former Yugoslav Republic of Macedonia.

Figure 2.41. Percentage of female teachers in primary education and per capita GNP (2000)



Source: Statistical annex, Tables 1 and 8.

Gaps of around 30% are found in Argentina, Bulgaria, Chile and Peru. All these are developing countries or relatively poor transition countries. The largest gaps for industrialized countries are around 10%. Brazil and Mexico are the only developing countries with a more modest gap.

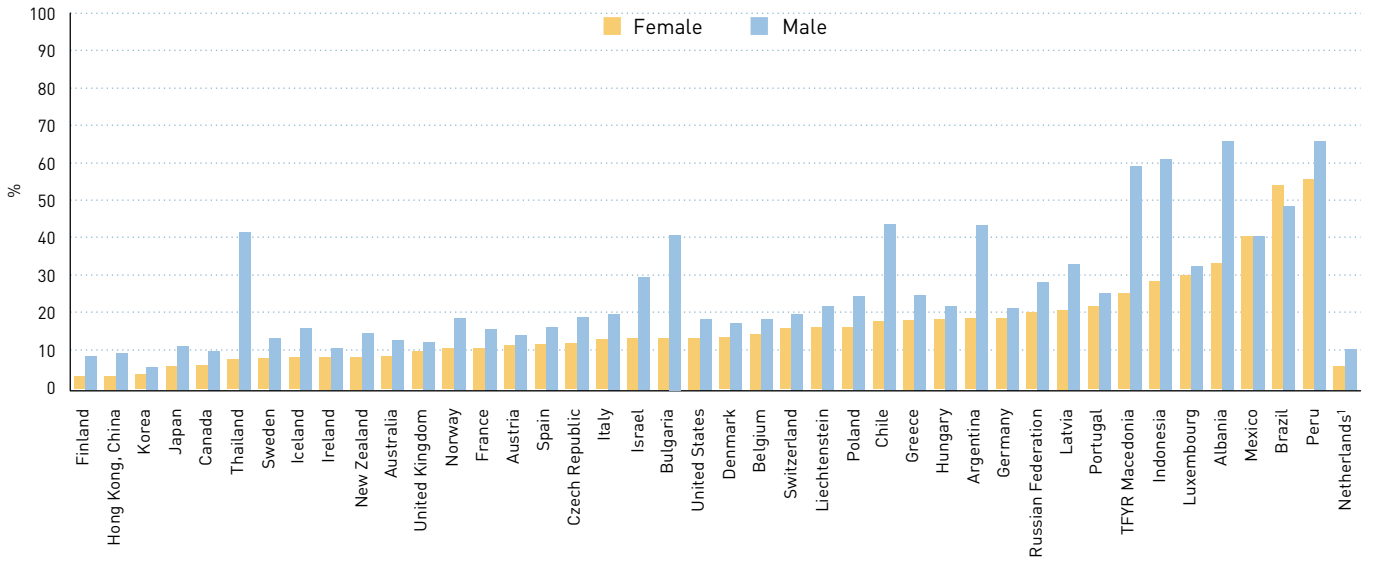
In understanding these figures, it must be kept in mind that PISA tests pupils at age 15 and that NER for secondary education is 47.5 in Indonesia, 55.4 in Thailand and 65.4 in Peru. In these countries it must be assumed that most of the very poorest girls and boys are not enrolled in secondary education. The NERs for the other countries just mentioned vary from 71.3 to 96.1. In all these countries, GPI for secondary education is near 1.00.

Thus it appears that the problem of low-performing boys at secondary level is greater in a number of transition and developing countries than it is in industrialized countries where it has been identified as a policy priority (see Chapter 5). In contrast, girls in these countries seem to see education more consciously as an opportunity to break their family's cycle of poverty or to further improve the quality of their lives. This hypothesis is supported by a number of additional outcomes of PISA.

A PASEC study indicates that the gender of the teacher has a strong and differential impact on achievement.

35. In the PASEC countries, the proportion of female primary teachers varied between 18% and 36% in 1995, against an average of about 50% in the countries covered by SACMEQ in 2000 (SACMEQ, 2002).

