# Enrolment and gender trends: secondary education

The previous chapter documented the progress that has been made toward the goals of enhancing access to education and closing the gender gap. Although the gains have not been as rapid as those at the primary level, countries around the world are making steady progress toward increased access to secondary education. In secondary education, especially the upper secondary level, students typically have more academic options than at the primary level. They can usually choose from a range of general and specialized study programmes offering different levels of instruction and leading to different career paths. Some of those programmes focus on preparing students for tertiary education, while others prepare them for direct entry into the labour force.

The extent to which girls are disproportionately excluded from education is higher at the secondary level than in primary education and increases further from the lower to the upper secondary levels. There may be various reasons for this: Emotional and physical dangers may increase as girls grow into young women and face sexual harassment and assault and social demands to conform to traditional gender roles. Lack of bathrooms and other sanitary facilities can be a problem, and the daily journey to school can be unsafe for girls and young women in communities around the world. Traditional conceptions of appropriate roles for both women and men are often pronounced in the technical and vocational aspects of secondary education.

# 1. Gross enrolment ratios rising at secondary level

Patterns of gross secondary enrolment ratios around the world reveal a polarized picture. Among the 187 countries with data, shown in Map 4.1.1, more than four out of ten (43 percent) countries have GERs of less than 80 percent, while nearly a quarter (27 percent) have rates of 98 percent or more — which approaches universal secondary enrolment.

Map 4.1.1 Secondary gross enrolment ratios vary amongst different regions

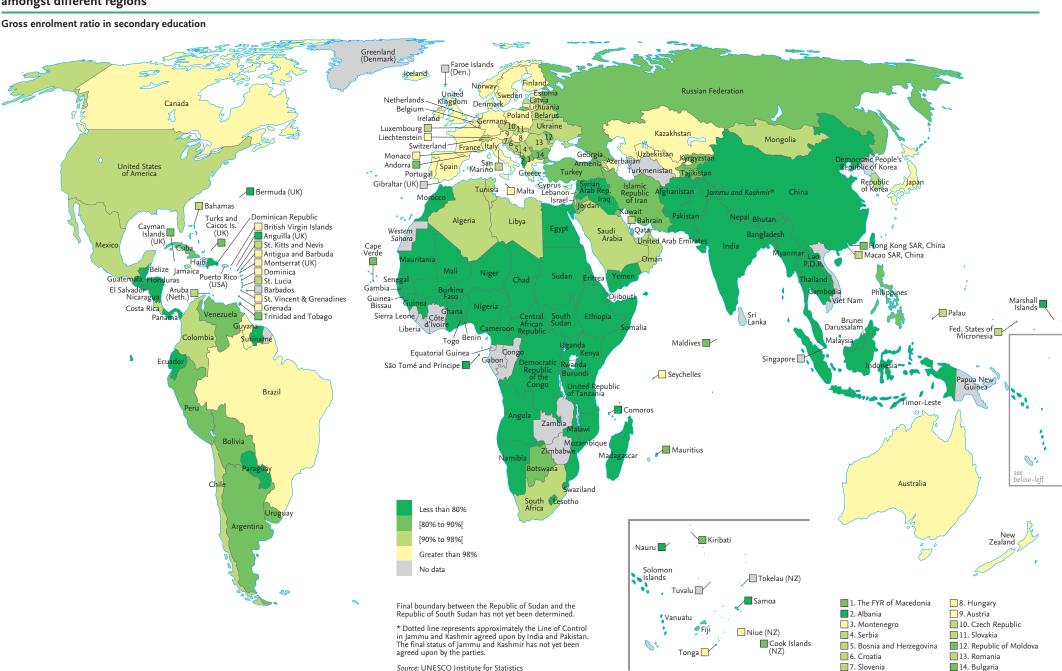
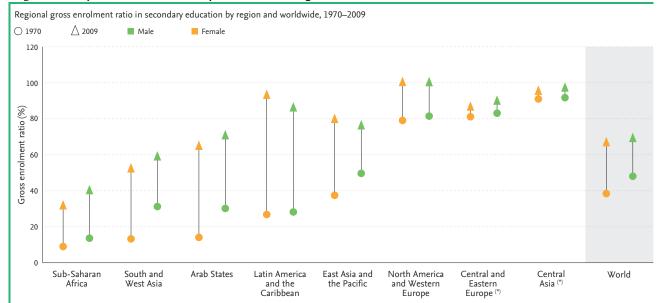


