

Patterns of Access and Equity in Education by Country Groupings

The observations above mainly testify that despite economic growth and development, and despite generally enhanced education opportunities in DMCs, considerable inequities in access to education remain. In such a context it is worthwhile to identify ways in which DMCs differ from each other by country grouping. This section categorizes DMCs with reference to their HDI ranks, because access and equity is mainly an HDI issue. Groupings are also based on income levels (GNP per capita) and regional locations. As a result, DMCs are organized into three main groups:

Group L: This category includes countries classified by the *Human Development Report 1999* (UNDP 1999) as low in HDI (with an HDI value below 0.500) and low GNP per capita (below \$765). They are mainly South Asian countries: Afghanistan, Bangladesh, Bhutan, Lao PDR, and Nepal. Their GNP per capita ranges between \$200 and \$400, positioned at the bottom of the low-income countries, compared with the ceiling of \$765.

Group M Countries in Group M fall in the medium range of HDI (between 0.500 and 0.799) and GNP per capita (between \$765 and \$9,385). In terms of geographic location, they are quite scattered. Twelve of these countries are in Southeast Asia and the Pacific (Cambodia, Fiji Islands, Indonesia, Malaysia, Myanmar, Papua New Guinea, Philippines, Samoa, Solomon Islands, Thailand, Vanuatu, and Viet Nam); the PRC and Mongolia; four in Central Asia (Kazakhstan, Kyrgyz Republic, Tajikistan, and Uzbekistan); and four in South Asia (India, Maldives, Pakistan, and Sri Lanka). Like Group L countries, nearly all the Group M countries are at the bottom of the medium range of GNP per capita. Seven of them should even belong to the low GNP per capita countries, but since the major guide for grouping is HDI, they are placed in this category.

Group H: The third category consists of the NIEs: Hong Kong, China; Republic of Korea; Singapore; and Taipei, China. They have high HDI (above 0.800) and high GNP per capita (above \$9,385). However, due to unavailability of data, Taipei, China is not included in this analysis (Table 39).

Table 39: Classification of the Selected DMCs by HDI and Region, 1997

<i>Country groupings by HDI and GNP per capita</i>	<i>Region</i>	<i>ADB developing member countries</i>	<i>HDI Rank^a</i>	<i>GNP per capita (\$)</i>
Group L Low HDI and GNP per capita (HDI: below 0.5000; GNP per capita: below \$765)	Mainly South Asia; except *	Bangladesh Bhutan Nepal Lao PDR* Afghanistan	150 145 144 140 —	360 430 220 400 —
Group M Medium HDI and GNP per capita (HDI: 0.5000–0.7999; GNP per capita: \$765–\$9,385)	Mainly Southeast Asia and the Pacific; except *	Pakistan* Cambodia India* Papua New Guinea Myanmar Mongolia* Solomon Islands Vanuatu Viet Nam Tajikistan* Indonesia PRC* Kyrgyz Republic* Maldives* Uzbekistan* Sri Lanka* Philippines Kazakhstan* Samoa Thailand Fiji Islands Malaysia	138 137 132 129 128 119 118 116 110 108 105 98 97 93 92 90 77 76 70 67 61 56	500 300 370 930 — 390 870 1,340 310 330 1,110 860 480 1,180 1,020 800 1,200 1,350 1,140 2,740 2,460 4,530
Group H High HDI and GNP per capita (HDI: 0.8000 and above; GNP per capita: above \$9,385)	NIEs ^b	Korea, Republic of Hong Kong, China Singapore	30 24 22	10,550 25,200 32,810

— Data not available.

* = Countries that are not in the same region of the group.

^a Table is sorted by this column heading.

^b Data for Taipei, China are unavailable.

Sources: ADB 1999, 248; UNDP 1998, 225; 1999, 134-7, 180-3, 257.

Gender, Education Enrollments and Education Expenditure

Education Enrollment

According to Table 40, the GERs in the medium and high HDI countries are notably higher than those in the L countries. In terms of GERs, these countries have in general achieved universal primary education. However, the low HDI countries are still far from the target, with GERs only averaging 87.8 percent. The gap in GERs between the three groups of countries has become obvious

starting from the secondary level of education onwards. The group H economies achieve an average secondary GER of 83.1 percent, whereas it is 55.2 percent for the M countries. This means that on average about half of the relevant age group in the medium GNP per capita countries have no access to secondary education. The average secondary GER in the L countries, i.e., mainly South Asian countries, is as low as 26.9 percent, implying that three quarters of the relevant age group have no access to secondary education. Tertiary education is obviously a privilege for a very small group of people in the L and M countries, with only 3.1 percent of GER in the former and 13.2 percent in the latter. At the higher education level, again, the H economies have a comparatively high average tertiary GER of 42.3 percent. The low GERs in the L countries is attributable to the exceptionally low figures in a few countries, namely 1.7 percent in Afghanistan and 0.2 percent in Bhutan. The relatively high tertiary GER in the group H economies may be attributed to an exceptionally high enrollment rate in the Republic of Korea, of which the tertiary GER is 60.3 percent (see Appendix 1, Table A1.9).

Public Current Expenditure on Higher Education

The H economies have a notably higher proportion of public current expenditure on tertiary education (average 26.6 percent), whereas the other two groups (L and M) have similar rates of about 11-14 percent. Correlating the tertiary GERs with the proportion of public current expenditure shows the extent of unequal access to education, if compared with the GER in tertiary education. For example, in the L countries the tertiary sector, which accounts for only 3.1 percent of the average GER, consumes 11.2 percent of the average public current expenditure. Looking at individual countries, in Indonesia, the tertiary GER is only 11.3 percent but accounts for 25.1 percent of public current expenditure on education. The contrast in Nepal is even greater: 4.7 percent of tertiary GER accounts for 17.9 percent of public current expenditure (see Appendix 1, Table A1.9). This suggests that in countries with low and medium HDI and GNP per capita, access to tertiary education remains a privilege for a small proportion of people, and they consume a disproportionately high amount of education expenditure. This means that only the richest can afford tertiary education in most DMCs. It may also mean that public resources are inequitably given to a small group of people, further hindering the universalization of education at the secondary level (Table 41).

Table 40: Average Gross Enrollment Rate by Level of Education and Grouping, 1996
(percent)

Grouping	Primary education	Secondary education	Tertiary education
L	87.8	26.9	3.1
M	102.9	55.2	13.2
H	95.1	83.1	42.3

Note: L, M, and H refer to country groupings with low, middle, and high HDI and GNP per capita respectively.

Source: Appendix 1, Table A1.9.

Access and Equity in Education and Earned Income Share by Gender

Table 42 shows that the GDI ranking is positively correlated with the HDI ranking, i.e., the lower the HDI, the lower the GDI. However, their relationship with GEM is less clear. For example, Bangladesh (83) and the Republic of Korea (78) have similar GEM ranks, but Bangladesh has extremely low HDI (150) and GDI (123) ranks, whereas the Republic of Korea has very high HDI (30) and GDI (30) ranks. This means that despite economic development, there has not been much improvement in female empowerment in the Republic of Korea. However, this does not mean that the situation of female empowerment is very good either, as the lowest rank in the *Human Development Report 1999* is 102, implying that Bangladesh's GEM is close to the bottom of all those countries being ranked. Considering DMCs as a whole, except for a few countries with relatively high ranks (such as Singapore 32, PRC 40, Philippines 45, and Malaysia 52), the GEM ranks of DMCs are within the range of 70-100 which is quite near the bottom of the GEM ranking (see Appendix 1, Table A1.5). This suggests that the general sociocultural context in DMCs is not favorable for female empowerment.

Looking at the combined average GER, in which primary, secondary, and tertiary levels of education are included, within country groupings, it is found that there is in general parity in enrollments between males and females in the M and H economies. A clearer disparity is found among the L countries, with a male/female rate of 1.4. Signified with a very low GEM rank (101), females'

Table 41: Average Proportion of Public Current Expenditure on Higher Education by Grouping
(percent)

Grouping	Average GER in higher education	Average proportion of public current expenditure on higher education (% of all levels)
L	3.1	11.2
M	13.2	13.5
H	42.3	26.6

Note: L, M, and H refer to country groupings with low, middle, and high HDI and GNP per capita respectively.