Figure 2.42. Percentage of male and female among the lowest performers on the combined reading literacy scale (2003)



1. Response rate is too low to ensure comparability.
Source: UNESCO Institute for Statistics/OECD (2003*b*, Table 5.3b).

In all countries, girls are more interested in reading than boys.

Examining the learning styles of pupils, PISA distinguished cooperative and competitive learning styles. In the industrialized countries, the former are typically associated with girls, the latter with boys. In some countries, however, girls have competitive learning styles as well. There is a strong tendency for these to be transition countries and, to a slightly lesser extent, developing countries. Exceptions include Brazil and Mexico, the same countries where the gap between low-performing boys and girls is moderate.

Furthermore, the interest in reading is higher among girls than among boys in all countries. Boys tend to show a greater interest in mathematics than girls, but these differences are less marked, especially in the poorer countries. It can also be said that girls in poorer countries are more interested in mathematics than girls in richer countries, even if this does not translate into better performance (this is probably due to the higher quality of education in richer countries).

Roughly similar patterns are found by PISA regarding the time boys and girls spend on reading, their reading preferences and their self-concept. But most striking is perhaps that in forty out of forty-two countries, girls have higher expectations towards their future occupations at age 30 than boys. 'Once girls are in school they tend to progress as well as, or better than boys' (UNESCO, 2002*b*, p. 75). This chapter has further substantiated this statement. Generally speaking, girls attend school more frequently than boys; they repeat grades to a lesser extent; they are more interested in reading and spend more time on it; they are driven by higher expectations of the future; and they end up reaching higher levels of achievement and attending secondary and tertiary education in larger numbers than boys. There are many (usually) poor countries where such expressions of female dominance in educational achievement do not yet occur, or are absent due to the exclusion of girls. However, in middle- and higher-income countries this appears to be the most frequent pattern.

The causes of this apparently recent phenomenon are unclear. It has been shown that the feminization of the teaching workforce can probably not fully account for it. Another possible explanation is related to changes in the nature of work, organizations and social interaction (see, for example, Castells, 1997) resulting in more emphasis on skills and attitudes such as communication, co-operation, networking, creativity, imagination and flexibility. These changes seem to be impacting on content, pedagogy and testing practices in education (OECD, 2002*a*). Existing differences between the sexes – caused by a combination of subtle innate differences, parental behaviour and further socialization (Hayward, 2003) – may explain why girls thus far seem to respond better than boys to this new societal and educational context.

But this explanation remains hypothetical while the Report is not in a position to enhance our understanding of girls' strong record of educational attainment. It is clear, however, that large numbers of girls still have no access to education. These girls never have a chance to demonstrate their motivation and ability to learn. This is not only unjust. It represents a vast waste of talent for the girls concerned and for society at large.

The very many girls with no access to education never have a chance to show their keenness and ability to learn.

Comparing the progress of countries towards EFA

There are strong linkages between the six EFA goals.

It will be clear from the analysis presented earlier in this chapter that there are strong linkages between the six EFA goals. Countries moving rapidly towards universal provision of good quality schooling can also be expected to make good progress in reducing levels of youth illiteracy. Levels of gender parity in ECCE seem to have some influence on gender ratios further up the school system. Achieving gender parity at primary level generally has a positive, though delayed impact upon gender ratios at secondary and higher levels. Nevertheless, these interactions are not automatic. The links between primary enrolments and literacy are much more tentative in low-quality systems and there are many cases where parity in primary enrolments co-exist, for many years, with strong disparities at secondary and higher levels of education.

Separate consideration of each of the goals allows such comparisons to be made. For example, countries giving policy priority to one or other of the goals can be identified on the basis of the indicators we have discussed. On the other hand, it is useful to ask whether a more aggregate, or rounded, picture can be given, which could identify those countries doing well on all fronts, those succeeding in some areas but not others, and those experiencing rather more comprehensive difficulties in making progress towards EFA.

One way of doing this is to construct an index, which attempts to aggregate some, or most, of these separate trends. This is tackled below. First, however – and by way of an intermediate step – we compare the progress being made by countries towards the 2005 gender-parity goal by considering their primary and secondary systems within a unified framework.