Figure 4.1.1 Upward trend in secondary GER seen in all regions and for both sexes



Note: (\*) 1970 data for Central and Eastern Europe refer to 1971. Data for Central Asia goes back to 1993 Source: LINESCO Institute for Statistics

There has been a general upward trend in secondary level GERs in all regions for both males and females. Between 1970 and 2009 the global average GER for males rose from 48 to 69 percent, while that for females increased from 39 to 67 percent.

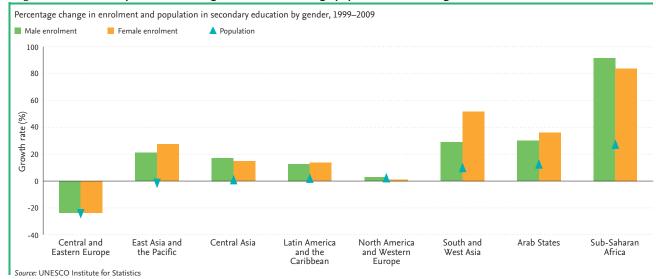
As seen in Figure 4.1.1, the largest gains took place in Latin America and the Caribbean, where the GER for females soared from 27 to 93 percent and that for males rose from 28 to 86 percent. Females made impressive progress in the Arab States, East Asia and the Pacific, and South and West Asia. Males also made substantial progress in the Arab States, where their GER rose from 30 to 71 percent. The smallest gains were registered in Central and Eastern Europe, where the GER was already

the highest of all regions for both males and females in 1971.

With GERs above 100 percent for both males and females, North America and Western Europe has the highest secondary level gross enrolment ratio. The lowest ratios are found in sub-Saharan Africa, which was at the bottom of the table in 1970 and is the only region that still has GERs below 45 percent for both sexes.

Males have higher GERs than females in five regions, while females have the edge in Latin America and the Caribbean and in East Asia and the Pacific. The GERs are almost the same for both sexes in North America and Western Europe.

Figure 4.1.2 Secondary enrolment rising faster than school-age population in most regions



As indicated in Figure 4.1.2, the number of secondary age children either held steady or increased between 1999 and 2009 in almost all regions of the world. Nevertheless, in almost all of these regions secondary enrolment levels also rose and did so at even faster rates than the population growth. The only region to register

a population loss was Central and Eastern Europe, where there was a parallel decline in secondary enrolment. The surge in secondary enrolment was particularly strong among females in South and West Asia and among both sexes in sub-Saharan Africa.

Figure 4.1.3 Patterns of gross enrolment ratio by gender vary among countries

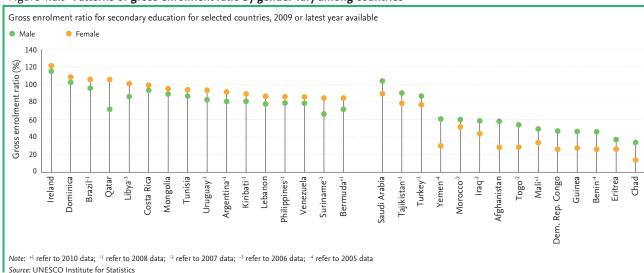


Figure 4.1.3 presents the gross enrolment ratios in

an edge, the differences are not all that large. For countries where males have higher GERs than females, the gap tends to be greater, such as for Afghanistan, Togo and Yemen.

secondary education for 30 selected countries. The GERs are higher for males than for females in half of these countries. A striking feature of these data is that, with the exception of Qatar, for the countries where females have