Source: Appendix 1, Table A1.9.

Table 42: Average Male/Female Rate of Combined GER and Earned Income Share by Grouping, 1997

Grouping	Range of HDI Rank 1997	Range of GDI Rank 1997	Range of GEM Rank 1997	Average combined GER, M/F 1997 ^a	Average earned income share, M/F 1995
L	140-150	115-123	around 83	1.4	2.2
M	56-138	52-116	45-101	1.1	1.9
H	22-30	22-30	32-78	1.0	2.5

Note: L, M, and H refer to country groupings with low, middle, and high HDI and GNP per capita respectively.

^a Including primary, secondary, and tertiary levels of education.

Source: Appendix 1, Table A1.5.

Table 43: Average Male/Female Rate of GER by Level of Education and Grouping, 1996

<i>Grouping</i>	<i>Primary</i>	<i>Secondary</i>	<i>Tertiary</i>
L	1.4	2.0	3.2
M	1.1	1.1	1.5
H	1.0	1.0	1.3

Note: L, M, and H refer to country groupings with low, middle, and high HDI and GNP per capita respectively.

Source: Appendix 1, Table A1.10.

enrollment chance in Pakistan is only half that of the males.

The average earned income share between males and females is not much different between the L and H economies, where males' income share percentage ratio is 2.2 and 2.5 times, respectively, that of females. The largest gap found in the L countries is in Bangladesh (3.3 times), while that in the H economies is in Hong Kong, China (2.9 times) (see Appendix 1, Table A1.5). Despite economic development, data suggest that empowerment of women in some respects in some H economies is lower than that in some M countries (Table 42).

Table 43 shows that the gender gap in GER in the L countries is wider than in the M and H economies at all levels of education. The disparity in enrollments is especially large at the tertiary level in the L countries, with an average male/female rate of 3.2. Such an obvious average gender gap in enrollments in the L countries is attributable to a wide gap in Bangladesh, where the male/female enrollment rate is 5.4. Moreover, while approaching parity at primary and secondary schooling in the M and H economies, gender disparity remains at the tertiary level (see Appendix 1, Table A1.10).

Labor Force, Urban/Rural Population Distribution, and Education

Labor Force and Rural Population

Table 44 shows a great contrast in the proportion of the rural population in different country groupings: as high as 83.2 percent in the L countries but as low as 7.3 percent in the H economies. This coincides with the average proportion of GDP share of agriculture in the respective country groupings: 38.8 percent in the L countries and 2 percent in the H economies. What this means is that if the urban-rural disparity is a significant problem today, this is a widespread problem in DMCs, as the H economies account for an extremely small proportion of DMCs.

Illiteracy, Rural Population, and Labor Force in Agriculture

The adult illiteracy rate varies significantly between country groups. More than half of the adult population is illiterate in the L countries. However, average

adult illiteracy is only 15.2 percent in the M countries and 6.2 percent in the H economies. Combining the adult illiterate rates with the proportion of rural population, it is easy to see that illiteracy is pervasive in countries that have large proportions of a rural population and agricultural labor force (Table 44).

Illiteracy rates are high among both males and females in the L countries. This indicates that the gender gap in illiteracy is the most modest among DMCs. In contrast, despite extremely low adult illiteracy rates in the H economies, the gender gap is the widest among DMCs. Comparing the different country groupings, the L countries have the widest gender gap in GERs but the narrowest in illiteracy. The H economies, on the other hand, have the narrowest gender gap in GERs but the widest in adult illiteracy. This means that in the low-HDI-low-GDI countries, both males and females, share similar rates of illiteracy; but once there is an opportunity for education, boys have much more opportunities than girls. In the H economies, although there are more or less equal education opportunities at the school level, females still account for a large proportion of illiterate people (see Appendix 1, Table A1.11).