Gender parity: progress and prospects

The gender goal for 2005 specifies the attainment of parity in enrolments between boys and girls at primary and secondary levels by that date. The current position of countries, with respect to this goal is summarised in Table 2.24.[36]

Table 2.24. Current situation of countries according to their distance from achieving the goal of gender parity in primary and secondary education

	Have achieved *GPI between 0.97 and 1*	Close to the goal *GPI between 0.95 and 0.96*	Medium position *GPI between 0.80 and 0.94*	Far from the goal *GPI < 0.80*	Number of countries in the sample
PRIMARY EDUCATION					
Arab States	8	3	7	2	20
Central and Eastern Europe	16	1	1		18
Central Asia	4	2	1		7
East Asia and the Pacific	15	4	5		24
Latin America and the Caribbean	22	4	3		29
North America and Western Europe	23				23
South and West Asia	2	1	2	1	6
Sub-Saharan Africa	10	5	12	13	40
Sub-total	**100**	**20**	**31**	**16**	**167**
SECONDARY EDUCATION					
Arab States	3	1	12	2	18
Central and Eastern Europe	15	1	1	1	18
Central Asia	4		3		7
East Asia and the Pacific	5	3	12	4	24
Latin America and the Caribbean	5	7	13	2	27
North America and Western Europe	12	4	6	1	23
South and West Asia		1	2	3	6
Sub-Saharan Africa	3	1	15	17	36
Sub-total	**47**	**18**	**64**	**30**	**159**

Source: Statistical annex, Tables 5 and 7.

36. In this table, values of the GPI greater than one – which indicate inequality in favour of girls – are inverted (1/GPI). This allows all GPI values to be compared on a scale having a maximum value of unity.

It can be seen that, among the countries having data for 2000, 60% had achieved gender parity at primary level and only about one-third had done so at secondary level. Those close to the goal amounted to 11% of countries at each level of schooling. Many others, however, were far from achieving parity – particularly at secondary level, where almost one-fifth of countries had GPI values less than 0.8.

The prospects for particular countries achieving the gender parity goal, on the basis of past rates of change, are shown in Table 2.25. These judgements thus assume that past rates of progress (or retrogression) will continue into the future[37]. Here, the sample size is smaller, because only those 128 countries with data for primary and secondary levels for both 1990 and 2000 are included. Thus, our overall assessment of the trajectory of nations towards achieving the gender sub-goal remains partial.

Nevertheless, it can be seen that:

- Less than half the countries shown (52 out of 128) have either already achieved gender parity in both primary and secondary enrolments or are likely to have done so by 2005. Most of these countries (in the green area of the table) are from North America and Western Europe (14) and Central and Eastern Europe (13). However they include countries from Latin America and the Caribbean (6) and from the Arab States (5).

37. The method used is explained in Appendix 2.

Table 2.25. Gender parity in primary and secondary education: national prospects for goal achievement in 2005 and 2015
(based on past trends, 1999–2000; all countries with GPI between 0.97 and 1.03 are considered to have achieved parity)

Gender parity in primary education	Gender parity in secondary education: Achieved in 2000	Likely to be achieved in 2005	Likely to be achieved in 2015	At risk of not achieving the goal by 2015	Number of countries
Achieved in 2000	Albania, Australia, Azerbaijan, Barbados, Belgium, Bulgaria, Canada, Cape Verde, Chile, Croatia, Cyprus, Czech Republic, Ecuador, France, Georgia, Germany, Greece, Guyana, Hungary, Indonesia, Israel, Italy, Japan, Jordan, Kazakhstan, Kuwait, Rep. of Korea, Latvia, Lithuania, Malta, Rep. of Moldova, Netherlands, Norway, Poland, Romania, Rwanda, Slovakia, Slovenia, TFYR Macedonia, United States 40	Austria, Bolivia, Jamaica, Kenya, Malawi, Portugal, Samoa 7	Belize, Botswana, Finland, Namibia, Nicaragua, Panama, Qatar, Spain, United Rep. of Tanzania, Venezuela 10	Bahrain, Bangladesh, China, Colombia, Costa Rica, Denmark, Iceland, Ireland, Malaysia, Mauritius, Mexico, Myanmar, New Zealand, Philippines, Russian Federation, Serbia and Montenegro, Suriname, Sweden, Switzerland, Trinidad and Tobago, United Arab Emirates, United Kingdom, Vanuatu, Zimbabwe 24	81
Likely to be achieved in 2005	Oman 1	Egypt, Iran, Mauritania, Nepal 4	Brunei Darussalam, Gambia, **Lesotho**, Saudi Arabia 4	Morocco, Senegal, Tunisia 3	12
Likely to be achieved in 2015	Paraguay 1	Cuba, Sudan, Syrian Arab Republic 3	Comoros, Congo, Ghana, Uganda 4	Algeria, Benin, Cambodia, Chad, Lao PDR, Togo 6	14
At risk of not achieving the goal by 2015	Estonia, Kyrgyzstan, Swaziland 3	Sierra Leone 1	Burundi, Macao (China), Niger, South Africa, Thailand 5	Burkina Faso, Côte d'Ivoire, Djibouti, Ethiopia, India, Iraq, Madagascar, **Mongolia**, Mozambique, Papua New Guinea, Saint Lucia, Turkey 12	21
Number of countries	**45**	**15**	**23**	**45**	**128**

Notes:
1. Where countries are shown in bold blue, enrolment disparities at the expense of boys are observed at both primary and secondary levels; non-bold blue indicates that such disparities occur at secondary level only.
2. Nine countries in the pink zone had high GPI values at both primary and secondary levels in 2000, even though their recent GPI trends had been slightly negative. They are in a different category to most of the other countries in this group, in that policy change could easily and quickly change their circumstances. These countries are: Denmark, Estonia, Kyrgyzstan, Macao (China), Madagascar, Mexico, Serbia and Montenegro, South Africa, and Swaziland.

Source: Statistical annex, Tables 5 and 7. The methodology is explained in Appendix 2.

For many countries unlikely to reach gender parity by 2005, policies are available to deliver it within a few years.

- There are a further 22 countries (shown in the yellow area of the table) which, while likely to miss the achievement of parity at primary or secondary level (or both) in 2005, should nevertheless achieve it by 2015. In most of these cases, as we would expect, the lagging sector will be secondary schooling – with only four countries likely to achieve gender parity in secondary school enrolments before having done so at primary level.

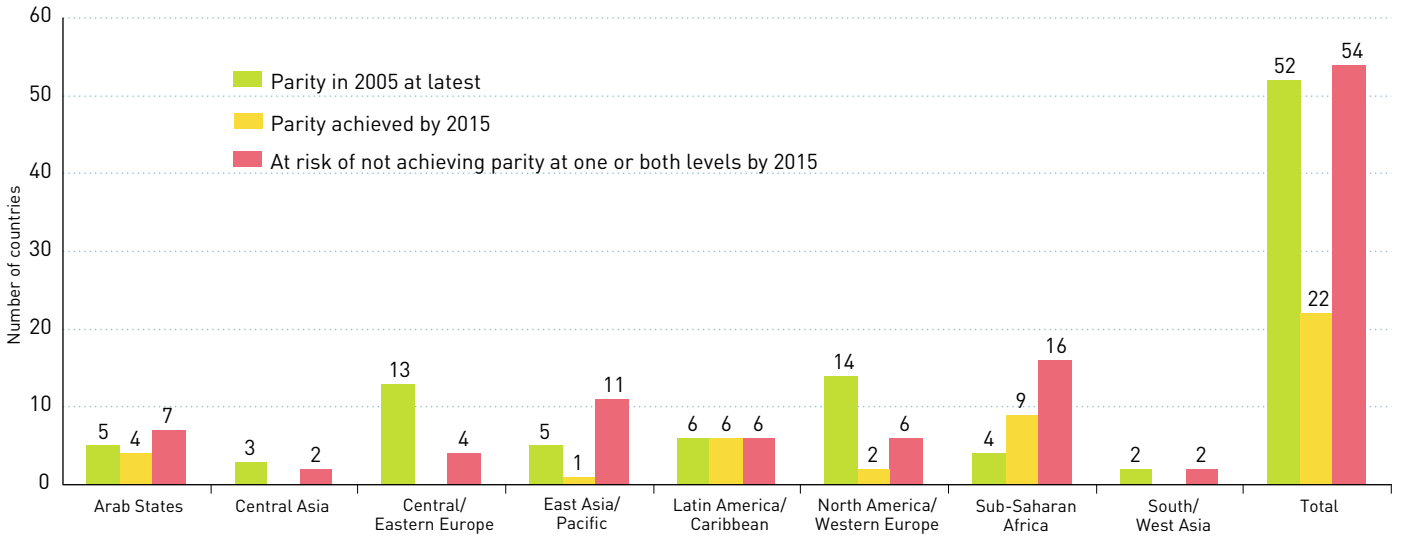
- More than 40% of the countries shown (54 out of 128) are at risk of not achieving gender parity either in primary (9) or secondary education (33) or at both levels (12), even by 2015. These countries (shown in the pink area of the table) are mainly from sub-Saharan Africa (16), East Asia and the Pacific (11), and the Arab States (7). In some of those where far fewer girls are enrolled than boys, their situation has recently further deteriorated. On the other hand, it should be noted that nine of these countries (indicated in the footnotes to the table) are presently very close to achieving gender parity at both primary and secondary levels. Nevertheless, they are shown as being at risk even in 2015 because their recent enrolment trends have led them further from gender parity. With changes in policy it would be relatively easy for a number of these countries to achieve the gender parity goal.

- Finally, the countries where enrolment inequalities are in favour of girls are shown in blue in the table. As we know from earlier in this chapter, such countries are concentrated in Latin America and the Caribbean, Europe, the Arab States and Asia. It is significant that in almost all the countries where, on present trends, such disadvantage would remain by 2015, it would be at secondary level only.

The regional prospects are further summarized in Figure 2.43, which indicates the extent to which the countries at risk of not meeting the gender-parity goals are concentrated in sub-Saharan Africa. However, it should also be noted from Table 2.25 that, if past trends were to continue, both China and India are among those countries at risk of not achieving gender parity, even by 2015.

It must be emphasised, however, that these outcomes are by no means immutable. Although almost 60% of countries for which we have data are likely to miss reaching gender parity at primary and secondary levels by 2005, for a good number of them policies are available to deliver it

Figure 2.43. Prospects of achieving gender parity in primary and secondary education, by region



Source: Table 2.25.

within the space of a few years. The ways in which their past record could change, in response to consistent policy commitment and reform, are indicated in later chapters of this report.

The Education For All Development Index (EDI)

The prominence given by the Millennium Declaration to the achievement of UPE and to gender parity in education risks less attention being given, internationally, to the four other EFA goals. There is a question as to how much this matters – in the sense that their achievement may be necessary (although probably not sufficient) for the achievement of the other goals. In this context, it would be useful to have some means of synthesizing information on all, or most of the goals, so as to indicate relative levels of progress towards EFA as a whole. An EFA Development Index (EDI), using a composite of a number of relevant indicators, can provide one way of doing this.

There are well-known problems associated with the construction and interpretation of indices. These relate to which elements and indicators to select, how they should be aggregated and weighted across different fields, and how the results should be used. For example, the constituents of a Human Development Index can be debated in terms of the meaning of the concept, what should constitute its most important elements, how these elements might be proxied, and – more fundamentally – whether there are other, more important, objectives of development policy which vitiate the need for such an index. In the case of EFA, some of these problems are less pressing. The international community has defined EFA in terms of a set of six time-bound goals; at least some of these goals can be measured in a quantitative sense; and a set of indicators has been agreed as regards what variables best proxy their attainment. Thus, in the case of an EFA development index, some of the problems of indicator selection, of weighting and of interpretation are likely to be less difficult to resolve.