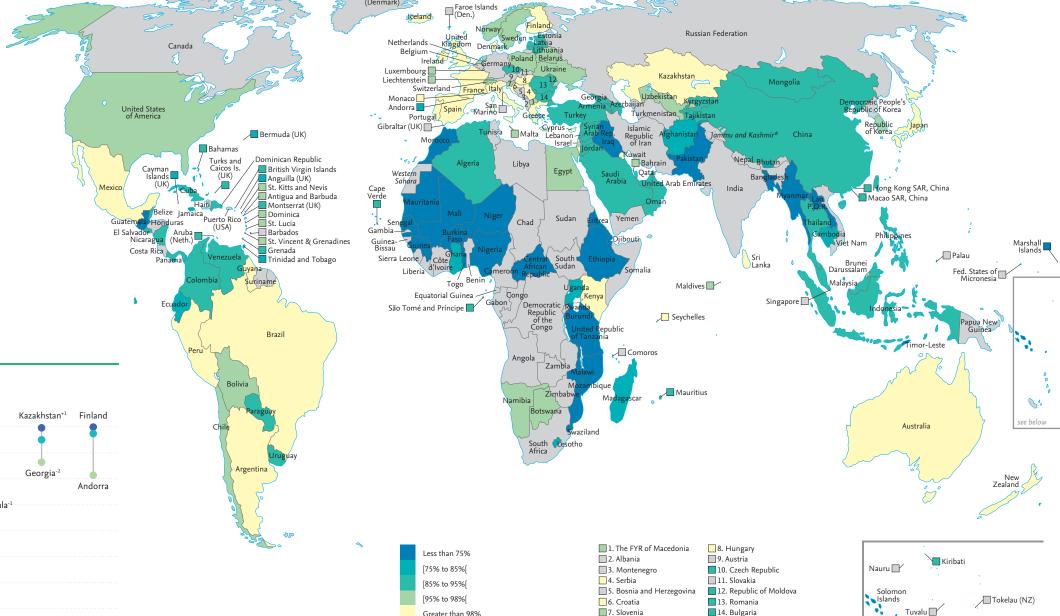
The net enrolment rate (NER) describes the proportion of children in the appropriate age group for a particular level of education who are actually enrolled in school. Map 4.1.2 shows how the NERs for lower secondary education vary in countries around the world. Enrolment at the secondary level is important because it is widely regarded as an upward extension of primary level schooling, where universal enrolment is an important objective.

Recent data show a wide distribution of net enrolment patterns at the lower secondary level. About one in five countries register NERs of less than 75 percent, with a comparable proportion in the range of 98 to 100 percent. One third of countries (30 percent) have NERs between 85 and 95 percent.

Similar disparities are seen at the regional level, as can be seen in Figure 4.1.4 offering data on each of the eight regions of the world for the lower secondary level, as well as the countries that have the highest and lowest NERs. The greatest variations are found in sub-Saharan Africa, where the NERs range from 22 percent in Niger to nearly 100 percent in Seychelles.

### Map 4.1.2 Net enrolment rates in lower secondary education vary widely





Final boundary between the Republic of Sudan and the

\* Dotted line represents approximately the Line of Control

in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been

Republic of South Sudan has not yet been deter

agreed upon by the parties.

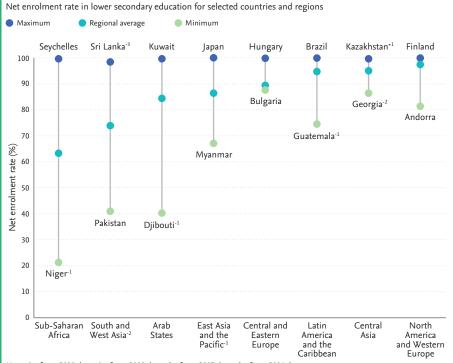
Source: UNESCO Institute for Statistics

Samoa

☐ Niue (NZ)

Cook Islands

Figure 4.1.4 NERs range widely within regions



Note: +1 refer to 2010 data; -1 refer to 2008 data; -2 refer to 2007 data; -3 refer to 2006 data Source: UNESCO Institute for Statistics

Greater than 98%

No data

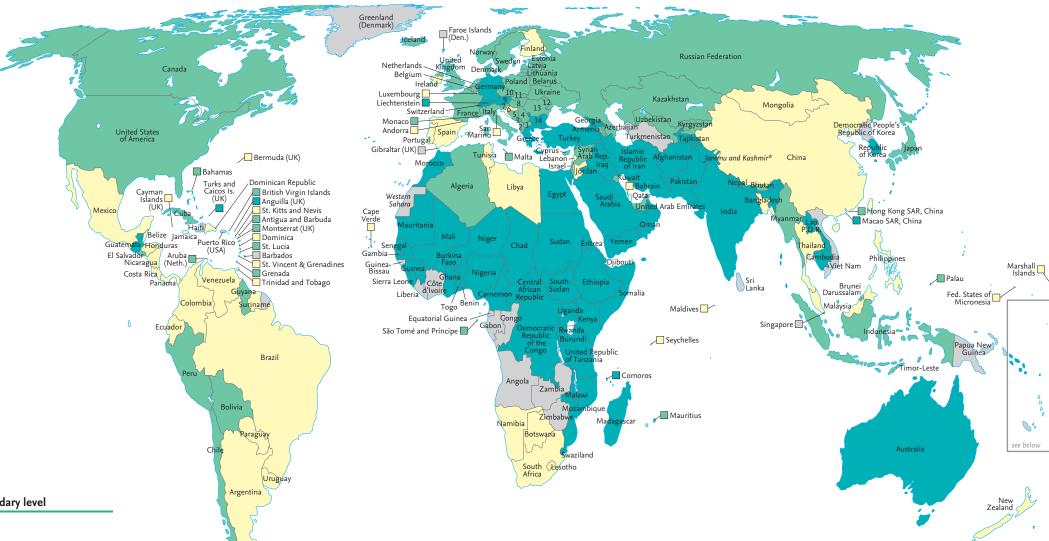
## 2. Upward trends in secondary level gender parity

As at the primary level, there has been a general upward trend in the percentage of countries reaching gender parity in secondary education, although the pattern has not been steady across the various regions.

As illustrated in Map 4.2.1, gender parity has been achieved at the overall secondary level (lower and upper combined) in slightly more than one-third of countries (39 percent). The remaining countries are almost equally divided between those where males are favoured (31 percent) and those where females have the edge (30 percent). Table 4.2.1 presents a list of selected countries which have the lowest and highest values of the gender parity index in secondary education.

Map 4.2.1 Gender parity at secondary level reached in more than one-third of countries

Gender parity index in secondary education



		<u> </u>	
Gender parity index for selected countries,	2009 or late	est year available	
Males favoured		Females favoured	
Country	GPI	Country	GPI
Chad	0.41	Nicaragua -1	1.12
Somalia <sup>-2</sup>	0.46	Namibia -1	1.14
Afghanistan	0.49	Libya -3	1.15
Togo <sup>-2</sup>	0.53	Bermuda +1	1.15
Central African Republic	0.56	Cape Verde	1.15
Democratic Republic of the Congo	0.56	Nauru <sup>-1</sup>	1.16
Guinea	0.59	Honduras <sup>-1</sup>	1.21
Mali	0.65	Suriname -1	1.22
Niger <sup>+1</sup>	0.66	Lesotho	1.28
Sierra Leone <sup>-2</sup>	0.66	Qatar	1.32

Note: GPI in tables is adjusted

Table 4.2.1 Some countries favour males, some females, at secondary level 1. The FYR of Macedonia 8. Hungary Males favoured 2. Albania 9. Austria . Kiribati Nauru 🔂 3. Montenegro 10. Czech Republic 4. Serbia 11. Slovakia Females favoured 12. Republic of Moldova 5. Bosnia and Herzegovina No data Tokelau (NZ) 6. Croatia 13. Romania 7. Slovenia 14. Bulgaria Samoa Final boundary between the Republic of Sudan and the Niue (NZ) \* Dotted line represents approximately the Line of Control Cook Islands (NZ) in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. Source: UNESCO Institute for Statistics

