



2012/ED/EFA/MRT/PI/38

Background paper prepared for the
Education for All Global Monitoring Report 2012

Youth and skills: Putting education to work

Youth disadvantage in the labour market: Empirical evidence from nine developing countries

L. Guarcello, I. Kovrova and S. Lyon

2012

This paper was commissioned by the Education for All Global Monitoring Report as background information to assist in drafting the 2012 report. It has not been edited by the team. The views and opinions expressed in this paper are those of the author(s) and should not be attributed to the EFA Global Monitoring Report or to UNESCO. The papers can be cited with the following reference: "Paper commissioned for the EFA Global Monitoring Report 2012, Youth and skills: Putting education to work" For further information, please contact efareport@unesco.org



Youth disadvantage in the labour market: Empirical evidence from nine developing countries

L. Guarcello

I. Kovrova

S. Lyon

Rome

May 2012

Youth disadvantage in the labour market: Empirical evidence from nine developing countries

L. Guarcello*
I. Kovrova¹
S. Lyon**

Working Paper
May 2012

Understanding Children's Work (UCW) Programme
Villa Aldobrandini
V. Panisperna 28
00184 Rome
Tel: +39 06.4341.2008
Fax: +39 06.6792.197
Email: info@ucw-project.org

As part of broader efforts towards durable solutions to child labor, the International Labour Organization (ILO), the United Nations Children's Fund (UNICEF), and the World Bank initiated the interagency Understanding Children's Work (UCW) Programme in December 2000. The Programme is guided by the Oslo Agenda for Action, which laid out the priorities for the international community in the fight against child labor. Through a variety of data collection, research, and assessment activities, the UCW Programme is broadly directed toward improving understanding of child labor, its causes and effects, how it can be measured, and effective policies for addressing it. For further information, see the project website at www.ucw-project.org.

This paper is part of the research carried out within UCW (Understanding Children's Work), a joint ILO, World Bank and UNICEF Programme. The views expressed here are those of the authors' and should not be attributed to the ILO, the World Bank, UNICEF or any of these agencies' member countries.

¹ Understanding Children's Work (UCW) Programme and University of Rome 'Tor Vergata'

** Understanding Children's Work (UCW) Programme

Youth disadvantage in the labour market: Empirical evidence from nine developing countries

Working Paper

May 2012

Table of contents

1.	Introduction	1
2.	Youth labour market disadvantage as reflected by a lack of jobs	1
	Youth absent from both education and the labour force	1
	Youth unemployment	3
	Youth <i>under</i> employment	6
3.	Youth labour market disadvantage as reflected by poor quality jobs	7
	Youth wage employment	7
	Youth non-farm employment	9
	Youth working poor	11
4.	In focus: Cameroon	13
	Youth absent from both education and the labour force	13
	Youth unemployment	17
	Youth underemployment	18
	Youth wage employment	19
	Youth working poor	20
5.	In focus: Brazil	21
	Youth absent from both education and the labour force	21
	Youth unemployment	25
	Youth wage employment	26
	Youth working poor	27
6.	Conclusions	28
	Annex I. Additional descriptive statistics	29
	Annex II. Additional descriptive statistics	32

LIST OF TABLES

<i>Table 1.</i> Youth not in education and not in labour force (% of population), by country, residence and sex	2
<i>Table 2.</i> Youth unemployment (% of labour force), by country, residence and sex	4
<i>Table 3.</i> Youth relaxed unemployment (% of expanded labour force), ^(a) by country, residence and sex	6
<i>Table 4.</i> Youth <i>under</i> employment (% of employed), ^(a) by country, residence and sex	6
<i>Table 5.</i> Youth wage employment (% of employed), by country, residence and sex	9
<i>Table 6.</i> Youth working poor (% of employed), by country, residence and sex	12
<i>Table 7.</i> Selected youth indicators, by residence and sex, Cameroon	13
<i>Table 8.</i> Youth absent from both education and the labour force, by income quintile, area of residence and sex, Cameroon	14
<i>Table 9.</i> Youth absent from both education and the labour force, by education level, area of residence and sex, Cameroon ^(a)	14
<i>Table 10.</i> Factors associated with absence from both education and the labour force, labour force participation and unemployment, regression results, Cameroon ^(a)	16
<i>Table 11.</i> Youth unemployment, by INCOME QUINTILE, area of residence and sex, Cameroon	17
<i>Table 12.</i> Youth unemployment, by EDUCATION LEVEL, area of residence and sex, ^(a) Cameroon	17
<i>Table 13.</i> Youth underemployment, by INCOME QUINTILE, area of residence and sex, Cameroon	19
<i>Table 14.</i> Youth underemployment, by EDUCATION LEVEL, area of residence and sex, ^(a) Cameroon	19
<i>Table 15.</i> Youth wage employment, by INCOME QUINTILE, area of residence and sex, Cameroon	19
<i>Table 16.</i> Youth wage employment, by EDUCATION LEVEL, area of residence and sex, ^(a) Cameroon	20
<i>Table 17.</i> Youth working poor, by EDUCATION LEVEL, area of residence and sex ^(a) , Cameroon	20
<i>Table 18.</i> Selected youth indicators, by residence and sex, Brazil,	21
<i>Table 19.</i> Youth absent from both education and the labour force, by INCOME QUINTILE, area of residence and sex, Brazil	22
<i>Table 20.</i> Youth absent from both education and the labour force, by EDUCATION LEVEL, area of residence and sex, ^(a) Brazil	22
<i>Table 21.</i> Factors associated with absence from both education and the labour force, labour force participation and unemployment, regression results, Brazil ^(a)	24
<i>Table 22.</i> Youth unemployment, by INCOME QUINTILE, area of residence and sex, Brazil	25
<i>Table 23.</i> Youth unemployment, by EDUCATION LEVEL, area of residence and sex, ^(a) Brazil	25
<i>Table 24.</i> Youth wage employment, by INCOME QUINTILE, area of residence and sex, Brazil	26
<i>Table 25.</i> Youth wage employment, by EDUCATION LEVEL, area of residence and sex, ^(a) Brazil	27
<i>Table 26.</i> Youth working poor, by EDUCATION LEVEL, area of residence and sex ^(a) , Brazil	27
<i>Table 27.</i> Factors associated with absence from both education and the labour force, labour force participation and unemployment, regression results, by sex, Brazil ^(a)	32
<i>Table 28.</i> Factors associated with absence from both education and the labour force, labour force participation and unemployment, regression results, by sex, Cameroon ^(a)	33

LIST OF FIGURES

<i>Figure 1.</i> Youth absent from both education and the labour force (% of population), by motive and country	2
<i>Figure 2.</i> Youth absent from both education and the labour force (% of population), by country and education level.....	3
<i>Figure 3.</i> Unemployment (% of labour force), by country and age group	4
<i>Figure 4.</i> Youth unemployment (% of labour force), by country and education level.....	5
<i>Figure 5.</i> Youth underemployment (% of employed), by age group and country.....	7
<i>Figure 6.</i> Youth wage employment (% of employed) and national income (2009 GNI per capita (USD), Atlas method), by country	8
<i>Figure 7.</i> Wage employment (% of employed), employed youth versus employed adults, by country	8
<i>Figure 8.</i> Youth wage employment (% of employed), and educational attainment, by country	9
<i>Figure 9.</i> Youth non-farm employment (% of employed, rural areas).....	10
<i>Figure 10.</i> Non-farm employment (% of employed, rural areas), employed youth versus employed adults, by country	10
<i>Figure 11.</i> Non-farm employment (% of employed, rural areas) and educational attainment, by country	11
<i>Figure 12.</i> Working poor (% of employed), employed youth versus employed adults, by country.....	11
<i>Figure 13.</i> Working poor (% of employed) and educational attainment, by country.....	12

1. Introduction

1. The lack of decent work opportunities for youth is a growing concern worldwide. According to ILO estimates, of the world's estimated 207 million unemployed people in 2009, nearly 40 percent – about 81 million – were between 15 and 24 years of age. In many countries, this grim unemployment picture is further aggravated by the large number of youth engaged in poor quality and low paid jobs, often in the informal economy. Young workers everywhere invariably have much higher rates of joblessness and much lower earnings than older workers. Many youth are poor or underemployed: some 152 million working poor youth, or 28 per cent of all young workers in the world, live on less than the equivalent of US\$1.25 per day.

2. The current report explores these issues of youth labour market disadvantage in the context of nine developing countries (i.e., Albania, Brazil, Cambodia, Cameroon, Indonesia, Jordan, Mexico, Turkey and Zambia).² For the purpose of report, youth labour market disadvantage is defined as the lack of decent work, in turn encompassing two broad dimensions - first, a lack of jobs and second, low quality jobs. Descriptive evidence is presented from labour force surveys and similar datasets relating to each of these dimensions of labour market disadvantage.³ Indicators are disaggregated by sex, residence and household income in order to identify which specific groups of young people are most disadvantaged in the labour force in the nine countries. The extent to which labour market disadvantage is associated with low levels of education is given particular emphasis.