If a major objective of such an index is to measure overall progress towards EFA, its constituents should ideally reflect all the six goals. In practice, however, this is difficult, as Goal 3 – learning and life-skills programmes – is not yet conducive to quantitative measurement.[38] For rather different reasons, ECCE cannot easily be incorporated at present, because the data are insufficiently standardized across countries, and they are, in any case, available for only a small minority of states. Accordingly, an EDI has been designed which incorporates indicators for the four goals of UPE, adult literacy, gender parity and the quality of education.

One indicator has been included as a proxy measure for each of these four EDI components.[39] This is in accordance with the principle of considering each goal to be equally important and, thus, of giving the same weight to each of the index constituents. So the EDI value for a particular country is the arithmetical mean of the observed values for each of its different constituents. As each of its constituents are percentages, its value can vary from 0 to 1. The closer it is to its maximum value, the less distance a country is from the goal and the greater its EFA achievement.

The following are the EDI constituents and their related indicators:[40]

EFA Development Index (EDI)

- UPE: Net enrolment ratio.
- Adult literacy: Literacy rate of the age group 15 years and over.
- Gender: Gender-specific EFA index; this is the simple average value of the GPIs in primary education, secondary education and adult literacy.
- Education quality: Survival rate to Grade 5 in primary education.

All the data used to calculate this composite index are for the year 2000 (or 1999 where more recent data are not available). They are drawn from the UIS database, with the exception of some survival rates to Grade 5, which were missing for some countries. Instead, these were obtained from the national 'EFA 2000 Assessment' reports. Only those countries with a complete set of indicators required to calculate the EDI are included in the analysis. This unfortunately means that a comprehensive global overview of progress towards the goals cannot yet be given.

There are well-known problems associated with construction and interpretation of indices.

38. See pages 84-95, above.

39. However, as explained below, the gender component of the EDI is itself a composite index comprising measures of gender parity in primary and secondary education and adult literacy.

40. Appendix 2 provides a justification for selecting these particular indicators.

Table 2.26. Distribution of countries according to their mean distance from the EFA Goals in 2000

	Achieved EDI: 0.98-1.00	Close to the goal EDI: 0.95-0.97	Intermediate Position EDI: 0.80-0.94	Far from the goal EDI: less than 0.80	Subtotal sample	Total number of countries
Arab States			11	6	17	20
Central and Eastern Europe	3	1			4	20
Central Asia		1	2		3	9
East Asia and Pacific	1		8	2	11	33
Latin America/Caribbean		6	12	2	20	41
North America/Western Europe	2	1			3	26
South and West Asia	1		1	4	6	9
Sub-Saharan Africa			8	22	30	45
Total	7	9	42	36	94	203

Source: Table 1, Appendix 2.

The EFA Development Index can be calculated for ninety-four countries for the year 2000. Consequently, slightly less than half of the countries in the world are covered by these estimates. The index values for all available countries are shown in Table 1 in Appendix 2, and their regional incidence is shown in Table 2.26. Estimates are available for between half and four-fifths of the countries in sub-Saharan Africa, the Arab States, South and West Asia and Latin America. There is lower coverage for the OECD group (where data on some variables such as adult literacy rates and survival rates to grade five of primary education are missing for almost all of these countries), for other European countries and for those of East and Central Asia.

Very few countries have achieved the four most quantifiable goals.

It can be seen that, among the ninety-four countries having the data, very few (16) have either achieved the four most quantifiable EFA goals or are close to doing so. These figures are surprising, even though they exclude most of the Western European and North American countries, where EFA goal achievement is higher. It is also notable that no country from sub-Saharan Africa, the Arab States, or from South and West Asia (with the exception of Maldives) is presently close to achieving the goals. On the other hand, Table 1 in Appendix 2 shows that those which are close include a number of countries from Latin America – Argentina, Chile, Cuba, Guyana, and Panama – which have a long-established tradition of emphasizing widespread participation in basic education.