<sup>&</sup>lt;sup>+1</sup> refer to 2010 data; <sup>-1</sup> refer to 2008 data; <sup>-2</sup> refer to 2007 data; <sup>-3</sup> refer to 2006 data

Source: UNESCO Institute for Statistics

# 3. Gross enrolment ratios different at lower and higher secondary levels

Gross enrolment ratios are much higher at the lower secondary level, which is commonly viewed as an extension of compulsory primary schooling, than they are at the upper secondary level. Maps 4.3.1 and 4.3.2 document how countries around the world are distributed according to their GERs at the lower and upper secondary levels respectively.

#### Box 4.1 The adjusted gender parity index

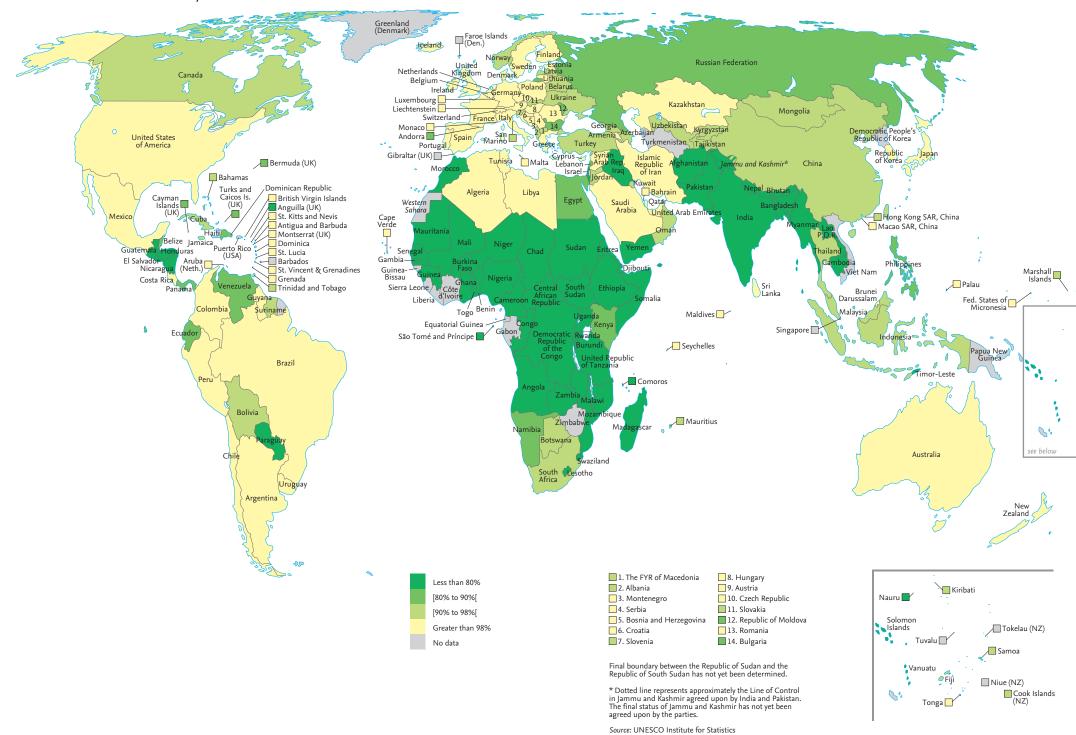
One of the difficulties in presenting the GPI is that the scale of disadvantage for girls or boys is not represented symmetrically around 1. For example, a GPI of 0.5 indicates that the female value of the indicator being reviewed is half the male value whilst a GPI of 1.5 (also 0.5 units away from parity) indicates the male value of the indicator is two-thirds of the female value (not half). Consequently, when boys are underrepresented in a given indicator, it appears more drastic than when girls are disadvantaged.

Thus, for the analysis and figures presented in chapters 4 and 5, the GPI is adjusted to present disadvantages symmetrically for both genders. The adjusted GPI is derived from the standard GPI, yet values greater than 1 are slightly different as the adjusted GPI presents disparities on a comparable scale.

