CHARLES UNIVERSITY IN PRAGUE

FACULTY OF SOCIAL SCIENCES

Institute of Economic Studies, Department of Institutional Economics

Bachelor Thesis

2011 **Pavla Břízová**

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Gender Differences in Education: Structure and Comparison of Countries

Bachelor Thesis

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Abstract

This bachelor thesis is devoted to the problem of gender disparities in education. It focuses mainly on the current situation of the problem using the recent data for individual countries. The main contribution of the thesis to the research of the topic is in new, inventive ways how it analyses the structure of gender inequalities. The first of them concentrates on the distribution of gender gap values that represent states of inequalities of individual countries. Separately for fourteen most important educational statistics (such as School enrolment rate, Progression to secondary school or Literacy rate) the thesis depicts the distribution of gender gap values of all the countries and describes the differences and common features among the statistics. The second part of the analysis is devoted to inequality stages. Educational statistics are divided into two groups (Access to education and Quality of obtained education), due to their natural consecutiveness called inequality stages. The analysis of the structure of inequalities consists in searching for mutual relations between the level of inequalities in the first and second stage there. In accordance with distinguished forms of relations the thesis consequently classifies countries into eleven definite categories. The main finding proved by this approach is the fact that in many more countries girls experience higher inequality in access to education than in its subsequent quality than vice versa.

Keywords

data analysis, education, gender inequalities, gender disparities, gender gap, structure, girls' education

JEL Classification: I21, J16

Length of work: 124 076 characters including spaces

Abstrakt

Tato bakalářská práce se věnuje problému genderových nerovností ve vzdělávání. Zaměřuje se především na jejich současný stav, k čemuž využívá aktuálních dat na úrovni států. Hlavním přínosem práce pro výzkum daného tématu je především užití nových, inovativních způsobů jak analyzovat strukturu genderových nerovností. První z nich se zaměřuje na rozložení hodnot gender gap, které vyjadřují stav nerovností v jednotlivých státech. Zmíněné rozložení je graficky znázorněno zvlášť pro každou ze čtrnácti nejdůležitějších vzdělávacích statistik (jako je např. míra zapisování dětí do škol, míra pokračování studiem na střední škole nebo míra gramotnosti). Na základě těchto grafů jsou pak pojmenovány hlavní rozdíly a společné rysy vyskytující se mezi jednotlivými vzdělávacími statistikami. Druhá část analýzy se zabývá tématem rozdílnosti jednotlivých vrstev genderových nerovností ve vzdělávání. Vzdělávací statistiky jsou zde rozděleny do dvou skupin (Přístup ke vzdělání a Kvalita získaného vzdělání) označovaných pro jejich vzájemnou návaznost pojmem nerovnostní stupně. Zkoumání struktury nerovností spočívá v tomto případě v hledání vztahů mezi stavem nerovností v prvním a druhém nerovnostním stupni. Podle rozpoznaných forem těchto vztahů jsou státy světa rozčleněny do jedenácti jasně definovaných kategorií. Jedním z hlavních poznatků, které tento postup umožnil, je zjištění, že států, kde jsou dívky vystaveny vyšší nerovnosti v přístupu ke vzdělání než v jeho následné kvalitě, je mnohem více než těch, kde je tomu naopak.

Klíčová slova

analýza dat, vzdělávání, genderové nerovnosti, genderové rozdíly, gender gap, struktura, vzdělávání dívek

Declaration

1. Hereby I declare that I have elaborated this bachelor thesis independently, using only the listed literature and sources.
2. I declare the bachelor thesis has not been used to obtain another university degree.
3. I agree to make the bachelor thesis available for educational and research purposes.

Prague, May 20, 2011 Pavla Břízová

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TEZE BAKALÁŘSKÉ PRÁCE

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Garant studijního programu Vám dle zákona č. 111/1998 Sb. o vysokých školách a Studijního a zkušebního řádu UK v Praze určuje následující bakalářskou práci

Předpokládaný název BP:

Rozdíly ve vzdělávání dívek a chlapců:
Srovnání několika států

Charakteristika tématu, současný stav poznání, případné zvláštní metody zpracování tématu:

V mnoha regionech světa nemají dívky stejný přístup ke vzdělávání jako chlapci. Rodiče je do škol buď vůbec nezapisují, nebo je zapíší, avšak dívky nakonec získají méně kvalitní vzdělání než chlapci. Důvodů pro to je mnoho. Skutečný počet docházejících se, často dost podstatně, liší od počtu zapsaných. Přístup učitelů a vůbec celé společnosti k užitečnosti vzdělávání žen je v některých oblastech stále ještě negativní. To se potom odráží jak v samotné kvalitě výuky dívek, tak v jejich vlastní motivaci.

Přitom eliminovat rozdíly ve vzdělávání dívek a chlapců je jedním z tzv. miléniových rozvojových cílů OSN. Ty nejsou pouze výrazem lidské solidarity, ale mají i ekonomický význam. Investice do lidských zdrojů v chudých zemích mají vysokou návratnost. Stimulují ekonomický růst, zvyšují efektivitu práce a vytvářejí nová pracovní místa.

Struktura BP:

Abstrakt

Přístup ke vzdělání z pohledu pohlaví není ve všech státech světa rovný. Cílem práce je na výběrové skupině států tyto rozdíly demonstrovat, včetně jejich vývoje v čase, a pokusit se na základě dalších charakteristik těchto států najít souvislosti a příčiny nerovností v přístupu ke vzdělávání.

V existujících datových souborech z oblasti vzdělávání lze tyto rozdíly pozorovat v několika různých veličinách. Dle konkrétní dostupnosti dat vybereme skupinu států (napříč světadíly, s různou mírou bohatství či chudoby, v různých nadnárodně kulturních podmínkách, apod.) a pro každou veličinu zvlášť porovnáme rozdíly mezi těmito státy. Na základě získaných výsledků potom budeme uvažovat, které vlivy (geografické, demografické i ekonomické) mohou vysvětlovat zjištěné rozložení nerovnosti přístupu ke vzdělání v pozorované skupině států.

U datově nejkompletnějších kategorií navíc vyneseme hodnoty veličiny barevnou škálou do politické mapy světa, a to pro všechny státy, u nichž dané pozorování existuje. Mapu následně porovnáme s mapami rozdělení bohatství, mapami přírodních podmínek, rozšíření náboženství, urbanistickými mapami a dalšími.

Výsledkem tedy bude nejen popsání současného stavu problému nerovného přístupu dívek ke vzdělávání ve světě a jeho minulý vývoj, ale také zvažování jeho možných příčin a souvislostí, které by mohly být do budoucna využity pro jeho řešení.

Osnova

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Content

Tables

Figures

Maps

Appendices

Introduction

"The surest way to keep a people down is to educate the men and neglect the women. If you educate a man you simply educate an individual, but if you educate a woman, you educate a family."

James Emman Kwegyir Aggrey
visionary Ghanaian educator (1875-1927)[1]

Education and gender equity rank among basic issues of development economics. They are even so important that two of the Millennium Development Goals are devoted to them – *Goal 2: Achieve universal primary education* and *Goal 3: Promote gender equality and empower women*. (United Nations, n.d. a) In the topic of gender disparities in education both the problems come together and their negative effects intensify.

The main objective of this bachelor thesis is on the one hand to describe the current situation of gender inequalities in education in the world using the empirical evidence of the recent data, and on the other hand to analyse in new, inventive ways the structure of these inequalities. The organisation of the thesis is as follows:

Chapter 1 is devoted to the overview of general facts about the problem of gender disparities in education. It contains the specification of geographical areas where the problem is the most serious (1.1), enumeration of the most important educational statistics dedicated to gender issues (1.2), the comment on historical evolution of the situation supported by empirical evidence (1.3), but it includes also the description of the most frequent causes of gender inequalities in education (1.4), possible

[1] Source: (Jacobs, 1996)

solutions (1.5) and the main reasons for the elimination of the inequalities, containing, besides others, political engagements and last but not least also economic benefits (1.6).

Chapter 2 focuses on the empirical analysis of the current structure of gender disparities in education. First part of this chapter (2.1) examines, separately for several educational statistics, characteristic features of distributions of countries' gender gap values. Further, it also comments on the influence of levels of the economic development there. Second part (2.2) analyses relations between two inequality stages (Access to education and Quality of education obtained). It distinguishes a number of different kinds of these relations and according to them classifies countries of the world into the same number of corresponding categories.

1. General Facts about Gender Differences in Education

There are still some parts of the world where gender equality has not been reached yet in the society and the access to education or its quality is not equal for girls and boys. Parents still prefer education of their sons prior to their daughters there. This behaviour has various reasons (mainly economical and cultural ones) and indispensable consequences for well-being of individuals, families and also for welfare and economic prosperity of countries.

1.1 Geographical Location

1.1.1 Regions

The problem of gender disparities in education is not of the same extent all over the world. There are some geographical regions which perform much worse than the others. The most frequently mentioned as problematic ones are Sub-Saharan Africa, South and West Asia, Arab states and Latin America and Caribbean.

To document this fact on the recent data, Table 1 summarises main educational statistics with respect to gender differences. It uses different division into geographical regions (Gapminder Foundation, n.d.), but confirms the foregoing statement. There is the only difference: West Asia falls there into region Europe & Central Asia and Latin America and Caribbean is counted in overall region America, so their gender disparities are tempered by better outcomes of the other countries in these regional groups.

Table 1 shows two general trends. Regions can be divided as problematic ones from the point of view of gender disparities (these are Middle East & North Africa, South Asia and Sub-Saharan Africa) and non problematic ones (America, East Asia & Pacific and Europe & Central Asia), as the three firstly mentioned have notably much bigger gender gaps (differences between values for males and values for females) than the other three regions, especially in categories *Children out of* (primary) *school*, *Primary completion rate*, *Progression to secondary school* and *Literacy rate* (both *Youth* and *Adult*), see Table 2.

Table 1: Current situation by Region and Gender

2008, percent

Region	School enrolment									
	Primary				Secondary				Tertiary	
	Gross		Net		Gross		Net		Gross	
	male	female	male	female	male	female	male	female	male	female
America	113.7	110.6	93.5	93.4	88.9	93.5	76.1	79.9	45.7	60.7
East Asia & Pacific	111.8	113.5	94.2	93.0	76.9	80.0	69.6	72.3	26.8	27.4
Europe & Central Asia	102.2	101.2	95.3	94.4	97.4	95.1	87.7	86.5	49.3	61.1
Middle East & North Africa	106.6	111.6	88.0	84.0	85.0	81.7	73.6	74.4	27.7	34.5
South Asia	95.2	85.4	78.7	73.1	37.4	28.4	36.9	27.9	5.6	4.8
Sub-Saharan Africa	105.7	96.5	83.7	80.5	38.3	29.4	31.2	27.4	5.7	2.9

Region	Children out of school, Primary		Persistence to grade 5 [a]		Persistence to last grade of primary [a]		Primary completion rate		Progression to secondary school [a]	
	male	female	male	female	male	female	male	female	male	female
America	1.9	1.8	85.5	87.6	82.2	84.8	97.0	99.0	93.1	92.8
East Asia & Pacific	3.3	3.0	96.2	96.8	95.1	95.5	96.4	98.8	93.0	95.0
Europe & Central Asia	1.1	1.2	95.2	95.8	95.7	96.7	98.7	97.6	99.2	99.1
Middle East & North Africa	4.5	6.3	93.4	92.3	91.5	90.6	95.8	87.0	87.0	84.8
South Asia	6.9	8.8	71.7	74.6	71.6	74.5	61.8	57.1	76.0	74.6
Sub-Saharan Africa	6.6	7.7	68.1	69.1	62.9	63.2	61.6	51.7	72.4	70.7

Region	Repeaters				Literacy rate			
	Primary		Secondary		Youth		Adult	
	male	female	male	female	male	female	male	female
America	3.2	2.3	4.0	2.5	97.9	97.9	94.5	92.6
East Asia & Pacific	1.1	0.9	0.5	0.3	98.7	98.5	96.2	90.5
Europe & Central Asia	1.0	0.9	3.6	2.6	99.5	99.6	99.3	98.7
Middle East & North Africa	6.4	4.5	9.2	6.3	92.2	82.8	83.2	63.5
South Asia	8.2	7.7	7.2	7.7	77.8	69.9	65.6	47.8
Sub-Saharan Africa	11.5	11.1	11.5	11.8	79.0	70.1	73.8	56.0

Source: Author's calculations based on data from the World Bank (World Bank, 2011).

Note: Year 2008 is the latest complete data set. Definitions of all the educational statistics are in Appendix 1. List of countries with division into particular geographical regions is enclosed in Appendix 2. Construction of aggregates is described in Appendix 3.
a. Data from the year 2007.

Second observation from Table 1 concerns essential differences in access to education (regardless to gender disparities). There are three obvious steps in values: America and Europe & Central Asia, East Asia & Pacific and Middle East & North Africa, and finally, South Asia and Sub-Saharan Africa. (It is visible, for example, from the category *School enrolment, Secondary* or *School enrolment, Tertiary*. As for concrete numbers, in the second mentioned statistics America and Europe & Central Asia have

values around 50 percent for males and 60 percent for females, East Asia & Pacific and Middle East & North Africa have values approximately about 30 percent, while South Asia and Sub-Saharan Africa only about 5 percent. See Table 1) It is to be mentioned that the general access to education is related with overall quality of education, which is one of important factors affecting gender disparities in education.

Regarding more in details findings from Table 1, which comment on general situation in education rather than on gender disparities, *School enrolment, Primary, Gross* is in all regions, except for South Asia and Sub-Saharan Africa, above 100 percent. It is caused by the character of gross measures, as they count the ratio of enrolled children, regardless of their age, to children in age officially corresponding to the level of education. Thereby they involve also under-age and over-age school entrances or repeaters. Whilst *School enrolment, Primary, Net* moves rather around 90 percent, as it counts only enrolments of children just in official school age of the level. (Precise description of educational statistics is in Appendix 1.)

In *School enrolment, Primary* there is another thing to comment on. For first four regions, surpluses in gross enrolment correspond very roughly to deficits in net enrolment. However, for South Asia and Sub-Saharan Africa, it is possible to claim that significant part of children is not enrolled at all. This is confirmed also by values in the category *Children out of school, Primary*.

In regard to gender gaps in this level of education, from Table 2 it is obvious that gender inequalities are closely linked to generally worse access of children to education on primary level, because substantial gender gaps in *School enrolment* and *Children out of school* are exactly in regions South Asia and Sub-Saharan Africa.

Very interesting are also regional differences in trends how children go through the primary school. In America, there are by roughly 10 percentage points lower values of *Persistence to grade 5* and *Persistence to last grade of primary* than in East Asia & Pacific, Europe & Central Asia and Middle East & North Africa. However, when children really reach the last grade in America, they have even a little higher potency to finish it (*Primary completion rate*) than in the mentioned regions. (See Table 1)

Table 2: Current situation by Region, Gender Gaps

2008, percentage points

Region	School enrolment					Children out of school, Primary	Persistence to grade 5 [a]
	Primary		Secondary		Tertiary		
	Gross	Net	Gross	Net	Gross		
America	3.1	0.2	-4.6	-3.8	-15.0	-0.2	-2.1
East Asia & Pacific	-1.7	1.1	-3.1	-2.7	-0.6	-0.3	-0.6
Europe & Central Asia	1.0	0.8	2.3	1.2	-11.8	0.1	-0.6
Middle East & North Africa	-5.0	4.0	3.3	-0.8	-6.8	1.8	1.0
South Asia	9.9	5.6	9.0	9.9	0.8	1.9	-2.8
Sub-Saharan Africa	9.3	3.3	8.9	3.9	2.8	1.1	-1.1

Region	Persistence to last grade of primary [a]	Primary completion rate	Progression to secondary school [a]	Repeaters		Literacy rate	
				Primary	Secondary	Youth	Adult
America	-2.6	-2.0	0.4	-0.8	-1.5	-0.1	1.8
East Asia & Pacific	-0.4	-2.4	-2.0	-0.3	-0.2	0.2	5.7
Europe & Central Asia	-1.0	1.1	0.2	-0.1	-1.1	-0.1	0.6
Middle East & North Africa	0.9	8.9	2.2	-1.9	-2.9	9.3	19.7
South Asia	-2.9	4.7	1.4	-0.4	0.4	7.9	17.8
Sub-Saharan Africa	-0.3	9.9	1.7	-0.3	0.3	9.0	17.8

Source: Author's calculations based on data from the World Bank (World Bank, 2011).

Note: Year 2008 is the latest complete data set. Definitions of all the educational statistics are in Appendix 1. Construction of gender gaps: Differences of values from Table 1 (Male minus Female; except of *Children out of school* and *Repeaters* where it is contrariwise). List of countries with division into particular geographical regions is enclosed in Appendix 2.

a. Data from the year 2007.

On the contrary, in South Asia and Sub-Saharan Africa there is an opposite trend. In the case of South Asia the values of both *Persistence* categories are by more than 10 percentage points higher than those in the category *Primary completion rate*. And in Sub-Saharan Africa, the only difference is that all the values are generally lower and decrease throughout all the three categories.

When looking into gender gaps, in *Persistence* there are no large values of them at all, but in *Primary completion rate* significant gender gaps occur in South Asia (4.7 percentage points), Middle East & North Africa (8.9 percentage points) and Sub-Saharan Africa (9.9 percentage points). And they follow in *Progression to secondary school*, notwithstanding that in much smaller amounts (1.4, 2.2 and 1.7 percentage points, respectively). (See Table 2)

The highest values of *Repeaters* are in Sub-Saharan Africa (above 11 percent for both genders and levels of education), nevertheless, there is no significant gender gap in this category. This is different in the case of *Literacy rate*, where gender disparities are in all three problematic regions: Middle East & North Africa, South Asia and Sub-Saharan Africa. Firstly mentioned region has still relatively high absolute values of literacy rate (for *Youth* males 92.2 percent, however for *Adult* females only 63.5 percent), but it has the highest gender gaps (*Youth* 9.3 percentage points, *Adult* even 19.7 percentage points). On the other hand, South Asia has the lowest absolute values (from 77.8 percent for *Youth* males decreasing to frightful 47.8 for *Adult* females), but a little narrower gender gaps than the others (*Youth* 7.9 percentage points and *Adult* 17.8 percentage points). Finally, Sub-Saharan Africa has values somewhere in between of these two. (See Table 1 and Table 2)

1.1.2 Countries

The danger of overall values rests in the fact that they hide presence of considerable exceptions. For example, in the category *School enrolment, Primary, Gross*, although gender gap for the aggregate of South Asia is 9.9 percentage points and for Sub-Saharan Africa 9.3 percentage points (see Table 2), individual countries have values as high as 28.9 percentage points for Chad, 30.0 percentage points for the Central African Republic (both Sub-Saharan Africa) and even 42.6 percentage points for Afghanistan (South Asia),[2] which is horrible.

Second most commonly used indicator of education is *Literacy*. Even thought the lowest levels of literacy are in South Asia (see Table 1), gender gaps are wider in Sub-Saharan Africa (*Youth* 9.0 percentage points, *Adult* 17.8 percentage points) and Middle East & North Africa (*Youth* 9.3 percentage points, *Adult* 19.7 percentage points). These are also regions of the worst performing individual countries. Third and second worst place in accordance with the size of the gender gap belongs to Benin (22.0 percentage points) and Ethiopia (23.7 percentage points) in the category of *Youth*, and to Mozambique (29.4 percentage points) and Guinea-Bissau (29.6 percentage points) in

[2] Author's calculations based on data from the World Bank (World Bank, 2011).

the category of *Adult*. Absolutely the highest gender inequality in literacy is (in both categories) in Yemen. *Youth Literacy* gender gap reaches there 25.1 percentage points and *Adult Literacy* even 36.1 percentage points.[3]

The last category to be mentioned here is *Children out of school, Primary*. The data in this statistics are usually gathered in absolute numbers of children, contrary to other educational statistics which are in terms of percentage proportions to related populations. For comparison of gender disparities in the category *Children out of school*, there is commonly used the measure: how many girls are out of school for every 100 boys. In 2008, approximately 69 million primary-school-age children were not enrolled in primary or secondary school (which is the precise definition of the category). Girls constituted 55 percent of this amount. Exactly, there were 121 girls out of school for every 100 boys worldwide.[3, 4] But among the data on country level there are enormous exceptions to this value. To start exceptionally with the countries where girls are treated better than boys within the context of this category the lowest numbers of girls out of school for every 100 boys were in 2008 in Sri Lanka (19.5), the United Kingdom (22.7) and Belize (22.7). These values show that girls out of school represented in extreme cases one fifth of boys. On the other hand, opposite exceptions reached much higher and almost unbelievable values: Bahrain (276.4), Cameroon (306.5), Tajikistan (714.0), the Republic of Korea (781.9) and Benin (1240.6).[3]

To summarise finally where the problem of gender disparities is the most serious, in Table 3 there is the list of countries chosen by the World Bank for its financial and technical assistance in the programme of eliminating gender disparity in primary and secondary education.

[3] Author's calculations based on data from the World Bank (World Bank, 2011).
[4] Detailed description of the construction of the world aggregate is in Appendix 4.

Table 3: List of Targeting Countries for the Assistance of the World Bank

Region	Countries				
America	Bolivia	Brazil	El Salvador	Guatemala	Mexico
East Asia & Pacific	Cambodia	Lao PDR	Vietnam		
Europe & Central Asia	Moldova	Turkey	Tajikistan		
Middle East & North Africa	Djibouti	Egypt, Arab Rep.	Morocco	Yemen, Rep.	
South Asia	Afghanistan	Bangladesh	India	Nepal	Pakistan
Sub-Saharan Africa	Benin Ethiopia Mali Sierra Leone	Burkina Faso Gambia, The Mauritania Tanzania	Cameroon Ghana Mozambique Uganda	Chad Guinea Niger Zambia	Cote d'Ivoire Malawi Senegal

Source: (World Bank, 2009). Forms of country names: (World Bank, 2011). Forms of region names: (Gapminder Foundation, n.d.).

1.2 Domains of Inequalities

There are several educational statistics available for measuring of gender disparities. To specify them, in the thesis they will be divided into two groups: statistics describing *Access to education* (I.) and statistics related to *Quality of obtained education* (II.).

Group I. represents data sets concerning mainly school enrolment. Group II. is then addressed to indicators showing how long a child studies successfully (persistence and completion measures) and how much he/she is successful (for example, literacy rate or progression to secondary school).

These two groups in fact represent two different, but consequent stages of gender inequalities. Group II. measures inequalities just among these children who have already resisted first step of discrimination – in access to education (group I.). Thereby this division develops deeper knowledge about the structure of gender inequalities.

The complete list of educational statistics enabling observation of gender disparities, which are used in the thesis, is in Table 4, divided according to the mentioned guideline.

Table 4: Educational Statistics, Division (Access, Quality)

Group	Statistics
I. Access to education	School enrolment
	Children out of school
II. Quality of obtained education	Persistence to grade 5
	Persistence to last grade of primary
	Primary completion rate
	Progression to secondary school
	Repeaters
	Literacy rate

Source: Forms of statistics names: (World Bank, 2011).

Note: Definitions of all the educational statistics are in Appendix 1.

1.3 Historical Evolution

1.3.1 Access to Education

From the long term point of view, gender inequalities in education have been decreasing throughout the time. For example, concerning the *School enrolment, Gross*, in 1980 in the region of South Asia, just 59.7 percent of girls was enrolled in primary schools, whilst 91.7 percent of boys. Gender gap was inconceivable 32 percentage points there. However, up to the year 2008 the ratio of enrolled girls has grown to 85.4 percent. Since the ratio of boys increased in the same period to 95.2, the gender gap fell to relatively favourable 9.9 percentage points. (See Table 5)

The similar situation was in following two regions. In Sub-Saharan Africa and Middle East & North Africa, gender gaps of gross enrolment rate to primary school were 20.3 and 25.5 percentage points, respectively, in 1980, with values of enrolment rate 66.1 and 70.7 percent for girls, and 86.4 and 96.2 percent for boys. In the year 2008, the gender gap was just 9.3 percentage points in Sub-Saharan Africa and even -5.0 percentage points in Middle East & North Africa, which means that girls were treated better than boys in access to education there. Enrolment rates for both genders and both regions approximated to 100 percent in 2008.

Table 5: Historical Evolution: School enrolment, Primary

percent (Male, Female), percentage points (Gender gap)

	Region	School enrolment Primary							
		Gross				Net			
		1980	1990	2000	2008	1980	1990	2000	2008
Male	America	109.8	105.7	118.7	113.7	86.1	92.6	94.1	93.5
	East Asia & Pacific	118.4	127.4	106.9	111.8	99.5	99.8	95.7	94.2
	Europe & Central Asia	104.7	104.1	103.9	102.2	96.5	97.9	96.9	95.3
	Middle East & North Africa	96.2	98.8	103.4	106.6	85.6	86.7	88.7	88.0
	South Asia	91.7	97.7	98.3	95.2		69.6	85.6	78.7
	Sub-Saharan Africa	86.4	78.7	89.4	105.7	48.9	56.9	61.6	83.7
Female	America	107.9	105.3	115.3	110.6	86.0	93.2	94.1	93.4
	East Asia & Pacific	104.8	117.1	103.3	113.5	99.6	94.6	92.8	93.0
	Europe & Central Asia	104.3	102.8	102.2	101.2	97.3	98.2	95.4	94.4
	Middle East & North Africa	70.7	84.3	92.5	111.6	66.1	75.6	81.8	84.0
	South Asia	59.7	71.6	80.1	85.4		59.1	72.2	73.1
	Sub-Saharan Africa	66.1	64.5	75.8	96.5	41.3	49.6	53.9	80.5
Gender gap	America	1.8	0.4	3.5	3.1	0.1	-0.5	0.0	0.2
	East Asia & Pacific	13.6	10.2	3.6	-1.7	-0.1	5.1	2.9	1.1
	Europe & Central Asia	0.4	1.3	1.7	1.0	-0.8	-0.3	1.5	0.8
	Middle East & North Africa	25.5	14.5	10.9	-5.0	19.5	11.1	6.9	4.0
	South Asia	32.0	26.1	18.2	9.9	0.0	10.5	13.5	5.6
	Sub-Saharan Africa	20.3	14.3	13.6	9.3	7.7	7.3	7.7	3.3

Source: Author's calculations based on data from the World Bank (World Bank, 2011).

Note: Definitions of all the educational statistics are in Appendix 1. List of countries with division into particular geographical regions is enclosed in Appendix 2. Construction of aggregates is described in Appendix 3. Construction of gender gaps: Differences of male and female values (Male minus Female).

In secondary education there is another region which had in 1980 substantial gender gap – East Asia & Pacific. It is interesting that it had essentially the same value of gender gap for primary as for secondary education (primary 13.6 percentage points, secondary 13.7 percentage points). (See Table 5 and Table 6) Although at primary level the gender gap there was much lower than these in South Asia, Sub-Saharan Africa and Middle East & North Africa, at secondary level the values became comparable, as the three regions had much lower gender gaps in secondary level than in primary (secondary: South Asia 19.0, Sub-Saharan Africa 10.8 and Middle East & North Africa 19.6 percentage points).

It shows the fact that the structure of inequalities differed throughout the world. Children in East Asia & Pacific in 1980 were undergoing the same extent of gender

discrimination in access to primary school as to secondary school. Whereas in other three mentioned regions gender discrimination in access to secondary school was lower than that one which children there had to overcome when entering primary school. After girls had finished primary school, they had better position for oncoming education there.

Table 6: Historical Evolution: School enrolment, Secondary

percent (Male, Female), percentage points (Gender gap)

	Region	School enrolment Secondary							
		Gross				Net			
		1980	1990	2000	2008	1980	1990	2000	2008
Male	America	51.7	77.6	83.7	88.9	18.1	35.7	67.0	76.1
	East Asia & Pacific	60.5	48.6	67.0	76.9	74.1		59.7	69.6
	Europe & Central Asia	74.8	87.5	95.8	97.4	75.0	80.7	83.2	87.7
	Middle East & North Africa	51.2	63.5	68.1	85.0	42.5	53.4	44.4	73.6
	South Asia	35.4	46.0	52.1	37.4			32.1	36.9
	Sub-Saharan Africa	22.1	25.4	29.3	38.3	16.2	10.4	25.4	31.2
Female	America	49.5	78.0	87.6	93.5	21.9	38.3	70.0	79.9
	East Asia & Pacific	46.9	40.4	65.0	80.0	64.9		58.8	72.3
	Europe & Central Asia	71.8	86.8	93.5	95.1	73.8	85.6	82.1	86.5
	Middle East & North Africa	31.5	48.7	58.3	81.7	26.7	40.2	34.0	74.4
	South Asia	16.5	26.3	38.7	28.4			28.7	27.9
	Sub-Saharan Africa	11.3	20.4	24.3	29.4	10.6	9.2	22.1	27.4
Gender gap	America	2.2	-0.5	-4.0	-4.6	-3.8	-2.6	-3.0	-3.8
	East Asia & Pacific	13.7	8.2	2.0	-3.1	9.2	0.0	0.9	-2.7
	Europe & Central Asia	2.9	0.6	2.3	2.3	1.2	-4.9	1.2	1.2
	Middle East & North Africa	19.6	14.8	9.8	3.3	15.7	13.2	10.4	-0.8
	South Asia	19.0	19.7	13.4	9.0	0.0	0.0	3.4	9.0
	Sub-Saharan Africa	10.8	5.0	5.0	8.9	5.5	1.2	3.2	3.9

Source: Author's calculations based on data from the World Bank (World Bank, 2011).

Note: Definitions of all the educational statistics are in Appendix 1. List of countries with division into particular geographical regions is enclosed in Appendix 2. Construction of aggregates is described in Appendix 3. Construction of gender gaps: Differences of male and female values (Male minus Female).

To finish the summary of secondary education, gender inequalities in East Asia & Pacific and Middle East & North Africa decreased and in the year 2008 reached the levels of America and Europe & Central Asia. In South Asia and Sub-Saharan Africa they remained a bit larger, about 9 percentage points (analogous to primary level, where it was about 10 percentage points in 2008). It means that differences in the structure of

gender inequalities almost disappeared in the category of *School enrolment* throughout the period 1980-2008.

As for tertiary education, gender gap in 1980 was in all regions lower than 8 percentage points (see Table 7), the lowest surprisingly in Sub-Saharan Africa. Nevertheless, in this region there were approximately four times fewer girls than boys enrolled in tertiary education. Whilst in Middle East & North Africa, where the gender gap was in 1980 the highest (7.4 percentage points), there were enrolled only less than two times fewer girls than boys. This discordance, when values of gender gaps rather lead to misinterpretation than to correct comparison of regions, is caused by very low levels of tertiary enrolment rates in general.

The recent data from 2008 indicate the global trend in tertiary education that girls more than boys continue their education after secondary school. Except for South Asia and Sub-Saharan Africa where gender gaps were positive but very close to zero, gender gaps in all other regions were in negative numbers. In Europe & Central Asia and America the values were even as low as -11.8 and -15.0 percentage points.

To interpret these findings as discrimination of boys in access to tertiary education would be absolutely wrong, because both – male and female tertiary enrolment rates – were increasing in the period 1980-2008 in Europe & Central Asia. And in America, male enrolment rate did not decrease, either. So, the explanation is rather in the increasing proportion of studying girls.

In the last category of group I., *Children out of school, Primary*, the situation does not differ considerably from school enrolment rates. Notable gender gaps were in 1980 in Middle East & North Africa (4.2 percentage points), South Asia (3.6 percentage points) and Sub-Saharan Africa (1.8 percentage points). (See Table 7) Until 2008 gender gaps have narrowed to values about 2 percentage points for the two firstly mentioned and around 1 percentage point for Sub-Saharan Africa. Generally, higher gender gaps were during the examined period always in regions with higher proportions of children out of school.

Table 7: Historical Evolution: School enrolment, Tertiary; Children out of school

percent (Male, Female), percentage points (Gender gap)

	Region	School enrolment Tertiary Gross				Children out of school, Primary		
		1980	1990	2000	2008	1990	2000	2008
Male	America	32.0	45.6	32.8	45.7	2.4	2.0	1.9
	East Asia & Pacific	5.5	37.3	35.6	26.8	0.8	2.7	3.3
	Europe & Central Asia	21.0	30.3	37.9	49.3	1.9	0.8	1.1
	Middle East & North Africa	14.2	17.0	18.2	27.7	4.4	3.7	4.5
	South Asia	6.4	7.1	10.7	5.6	10.1	2.7	6.9
	Sub-Saharan Africa	1.6	3.5	3.6	5.7	16.1	14.1	6.6
Female	America	30.1	53.5	42.1	60.7	2.1	1.8	1.8
	East Asia & Pacific	3.6	23.8	30.8	27.4	1.7	3.5	3.0
	Europe & Central Asia	16.2	33.4	43.1	61.1	0.5	1.2	1.2
	Middle East & North Africa	6.8	10.4	15.8	34.5	8.6	6.3	6.3
	South Asia	2.3	3.4	6.8	4.8	13.7	7.8	8.8
	Sub-Saharan Africa	0.4	2.1	2.0	2.9	17.9	16.5	7.7
Gender gap	America	2.0	-7.9	-9.3	-15.0	-0.4	-0.2	-0.2
	East Asia & Pacific	2.0	13.5	4.8	-0.6	0.9	0.8	-0.3
	Europe & Central Asia	4.8	-3.1	-5.2	-11.8	-1.4	0.4	0.1
	Middle East & North Africa	7.4	6.6	2.4	-6.8	4.2	2.5	1.8
	South Asia	4.1	3.7	3.8	0.8	3.6	5.1	1.9
	Sub-Saharan Africa	1.2	1.3	1.6	2.8	1.8	2.4	1.1

Source: Author's calculations based on data from the World Bank (World Bank, 2011).

Note: Definitions of all the educational statistics are in Appendix 1. List of countries with division into particular geographical regions is enclosed in Appendix 2. Construction of aggregates is described in Appendix 3. Construction of gender gaps: Differences of male and female values (Male minus Female for *School enrolment*; for *Children out of school* contrariwise).

1.3.2 Quality of Obtained Education

Moving towards educational statistics from the group II., which describe the quality of obtained education and are engaged more in details in journey throughout the particular level of education, gender gaps of regional aggregates are narrower than in the case of statistics from the group I.

In categories *Persistence to grade 5* and *Persistence to last grade of primary* the gender gaps were throughout the examined period and remained up to the year 2007 close to zero (positive or negative) in almost all the regions. Only in America they were all the time a little higher. (See Table 8)

Though, in *Primary completion rate* there were some substantial gender gaps in 1980: for Sub-Saharan Africa (19.2 percentage points), Middle East & North Africa (22.9 percentage points) and South Asia (32.0 percentage points). Again, these are also the regions which performed the worst in concrete proportions of males and females (South Asia only 40.9 percentage points for males and incredible 8.9 percentage points for females in 1980). Up to the year 2007, the gaps, however, have decreased towards zero. Only in Sub-Saharan Africa, the gender gaps fell only to 9.4 percentage points.

Table 8: Historical Evolution: Persistences and Primary completion rate

percent (Male, Female), percentage points (Gender gap)

	Region	Persistence to grade 5			Persistence to last grade of primary		Primary completion rate			
		1990	2000	2007	2000	2007	1980	1990	2000	2007
Male	America	52.2	78.6	85.5	76.2	82.2	67.7	62.5	98.2	97.6
	East Asia & Pacific	87.8	84.5	96.2	76.8	95.1	100.9	96.4	90.1	98.0
	Europe & Central Asia	92.6	99.3	95.2	97.4	95.7	95.2	94.9	99.6	98.7
	Middle East & North Africa	76.5	95.3	93.4	93.5	91.5	67.4	81.4	84.9	99.6
	South Asia	93.7	58.8	71.7	58.8	71.6	40.9	97.5	77.0	91.3
	Sub-Saharan Africa	53.2	65.6	68.1	58.1	62.9	62.0	41.5	45.9	61.3
Female	America	57.7	81.6	87.6	81.4	84.8	65.4	73.7	98.5	99.4
	East Asia & Pacific	88.0	88.9	96.8	76.3	95.5	101.3	96.7	85.7	100.7
	Europe & Central Asia	91.9	99.7	95.8	97.1	96.7	95.9	92.0	98.8	97.6
	Middle East & North Africa	71.7	95.3	92.3	93.8	90.6	44.5	69.3	75.9	100.6
	South Asia	95.6	58.5	74.6	58.5	74.5	8.9	97.7	63.7	86.4
	Sub-Saharan Africa	48.9	64.9	69.1	57.3	63.2	42.8	31.4	36.8	51.9
Gender gap	America	-5.6	-3.0	-2.1	-5.2	-2.6	2.3	-11.2	-0.2	-1.7
	East Asia & Pacific	-0.2	-4.3	-0.6	0.5	-0.4	-0.4	-0.3	4.4	-2.7
	Europe & Central Asia	0.6	-0.4	-0.6	0.3	-1.0	-0.7	2.9	0.8	1.1
	Middle East & North Africa	4.8	0.0	1.0	-0.3	0.9	22.9	12.1	9.0	-1.0
	South Asia	-1.9	0.3	-2.8	0.3	-2.9	32.0	-0.2	13.4	4.9
	Sub-Saharan Africa	4.3	0.7	-1.1	0.8	-0.3	19.2	10.1	9.1	9.4

Source: Author's calculations based on data from the World Bank (World Bank, 2011).

Note: Definitions of all the educational statistics are in Appendix 1. List of countries with division into particular geographical regions is enclosed in Appendix 2. Construction of aggregates is described in Appendix 3. Construction of gender gaps: Differences of male and female values (Male minus Female).

Second table related to the quality of obtained education contains data about *Repeaters*. It is not a striking fact that boys generally tend to repeat more than girls. Statistics

confirm it, almost for all years and regions values of gender gap are negative. Slightly above zero, there were values just for Sub-Saharan Africa and in the case of secondary level also for South Asia. (See Table 9)

Table 9: Historical Evolution: Repeaters

percent (Male, Female), percentage points (Gender gap)

	Region	Repeaters							
		Primary				Secondary			
		1980	1990	2000	2008	1980	1990	2000	2008
Male	America	16.1	11.9	9.4	3.2	8.3	5.5	11.9	4.0
	East Asia & Pacific	0.2	0.1	4.8	1.1	0.2	0.9	1.3	0.5
	Europe & Central Asia	3.5	4.6	1.4	1.0	10.7	17.1	3.2	3.6
	Middle East & North Africa	13.6	11.5	9.6	6.4	17.0	16.6	20.4	9.2
	South Asia	14.9	9.2	4.8	8.2	28.3	12.4	4.6	7.2
	Sub-Saharan Africa	14.0	18.9	16.3	11.5	12.3	18.1	13.9	11.5
Female	America	14.7	8.1	8.6	2.3	6.6	5.9	11.0	2.5
	East Asia & Pacific	0.2	0.1	4.1	0.9	0.1	0.5	0.8	0.3
	Europe & Central Asia	2.7	4.0	1.2	0.9	6.0	12.5	2.7	2.6
	Middle East & North Africa	11.8	8.4	6.6	4.5	13.0	11.9	15.5	6.3
	South Asia	16.1	6.8	4.7	7.7	30.0	12.7	4.2	7.7
	Sub-Saharan Africa	14.2	19.0	16.3	11.1	14.8	21.4	14.5	11.8
Gender gap	America	-1.4	-3.8	-0.8	-0.8	-1.7	0.4	-1.0	-1.5
	East Asia & Pacific	-0.1	0.0	-0.7	-0.3	0.0	-0.4	-0.5	-0.2
	Europe & Central Asia	-0.7	-0.6	-0.2	-0.1	-4.7	-4.6	-0.6	-1.1
	Middle East & North Africa	-1.8	-3.1	-3.0	-1.9	-3.9	-4.7	-4.9	-2.9
	South Asia	1.2	-2.3	-0.1	-0.4	1.7	0.3	-0.4	0.4
	Sub-Saharan Africa	0.2	0.1	0.0	-0.3	2.5	3.3	0.5	0.3

Source: Author's calculations based on data from the World Bank (World Bank, 2011).

Note: Definitions of all the educational statistics are in Appendix 1. List of countries with division into particular geographical regions is enclosed in Appendix 2. Construction of aggregates is described in Appendix 3. Construction of gender gaps: Differences of male and female values (Female minus Male, i.e. contrariwise than habitually).

In contrast to the preceding categories, in *Progression to secondary school* there are again visible differences among regions. Considerable gender gaps were in 1990 in Europe & Central Asia (8.2 percentage points) and South Asia (9.5 percentage points). But up to the year 2007, they have narrowed to less than 3 percentage points, closer to values in other regions. (See Table 10)

Table 10: Historical Evolution: Progression to secondary school; Literacy rate

percent (Male, Female), percentage points (Gender gap)

	Region	Progression to secondary school			Literacy rate			
					Youth		Adult	
		1990	2000	2007	2000	2008	2000	2008
Male	America	80.5	89.8	93.1	94.2	97.9	88.6	94.5
	East Asia & Pacific	64.9	86.3	93.0	98.6	98.7	94.8	96.2
	Europe & Central Asia	71.0	99.0	99.2	99.8	99.5	98.5	99.3
	Middle East & North Africa	72.7	82.4	87.0	93.5	92.2	85.6	83.2
	South Asia	54.9	87.6	76.0	98.0	77.8	96.2	65.6
	Sub-Saharan Africa	39.2	46.2	72.4	80.9	79.0	70.1	73.8
Female	America	84.7	88.6	92.8	96.0	97.9	87.4	92.6
	East Asia & Pacific	60.7	84.0	95.0	97.8	98.5	86.8	90.5
	Europe & Central Asia	62.9	98.4	99.1	99.8	99.6	96.5	98.7
	Middle East & North Africa	69.6	85.3	84.8	86.4	82.8	66.5	63.5
	South Asia	45.4	84.2	74.6	98.3	69.9	96.4	47.8
	Sub-Saharan Africa	36.5	45.0	70.7	70.3	70.1	53.6	56.0
Gender gap	America	-4.2	1.1	0.4	-1.9	-0.1	1.2	1.8
	East Asia & Pacific	4.2	2.4	-2.0	0.8	0.2	8.0	5.7
	Europe & Central Asia	8.2	0.5	0.2	-0.1	-0.1	2.0	0.6
	Middle East & North Africa	3.1	-2.9	2.2	7.0	9.3	19.1	19.7
	South Asia	9.5	3.4	1.4	-0.3	7.9	-0.2	17.8
	Sub-Saharan Africa	2.6	1.2	1.7	10.5	9.0	16.5	17.8

Source: Author's calculations based on data from the World Bank (World Bank, 2011).

Note: Definitions of all the educational statistics are in Appendix 1. List of countries with division into particular geographical regions is enclosed in Appendix 2. Construction of aggregates is described in Appendix 3. Construction of gender gaps: Differences of male and female values (Male minus Female).

Examining *Literacy rate*, there should be mentioned that this statistics suffer from the relative scarcity of original data for individual states. For that reason, there are values of *Literacy rate* just for years 2000 and 2008 in Table 10. The lack of data also explains the bizarre decrease in values for South Asia between 2000 and 2008 (*Youth*: male from 98.0 to 77.8 percentage points, female from 98.3 to 69.9 percentage points, *Adult*: male from 96.2 to 65.6 percentage points and female from 96.4 to 47.8 percentage points). South Asia is the region with the lowest number of countries (8 countries, see Table 19 in Appendix 2) and there were available data fields just for one country from this region in 2000, whilst in 2008 there were data from 4 countries, but that one from 2000 was not among them. This caused a significant distortion of values for this region.

Nevertheless, an analogous problem appeared neither in other regions, nor in other statistics.

Concerning the remaining regions, relatively large gender gaps were in Middle East & North Africa and Sub-Saharan Africa. (See Table 10) It is the fact for both, *Youth* and *Adult*, *Literacy rates*, but values of *Adult* are in all regions higher than these of *Youth*. This signifies that the situation in society is in the long run positively changing towards literacy, as more young people become literate than is the overall literacy in the society.

To sum up the question of historical evolution, trend of changes has unambiguously the right direction. What is left to be answered is whether the speed of positive changes is sufficient, when gender equality in education could be obtained and, last but not least, whether the inequalities are narrowing in all aspects of education (it means not only in access, but also in quality and general insight of population towards gender equity).

1.4 Causes

Why are there countries and even whole regions which still face such gender inequalities in education? What are the main causes of different treating girls and boys? As most often mentioned, there are poverty, unfavourable culture traditions and the quality of school facilities and schooling itself. But important factors are also the presence of HIV/AIDS pandemic, armed conflicts and related problems of orphanage and gender-based violence.

From the economic point of view, the causes can be viewed as supply or demand factors. Among supply-side factors there are availability of schools, their quality and how they satisfy special needs of girls. Demand-side factors are then associated with the costs of education (direct as well as opportunity costs) and the ways how families under these costs respond to the offer of available education. The actual disposition of gender inequalities then results from the mutual interaction of supply and demand factors with actions of the political system, progress of economy and overall socio-cultural situation in the country. (Abu-Ghaida, et al., 2004)

Nevertheless, in what follows, the causes will be discussed more in details one after another according to thematic topics rather than supply-demand division, as many of them (for example poverty or armed conflicts) could be viewed as both, supply- as well as demand-side factors.

1.4.1 Poverty

Poverty is the most important factor which hampers children to get proper education. In itself, it is even a stronger barrier than gender inequalities. A simple evidence of this fact gives, for example, analysis of *Completion through grade 6* (Filmer, 2008). It shows that, when depicting the relation between the completion through grade 6 and the wealth gap (gap between the poorest and the richest 20 percent of the population), and relation between the completion and gender gap, wealth gaps grows much more sharply with decreasing completion than gender gaps.