Forty-two countries have EDI values between 0.80 to 0.94. Countries in this group can be found in all regions except North America and Western Europe, and Central and Eastern Europe. However, a further thirty-six countries (representing 40% of those with EDI data) are very far from achieving the EFA goals, with EDI values lower than 0.8. As many as twenty-two of these lowest EDI countries are from sub-Saharan Africa (more than 60% of those in this category). They also include India, Pakistan, Bangladesh and Nepal. Table 1 in Appendix 2 reveals that, in most of these cases, there is low achievement across each of the EFA goals. Primary-school enrolments are low, gender ratios are highly unequal, illiteracy is widespread and high drop-out rates mean that many children – sometimes a majority – never reach the fifth grade of primary school. Thus, countries in this group are faced with multiple challenges that will have to be tackled simultaneously if EFA is to be secured (Box 2.13).

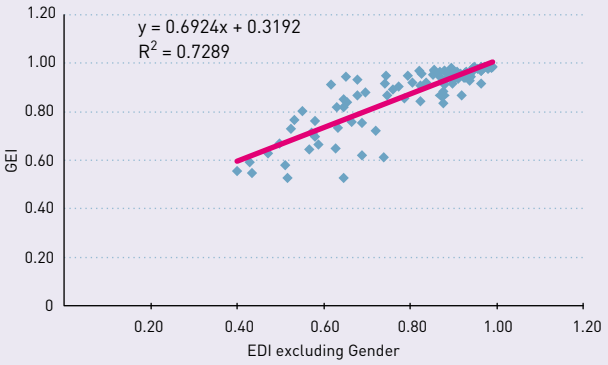
Box 2.13. Improving gender parity is the best predictor of progress towards EFA as a whole

The extent to which achieving one or other of the EFA goals is intertwined with achieving the rest can easily be demonstrated. The graphs below show how variation in each of the EDI constituents is associated with variation in the other three items. In general, it can be seen that countries achieving well on one of the EFA goals tend also to do well on the others. However, this also implies that those countries at low levels of EFA are faced with multiple aspects of educational deprivation – complicating massively their time-bound tasks.

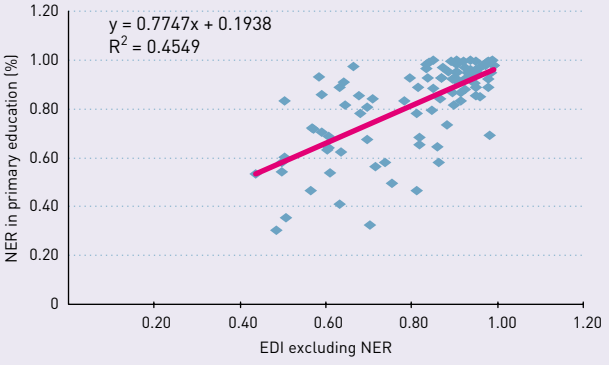
The results also show that the strongest association is between gender parity and the other EDI constituents. This variable explains 73% of the variance of mean scores for adult literacy, NER and the survival rate to grade 5 combined. Adult literacy is also a good predictor of EFA, explaining 67% of the variance of the other three EDI constituents. The NER and the survival rate are somewhat less strongly associated with the residual elements – explaining 45% and 32% of their respective variance in each case.

Thus, high survival rates and high NERs do not necessarily deliver gender parity and literacy in the short term. On the other hand, moves towards gender parity and, to a lesser extent, higher levels of adult literacy strongly signal the presence of other school-related improvements. These data show that, if we were seeking one indicator to summarize progress towards EFA, the single best proxy would be the gender-parity variable: the average gender balance among primary and secondary school pupils and literate adults.

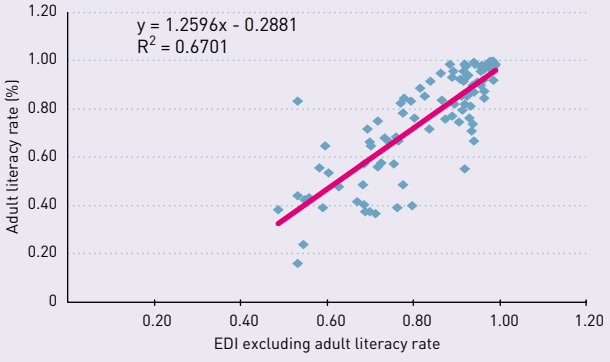
EDI and gender equality



EDI and NER



EDI and adult literacy



EDI and quality