2. Youth labour market disadvantage as reflected by a lack of jobs

3. This section reports descriptive evidence of youth labour market disadvantage as reflected by a lack of jobs. Three main groups of young people are looked at in this context: (a) youth not in education and not in the labour force; (b) unemployed youth; and (c) *underemployed* youth. Young people who are neither attaining marketable skills in school nor in the labour force, and particularly male youth in this group, frequently find themselves at the margins of society and more vulnerable to risky and violent behaviour. At a macro-economic level, they constitute unutilised productive capacity and a constraint to growth. The risks borne by unemployed youth are also well-documented: unemployment can permanently impair their productive potential and therefore influence lifetime patterns of employment, pay and job tenure. Underemployed youth having to settle for part-time or intermittent work are also disadvantaged in terms of their ability to earn a living wage and gain a secure foothold in the labour market.

Youth absent from both education and the labour force

4. Absence from both the labour force and education is not uncommon among young persons in the nine sample countries. As reported in Table 1, over one-third of Turkish young persons, and around one-fifth of youth in Albania, Indonesia, Jordan and Mexico are not studying nor working nor actively seeking work. Levels of absence from education and the labour force

² Kosovo was also in the initial list of countries but is not included in the report because of concerns about data quality.

³ UCW calculations in the report are based on Albania Living Standards Measurement Survey (LSMS) 2008; Brazil Pesquisa Nacional por Amostra de Domicílios (PNAD) 2009; Cambodia Socio-Economic Survey (SES) 2009; Cameroon Enquête camerounaise auprès des ménages III (ECAM 3) 2007; Indonesia Labor Force Survey (Sakernas) 2010; Jordan National Child Labour Survey 2007; Mexico Encuesta Nacional de Ocupación y Empleo (ENOE) 2009; Turkey Labour Force Survey 2006; and Zambia Labour Force Survey 2008.

are lowest in the three poorest countries in the sample – Cambodia, Cameroon and Zambia – but even in these countries the share of youth absent from education and the labour force is by no means negligible. Absence from the education and the labour force is much higher among female compared to male youth across all nine countries, product of the culturally-driven tendency for females to stay out of the labour force after leaving education in order to perform domestic duties and rear children.

Table 1. Youth not in education and not in labour force (% of population), by country, residence and sex

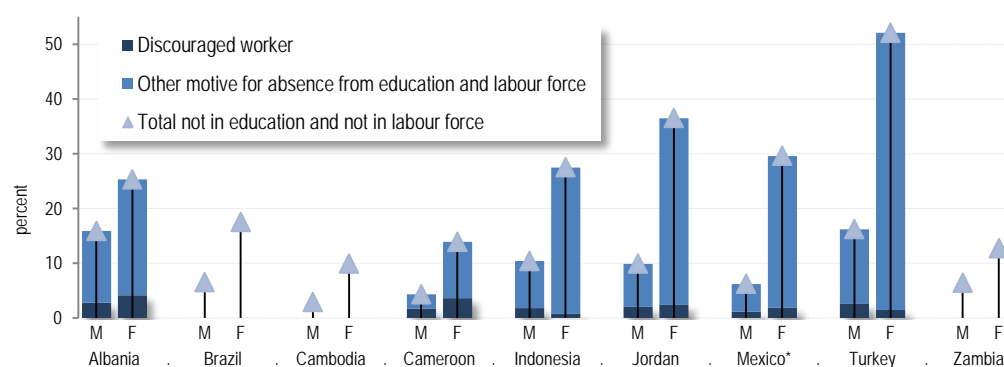
Country	Total	Residence		Sex		HH income	
		Urban	Rural	Male	Female	Poorest	Wealthiest
Albania	20.6	14.1	26.7	15.9	25.3	29.3	11.4
Brazil	12.0	11.5	14.2	6.5	17.5	21.5	5.8
Cambodia	6.3	9.3	5.6	2.9	9.9	8.2	5.8
Cameroon	9.3	14.7	5.5	4.3	13.9	3.6	13.0
Indonesia	18.9	13.3	23.7	10.4	27.5	-	-
Jordan	22.4	22.7	21.0	9.9	36.5	-	-
Mexico*	17.9	14.1	21.8	6.2	29.6	-	-
Turkey	34.7	32.5	38.8	16.2	52.1	-	-
Zambia	9.7	18.7	4.1	6.4	12.7	6.1	14.8

Notes: *For Mexico ENOE 2009 residence is composed by "more urbanized" and "less urbanized".

Source: UCW calculations based on Albania Living Standards Measurement Survey (LSMS) 2008; Brazil Pesquisa Nacional por Amostra de Domicílios (PNAD) 2009; Cambodia Socio-Economic Survey (SES) 2009; Cameroon Enquête camerounaise auprès des ménages III (ECAM 3) 2007; Indonesia Labor Force Survey (Sakernas) 2010; Jordan National Child Labour Survey 2007; Mexico Encuesta Nacional de Ocupación y Empleo (ENOE) 2009; Turkey Labour Force Survey 2006; and Zambia Labour Force Survey 2008.

5. Discouragement accounts for only a minority of young people not in education and not in the labour force. Discouraged workers, i.e., persons wanting to work but who given up actively looking because they are pessimistic about their prospects of securing a job, account for a larger share of male compared to female youth that are absent from education and the labour force in the six sample countries where data are available. Female youth, again, are more likely to be neither studying nor part of the labour force because of their domestic responsibilities (Figure 1). However, even in the case of male youth, discouragement only accounts for a small share of total youth absent from both education and the labour force in all sample countries except Cameroon. This raises the question of what other factors explain the absence of male youth from school and the labour force. While some suffer from disabilities that preclude their involvement in work, others are undoubtedly involved in the illicit economy in forms of work that are unreported in national labour force surveys.

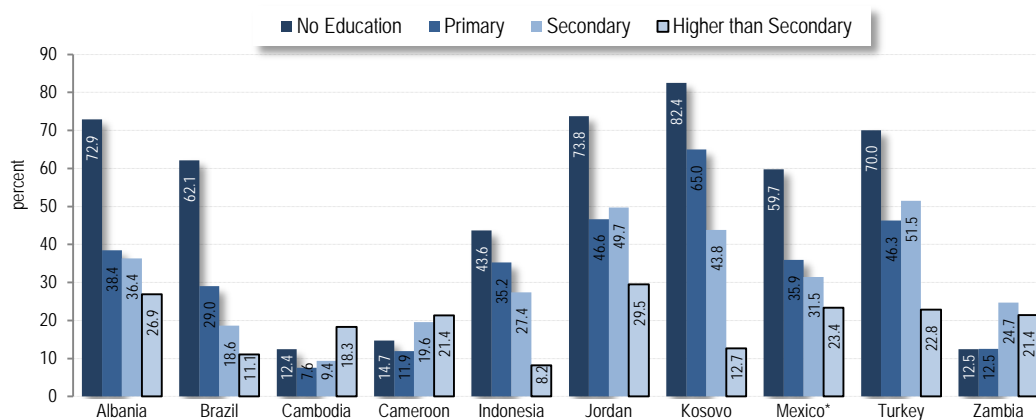
Figure 1. Youth absent from both education and the labour force (% of population), by motive and country



Source: UCW calculations based on national survey datasets (see sources, Table 1, for listing of specific surveys).

6. The likelihood of absence from both education and the labour force is much lower for educated youth in most of the sample countries. The exceptions to this pattern are the three poorest sample countries – Cambodia, Cameroon and Zambia. Nonetheless, what is particularly striking about Figure 2, which reports absence from education and the labour force by education level, is the high rate even the most educated segments of the youth populations across all of the sample countries. Over a quarter of young people with higher education in Albania and Jordan, for example, and over one-fifth of the best-educated youth in Turkey and Mexico, are not in education and not in the labour force. These figures underscore the substantial lost productive potential represented by the group youth neither studying nor in the labour force. The figures are primarily driven by well-educated female youth (not shown), and point to the need for policy measures aimed at expanding labour market opportunities for female young people.

Figure 2. Youth absent from both education and the labour force (% of population), by country and education level



Source: UCW calculations based on national survey datasets (see sources, Table 1, for listing of specific surveys).

Youth unemployment

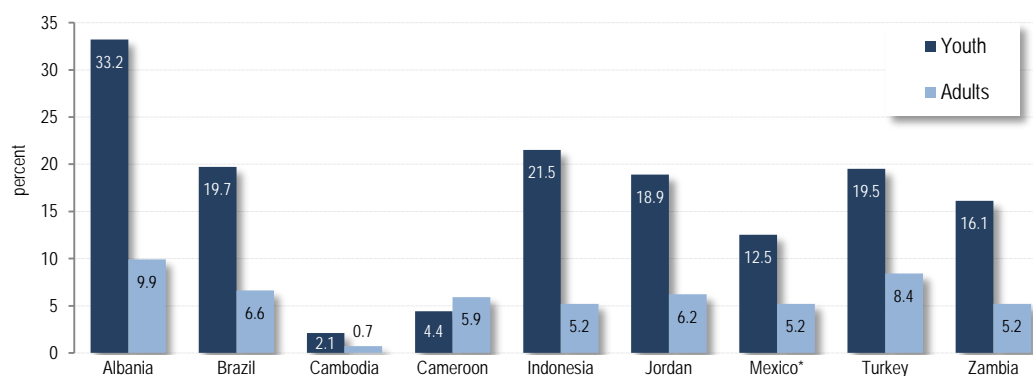
7. Youth unemployment is an important policy concern across most of the sample countries. Figure 3 reports the youth unemployment rate (ILO, strict definition⁴) for the nine countries. Albania stands out as having a particularly serious youth unemployment problem – one in three young Albanians in the labour force are unable to find work. The share of active youth that are unemployed stands at around one-fifth in four other countries (Indonesia, Brazil, Turkey and Jordan). By comparison, the youth unemployment rate in high-income OECD countries for roughly the same time period was 17 percent.⁵ The three lowest income countries (i.e., Cambodia, Zambia and Cameroon) have much lower levels of unemployment than the other sample countries (Figure 3). This is not surprising, as youth in poor countries with limited social supports are less able to afford spells of unemployment; other indicators are therefore better suited to measuring youth force disadvantage in these national contexts, as discussed further below.

⁴ The strict ILO concept is based on three criteria and defines as unemployed those people who are (1) without work, (2) available for work within the next two weeks and (3) have been seeking work for the preceding four weeks.

⁵ World Bank World Development Indicators 2009.

8. Youth unemployment is very high relative to adult unemployment in all nine sample countries. It is a common international trend that youth unemployment is higher than unemployment for older generations, but the size of the difference in some of the sample countries is nonetheless striking. In Indonesia, for instance, the youth unemployment rate is more than four times that of adults, and in Albania, Brazil, Jordan and Zambia, the youth employment rates is at least triple that of adults. These large differences point to the existence of special barriers to youth employment that need to be addressed by policy makers.

Figure 3. Unemployment (% of labour force), by country and age group



Source: UCW calculations based on national survey datasets (see sources, Table 1, for listing of specific surveys).

Urban and female youth are particularly susceptible to unemployment in the sample countries. Table 2 reports youth unemployment rates disaggregated by residence, sex and household income. Two general patterns are clear from the table. First, urban youth face a greater risk of unemployment than their rural peers, underscoring the differences in the rural and urban labour markets and in particular the role of the agricultural sector in absorbing young workers in rural areas. Second, female youth appear particularly disadvantaged in securing jobs. Females are more likely to be unemployed in all countries except Zambia, despite the fact that fewer females are in the labour force; differences in unemployment by sex are especially noteworthy in Brazil and Jordan.

Table 2. Youth unemployment (% of labour force), by country, residence and sex

Country	Total	Residence		Sex		HH income	
		Urban	Rural	Male	Female	Poorest	Wealthiest
Albania	18.8	33.2	9.6	18.5	19.3	30.3	7.8
Brazil	17.8	19.7	7.8	13.9	23.1	28.9	12.2
Cambodia	1.2	2.1	1.1	1.2	1.2	1.5	1.6
Cameroon	4.4	11.4	1.3	3.9	4.8	0.7	8.6
Indonesia	18.6	21.5	16.1	17.9	19.6	-	-
Jordan	19.4	18.9	21.2	16.2	32.3	-	-
Mexico*	9.7	12.5	7.1	9	10.8	-	-
Turkey	17.3	19.5	14	16.7	18.6	-	-
Zambia	4.8	16.1	0.9	5.1	4.6	2.5	10.4

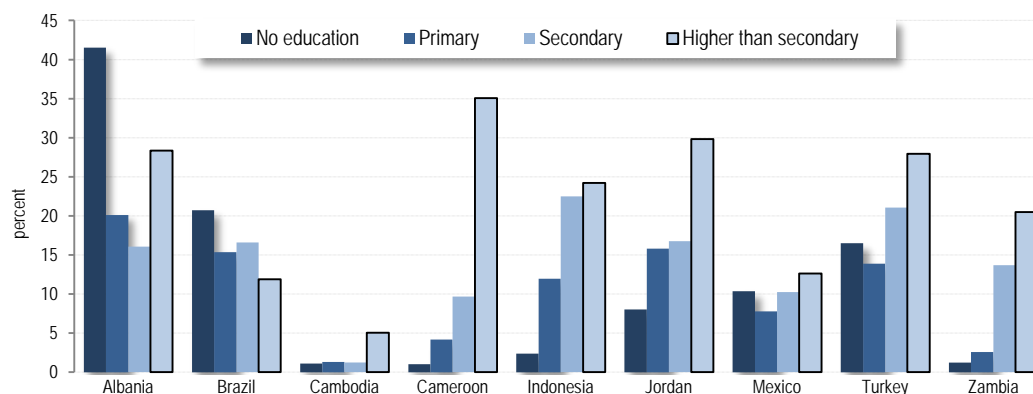
Notes: *For Mexico ENOE 2009 residence is composed by "more urbanized" and "less urbanized".

Source: UCW calculations based on national survey datasets (see sources, Table 1, for listing of specific surveys).

9. More education does not consistently lower the risk of unemployment among young people. Rather, the association between education and unemployment appears to depend on a country's level of development. In the poorer countries, where low-skill informal sector production plays a relatively

greater role, it is the *most*-educated segment of the youth population that is at greatest risk of unemployment. In the richer countries, where production is more skills-intensive, least-educated youth are affected most by unemployment, with the important exception of Turkey. But caution should be exercised in over-interpreting these patterns, as other, supply-side, factors are also undoubtedly at work. A positive link between education and unemployment, for example, could also be driven in part by the fact that more-educated youth have been on the labour market for less time, that they typically have a higher reservation wage, and that they are more likely to be from better-off families and therefore able to afford unemployment.

Figure 4. Youth unemployment (% of labour force), by country and education level



Source: UCW calculations based on national survey datasets (see sources, Table 1, for listing of specific surveys).

10. Levels of unemployment among youth are markedly higher when the “relaxed” as opposed to the “strict” definition of employment is used. The “relaxed” youth unemployment rate⁶ is a more complete measure of the youth unemployment problem because it also captures discouraged workers, i.e. those willing to work but who have given up actively seeking work because they are pessimistic about their employment prospects. The “strict” unemployment rate, on the other hand, reported above, captures only active job seekers. Youth unemployment nearly doubles to eight percent in Cameroon when discouraged workers are considered. Similarly in Albania, youth unemployment rises by one-third, and in Jordan, Mexico and Turkey by one-fourth, when discouraged workers are included in the calculation. Patterns for relaxed employment by residence and sex are similar to those for the strict definition of unemployment: relaxed unemployment is generally higher in urban compared to rural areas and among female youth compared to their male peers (Table 3).

⁶ The relaxed unemployment rate is the sum of unemployed workers and discouraged workers available for work expressed as a percentage of the expanded active population. The expanded active population, in turn, comprises discouraged workers available for work and the active population. Discouraged workers available for work are defined as those who are not working, report to not looking for a work and not preparing for a business because they feel hopeless about their job prospects, but would accept job if offered.

Table 3. Youth relaxed unemployment (% of expanded labour force),^(a) by country, residence and sex

Country	Total	Residence		Sex		HH income	
		Urban	Rural	Male	Female	Poorest	Wealthiest
Albania	25.9	37.8	18.5	23.5	29.0	40.6	10.4
Brazil	-	-	-	-	-	-	-
Cambodia	-	-	-	-	-	-	-
Cameroon	8.0	19.1	2.8	6.1	9.8	1.5	16.4
Indonesia	20.7	22.8	18.9	20.4	21.1	-	-
Jordan	25.2	24.3	28.7	20.0	43.5	-	-
Mexico ^(b)	12.4	14.8	10.3	10.7	15.4	-	-
Turkey	21.4	22.8	19.2	20.6	23.1	-	-
Zambia	-	-	-	-	-	-	-

Notes: (a) The relaxed unemployment rate is the sum of unemployed workers and discouraged workers available for work expressed as a percentage of the expanded active population. The expanded active population, in turn, comprises discouraged workers available for work and the active population. Discouraged workers are those willing to work but who have given up actively seeking work because they are pessimistic about their employment prospects; (b) For Mexico ENOE 2009 residence is composed by "more urbanized" and "less urbanized".
Source: UCW calculations based on national survey datasets (see sources, Table 1, for listing of specific surveys).

Youth underemployment

11. Underemployment is also a source of labour market disadvantage for young people. Not captured in the unemployment figures cited above is another group disadvantaged by a lack of sufficient work – young people that are technically employed but are not working *enough*, i.e., youth that have had to settle for only part-time or occasional work when they would like to be in full-time employment. Table 4, which reports the rate of underemployment for youth,⁷ indicates that underemployment is especially high in Cameroon, where more than two of every five employed youth indicate wanting to work more hours than they actually are. This figure contrasts starkly with the youth unemployment rate in Cameroon of only four percent, illustrating how the unemployment rate alone is an incomplete indicator of labour market disadvantage in contexts such as Cameroon. Youth underemployment is higher in rural compared to urban areas across all six sample countries where data are available. Youth are not more likely than adults to be in situations of underemployment, with the exception of Albania (Figure 5).

Table 4. Youth underemployment (% of employed),^(a) by country, residence and sex

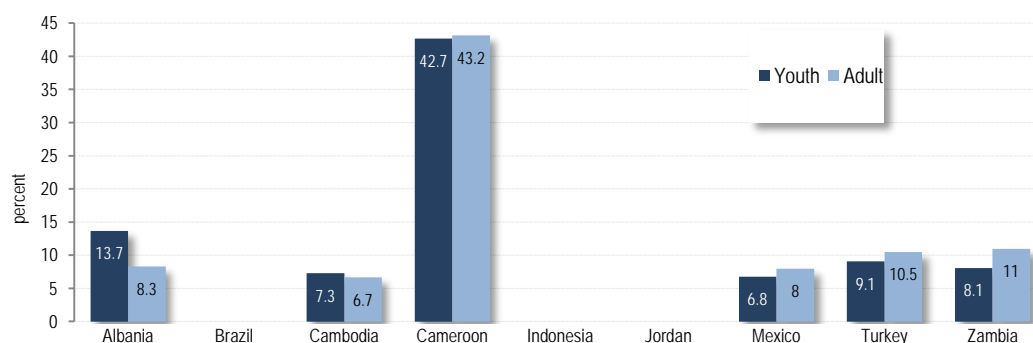
Country	Total	Residence		Sex		HH income	
		Urban	Rural	Male	Female	Poorest	Wealthiest
Albania	13.7	6.1	17.3	14.6	12.4	27.8	11.5
Brazil	-	-	-	-	-	-	-
Cambodia	7.3	2.9	8.1	7.3	7.2	9.5	4.9
Cameroon	42.7	40.3	43.7	43.8	41.6	38.1	47.2
Indonesia	-	-	-	-	-	-	-
Jordan	-	-	-	-	-	-	-
Mexico ^(b)	6.8	6.3	7.3	7.9	4.8	-	-
Turkey	9.0	4.9	15.6	8.2	11.0	-	-
Zambia	8.1	5.6	8.8	7.9	8.2	-	-

Notes: (a) Underemployment rate is defined as number of employed youth indicating that they would like to be working for more hours than they actually are working, expressed as a percentage of the total employed youth population; (b) For Mexico ENOE 2009 residence is composed by "more urbanized" and "less urbanized".

Source: UCW calculations based on national survey datasets (see sources, Table 1, for listing of specific surveys).

⁷ Underemployment rate is defined as number of employed youth indicating that they would like to be working for more hours than they actually are working, expressed as a percentage of the total employed youth population

Figure 5. Youth underemployment (% of employed), by age group and country



Source: UCW calculations based on national survey datasets (see sources, Table 1, for listing of specific surveys).

3. Youth labour market disadvantage as reflected by poor quality jobs

12. Indicators reflecting the *quality* of employment are also critical to assessing the labour market disadvantage of young people. There is no standard international definition of job quality and information on many possible quality criteria, e.g., legal employment contract, paid sick leave, health and disability insurance, etc., is limited in the surveys used for this report. The issue of job quality is therefore investigated in this section relying on three imperfect proxies of job quality: (a) wage employment; (b) non-farm employment; and (c) working poor. Wage employment is typically associated with greater formality and with it a greater degree of job security and basic job benefits and protections. It therefore represents one reasonable proxy for job quality, albeit with some important caveats.⁸ There is a wide body of evidence indicating that average wages, working conditions and prospects for advancement in the non-farm sector are generally better than in the farm sector. Therefore non-farm employment represents a useful proxy for job quality in the rural labour market. The extent to which a job offers a young person an escape from poverty offers another, less direct, indicator of job quality, particularly in the absence of specific earnings information. Clearly, if a young person finds him or herself in poverty despite holding a job, the pay and conditions associated with that job are inadequate.

Youth wage employment

13. **A large share of youth works in low-quality non-wage jobs, particularly in the poorer sample countries.** Wage employment tracks closely with the overall level of development in the nine sample countries (Figure 6). Worst off are working youth in the sample countries at the lower end of the income spectrum: only about one in 10 employed youth are in wage jobs in Cameroon and Zambia and less than one-third enjoy wage employment in Cambodia. Jordan stands out as producing a very high proportion of wage jobs for youth, particularly relative to its income level. Young people are

⁸ There are some caveats to using wage employment as a quality proxy. There are many instances in which informal non-wage jobs are valid pathways to future beneficial formal salaried jobs or successful self-employment through the acquisition of experience or on-the-job "training". Some unpaid work and self-employment may be the result of rational decisions and not lack of alternatives, especially when they lead to a reasonable standard of living and more freedom and other intangible benefits.

disadvantaged vis-à-vis adults in terms of wage employment in Cameroon, Zambia and Albania, but in the remaining sample countries young people are actually more successful than their adult counterparts in securing wage work (Figure 7). Generating better quality jobs, therefore, appears to be more of a general labour market challenge than a challenge unique to youth labour market in most of the sample countries.

Figure 6. Youth wage employment (% of employed) and national income (2009 GNI per capita (USD), Atlas method), by country

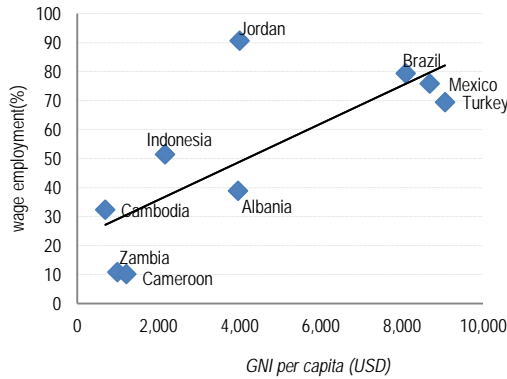
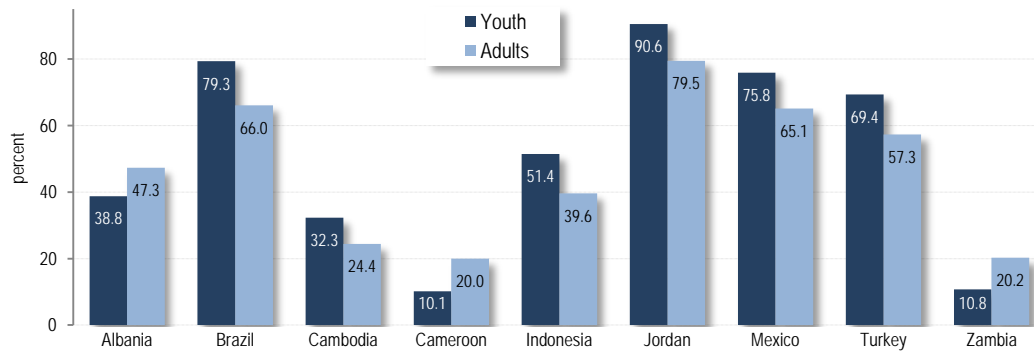


Figure 7. Wage employment (% of employed), employed youth versus employed adults, by country



Source: UCW calculations based on national survey datasets (see sources, Table 1, for listing of specific surveys).

14. Rural youth, female youth and poor youth appear particularly disadvantaged in terms being able to secure wage employment. Table 5 reports youth wage employment as a share of total employment. It indicates two clear patterns across the sample countries. First, youth wage employment is much more common in urban than in rural areas (with the exception of Jordan) again highlighting the different nature of the rural and urban youth labour markets. Second, wage employment is much more common among youth from wealthier households. The pattern across countries in terms of differences between male and female youth wage employment is less clear. Female youth are disadvantaged in terms of wage employment in the countries where differences in youth wage employment by sex are largest, i.e., Albania, Cameroon and Zambia. Females are more likely to be in wage employment in other countries, e.g., Brazil, Cambodia and Jordan, but the differences between male and females wage employment in these countries are smaller.

Table 5. Youth wage employment (% of employed), by country, residence and sex

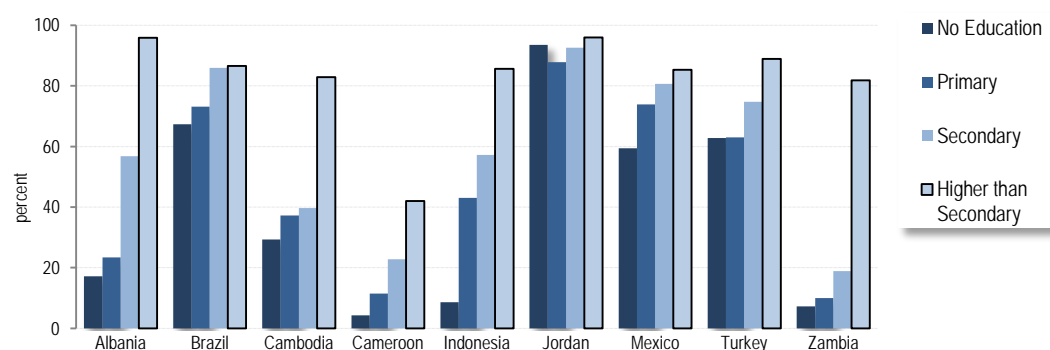
Country	Total	Residence		Sex		HH income	
		Urban	Rural	Male	Female	Poorest	Wealthiest
Albania	38.8	82.7	20.2	43.0	32.5	27.5	47.6
Brazil	79.3	85.7	50.1	77.9	81.4	57.4	85.7
Cambodia	32.3	47.7	29.5	30.8	33.8	32.7	34.6
Cameroon	10.1	22.7	5.2	15.9	4.6	3.3	23.6
Indonesia	51.4	68.0	38.1	49.8	53.8	-	-
Jordan	90.6	90.6	90.3	89.9	93.6	-	-
Mexico*	75.8	84.5	68.4	76.3	75.0	-	-
Turkey	69.4	86.1	44.1	71.1	65.8	-	-
Zambia	10.8	30.0	5.3	14.2	7.5	3.3	24.2

Notes: *For Mexico ENOE 2009 residence is composed by "more urbanized" and "less urbanized".

Source: UCW calculations based on national survey datasets (see sources, Table 1, for listing of specific surveys).

15. There are clear benefits to education in terms of ability to secure wage employment. In all nine sample countries, the likelihood of wage employment rises dramatically with education for young people (Figure 8). Even a small amount of education is relevant in this regard in many of the countries. In Indonesia, for example, those with primary education are more than five times more likely to be wage employment than those with no education. Therefore, while, as seen in the previous section, educated young people have greater initial difficulty in securing jobs in some of the sample countries, the jobs that they do eventually secure are likely to be of better quality, at least on the basis of wage employment as a proxy indicator.

Figure 8. Youth wage employment (% of employed), and educational attainment, by country



Source: UCW calculations based on national survey datasets (see sources, Table 1, for listing of specific surveys).

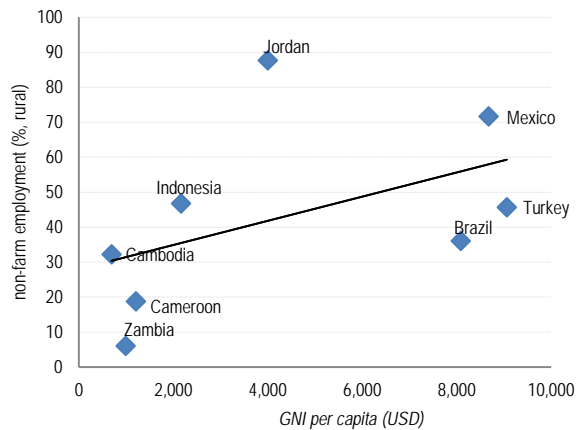
Youth non-farm employment

16. The absence of opportunities for rural youth outside the farm sector is an important issue in many of the countries in the sample.⁹ In only two – Jordan and Mexico – of the sample countries are rural youth more likely to be working *off* the farm than on it. Youth non-farm employment is lowest in the three sample countries at the lower end of the income spectrum – Cambodia, Cameroon and Zambia (Figure 9). Off-farm employment is very limited for rural youth in Brazil, despite the country's relatively high income level. In Jordan, by contrast, the share of rural youth in non-farm employment is very high relative to its income level. Youth people are not disadvantaged vis-à-vis

⁹ Data on non-farm employment are not available for the ninth country, Albania.

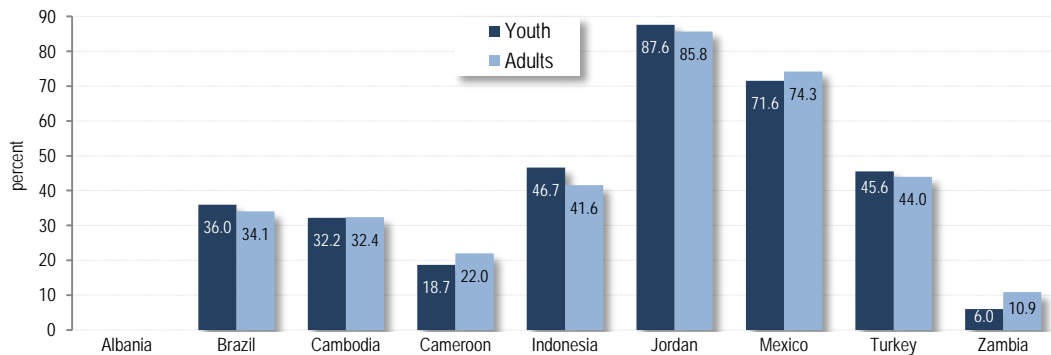
adults in terms of non-farm employment in the sample countries, indicating that generating jobs off the farm is a general labour market challenge rather than one unique to the youth labour market (Figure 10).

Figure 9. Youth non-farm employment (% of employed, rural areas)



Source: World Bank World Development indicators and UCW calculations based on national survey datasets (see sources, Table 1, for listing of specific surveys).

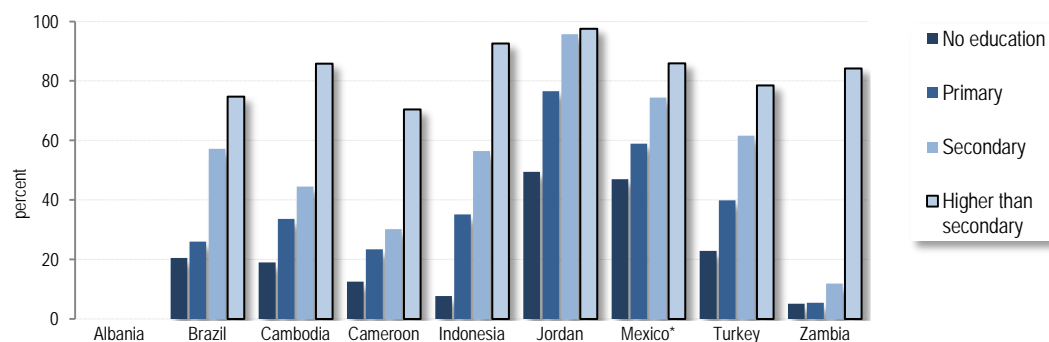
Figure 10. Non-farm employment (% of employed, rural areas), employed youth versus employed adults, by country



Notes: *For Mexico ENOE 2009 residence is composed by "more urbanized" and "less urbanized".
Source: UCW calculations based on national survey datasets (see sources, Table 1, for listing of specific surveys).

17. Non-farm employment is much more common among better-educated rural youth. In all eight of the sample countries where data are available, the likelihood of work off the farm rises significantly with each level of education, further evidence of the strong link between educational attainment and job quality (Figure 11). This pattern holds even in the poorest countries in the sample where off-farm job opportunities in the rural labour market are most limited. In Cameroon, for instance, the share of rural youth in non-farm jobs rises from just 13 percent for youth with no education, to 30 percent for those with secondary education and to over 70 percent for those with higher education.

Figure 11. Non-farm employment (% of employed, rural areas) and educational attainment, by country

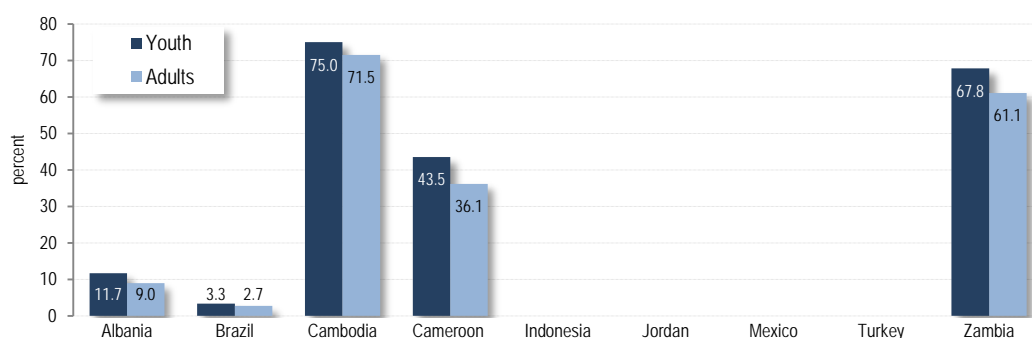


Notes: *For Mexico ENOE 2009 residence is composed by "more urbanized" and "less urbanized".
Source: UCW calculations based on national survey datasets (see sources, Table 1, for listing of specific surveys).

Youth working poor

18. The share of working poor youth is very high in the three least developed sample countries. Three-fourths of working youth in Cambodia, two-thirds in Zambia and almost one-half in Cameroon are poor. About 12 percent of employed youth are poor in Albania and three percent in Brazil, the other two sample countries where data are available. Three general patterns concerning youth working poor are common across all five sample countries. First, working youth are more prone to poverty than working adults (Figure 12), suggesting youth face special barriers to earning a living wage. Second, female youth workers are much more prone to poverty than their male peers (Table 6), another indication that female youth are a particularly disadvantaged group in the labour market. Third, the share of youth working poor falls significantly with educational attainment (Figure 13). This final result is undoubtedly at least in part due to a disguised income effect (i.e., better educated youth are likely to be from better off households) but it is also suggestive of returns to education in the form of higher earnings.

Figure 12. Working poor (% of employed), employed youth versus employed adults, by country



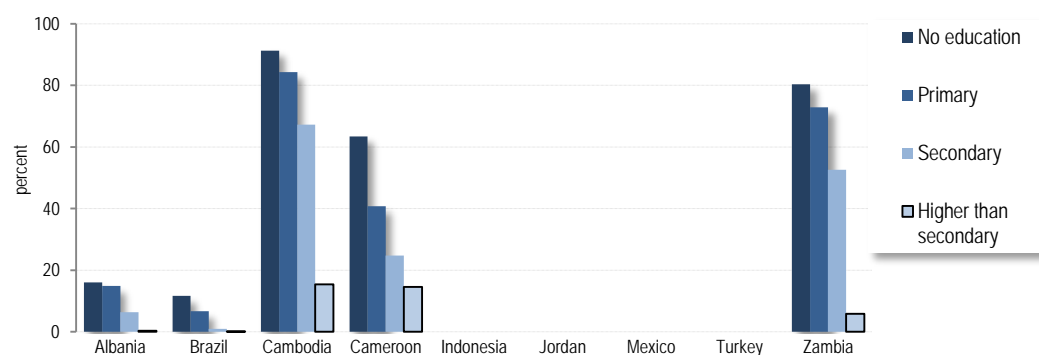
Source: UCW calculations based on national survey datasets (see sources, Table 1, for listing of specific surveys).

Table 6. Youth working poor (% of employed), by country, residence and sex

Country	Total	Sex		Residence	
		Male	Female	Urban	Rural
Albania	11.7	6.6	14.0	12.3	10.7
Brazil	3.3	1.4	11.9	3.5	3.0
Cambodia	75.0	45.6	80.3	76.5	73.4
Cameroon	43.5	16.6	54.1	42.4	44.6
Indonesia	-	-	-	-	-
Jordan	-	-	-	-	-
Mexico	-	-	-	-	-
Turkey	-	-	-	-	-
Zambia	67.8	33.2	78.0	66.4	69.2

Notes: *For Mexico ENOE 2009 residence is composed by "more urbanized" and "less urbanized".
Source: UCW calculations based on national survey datasets (see sources, Table 1, for listing of specific surveys).

Figure 13. Working poor (% of employed) and educational attainment, by country



Source: UCW calculations based on national survey datasets (see sources, Table 1, for listing of specific surveys).

4. In focus: Cameroon

19. Aggregate labour market indicators for Cameroon are reported in Table 7. Two-thirds of Cameroonian young persons are in the labour force, of which around four percent are unable to secure work. About three of five young people are no longer in education, and one in ten are absent from both education and the labour force. The labour market disadvantage faced by Cameroonian young people, however, is best reflected by indicators relating to underemployment and job quality. Employed young persons in Cameroon have very high rates of underemployment, and are predominantly in insecure, non-wage jobs offering little in the way of social security or benefits. Activity is still concentrated in the agricultural sector where productivity and returns to employment remain low. Forty-three percent of employed young persons in Cameroon are poor despite holding a job.

20. **There are important differences between the rural and urban youth labour markets, and between male and female young persons within each.** Youth labour force participation is much higher in rural areas but at the same time unemployment is much lower, owing in large part to the role of the agriculture sector in absorbing the rural youth labour force. Fewer rural young persons are in education. Rural females are disadvantaged vis-à-vis their male counterparts in terms of their education involvement; rural females are also much more likely to be absent from both education and the labour force. Female youth are also particularly disadvantaged in urban areas. Female urban youth are less likely than their male counterparts to be in education and much more likely to be absent from both education and the labour force. Urban female youth in the labour force are much more prone to unemployment than their male counterparts.

Table 7. Selected youth indicators, by residence and sex, Cameroon

		<i>Labour market participation (% of population)</i>	<i>Employment (% of population)</i>	<i>Education involvement (% of population)</i>	<i>Absent from education and from labour force (% of population)</i>	<i>Unemployment (% of labour force)</i>
Total	Male	69.4	66.7	50.8	4.2	3.9
	Female	66.1	62.9	35.1	13.8	4.8
	Total	67.7	64.7	42.5	9.3	4.4
Urban	Male	54.8	49.8	53.1	6.8	9.0
	Female	44.9	38.5	45.8	21.6	14.2
	Total	49.6	43.9	49.3	14.6	11.5
Rural	Male	79.8	78.6	49.2	2.4	1.4
	Female	81.2	80.2	27.5	8.3	1.2
	Total	80.5	79.4	37.8	5.5	1.3

Source: UCW calculations based on Cameroon Enquête camerounaise auprès des ménages III (ECAM 3) 2007.

Youth absent from both education and the labour force

21. **Around one in ten young persons are absent from both education and the labour force** (Table 7). Female youth are three times more likely than their male counterparts to be absent from both education and the labour force. Absence from both education and the labour force is highest for female youth living in urban areas – one in five females from this group neither study nor form part of the labour force.

22. Discouraged workers account for about 40 percent of male youth who are absent from education and the labour force, but only for about 25 percent of

female youth who are in this group (not shown). For female youth, the culturally-driven tendency to stay out of the labour force after leaving education in order to perform domestic duties and rear children is likely the most important explanation for their absence from education and the labour force.

23. The share of youth that is absent from both education and the labour force rises with household income (Table 8). This pattern is particularly pronounced for female youth, and is driven at least in part by the fact that females from poor households are less able to “afford” being outside the labour force.

Table 8. Youth absent from both education and the labour force, by INCOME QUINTILE, area of residence and sex, Cameroon

Income quintile	Total			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Lowest	1.5	5.2	3.5	4.1	14.2	9.4	1.3	4.5	3.0
2	5.1	7.2	6.3	13.0	13.8	13.4	3.5	6.1	5.0
3	3.9	12.4	8.4	5.8	19.2	12.8	2.9	9.0	6.1
4	5.3	18.1	11.8	8.0	24.7	16.8	2.7	10.3	6.4
Highest	4.4	21.1	12.8	5.8	22.1	14.3	0.9	17.6	8.6
Total	4.2	13.8	9.3	6.8	21.6	14.6	2.4	8.3	5.5

Source: UCW calculations based on Cameroon Enquête camerounaise auprès des ménages III (ECAM 3) 2007.

Table 9. Youth absent from both education and the labour force, by EDUCATION LEVEL, area of residence and sex, Cameroon^(a)

Education level	Total			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
No education	8.2	17	14.5	23.9	55.3	44.3	5.1	11.8	10.0
Primary	4	14.7	9.6	8.1	32.7	20.6	2.2	7.5	5.0
Secondary	3.6	11.8	7.5	5.5	16.1	11.1	1.9	5.6	3.4
Higher	5.9	13.3	9.3	7.0	10.8	8.8	--	--	12.6
Total	4.2	13.8	9.2	6.8	21.5	14.5	2.4	8.3	5.5

Notes: (a) Refers to youth not currently in education.

Source: UCW calculations based on Cameroon Enquête camerounaise auprès des ménages III (ECAM 3) 2007.

24. The rate of absence from both education and the labour force is highest among poorly educated youth. This pattern is particularly pronounced for urban youth; over one-half of uneducated urban female youth and almost one fourth of uneducated urban male youth are absent from both education and the labour force. For urban females, absence from education and the labour force declines with each level of education, suggesting that education provides this group with greater labour market opportunities. Even among most-educated female youth, however, 13 percent are absent from both education and the labour force, representing substantial underutilised productive capacity.

25. Regression analysis offers further insight into factors associated with young persons’ absence from both education and the labour force. Regression results are reported in Table 10 and summarised below. (Results decomposed by sex are presented in the annex).

- Older youth are more likely to be absent from both education and the labour force, presumably a reflection of more females undertaking full-time domestic responsibilities as they grow older and leave education.
- Absence from both education and the labour force is positively associated with numbers of siblings, a likely product of the greater child care responsibilities of female youth in such households.

- Youth from households in which the household head is in wage employment are less likely to be absent from school and the labour force than their peers from households whose head has no job.
- Youth who are themselves the head of household are less likely to be absent from both education and the labour force, as these youth must depend on themselves to make ends meet.
- The conditions of the local labour market appear to substantially influence the probability of absence from education and the labour market. An increase of the adult employment ratio, a proxy for labour demand, reduces the probability of absence from both education and the labour force. The share of youth in the overall population, a proxy for the supply of youth labour, also reduces the likelihood of absence from education and the labour force.
- Finally, consistent with the descriptive evidence presented above, absence from both education and the labour force is more likely among female and urban youth, among uneducated youth, and among youth from non-poor households.

Table 10. Factors associated with absence from both education and the labour force, labour force participation and unemployment, regression results, Cameroon^(a)

		Absent from education and labour force	Labour force participation	Unemployment
Youth characteristics	Age	0.3036 (3.01)**	0.1029 (1.38)	0.1740 (1.03)
	Age squared	-0.0068 (2.65)**	0.0004 (0.21)	-0.0032 (0.76)
	Female	0.6901 (16.00)**	-0.2218 (7.85)**	0.1078 (1.74)
	Youth is HH head	-0.4068 (5.80)**	0.3236 (6.74)**	-0.2033 (2.06)*
	Nationality (Cameroonian)	-0.2771 (1.76)	0.3526 (2.49)*	-0.1973 (0.63)
Household characteristics	No. siblings	0.0628 (3.05)**	-0.0011 (0.06)	0.0320 (1.12)
	No. adult	-0.0198 (0.75)	-0.0173 (0.91)	-0.0177 (0.47)
	HH size	-0.0177 (1.98)*	0.0013 (0.20)	0.0259 (2.22)*
	Male HH head	0.1257 (2.61)**	0.0156 (0.47)	-0.2237 (3.29)**
Youth education ^(b)	Primary	-0.4473 (6.79)**	0.4179 (7.14)**	0.0221 (0.17)
	Secondary or higher	-0.9840 (13.32)**	-0.3262 (5.66)**	0.0643 (0.49)
Household head education ^(c)	Primary	0.0241 (0.40)	-0.1396 (3.10)**	0.1256 (1.30)
	Secondary	0.0610 (0.93)	-0.3142 (6.51)**	0.1399 (1.33)
	Higher than secondary	-0.1868 (1.95)	-0.5857 (8.70)**	0.3467 (2.39)*
Household head employment status ^(d)	No employment	0.1411 (2.21)*	-0.6264 (12.38)**	0.6234 (6.35)**
	Self employee	-0.0725 (1.63)	0.2726 (8.06)**	-0.0731 (1.02)
Household wealth ^(e)	Poor	-0.2948 (5.51)**	0.2588 (7.14)**	-0.1521 (1.92)
Local labour market characteristics	Prime age employment to population ratio	-4.7883 (8.57)**	4.6650 (12.03)**	-0.6911 (0.81)
	Share of youth of working age population	-2.0490 (2.84)**	0.7834 (1.55)	0.1361 (0.12)
Area of residence	Rural	-0.3517 (6.29)**	0.2393 (6.30)**	-0.5228 (6.32)**
	Controls for provinces	Yes	Yes	Yes
	Constant	0.7080 (0.63)	-5.8661 (7.18)**	-3.0120 (1.57)
	Observations	11154	11063	6730

Notes: (a) Robust z statistics in parentheses: * significant at 5%; ** significant at 1% (b) Reference group is no education; (c) Reference group is no education; (d) Reference group is wage employment; (e) Reference group is non-poor.

Source: UCW calculations based on Cameroon Enquête camerounaise auprès des ménages III (ECAM 3) 2007.

Youth unemployment

26. About four percent of active 15-24 year-olds are unable to find a job.

Unemployment rates, however, understate the full extent of problems in securing full-time jobs because they do not consider young persons who have given up looking for work or young persons who are technically employed but work only occasionally. Youth unemployment nearly doubles to eight percent in Cameroon when discouraged workers are considered. More than 40 percent of employed youth are underemployed, as discussed in the next section. Almost three-fourths of unemployed youth have been looking for a job for at least one year, indicating that much of the unemployment problem in the country is structural in nature (not shown).

27. **There are important youth population segments for which the unemployment rate is much higher** (Table 7). Urban youth in the labour force are much more likely to be unemployed than their rural counterparts, underscoring the different nature of the urban and rural labour markets, and in particular the important role that the agriculture sector plays in absorbing young rural workers. Within urban areas, the unemployment rate for female youth is about one-third higher than that for male youth. Unemployment rates vary dramatically by region – unemployment is significant concern in Yaoundé and Douala, and to a lesser extent in Centre and Sud, but is negligible in the other regions of the country (not shown).

28. **Unemployment is lower among poorer Cameroonian youth** (Table 11). This result is likely less a reflection of labour market prospects and more a reflection of the fact that poor Cameroonian youth simply cannot afford to be unemployed, and must accept any job even if it is only part-time or is of low quality. Wealthy youth on the other hand are in a better position to sustain a period without work. Urban females living in households in the highest two income quintiles face the greatest risk of unemployment. Over 15 percent of active female youth from this group is without a job.

Table 11. Youth unemployment, by INCOME QUINTILE, area of residence and sex, Cameroon

Income quintile	Total			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Lowest	1.0	0.4	0.7	4.2	5.3	4.8	0.7	0.0	0.4
2	1.4	1.6	1.5	3.3	11.0	7.3	1.1	0.5	0.7
3	3.9	4.5	4.2	10.4	13.0	11.7	1.2	1.5	1.3
4	5.9	8.2	7.0	9.6	16.9	13.0	3.3	2.5	2.9
Highest	6.3	11.5	8.6	9.4	14.6	11.8	1.0	4.6	2.4
Total	3.9	4.8	4.4	9.0	14.2	11.5	1.4	1.2	1.3

Source: UCW calculations based on Cameroon Enquête camerounaise auprès des ménages III (ECAM 3) 2007.

Table 12. Youth unemployment, by EDUCATION LEVEL, area of residence and sex,^(a) Cameroon

Education level	Total			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
No education	2.5	0.4	1.0	5.2	6.4	5.9	2.0	0.0	0.6
Elementary	3.2	4.0	3.6	7.4	13.1	9.8	1.5	1.5	1.5
Secondary	3.8	7.2	5.4	8.5	13.5	11.0	1.0	1.8	1.3
Higher	28.5	40.3	33.8	32.2	41.4	36.5	15.4	34.9	22.9
Total	3.9	4.8	4.4	9.0	14.2	11.5	1.4	1.2	1.3

Notes: (a) Refers to youth not currently in education.

Source: UCW calculations based on Cameroon Enquête camerounaise auprès des ménages III (ECAM 3) 2007.

29. **The rate of youth unemployment increases with education level, peaking among those with higher education** (Table 12). This is partially the product of the fact that less-educated young people by definition begin their

transition to work at an earlier age, and therefore have had a greater length of exposure to the labour market and more time to secure employment. It is also a reflection of the important role of the agriculture sector in absorbing low skill labour. In addition, as the reservation wage is likely to rise with skill level, search time might increase with the level of human capital of the individual. This finding *per se*, therefore, says little about links between human capital levels and success in the labour market. The extremely high level of unemployment among those with higher education is nonetheless striking – one third of this group is without work.

30. Regression analysis offers further insight into factors associated with youth unemployment. Regression results are reported in Table 10 and summarised below. (Results decomposed by sex are presented in the annex).

- The probability of youth unemployment is higher in larger households, whereas youth from household headed by a male are less at risk of unemployment.
- Youth who are themselves the head of household are less likely to be unemployed, again presumably because this group must work for survival.
- Youth from households in which the household head is in wage employment are less likely to be unemployed than their peers from households whose head has no job.
- Youth from households whose head has higher education are more likely to be unemployed compared to those from households whose head is less educated; this is likely a reflection of the link between education and income, and the fact the wealthier youth are more able to sustain spells of unemployment.
- Links between youth unemployment and local labour market conditions are not significant.
- Finally, consistent with the descriptive evidence presented above, unemployment is more likely among urban youth and among youth from in non-poor households.

Youth underemployment

31. **Rates of youth underemployment are extremely high in Cameroon** (Table 13). The rate of underemployment is defined as the number of persons in situations of underemployment expressed as a percentage of total persons in employment. A person is considered in a situation of under-employment, in turn, if he or she indicates wanting to work more hours than he or she is actually working. Almost 43 percent of employed youth countrywide work fewer hours than they would like. Unlike the other measures of youth labour market disadvantage, underemployment does not vary substantially between rural and urban labour markets or between male and female youth. Underemployment rises with somewhat with household income (Table 13) and with educational levels (Table 14), but it is very high even among youth from lowest income households (38 percent) and with no education (46 percent). The high rate of under-employment points to the substantial under-utilisation of the productive capacity of Cameroonian young people.

Table 13. Youth underemployment, by INCOME QUINTILE, area of residence and sex, Cameroon

Income quintile	Total			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Lowest	38.0	38.1	38.1	34.4	33.3	33.8	38.2	38.5	38.4
2	37.9	39.9	39.1	41.6	36.3	38.9	37.4	40.3	39.1
3	45.6	43.5	44.5	45.1	34.9	40.1	45.8	46.2	46
4	43.5	46.7	45.0	35.4	44.3	39.4	48.7	48.1	48.4
Highest	52.5	40.0	47.2	47.8	34.3	41.9	59.8	51.1	56.5
Total	43.8	41.6	42.7	42.9	37.2	40.3	44.3	43.1	43.6

Source: UCW calculations based on Cameroon Enquête camerounaise auprès des ménages III (ECAM 3) 2007.

Table 14. Youth underemployment, by EDUCATION LEVEL, area of residence and sex,^(a) Cameroon

Education level	Total			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
No education	50.0	43.8	45.7	54.2	41.4	47.3	49.4	44	45.5
Elementary	53.7	49.6	51.6	47.9	42.7	45.7	56.6	51.5	53.7
Secondary	52.9	49.9	51.5	51.2	48.9	50.1	54.7	51	52.9
Higher	90.4	59.3	79.5	62.3	58.8	60.1	100	61.5	95.1

Notes: (a) Refers to youth not currently in education.

Source: UCW calculations based on Cameroon Enquête camerounaise auprès des ménages III (ECAM 3) 2007.

Youth wage employment

32. Nine out of every ten employed Cameroonian youth work in low-quality non-wage jobs (Table 15). There are very large differences in the levels of wage employment by both residence and sex. The share of employed urban youth enjoying wage employment is more than four times that of rural youth, while the share of male youth benefiting from wage employment is three times that of female youth. Young female workers in rural areas are by far the worst off according to this measure – less than two percent of this group is in wage employment. Wage employment rises with household wealth (Table 15). The of working youth enjoying wage employment also rises dramatically with education across all segments of the youth population (Table 16), pointing to important returns to education. Even a little education appears to make a large difference in this regard – the share of employed youth in wage employment more than doubles moving from no education to elementary education, and doubles again moving from elementary to secondary education.

Table 15. Youth wage employment, by INCOME QUINTILE, area of residence and sex, Cameroon

Income quintile	Total			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Lowest	5.6	1.3	3.3	25.5	11.2	17.8	4.2	0.6	2.3
2	6.4	2.7	4.2	19.1	13.0	16	4.5	1.6	2.8
3	13.5	2.6	7.8	23.1	6.9	15.2	9.8	1.2	5.2
4	19.8	6.4	13.5	27.6	12.4	20.8	14.8	3.1	9.0
Highest	31.1	13.1	23.6	38.6	18.0	29.6	19.3	3.5	13.2
Total	15.9	4.6	10.1	30.6	13.4	22.7	9.3	1.6	5.2

Source: UCW calculations based on Cameroon Enquête camerounaise auprès des ménages III (ECAM 3) 2007.

Table 16. Youth wage employment, by EDUCATION LEVEL, area of residence and sex,^(a) Cameroon

Education level	Total			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
No education ^(a)	12.1	1.0	4.3	32.1	6.6	18.6	9.2	0.6	3.1
Elementary ^(a)	20.1	3.7	11.5	32.8	12.4	24.3	13.9	1.4	6.8
Secondary ^(a)	30.5	14.1	22.8	42.8	22.2	33.1	17.7	5.8	12
Higher ^(a)	40.4	44.8	41.9	60.3	40.6	47.9	33.6	61.5	37.2

Notes: (a) Refers to youth not currently in education.

Source: UCW calculations based on Cameroon Enquête camerounaise auprès des ménages III (ECAM 3) 2007.

Youth working poor

33. Levels of working poor are very high among youth in Cameroon. This is particularly the case in rural areas where more than one out of every two youth workers are poor. The relatively high levels of working poor youth in rural areas points to the importance of expanding non-farm employment opportunities for rural youth. Less than one in five employed rural youth currently holds a non-farm job, but this group appears much better off. The level of working poverty among rural young people working off the farm is 20 percentage points lower than that for rural young people working on the farm (not shown).

Table 17. Youth working poor, by EDUCATION LEVEL, area of residence and sex^(a), Cameroon

Education level	Total			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
No education ^(a)	56.0	66.6	63.4	21.0	23.2	22.1	61.0	69.4	67.0
Elementary ^(a)	41.8	39.8	40.7	22.6	17.5	20.5	51.1	45.8	48.1
Secondary ^(a)	23.1	26.7	24.8	9.2	12.8	10.9	37.7	40.8	39.2
Higher ^(a)	20.2	4.2	14.6	0.0	5.3	3.3	27.1	0.0	23.6
Total^(b)	37.9	45.2	42.0	16.0	15.5	15.8	49.9	54.4	52.6

Notes: (a) Refers to employed youth not currently in education; and (b) Refers to all employed youth, regardless of education status.

Source: UCW UCW calculations based on Cameroon Enquête camerounaise auprès des ménages III (ECAM 3) 2007.

34. The share of youth working poor varies falls with level of education, but is by no means negligible even among the best-educated youth people. Overall, working poverty stands 63 percent for uneducated youth, falling to 25 percent for youth with secondary education and to 15 percent for youth with higher education.

5. In focus: Brazil

35. Aggregate labour market indicators for Brazil are reported in Table 18. Sixty-three percent of Brazilian young persons are in the labour force, of which a very large share – almost one in five - is unable to secure work. Youth unemployment is about three times that of adult unemployment, suggesting youth face unique barriers to securing employment. About half of young people are no longer in education, and more than one in ten are absent from both education and the labour force. The labour market disadvantage as reflected by poor quality jobs appears less an issue for Brazilian young people. Four out of every five of those working enjoys wage employment while less than three percent of those that are employed are poor.

36. **Decomposing the youth population by sex and residence gives a clearer picture of the specific groups of youth that are most disadvantaged.** Female youth in particular stand out in this context, in both rural and urban areas. They are much more likely than their male peers to be unemployed and also much more likely to be absent from both education and the labour force. Differences by sex for both indicators are largest in rural areas, where youth unemployment is almost three times higher, and where absence from both education and the labour force is almost five times higher, for female compared to male youth. Female youth do not appear disadvantaged in terms of their ability to further their studies – indeed, in urban areas, a slightly higher share of female compared to male youth are still in education.

Table 18. Selected youth indicators, by residence and sex, Brazil,

		Labour market participation (% of population)	Employment (% of population)	Education involvement (% of population)	Absent from education and from labour force (% of population)	Unemployment (% of labour force)
Total	Male	71.3	61.4	46.0	6.5	13.9
	Female	54.0	41.5	48.9	17.5	23.1
	Total	62.7	51.5	47.4	12.0	17.8
Urban	Male	69.9	58.8	46.3	6.8	15.9
	Female	55.5	41.9	49.4	16.2	24.5
	Total	62.7	50.3	47.9	11.5	19.7
Rural	Male	78.7	74.8	44.3	5.1	5.0
	Female	45.4	39.3	45.8	24.5	13.5
	Total	63.0	58.0	45.0	14.2	7.9

Source: UCW calculations based on Brazil Pesquisa Nacional por Amostra de Domicílios (PNAD) 2009.

Youth absent from both education and the labour force

37. **Around 12 percent of Brazilian young people are absent from both the education and the labour force.** Female youth are three times more likely than their male counterparts to be absent from both education and the labour force. Absence from both education and the labour force is highest for female youth living in rural areas – one in five females from this group neither study nor form part of the labour force. Information on discouraged workers is not available from PNAD 2009, so it is not possible to determine the extent to which those absent from both education and the labour force are persons that have given up actively seeking work. Again, the large difference in this indicator by sex points to the culturally-driven tendency for females to stay out of the labour force after leaving education in order to perform domestic duties and rear children.

38. **Absence from both education and the labour force is highest among youth from low income quintile households** (Table 19). The most

disadvantaged group in this regard is female youth from poorest households – almost one in three of female youth from this group is absent from both education and the labour force. Absence from both education and the labour force falls as household incomes rise, but even in highest income households 16 percent of female youth is in neither education nor the labour force

Table 19. Youth absent from both education and the labour force, by INCOME QUINTILE, area of residence and sex, Brazil

Income quintile	Total			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Lowest	10.7	30.9	21.5	12.5	30.5	22.4	6.7	31.9	19.5
2	7.1	22.0	14.7	7.8	21.6	15.0	4.5	23.5	13.6
3	6.4	14.9	10.5	6.7	14.6	10.6	5.4	16.8	10.4
4	4.7	10.6	7.5	4.8	10.1	7.4	3.7	16.1	8.9
Highest	4.1	7.6	5.8	4.3	7.2	5.7	0.9	15.5	7.0
Total	6.6	17.7	12.1	6.8	16.5	11.7	5.2	24.6	14.3

Source: UCW calculations based on Brazil Pesquisa Nacional por Amostra de Domicílios (PNAD) 2009.

39. Absence from both education and the labour force is highest among poorly educated youth (Table 20). Again, uneducated female youth are most disadvantaged, but the share of uneducated male youth that are absent from both education and the labour force is also high. While absence from both education and the labour force falls as levels of education rise, the high share of well-educated females that are absent from education and the labour force is also noteworthy. Over one fourth of females with a secondary education, and 13 percent with higher education, are outside both education and the labour force. This highlights the substantial underutilised productive capacity represented by the group of female youth that are absent from both education and the labour force, and underscores the need for policies expand and improve labour market opportunities for female youth.

Table 20. Youth absent from both education and the labour force, by EDUCATION LEVEL, area of residence and sex,^(a) Brazil

Education level	Total			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
No education	51.4	78.2	62.1	57.3	76.2	65.0	36.0	83.5	54.6
Elementary	13.9	50.0	29.0	15.7	50.0	30.1	8.9	49.8	26.0
Secondary	9.3	27.3	18.6	9.6	26.0	18.0	6.3	38.1	23.5
Higher	8.6	12.8	11.1	8.1	12.7	10.8	20.7	15.1	17.6

Notes: (a) Refers to youth not currently in education.

Source: UCW calculations based on Brazil Pesquisa Nacional por Amostra de Domicílios (PNAD) 2009.

40. Regression analysis offers further insight into factors associated with young persons' absence from both education and the labour force. Regression results are reported in Table 21 and summarised below. (Results decomposed by sex are presented in the annex).

- