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**Gender, education and labour market outcomes**

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\* The views expressed in this paper are those of the author and do not necessarily represent those of the United Nations.

## Table of Contents

<b>List of figures and tables .....</b>	<b>Error! Bookmark not defined.</b>
<b>Introduction.....</b>	<b>Error! Bookmark not defined.</b>
<b>Gender and education.....</b>	<b>4</b>
Broad trends in enrollment rates .....	4
Inter- and intra-regional diversity in primary and lower secondary enrolment .....	6
Trends in upper secondary enrolment.....	9
Other schooling indicators .....	9
Trends in tertiary education .....	11
Children's work in the household and progress through school .....	11
Summary .....	14
<b>Gender, education and the labour market .....</b>	<b>15</b>
Labour force participation.....	15
Unemployment.....	17
Employment outcomes.....	18
Labour market outcomes and education .....	22
i) <i>Labour force participation, employment and education</i> .....	22
ii) <i>Gender earnings gaps and the returns to schooling</i> .....	26
Summary .....	30
<b>The school-to-work transition.....</b>	<b>33</b>
Summary .....	38
<b>References .....</b>	<b>38</b>

## Figures and Tables

Figure 1. Primary net enrolment rates, 2000 – 2011.....	5
Figure 2. Lower secondary net enrolment rates, 2000 – 2011 .....	5
Figure 3. Primary net enrolment rates in developing countries, by sex.....	5
Figure 4. Lower secondary net enrolment rates in developing countries, by sex.....	6
Figure 5a. Primary net enrolment rates, Northern Africa .....	7
Figure 5b. Primary net enrolment rates, Sub-Saharan Africa.....	7
Figure 5c. Primary net enrolment rates, Western Asia .....	7
Figure 5d. Primary net enrolment rates, Southern Asia.....	7
Figure 6a. Primary net enrolment rates, Southern Asia (India included/excluded).....	8
Figure 6b. Lower secondary net enrolment rates, Southern Asia (India included/excluded).....	8
Table 1. Labour force participation rates, by sex, 1991-2012 .....	15
Table 2. Labour force participation rates by sex and age, 1991 and 2012 .....	16
Table 3. Unemployment rates by sex and region, 2000 and 2011 .....	18
Table 4. Employment-to-population ratio, MDG regions (current 2012) .....	19
Table 5. Vulnerable employment as a percentage of total employment, MDG regions (current 2012) .....	21
Table 6. Higher rates of return to female education in developing countries (selected studies) ..	32
Table 7. Labour market statistics by sex, age cohort and region, 2011 .....	33

## **Introduction: Gender, education and access to labour markets**

This report examines education and labour market outcomes for men and women in developing countries, drawing on literature and data predominantly from the past decade.

The report is structured as follows. Section 1 focuses on gender and education, summarising broad trends in enrolment rates and schooling attainment, from primary school to tertiary education. This section also reviews recent literature which investigates the relationship between children's work in the household and the implications for progress through school. Section 2 explores labour market outcomes and the links to education and covers three main areas of investigation: broad trends in labour force participation by sex; the relationship between education and participation or employment; and the relationship between education and earnings. The final section, Section 3, focuses on the school-to-work transition and describes gendered labour market outcomes for the youngest cohort. Where possible, the review highlights differences in patterns and trends both across and within developing regions.

### **1. Gender and education**

#### **Broad trends in enrolment rates:**

School enrolment rates have increased considerably in almost all developing countries since at least 1960 (the earliest year for which reliable data are available) (Glewwe and Kremer, 2006:950).

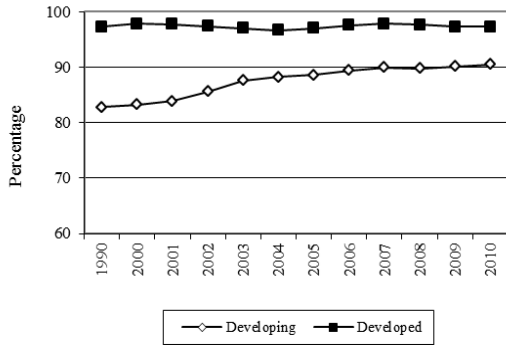
The latest available data from UNESCO<sup>1</sup> show that by 2000, education gaps between developed and developing countries had narrowed significantly, but sizeable gaps still remained (UNESCO 2014). Although almost 83 percent of age-eligible children in developing countries were enrolled in primary school, the primary school net enrolment rate in developed countries was 97 percent. The gap in the net enrolment rate in lower secondary school was even larger: whereas almost 95 percent of all age-eligible children in developed countries were enrolled in lower secondary school in 2000, the enrolment rate in developing countries was only 70 percent (see Figures 1 and 2).

From 2000, and as illustrated in Figures 1 and 2 below, both primary and lower secondary school enrolment rates increased substantially in developing countries, with the largest increases occurring during the first half of the decade. By 2011, the gap in primary school net enrolment rates between developed and developing countries had narrowed by half, from almost 14 percentage points to less than 7 percentage points; and in lower secondary school enrolment, from 25 to 17 percentage points.

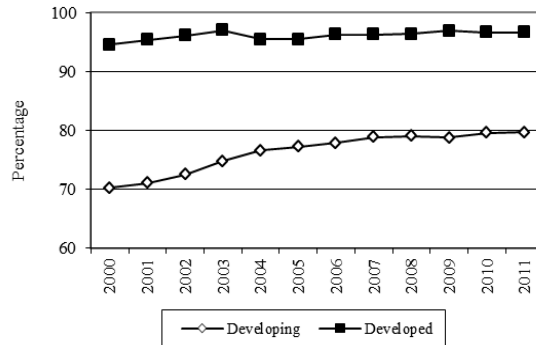
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<sup>1</sup> All the statistics presented in Figures 1 to 6 and discussed in the accompanying text have been derived from data provided in the UNESCO Institute for Statistics database (UNESCO 2014).

**Figure 1. Primary net enrolment rates, 1990 - 2011**



**Figure 2. Lower secondary net enrolment rates, 2000-2011**

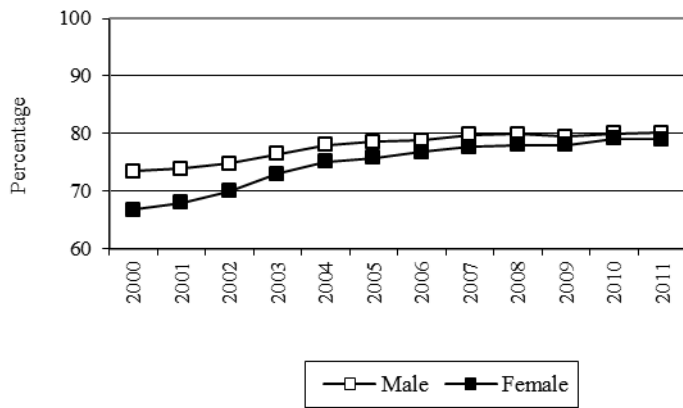


In general, as educational access in developing countries has increased, so the gender gap in primary and lower secondary schooling enrolment has narrowed appreciably (cf. Ozarem and King 2007; Grant and Behrman 2010). Figures 3 and 4 illustrate that in developing countries during the 2000s, enrolment rates in both primary and lower secondary schooling increased by more among age-eligible girls than boys, such that by 2011, the difference in net enrolment rates had narrowed to between one and two percentage points for both levels of education.

**Figure 3. Primary net enrolment rates in developing countries, by sex**



**Figure 4. Lower secondary net enrolment rates in developing countries, by sex**



**Inter- and intra-regional diversity in primary and lower secondary enrolment:**

Access to schooling has increased, and the gender gap in enrolment has decreased, across all developing regions. But aggregate trends also mask considerable regional diversity. In 2011, primary school net enrolment rates were above 95 percent in Eastern Asia, South-eastern Asia, Northern Africa and Latin America; but they were below 80 percent in Sub-Saharan Africa and in the Southern Asia region when this excludes India. The divergence in lower secondary school net enrolment rates is even larger, ranging from 96 percent in Latin America to 64 percent in Sub-Saharan Africa.

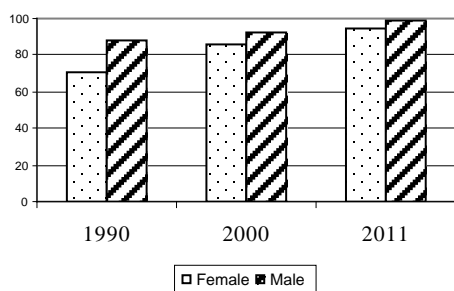
In general, gender gaps in schooling are low in regions where enrolment rates are very high. In some regions, a female advantage has emerged, mirroring trends in developed countries. From 1990 to 2011, a gender gap in primary net enrolment rates favouring boys reversed in Latin America, South-eastern Asia and Eastern Asia, so that slightly larger shares of age-eligible girls were enrolled in primary school than boys. By 2011 in Eastern Asia, net enrolment rates in lower secondary school were also substantially larger among girls (96 percent) than boys (88 percent), although this is driven entirely by large changes in enrolment rates favouring girls in China (UNESCO 2014).

In regions where educational access historically has been low, the growth in primary and lower secondary school enrolment rates has been dramatic. Over the past two decades, primary net enrolment rates increased by at least 17 percentage points in Sub-Saharan Africa, Northern Africa and Southern Asia, and by 9 percentage points in Western Asia; and over the last decade, lower secondary net enrolment rates increased by at least 10 percentage points. At the same time, gender gaps in schooling in these regions have narrowed substantially.

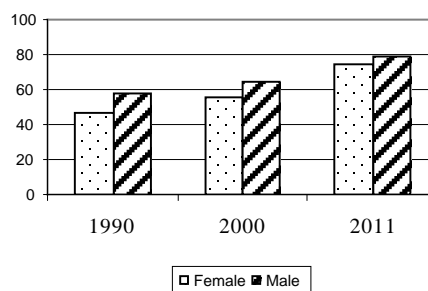
From 1990 to 2011, the difference between male and female net enrolment rates in primary school decreased by 13 percentage points in Northern Africa, 7 percentage points in Sub-Saharan Africa and 4 percentage points in Western Asia, with the largest reduction of 15 percentage

points in Southern Asia (Figures 5a - 5c). As a result, by 2011, male primary school net enrolment rates in these regions were at most 5 percentage points higher than female enrolment rates.

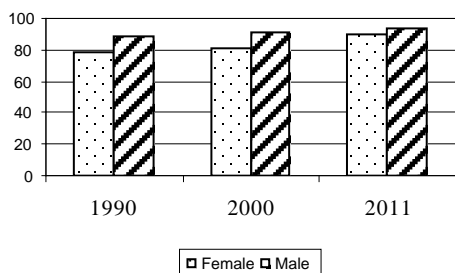
**Figure 5a. Primary net enrolment rates, Northern Africa**



**Figure 5b. Primary net enrolment rates, Sub-Saharan Africa**



**Figure 5c. Primary net enrolment rates, Western Asia**



**Figure 5d. Primary net enrolment rates, Southern Asia**



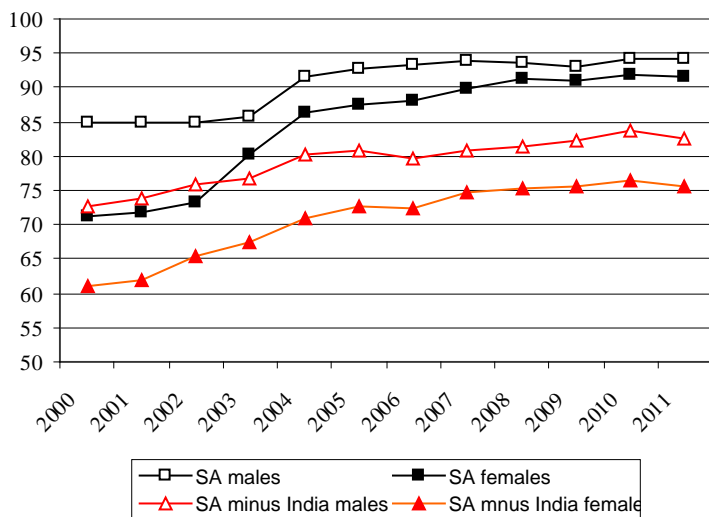
The narrowing of the gender gap in lower secondary school net enrolments has also been substantial in these regions, and particularly in Sub-Saharan Africa and in Western and Southern Asia. From 2000 to 2011, the difference between male and female enrolment rates closed by almost 7 percentage points in Sub-Saharan Africa (with a remaining gap of 7 percentage points); by 9 percentage points in Western Asia (a remaining gap of 6 percentage points); by 10 percentage points in Southern Asia (a remaining gap of 2 percentage points); and by 4 percentage points in Northern Africa (a remaining gap of 4 percentage points).

By 2011, therefore, significant progress had been made in reducing gender inequality in those regions where schooling gaps between boys and girls had historically been large. These aggregate positive developments, however, also need to be qualified, as there is significant variation both between and within countries.

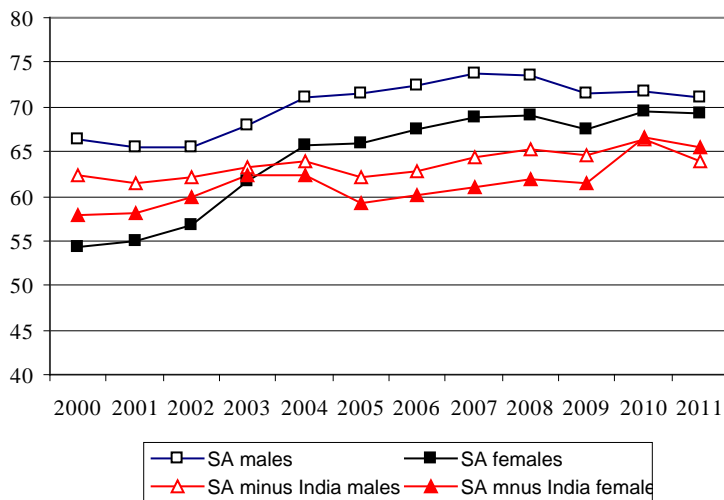
Inter-country variation is clearly illustrated in Southern Asia, a region where gender gaps in schooling previously have been among the largest in the developing world (cf. Birdsall et al., 2005; Glewwe and Kremer, 2006; Ozarem and King, 2007). Although more than 90 percent of age-eligible children were enrolled in primary school by 2011, and the aggregate gender gap in primary schooling closed to only two percentage points (from over 17 percentage points in 1990), this trend is driven particularly by increasing enrolment in India. When India is excluded from the Southern Asia region, aggregate primary net enrolment rates for boys and girls are far

lower, and the gender gap in enrolments, far higher (7 percentage points) (Figure 6a). Net enrolment rates in lower secondary school in Southern Asia are also lower when India is excluded, although in very recent years, a small female advantage has emerged (Figure 6b).

**Figure 6a. Primary net enrolments, Southern Asia (India included/excluded)**



**Figure 6b. Lower secondary net enrolments, Southern Asia (India included/excluded)**



Enrolment rates and the gender gap in these rates also vary considerably within countries, according to the socio-economic status of households and their location. Across all the developing regions, the most recent UNESCO data available show that school attendance over the past decade has increased considerably, and by relatively more for children in the poorest income quintile of households compared with the richest income quintile. However, these data also show that boys and girls from the poorest income quintile remain far less likely to attend school, with primary school attendance in 2011 below 60 percent in Sub-Saharan Africa and



below 70 percent in South-eastern Asia, and secondary school attendance less than 30 percent in Latin American (and the Caribbean), Southern Asia, South-eastern Asia and Sub-Saharan Africa. With few exceptions (Sub-Saharan Africa and Southern Asia) gender gaps in schooling are also larger for children in the poorest households (UNESCO 2014).

Similar patterns emerge when enrolment is compared across rural and urban areas in developing countries. A survey of primary-school attendance in 108 developing countries, for example, showed that while gender parity had been reached in urban areas and among the richest 40 percent of households, this was not the case in rural areas and in poor households (UN, 2010:17). In data drawn from 70 countries, Ozarem and King (2007) identify several “stylized facts” about the enrolment status of children aged 7 to 17. In particular, the largest gender gaps in favour of boys occur in rural areas and particularly for the age cohort 15-17 years.<sup>2</sup>

### **Trends in upper secondary enrolment:**

In general, as access to education increases, so the gender gap against females shifts from lower to higher levels of education (Altinok et al., 2014). Over the past decade, enrolment rates in upper secondary education have risen considerably across all developing regions. In a recent UNESCO (2012) publication on education, which maps global trends by gender from 1999 to 2009, increases in gross enrolment rates at the upper secondary level are identified as being largest in East Asia and the Pacific region, followed by South and West Asia, and Latin America and the Caribbean. However, in 2009, gross enrolment rates in upper secondary school remained lower than enrolment rates in lower secondary school across all developing regions (and lower than enrolment rates in North America and Western Europe).

Gender gaps in enrolment at the upper secondary level were found to favour males in all regions, except Latin America and the Caribbean, and East Asia and the Pacific (UNESCO, 2012:71-72), where gross upper secondary enrolment rates were larger among females than males. In the majority of developing countries, females are also far less likely than males to enrol in vocational education. However, the study also highlights considerable diversity among countries, with the largest female advantage in upper secondary enrolments in Qatar, and the largest male advantage in Niger (UNESCO, 2012:71). Enrolments in vocational education were also larger among females than males in several Sub-Saharan African countries (Ethiopia, Benin, Burkina Faso and Togo).

### **Other schooling indicators:**

The extent of the progress towards gender equality in schooling needs to be further scrutinised as school enrolment may not lead to grade completion. In their 2005 report on the UN Millennium Project Task Force on Education and Gender Equality, Birdsall et al. (2005) found that despite considerable increases in enrolment in developing regions, levels of grade completion remained low particularly across Africa and in Southern Asia. Even in countries in Latin America, where there is almost universal enrolment, “high repetition and drop-out rates lead to low completion rates” (Birdsall et al., 2005: 388). At the time the report was conducted, the study also found that

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<sup>2</sup> The study finds also that the urban-rural gap in enrolment was greater than the gender gap, exceeding 10 percentage points in over half the developing countries surveyed.

in many countries, girls are “disproportionately affected” (Birdsall et al., 2005: 337) by education gaps in progress through school.

A more recent study, which compares grade completion from the 1990s to the 2000s in 38 developing countries, finds that in some regions, higher female than male enrolment rates have translated into higher average grade completion among females (Grant and Behrman, 2010). Among the Latin American countries included in the study<sup>3</sup>, for example, a small female advantage in grade completion across younger age cohorts has persisted from the 1990s to the 2000s, while a female advantage among older cohorts (13-15 and 16-18) has widened slightly. In countries in South-eastern Asia<sup>4</sup>, mean grade completion has also remained higher among girls than boys (aged 10-12 and 13-15) while a female advantage among older children (16-18) has emerged in the 2000-2006 period (Grant and Behrman, 2010:79).

In other regions, there has been a narrowing of the gender gap in grade completion, and notably in Southern Asia<sup>5</sup>, Sub-Saharan Africa<sup>6</sup> and Northern Africa<sup>7</sup>, where the increase in mean grades completed among girls (6-18 years) was roughly double that for boys (Grant and Behrman, 2010: 79-80). However, sizeable gender gaps in mean grade completion still remain in these regions and also in Western Asia, and particularly among the oldest cohort (16-18). In these four regions, boys in the oldest cohort are also more likely than girls to transition into secondary school, although this gender gap has narrowed considerably since the 1990s.

The gender gap in favour of boys among the oldest cohort has received significant attention in the academic and policy literature, and the roles of gender-specific factors, including the onset of puberty, teenage pregnancy and marriage, have been explored as contributing to a male advantage in schooling (cf. Lloyd and Mensch, 2008; Oster and Thornton, 2011). However, Grant and Behrman (2010: 80) show that *conditional on ever attending school*, a very different picture about mean grade completion emerges. In Northern Africa, Western Asia and Southern Asia, the gender gap in grade completion narrows substantially so that among 16-18 year olds, there is virtually no gap in mean grades completed; and in some countries in Sub-Saharan Africa (in the south and east of Sub-Saharan Africa), there is even evidence of a small female advantage in grade completion by the 2000-2006 period.<sup>8</sup>

These findings show that gender gaps in enrolment are critical in understanding gender differences in grade completion and grade progression. Among children enrolled in school, girls may even progress faster through school than boys on average. These findings are supported by individual country studies which analyse micro-data. In Egypt, for example, Assad et al. (2010) find that enrolment rates are lower among girls than boys, but that once enrolled, retention rates are similar. In their study of 25 rural villages in Pakistan, Sawada and Loxsin (2009) also find

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<sup>3</sup> The Latin American countries are Bolivia, Colombia, the Dominican Republic, Haiti, Nicaragua and Peru.

<sup>4</sup> The South-eastern Asian countries are Indonesia, the Philippines and Vietnam.

<sup>5</sup> The Southern Asia countries are Bangladesh, India, Nepal and Pakistan.

<sup>6</sup> The Sub-Saharan African countries are Kenya, Madagascar, Malawi, Namibia, Zimbabwe, Mozambique, Uganda, Zambia, Rwanda, Tanzania, Benin, Burkina Faso, Cameroon, Chad, Ivory Coast, Mali, Niger, Nigeria, Senegal, Guinea and Ghana.

<sup>7</sup> The Northern African countries are Egypt and Morocco.

<sup>8</sup> Moreover, conditional on ever-enrolment, average grade completion among 13-15 year olds was higher for females than males across all regions.

that school enrolments are substantially lower among girls than among boys, but that after entry into secondary school, retention rates are high among girls and school progression rates become comparable between males and females, including at a postsecondary level (Sawada and Loxsin, 2009:341). In Punjab specifically, progression rates at higher levels of education may even be larger among females than among males.

### **Trends in tertiary education:**

The past decades have witnessed a dramatic expansion in tertiary education across all regions of the developing world (exceeding the growth of the school-age population) (UNESCO, 2012). However, by 2009, enrolment rates remained below 20 percent in most of Sub-Saharan Africa and South and West Asia. From 1999 to 2009, the largest increases occurred in the East Asia and the Pacific region, where tertiary enrolments rose by over a 100 percent for men and over 150 percent for women; and in Sub-Saharan Africa, where increases were slightly larger for men than for women (UNESCO, 2012:75-76).

Overall, women have benefited by relatively more than men from the expansion of tertiary education in developing countries. By 2009, women accounted for the majority of tertiary-level students in 93 of 149 countries while a further 10 countries had achieved gender parity (UNESCO, 2012: 76-78). In the remaining 46 countries, there was a male advantage in tertiary enrolments. Most of the countries where men comprise a larger share of tertiary students than women are in Sub-Saharan Africa (Namibia and Botswana being exceptions) and Southern Asia. In most countries in Latin America, a female advantage in schooling persists at the tertiary level (with the exception of Bolivia and Guyana).

Although the gender gap in tertiary enrolments has therefore narrowed considerably, and in many countries, it has reversed, significant differences remain in the fields of specialisation. Across all the developing countries for which there are data, men comprise the majority of graduates in engineering, manufacturing and construction, and the large majority of graduates in computing. Women account for the (mostly large) majority of graduates in the field of education (with some exceptions, including Morocco, Ethiopia and Malawi) and the majority of graduates in the life sciences (UNESCO, 2012: 81-83).

### **Children's work in the household, enrolment and progress through school:**

Recent evidence on gender gaps in schooling shows that despite significant progress towards gender parity in education, in many developing regions girls remain disproportionately excluded from education, and the extent of this exclusion grows as the level of schooling increases from primary, to lower secondary and then upper secondary levels.

A number of reasons have been advanced for why gender gaps in school enrolment persist, particularly at secondary levels. For example, where resources are scarce, parents may invest more in the education of boys than girls, motivated partly by economic incentives: boys may be more able to provide support in old-age because girls marry and move to the husband's family or because of men's better labour market prospects (cf. Fafchamps and Quisumbing, 1999). Other sets of reasons relate to demographic events, including the onset of puberty in girls, teenage

pregnancy and early marriage (cf. Eloundou-Enyegue, 2004; Lloyd, 2006; Lloyd and Mensch, 2008; Oster and Thornton, 2011). In remainder of this section, we consider specifically whether different responsibilities among children and young adults, in market work and particularly in domestic and caring labour, affect their progress through school.

In many developing countries, school-age girls spend more time on housework (including cooking, cleaning, and child care) than boys; while in some countries, school-age boys are more likely than school-age girls to work outside the home. These time allocations of girls and boys may affect school access, particularly as the length of the schooling day increases as children progress through school. Work outside school (in the market or in the home) could also lower the productivity of children's time in school, and therefore their progress through school and the quality of their schooling attainment (Ozarem and King, 2007).

Ozarem and King (2007:41) suggest that market work may be expected to be “more damaging to child schooling than is home work”, because in employment, children will be exposed to more physical and health risks, and employment may be more physically and time-intensive affecting their performance at school. This expectation, together with a traditional definition of work that excludes domestic labour, may help to explain why a growing literature which explores child labour and schooling focuses on children's market work (cf. Heady, 2000; DeGraaf et al., 2003; Beegle et al., 2005; Duryea et al., 2007; and see Hunt, 2008 for a review). This research typically finds that educational outcomes are negatively correlated with children's market work. However, in many of these studies, work in the household is not considered as a form of child labour (Assaad et al., 2010; Zapata et al., 2011).

Some qualitative research probes how girls' responsibility for domestic work affects the nature of their access to education. Jones and Chant (2009) for example, conducted interviews with 60 young men and women in The Gambia and Ghana. Although children in these countries start participating in unpaid work from a young age (at about 7 or 8 years), the workload for girls is far higher: girls perform more chores and spend more time in unpaid household labour, with their responsibilities including housework, as well as the care of younger siblings and older brothers (Jones and Chant, 2009:189). In The Gambia, girls are slightly more likely than boys also to take on paid work, with girls spending up to four hours a day in some combination of paid and unpaid labour (Jones and Chant, 2009:190).<sup>9</sup> Field interviews reveal how “social expectations that women should perform the bulk of reproductive labour in their youth as well as in adulthood, and constraints on young women's personal freedom in respect of their social relationships reduce time dedicated to education and establish fewer contacts relevant to securing paid employment” (Jones and Chant, 2006:184).

Similar findings are suggested in Morley et al's (2009) qualitative study, which focuses on enrolment in tertiary education in Ghana and Tanzania. In both countries, men are more likely than women to pursue tertiary education - more than 60 percent of students enrolled in higher education institutions (based on 2005 - 2007 data) in both countries were male. The expectation

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<sup>9</sup> The duty of school-age girls to contribute to household and paid labour was also identified as becoming more intense with the shift from extended to nuclear households, as this reduced the possibility for girls to share household tasks with other adult women in the household, and increased the risk of schooling disruptions associated with a parent losing employment (Jones and Chant, 2009:190).

that girls undertake domestic work continues into higher education, and interview data with young women revealed “how gendered divisions of labour and women’s socially prescribed domestic responsibilities influence women’s possibility of participating in education at all stages” (Morley et al., 2009).

This qualitative research, however, provides no formal analysis of a link between household labour and educational outcomes. In recent years, a small number of studies have used micro-data to test whether responsibility for domestic and caring labour in the household affects school enrolments. In Egypt, for example, retention rates among girls and boys who enrol in school are similar, but girls are less likely than boys to be enrolled. Assad et al. (2010) use micro-data from 1998 to investigate whether the work responsibilities of girls affects their school enrolment.<sup>10</sup> The study adopts an inclusive definition of work which incorporates labour-market work, subsistence work and domestic chores. Approximately 42 percent of school-age girls (6-14 years) were involved in some form of work, and particularly domestic work, with less than two percent doing market work specifically. The study finds that girls who worked 14 hours or more per week were significantly less likely to be enrolled in school: a ten percent increase in the probability of a girl working reduced the probability of her school enrolment by six percent.

Similar findings on the displacement effect of domestic work on girls' schooling are identified for Bolivia (Zapata et al., 2011). Using 2001 national household survey data for Bolivia, Zapata et al. (2011) find that when child labour is expanded to include domestic work, girls undertake more work than boys: 88 percent of girls (7-14 years) worked during the week, compared with 83 percent of boys in the same age cohort; with a weekly average of 22 hours. Although boys are more likely than girls to undertake market work (32 percent compared with 25 percent), girls are more likely than boys to perform domestic chores (88 percent compared with 80 percent), and they spend more hours per week on these chores (17 hours compared with 13 hours). Multivariate regression analysis shows that girls have a 23 percent higher probability of working and not being in school, than boys. They are also 41 percent more likely than boys to combine working with school. When the majority of work comprises market work, rather than domestic work, then both boys and girls are equally likely to be out of school. However, when the majority of work involves domestic work, then girls are 51 percent more likely than boys to be working and not in school (Zapata et al., 2011).

In these studies, the extent of girls' domestic work is typically found to be larger in households where there are fewer female adults, more young children, and low access to basic services, such as piped water and electricity. Domestic work also increases with illness and death in the household. In a study of rural Kenya, Yamano and Jayne (2005) use 3 waves of panel data (from 1997 to 2002) to explore the effects of working-age adult mortality, in the context of high rates of HIV infection, on the primary school attendance of children. The study finds that working-age adult mortality negatively predicts school attendance but only among children in poorer households (in the lower half of the asset distribution), and particularly before (rather than after) the adult dies. The negative effect is also larger and only significant for girls, suggesting that

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<sup>10</sup> Among school-age children, Assad et al. (2010) find that the reasons for non-attendance at school differ among boys and girls. Among boys, non-attendance is more likely to be the result of dropout, whereas among girls, non-attendance typically derives from non-enrolment. However, the study provides no further description or analysis of the time allocation of boys.

“children, especially girls, are sharing the burden of caring for sick working-age adults and/or that school fees tend to be among the first expenditures curtailed” (Yamano and Jayne, 2005:621).

These findings highlight that domestic work is an important part of child labour policy. Interventions which seek to reduce child labour by focussing only on labour market work will not be effective in enabling female schooling attainment, if girls are primarily responsible for domestic work, and particularly if this domestic work is made more onerous in the context of a limited provision of basic services and high rates of morbidity and mortality.

## Summary

- The past decade has witnessed a further narrowing of school enrolment gaps between developing and developed countries, although these gaps still remain sizeable and they are larger at higher levels of schooling.
- There has also been considerable progress in reducing the gender gap in school enrolments. Within developing regions as a whole, the gender gap in net enrolment rates has narrowed to between one and two percentage points at both primary and lower secondary levels. In some regions, a female advantage in enrolment, particularly at primary school levels, has emerged.
- The increase in net enrolment rates at primary and lower secondary school has been marked in regions where educational access historically has been low and gender gaps high. In Sub-Saharan Africa, Northern Africa, Western Asia and Southern Asia, the gender gap has narrowed to within a few percentage points in primary net enrolments, and to below 8 percentage points at lower secondary levels.
- However, there is also considerable intra-regional diversity. In particular, trends in the Southern Asia and Eastern Asia regions are strongly influenced by trends in India and China respectively.
- Although primary and lower secondary school attendance has increased considerably in developing countries, attendance remains far lower in rural areas and among households in the poorest income quintile.
- A gender gap in grade completion has also narrowed appreciably across developing countries, and in some regions a female advantage has emerged. Gender differences in grade completion which favour males are still observed in Northern Africa, Sub-Saharan Africa, Southern Asia and Western Asia and particularly among older children (16-18 years). However, these gender gaps in grade attainment close or are eliminated when controlling for school attendance, indicating that if enrolled, girls do not progress through school at a slower rate than boys on average.
- In many developing countries, school-age girls spend more time on domestic labour or household work than school-age boys. Ignoring domestic work as a form of child labour

will underestimate the relationship between child labour and school enrolments and it will bias findings on gender differences in this relationship.

## 2. Gender, education and the labour market

### Labour force participation:

The 1980s saw an increase in the global female labour force participation rate (defined as the percentage of individuals 15 years and older employed or unemployed). Since the 1990s, however, there has been a small decline from about 52.3 percent in 1991 to 51.1 percent in 2012. In developed countries, the female labour force participation rate (LFPR) has largely stabilised, at approximately 50 percent in Europe and Central Asia and 60 percent in North America over the period 1990 to 2011 (ILO, 2010; 2012; Elborg-Wortek et al., 2013).

There is more regional variation in the size and direction of change of the female LFPR across the developing world, as shown in Table 1. In some regions, such as South Asia (31.8 percent), the Middle East (18.7 percent) and Northern Africa (24.4 percent), female LFPRs in 2012 were much lower than in the developed regions. In other regions, such as East Asia (66.4 percent), South-East Asia and the Pacific (58.8 percent) and Sub-Saharan Africa (64.6 percent), female LFPRs were higher than in the developed regions on average.

**Table 1. Labour force participation rates, by sex, 1991-2012**

	1991	1995	2000	2005	2010	2012	% change 1991-2012
<b>MALE</b>							
World	80,4	79,5	78,6	77,9	77,1	77,1	-4,1
Developed Economies and EU	72,3	70,8	70,2	69	68	67,5	-6,6
Central and South-Eastern Europe (non-EU) & CIS	74,8	71,4	69,2	68,2	70	70,7	-5,5
East Asia	84,2	83,7	82,1	80,7	79,6	79,4	-5,7
South-East Asia and Pacific	82,6	82,8	82,8	82,7	81,9	81,8	-1,0
South Asia	85	84,1	83,3	83,4	81,4	81,3	-4,4
Latin America and Caribbean	82,3	82	80,7	80,2	79,8	79,5	-3,4
Middle East	78,1	75,9	74	74	73,6	74,3	-4,9
Northern Africa	75,4	75,3	74,9	75,2	74,1	74,3	-1,5
Sub-Saharan Africa	79,3	78,2	77	75,9	76,1	76,3	-3,8
<b>FEMALE</b>							
World	52,3	52,2	52	52,4	51,2	51,1	-2,3
Developed Economies and EU	50,3	50,6	51,8	52,2	53	52,8	5,0
Central and South-Eastern Europe (non-EU) & CIS	53,8	49,9	49,2	48,5	49,7	50,2	-6,7
East Asia	71,2	71	69,7	68	66,9	66,4	-6,7
South-East Asia and Pacific	59,1	58,8	58,5	58,5	58,6	58,8	-0,5
South Asia	36	35,9	35	37,4	31,7	31,8	-11,7
Latin America and Caribbean	41,7	45,5	48,1	51,3	53,1	53,6	28,5
Middle East	13,1	14,3	16,3	19	18,1	18,7	42,7
Northern Africa	21,7	21,9	22,1	22,6	24	24,4	12,4
Sub-Saharan Africa	59,9	61,2	62,7	64,1	64,4	64,6	7,8

Source: ILO, Key Indicators of the Labour Market (KILM), 1991 - 2012

There is also substantial variation across regions in the change in female LFPRs over the two last decades. In East Asia (-6.7 percent), South-East Asia and the Pacific (-0.5 percent) and South Asia (-11.7 percent), the female LFPR has declined. In the other regions, the female LFPR has increased, with particularly large increases in the Middle East (42.7 percent), although from a small base, and Latin America and the Caribbean (LAC). LAC has seen a substantial increase in the participation of women from 41.7 percent in 1991 to about 54 percent in 2012 (i.e. to just above the rate for the developed economies and the EU). As described in Section 1, LAC is also the region with some of the highest enrolment rates for boys and girls, with a gender gap in enrolment favouring females at all education levels by the late 2000s (see also UNESCO, 2012).

Despite the rise in women's participation in some regions, in both developed and developing countries men's LFPRs are still higher than women's. In the developing world, men's LFPRs range from a low of 74 percent in MENA to a high of about 82 percent in South-East Asia and the Pacific. Over the period 1991 to 2012, male labour force participation rates declined in both the developed and developing regions.

At a global level, it has been this fall in the male LFPR (larger than the overall fall in the female LFPR) that has led to a slight narrowing of the global gender gap in labour force participation over these two decades. As we would expect, in regions where the female LFPR increased notably, the gender gap narrowed the most, namely LAC, the Middle East and North Africa. Nonetheless, the gender gap in labour force participation remains largest in the Middle East and North Africa at 55.6 and 49.9 percentage points respectively in 2012. In South Asia the gap is also very large at 49.5 percentage points. The gap is smallest in East Asia and Sub-Saharan Africa (13 and 11.7 percentage points respectively).