The adjusted GPI uses the following methodology: when the ratio of female to male values of a given indicator is less than 1, the adjusted GPI is identical to the unadjusted GPI. By contrast, when the ratio is greater than 1, the adjusted GPI is calculated as the ratio of male to female values and the ratio is subtracted from 2. For instance, if the GER for males is 33 percent and 66 percent for females, the ratio of male to female GER is 0.5. Then, subtracting 0.5 from 2 gives an adjusted GPI of 1.5 while the unadjusted GPI would show a result of 2.

### Map 4.3.1 Enrolments highest at lower secondary level

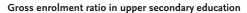
Gross enrolment ratio in lower secondary education



The ratios are consistently higher at the lower secondary level. For example, 40 percent of countries have GERs of 98 percent or more at the lower secondary level, but only a sixth (16 percent) of countries have GERs of 98 percent or more at the upper secondary level. Likewise, more than half (57 percent) of the countries register a ratio lower than 80 percent at the upper secondary level, but only a third (30 percent) of countries have GERs below 80 percent at the lower secondary level.

In the majority of countries worldwide, young men are more likely than young women to enrol in vocational education. Figure 4.3.1 compares male and female vocational enrolment in selected countries colour-coded by region. Although the male percentages are higher in a majority of countries, there are numerous exceptions, especially among countries in sub-Saharan Africa. In Burkina Faso, females out-number males in vocational education by 34 to 22 percent. In Ethiopia they do so by 70 to 52 percent.