Female Political and Economic Participation

Despite generally low GEM ranks in DMCs, there are differences in females' life chances beyond education between country groupings. However, like GEM ranking, women's empowerment in a society may not have a direct linkage to the country's economic or human development. Table 45 shows that women occupy less than 10 percent of parliamentary seats in DMCs. The proportion of women in parliament is more or less the same in the L, M, and H economies. However, women's representation in parliament is notably low in the H economies, comprising only 4.3 percent of the seats. Looking at the male/female rate in parliament, while males exceed females by 9-12 times in the other two country groupings, it is 22.5 times in the H economies. However, the picture of female participation in administrative and managerial occupations is totally reversed. While females account for only 5 percent in administrative and managerial occupations in the L countries, the rate is 13 percent in the

Table 44: Average Rural Population, Illiteracy Rate, and Labor Force in Agriculture by Grouping
(percent)

Grouping	Average rural population 1997	Average GDI share of agriculture 1997	Average labor force in agriculture		Average labor force in industry		Average adult illiteracy rate estimate 1995 ^a			
			1970	1990	1970	1990	Total	M	F	F/M
L	83.2	38.8	88.5	82.8	3.8	5.8	60.8	47.4	74.5	1.6
M	66.4	26.7	62.6	52.2	14.2	18.0	15.2	10.0	19.3	1.9
H	7.3	2.0	18.7	6.3	35.0	36.0	6.2	2.9	9.6	3.7

Note: L, M, and H refer to country groupings with low, middle, and high HDI and GNP per capita respectively.

^a Data refer to population 15 years old and above.

Source: Appendix 1, Table A1.11.

Table 45: Political and Economic Participation of Women by Grouping

Grouping	Range of GDI Rank 1997	Seats held in parliament 1999		Administrative & manager 1992-1996		Professional & technical workers 1992-1996		Sales & service workers 1992-1996		Clerical workers 1992-1996	
		F%	M/F	F%	M/F	F%	M/F	F%	M/F	F%	M/F
L	115-123	9.2	9.9	5.0	19.0	23.0	3.3	4.0	24.0	46.0	1.2
M	52-116	7.5	12.3	12.8	6.8	37.5	1.7	41.1	1.4	40.2	1.5
H	22-30	4.3	22.5	13.0	6.7	35.7	1.8	47.3	1.1	66.7	0.5

Note: L, M, and H refer to country groupings with low, middle, and high HDI and GNP per capita respectively.

Source: Appendix 1, Table A1.2.

Table 46: Participation of Women in Teaching Profession by Grouping, 1996

Grouping	Primary Education			Secondary education			Tertiary education		
	M%	F%	M/F	M%	F%	M/F	M%	F%	M/F
L	80.0	20.0	4.0	62.0	38.0	1.6	71.0	29.0	2.4
M	43.9	56.1	0.8	46.5	53.5	0.9	70.8	29.3	2.4
H	36.7	63.3	0.6	55.5	44.5	1.2	73.3	26.7	2.8

Note: L, M, and H refer to country groupings with low, middle, and high HDI and GNP per capita respectively.

Source: Appendix 1, Table A1.12.

other two groups. This may mean that while women are politically active in the low HDI and GDI countries, they are economically and administratively passive; this pattern is reversed in the H economies. However, this does not necessarily mean high gender empowerment in the L countries. The literature on gender studies points out that women who climb to power do not necessarily devote their efforts to raising the sociopolitical status of females, but are usually more interested in securing their own power in their political system.

Referring to other occupational categories, there seems to be parity in gender distribution. However, teaching is regarded as a professional job that comprises mainly women. If teachers are excluded from the professional category, women may be much less represented in professional occupations. However, as revealed in Table 46, such representation is concentrated in primary and secondary levels of education only. In both M and H country groupings, females' participation rates in teaching at the tertiary level drops conspicuously. Moreover, for all occupational categories except political participation, gender disparity is more notable in the L countries than the other country groupings. This may be due to a general low level of education attainments in South Asia.

High HDI and Low HDI Economies Compared: Hong Kong, China and the Lao PDR

After looking at country groupings in general, it may be useful to compare two individual economies. Hong Kong, China and the Lao PDR are chosen for this

purpose, as the former is an economy in Group H with high HDI and GDI, and is mainly urban and industrial. In contrast, the Lao PDR is an L country, with low HDI and GDI. It is mainly an agrarian economy, with a large rural population.

Table 47 shows that males exceed females in nearly all types of occupations except clerks in Hong Kong, China and elementary occupations in the Lao PDR. The two occupations in which females occupy higher proportions are actually humble jobs in both societies. Clerical jobs are generally regarded as the new working class job in an industrial society, and elementary occupations are obviously those of low social status. Males exceed females to the greatest extent in administrative and managerial positions, by four times in Hong Kong, China and nine times in the Lao PDR. For other occupations, the male/female ratio is mostly about 2:1. This further illustrates the fact that, despite the state of economic development, females are still far from having equal life chances to males.

Table 48 compares the proportion of females in various tertiary level fields of study in Hong Kong, China and the Lao PDR. Males exceed females in nearly all fields of study in the Lao PDR, whereas the pattern is reversed in Hong Kong, China. In Hong Kong, China, females are the majority particularly in the fields of education, humanities, and social sciences, whereas there is more or less parity in trade and natural sciences. However, males far exceed females in engineering and architecture. This is a clear demonstration of gender stereotyping in the fields of study. As the outlets of humanities and social sciences are usually teachers and social workers, females are mainly clustered in the "female subjects." In subjects that can lead to better professional or high-income jobs, the proportion of male enrollments is increased.

In contrast, the Lao PDR figures show an overall domination of males in tertiary enrollments. Apart from education, social sciences, and natural science, males exceed females in most fields of study from two to seven times. It is another demonstration of male dominance in tertiary enrollments in a low HDI and GDI economy.

Table 47: Employment by Occupation and Male/Female Rate in Hong Kong, China and the Lao PDR, 1992

<i>Occupation</i>	<i>Employment, Male/Female Rate</i>	
	<i>Hong Kong, China</i>	<i>Lao PDR</i>
Mangers and administrators	4.0	9.1
Professionals	2.2	2.1
Service workers and shop sales workers	1.8	—
Plant and machine operators and assemblers	1.8	2.7
Elementary occupation	1.3	0.6
Clerks	0.5	1.0
Farm workers	—	1.1

— Data not available.

Sources: Netherlands Economic Institute 1995, 17, 48; Westwood, Mehra, and Cheung 1995, 74.

Table 48: Proportions of Females in Tertiary Level Fields of Study in Hong Kong, China and the Lao PDR, 1994

<i>Field of study</i>	<i>Hong Kong, China</i>		<i>Lao PDR</i>	
	<i>Female (%)</i>	<i>Male/Female</i>	<i>Female (%)</i>	<i>Male/Female</i>
Education	62.8	0.59	40.1	1.49
Humanities	75.5	0.32	32.8	2.05
Social sciences	66.5	0.51	45.1	1.21
Business administration	54.3	0.84	—	—
Trade	51.3	0.95	—	—
Natural science	—	—	49.3	1.03
Engineering	6.0	15.70	18.0	4.56
Architecture	21.0	3.76	12.7	6.88

— Data not available.

Source: UNESCO, Division of Statistics 1999.

Policy Implications

The pattern presented above highlights the following three aspects that need attention from policymakers:

- (i) *Efforts to expand secondary schooling and consolidate primary schooling.* Universal primary education has generally been achieved in DMCs, but about half of the children in the population have no access to secondary education in the countries with medium-low income and HDI. DMCs should aim to expand access to secondary schooling for all. At the primary level, the major task is to reduce dropouts and increase retention. Investment in basic education is still a priority for the medium-low income DMCs, not only to consolidate access but also as a means to consolidate equity in terms of resource distribution. The NIEs and ASEAN countries spend most on primary education, then on the secondary schools, and the least on higher education (Bautista 1990, 49). As argued above, the largest group of income poor is likely to benefit in basic education rather than higher education.
- (ii) *The gender gap at higher levels of education.* The obvious gender gap from secondary education onward needs attention. Associated with this, there appears a need to attend to the sociocultural biases against females in attending schools, in getting equal pay, and in participating in government administration. In sum, there appears to be a need for empowerment of females in DMCs.
- (iii) *The problem of rural education.* The L and M countries have much higher average rural populations than the three H economies. These rural populations still suffer from insufficient access to schooling, and addressing the issue of rural education is much needed in most DMCs.