**Table 2. Labour force participation rates by sex and age, 1991 and 2012**

	YOUTH (15-24)			NON-YOUTH (25+)		
	1991	2012	% change 1991-2012	1991	2012	% change 1991-2012
<b>MALE</b>						
World	67	56,1	-16,3	85,8	83,7	-2,4
Developed Economies and EU	58,9	49,2	-16,5	75,5	70,9	-6,1
Central and South-Eastern Europe (non-EU) & CIS	56,7	49,6	-12,5	80,3	76,2	-5,1
East Asia	75,3	58,8	-21,9	87,9	84,7	-3,6
South-East Asia and Pacific	65,6	59,2	-9,8	90,9	89,5	-1,5
South Asia	70,3	57,3	-18,5	91,8	90,7	-1,2
Latin America and Caribbean	71,3	62,1	-12,9	87,2	85,3	-2,2
Middle East	57,4	46,5	-19,0	89	84,7	-4,8
Northern Africa	51,7	46,8	-9,5	87,6	85,1	-2,9
Sub-Saharan Africa	58,3	55,9	-4,1	91	87,4	-4,0
<b>FEMALE</b>						
World	51	40,5	-20,6	52,8	54,2	2,7
Developed Economies and EU	52,5	45,3	-13,7	49,8	54	8,4
Central and South-Eastern Europe (non-EU) & CIS	44,2	34,1	-22,9	56,2	53,6	-4,6
East Asia	78	61,1	-21,7	68,5	67,7	-1,2



South-East Asia and Pacific	52,5	45,1	-14,1	62,2	63	1,3
South Asia	32,5	23,4	-28,0	37,7	35	-7,2
Latin America and Caribbean	39,6	42,7	7,8	42,5	57	34,1
Middle East	12,6	13,2	4,8	13,3	21	57,9
Northern Africa	21,6	19,7	-8,8	21,8	26,1	19,7
Sub-Saharan Africa	49,7	51,4	3,4	65,3	71,5	9,5

Source: ILO, KILM 1991-2012.

The LFPR is a useful indicator of what percentage of women of working age are ‘able and available’ to supply their labour. However, it is difficult to say whether the changes in female LFPRs are positive or negative for women. All else equal, increasing school enrolments could lead to female LFPRs falling if more young women remain in school rather than enter the labour force to work or look for work. Table 2 shows that the global decline in the female LFPR since 1991 is due to the declining participation of the 15-24 year old age group, the group most likely to be in education (see also ILO, 2010; 2012). For women in the non-youth group, the global LFPR increased by 2.7 percent over the two decades. In fact, across all regions, and for both males and females, the fall in labour force participation is larger (and the increase smaller), among the youth than the non-youth population. Only in LAC, the Middle East and Sub-Saharan Africa were small increases in female LFPRs for the youth recorded.

A further consideration when interpreting changes in female LFPRs, is whether women are entering the labour market out of ‘choice’ – for example, a rise in female LFPRs because more women are forced into the labour market out of necessity in recessionary times might not be considered a positive outcome for women. Women might also enter the labour market in increasing numbers but not find work, leading to a concurrent increase in the unemployment rate. Therefore it is also important to consider other indicators of women’s involvement in the labour market.

### **Unemployment:**

In the majority of countries around the globe for which data are available in the 2000s (113 out of 152 countries), female unemployment is higher than male unemployment. However the differences are not very large; in 83 of the countries, the difference in male and female unemployment rates was between 0.1 and 5 percentage points (ILO, 2010). Overall, the gender gap in the global unemployment rate was less than a percentage point in 2011 (Table 3): the unemployment rate was 5.7 percent for men and 6.4 percent for women (ILO, 2012). However, compared to the decade before, the gap has increased slightly. In 2000, 6.1 percent of men, and 6 percent of women had been unemployed. This widening may be explained by the effects of the global crisis. Between 2007 and 2009, unemployment rates increased for both women and men, but while for men there was some recovery in the subsequent years, for women the unemployment rate has remained at the new higher level (ILO, 2012).

Table 3 shows the regional variation in unemployment rates. In 2011 the female unemployment rate was higher than the male unemployment rate in all the developing regions except East Asia. Unemployment rates were below 10 percent in all regions except Northern Africa and the Middle East, where the female unemployment rate was just over 18 percent and more than double the male unemployment rate (of 7.9 percent) in 2011.

However, ILO (2010, 2012) cautions that the unemployment rate as a measure of employment access is often less useful in developing than developed economies because in many poor countries, people cannot afford to be unemployed in the absence of social protection. Instead, they take on any work available or engage in informal, subsistence, or unpaid family work for even a few hours a week. The standard definition of employment only requires individuals to have worked for an hour over the previous week, and individuals with very marginal or vulnerable employment will therefore be excluded from the measure of unemployment. Women tend to be more likely to accept such work and the gender gap in unemployment rates will therefore underestimate gender differences in access to employment.

**Table 3. Unemployment rates by sex and region, 2000 and 2011**

	Female		Male	
	2000	2011	2000	2011
World	6.6	6.4	6.1	5.7
Developed Economies and EU	7.3	8.2	6.3	8.7
Central and South-Eastern Europe (non-EU) & CIS	11.0	8.5	10.5	8.9
East Asia	3.9	3.6	5.1	4.9
South-East Asia and Pacific	4.9	4.6	5.1	4.3
South Asia	4.6	4.7	4.4	3.4
Latin America and Caribbean	10.8	9.1	7.3	5.9
Middle East	18.9	18.1	9.1	8.1
Northern Africa	20.9	18.9	11.4	7.9
Sub-Saharan Africa	9.6	8.3	8.3	7.3

Source: ILO (2012).

The gap between male and female unemployment might also be underestimated if there are gender differences in the way people report their labour market status: women might be more likely to report being inactive and involved in household work if they have been unable to find any work, whereas men may be more likely to ‘hold out’ for suitable work, being classified as unemployed in the interim.

To provide a better understanding of whether women’s labour force participation translates into (decent) employment, below we examine employment-to-population ratios (employment as a percentage of the total adult population), and the share of vulnerable employment in total employment.

### **Employment outcomes:**

Table 4 presents employment-to-population ratios for men and women by region from 2000 to 2012. In 2012, the employment-to-population ratio for men was substantially higher in developing regions than in developed regions on average: 74.7 percent compared with 62 percent. For women the relationship is reversed, although the difference is far smaller: the female employment-to-population ratio was 46.6 percent for developing countries and 49 percent for developed countries. Noteworthy is the large gap between the employment-to-population ratios of men and women, and that the gap is much higher in developing regions than in developed regions on average.

Overall, employment-to-population ratios over the last decade have mostly fallen in both developing and developed regions, trends which are perhaps not surprising given that the period includes the 2008 global financial crisis. In developed regions, the employment-to-population ratio has decreased for men, by 4.1 percent, and increased slightly for women, by 2.2 percent. In developing regions, it has fallen for both men and women, with the percentage decrease larger for women than men (4.4 vs 2.4 percent). Overall, women in developing countries experienced the greatest losses on average, despite the rise in schooling enrolment for women over the preceding decades. Consequently, although the gender gap in school enrolments narrowed, the gender gap in the employment-to-population ratio in developing countries actually increased from 0.36 (1 - 48.7/76.5) to 0.38 (1 - 46.6/74.7) between 2000 and 2012. Nonetheless, these findings need to be tempered, for the aggregate trends among women are driven by the decline in employment-to-population ratios particularly in Eastern Asia, and also in Southern Asia. In all other regions, employment-to-population ratios among women have increased.

**Table 4. Employment-to-population ratio, MDG regions (current 2012)**

	2000	2002	2004	2006	2008	2010	2012	% change 2000-2012
<b>MALE</b>								
<b>Developed regions</b>	64.7	63.6	63.5	64.2	64.5	61.8	62.0	-4.1
<b>Developing regions</b>	76.5	76.0	75.7	75.5	75.0	74.7	74.7	-2.4
Northern Africa	65.4	65.0	66.5	67.3	68.0	68.4	67.7	3.5
Sub-Saharan Africa	70.9	70.7	70.4	70.7	70.8	70.8	71.0	0.1
Latin America and the Caribbean	74.8	74.1	74.7	75.4	75.9	74.9	75.3	0.7
Caribbean	66.0	65.0	65.6	66.0	66.5	65.7	65.4	-0.9
Latin America	75.5	74.9	75.4	76.1	76.6	75.6	76.0	0.7
Caucasus and Central Asia	65.5	65.4	65.3	65.9	66.6	67.4	68.4	4.4
Eastern Asia	78.5	77.4	76.1	75.3	74.3	73.7	74.0	-5.8
Eastern Asia excl. China	73.2	73.5	73.2	72.7	72.0	71.4	71.9	-1.7
Southern Asia	78.9	79.1	79.3	79.0	78.2	77.8	77.1	-2.2
Southern Asia excl. India	78.0	77.4	77.4	77.9	77.3	76.8	77.1	-1.2
South-eastern Asia	78.5	77.9	78.2	77.8	77.8	78.4	78.8	0.4
Western Asia	68.2	65.5	64.8	66.1	66.7	67.3	68.4	0.3
Oceania	71.9	72.5	72.7	72.6	72.3	72.2	72.2	0.4
<b>FEMALE</b>								
<b>Developed regions</b>	47.9	47.9	48.3	49.3	49.9	48.9	49.0	2.2
<b>Developing regions</b>	48.7	48.6	48.5	48.2	47.5	46.7	46.6	-4.4
Northern Africa	15.5	14.5	16.3	16.8	18.2	18.2	17.7	13.7
Sub-Saharan Africa	55.6	56.4	57.0	57.5	57.7	57.9	58.1	4.3
Latin America and the Caribbean	42.7	44.0	45.2	46.6	47.7	48.2	49.1	14.9
Caribbean	39.5	40.8	40.7	42.4	43.6	44.1	43.9	11.1
Latin America	43.0	44.2	45.5	46.9	48.0	48.5	49.5	15.1
Caucasus and Central Asia	48.0	48.3	48.3	48.8	49.7	50.0	50.6	5.4
Eastern Asia	67.2	65.8	64.3	63.2	61.9	60.9	61.1	-9.0
Eastern Asia excl. China	54.2	54.9	54.7	55.2	55.0	54.3	54.7	0.9
Southern Asia	32.0	32.9	34.0	33.3	31.2	29.2	28.2	-12.0
Southern Asia excl. India	30.8	31.0	31.8	33.2	33.0	33.9	34.3	11.1
South-eastern Asia	55.6	54.7	54.3	54.6	55.7	55.9	56.5	1.8
Western Asia	19.0	19.1	17.1	17.5	18.1	19.0	20.1	5.4
Oceania	62.8	63.4	63.6	63.6	63.3	63.3	63.3	0.9

Source: ILO, Key Indicators of the Labour Market, 2000 - 2012

Similar to labour force participation rates, there is far less regional variation in the employment-to-population ratios for men than for women. In 2012, the ratios for men were in the 65-70 percent range for Northern Africa, the Caribbean, Caucasus and Central Asia, and Western Asia and in the 70–80 percent range for Sub-Saharan Africa, Latin America, East Asia (including China), Southern Asia (including India), South-eastern Asia and Oceania. There were also no large changes over the time period (with the exception of China).

For women, there is much greater variation, with very low ratios in 2012 in Southern Asia (28.2), Western Asia (20.1) and Northern Africa (17.7), and relatively high ratios in Oceania (63.3), Eastern Asia (driven largely by China) (61.1), and Sub-Saharan Africa (58.1). In the rest of the regions, the ratios range from 44 to 57 percent. There was also more variation in the change over the period for women than for men. As noted above, in Southern Asia and Eastern Asia, declines in the employment-to-population ratio of 12 and 9 percent respectively were particularly large, driven mostly by decreases in India and China. This may be in part because women in the export sectors in these regions were affected disproportionately by the global crisis (ILO, 2012). In contrast, Northern Africa saw a 13.7 percent increase over the period (although from a very small base), and LAC a 14.9 percent increase.