## Map 4.3.2 Enrolments lowest at upper secondary level



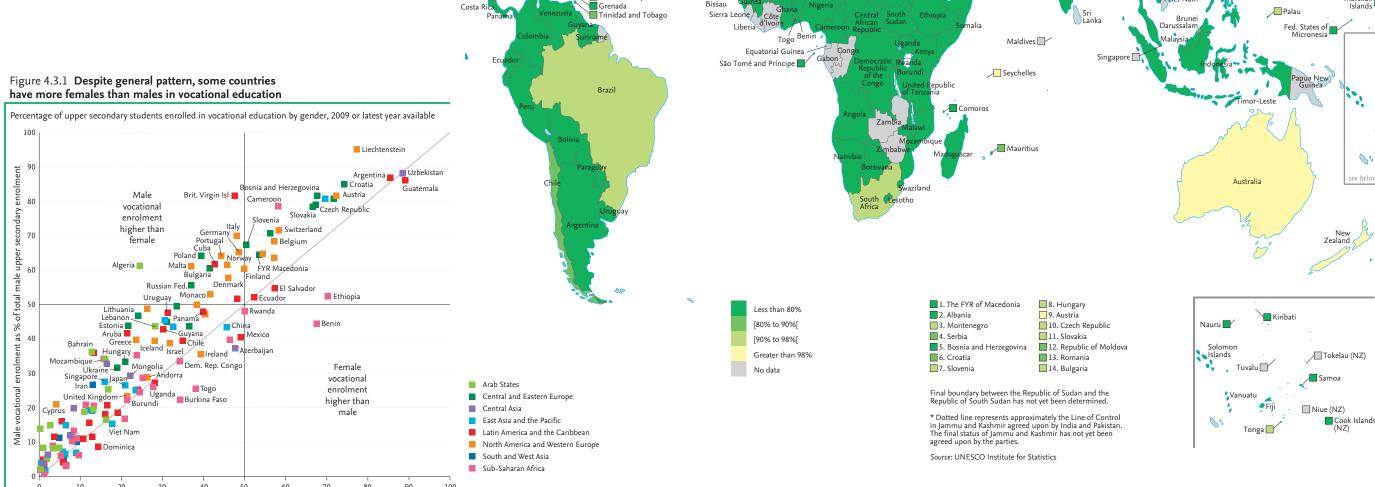


Netherlands

Russian Federation

Hong Kong SAR, China

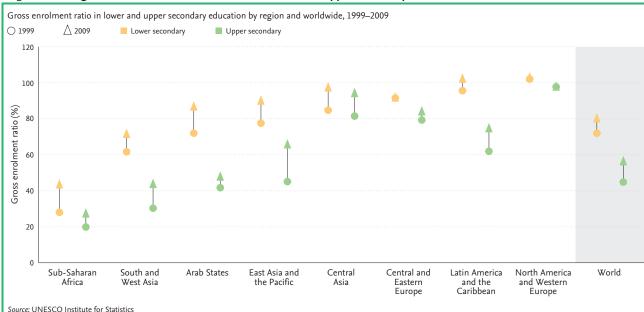
Macao SAR, China



Source: UNESCO Institute for Statistics

Female vocational enrolment as % of total female upper secondary enrolment

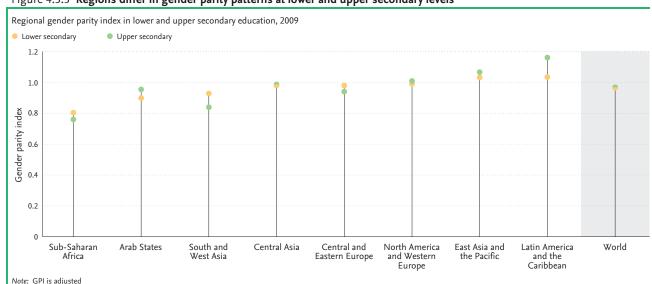
Figure 4.3.2 Significant enrolment increases at both lower and upper secondary levels



Gross enrolment ratios grew significantly between 1999 and 2009 for both the lower and upper secondary levels, and the increases were seen in all regions of the world. Figure 4.3.2 shows these patterns for 1999 and 2009

respectively. In all regions the ratios at the lower secondary level exceeded those at the upper secondary level.

Figure 4.3.3 Regions differ in gender parity patterns at lower and upper secondary levels

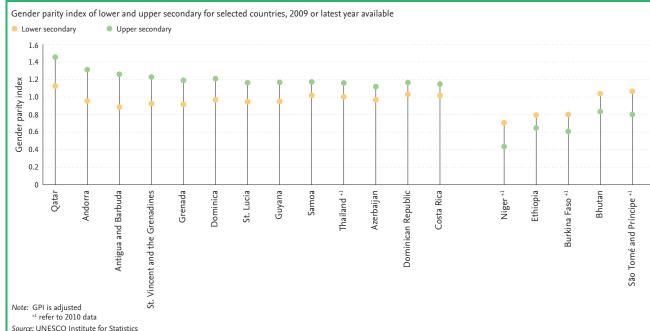


Source: UNESCO Institute for Statistics

Figure 4.3.3 compares data on gender parity at the lower and upper secondary levels. The global average GPI of 0.97 is the same for both levels, and the regions are equally divided among regions where the GPI is higher for lower secondary and those where it is higher at the upper secondary level, with the exception of Central Asia where the GPI is the same for both levels. For the upper secondary level in most regions the GPI is less than 0.97— meaning that males are favoured.

A conspicuous exception is seen in Latin America and the Caribbean, where the GPI favouring girls is 1.16 at the upper secondary level and in East Asia and the Pacific, where the GPI is of 1.07. For the lower secondary level, half of the regions have achieved parity. In three out of the remaining four regions, males are favoured and in Latin America and the Caribbean a GPI of 1.04 indicated that girls have an advantage.

Figure 4.3.4 Gender parity index of lower and upper secondary for selected countries



Whatever the regional differences in GPI may be, they mask even greater differences among various countries. Figure 4.3.4 presents data on GPI rates for 18 selected countries. At the lower secondary level, the differences

range from 0.71 in favour of males in Niger to 1.13 in favour of females in Qatar. The ranges are even more dramatic at the upper secondary level – ranging from 0.44 in Niger to 1.45 in Qatar.