Back to gender disparities, for families education is connected with costs (from direct costs, for example, school fees, uniforms, textbooks, transportation) and poor people very often cannot afford to pay these costs. If the family have more children and only limited financial resources, parents are more likely to give priority in education to their sons than daughters. (Al-Mekhlafy, 2008)

Furthermore, there are so called opportunity costs, which consist of missed income, or more generally missed utility from children's work (no matter if coming from labour market via paid job or just from unpaid domestic chores), during the time spent at school. Due to traditional division of labour, opportunity costs of girls' education are for the family often higher than those of boys, as girls are able to cope with larger amount of domestic chores, while opportunities to find a job providing at least passable income are roughly the same for both, girls as well as boys. (World Bank, n.d.) Therefore girls are broadly disadvantaged in family decision making of which child will be educated.

Another topic related to economic incentives concerns returns to education. Whereas social returns to education are rather non-measurable, private ones are at least partly expressible by expected future earnings. (Patrinos, 2008) And because in the areas with

gender disparities in education there are also very often gender inequalities in wages throughout the labour market, the decision about the education of girls in the family can be seen from the economical point of view as unprofitable or even disadvantageous for the family.

Back again to poverty in general, this issue influences in a negative way many other causes of gender inequalities strengthening their effect, as it is visible for example in following paragraphs.

1.4.2 Socio-Cultural Background

Culture norms are another important reason of gender inequalities in education. They are connected with attitudes to the role of girls and women in family and society. In many regions, as was mentioned above, the role of women is associated rather with domestic chores, caring about children and ill or old members of the family than with education and entering the labour market.

Parents when deciding about education of their children take into account also what is beneficial purely for themselves. It concerns the extent to what they suppose that their child will help them in their old age or in the case of their bad economic situation (King, et al., 1993). In cultures where it is customary that girls marry early and then live with the family of their husband, parents have really small incentives to send girls to school. (Abu-Ghaida, et al., 2004)

Interconnection of poverty and culture together create a vicious circle of gender disparities in education, documented by following citations of two famous development economists:

"Poor families will not find it worthwhile to invest in the education of their children, locking them into poverty gap. High initial inequalities thus tend to persuade themselves."

Debraj Ray

(Ray, 2004)

"Traditional customs and attitudes cannot be changed significantly until a large section of the community at a fairly young age is exposed to new ideas and ways of doing things."

Anthony Philip Thirlwall
(Thirlwall, 2006)

Nevertheless, there are also cultural customs that affect education of girls negatively, but are not directly connected with poverty. These are for example early marriages or gender-based violence. Both mentioned are still deeply embedded in some societies as correct and legitimate components of communal living. Whilst early marriages simply make attendance of school impossible (as they are often connected with moving to husband's house and pregnancies), on the contrary, gender-based violence very often takes place directly at school or in its surroundings and first of all grind down school achievements of girls, which is then followed by more frequent repeating of grades or even dropping out of school.

1.4.3 Religion

Other important sort of causes is connected with religion. For example, Islamic customs which demand veiling of women, their segregation from men in public and place particular emphasis on the family honour markedly affect the probability that there is a school, in acceptable distance, which girls can attend without violation of the customs.

It is important to understand that these customs are deeply rooted in the society of that place and come from the interconnection of religious values, family honour and measures for security of women. Therefore, they should be respected and fully understood as local social environment, not viewed as a problem to be solved. (Kaldor, 1988)

As for many following causes, impact of religion customs upon gender inequalities is greater if the area is simultaneously also poor, rural or under the armed conflict.

1.4.4 HIV/AIDS, Orphanage

Another specific feature influencing gender gaps in education is HIV/AIDS pandemic. In the areas where the situation is graver, gender inequalities in access to education are more serious. It is not surprising. In affected families, school-age girls have to carry domestic chores or join economic activities to help to improve the financial situation of the family much more often instead of attending school classes.

HIV/AIDS is also connected with higher proportion of families without one or both parents. In that case, older children, and mostly girls, have to take care of their younger siblings and cope with the roles of adults. Education is not possible for them henceforth. But even if orphans do not stay alone and are adopted by other families (mainly relative ones), their access to education is usually lower than this of own children of the family.

All these disadvantages affect education of girls more, as they simply strengthen above mentioned causes of poverty, economic non-profitability and traditional cultural aversion towards education of girls.

1.4.5 Conflicts, Emergencies and Other Fragile Situations

The problem that deserves at least the same attention as the previous more famous ones is commonly known under the term: areas of emergencies, fragile states or states in the early stage of reconstruction. All together, these three possibilities express serious political instability, usually connected directly with armed conflicts, under which state administration is significantly weaker or does not work at all.

However, war conflicts are not the only reason of the emergencies. For example, natural catastrophes could have the same effect. Although they do not last long (to be able to influence directly other than just momentary situation in education), their consequences can persist for years, especially in less developed areas.

As a great example there are two relatively recent disasters: earthquake on Haiti from January 2010, and even stronger earthquake accompanied by tsunami which hit Japan in March 2011. While Haiti, as a low income country, was deeply paralyzed by the

catastrophe and, even a year after, it has still considerable problems with functioning of the state, education not excepting, Japan, as a high income country, is, apart from the really destroyed, razed to the ground areas, functioning without visible problems.

Returning back to general topic of emergencies, there are some other issues, closely related to them, which explain more in details why emergencies are one of the causes of gender disparities in education. First of them is safety of girls. During the armed conflicts or other fragile situations, girls are in greater danger then boys. It is always a risk when a girl has to go out of dwelling and move outside alone. And this is the reason why parents rather do not send their daughters to school in affected areas.

Not only are girls physically weaker and can easily become victims of gender-based violence in the commonly imaginable sense of the word, but women are somewhere regarded even as a kind of military targets. Raping has become one of the war techniques and ways how to gain control over the territory or certain community.

One of the possible examples is from the Democratic Republic of Congo. According to various estimates, up to 200 000 women and children have been raped there in the provinces South and North Kivu during the last ten years of war. Offenders are mostly rebels from local military units, of which there are operating more than one hundred, or soldiers of the Congolese army. But attacks from civilians are not the exception, as moral values in the local society are seriously deformed by the war and raping has become an ordinary thing. (People in Need, n.d.)

Another, slightly neglected, topic influencing education is emigration. Emergencies, especially in developing countries, are often connected with exodus of inhabitants. No matter whether we speak about refugees or so called internally displaced persons (intrastate refugees), these people fled from their homes, often with almost no belongings, and live in provisional refugee camps.

Under these conditions, education of children is extremely difficult. Parents are worried about safety of their children. And even if they would like to let their children get education, it is possible that there is no school at all in the camp, or there is just a provisional one suffering from a lack of teachers, textbooks and other school supplies.

Nevertheless, the main reason why children, and predominantly girls, living in refugee camps cannot attend school classes is again connected with financial situation of their families and traditional division of work. Satisfying basic needs is difficult in the camp and children are needed to help the family. And because tasks as collecting water or firewood and other household chores are typically considered as a responsibility of women, girls are more likely to be limited in access to education than boys.

Another topic related to armed conflicts is of course orphanage, as wars are connected with great loss of lives. The influence of orphanage on gender disparities in education was discussed in the previous subchapter in connection with HIV/AIDS.

1.4.7 Gender-Based Violence

Status of women is often very low in developing countries. In some of them, there are still not existing appropriate laws that would provide the protection of women and guarantee human rights for them. But even if they exist, the legal system could be so weak due to frail political situation that it is not able to enforce them.

Other problem is the low level of education of common inhabitants and strong influence of longstanding traditions and social norms in the society. Thereby, many abused girls do not even know that they are victims of gender-based violence. Simply, they are not aware of the fact that what was done to them is illegal, inhuman and damnable. The same situation is then in their families, where great emphasis is put on protection of the family honour. And exactly this fact does not make it possible to go and blame the perpetrator, as it would discredit the honour of family – not that of perpetrator's, but that of victim's.

But how is gender-based violence related with education? Girls attending school classes could easily become victims of gender-based violence, not only on the way to and from school, but also at school or in its surroundings. As potentially dangerous, girls themselves name places like toilets, school playgrounds, accommodation facilities or outlying places in general. Perpetrators are in these cases rather male schoolmates and teachers than unknown men.

Significant problems with gender-based violence committed by teachers are for example in Benin (Akpo, 2008). Teachers abuse their positions there to offer girls better marks if these ones accept their sexual advances or threaten them with bad marks or failing if they refuse. The issue of sexual abuse is still taboo in the society, so girls do not speak about it with parents or anyone else.

Implications of gender-based violence from teachers are simple. Girls are afraid to go to school, their performance goes down and often it ends with dropping out – sadly, irrespective of whether they had refused or accepted the teacher's proposals, because long-term fear of revenge is accompanied with both alternatives, from the teacher on the one hand or from classmates who feel disadvantaged compared with the preferred girl on the other hand. The worst consequences are often unwanted pregnancies frequently resulting in unsafe abortions, and other psychological or physical problems. (Akpo, 2008)

In addition, in many countries there are programmes encouraging girl's education by financial incentives for families. This makes girls even more susceptible to accept teachers' advances, as they do not want to deprive the family of this income.

1.4.7 Excluded Groups and Rural Areas

Term excluded groups denotes the minorities that differ from the majority in religion, race, ethnicity, language, or just in the cultural background which they are from. Important characteristic determining excluded group is the fact that the majority makes members of the minority feel that they deserve lower esteem than members of the majority. Refugees or castes as there are in India could be also a kind of excluded groups.

Countries differ in number of socially excluded groups living in them. Some countries are rather ethnically homogenous while areas of others are much more diverse. There are even such countries in area of which there live hundreds of different groups.

It was proved that higher heterogeneity of the country (in the sense of diversified structure of inhabitants with respect to nationalities, languages, beliefs and cultural

roots) implicate higher gender differences in education and difficulties in reaching universal education in general. Discrimination could have many forms, from mere disregard of minority students at school by majority teachers even to absolute destruction of minority schools and violence towards minority teachers and whole communities. (Lockheed, 2008)

Another thing influencing education is whether children live in rural or urban areas. Remoteness of rural areas causes absence of sufficient number of qualified teachers, appropriate school buildings and adequate quality and quantity of learning materials. The lower quality of education goes there hand in hand with stronger emphasis on the traditional division of gender roles. Both of them result in wider gender gaps than there are in urban areas.

One example from Pakistan: Study of *Percentage of all 15- to 19-year-olds who ever attended school* made from dates from 2001/2002 shows that gender gaps in rural areas are much higher than in urban ones. Analysis takes into account also economic status of households and divides them into four categories: low, low-medium, medium-high and high. Gender gaps in rural areas range from 43.8 percentage points in low economic status to 15.1 percentage points in high economic status. In urban areas, the highest gender gap was identified in the category of low-medium economic status (31.1 percentage points), as the category of low economic status suffered from the lack of observations. Gender gap for high economic status is then 6.3 percentage points in urban areas. (Lloyd, et al., 2007)

1.4.8 Other Gender-Sensitive Issues

Girls' education could be influenced also by other issues than are only these related directly to discrimination. One of them is menstruation. Young girls, particularly at upper primary and lower secondary level, have during their period specific needs concerning personal hygiene. While for boys the absence of acceptable sanitary facilities is not such an obstacle in education, for persuading girls to attend school classes, clean, safety and privacy ensuring hygienic facilities are highly important. The

first step for ensuring that girls will want to go to school is therefore to make them feel good and comfortable there.

Another barrier to girls' education which is associated with the topic of menstruation is a lack of sanitary materials. When girls are not able to buy sanitary pads, they ordinarily use home-made pads. But in some areas, conditions for life are hard and girls do not have any material to make the pads there. Moreover, they often have just small and worn cloths, sometimes torn, and frequently they do not have any underwear. The situation like this is predominantly in very poor areas or in refugee camps and the like. (Kirk, 2008)

There is not general agreement whether the lack of sanitary materials directly implicates lower school attendance of girls. For example, empirical analysis made in Nepal shows that a provision of sanitary products did not lead there to less frequent absences of girls during their period (Oster, et al., 2010). On the other hand, practical experiences from Sudan and Eritrea had opposite outcomes. Distribution of sanitary pads, underwear and soap accompanied with basic tutoring about biological changes in puberty increased girls' attendance there (Kirk, et al., 2005). To sum up, the influence of insufficient availability of sanitary materials on school attendance of girls considerably depends on other issues, such as degree of poverty or awareness about the topic in the community.

1.5 Possible Solutions

There is a great number of problems contributing to gender inequalities in education, but there is also quite a lot of ways how to improve the situation. General recommendation is: to combat poverty and HIV/AIDS pandemic, stop war conflicts and ensure the reconstruction of fragile states.

Good example of how it works in the case of poverty is Yemen. About twenty years ago, girls were not attending school there, mainly due to household chores, when they were for example collecting water and wood. Now every house has drinking water from the pipes and wood for cooking was replaced by gas, all of that thanks to efforts of local government to reconstruct the country and raise the level of its development. Now, girls

are able to go to school there (*Gross enrolment rate, Primary* reached 100 percent and the situation at secondary level is also much better). (Al-Mekhlafy, 2008)

Another goal is elimination of cultural and social constraints to girls' education. However, there are some rules recommended to observe. The most important one is: when offering help, start with the least controversial thing. One example, when the aim is to improve quality of schooling in a locality with strong cultural or religious norms, the programme should start for example with the offer of training for teachers, as they are usually the most tolerant persons there. And only after the confidence of the community is won, it is suitable to offer guidance in more delicate issues such as updating of school curricula. (Yacoobi, 2008)

Other rule concerns interest of the community in offered help. It is important to start from what local people need and want, and let them cooperate on the programme or even solve the whole situation in their own way, if possible. The experience from practice like this is the existence of unofficial community schools in India. Parents from excluded groups of the population worry about safety of their daughters on the way to and from school there. Community schools solve the situation by employing trained assistants and part-time workers who accompany girls to school. Effects are evident. Enrolment, attendance and even results of the girls are higher there than in formal public schools. (Tembon, et al., 2008)

The importance of gender equality in education is still not understood sufficiently in some parts of the world. Therefore it should be publically advocated, and not only on the community level, but also on the governmental one. Carefully worked-out policy is needed to ensure sufficient changes and appropriate laws should be implemented where they are missing.

A good example of successful governmental policy is the educational reform in Bangladesh. (Asadullah, et al., 2008) The government offered financial incentives to madrassas (Islamic faith schools) in exchange for their registration and adding secular subjects as Science, Math and English. The reason is simple, modern subjects provide skills that are valued by labour market. Together with stipend programme for girls, the reform has greatly increased girls' enrolment in Bangladesh, as madrassas are very

often the only schools in rural areas and now, when providing also secular education, they are regarded by parents as useful for girls.

1.5.1 Affordability

One of the main and the most significant causes of gender inequalities in education is poverty. Many families cannot afford to enable the education to all their children and so they give the priority to boys. The simplest solution of that problem is the elimination of school fees to make education affordable. However, without adequate compensation, schools can then suffer from the lack of resources.

Loreto Day School in Calcutta, India, is a good example of sensible approach to the elimination of schools fees. Students pay fees in a standard way except of those who cannot afford it. These are mostly street children. Apart from free education Loreto Day School provides them also with lodging on the rooftop of the school if they help with chores. (Tembon, et al., 2008)

In a similar way it is possible to abolish fees for textbooks or whatever fee or cost. The exemption could be general or concentrated on a particular group to increase its participation in education, for example girls. Scholarship and stipends programmes are also very beneficial, as they not only reduce educational cost, but also motivate for better learning achievements. Another variant are cash transfer programmes. They are a kind of social assistance payments conditioned, for example, by enrolment of a girl to school, or her attendance. Last but not least related possibility concerns transportation programmes, which eliminate the cost of commuting and increase the safety of children.

And there are even more ways, not only these directly providing money. For example, free meal programmes or provision of materials such as sanitary products, soap or flashlights. Some of these materials, like sanitary products, soap, underwear or uniforms, could be manufactured by the local community, then bought by humanitarian organizations and distributed freely to local children (Kirk, 2008). Such a help serves two times.

1.5.2 Accessibility

There are still numerous areas of the world where there are no schools or they have insufficient capacity. Therefore, first prerequisite of progress towards gender equity in education is general improvement of school accessibility. It is needed to construct new school buildings, additional classes to the existing ones and to improve overall level of school infrastructure. This includes building of toilets, boarding facilities and other physical environment of schools such as fencing and lighting. Toilets and boarding facilities should be separate for girls to ensure them privacy and higher safety.

Importance of dormitories for narrowing gender gap is well demonstrated on the case of Morocco. At a secondary level, there were relatively low enrolment rates of rural girls. So, the government invested into building of dormitories and realization of accompanying programmes for support of rural girls. The project is considerably successful. (Muskin, et al., 2010)

1.5.3 Appropriateness

Not only quantity, but quality matters. Therefore, emphasis should be put on raising educational standards and introduction of gender-sensitive pedagogical models. It is also quite important to ensure adequate return to girls' education. This could be done throughout general advocacy of girls' education and influencing traditional attitudes of inhabitants towards this issue, but also by increase of girls' participation in subjects such as science, mathematics and technology, and promotion of post primary education, because this is crucial for gaining skills required and highly valued by the labour market.

Another recommended arrangement concerns female teachers. It is important to have not only male teachers, but also female ones at school to narrow gender gap among students. Female teachers serve as role models for girls and make them feel more comfortable at school. Alternative possibility is to hire classroom assistants or school mentors from local women to ensure the presence of both genders among the staff.

The quality of education and general attitudes towards girls' education depends considerably also on quality of school curricula and used textbooks. In many areas, there are still used irrelevant and outdated materials depicting girls and women in subservient roles. This all should be improved to strengthen awareness about girls' education.

1.6 Reasons for Eliminating

There are several domains of reasons for elimination of gender disparities in education. They concern human rights, overall standard of living of the world population, but crucial for improvement of the situation are particularly political engagements that have been made and economical benefits resulting mainly from human capital generating.

1.6.1 General Benefits

Girls' education is associated with several health and social benefits. Education contributes to empowerment of women, enhances their domestic role and enables them to reject adverse cultural practices such as genital mutilation. It also protects significantly against HIV/AIDS infection and helps women to fight against abuse and exploitation. Education is connected with lower fertility rates and lower maternal mortality rates, too. This substantially improves quality of women's lives and helps families to escape the vicious circle of poverty.

Maternal education creates also intergenerational benefits – lowers infant and child mortal rates, increases the survival rate of children and significantly improves child nutrition. Moreover, children of educated women have much bigger chance that they will also be educated.

But there are also other social benefits to be mentioned. Schooling encourages research and research implicates development. Another positive influence then concerns the reduction of criminal activity. To sum up, education, and those of girls especially,

brings many substantial benefits to educated individuals, but also to their families, and last but not least to whole societies. (Tembon, et al., 2008)

1.6.2 Political Engagements

Access to education and gender equity are internationally perceived as the most basic human rights. Therefore, several political engagements were taken to improve the situation.

First one to be mentioned here is the Copenhagen Declaration on Social Development created during the United Nations World Summit for Social Development in March 1995. It has 10 Commitments, the fifth of which is devoted to gender equality: "*Achieve equality and equity between women and men.*" and the sixth to access to education: "*Attain universal and equitable access to education and primary health care.*" (United Nations, n.d. b) (For all Commitments see Appendix 5)

Another, even more important, engagement adopted by the world leaders in 2000 is the United Nations Millennium Declaration. Common objectives were formulated into 8 thematically distinguished topics and are known as the Millennium Development Goals. Here is the list of them:

(1) Eradicate extreme poverty and hunger
(2) Achieve universal primary education
(3) Promote gender equality and empower women
(4) Reduce child mortality
(5) Improve maternal health
(6) Combat HIV/AIDS, malaria and other diseases
(7) Ensure environmental sustainability
(8) Develop a Global Partnership for Development

(United Nations, n.d. a)

Every Goal is presented by one or more concretely defined targets. To gender differences in education there are directly devoted Goals (2) and (3). Wordings of their targets are: "*Ensure that boys and girls complete a full course of primary schooling*"

and (3) "*Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015*". (All targets are listed in Appendix 6)

Nevertheless, all Goals are interlinked. Improvement in one area has commonly positive consequences in other ones. This way, for example, the elimination of gender disparities in education (Goal 3) helps to achieve universal primary education (Goal 2), and, as was mentioned in previous subchapter, it reduces child mortality (Goal 4) and likelihood of the contraction of HIV/AIDS (Goal 6), improves maternal health (Goal 5) and combats poverty (Goal 1). (Tembon, et al., 2008)

Third engagement to be mentioned here is the Education for All headed by the United Nations Educational, Scientific, and Cultural Organization (UNESCO). This initiative resulted from the World Summit on Education held in 1990 in Jomtien, Thailand. Their main goals were laid out as a component of the Dakar Framework for Action agreed on during the World Education Forum in April 2000 in Senegal and are known as The Six Dakar Goals (listed in Appendix 7). They concern mainly the quality of education and access to it for girls and excluded groups. All the goals are officially to be fulfilled by 2015. (UNESCO, 2006)

1.6.3 Economic Benefits

On microeconomic level, female education helps families to escape poverty throughout additional or higher income and simultaneously by lowering fertility rate. Benefits on macroeconomic level arise primarily from human capital accumulation. In developing countries, women, due to persisting gender inequalities in education, still present an important and untapped source of human capital.

This makes average levels of human capital lower in these economies and hampers their development, as human capital formation is fundamental for technological progress through which it is possible to achieve increased productivity. Thus investment in female education leads to the expansion of economy.

There were many attempts to evaluate the impact of education on economic growth and they had various outcomes. For example, that every additional year of schooling is

associated with increase of output for the world economy as a whole by around 2 percent (Barro, et al., 2010) or that increase in the share of women with secondary education in countries with higher initial education by 1 percentage point implies an 0.3 percentage points increase in annual per capita income growth (Dollar, et al., 1999).

However, these findings remain mere estimates, as real economic benefits of education are not exactly measurable and even in existing works empirical evidence is scarce and inconclusive. (Psacharopoulos, et al., 2002)

2. Structure of Inequalities: Distributions, Stages and Relations

The structure of gender inequalities in education is relatively complicated. In every country the situation is different, which is well documented by the fact that even outcomes of each one country often differ across particular available educational statistics. However, it is possible to find some general features there.

This chapter is devoted to the empirical evidence of the current situation of gender differences in education with the main attention paid to distributions of inequalities in particular educational statistics, to distinguishing of two inequality stages in accordance with the nature of particular statistics, and finally, to mutual relations between outcomes of the countries in these two separate inequality stages. The base year for all following analysis is the year 2007.