Moreover, even where the share of women in employment has declined, at least part of this fall may derive from young women staying in school longer, as was shown above in the discussion on labour force participation rates. ILO (2012) disaggregates employment-to-population ratios by age cohort; the figures show that in most of the developing regions the employment-to-population ratios for the youngest age cohort (15-24) either stagnated or declined between 2000 and 2012. In contrast, the ratios for the older adult population (25 and over) increased in most regions. Two exceptions were East Asia and South Asia, but the rate of decline in the employment-to-population ratios for the non-youth in these regions was much slower than the rate of decline among the youth cohort.

As an indicator of the quality of employment, Table 5 displays the shares of men and women in vulnerable employment (i.e. in own-account work or family labour) as a percentage of total employment. These shares differ dramatically between developed and developing regions for both men and women, highlighting how unemployment and employment figures in the developing world mask large amounts of underemployment and low-quality employment (Michaelowa and Waller, 2003).

In 2012, in developed regions, only 11 percent of total employment was defined as vulnerable for men (and there was little change over the decade), and for women it was even lower at 8.5 percent (down from 10.4 percent in 2000).

In contrast, in the developing regions, over half of men's employment in 2012 (54.5 percent) was defined as vulnerable, while for women the share was even greater at 60.9 percent. One small positive development in terms of gender equity is that from 2000 to 2012, the share of vulnerable employment declined more for women than for men (by 12.1 percent for women vs. 9.2 for

men), leading to a slight narrowing (in favour of women) in the gender gap in vulnerable employment.<sup>11</sup>

For both men and women, there is large variation across developing regions in the share of employment identified as vulnerable. For men, shares in 2012 range from 19.5 percent in Western Asia and 26.9 percent in Northern Africa to 69.9 percent in Sub-Saharan Africa and 73.3 percent in Southern Asia. There is a similarly large range for women, from 31.7 percent in LAC and 34.1 percent in Western Asia, to 80.4 percent in Southern Asia and 85.5 percent in Sub-Saharan Africa. While the share of vulnerable employment has increased slightly in Northern Africa for women, in the other regions it has declined for men and women, with the largest decreases witnessed in Caucasus and Central Asia, Eastern Asia and Western Asia. The gender gap in 2012 remained large in many countries (particularly Northern Africa and Western Asia and Sub-Saharan Africa), but notably was eliminated in LAC.<sup>12</sup>

**Table 5. Vulnerable employment as a percentage of total employment, MDG regions (current 2012)**

	2000	2002	2004	2006	2008	2010	2012	% change 2000-2012
<b>MALE</b>								
<b>Developed regions</b>	11.5	11.2	11.7	11.5	11.1	11.3	11.0	-5.1
<b>Developing regions</b>	60.0	59.6	58.7	57.7	56.0	55.7	54.5	-9.2
Northern Africa	29.2	30.4	30.9	31.4	27.8	27.3	26.9	-7.8
Sub-Saharan Africa	74.0	73.3	71.0	70.2	69.4	70.1	69.9	-5.5
Latin America and the Caribbean	35.1	35.7	34.5	32.3	31.1	31.6	31.7	-9.6
Caribbean	30.8	32.0	32.1	32.6	32.5	33.2	35.6	15.5
Latin America	35.4	35.9	34.7	32.3	31.0	31.5	31.5	-11.0
Caucasus and Central Asia	49.2	48.7	46.5	43.6	40.9	40.6	39.6	-19.6
Eastern Asia	52.6	50.9	49.9	48.9	46.2	45.0	43.2	-17.9
Eastern Asia excl. China	32.1	31.7	30.9	30.6	29.4	30.0	29.1	-9.2
Southern Asia	76.7	76.9	76.6	76.6	75.0	75.2	73.3	-4.4
Southern Asia excl. India	65.9	66.0	65.6	64.9	64.5	63.9	63.4	-3.8
South-eastern Asia	61.9	61.7	59.9	58.2	58.1	57.3	56.5	-8.7
Western Asia	28.4	27.5	27.3	22.5	20.6	20.0	19.5	-31.3
Oceania	68.4	71.2	70.8	68.2	70.4	69.3	68.3	-0.1
<b>FEMALE</b>								
<b>Developed regions</b>	10.4	9.6	9.6	9.3	8.9	8.8	8.5	-18.3
<b>Developing regions</b>	69.2	67.8	67.5	65.9	63.5	62.6	60.9	-12.1
Northern Africa	45.9	39.0	50.4	48.6	48.3	48.5	47.5	3.5
Sub-Saharan Africa	87.0	86.7	86.3	85.9	85.4	85.6	85.5	-1.7
Latin America and the Caribbean	36.0	36.9	36.2	32.8	32.0	32.0	31.7	-11.9
Caribbean	23.3	24.1	24.2	24.6	25.0	24.9	26.2	12.4
Latin America	36.9	37.8	37.0	33.4	32.5	32.5	32.1	-13.1
Caucasus and Central Asia	50.1	48.5	46.4	45.1	43.6	43.4	41.7	-16.6
Eastern Asia	64.5	61.8	61.2	60.3	56.3	54.2	51.6	-19.9
Eastern Asia excl. China	38.8	36.4	35.1	34.7	31.8	31.1	29.8	-23.4
Southern Asia	88.2	86.3	86.9	84.6	82.9	83.1	80.4	-8.8

<sup>11</sup> However, ILO (2010) notes that in most regions men are more likely to be in own account work while women are more likely to be in unpaid family labour, so even if the overall gender gap is falling, a greater share of men than women are at least still receiving pay for their vulnerable work.

<sup>12</sup> ILO (2010) summarises additional information on the 'quality' of work captured in the ILO's Key Indicators of the Labour Market database on part-time work, time-related under-employment, and informal employment, for instance. These data are still not consistently available for all countries and regions, so we do not describe them any further here. However, the data generally suggest women are more likely than men to be in these kinds of work.

Southern Asia excl. India	81.7	77.7	78.9	79.2	79.6	79.0	78.3	-4.1
South-eastern Asia	70.6	70.2	68.5	66.0	65.5	64.7	63.7	-9.8
Western Asia	51.5	48.9	45.6	37.8	35.6	36.1	34.1	-33.8
Oceania	80.4	81.9	81.5	81.5	81.8	80.7	80.0	-0.4

Source: ILO, Key Indicators of the Labour Market, 2000 - 2012

Note: The ILO defines vulnerable employment as own-account workers (the self-employed without hired employees) and contributing family workers.

## **Labour market outcomes and education:**

Although almost universal enrolment in school and gender parity in education has been achieved in developed regions, the sections above describe how women's participation in the labour market in terms of labour force participation rates and employment-to-population ratios remains below that of men's (see also OECD, 2011). In developing regions, despite large gains for women relative to men in education over the past few decades, gender gaps in employment outcomes remain substantial. The gap in favour of men in the employment-to-population ratio widened slightly in developing countries on average, although this was driven by a large decline in the ratios among women in India and China. One positive development over the period is that, among the employed, the gender gap in the share of vulnerable employment has narrowed, with the share of vulnerable employment in total employment decreasing more for women than for men on average.

Although education, particularly at higher levels, is widely documented to improve labour market outcomes, aggregate country data reveal that gender progress in the labour market typically has lagged behind gender progress in schooling. Gender gaps in the labour market can persist even where women and men are equally educated. In this section, we review the literature on labour market outcomes and education. We first consider the relationship between education and employment access, highlighting in particular some of the common supply- and demand-side reasons, for why gender gaps in schooling and employment may not be well correlated in the aggregate data. We then consider the relationship between education and gender gaps in earnings.

### **i) Labour force participation, employment and education**

One obvious supply-side factor, which affects women in developed and developing countries, is that women spend more time on housework and unpaid care than men (ILO, 2012), whether by choice or out of social, cultural or religious obligation. In OECD countries, employment patterns tend to start diverging particularly in the 25-34 year age range, when women enter the child-bearing phase, and in countries that have policies aimed at helping women to reconcile the work-family divide (for e.g. in the Nordic region), women's labour force outcomes are more similar to men's (OECD, 2011).

Ganguli et al (2013) provide further evidence that women's roles as wives and mothers impact their labour market outcomes in an analysis of micro-level census data for a sample of 40 developed and developing countries (from Africa, Asia, Europe and Latin America). They analyse data for 35-44 year olds over approximately a ten-year period in the 1990s and 2000s to explore why the narrowing (and in some countries, closing) of the education gap has not resulted in a similar narrowing of the labour market gap between men and women. They find that in 27 of

40 countries, the gender gap in years of schooling closed, and with the exception of India, the gap had decreased in all countries. The labour force participation gap also narrowed in most countries, with countries with high initial gaps in particular experiencing decreases in the gap (suggesting convergence). However, they find a substantial amount of heterogeneity in the size and change in the gaps across countries, such that in country-level regressions, there is no significant relationship between the education gap and the labour force participation gap, or between the changes in these gaps. Instead, the labour force participation gap between men and women is more closely related to ‘marriage’ and ‘motherhood’ gaps in employment, i.e. the gaps in employment between married and single women and between women with or without children. They suggest that the variation in the size of these gaps across countries is likely influenced by the compatibility of work with marriage and motherhood. They also highlight the need for more research on why gaps in labour force participation are not eliminated after controlling for the motherhood and marriage effects.

Another possible explanation for the poor correlation between education and labour market gender gaps (and the change in these over time) evident in the aggregate data, could be the relatively weak relationship between certain levels of schooling attainment and labour market participation that has been identified using micro-data for a number of developing countries. In particular, relatively low rates of participation have been found for those with primary and lower secondary schooling (the levels of education for which gender gaps in schooling are smallest) compared with those with no schooling and tertiary education.<sup>13</sup> Thus, whereas in OECD countries, a clear positive relationship between education and participation generally exists, in developing countries, the relationship more closely resembles a U-shaped curve. This has been explained by the fact that individuals with little or no education tend to come from very poor households, forcing them to accept whatever low-paid, low-skilled work is available (particularly in the absence of social security), while those with higher levels of education are more likely to be able to afford inactivity. At the highest levels of education, particularly tertiary, the opportunity cost of not working is very high, resulting again in high rates of labour force participation.

Cameron et al (2001) use household survey data from the mid-1970s for five Asian countries (Indonesia, Thailand, Korea, Sri Lanka and the Philippines) to estimate labour force participation regressions for married women aged 15 to 49. In all five countries, tertiary education increased the probability of women participating compared with no schooling, and, except for Korea, the effect was large. In Thailand, secondary education also increased participation, and in Indonesia, intermediate and secondary schooling increased participation. Therefore in most of the countries, primary, intermediary and secondary education did not have a positive influence on participation compared with no schooling in individual-level regressions, and in Sri Lanka, the effect of the lower levels of schooling was even negative compared to no schooling, resulting in a strong U-shaped curve. The authors suggest that the weak relationship with primary schooling in particular might be due to the low wage returns at this level coupled with the possibility that women with primary education come from better-off families (compared to those with no schooling at all), reducing the need to work.

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<sup>13</sup> Of course, even though the labour market benefits for women at the lower levels of schooling may not be large, other benefits deriving from education have been well-documented, including declining fertility, lower infant mortality and improved child health.

The influence of cultural norms regarding women's work is also highlighted in the study by Cameron et al (2001). The authors suggest that the variation in the relationship between education and female LFP *across* the countries is likely to reflect heterogeneity in such norms: "In countries with more traditionally defined gender roles, like Korea and Sri Lanka, increases in women's education levels are unlikely to bolster women's labour force participation rates. However, in countries where gender roles are less rigidly defined, like Thailand and the Philippines, there is likely to be a stronger relationship between women's education and labour force participation" (Cameron et al., 2001: 475-6).

In the study by Cameron et al (2001), only female labour force participation regressions are estimated. In Michaelowa and Waller (2003), the relationship between education and labour force participation is presented for men *and* women, although only bivariate correlations are shown. They have comparable micro-data from 1998 for seven developing countries (Brazil, Chile, Indonesia, Malaysia, Peru, Thailand and Uruguay) and they restrict their sample to 25-64 year olds to exclude the group that are most likely to still be in education. Men at all levels of education, from no schooling to post-secondary schooling, have high labour force participation rates of 80 percent or more, and at each level of education, the rate is higher than that for women. The gap between men's and women's rates is particularly large at the lower levels of education, and narrows substantially at higher levels of education. This is because women's labour force participation rates only start increasing at the upper secondary and especially post-secondary levels, with generally little difference between the participation rates of women with no schooling and the lower levels of schooling. In the poorest two countries, Peru and Indonesia, the U-shaped pattern emerges among women, where those with no schooling are even more likely to participate than those with primary or secondary education.

Using micro-data from the late 1980s and the early 1990s in India, Kingdon and Unni (2001) and Duraisamy (2002) estimate the probability of participation for both men and women aged 15-65 in a multivariate framework. Participation is defined differently here, as being in wage employment.<sup>14,15</sup> In both studies, a U-shaped curve between education and participation in wage work is found, and the relationship is stronger for women than men. Only post-secondary education increases participation in wage work among women and the effects at this level are much larger for women than men. Kingdon and Unni (2001) suggest that the downward-sloping part of the curve for women could reflect that it is "socially acceptable for low-caste women to work" while the upward-sloping part might have to do with the very high returns to schooling at the post-secondary level for women (discussed below) greatly increasing the economic incentive to work. Other reasons may be that women who acquire higher education are a select group of women with more progressive attitudes towards work, or that higher education has a 'modernizing influence' on young women in India, changing their ambitions and aspirations (Kingdon and Unni, 2001: 184).

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<sup>14</sup> While Kingdon and Unni (2001) refer to their model as predicting 'labour force participation', the dependent variable is defined as equal to one if the woman was working for cash in regular or casual work (i.e. the unemployed and self-employed are not included as labour force participants).

<sup>15</sup> In both studies, the focus is on estimating the differential returns to schooling among men and women in India, with wage-work participation regressions estimated in order to account for sample selection.



Kolev and Sirven (2010) analyse the relationship between education and various labour market outcomes in a bivariate framework in a cross-country study of 18 African countries for which they have comparable household survey data from around 2000. They find that, for 15-64 year olds, at all levels of education (no education, primary, secondary and tertiary) the female employment-to-population ratio is lower than the male ratio and the female unemployment rate is higher than the male rate. For both men and women, there is a U-shaped relationship between education and employment and an inverted U-shaped relationship between education and unemployment. Interestingly, for both men and women, the unemployment rate for those with no education is even lower than the unemployment rate for those with tertiary education (while the employment-to-population ratio is higher). This might reflect that those with tertiary education can afford to wait for a suitable job to be offered. Another important result is that, despite this ambiguous relationship between education and employment/unemployment, there is a clear association between education and job outcomes among the employed. Working poverty and underemployment decline substantially as educational attainment rises, while the probability of wage employment (compared to self-employment or informal employment) rises. The gender gap in these outcomes also narrows as education rises, and especially for those with tertiary education, highlighting the importance of higher education in particular for gender equity.

Women's labour market participation and access to (decent) employment relative to men's will also depend on the demand side of the labour market. Although based on macroeconomic trends rather than micro-data, Hossain and Tisdell (2005) on Bangladesh provide an example of how structural changes on the demand side of the economy can lead to an increase in women's labour force participation and employment. They present data to show that from the 1970s, great strides were made towards gender parity at all levels of school enrolment and in grade attainment, and since the mid-1980s especially, female LFPR and women's share in total employment also increased dramatically. They attribute the rapid growth in the latter to the expansion in export-oriented manufacturing (especially the garment industry) which created jobs mostly for women. However, while there has been some limited growth in women's share of the more skilled jobs (professional and managerial) in Bangladesh, most of the gains in wage work have been in unskilled jobs.<sup>16</sup> This phenomenon has been documented for a number of other countries in Asia which saw the rapid growth of low-paid jobs in the export sector favour women (ILO, 2010).

In addition to the growth of low-paid jobs for women, a number of studies from the 1990s especially documented how the 'feminisation' of the labour force also coincided with the 'informalisation' of work across the developing world, in part in response to the need for flexibility in a globalising environment and in part due to the downsizing of the public sector, an important source of formal work opportunities for women (for example, Cagatay and Ozler, 1995; Mehra and Gammage, 1999; Standing 1999; Ertürk and Darity, 2000).

Ghana is one such country in which formal wage employment has been unable to support the rise in women's labour force participation (South Africa is another; see Case Study Report), despite increases in women's education (Sackey, 2005). Enrolment in primary and secondary schooling for girls grew from the mid-1970s such that the gender gap had been reduced to 8 percent and 14

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<sup>16</sup> The rise in women's labour force participation in Bangladesh was also partly driven by the availability of micro-finance for women (through the Grameen Bank for e.g.), but this would have affected generally low-skilled self-employment.

percent respectively by 2000. However, over the same period, formal sector employment shrunk, partly due to reductions in the public sector following the structural adjustment of the mid-1980s. Therefore, while female labour force participation rose over the 1990s (from 77.3 to 86.9 percent), women's participation in wage employment stagnated at about 10 percent of total employment. Instead, unemployment among women rose (from 5.4 to 8.7 percent between 1991 and 1998), as did their participation in informal activities and self-employment. Even though the increase in education in Ghana has not translated into more decent quality work for women overall given demand-side constraints, education has been important in the competition for the limited formal jobs available. In a multinomial logit model of employment type, Sackey (2005) finds that, among employed women, years of schooling significantly increase the chances of securing wage employment and significantly decrease the chances of being in self-employment, compared to unpaid labour.

Studies that exclusively examine the relationship between education and labour force participation or employment among women are far less common in developing countries than in developed countries (as has been noted elsewhere, see Cameron et al 2001). There appears to be a far more developed literature examining the implications of schooling for earnings in developing countries, which we review below.

## **ii) Gender earnings gaps and the returns to schooling**

A gender gap in earnings, in favour of men, is widely observed across developing countries, although the size of the gap also varies considerably. In a study of nationally representative household survey data for 64 countries<sup>17</sup>, for example, Hugo et al (2011) document gender differences in the average hourly earnings of men and women (aged 15 to 65 in both wage and self-employment) which range from 8 percent of average female earnings in the MENA region and 10 percent in the EAP region, to 48 percent in countries in South Asia (SA).

The gender gap in earnings is commonly explained as deriving from a combination of differences in personal endowments (particularly productivity-related endowments or income-generating characteristics) and differences in the returns to these endowments. One of the most important of these endowments is education.

Increased education is consistently found to increase earnings - partly because more education increases access to higher-paying occupations, and to higher-earning jobs within these occupation types. An important reason, therefore, for why women have earned less than men on average is that women have had lower levels of schooling than men.

However, studies typically find that gender disparities in earnings are explained not only by gender differences in endowments. Rather, men and women face different earnings structures, and different returns to their endowments. In particular, men receive higher (private) returns to their education than women. This means that the increase in earnings that derives from additional years or levels of schooling is larger *among* men than it is *among* women. If men with more education are compared to men with less education, and women with more education are

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<sup>17</sup> Most of these surveys were conducted in the 2000s, with several from 2008, but some were also undertaken in the 1990s.

compared to women with less education, then the difference in earnings (between the more and the less educated) would be larger among men than among women. These differences in the returns to education are mostly understood as reflecting different treatment in the labour market because of discrimination, including differential access to types or grades of employment. But they can also derive from differences in the circumstances and choices of women compared to men (Dougherty, 2005).<sup>18</sup>

Higher returns to men's education help to explain why gender gaps in earnings can persist even in countries where the gender gap in education has narrowed considerably or even been reversed. For example, although the average (unadjusted) gender earnings gap among countries in the EAP region<sup>19</sup> is low (at 10 percent), women in employment are also more educated than men. Accounting for these gender differences in education increases the size of the (adjusted) earnings gap, indicating that the schooling attainment of women and men is not equally rewarded in the labour market (Hugo et al., 2011).

However a gender gap in earnings can still persist even where there is no gender gap in schooling and where the returns to education are *lower* among men than among women. If the earnings trajectory for women is positioned below the earnings trajectory for men, then even if education increases the slope of the earnings trajectory by more for women than for men, women's earnings may still not "catch up" to men's earnings. An important reason for why women's earning trajectory may lie below that of men's concerns occupational segregation and the kinds of pay structures associated with typically "female" and "male" occupations. Compared with "male" occupations, "female" occupations may pay poorly, but as Dougherty (2005:978) explains, this does not exclude the possibility that within "female" occupations, education is valued relatively highly (and women therefore receive high returns to their education).

Although commonly reported for developed countries, and particularly the USA (Dougherty, 2005), there is now considerable evidence of higher returns to female education in developing countries - in Ghana, South Africa, Kenya and Burkina Faso (Schultz, 2003), Nigeria (Aromolaran, 2006), Bangladesh (Asadullah, 2006; Riboud et al., 2007), Pakistan (Aslam, 2007; Aslam et al., 2008; Riboud et al., 2007), India (Kingdon and Unni, 2001; Riboud et al., 2007); Sri Lanka (Riboud et al., 2007), Indonesia (Purnastuti et al., 2013) and China (Ren and Miller, 2012). A summary of selected studies and findings is included in Table 6.

Gender differences in the returns to education are commonly estimated using separate Mincerian-type earnings regressions for men and women (typically with the log of hourly earnings as the dependent variable). To capture the full effect of education on earnings, the regressions include a parsimonious set of controls, excluding those variables (such as occupation type) which may themselves incorporate the effects of education.

Several studies estimate the returns to years of schooling, providing an estimate of the average percentage increase in earnings for each additional schooling year completed. But studies which

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<sup>18</sup> For example, women may "choose" jobs or job trajectories which make it easier for them to accommodate paid employment with childcare, but which have a flatter (or more compressed) earnings trajectory .

<sup>19</sup> These countries are Vietnam, Mongolia, Cambodia, Indonesia and Micronesia.

distinguish among levels of education (primary, secondary and post-secondary), show that the increase in earnings is not constant for each level of education. In many developing countries in recent decades, the returns to education are found to be lower for primary schooling than for higher levels of schooling, and in several developing countries, the returns are convex, i.e. earnings increase at an increasing rate as the level of education rises (cf. Schultz, 2003; Aslam et al., 2008; and Colclough et al., 2010 for a review of studies). The common explanation for this convexity is that it reflects a scarcity premium because of a restricted supply of labour force participants with higher levels of education (Schultz, 1988).

In a few countries, including Pakistan (Riboud et al., 2007), Bangladesh (Asadullah, 2006) and among Africans in South Africa (Schultz, 2003), rates of return to education have been estimated as being higher for women than for men across all education levels. But in most countries - including Nigeria, Kenya, Burkina Faso, Ghana, Sri Lanka and Indonesia - returns are not uniformly greater among women than men at all levels of education (cf. Schultz, 2003; Aromolaran, 2006; Riboud et al., 2007; Purnastuti et al., 2013; see also Patrinos, 2008). Rather, returns are typically larger among women for higher levels of education, and particularly secondary schooling, while they are frequently larger among men for primary schooling.

Despite higher returns to women's education, these studies still find that women earn significantly less than men, even when the gender gap in education has narrowed (or closed). As noted earlier, the earnings disparity persists because the earnings function for women is positioned below the earnings function for men (Aslam, 2009). At every level of education, *including no education*, women earn less than men on average. In some countries, the difference in the position of the earnings function for men and women can be substantial. In Bangladesh, for example, rates of return are higher for women than men at every level of education. However, among men and women with the same level of education (and living in the same broad area type, and with the same work experience), women earned 65 percent less than men on average (Asadullah, 2006).

Higher rates of return to secondary (and in some countries post-secondary) education for women, however, means that the gap in earnings falls at secondary (or higher education). Several studies identify that the average gender gap in earnings is larger among those with lower schooling attainment (no education or primary schooling) (cf. Aslam et al., 2008; Hugo et al., 2011). This is because among those with no schooling, men earn substantially more than women, and the increase in earnings derived from primary schooling is typically larger for men than for women. At higher levels of education, where returns are larger among women than among men, the gender gap in earnings narrows (i.e. the earnings functions start to converge). Although the increased education of women therefore has not eliminated the gender earnings gap, it has reduced the size of the gap.