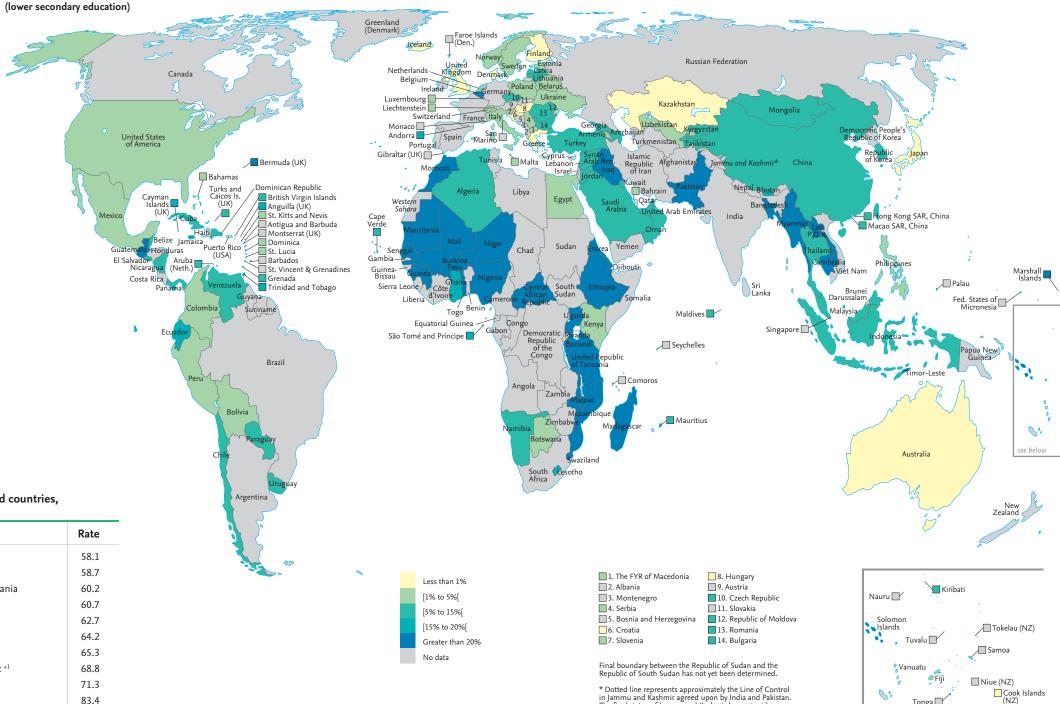
## 4. Out-of-school adolescents a continuing problem

Map 4.4.1 presents data on the females of lower secondary age who are not enrolled in school. It shows that in almost one-third (32 percent) of the countries this proportion is at least 15 percent. Another third of the countries (32 percent) have an out-of-school rate of less than 5 percent.

Table 4.4.1 illustrates how great the variations are among countries by listing some of the countries with the lowest and highest rates of female out-of-school adolescents. Although countries with low rates of female out-of-school adolescents can be found in most regions of the world, the majority of the countries with high rates are concentrated in sub-Saharan Africa.

Map 4.4.1 High rates of out-of-school female adolescents detected in certain regions

Rate of female out-of-school adolescents



in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been

agreed upon by the parties.

Source: UNESCO Institute for Statistics

Table 4.4.1 Rate of female out-of-school adolescents for selected countries, 2009 or latest year available

Country	Rate	Country	Rate
Australia -1	0.0	Burundi -2	58.1
Kazakhstan -4	0.2	Burkina Faso +1	58.7
Finland -4	0.2	United Republic of Tanzania	60.2
Japan -4	0.2	Guinea	60.7
Croatia -1	0.3	Eritrea	62.7
United Kingdom <sup>-1</sup>	0.5	Pakistan	64.2
Denmark <sup>-2</sup>	0.6	Djibouti <sup>-1</sup>	65.3
Greece -3	0.7	Central African Republic +1	68.8
Hungary	0.8	Senegal -3	71.3
Iceland	0.8	Niger -2	83.4

Note: \*1 refer to 2010 data; -1 refer to 2008 data; -2 refer to 2007 data; -3 refer to 2006 data; -4 refer to 2005 data Source: UNESCO Institute for Statistics