2.1 Distribution of Inequalities and the Role of Economic Development

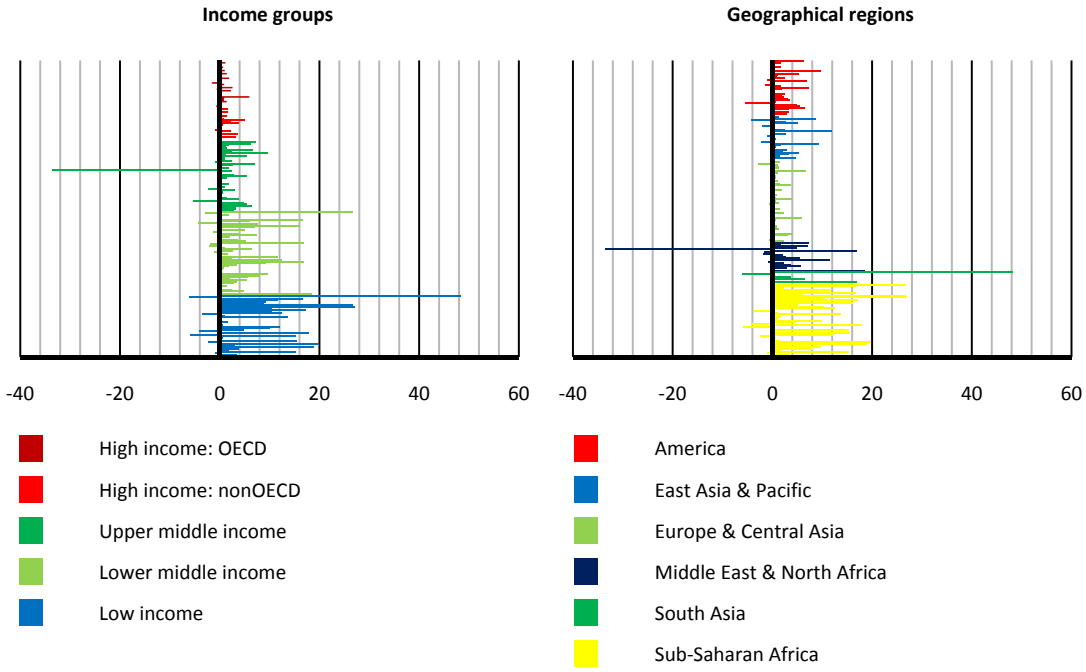
So as to describe gender inequalities in education it is not sufficient to highlight only extreme values for some countries. Much more important is to know the whole extent and distribution of all the values. This enables to estimate, for example, which values could be understand as typical or normal for the statistics, and which ones are rather extremes, furthermore, how many extremes are actually present, and consequently how serious the situation is.

The second intention of this subchapter is to demonstrate that the problem of gender inequalities is highly connected with the level of economic development. This connection is even stronger than that in the case of geographical regions. It is well apparent from Figure 1, where there are depicted gender gaps in *School enrolment, Primary, Gross* once with the division of countries according to income groups and then according to geographical regions. Although both divisions apparently correspond well to different typical levels of inequalities for different groups of countries, in the case of income groups these trends are much more distinct than in the case of geographical regions. The same results arise from the comparison of graphs in other educational statistics.

Figure 1: Comparison of Country Divisions: Income Groups, Geographical Regions

Gender gaps: School enrolment, Primary, Gross

2007, percentage points



Source: Author's calculations based on data from the World Bank (World Bank, 2011).

Note: Vertical axis represents countries arranged in alphabetical order top down separately for each particular income group or geographical region. Construction of gender gaps: Differences of male and female values (Male minus Female). For countries whose data for the year 2007 are not available, there were used data from the year 2009, 2006 or 2005 instead. Definition of the statistics is in Appendix 1. List of countries with division into income groups and geographical regions is enclosed in Appendix 2.

This implies that policies for elimination of gender inequalities in education should be focused more on the increase in economic development than, as they often are, simply on the particular geographical region, because economic development seems to be one of the most important preconditions for the improvement in the field of gender disparities.

2.1.1 Description of Constructed Graphs

The distribution of gender inequalities is depicted in Figure 2 and Figure 4, separately for both above established stages of gender inequalities – *Access to education* and *Quality of obtained education*. The figures contain graphs (for each statistics one),

where the values of gender gaps for individual countries are arranged in ascendant order to demonstrate the overall extent of inequalities and their behaviour. The shape of such a graph shows clearly which values are ordinary for the statistics and which ones are rather extremes.

By far not all countries have gender gaps either close to zero signalling gender equity, or positive, which means gender inequalities against girls. In majority of statistics, there is a substantial proportion of countries with gender gaps in negative numbers. The explanation is not straightforward. But one possible reason could be the fact that during the last years some countries have been working considerably on the increase of participation of girls in education, which could lead to temporarily higher proportions of girls than boys at schools. The graphs thus, at the first sight, inform about the ratio of the countries with positive gender gaps to these with the negative ones.

The third important feature visible from the shape of the graphs in Figure 2 and Figure 4 is the rate of growth of inequalities among country values. In majority of the graphs gender gaps increase in positive numbers much faster than they decrease in the negative ones. This indicates that positive gender gaps signalize substantial problems for the majority of countries having them while negative gender gaps are much more often still relatively close to zero and special attention should be paid only to the extremely negative ones.

The last comment on the structure of Figure 2 and Figure 4 concerns different vertical magnitude of the graphs. A blank upper part in each graph corresponds on the vertical axis to countries for which there are not available data in given statistics not only for the year 2007, but for any year from the period 2005-2008.

Connections of gender disparities in education with levels of economic development are documented on Figure 3 and Figure 5. The construction of graphs in Figure 3 and Figure 5 is very similar to that of graphs in Figure 2 and Figure 4, the only difference is in the arrangement of countries on vertical axis. There, they are arranged in alphabetical order from the top of the graph towards its bottom, separately for each income group. Income groups are in the graph depicted in different colours and ordered from the most to the least developed group.

So, as it was in the case of Figure 1, the graphs depict the same data (Figure 3 the same data as Figure 2, and Figure 5 the same data as Figure 4), but arrange them differently to stress diverse features. The principal contribution of Figure 3 and Figure 5 is thus the fact that they enable to estimate values typical for particular levels of economic development.

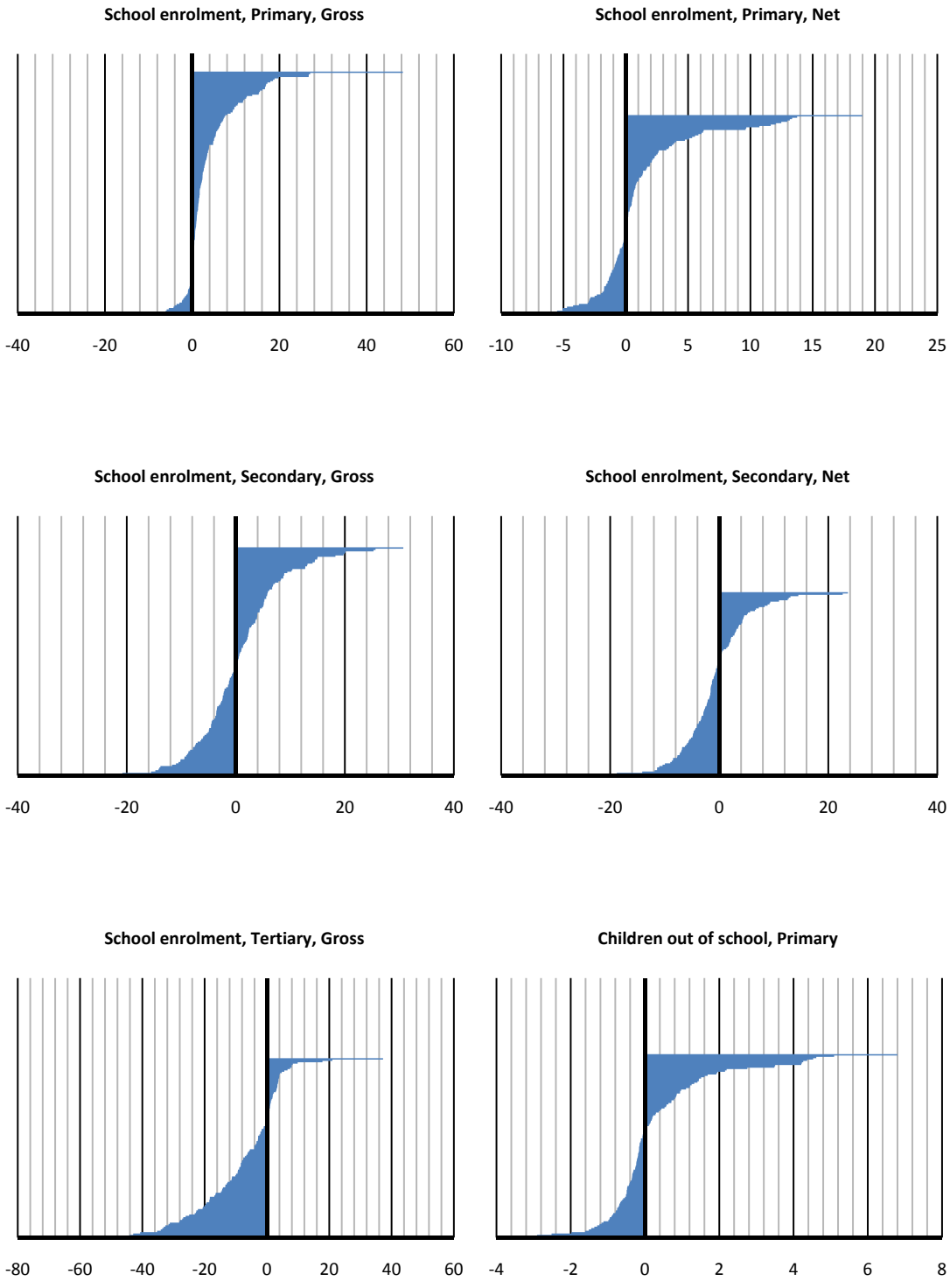
2.1.2 Access to Education

The distribution of gender inequalities in *Access to education* differs substantially across age levels of education. (See Figure 2) On primary level, countries with positive values of gender gaps substantially prevail. However, in *Gross enrolment, Primary*, more than half of them have values under 3 percentage points, which does not mean any substantial inequality. As for extremes, there are four countries having gender gaps higher than 20 percentage points: Angola (26.71 percentage points), the Central African Republic (26.73 percentage points), Chad (27.03 percentage points) and Afghanistan (48.30 percentage points). The opposite case is Iran (-33.62 percentage points), however, its value is not visible to the naked eye on the graph due to the small scale of the graph, solitariness of the value and its proximity to the horizontal axis. Other negative values are not so marked. They are all above -7 percentage points. Regarding the division of countries according to economic development (see Figure 3) typical values of particular groups grow in well visible steps.

In *Net enrolment, Primary* the situation is quite similar to gross enrolment, but the extent of values is not so wide and the number of countries in negative numbers is higher. (See Figure 2) Countries with negative values are from all income groups (see Figure 3), thus negative values of gender gaps cannot be regarded as a typical feature of any level of economic development. The maximal value of gender gap is in the Central African Republic (18.98 percentage points). The data for Afghanistan and Iran (extremes from previous statistics) are not available there. The minimal value belongs to Malawi (-5.99 percentage points).

Figure 2: Distributions of Gender Gaps in Access to Education

2007, percentage points



Source: Author's calculations based on data from the World Bank (World Bank, 2011).

Note: Vertical axis represents countries arranged in ascending order according to their values of gender gap. For countries whose data for the year 2007 are not available, there were used data from the year 2009, 2006 or 2005 instead. Definitions of all the educational statistics are in Appendix 1. List of examined countries is in Appendix 2.

On secondary level, the share of countries with positive values of gender gaps decreases. In *Gross enrolment, Secondary* countries in negative numbers constitute almost a half of all the countries, and in the category of *Net enrolment, Secondary* they even prevail. (See Figure 2) Unlike primary level, negative numbers occur particularly in the countries from the Upper middle income group in *Gross enrolment, Secondary,* and from both High income (OECD and nonOECD) and both (Upper and Lower) Middle income groups in the category of *Net enrolment, Secondary*. But in principle negative numbers are not present in Low income countries. (See Figure 3) This fact could be explained not only by the temporary impact of the stress on the improvement of gender inequalities in countries mainly from Middle income groups, but also by the trend occurring in developed countries that girls have usually better results at school (World Bank, n.d.) and thus they continue their studies at secondary school more likely than boys do.

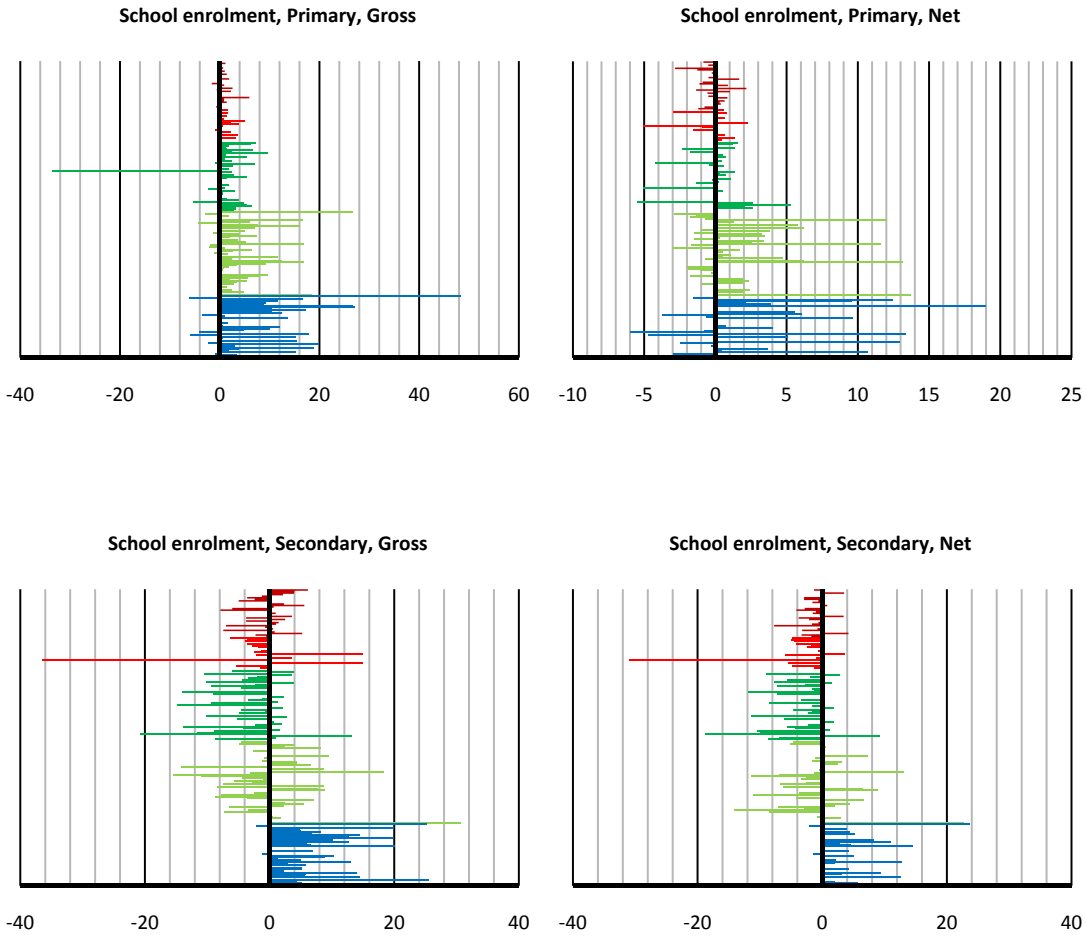
The shape of the graphs shows that gender gaps on secondary level grow or decline faster from zero than it was in the case of primary level. Therefore, many more countries reach relatively significant values of inequality even if the overall extent of values is narrower. The maximal values in *Gross enrolment* are in Afghanistan (25.25 percentage points), Togo (25.62 percentage points) and Yemen (30.72 percentage points), the minimal values in Suriname (-20.81 percentage points) and Qatar (-36.53 percentage points). In *Net enrolment* extremes occur in the same countries but with lower values: Yemen (22.64 percentage points), Afghanistan (23.60 percentage points) and Qatar (-31.02 percentage points).

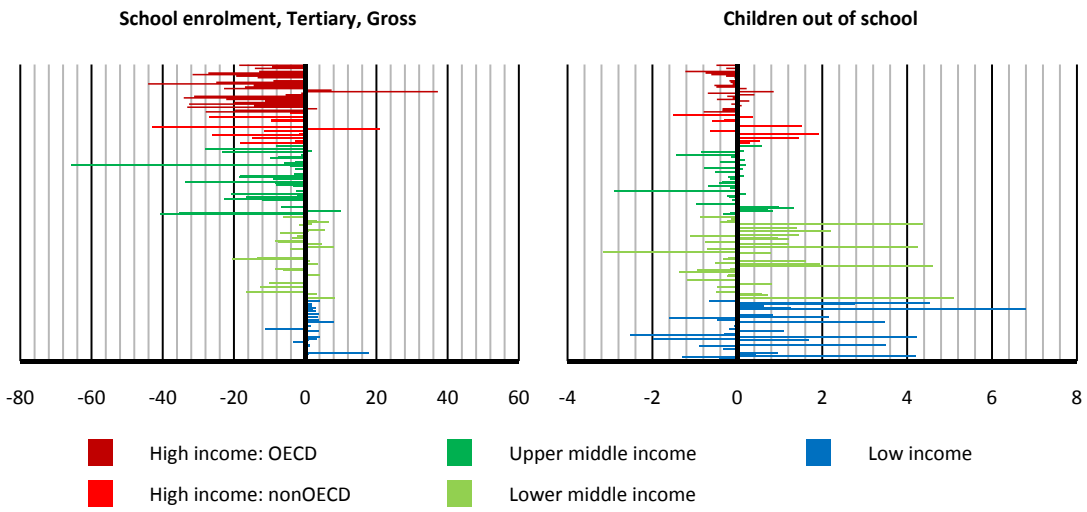
On tertiary level of education, negative gender gaps absolutely prevail (see Figure 2), as girls in majority of the countries (and those from High income groups or the Upper middle income group in particular (see Figure 3)) continue their post-secondary studies much more often than boys. Moreover, most of the countries with negative gender gaps reach really noticeable values. More than a half of them have values under -10 percentage points, which corresponds to significant inequalities, and still more than twenty of them reach values even under -20 percentage points. Between -30 and -40 percentage points, there are these countries: New Zealand, Estonia, Slovenia, Sweden, Lithuania, Norway and Uruguay. And really the most extreme cases of negative gender

gaps in *Gross enrolment, Tertiary* are in Venezuela (-40.72 percentage points), in Latvia (-42.95 percentage points), in Iceland (-44.11 percentage points) and in Cuba (-65.60 percentage points). The maximal gender gaps are in Lichtenstein (surprisingly, 20.99 percentage points) and the Republic of Korea (37.26 percentage points).

Figure 3: Gender Gaps in Access to Education by Income Groups

2007, percentage points





Source: Author's calculations based on data from the World Bank (World Bank, 2011).

Note: Vertical axis represents countries arranged in alphabetical order top down separately for each income group. Construction of gender gaps: Differences of male and female values (Male minus Female, except of *Children out of school* where it is contrariwise). For countries whose data for the year 2007 are not available, there were used data from the year 2009, 2006 or 2005 instead. Definitions of all the educational statistics are in Appendix 1. List of countries with division into income groups is enclosed in Appendix 2.

Lastly, the graph of the category *Children out of school*, *Primary* has a very similar shape and the distribution of inequalities across income groups as that of *Net enrolment, Primary*. The main difference is in the extent of values, as it is obvious that the share of children not attending school is lower than the share of those who are enrolled. Almost all values of gender gaps are in absolute value lower than 4 percentage points there. The maximal value is in the Central African Republic (6.80 percentage points), the minimal one in Lesotho (-3.17 percentage points).

2.1.3 Quality of Obtained Education

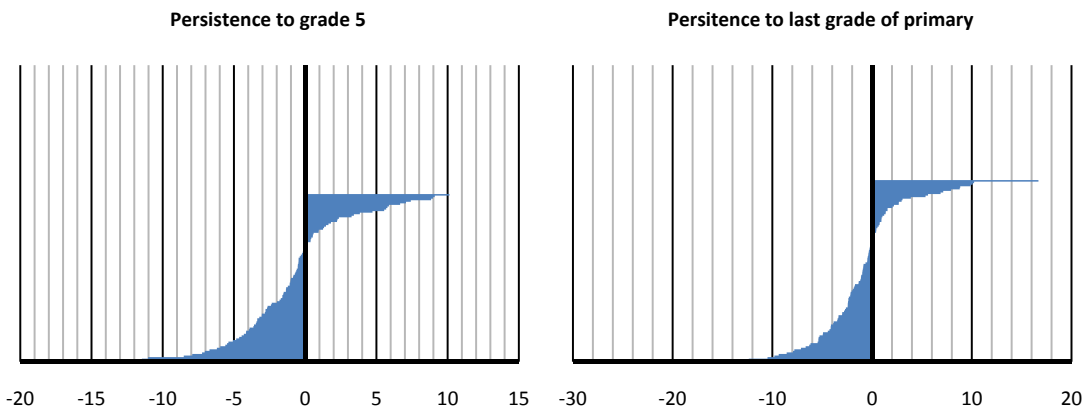
For the description of gender inequalities in *Quality of obtained education* there are used eight relatively diverse statistics related on one hand to the length of education that a child really gets if enrolled to school (documented in persistence and completion statistics) and on the other hand to the quality of knowledge that he/she obtains there (estimated on the basis of the data of repeaters and literacy rates). This category of statistics covers indirectly also topics such as early drop-outs from school, poor

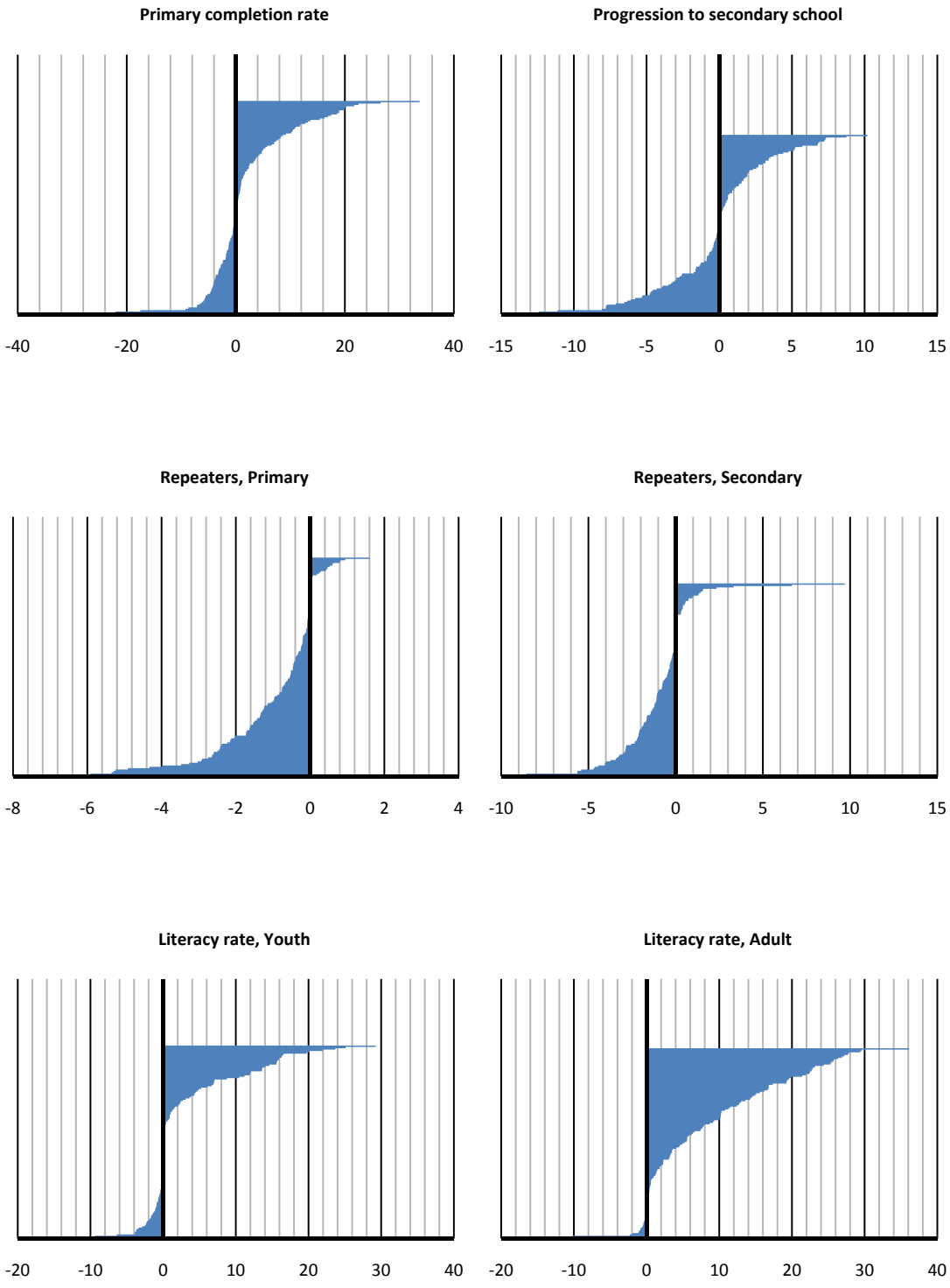
attendance or competence of teachers and also their disregard towards some children in classes (for example girls). These topics would be hard to document otherwise.

To start with *Persistence* in both its statistics values of gender gaps range (with only few exceptions) between -10 and 10 percentage points. (See Figure 4) The countries with negative gender gaps dominate over those with the positive ones, especially in Middle income groups. There girls persist much more often to grade 5 as well as to the last grade of primary than boys do. The opposite situation is especially among the countries from the Low income group. (See Figure 5) To mention values deviating from above mentioned range, in *Persistence to grade 5* extremes are: the maximal value Cote d'Ivoire (10.13 percentage points) and the minimal values Sudan (-11.03 percentage points), Swaziland (-11.47 percentage points) and Lesotho (-14.32 percentage points). Similarly in *Persistence to last grade of primary* there are extremes in the Central African Republic (10.09 percentage points), Guinea (10.23 percentage points) and Cote d'Ivoire (16.68 percentage points), and on the other side in Bhutan (-10.49 percentage points), Sudan (-12.37 percentage points) and again in Lesotho (-18.80 percentage points).

Figure 4: Distributions of Gender Gaps in Quality of Obtained Education

2007, percentage points





Source: Author's calculations based on data from the World Bank (World Bank, 2011).

Note: Vertical axis represents countries arranged in ascending order according to their values of gender gap. For countries whose data for the year 2007 are not available, there were used data from the year 2009, 2006 or 2005 instead. Definitions of all the educational statistics are in Appendix 1. List of examined countries is in Appendix 2.

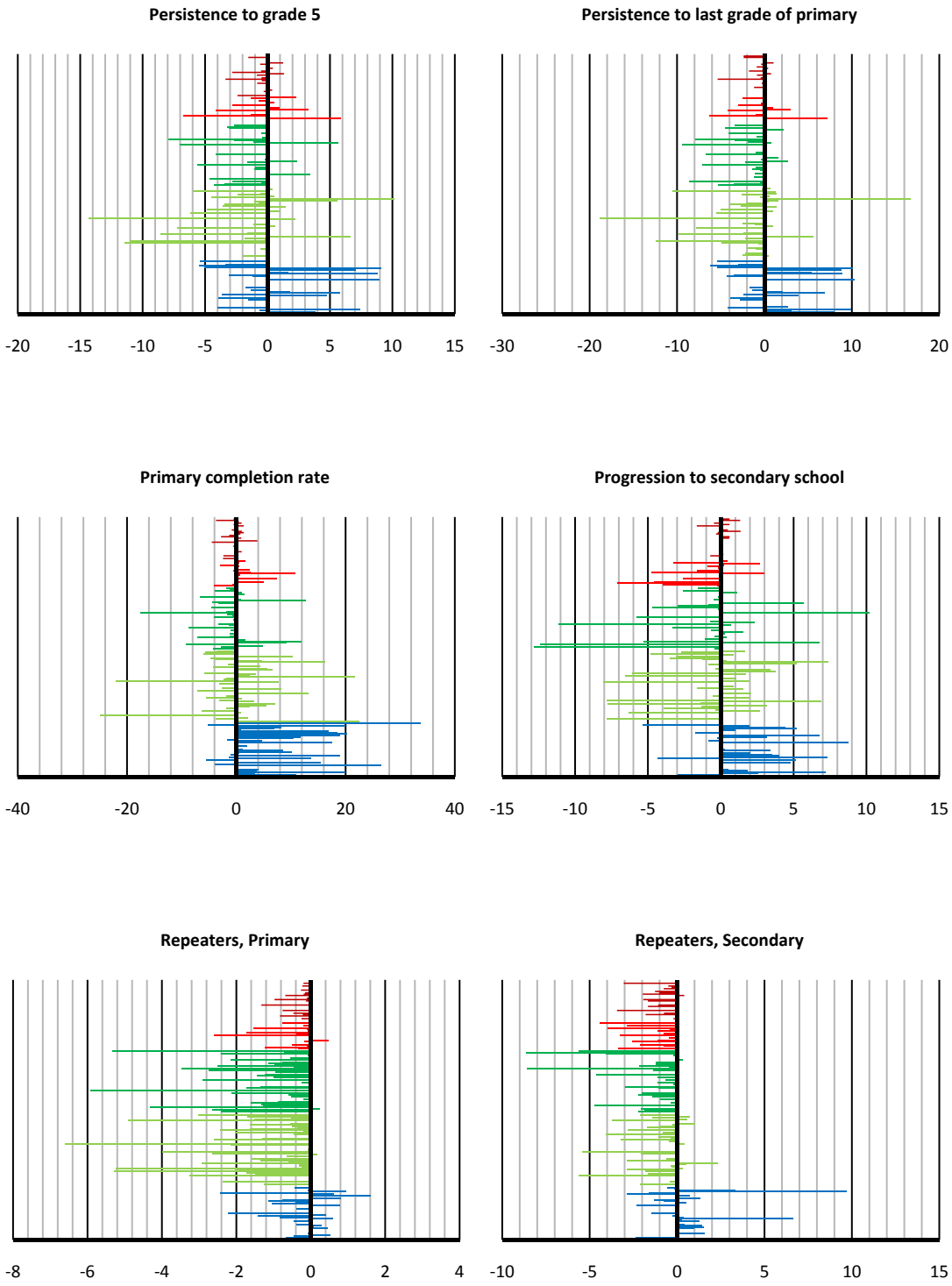
In *Primary completion rate* the values of gender gaps range usually between -20 and 20 percentage points, with very high proportion of them staying close to zero (more than forty countries with values between -1 and 1 percentage points). (See Figure 4) The numbers of countries in positive and negative numbers are approximately the same, however, the positive values grow from zero much faster than the negative ones decline from there (only 56 percent of countries with positive values have gender gaps below 5 percentage points, while full 80 percent of countries with negative gender gaps stay above -5 percentage points).

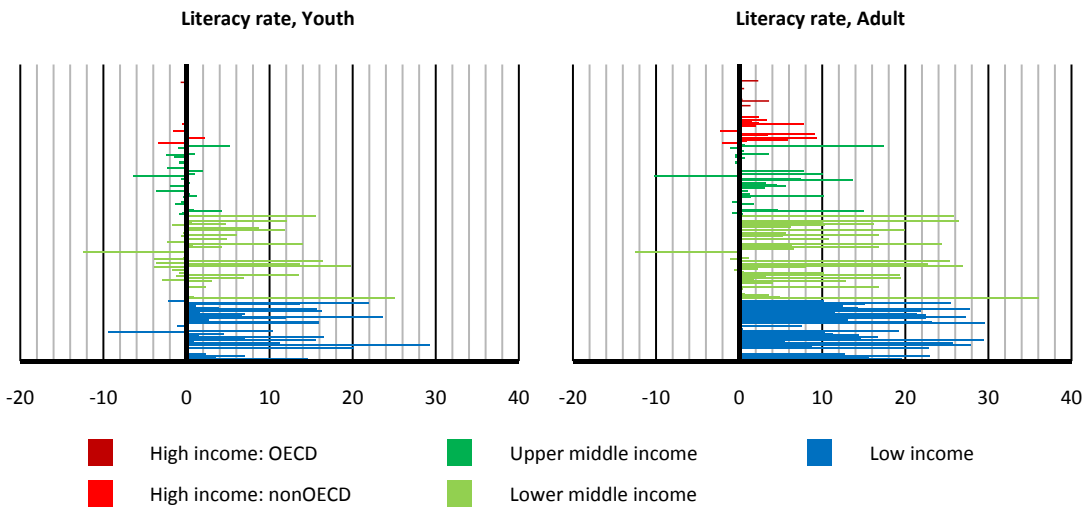
Regarding *Progression to secondary school* the range of values is narrower (approximately between -8 and 10 percentage points), the ratio of negative and positive values is also balanced, but the rate of growth of gender gaps is symmetric on the positive and negative side in this category. (See Figure 4) All of this implies that the problem of gender inequalities is more serious in *Primary completion rate* than in *Progression to secondary school*.

In both statistics, girls are more successful (means negative values of gender gaps) in more developed countries, those from Middle income groups in particular, while boys outperformed them above all in the countries from the Low income group. (See Figure 5) The strongest inequalities are for *Primary completion rate* in Iraq (21.70 percentage points), Yemen (22.50 percentage points), Sierra Leone (26.55 percentage points) and Afghanistan (33.69 percentage points), and on the opposite side in Lesotho (-22.04 percentage points) and Tuvalu (-25.02 percentage points). In *Progression to secondary school* the extremes are Iran (10.20 percentage points) and Mauritius (-11.12 percentage points), and then Suriname (-12.42 percentage points) and Uruguay (-12.80 percentage points).

Figure 5: Gender Gaps in Quality of Obtained Education by Income Groups

2007, percentage points





Source: Author's calculations based on data from the World Bank (World Bank, 2011).

Note: Vertical axis represents countries arranged in alphabetical order top down separately for each income group. Construction of gender gaps: Differences of male and female values (Male minus Female, except of *Repeaters* where it is contrariwise). For countries whose data for the year 2007 are not available, there were used data from the year 2009, 2006 or 2005 instead. Definitions of all the educational statistics are in Appendix 1. List of countries with division into income groups is enclosed in Appendix 2.

Among *Repeaters* boys have absolute prevalence over girls. (See Figure 4) There are only a few countries with positive gender gaps. This fact is most probably the natural characteristic of boys' education, as it prevails in almost all countries. However, from Figure 5 it is obvious that this trend does not count for many countries from the Low income group (on secondary level in particular). This indicates probable problems with disregard of girls at school or another ways of their discrimination there. (Note: Gender gaps in categories *Repeaters*, as well as in the category *Children out of school*, are constructed as Female values minus Male values to take into account unfavourable character of these categories and to keep the custom that positive values of gender gaps stand for inequalities against girls.)

Comparing primary and secondary level, gender gaps are in absolute values higher on secondary level. The increase is the most significant in both High income groups and the Upper middle income group. (See Figure 5) As for extremes, in *Repeaters*, *Primary* they are in Chad (1.61 percentage points) and Lesotho (-6.61 percentage points), whereas in *Repeaters*, *Secondary* they occur in Burundi (9.69 percentage points) and Antigua and Barbuda (-8.64 percentage points).

The last two graphs in both Figures are devoted to *Literacy rates*. These statistics are very specific. For one thing, they refer to the quality of education with delay as *Youth literacy rate* is examined among people between 15 and 24 years of age and *Adult literacy rate* even among all inhabitants above 15 years of age, for another, they bear witness to the overall development of the society. Since in the countries where literacy among women is by 20 percentage points lower than among men (and there is more than twenty of such countries in *Adult* category), the general knowledge about issues such as laws, human rights or health must be seriously deficient. In such societies high illiteracy makes it impossible for the society to realise gender equity.

Looking on Figure 4, in *Literacy rate, Youth* there is, in comparison with *Adult*, still substantial number of the countries with negative values of gender gaps, however, these values are rather small in absolute value (only three of them are in reality lower than -4 percentage points: Jamaica (-6.40 percentage points), Liberia (-9.40 percentage points) and frequently mentioned Lesotho (-12.40 percentage points)). Another characteristic of this statistics is in the fact that a great number of the countries have values close to zero (almost seventy in the interval from -1 to 1 percentage points). But above the value of 1 percentage point the positive values of gender gaps sharply grow and thus reach serious numbers. The highest ones are in Sierra Leone (20.10 percentage points), Benin (22.00 percentage points), Ethiopia (23.70 percentage points), Yemen (25.10 percentage points) and finally in Niger (29.25 percentage points).

But, in *Literacy rate, Adult* gender gaps reach much higher (and more serious) levels. Absolute majority of countries have positive gender gaps there, and their growth rate is even higher than in the case of *Literacy rate, Youth*. (See Figure 4) Thus great amount of countries have quite significant problems with gender inequality in this domain. There are more than twenty countries with gender gaps above 20 percentage points. The most extreme values are in Mozambique (29.40 percentage points), Guinea-Bissau (29.60 percentage points) and Yemen (36.10 percentage points). On the opposite side, the lowest ones are in Jamaica (-10.20 percentage points) and Lesotho (-12.50 percentage points).

Regarding the division of countries into income groups, high gender gaps in *Literacy rate, Youth* are especially domains of the Lower middle income group and the Low

income group. In *Literacy rate, Adult* the problem does not avoid the High income: nonOECD group and the Upper middle income group, either. But values for the two least developed groups are by far much bigger. (See Figure 5)

There is one interesting thing about *Literacy rate, Adult*. The shape of its graph depicting the distribution of values is surprisingly very similar (including also the extent of values) to that of *School enrolment, Tertiary, Gross* turned under the central symmetry. While the graph of *Literacy rate, Adult* shows the dark past, the graph of *School enrolment, Tertiary, Gross* predicts better future to gender equality in education. Because if there are more and more girls attending school (and higher levels of education especially), it will be a good promise for future progress not only on the field of adult literacy but also concerning general empowerment of women and related gender equity in education.

2.2 Inequality Stages and Classification of Countries

As was established in *1.2 Domains of Inequalities*, the thesis distinguishes two stages of inequalities (*Access to education* and *Quality of obtained education*) to stress the main difference in the nature of available educational statistics concerning gender inequalities. The analysis of relations between the outcomes of the countries in those two inequality stages gives valuable additional information about the current world state of gender inequalities in education.

2.2.1 Summarization of Outcomes for Particular Inequality Stages

First of all, it is necessary to summarise the outcomes of individual countries over each of the inequality stages. It means to determine for every country (from its values of gender gaps in particular educational statistics) how it generally performs in *Access to education*, and then the same for *Quality of obtained education*.

For every statistics there were established boundary values distinguishing normal (typical) values of gender gaps from those which are rather abnormal and signify

substantial gender inequalities (positive or negative). For this purpose, there was used the principle of statistical quartiles. Gender gaps higher than the third quartile of the positive values in the given statistics are considered to be abnormally high. For negative values the principle is analogical: gender gaps lower than the first quartile of the negative values in the given statistics are considered to be abnormally low; just with one modification – the value of the first quartile is additionally multiplied by the coefficient whose value was chosen as 1.6. The reason for addition of the coefficient is the fact that due to commonly lower rates of growth in negative values (see *2.1.1 Description of Constructed Graphs*) the share of countries with exceptionally low gender gaps among the countries with the negative values is naturally much smaller that the share of the countries with exceptionally high gender gaps among the countries with the positive values.

The construction of the boundaries is, for better comprehensibility, once again described by following mathematical notation:

$$b_{u_i} = 3rd\ quartile\ of\ all\ x_i > 0\ ,$$

$$b_{l_i} = a \cdot (1st\ quartile\ of\ all\ x_i < 0); \quad a \coloneqq 1.6\ ,$$

$$x_i \in \langle b_{l_i};\ b_{u_i} \rangle\ is\ normal\ ,$$

$$x_i < b_{l_i} \quad \vee \quad x_i > b_{u_i}\ is\ abnormal\ ,$$

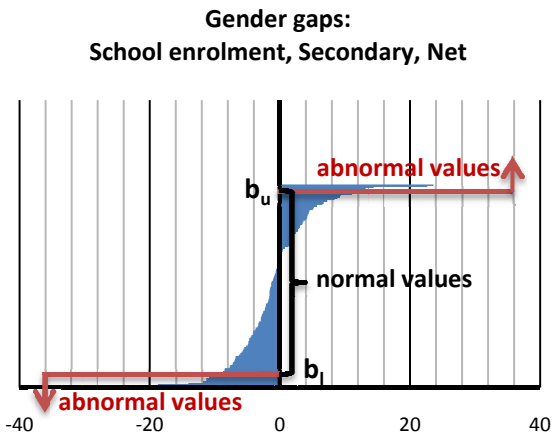
where b_{u_i} stays for the upper boundary of the statistics i, b_{l_i} is its lower boundary and x_i assigns a particular value of the statistics i. Finally, a is the mentioned coefficient. Graphically, the construction of boundaries and distinguishing normal and abnormal values is depicted in the schematic diagram in Figure 6 (by the example of *School enrolment, Secondary, Net*).

The determination of the coefficient by the number 1.6 follows from the effort to have approximately the same number of the countries in which abnormal gender inequalities against girls prevail in both inequality stages as the number of the countries in which, on the contrary, abnormal gender inequalities in favour of girls predominate in the both stages. (This construction will be described more in detail in the following subchapter.)

The coefficient equal to 1.6 gives concretely 52 countries with prevailing abnormal inequalities against girls and 51 countries with prevailing inequalities in favour of girls. (The remaining countries either do not have any abnormal values or have one abnormally positive and one abnormally negative.) (See Table 13)

Figure 6: Distinguishing of Normal and Abnormal Values, Diagram

2007, percentage points



Source: Author's calculations based on data from the World Bank (World Bank, 2011).

Note: Vertical axis represents countries arranged in ascending order according to their values of gender gap. For countries whose data for the year 2007 are not available, there were used data from the year 2009, 2006 or 2005 instead. Definition of the statistics is in Appendix 1. List of examined countries is in Appendix 2.

When for every abnormally positive value there is given number 1 to the country and for every abnormally negative value number -1, the sum of these numbers over the inequality stage denote how well the country fares in the given stage. And similarly, the sum over all the educational statistics from the both stages gives then the overall information about the state of gender inequalities in education in the given country. Ordered list of countries according to these sums is in Table 11.

Another way how to demonstrate these findings is to depict them in the outline world map. This moreover shows well the geographical distribution of gender inequalities (to which the subchapter *1.1 Geographical Location* was devoted). See Map 1, Map 2 and Map 3.

Table 11: Rankings of Countries according to Overall Situation in Inequality Stages

	Access to education			Quality of obtained education			All gender inequalities in education	
	Country name	Σ		Country name	Σ		Country name	Σ
1	Lesotho	-3	1	Lesotho	-6	1	Lesotho	-9
2	Malawi	-3	2	Namibia	-4	2	Namibia	-7
3	Mauritania	-3	3	Nicaragua	-4	3	Suriname	-6
4	Namibia	-3	4	Suriname	-4	4	Dominican Republic	-4
5	Bahamas, The	-2	5	Swaziland	-3	5	Nicaragua	-4
6	Dominican Republic	-2	6	Cape Verde	-2	6	Dominica	-3
7	Gambia, The	-2	7	Colombia	-2	7	Malawi	-3
8	Qatar	-2	8	Dominica	-2	8	Philippines	-3
9	St. Kitts and Nevis	-2	9	Dominican Republic	-2	9	Qatar	-3
10	Suriname	-2	10	Jamaica	-2	10	Bahamas, The	-2
11	Uganda	-2	11	Philippines	-2	11	Cape Verde	-2
12	Armenia	-1	12	Sudan	-2	12	Colombia	-2
13	Bangladesh	-1	13	United Arab Emirates	-2	13	Jamaica	-2
14	Botswana	-1	14	Algeria	-1	14	Mauritania	-2
15	China	-1	15	Andorra	-1	15	Seychelles	-2
16	Cuba	-1	16	Antigua and Barbuda	-1	16	St. Kitts and Nevis	-2
17	Czech Republic	-1	17	Argentina	-1	17	Swaziland	-2
18	Dominica	-1	18	Belize	-1	18	Uganda	-2
19	Honduras	-1	19	Brunei Darussalam	-1	19	United Arab Emirates	-2
20	Iceland	-1	20	Grenada	-1	20	Uruguay	-2
21	Iran, Islamic Rep.	-1	21	Guyana	-1	21	Andorra	-1
22	Kiribati	-1	22	Lebanon	-1	22	Antigua and Barbuda	-1
23	Latvia	-1	23	Liberia	-1	23	Argentina	-1
24	Libya	-1	24	Maldives	-1	24	Armenia	-1
25	Norway	-1	25	Malta	-1	25	Bangladesh	-1
26	Philippines	-1	26	Mauritius	-1	26	Belize	-1
27	Samoa	-1	27	Mongolia	-1	27	Botswana	-1
28	Seychelles	-1	28	Papua New Guinea	-1	28	Brunei Darussalam	-1
29	St. Lucia	-1	29	Qatar	-1	29	China	-1
30	Tonga	-1	30	Seychelles	-1	30	Cuba	-1
31	Uruguay	-1	31	Singapore	-1	31	Czech Republic	-1
32	Venezuela, RB	-1	32	Thailand	-1	32	Grenada	-1
33	Albania	0	33	Tunisia	-1	33	Guyana	-1
34	Andorra	0	34	Tuvalu	-1	34	Honduras	-1
35	Antigua and Barbuda	0	35	Uruguay	-1	35	Iceland	-1
36	Argentina	0	36	Vanuatu	-1	36	Iran, Islamic Rep.	-1
37	Australia	0	37	Albania	0	37	Kiribati	-1
38	Austria	0	38	Armenia	0	38	Latvia	-1
39	Azerbaijan	0	39	Australia	0	39	Lebanon	-1
40	Bahrain	0	40	Austria	0	40	Libya	-1
41	Barbados	0	41	Azerbaijan	0	41	Maldives	-1
42	Belarus	0	42	Bahamas, The	0	42	Malta	-1
43	Belgium	0	43	Bahrain	0	43	Mauritius	-1
44	Belize	0	44	Bangladesh	0	44	Mongolia	-1
45	Bhutan	0	45	Barbados	0	45	Norway	-1
46	Bosnia and Herzegovina	0	46	Belarus	0	46	Samoa	-1
47	Brunei Darussalam	0	47	Belgium	0	47	Singapore	-1
48	Bulgaria	0	48	Bolivia	0	48	Sudan	-1
49	Canada	0	49	Bosnia and Herzegovina	0	49	Thailand	-1
50	Cape Verde	0	50	Botswana	0	50	Tonga	-1
51	Chile	0	51	Brazil	0	51	Tunisia	-1
52	Colombia	0	52	Bulgaria	0	52	Tuvalu	-1
53	Costa Rica	0	53	Cambodia	0	53	Vanuatu	-1
54	Croatia	0	54	Cameroon	0	54	Venezuela, RB	-1
55	Cyprus	0	55	Canada	0	55	Albania	0

56	Denmark	0	56	China	0	56	Algeria	0
57	Ecuador	0	57	Congo, Rep.	0	57	Australia	0
58	Egypt, Arab Rep.	0	58	Croatia	0	58	Austria	0
59	El Salvador	0	59	Cuba	0	59	Azerbaijan	0
60	Equatorial Guinea	0	60	Cyprus	0	60	Bahrain	0
61	Estonia	0	61	Czech Republic	0	61	Barbados	0
62	Fiji	0	62	Denmark	0	62	Belarus	0
63	Finland	0	63	Ecuador	0	63	Belgium	0
64	France	0	64	El Salvador	0	64	Bosnia and Herzegovina	0
65	Gabon	0	65	Equatorial Guinea	0	65	Bulgaria	0
66	Georgia	0	66	Estonia	0	66	Canada	0
67	Germany	0	67	Fiji	0	67	Croatia	0
68	Ghana	0	68	Finland	0	68	Cyprus	0
69	Greece	0	69	France	0	69	Denmark	0
70	Grenada	0	70	Gabon	0	70	Ecuador	0
71	Guinea-Bissau	0	71	Georgia	0	71	El Salvador	0
72	Guyana	0	72	Germany	0	72	Equatorial Guinea	0
73	Haiti	0	73	Ghana	0	73	Estonia	0
74	Hungary	0	74	Greece	0	74	Fiji	0
75	Indonesia	0	75	Guatemala	0	75	Finland	0
76	Ireland	0	76	Haiti	0	76	France	0
77	Israel	0	77	Honduras	0	77	Gabon	0
78	Italy	0	78	Hungary	0	78	Gambia, The	0
79	Jamaica	0	79	Iceland	0	79	Georgia	0
80	Jordan	0	80	Indonesia	0	80	Germany	0
81	Kazakhstan	0	81	Iran, Islamic Rep.	0	81	Ghana	0
82	Kenya	0	82	Ireland	0	82	Greece	0
83	Korea, Dem. Rep.	0	83	Israel	0	83	Haiti	0
84	Kuwait	0	84	Italy	0	84	Hungary	0
85	Kyrgyz Republic	0	85	Japan	0	85	Indonesia	0
86	Lebanon	0	86	Jordan	0	86	Ireland	0
87	Lithuania	0	87	Kazakhstan	0	87	Israel	0
88	Luxembourg	0	88	Kenya	0	88	Italy	0
89	Macedonia, FYR	0	89	Kiribati	0	89	Jordan	0
90	Madagascar	0	90	Korea, Dem. Rep.	0	90	Kazakhstan	0
91	Malaysia	0	91	Korea, Rep.	0	91	Kenya	0
92	Maldives	0	92	Kuwait	0	92	Korea, Dem. Rep.	0
93	Malta	0	93	Kyrgyz Republic	0	93	Kuwait	0
94	Marshall Islands	0	94	Latvia	0	94	Kyrgyz Republic	0
95	Mauritius	0	95	Libya	0	95	Lithuania	0
96	Mexico	0	96	Lithuania	0	96	Luxembourg	0
97	Micronesia, Fed. Sts.	0	97	Luxembourg	0	97	Macedonia, FYR	0
98	Moldova	0	98	Macedonia, FYR	0	98	Madagascar	0
99	Monaco	0	99	Madagascar	0	99	Malaysia	0
100	Mongolia	0	100	Malawi	0	100	Marshall Islands	0
101	Montenegro	0	101	Malaysia	0	101	Mexico	0
102	Myanmar	0	102	Marshall Islands	0	102	Micronesia, Fed. Sts.	0
103	Nepal	0	103	Mexico	0	103	Moldova	0
104	Netherlands	0	104	Micronesia, Fed. Sts.	0	104	Monaco	0
105	New Zealand	0	105	Moldova	0	105	Montenegro	0
106	Nicaragua	0	106	Monaco	0	106	Netherlands	0
107	Oman	0	107	Montenegro	0	107	New Zealand	0
108	Palau	0	108	Morocco	0	108	Palau	0
109	Panama	0	109	Netherlands	0	109	Panama	0
110	Paraguay	0	110	New Zealand	0	110	Papua New Guinea	0
111	Peru	0	111	Norway	0	111	Paraguay	0
112	Poland	0	112	Palau	0	112	Peru	0
113	Portugal	0	113	Panama	0	113	Poland	0
114	Romania	0	114	Paraguay	0	114	Portugal	0

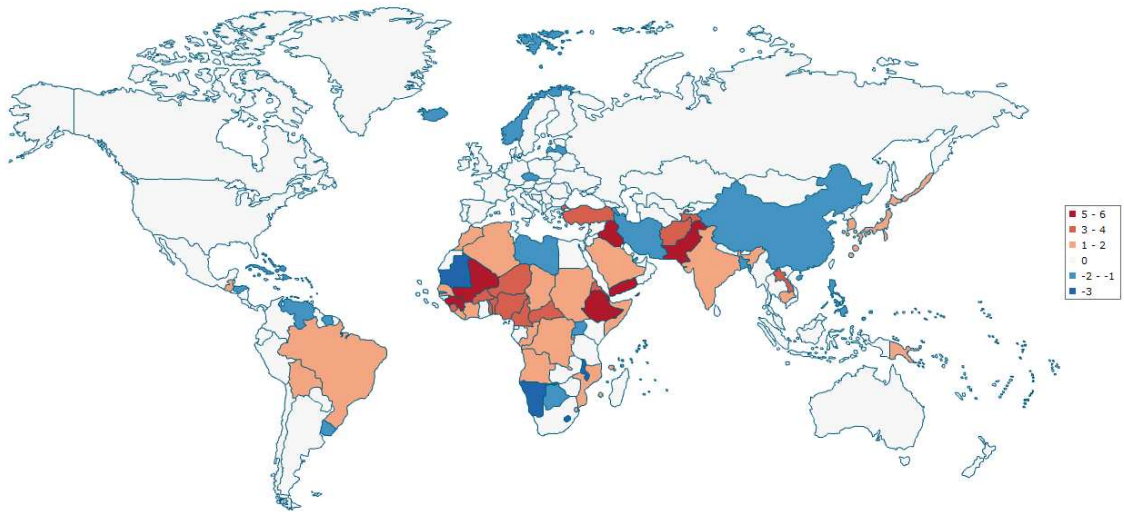
115	Russian Federation	0	115	Peru	0	115	Romania	0
116	Rwanda	0	116	Poland	0	116	Russian Federation	0
117	San Marino	0	117	Portugal	0	117	San Marino	0
118	Sao Tome and Principe	0	118	Romania	0	118	Sao Tome and Principe	0
119	Serbia	0	119	Russian Federation	0	119	Serbia	0
120	Singapore	0	120	Samoa	0	120	Slovak Republic	0
121	Slovak Republic	0	121	San Marino	0	121	Slovenia	0
122	Slovenia	0	122	Sao Tome and Principe	0	122	Solomon Islands	0
123	Solomon Islands	0	123	Serbia	0	123	South Africa	0
124	South Africa	0	124	Slovak Republic	0	124	Spain	0
125	Spain	0	125	Slovenia	0	125	Sri Lanka	0
126	Sri Lanka	0	126	Solomon Islands	0	126	St. Lucia	0
127	Sweden	0	127	Somalia	0	127	Sweden	0
128	Switzerland	0	128	South Africa	0	128	Switzerland	0
129	Syrian Arab Republic	0	129	Spain	0	129	Syrian Arab Republic	0
130	Tanzania	0	130	Sri Lanka	0	130	Timor-Leste	0
131	Thailand	0	131	St. Kitts and Nevis	0	131	Trinidad and Tobago	0
132	Timor-Leste	0	132	St. Vincent [a]	0	132	Turkmenistan	0
133	Trinidad and Tobago	0	133	Sweden	0	133	Ukraine	0
134	Tunisia	0	134	Switzerland	0	134	United Kingdom	0
135	Turkmenistan	0	135	Syrian Arab Republic	0	135	United States	0
136	Tuvalu	0	136	Tajikistan	0	136	Uzbekistan	0
137	Ukraine	0	137	Timor-Leste	0	137	Vietnam	0
138	United Arab Emirates	0	138	Tonga	0	138	Zimbabwe	0
139	United Kingdom	0	139	Trinidad and Tobago	0	139	Bhutan	1
140	United States	0	140	Turkey	0	140	Bolivia	1
141	Uzbekistan	0	141	Turkmenistan	0	141	Brazil	1
142	Vanuatu	0	142	Uganda	0	142	Cambodia	1
143	Vietnam	0	143	Ukraine	0	143	Chile	1
144	Zambia	0	144	United Kingdom	0	144	Costa Rica	1
145	Zimbabwe	0	145	United States	0	145	Egypt, Arab Rep.	1
146	Algeria	1	146	Uzbekistan	0	146	Guatemala	1
147	Angola	1	147	Venezuela, RB	0	147	Japan	1
148	Bolivia	1	148	Vietnam	0	148	Korea, Rep.	1
149	Brazil	1	149	Zimbabwe	0	149	Liberia	1
150	Burundi	1	150	Afghanistan	1	150	Myanmar	1
151	Cambodia	1	151	Bhutan	1	151	Nepal	1
152	Guatemala	1	152	Chile	1	152	Oman	1
153	India	1	153	Comoros	1	153	Rwanda	1
154	Japan	1	154	Costa Rica	1	154	Somalia	1
155	Korea, Rep.	1	155	Djibouti	1	155	St. Vincent [a]	1
156	Liechtenstein	1	156	Egypt, Arab Rep.	1	156	Tanzania	1
157	Papua New Guinea	1	157	Lao PDR	1	157	Congo, Rep.	2
158	Saudi Arabia	1	158	Liechtenstein	1	158	Guinea-Bissau	2
159	Senegal	1	159	Mauritania	1	159	Liechtenstein	2
160	Somalia	1	160	Myanmar	1	160	Morocco	2
161	St. Vincent [a]	1	161	Nepal	1	161	Angola	3
162	Sudan	1	162	Oman	1	162	Cameroon	3
163	Swaziland	1	163	Rwanda	1	163	Comoros	3
164	Chad	2	164	St. Lucia	1	164	India	3
165	Comoros	2	165	Tanzania	1	165	Saudi Arabia	3
166	Congo, Dem. Rep.	2	166	Angola	2	166	Tajikistan	3
167	Congo, Rep.	2	167	Ethiopia	2	167	Turkey	3
168	Cote d'Ivoire	2	168	Gambia, The	2	168	Afghanistan	4
169	Liberia	2	169	Guinea-Bissau	2	169	Burundi	4
170	Morocco	2	170	India	2	170	Lao PDR	4
171	Mozambique	2	171	Iraq	2	171	Senegal	4
172	Afghanistan	3	172	Nigeria	2	172	Zambia	4
173	Burkina Faso	3	173	Saudi Arabia	2	173	Nigeria	5

174	Cameroon	3	174	Benin	3	174	Burkina Faso	6
175	Central African Republic	3	175	Burkina Faso	3	175	Djibouti	6
176	Lao PDR	3	176	Burundi	3	176	Mozambique	6
177	Niger	3	177	Pakistan	3	177	Sierra Leone	6
178	Nigeria	3	178	Senegal	3	178	Benin	7
179	Sierra Leone	3	179	Sierra Leone	3	179	Congo, Dem. Rep.	7
180	Tajikistan	3	180	Yemen, Rep.	3	180	Cote d'Ivoire	7
181	Turkey	3	181	Eritrea	4	181	Ethiopia	7
182	Benin	4	182	Mozambique	4	182	Chad	8
183	Eritrea	4	183	Zambia	4	183	Eritrea	8
184	Togo	4	184	Congo, Dem. Rep.	5	184	Iraq	8
185	Djibouti	5	185	Cote d'Ivoire	5	185	Niger	8
186	Ethiopia	5	186	Niger	5	186	Pakistan	8
187	Pakistan	5	187	Central African Republic	6	187	Central African Republic	9
188	Guinea	6	188	Chad	6	188	Yemen, Rep.	9
189	Iraq	6	189	Togo	6	189	Togo	10
190	Mali	6	190	Guinea	7	190	Guinea	13
191	Yemen, Rep.	6	191	Mali	7	191	Mali	13

Source: Author's calculations based on data from the World Bank (World Bank, 2011).

Note: The base year is 2007, for countries whose data for the year 2007 are not available there were used data from the year 2009, 2006 or 2005 instead. Contain only sovereign states, i.e. the United Nations member states.
a. The name of the country St. Vincent and the Grenadines is in the table abbreviated to St. Vincent.

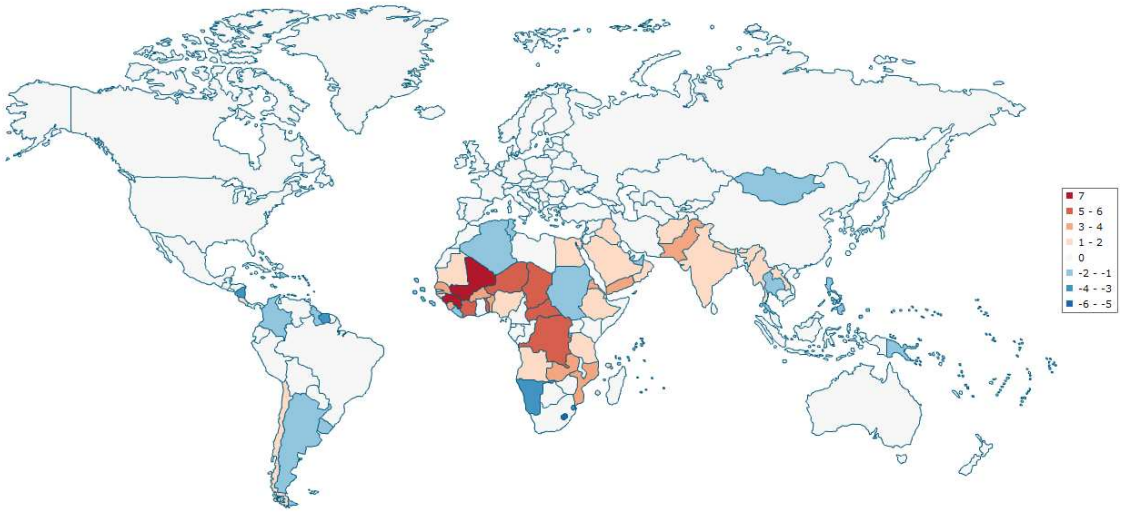
Map 1: Summary of Outcomes, Access to Education



Source: Author's calculations based on data from the World Bank (World Bank, 2011). Depicted in the outline map from Index Mundi (Index Mundi, n.d.).

Note: Depicted values are the results from Table 11. The base year is 2007, for countries whose data for the year 2007 are not available there were used data from the year 2009, 2006 or 2005 instead. Contain only sovereign states, i.e. the United Nations member states.

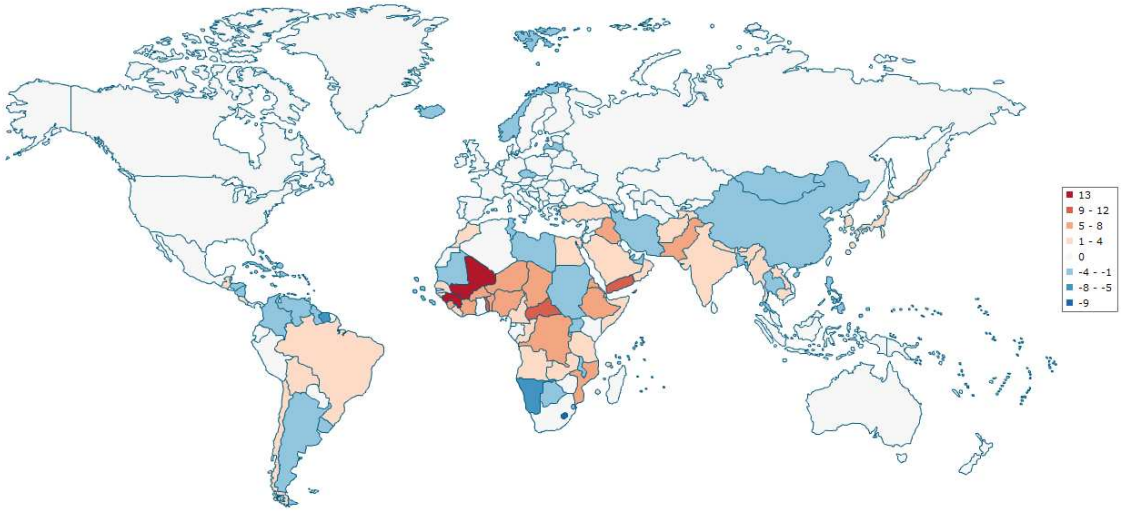
Map 2: Summary of Outcomes, Quality of Obtained Education



Source: Author's calculations based on data from the World Bank (World Bank, 2011). Depicted in the outline map from Index Mundi (Index Mundi, n.d.).

Note: Depicted values are the results from Table 11. The base year is 2007, for countries whose data for the year 2007 are not available there were used data from the year 2009, 2006 or 2005 instead. Contain only sovereign states, i.e. the United Nations member states.

Map 3: Summary of Outcomes, All Gender Inequalities in Education



Source: Author's calculations based on data from the World Bank (World Bank, 2011). Depicted in the outline map from Index Mundi (Index Mundi, n.d.).

Note: Depicted values are the results from Table 11. The base year for is 2007, for countries whose data for the year 2007 are not available, there were used data from the year 2009, 2006 or 2005 instead. Contain only sovereign states, i.e. the United Nations member states.

2.2.2 Relations between Inequality Stages and Classification into Categories

The obtained findings about the overall situation of gender inequalities in each inequality stage not only allow making the rankings of countries, but it is also possible to examine the relations between the results of the countries in the first and the second stage. It means, for example, to detect how many countries (and which ones) have generally higher inequalities in *Access to education* than in *Quality of obtained education*, or vice versa.

The thesis distinguishes eleven such mutual relations. They are listed in Table 12. Signs -, +, 0 and $+_0$ in the column *Relation* symbolize whether the sum over the given stage (see Table 11) is negative, positive, zero or non-negative (means positive or zero). The stage *Access to education* is assigned as *I* and *Quality of obtained education* as *II*. The character of the particular relations is described on the one hand by the fact which gender gaps they represent (in the column *Gender gaps*) and on the other hand by the *Mathematical notation* explaining more specifically criterions of the choice.

As there is not the same number of educational statistics belonging to each inequality stage (there is 6 statistics in *Access to education* and 8 statistics in *Quality of obtained education*), the percentage shares were counted to compare properly sums over particular stages (in Table 12 assigned with symbols *I%* and *II%*).

According to its performance each country belongs just to one from the distinguished categories of mutual relations (denoted by letters from *(A)* to *(K)*). The numbers of the countries belonging to particular categories are stated in Table 13. There is also summed up how many countries belong to non-positive and non-negative categories as it was used for the establishment of the coefficient *a* mentioned in the previous subchapter.

Further, there are three more Tables (Table 14, 15 and 16) and three Maps (Map 4, 5 and 6) where there is listed and showed which countries belong to in which categories. Table 14 and Map 4 are devoted to *Non-positive categories*. They confirm the finding from Table 13 that there is approximately the same number of countries in the *Category (B)* as in the *Category (C)*, and thus that there is no substantial difference or trend in the *Non-positive categories*.

Table 12: Categories of Relations between the Inequality Stages

Category	Relation I	~	II	Gender gaps	Mathematical notation
(A)	-		-	abnormally negative in both the stages	$\Sigma I < 0$ $\Sigma II < 0$
(B)	-		0	abnormally negative in the stage I and normal in the stage II	$\Sigma I < 0$ $\Sigma II = 0$
(C)	0		-	normal in the stage I and abnormally negative in stage II	$\Sigma I = 0$ $\Sigma II < 0$
(D)	0		0	normal in both the stages	$\Sigma I = 0$ $\Sigma II = 0$
(E)	-		+	abnormally negative in the stage I and abnormally positive in the stage II	$\Sigma I < 0$ $\Sigma II > 0$
(F)	+		-	abnormally positive in the stage I and abnormally negative in the stage II	$\Sigma I > 0$ $\Sigma II < 0$
(G)	$+_o$	~	$+_o$	abnormally positive or normal in both the stages: approximately the same percentage share of them in the both stages	$\Sigma I \geq 0$ $\Sigma II \geq 0$ $(I\% - II\%) \in [-10; 10]$
(H)	$+_o$	>	$+_o$	abnormally positive or normal in both the stages: higher percentage share of them in the stage I	$\Sigma I \geq 0$ $\Sigma II \geq 0$ $(I\% - II\%) \in (10; 50)$
(I)	$+_o$	>>	$+_o$	abnormally positive or normal in both the stages: substantially higher percentage share of them in the stage I	$\Sigma I \geq 0$ $\Sigma II \geq 0$ $(I\% - II\%) \in [50; 100]$
(J)	$+_o$	<	$+_o$	abnormally positive or normal in both the stages: higher percentage share of them in the stage II	$\Sigma I \geq 0$ $\Sigma II \geq 0$ $(I\% - II\%) \in (-50; -10)$
(K)	$+_o$	<<	$+_o$	abnormally positive or normal in both the stages: substantially higher percentage share of them in the stage II	$\Sigma I \geq 0$ $\Sigma II \geq 0$ $(I\% - II\%) \in [-100; -50]$

Source: Author's own division.

Note: In *Categories (G)* to *(K)*, the first part of the Mathematical notation concerning non-negativity stays precisely: $\Sigma I \geq 0 \wedge \Sigma II \geq 0 \wedge \text{non}(\Sigma I = 0 \wedge \Sigma II = 0)$ to ensure unambiguousness of every category (means differentiation from the *Category (D)*).

Table 13: Numbers of Countries belonging to Particular Categories of Relations

Category	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
Number of countries	9	20	22	80	3	5	5	18	10	17	2
Summary		51		80	8				52		
		Non-positive		Zero	Diverse				Non-negative		

Source: Author's calculations based at the very beginning on data from the World Bank (World Bank, 2011).

Note: The base year is 2007, for countries whose data for the year 2007 are not available there were used data from the year 2009, 2006 or 2005 instead. Contain only sovereign states, i.e. the United Nations member states.

Table 14: Lists of Countries belonging to Categories of Relations (A), (B) and (C)

Category (A) - -		
Dominica	Namibia	Seychelles
Dominican Republic	Philippines	Suriname
Lesotho	Qatar	Uruguay
Category (B) - 0		
Armenia	Honduras	Norway
Bahamas, The	Iceland	Samoa
Bangladesh	Iran, Islamic Rep.	St. Kitts and Nevis
Botswana	Kiribati	Tonga
China	Latvia	Uganda
Cuba	Libya	Venezuela, RB
Czech Republic	Malawi	
Category (C) 0 -		
Andorra	Guyana	Singapore
Antigua and Barbuda	Jamaica	Thailand
Argentina	Lebanon	Tunisia
Belize	Maldives	Tuvalu
Brunei Darussalam	Malta	United Arab Emirates
Cape Verde	Mauritius	Vanuatu
Colombia	Mongolia	
Grenada	Nicaragua	

Source: Author's own division and calculations based at the very beginning on data from the World Bank (World Bank, 2011).

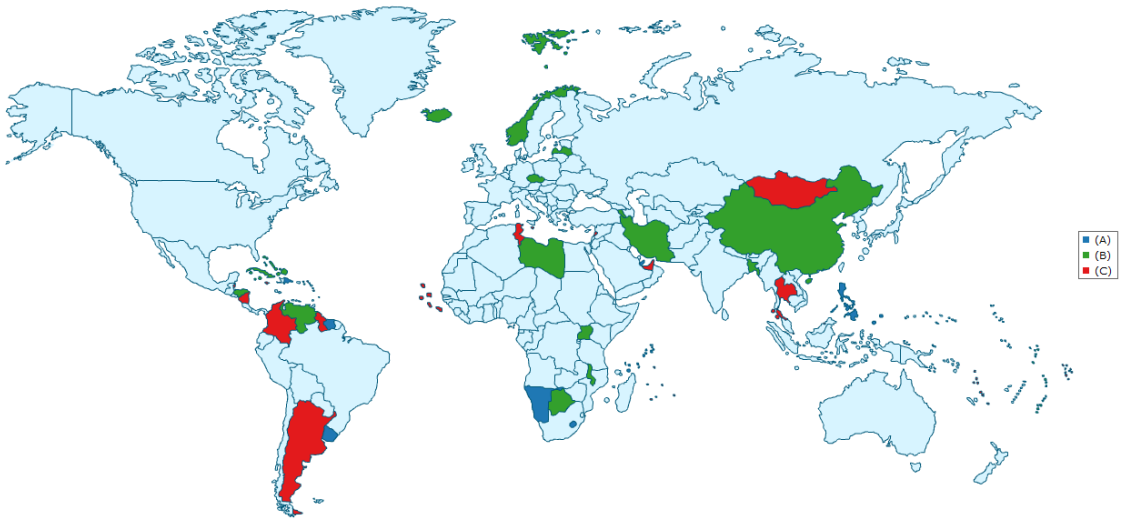
Note: The base year is 2007, for countries whose data for the year 2007 are not available there were used data from the year 2009, 2006 or 2005 instead.

The *Category (D)* is not listed or depicted in the map either, because it contains all the countries which do not reveal significant gender disparities in any educational statistics examined in the thesis. There are 80 of such countries (see Table 13), which represents more than 40 percent of total number of countries. This figure indicates that the problem of gender disparities in education does not concern by far all the countries in the world, though it is the problem serious enough to require the global solution.

The two categories denoted as *Diverse* (see Table 15 and Map 5) include the countries with very specific distribution of gender inequalities (in one stage abnormally positive and in another abnormally negative). This indicates a considerable imbalance in gender inequalities. The main objective for those countries is thus to equilibrate these huge differences. Only after that they could reach gender equity in education. However, the number of those countries is very low (8 in total (see Table 13)) and thus they do not

represent any crucial characteristic of the overall distribution of gender inequalities between the two inequality stages.

Map 4: Countries belonging to Categories of Relations (A), (B) and (C)



Source: Author's own division and calculations based at the very beginning on data from the World Bank (World Bank, 2011). Depicted in the outline map from Index Mundi (Index Mundi, n.d.).

Note: Depicted values are the results from Table 14. The base year is 2007, for countries whose data for the year 2007 are not available there were used data from the year 2009, 2006 or 2005 instead.

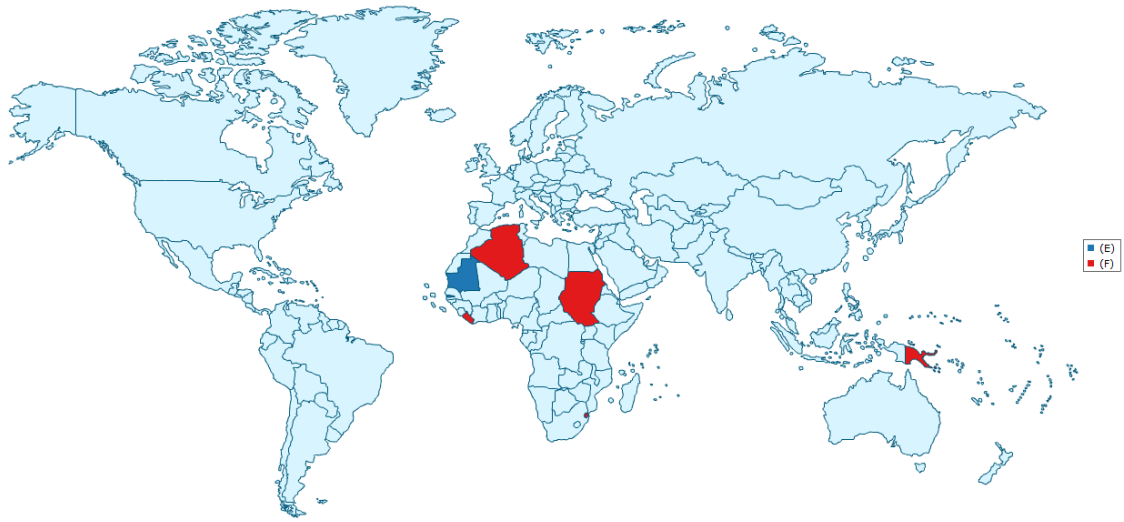
Table 15: Lists of Countries belonging to Categories of Relations (E) and (F)

	Category (E) - +	
Gambia, The	Mauritania	St. Lucia
	Category (F) + -	
Algeria	Papua New Guinea	Swaziland
Liberia	Sudan	

Source: Author's own division and calculations based at the very beginning on data from the World Bank (World Bank, 2011).

Note: The base year is 2007, for countries whose data for the year 2007 are not available there were used data from the year 2009, 2006 or 2005 instead.

Map 5: Countries belonging to Categories of Relations (E) and (F)



Source: Author's own division and calculations based at the very beginning on data from the World Bank (World Bank, 2011). Depicted in the outline map from Index Mundi (Index Mundi, n.d.).

Note: Depicted values are the results from Table 15. The base year is 2007, for countries whose data for the year 2007 are not available there were used data from the year 2009, 2006 or 2005 instead.

Regarding *Non-negative categories* (see Table 16 and Map 6), there should be mentioned once again the method of division of *Categories (G)* to *(K)* which is based on the proportionality of outcomes. This way, in the *Category (G)* (describing the relation where there is approximately the same share of abnormally positive values in the first stage as in the second one), there are on one hand the countries with values of the sums over the particular stage equal to 1 or 2 (Angola, India, Lichtenstein and Saudi Arabia (see Table 11)), but also Togo which has the value equal to 4 for the first stage and the value equal to 6 for the second stage (and thus it has generally much more serious problems with gender inequalities than the others, but the proportion of the values is the same and so it is in the same category as they are).

As for characteristic trends in this group of categories, there are many more countries with higher proportions of inequalities against girls in *Access to education* (*Categories (H)* and *(I)*) than in *Quality of obtained education* (*Categories (J)* and *(K)*). (See Table 13 or Table 16) This shows one important feature of current situation in gender

disparities – the girl is generally more likely to meet gender inequalities when entering school than then during the classes.

Table 16: Lists of Countries belonging to Categories of Relations from (G) to (K)

Category (G) $+_0 \sim +_0$		
Angola	Liechtenstein	Togo
India	Saudi Arabia	
Category (H) $+_0 > +_0$		
Benin	Congo, Rep.	Mali
Bolivia	Eritrea	Morocco
Brazil	Guatemala	Nigeria
Burkina Faso	Guinea	Sierra Leone
Cambodia	Japan	Somalia
Comoros	Korea, Rep.	St. Vincent and the Grenadines
Category (I) $+_0 >> +_0$		
Afghanistan	Iraq	Turkey
Cameroon	Lao PDR	Yemen, Rep.
Djibouti	Pakistan	
Ethiopia	Tajikistan	
Category (J) $+_0 < +_0$		
Bhutan	Cote d'Ivoire	Niger
Burundi	Egypt, Arab Rep.	Oman
Central African Republic	Guinea-Bissau	Rwanda
Chile	Mozambique	Senegal
Congo, Dem. Rep.	Myanmar	Tanzania
Costa Rica	Nepal	
Category (K) $+_0 << +_0$		
Chad	Zambia	

Source: Author's own division and calculations based at the very beginning on data from the World Bank (World Bank, 2011).

Note: The base year is 2007, for countries whose data for the year 2007 are not available there were used data from the year 2009, 2006 or 2005 instead.

The similar result comes also from the analogous overall comparison of all the categories (not only the *Non-negative* ones). From Table 13 it is evident that there are many more countries with higher proportions of inequalities against girls in *Access to education* than those with higher proportions of the inequality in *Quality of obtained education*. For the first mentioned case, there are summed up numbers of countries in *Categories (C), (F), (H)* and *(I)* which gives in total 55 countries, whereas for the

second case there are summed up *Categories (B), (E), (J)* and *(K)* and the total number equals to 42. (Remaining 92 countries have approximately the same proportions in both inequality stages.)

Back to *Non-negative categories*, the pairs *(H)* and *(I)*, and *(J)* and *(K)* differ not only in the numbers of the countries belonging to them, but also in geographical location of these countries. In *Categories (H)* and *(I)*, there are, in addition to Sub-Saharan countries, very often also countries from South America, Middle East and East, Central and South Asia. (See Map 6)

It is worth mentioning that among the countries in *Category (H)* there are also two countries from the High income: OECD group – Japan and the Republic of Korea. They both have just one abnormally positive value of gender inequalities in the statistics *School enrolment, Tertiary, Gross* (the first inequality stage) and no abnormally positive values in the second inequality stage. (The possibility of this situation arises from the definition of the *Category (H)*: $+_0 > +_0$). However, Japan has its one and only abnormal value due to exceeding the upper boundary (4.02 percentage points for *School enrolment, Tertiary, Gross*) by the value 7.42 percentage points, while the Republic of Korea has this abnormality for the value 37.26 percentage points (which is even the maximum value of the statistics *School enrolment, Tertiary, Gross*).

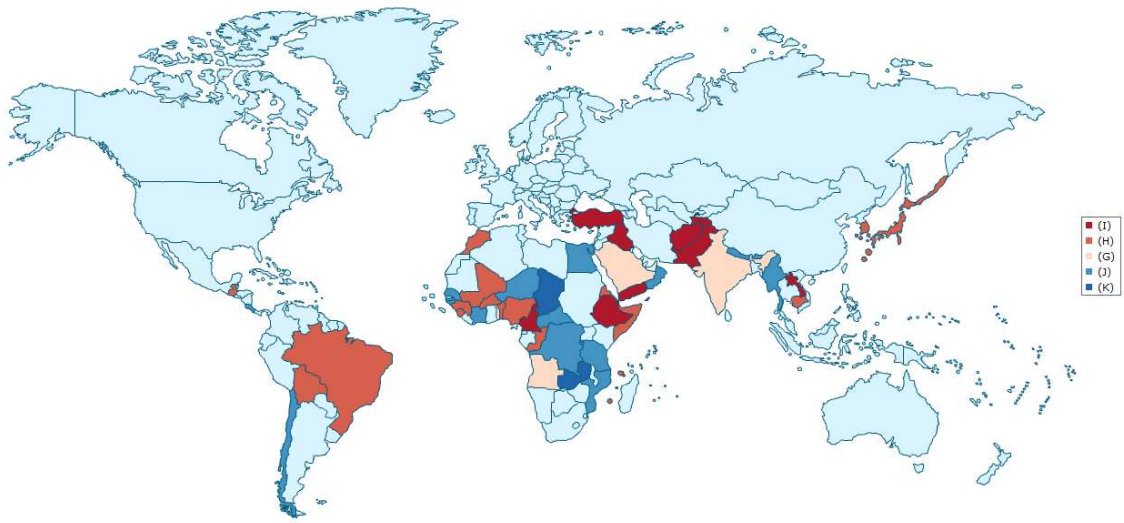
This again confirms the fact that not all the countries in the same category have exactly the same level of gender inequalities. In fact, they have rather the same characteristic feature in values of gender gaps.

The last important finding of the thesis concerns Turkey and its belonging to the *Category (I)* ($+_0 >> +_0$). This is quite a surprising result for the country from the High income: nonOECD group, moreover, when it applies for the accession to the European Union. The explanation is similar to that of Japan and the Republic of Korea. Turkey has the sum over the first stage equal to 3 (abnormal values in both *School enrolment, Secondary* and in *School enrolment, Tertiary, Gross*), whereas its sum over the second stage equals 0. This fact correctly counts Turkey among the countries in *Category (I)* and signifies that the policy of this country should focus on the elimination of gender

inequalities in *Access to education*, because they are substantially higher there than in *Quality of obtained education.*

Finally, there is a short mention about *Categories (J)* and *(K)*. The countries in these two categories have higher share of abnormally positive values in *Quality of obtained education*. Geographically, they are mostly from Sub-Saharan Africa, and concerning economic development they belong most often to Low and Lower middle income group. A noticeable exception is Oman (Middle East and High income: nonOECD group). And there are also some countries from South and East Asia and others. (See Table 16)

Map 6: Countries belonging to Categories of Relations from (G) to (K)



Source: Author's own division and calculations based at the very beginning on data from the World Bank (World Bank, 2011). Depicted in the outline map from Index Mundi (Index Mundi, n.d.).

Note: Depicted values are the results from Table 16. The base year is 2007, for countries whose data for the year 2007 are not available there were used data from the year 2009, 2006 or 2005 instead.

Conclusion

Based on the recent data, the thesis confirms that the problem of gender inequalities in education is the most serious in regions Middle East & North Africa, South Asia and Sub-Saharan Africa. However, it shows that the occurrence of gender inequalities is much more connected with the level of economic development of a country than with its geographical location. Therefore, the thesis highly recommends concentrating global efforts especially on the increase in economic development of the worst performing countries, as the economic development seems to be an important precondition for the improvement of gender inequalities. The highest levels of inequalities are naturally mainly among countries belonging to the Low income group.

As for concrete countries, after the summarization of outcomes over all educational statistics examined in the thesis, the highest numbers of abnormally high gender gaps are in Chad, Eritrea, Iraq, Niger, Pakistan (all of them 8 abnormal values), the Central African Republic, Yemen (both 9 abnormal values), Togo (10 abnormal values), Guinea and Mali (both 13 abnormal values from 14 statistics in total). Nevertheless, there are also opposite extremes. In almost every educational statistics there is a significant number of countries with negative values of gender gaps (indicating gender inequalities against boys instead of girls). In the overall summary, the highest numbers of abnormally low gender gaps are in Nicaragua, the Dominican Republic (both 4 values), Suriname (6), Namibia (7) and Lesotho (9).

Regarding the analysis of the distribution of gender gaps, the chosen method consisting in depiction of ordered gender gap values in the graph shows clearly the whole extent of values and allows to estimate which values are still rather normal and which ones on the contrary seems to be abnormal and signifies substantial gender inequalities. The shape of the graph describes the rate of the growth of values. It should be mentioned that in the absolute majority of the educational statistics positive values of gender gaps increase from zero much faster than the negative ones decrease. This finding implies that the greater attention should be generally paid to positive gender gaps, as they are statistically more likely to stand for significant inequality than the negative ones do.

As for the concrete results of the analysis, in *Access to education* the distributions of the values considerably differ across the age levels of education. While on primary level there prevail positive values of gender gaps, on secondary level numbers of countries with positive values and those with the negative ones are approximately the same (negative values are particularly among countries from Upper and Lower middle income group there). And on tertiary level the majority of gender gaps is negative. Girls all over the world (and in developed countries in particular) tend to enrol at universities more than boys do.

In *Quality of obtained education* the most interesting findings are as follows: Significantly higher gender inequalities in favour of girls (than against them) are not only in statistics describing *Repeaters* where it was supposed, but also in *Persistence to grade 5* and *Persistence to last grade of primary*. Substantially negative values occur again especially in Middle income groups. This feature could be probably caused by recent efforts of developing countries to improve their situation of gender disparities in education. Their policies to bring girls to school were apparently successful and led to temporarily higher shares of enrolled girls than boys.

In the analysis of the relations between the inequality stages there was, using the principle of quartiles, constructed the original method of distinguishing normal and abnormal values of gender inequalities. Thanks to this, values of inequalities of individual educational statistics could be summarised over each of the inequality stages. On the basis of this summarization, there were then distinguished eleven different kinds of mutual relations and established corresponding categories for the classification of countries.

As for the outcomes of this part of the analysis, the main finding concerns countries in categories termed as *Non-negative*. It was shown that countries with higher proportions of inequalities against girls in *Access to education* have superior numbers over those having higher proportions of the inequalities in *Quality of obtained education*. This enables to claim that girls generally experience more often gender inequality against them when entering school than in the subsequent course of education. And the same result also comes from the generalization of the procedure to all the categories (not only the *Non*-negative ones).

Despite all valuable findings mentioned above, the thesis studies only two from the infinite number of ways how to analyse the structure of gender inequalities. The remaining ones still wait for being found. And even the analyses from this thesis leave the space for further research. For example, the extension of the described methods also on educational statistics not related directly to gender disparities among children (meant on these representing the information about gender equality of school staff or overall quality of education, such as *Expenditure per student, Female teachers, Pupil-teacher ratio, Trained teachers*) and subsequent examination of relations between outcomes in these statistics and findings stated in this bachelor thesis are highly recommended.

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Appendices

Appendix 1: Definitions of Educational Statistics

Table 17: Educational Statistics, Description

Statistics		Description
School enrolment	Gross	Gross enrolment ratio is the ratio of total enrolment, regardless of age, to the population of the age group that officially corresponds to the level of education shown.
	Net	Net enrolment ratio is the ratio of children of official school age based on the International Standard Classification of Education 1997 who are enrolled in school to the population of the corresponding official school age.
	Primary	Primary education provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music.
	Secondary	Secondary education completes the provision of basic education that began at the primary level, and aims at laying the foundations for lifelong learning and human development, by offering more subject- or skill-oriented instruction using more specialized teachers.
	Tertiary	Tertiary education, whether or not to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at the secondary level.
Children out of school		Children out of school are the number of primary-school-age children not enrolled in primary or secondary school. [a]
Persistence to grade 5		Persistence to grade 5 (percentage of cohort reaching grade 5) is the share of children enrolled in the first grade of primary school who eventually reach grade 5. The estimate is based on the reconstructed cohort method.
Persistence to last grade of primary		Persistence to last grade of primary is the percentage of children enrolled in the first grade of primary school who eventually reach the last grade of primary education. The estimate is based on the reconstructed cohort method.
Primary completion rate		Primary completion rate is the percentage of students completing the last year of primary school. It is calculated by taking the total number of students in the last grade of primary school, minus the number of repeaters in that grade, divided by the total number of children of official graduation age.
Progression to secondary school		Progression to secondary school refers to the number of new entrants to the first grade of secondary school in a given year as a percentage of the number of students enrolled in the final grade of primary school in the previous year.
Repeaters		Repeaters are the number of students enrolled in the same grade as in the previous year, as a percentage of all students enrolled.
Literacy rate	Youth	Youth literacy rate is the percentage of people ages 15-24 who can, with understanding, read and write a short, simple statement on their everyday life.
	Adult	Adult literacy rate is the percentage of people ages 15 and above who can, with understanding, read and write a short, simple statement on their everyday life.

Source: (World Bank, 2011).

Note: a. In the majority of tables recalculated as percentage proportions. See Appendix 3.

Appendix 2: Lists of Countries

Table 18 contains a list of countries in alphabetical order with information about the geographical regions and income groups which they belong to. Table 19 represents lists of countries for each geographical region separately. And Table 20 does the same for the income groups.

Table 18: List of Countries; Division into Geographical Regions, Income Groups

Country	Geographical region	Income group
Afghanistan	South Asia	Low income
Albania	Europe & Central Asia	Upper middle income
Algeria	Middle East & North Africa	Upper middle income
Andorra	Europe & Central Asia	High income: nonOECD
Angola	Sub-Saharan Africa	Lower middle income
Antigua and Barbuda	America	Upper middle income
Argentina	America	Upper middle income
Armenia	Europe & Central Asia	Lower middle income
Australia	East Asia & Pacific	High income: OECD
Austria	Europe & Central Asia	High income: OECD
Azerbaijan	Europe & Central Asia	Upper middle income
Bahamas, The	America	High income: nonOECD
Bahrain	Middle East & North Africa	High income: nonOECD
Bangladesh	South Asia	Low income
Barbados	America	High income: nonOECD
Belarus	Europe & Central Asia	Upper middle income
Belgium	Europe & Central Asia	High income: OECD
Belize	America	Lower middle income
Benin	Sub-Saharan Africa	Low income
Bhutan	South Asia	Lower middle income
Bolivia	America	Lower middle income
Bosnia and Herzegovina	Europe & Central Asia	Upper middle income
Botswana	Sub-Saharan Africa	Upper middle income
Brazil	America	Upper middle income
Brunei Darussalam	East Asia & Pacific	High income: nonOECD
Bulgaria	Europe & Central Asia	Upper middle income
Burkina Faso	Sub-Saharan Africa	Low income
Burundi	Sub-Saharan Africa	Low income
Cambodia	East Asia & Pacific	Low income
Cameroon	Sub-Saharan Africa	Lower middle income
Canada	America	High income: OECD
Cape Verde	Sub-Saharan Africa	Lower middle income
Central African Republic	Sub-Saharan Africa	Low income
Chad	Sub-Saharan Africa	Low income
Chile	America	Upper middle income
China	East Asia & Pacific	Lower middle income
Colombia	America	Upper middle income
Comoros	Sub-Saharan Africa	Low income
Congo, Dem. Rep.	Sub-Saharan Africa	Low income
Congo, Rep.	Sub-Saharan Africa	Lower middle income
Costa Rica	America	Upper middle income
Cote d'Ivoire	Sub-Saharan Africa	Lower middle income

Croatia	Europe & Central Asia	High income: nonOECD
Cuba	America	Upper middle income
Cyprus	Europe & Central Asia	High income: nonOECD
Czech Republic	Europe & Central Asia	High income: OECD
Denmark	Europe & Central Asia	High income: OECD
Djibouti	Middle East & North Africa	Lower middle income
Dominica	America	Upper middle income
Dominican Republic	America	Upper middle income
Ecuador	America	Lower middle income
Egypt, Arab Rep.	Middle East & North Africa	Lower middle income
El Salvador	America	Lower middle income
Equatorial Guinea	Sub-Saharan Africa	High income: nonOECD
Eritrea	Sub-Saharan Africa	Low income
Estonia	Europe & Central Asia	High income: OECD
Ethiopia	Sub-Saharan Africa	Low income
Fiji	East Asia & Pacific	Upper middle income
Finland	Europe & Central Asia	High income: OECD
France	Europe & Central Asia	High income: OECD
Gabon	Sub-Saharan Africa	Upper middle income
Gambia, The	Sub-Saharan Africa	Low income
Georgia	Europe & Central Asia	Lower middle income
Germany	Europe & Central Asia	High income: OECD
Ghana	Sub-Saharan Africa	Low income
Greece	Europe & Central Asia	High income: OECD
Grenada	America	Upper middle income
Guatemala	America	Lower middle income
Guinea	Sub-Saharan Africa	Low income
Guinea-Bissau	Sub-Saharan Africa	Low income
Guyana	America	Lower middle income
Haiti	America	Low income
Honduras	America	Lower middle income
Hungary	Europe & Central Asia	High income: OECD
Iceland	Europe & Central Asia	High income: OECD
India	South Asia	Lower middle income
Indonesia	East Asia & Pacific	Lower middle income
Iran, Islamic Rep.	Middle East & North Africa	Upper middle income
Iraq	Middle East & North Africa	Lower middle income
Ireland	Europe & Central Asia	High income: OECD
Israel	Middle East & North Africa	High income: OECD
Italy	Europe & Central Asia	High income: OECD
Jamaica	America	Upper middle income
Japan	East Asia & Pacific	High income: OECD
Jordan	Middle East & North Africa	Lower middle income
Kazakhstan	Europe & Central Asia	Upper middle income
Kenya	Sub-Saharan Africa	Low income
Kiribati	East Asia & Pacific	Lower middle income
Korea, Dem. Rep.	East Asia & Pacific	Low income
Korea, Rep.	East Asia & Pacific	High income: OECD
Kuwait	Middle East & North Africa	High income: nonOECD
Kyrgyz Republic	Europe & Central Asia	Low income
Lao PDR	East Asia & Pacific	Low income
Latvia	Europe & Central Asia	High income: nonOECD
Lebanon	Middle East & North Africa	Upper middle income
Lesotho	Sub-Saharan Africa	Lower middle income
Liberia	Sub-Saharan Africa	Low income
Libya	Middle East & North Africa	Upper middle income
Liechtenstein	Europe & Central Asia	High income: nonOECD
Lithuania	Europe & Central Asia	Upper middle income
Luxembourg	Europe & Central Asia	High income: OECD

Macedonia, FYR	Europe & Central Asia	Upper middle income
Madagascar	Sub-Saharan Africa	Low income
Malawi	Sub-Saharan Africa	Low income
Malaysia	East Asia & Pacific	Upper middle income
Maldives	South Asia	Lower middle income
Mali	Sub-Saharan Africa	Low income
Malta	Europe & Central Asia	High income: nonOECD
Marshall Islands	East Asia & Pacific	Lower middle income
Mauritania	Sub-Saharan Africa	Low income
Mauritius	Sub-Saharan Africa	Upper middle income
Mexico	America	Upper middle income
Micronesia, Fed. Sts.	East Asia & Pacific	Lower middle income
Moldova	Europe & Central Asia	Lower middle income
Monaco	Europe & Central Asia	High income: nonOECD
Mongolia	East Asia & Pacific	Lower middle income
Montenegro	Europe & Central Asia	Upper middle income
Morocco	Middle East & North Africa	Lower middle income
Mozambique	Sub-Saharan Africa	Low income
Myanmar	East Asia & Pacific	Low income
Namibia	Sub-Saharan Africa	Upper middle income
Nepal	South Asia	Low income
Netherlands	Europe & Central Asia	High income: OECD
New Zealand	East Asia & Pacific	High income: OECD
Nicaragua	America	Lower middle income
Niger	Sub-Saharan Africa	Low income
Nigeria	Sub-Saharan Africa	Lower middle income
Norway	Europe & Central Asia	High income: OECD
Oman	Middle East & North Africa	High income: nonOECD
Pakistan	South Asia	Lower middle income
Palau	East Asia & Pacific	Upper middle income
Panama	America	Upper middle income
Papua New Guinea	East Asia & Pacific	Lower middle income
Paraguay	America	Lower middle income
Peru	America	Upper middle income
Philippines	East Asia & Pacific	Lower middle income
Poland	Europe & Central Asia	High income: OECD
Portugal	Europe & Central Asia	High income: OECD
Qatar	Middle East & North Africa	High income: nonOECD
Romania	Europe & Central Asia	Upper middle income
Russian Federation	Europe & Central Asia	Upper middle income
Rwanda	Sub-Saharan Africa	Low income
Samoa	East Asia & Pacific	Lower middle income
San Marino	Europe & Central Asia	High income: nonOECD
Sao Tome and Principe	Sub-Saharan Africa	Lower middle income
Saudi Arabia	Middle East & North Africa	High income: nonOECD
Senegal	Sub-Saharan Africa	Lower middle income
Serbia	Europe & Central Asia	Upper middle income
Seychelles	Sub-Saharan Africa	Upper middle income
Sierra Leone	Sub-Saharan Africa	Low income
Singapore	East Asia & Pacific	High income: nonOECD
Slovak Republic	Europe & Central Asia	High income: OECD
Slovenia	Europe & Central Asia	High income: OECD
Solomon Islands	East Asia & Pacific	Low income
Somalia	Sub-Saharan Africa	Low income
South Africa	Sub-Saharan Africa	Upper middle income
Spain	Europe & Central Asia	High income: OECD
Sri Lanka	South Asia	Lower middle income
St. Kitts and Nevis	America	Upper middle income
St. Lucia	America	Upper middle income

St. Vincent and the Grenadines	America	Upper middle income
Sudan	Sub-Saharan Africa	Lower middle income
Suriname	America	Upper middle income
Swaziland	Sub-Saharan Africa	Lower middle income
Sweden	Europe & Central Asia	High income: OECD
Switzerland	Europe & Central Asia	High income: OECD
Syrian Arab Republic	Middle East & North Africa	Lower middle income
Tajikistan	Europe & Central Asia	Low income
Tanzania	Sub-Saharan Africa	Low income
Thailand	East Asia & Pacific	Lower middle income
Timor-Leste	East Asia & Pacific	Lower middle income
Togo	Sub-Saharan Africa	Low income
Tonga	East Asia & Pacific	Lower middle income
Trinidad and Tobago	America	High income: nonOECD
Tunisia	Middle East & North Africa	Lower middle income
Turkey	Europe & Central Asia	Upper middle income
Turkmenistan	Europe & Central Asia	Lower middle income
Tuvalu	East Asia & Pacific	Lower middle income
Uganda	Sub-Saharan Africa	Low income
Ukraine	Europe & Central Asia	Lower middle income
United Arab Emirates	Middle East & North Africa	High income: nonOECD
United Kingdom	Europe & Central Asia	High income: OECD
United States	America	High income: OECD
Uruguay	America	Upper middle income
Uzbekistan	Europe & Central Asia	Lower middle income
Vanuatu	East Asia & Pacific	Lower middle income
Venezuela, RB	America	Upper middle income
Vietnam	East Asia & Pacific	Lower middle income
Yemen, Rep.	Middle East & North Africa	Lower middle income
Zambia	Sub-Saharan Africa	Low income
Zimbabwe	Sub-Saharan Africa	Low income

Source: Forms of country names, income groups: (World Bank, 2011). Geographical regions: (Gapminder Foundation, n.d.).

Note: Contain only sovereign states, i.e. the United Nations member states.

Table 19: Geographical Regions, Lists of Countries

America		
Antigua and Barbuda	Dominica	Panama
Argentina	Dominican Republic	Paraguay
Bahamas, The	Ecuador	Peru
Barbados	El Salvador	St. Kitts and Nevis
Belize	Grenada	St. Lucia
Bolivia	Guatemala	St. Vincent and the Grenadines
Brazil	Guyana	Suriname
Canada	Haiti	Trinidad and Tobago
Chile	Honduras	United States
Colombia	Jamaica	Uruguay
Costa Rica	Mexico	Venezuela, RB
Cuba	Nicaragua	

East Asia & Pacific		
Australia	Lao PDR	Samoa
Brunei Darussalam	Malaysia	Singapore
Cambodia	Marshall Islands	Solomon Islands
China	Micronesia, Fed. Sts.	Thailand
Fiji	Mongolia	Timor-Leste
Indonesia	Myanmar	Tonga
Japan	New Zealand	Tuvalu
Kiribati	Palau	Vanuatu
Korea, Dem. Rep.	Papua New Guinea	Vietnam
Korea, Rep.	Philippines	

Europe & Central Asia		
Albania	Greece	Poland
Andorra	Hungary	Portugal
Armenia	Iceland	Romania
Austria	Ireland	Russian Federation
Azerbaijan	Italy	San Marino
Belarus	Kazakhstan	Serbia
Belgium	Kyrgyz Republic	Slovak Republic
Bosnia and Herzegovina	Latvia	Slovenia
Bulgaria	Liechtenstein	Spain
Croatia	Lithuania	Sweden
Cyprus	Luxembourg	Switzerland
Czech Republic	Macedonia, FYR	Tajikistan
Denmark	Malta	Turkey
Estonia	Moldova	Turkmenistan
Finland	Monaco	Ukraine
France	Montenegro	United Kingdom
Georgia	Netherlands	Uzbekistan
Germany	Norway	

Middle East & North Africa		
Algeria	Jordan	Saudi Arabia
Bahrain	Kuwait	Syrian Arab Republic
Djibouti	Lebanon	Tunisia
Egypt, Arab Rep.	Libya	United Arab Emirates
Iran, Islamic Rep.	Morocco	Yemen, Rep.
Iraq	Oman	
Israel	Qatar	

South Asia		
Afghanistan	India	Pakistan
Bangladesh	Maldives	Sri Lanka
Bhutan	Nepal	

Sub-Saharan Africa		
Angola	Gabon	Nigeria
Benin	Gambia, The	Rwanda
Botswana	Ghana	Sao Tome and Principe
Burkina Faso	Guinea	Senegal
Burundi	Guinea-Bissau	Seychelles
Cameroon	Kenya	Sierra Leone
Cape Verde	Lesotho	Somalia
Central African Republic	Liberia	South Africa
Chad	Madagascar	Sudan
Comoros	Malawi	Swaziland
Congo, Dem. Rep.	Mali	Tanzania
Congo, Rep.	Mauritania	Togo
Cote d'Ivoire	Mauritius	Uganda
Equatorial Guinea	Mozambique	Zambia
Eritrea	Namibia	Zimbabwe
Ethiopia	Niger	

Source: Forms of country names: (World Bank, 2011). Geographical regions: (Gapminder Foundation, n.d.).

Note: Contain only sovereign states, i.e. the United Nations member states.

Table 20: Income Groups, Lists of Countries

High income: OECD		
Australia	Hungary	Poland
Austria	Iceland	Portugal
Belgium	Ireland	Slovak Republic
Canada	Israel	Slovenia
Czech Republic	Italy	Spain
Denmark	Japan	Sweden
Estonia	Korea, Rep.	Switzerland
Finland	Luxembourg	United Kingdom
France	Netherlands	United States
Germany	New Zealand	
Greece	Norway	

High income: nonOECD		
Andorra	Equatorial Guinea	Qatar
Bahamas, The	Kuwait	San Marino
Bahrain	Latvia	Saudi Arabia
Barbados	Liechtenstein	Singapore
Brunei Darussalam	Malta	Trinidad and Tobago
Croatia	Monaco	United Arab Emirates
Cyprus	Oman	

Upper middle income		
Albania	Fiji	Panama
Algeria	Gabon	Peru
Antigua and Barbuda	Grenada	Romania
Argentina	Iran, Islamic Rep.	Russian Federation
Azerbaijan	Jamaica	Serbia
Belarus	Kazakhstan	Seychelles
Bosnia and Herzegovina	Lebanon	South Africa
Botswana	Libya	St. Kitts and Nevis
Brazil	Lithuania	St. Lucia
Bulgaria	Macedonia, FYR	St. Vincent and the Grenadines
Chile	Malaysia	Suriname
Colombia	Mauritius	Turkey
Costa Rica	Mexico	Uruguay
Cuba	Montenegro	Venezuela, RB
Dominica	Namibia	
Dominican Republic	Palau	

Lower middle income		
Angola	India	Samoa
Armenia	Indonesia	Sao Tome and Principe
Belize	Iraq	Senegal
Bhutan	Jordan	Sri Lanka
Bolivia	Kiribati	Sudan
Cameroon	Lesotho	Swaziland
Cape Verde	Maldives	Syrian Arab Republic
China	Marshall Islands	Thailand
Congo, Rep.	Micronesia, Fed. Sts.	Timor-Leste
Cote d'Ivoire	Moldova	Tonga
Djibouti	Mongolia	Tunisia
Ecuador	Morocco	Turkmenistan
Egypt, Arab Rep.	Nicaragua	Tuvalu
El Salvador	Nigeria	Ukraine
Georgia	Pakistan	Uzbekistan
Guatemala	Papua New Guinea	Vanuatu
Guyana	Paraguay	Vietnam
Honduras	Philippines	Yemen, Rep.

Low income		
Afghanistan	Guinea	Nepal
Bangladesh	Guinea-Bissau	Niger
Benin	Haiti	Rwanda
Burkina Faso	Kenya	Sierra Leone
Burundi	Korea, Dem. Rep.	Solomon Islands
Cambodia	Kyrgyz Republic	Somalia
Central African Republic	Lao PDR	Tajikistan
Chad	Liberia	Tanzania
Comoros	Madagascar	Togo
Congo, Dem. Rep.	Malawi	Uganda
Eritrea	Mali	Zambia
Ethiopia	Mauritania	Zimbabwe
Gambia, The	Mozambique	
Ghana	Myanmar	

Source: Forms of country names, income groups: (World Bank, 2011).

Note: Contain only sovereign states, i.e. the United Nations member states.

Appendix 3: Construction of Regional Aggregates

Aggregates are constructed from a data set of educational statistics with values gathered for individual countries in terms of percents (except of the category *Children out of school*). Therefore, they were for purpose of regional aggregates in Table 1, first of all, recounted as absolute numbers of population (for better comparability, to take into account different population size of countries), and then summed up and expressed as a percentage proportion of the total relevant population of the region.

Since numbers of the population in age groups relevant to particular statistics are not available, there was made an approximation with using available data sets of total populations, percentages of females in total populations and percentages of inhabitants in the age 0-14 years and 15-64 years in the total populations.

Calculations of particular values in Table 1 were done according to following formula:

$$X_{E,R}\,(\%) = \frac{100 \cdot \sum_{i=1}^{l} \frac{E_i(\%)}{100} \cdot T_i \cdot \frac{S_i(\%)}{100} \cdot \frac{A_i(\%)}{100}}{\sum_{i=1}^{l} T_i \cdot \frac{S_i(\%)}{100} \cdot \frac{A_i(\%)}{100}},$$

where X is the calculated value for educational statistics E and region R, which comprises of countries $i = \{1, \dots, l\}$. T is total population, S assigns gender (for males it means $100 - F(\%)$, where F is female population; for females $F(\%)$), and A is age

category $(0-14(\%)$ for all educational statistics except of *Literacy*, which originally concerns age groups 15-24 years (Youth) and above 15 years (Adult), so it is standardized according to data set $15-64(\%)$).

There is one exception in construction of Table 1. Category *Children out of school* was originally in terms of concrete numbers instead of percents. Therefore, it was just summed up for each region and gender statistics of the category, and then, these sums were expressed as a percentage proportion of referable populations according to aforementioned formula. Modified formula then stays:

$$X_{E,R}\ (\%) = \frac{100 \cdot \sum_{i=1}^{l} E_i}{\sum_{i=1}^{l} T_i \cdot \frac{S_i(\%)}{100} \cdot \frac{A_i(\%)}{100}}.$$

Appendix 4: Children out of School, Construction of World Aggregate

For construction of total number of children out of school in the world, there were summed up not only male and female values for sovereign states (listed in Table 18), but also for their special (external) territories, which were in the original data set of the World Bank listed separately. These not fully sovereign territories are stated in Table 21.

Table 21: List of External Territories and Countries with Limited Recognition

External territory	Sovereign country
American Samoa	United States
Aruba	Netherlands
Bermuda	United Kingdom
Cayman Islands	United Kingdom
Channel Islands	United Kingdom
Faeroe Islands	Denmark
French Polynesia	France
Gibraltar	United Kingdom
Greenland	Denmark
Guam	United States

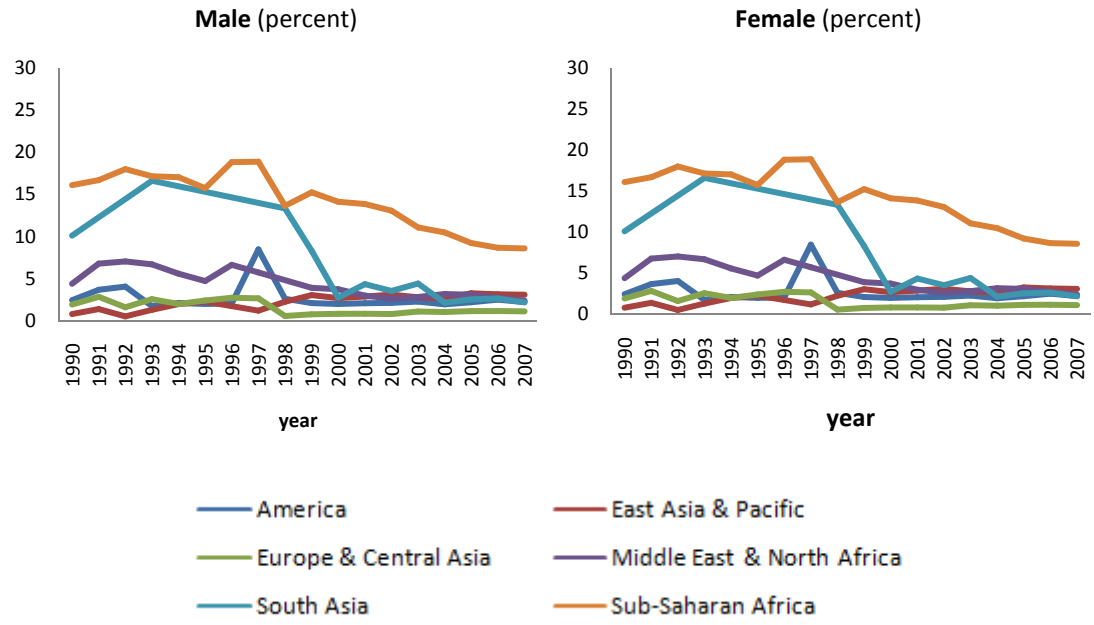
External territory	Sovereign country
Hong Kong SAR, China	China
Isle of Man	United Kingdom
Macao SAR, China	China
Mayotte	France
Netherlands Antilles	Netherlands
New Caledonia	France
Northern Mariana Islands	United States
Puerto Rico	United States
Turks and Caicos Islands	United Kingdom
Virgin Islands (U.S.)	United States

Countries with limited recognition	
Kosovo	West Bank and Gaza

Source: Forms of country and territory names: (World Bank, 2011). To which sovereign countries territories appertain to: (Central Intelligence Agency, 2011).

(Note: In the rest of data processing in the thesis, there are used data in terms of percents, original (from the source) or constructed (estimative recalculation for *Children out of school*). It that case, it is not necessary to recalculate values of countries having some special territories in order to include territorial values, as populations of the territories compared to populations of the sovereign countries (the most suitable information for recalculation) are very low. Therefore, consequent results would not differ considerably from the initial values of the sovereign countries.)

Figure 7: Children out of School by Region and Gender, Historical Evolution



Source: Author's calculations based on data from the World Bank (World Bank, 2011).

Note: Definition of the statistics is in Appendix 1. List of countries with division into particular geographical regions is enclosed in Appendix 2. Construction of aggregates is described in Appendix 3.

Where the data for the year 2008 were not available, there were used values from the last available year (from the period 1990-2007) to achieve the outcome as factual as possible. On the one hand, there are still some countries remaining without any data in this category. On the other hand, the compensatory older data used instead of missing values for the year 2008 certainly overestimate a little bit the world aggregate, as the trend in the category of *Children out of school* has been decreasing over the time (see Figure 7). Bring together, these two inaccuracies work against each other.

Appendix 5: Commitments of Copenhagen Declaration on Social Development

(1) Create an economic, political, social, cultural and legal environment that will enable people to achieve social development.
(2) Eradicate absolute poverty by a target date to be set by each country.
(3) Support full employment as a basic policy goal.
(4) Promote social integration based on the enhancement and protection of all human rights.
(5) Achieve equality and equity between women and men.
(6) Attain universal and equitable access to education and primary health care.
(7) Accelerate the development of Africa and the least developed countries.
(8) Ensure that structural adjustment programmes include social development goals.
(9) Increase resources allocated to social development.
(10) Strengthen cooperation for social development through the UN.

(United Nations, n.d. b)

Appendix 6: Millennium Development Goals

(1) <u>Eradicate extreme poverty and hunger</u>
    a. Reduce by half the proportion of people living on less than a dollar a day
    b. Achieve full and productive employment and decent work for all, including women and young people

c. Reduce by half the proportion of people who suffer from hunger

(2) Achieve universal primary education

a. Ensure that all boys and girls complete a full course of primary schooling

(3) Promote gender equality and empower women

a. Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015

(4) Reduce child mortality

a. Reduce by two thirds the mortality rate among children under five

(5) Improve maternal health

a. Reduce by three quarters the maternal mortality ratio
b. Achieve, by 2015, universal access to reproductive health

(6) Combat HIV/AIDS, malaria and other diseases

a. Halt and begin to reverse the spread of HIV/AIDS
b. Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it
c. Halt and begin to reverse the incidence of malaria and other major diseases

(7) Ensure environmental sustainability

a. Integrate the principles of sustainable development into country policies and programmes; reverse loss of environmental resources
b. Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss
c. Reduce by half the proportion of people without sustainable access to safe drinking water and basic sanitation
d. Achieve significant improvement in lives of at least 100 million slum dwellers, by 2020

(8) Develop a Global Partnership for Development

a. Develop further an open, rule-based, predictable, non-discriminatory trading and financial system
b. Address the special needs of the least developed countries
c. Address the special needs of landlocked developing countries and small island developing states

d. Deal comprehensively with the debt problems of developing countries
e. In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries
f. In cooperation with the private sector, make available the benefits of new technologies, especially information and communications

(United Nations, n.d. a)

Appendix 7: Education for All: The Six Dakar Goals

(1) Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children.
(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.
(3) Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programmes.
(4) Achieving a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults.
(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.
(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.

(Education for All, n.d.)