A number of reasons have been suggested for why returns to education would be larger among women than men; and conversely, why women face smaller returns to primary education. However, few studies systematically evaluate the possible explanations which they provide. A common reason concerns the relative scarcity of human capital.<sup>20</sup> Because of gender gaps in

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<sup>20</sup> This is also an explanation for why returns to higher levels of education are larger in developing than developed countries.

schooling, the supply of educated female labour is more limited, and this increases the relative earnings advantage for women with more education (Aslam et al., 2008).<sup>21</sup>

However, larger returns to female education are still documented even where schooling attainment has increased and women in the labour force are more educated than men (i.e. where the supply of educated female labour is not limited, or not more so than the supply of educated male labour). In a study of Indonesia, for example, Purnastuti et al. (2013) show that a greater share of women than men in employment had post-secondary education (college, undergraduate and a master's degree) in 2008. Although from 1993 to 2008, returns to education declined, both for men and women with primary schooling, some levels of secondary schooling and college education, gendered patterns in returns to education remained. Returns to senior secondary schooling (vocational and general) and to college education were larger among women than men; while they remained larger among men with primary schooling. Moreover, although returns to a university education increased for both men and women, the increase was larger for women.

Purnastuti et al. (2013:235) attribute these gender differences in returns to “gender-specific changes in employment levels across industrial sectors”, and particularly the increasing importance of the trade and services sectors, which would have favoured labour market outcomes for women. Nonetheless, despite these patterns in levels of, and returns to, education, women in Indonesia continued to earn significantly less than men at all levels of education. This may be because women gained access to sectors where earnings start very low but where returns to schooling are relatively high.

Another possible explanation for larger returns to female secondary (and higher) education is that the extent of discrimination decreases as education increases. For example, more educated women may be more able to refuse discriminatory wage offers that undervalue their human capital. Studies for the USA (Dougherty, 2005) and for Pakistan (Aslam, 2007) find that education reduces the “unexplained” portion of the gender gap resulting from discrimination.

Most studies also recognise that gender differences in returns to education may derive from (or at least be biased by) the effects of unobservable characteristics and endogeneity in the earnings estimations. For example, there may be a male-female differential in the quality of schooling, with females learning more for each level of school attainment. In the absence of data, studies are not able to control for the quality of schooling attainment in earnings regressions, but there does not seem to be evidence among school-leavers to support this argument (Altinok et al., 2014; Else-Quest et al., 2010). However, there may also be selection effects among females into employment, particularly when female labour force participation rates are relatively low compared with male participation rates. In this case, there may be greater positive self-selection among women into the labour force. For example, women with a better quality of schooling attainment, or women with more motivation and ability, will be more likely than other women to enter the labour force. By not controlling for these unobservable characteristics of women in employment, the returns to education among women will be over-estimated.

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<sup>21</sup> Analogously, a large supply of female labour with no or little schooling depresses wage levels for typically feminised occupations such as domestic work.

Studies which estimate gender differences in the returns to education typically report that the findings are robust to models which control for selection (particularly Heckman-type models). But, most studies prefer to report OLS estimates because of the difficulties of finding suitable instrumental variables (or exclusion restrictions) with which to estimate selection into employment independently of earnings.

The explanations for gender differences in returns to education focus primarily on factors relevant to wage employment, with little discussion of self-employment. Some studies include both the wage employed and the self-employed, but several restrict the sample only to those with wage employment. This restriction can exclude a sizeable share of women's employment in developing countries, and can present an incomplete picture of gender differences in the returns to education. For example, in Pakistan in 1999, Aslam et al. (2008) find that wage employment represented less than 50 percent of all women's employment. They estimate separate earnings regressions for men and women in wage and self-employment, and find that returns to years of schooling are larger among women than men in both types of employment. But among young adults (16 to 30 years), gender differences in returns to education are considerably more pronounced among the wage employed than the self-employed.

### **Summary:**

- Over the past two decades in developing countries, the gender gap in labour force participation rates has narrowed slightly. At a global level, this has been driven by a faster decline in the male labour force participation rate than in the female labour force participation rate. There is substantial regional variation however, with LAC, MENA and SSA showing a significant narrowing of the gap due to rising female LFPRs. Further, where female LFPRs have declined, this is driven in large part by a fall among the youth cohort, the group most likely to be in school for longer.
- Women remain more vulnerable to unemployment than men in all developing regions, with the exception of East Asia. The gender gap in unemployment rates is particularly high in Northern Africa and the Middle East.
- Lower labour force participation rates and higher rates of unemployment among women result in large gender gaps in employment-to-population ratios. Over the period 2000 to 2012, the gender gap in developing regions widened overall, as the employment-to-population ratio for women declined by more than the ratio for men. However, these trends are driven particularly by the fall in employment-to-population ratios in East Asia and Southern Asia, whereas in all other developing regions, employment-to-population ratios among women increased.
- Unemployment and employment figures for developing regions mask large shares of vulnerable work among men and women. The share of vulnerable employment as a percentage of total employment declined from 2000 to 2012 for men and women in developing countries on average, with the fall larger for women. This led to a slight narrowing of the overall gender gap in the share of vulnerable work among the employed.

However, in most regions (except Latin America and the Caribbean) the gender gap in the share of vulnerable employment remains large.

- Traditionally defined gender roles, sustained by cultural norms, help to explain why progress in reducing gender gaps in the labour market has been less marked than progress in reducing gender gaps in schooling.
- In developing countries, high levels of education typically increase women's participation in the labour market and their access to employment, but at lower levels, the relationship between education and participation in the labour market may not be positive.
- Among the employed, the gender gap in earnings persists even among equally educated men and women. Among both men and women, earnings rise as education increases. However, where the (private) returns to education are greater among women than among men, particularly at higher levels of education, the gender gap in earnings narrows as education increases.

**Table 6: Higher rates of return to female education in developing countries (selected studies)**

	<b>Countries (date of survey - latest)</b>	<b>Sample</b>	<b>Schooling variable</b>	<b>Estimation</b>	<b>Returns higher for women</b>	<b>Returns higher for men</b>
Schultz (2003)	Ghana (1991); Cote d'Ivoire (1987); Kenya (1994); South Africa (1993); Nigeria (1999); Burkina Faso (1998)	Wage employed	Levels of education	OLS	Ghana: Secondary and higher Kenya: Secondary and higher South Africa: Among Africans, all levels Nigeria: secondary and post-secondary school (but not for women 35-44) Burkina Faso: secondary and post-secondary	Cote d'Ivoire: All levels  South Africa: Whites: all levels  Other countries: primary
Aromolaran (2006)	Nigeria (1996-1999)	Wage employed + self-employed	Years of schooling + levels of education	OLS	Years of schooling: wage employment Education levels: secondary and post-secondary in both wage and self-employment	Years of schooling: self-employment  Education levels: primary
Asadullah (2006)	Bangladesh (1999/2000)	Wage employed	Years of schooling + levels of education	OLS and results robust to Heckman selection model	Higher for women (13.2 percent) than men (6.2 percent) for each additional schooling year.	
Riboud (2007)	Bangladesh (2004); India (2004); Pakistan 2000/2001); Sri Lanka (2000/2001)	Wage employed	Levels of education	OLS	Pakistan: all levels India and Sri Lanka: all levels except primary Bangladesh: primary, secondary and tertiary.	India and Sri Lanka: primary Bangladesh: higher secondary
Aslam et al. (2008)	Pakistan (1998/1999)	Wage employed + self-employed	Years of schooling	OLS (but robust to selection model)	Higher in both wage employment and self-employment. But gender differences more pronounced in wage employment	
Kingdon and Unni (2001)	India (1987/1988): two urban districts only	Wage employed	Years of schooling + levels of education	Heckman selection model (log of daily wages)	Higher for years of schooling.  Education levels: secondary and graduate education.	Higher for middle schooling in Madhya Pradesh.
Purnastuti et al. (2013)	Indonesia (2007/2008)	Wage employed + self-employed	Levels of education	OLS (log monthly earnings); results robust to Heckman selection model	All levels except primary	Primary



### 3. THE SCHOOL-TO-WORK TRANSITION

Aggregate data on labour market outcomes by age cohort and country-specific studies on the school-to-work transition provide ample evidence that the youth, despite being more educated on average than earlier generations, are in a much worse off position in the labour market. This is the case for both young men and women compared with older men and women. Further, among the youth, women tend to fare worse than men.

The upper frame of Table 7 below shows that gendered differences in labour market outcomes persist even among the generally more educated youth cohort. Labour force participation rates in 2011 were lower for young women compared with young men in all regions of the world, except for East Asia. Differences in favour of men are particularly large in South Asia and in the Middle East and Northern Africa, perhaps reflecting entrenched cultural norms in these regions. Unemployment rates are higher, and employment-to-population ratios are lower, for young women compared with young men in all regions of the developing world, again except for East Asia. Differences in unemployment rates by gender are notably large in Latin America and the Caribbean and in the Middle East and Northern Africa.

**Table 7. Labour market statistics by gender, age cohort and region, 2011**

	LFPR		Unemployment rate		Employment-to-population ratio	
	Female	Male	Female	Male	Female	Male
<b>YOUTH (15-24)</b>						
World	40.7	56.2	12.9	12.3	35.4	49.3
Developed Economies and EU	45.1	49.0	16.0	18.2	37.9	40.1
Central and South-Eastern Europe (non-EU) & CIS	34.1	49.4	18.1	17.4	27.9	40.8
East Asia	61.5	59.0	7.4	10.8	57.0	52.7
South-East Asia and Pacific	45.1	59.3	12.9	12.6	39.3	51.8
South Asia	23.5	57.6	10.8	9.4	20.9	52.2
Latin America and Caribbean	42.6	62.4	18.7	11.9	34.6	55.0
Middle East	13.1	46.6	39.9	21.9	7.8	36.4
Northern Africa	19.6	47.0	41.5	21.3	11.5	37.0
Sub-Saharan Africa	51.4	55.9	12.8	11.2	44.8	49.6
<b>NON-YOUTH (25+)</b>						
World	54.2	83.8	4.9	4.3	51.6	80.2
Developed Economies and EU	54.1	71.1	7.1	7.5	50.2	65.8
Central and South-Eastern Europe (non-EU) & CIS	53.6	76.2	7.1	7.4	49.8	70.6
East Asia	67.9	85.0	2.8	3.9	66.0	81.7
South-East Asia and Pacific	63.0	89.7	2.7	2.3	61.3	87.6
South Asia	35.0	90.8	3.1	1.9	33.9	89.1
Latin America and Caribbean	56.7	85.4	6.8	4.4	52.8	81.7
Middle East	20.7	84.7	12.3	5.1	18.1	80.4
Northern Africa	25.9	85.2	12.4	4.9	22.7	81.0
Sub-Saharan Africa	71.4	87.4	6.6	6.0	66.6	82.1

Source: ILO (2012)

Table 7 also shows that compared with the older cohort of women and men (lower frame), labour force participation rates are lower among young women and men in all regions. This would be

expected given that the youth (aged 15-24 years) are more likely to be in education. However, unemployment rates are also substantially higher and employment-to-population ratios substantially lower, among the youth compared with the non-youth. For example, in most regions of the developing world, unemployment rates for the youth are at least two to three times as high as unemployment rates for the non-youth, with particularly large differences in South-East Asia and the Pacific, South Asia, the Middle East and Northern Africa.

It has been suggested that the labour market conditions facing the youth of recent generations are much poorer compared with earlier generations, despite their higher levels of education, because of a fall in formal job opportunities due in part to the effects of structural adjustment across the developing world, including the rationalisation of jobs in the public sector (Calvès and Schoumaker, 2004). This situation has been exacerbated by the global financial crisis. Falling labour force participation among the youth (partly due to increased enrolment) and rising unemployment, have led to a decline over the past decade in the employment-to-population ratios among young men and women. The global employment-to-population ratio for young men fell from 53.1 percent in 2000 to 49.3 percent in 2011, while for young women the fall was slightly larger from 38.9 percent to 35.4 percent (ILO, 2012).<sup>22</sup> Entering the labour market during a time of economic stagnation has important long-term consequences for the youth, reflected in lower lifetime earnings and the inability to make a successful transition into employment in the future (Guarcello et al, 2005; Matsumoto and Elder, 2010; ILO, 2013). This ‘scarring’ among the youth, and its consequences, have been evident particularly in the Middle East and Northern Africa (ILO, 2013).

Data from around the world also suggest an increasing tendency of the youth to accept part-time, informal, or temporary work in the absence of stable employment opportunities, a phenomenon which has intensified since the crisis, and is more severe in developing countries and for women (Calvès and Schoumaker, 2004; Guarcello et al, 2005; UNGEI, 2012; ILO, 2013). Some regions are more affected than others. For instance, even though youth unemployment rates are relatively low in South-eastern Asia and the Pacific<sup>23</sup>, South Asia and Sub-Saharan Africa, they mask a large share of the youth in insecure work, likely related to high levels of poverty in these regions.

Much of the work described above is based on cross-sectional data. In a recent project on the youth and the labour market, the ILO in conjunction with various local partners, conducted a set of School-to-Work Transition Surveys (STWS) that capture detailed work histories on the youth aged 15-29 years, including information on the quality of work. Based on STWSs conducted in 2004/5 in Azerbaijan, China, Egypt, Iran, Kosovo, Mongolia, Nepal and Syria, Matsumoto and Elder (2010) find that ‘transition’ rates for young men and women are low, transition defined as either entering into a stable job (i.e. with a contract of at least 12 months) or into (self-assessed) satisfactory temporary work or self-employment. In addition, the transition rates for women were lower than for men in all eight countries (except Mongolia where rates were very similar for men

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<sup>22</sup> This phenomenon has been substantiated by studies based on micro-data which compare youth cohorts over time. For example, Calvès and Schoumaker (2004) in a birth cohort analysis on Burkina Faso, find that the most recent generations of youth have much poorer labour market outcomes than the youth of earlier generations.

<sup>23</sup> UNGEI (2012:19) notes how in South-eastern Asia and the Pacific in countries like Thailand, Cambodia and Vietnam, in which the export-oriented sectors are female labour-intensive, the rise in the female-male gender gap in unemployment rates post-crisis underestimates the gender effect. Following the crisis, youth and women moved to more vulnerable jobs in the informal sector and agriculture which acted as an ‘employment buffer’.

and women). Transition rates were particularly low (around 5 percent or less) for women in Egypt, Iran, Nepal and Syria, and between four and six times lower than men's transition rates in these countries.

These gender differences derive from a combination of lower labour force participation rates, higher unemployment rates, and a lower probability of transitioning into stable employment among women than men. In addition in the six countries for which data were available, young women earned less than young men on average.<sup>24</sup> Matsumoto and Elder (2010: 72) summarise the situation as follows: "Most young women who do enter the labour market face a lengthy job search before finally settling into an unsatisfactory job where they will be paid less than men."

Using a more recent set of SWTSs from 2012 in Armenia, Cambodia, Egypt, FYR Macedonia, Jordan, Liberia, Malawi, Peru, Russian Federation and Togo, ILO (2013) draws similar conclusions. Except for Togo, in all the countries analysed, young women were less likely to have made a successful transition into the labour market than men. Consistent with the data presented above, the largest gender gaps in transition rates were in countries in MENA (Egypt and Jordan). Rates of transition were particularly low among those who had previously been in own-account work or inactive suggesting that 'traps' exist in certain states.

Given that many in this youth cohort are likely to be in school, it can be more useful to examine the 'neither in employment, education or training' (NEET) group than the inactive. In all ten countries analysed in ILO (2013), NEET rates were higher for women than men: for men the rates averaged around 10 percent; for women, rates were generally at least twice as high, with especially high rates in Armenia, Egypt and Jordan (in excess of 35 percent) (ILO, 2013: 101). Using a broad definition of unemployment (i.e. including the discouraged), women were also found to have higher unemployment rates than men in all countries except FYR Macedonia, with unemployment rates for women exceeding 15 percent in all countries (except Cambodia) and as high as 52 percent in Egypt and Jordan (ILO, 2013: 101). Although not disaggregated by gender, it was found that the average duration of unemployment spells ranged from 15.5 months in Armenia to 37.1 months in FYR Macedonia (ILO, 2013: 104).

In other work, longer transition durations have been found for young women compared with young men. Using the SWTS for Iran, Egel and Salehi-Isfahani (2010: 102) found that young men took 15 months on average to find their first job compared with 37.5 months among young women. Although based on cross-sectional data, Guarcello et al (2005) in a study of 13 Sub-Saharan African countries<sup>25</sup>, found that the average gap between the age of exit from school and the age of entry into first job ranged from one year in Côte d'Ivoire to seven years in

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<sup>24</sup> Gender earnings gaps in favour of men among the youth have also been found elsewhere. See Aslam et al (2008) on Pakistan and Pastore (2009) on Mongolia, for example. Although average earnings were lower for women than men in these studies, returns to education were found to be higher among women than among men (mirroring the findings for adults presented earlier in Section 2).

<sup>25</sup> These are Burundi, Burkina Faso, Côte d'Ivoire, Cameroon, Ethiopia, Gambia, Kenya, Madagascar, Mozambique, Malawi, Sao Tome and Principe, Uganda, and Zambia.

Mozambique, and for most countries it was over three years. Female youth tended to leave school earlier and transition to work more slowly than male youth.<sup>26</sup>

Higher education does not necessarily protect the youth from unemployment in developing countries, possibly reflecting skills mismatches in the labour market. While the unemployment rate in several East Asian countries is lowest for those with tertiary education, unemployment rates tend to increase in South Asia as educational levels rise (ILO, 2013). In Sri Lanka, for example, the unemployment rate for women with at least higher secondary schooling was 11.7 percent in 2011 and for men it was 5.5 percent. Among those with less than lower secondary education, it was 3.3 percent for women and 1.7 percent for men. In India too, unemployment rates are much larger for those with higher skills, and especially women (ILO, 2013: 14).

Some of the highest unemployment rates among tertiary graduates are in Northern Africa (around 20 percent in Algeria, Egypt and Morocco in 2010). In Egypt specifically, among tertiary graduates, the unemployment rate for men was 10.5 percent and for women it was 29.1 percent, while for those with primary schooling or below, it was 1.7 percent for men and 1.8 percent for women (Angel-Urdinola and Semlali, 2010; see also Egel and Salehi-Isfahani, 2010 on Iran). In a number of countries in Latin America (e.g. Chile and Argentina), however, it appears that secondary school graduates have higher rates of unemployment compared with basic or tertiary educated workers (ILO, 2013: 18).

In Sub-Saharan Africa, there seems to be considerable intra-regional variation. In South Africa, Ghana and Mozambique, for example, unemployment rates are much lower among tertiary graduates (see Case Study report; Guarcello et al, 2005). In Tanzania, Togo, Burundi, Cameroon, Madagascar, Kenya, Nigeria and Cote d'Ivoire the opposite holds; tertiary (and in some cases secondary) graduates have higher unemployment rates than those with lower levels of schooling (Guarcello et al, 2005).

Higher unemployment rates among the more educated in some developing countries possibly reflect that in countries with a small formal sector, the more highly educated hold out for better employment opportunities to become available (Angel-Urdinola and Semlali, 2010; ILO, 2013: 21). In Burkina Faso for example, where unemployment rates are higher among the more educated urban youth, only 4 percent of employed young women and 8 percent of employed young men found their first job in formal employment (much lower than the percentages recorded for earlier generations of youth) (Calvès and Schoumaker, 2004). Those who are able to access formal jobs are generally more educated, but there are too few such jobs to absorb the educated youth, particularly women. Calvès and Schoumaker (2004: 1343) write: "Unable to find a stable job, often dependent on their less educated siblings or elders, educated youth has lost its credibility and prestige."

The question considered in a number of these studies is why women's labour market outcomes are poorer than men's, even among the youngest and more highly educated cohort. The answer to this question would require in-depth country level analysis, but the evidence presented in these

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<sup>26</sup> These figures are conditional on ever being in school and ever having worked, and therefore will exclude the segment of the population, larger among females than males, who have never enrolled in school or entered the labour market.

studies suggests traditional roles continue to play a large role even for the youth. For example, in the countries surveyed in Matsumoto and Elder (2010: 12), the majority of young mothers were inactive, while the majority of young fathers were working (or looking for work). Although age at first marriage and childbearing has increased in a number of countries, resulting in more time spent in school (Lloyd and Grant, 2004; Grant and Furstenberg, 2007; Egel and Salehi-Isfahani, 2010), even those with more schooling appear to adhere to gender-stereotyped roles - they just do so later.

These roles are established very early on. In Section 1, we described how in many developing countries, there are gender differences in the time allocation of school-age children. These differences persist among young adults. Lloyd and Grant (2004) on Pakistan for example, present evidence that among young adults (15-24 years) still in education, young women spend more time on noneconomic work inside the house and young men more time on paid work outside the house (with young women working a greater mean number of hours in total). These roles are reflected in different goals among men and women in young adulthood. Egel and Salehi-Isfahani (2010:112) on Iran, for example, found that when asked to state the most important goal in their life, 50 percent of women (compared with 31 percent of men) stated “having a good family life” while 14 percent of women (compared with 28 percent of men) stated “being successful in work”.

In the studies reviewed, a number of policy suggestions on easing the school-to-work transition are made based on programmes that have been shown to work elsewhere. Some of the policies recommended include: stimulating demand to increase the number of jobs available (Matsumoto and Elder, 2010; ILO, 2013); targeted labour market policies (such as youth wage subsidies, job guarantees or job search assistance) (ILO, 2013); better labour market institutions to facilitate the transition, such as public employment and placement centres (Angel-Urdinola and Semlali, 2010; Matsumoto and Elder, 2010); support for entrepreneurship and self-employment to expand career options for the youth (ILO, 2013); and improving access to and quality of education<sup>27</sup> and training (Castro et al, 2000; Calvès and Schoumaker, 2004; Pastore, 2009; Angel-Urdinola and Semlali, 2010; UNGEI, 2012; ILO, 2013). On the latter point, it has been suggested repeatedly in the literature that the quality and relevance of Technical and Vocational Education and Training (TVET) programmes need to be strengthened. These programmes tend to be seen as a ‘last resort’ by many youth, and a common criticism is that training does not coincide well with market requirements. In particular, it has been noted that employers not only want graduates to have subject-specific practical/on-the-job training but also ‘soft skills’ that improve their ability to function in the workplace.

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<sup>27</sup> A paper by Castro et al (2000) suggests that one of the reasons for poor school-to-work transition is that secondary schools do not adequately equip students for the labour market. With the ‘massification’ of secondary schooling in developing countries in recent decades (they write about LAC in particular), the student body (larger and from more diverse socio-economic backgrounds) is less equipped for success at school or in the labour market. And the schooling system itself battles with the dual challenge of having to prepare some students for tertiary education and others for direct entry into the labour market. Ansell (2004) makes a similar point about secondary schooling in Lesotho and Zimbabwe being ill-equipped to prepare the youth for entry into the labour market, which together with structural constraints in the economy, means that it is very hard for the youth and young women in particular, to find paid employment.

However, the implications of these initiatives for young women relative to young men are generally not considered in the work we have reviewed. At most, passing reference is made to possible constraints that limit women's success: writing on East Asia and the Pacific specifically, UNGEI (2012) suggests more attention be given to eliminating gender-stereotyping in the classroom and in textbooks; Ansell (2004) on Zimbabwe and Lesotho notes that gender-streaming in subjects is problematic; and others have suggested that gender-sensitive career counselling for the youth and provision of childcare services for young working mothers need to be provided (Angel-Urdinola and Semlali, 2010; Matsumoto and Elder, 2010). It appears that enquiry into different policy options in developing countries specifically, and the gendered effects thereof, is an important area for further review.

### **Summary:**

- Even among the more educated youth cohort, labour force participation rates are lower among women than men. Gender gaps among the youth are especially large in South Asia and in the Middle East and Northern Africa, possibly reflecting entrenched cultural norms.
- Unemployment rates are higher, and employment-to-population ratios are lower, for young women compared with young men in most regions of the developing world (with the exception of East Asia).
- Labour market outcomes are poorer for young men and women compared with the older cohort of men and women, in part reflecting that the more recent generations of youth have entered the labour market during a time when the creation of (formal) jobs has been limited.
- Transition rates to stable/satisfactory work tend to be lower among young women than young men, with young women also taking much longer than young men to make the transition.
- Higher education does not necessarily protect the youth from unemployment in developing countries. The more highly educated may 'queue' for better employment opportunities, particularly in countries where formal jobs are limited.

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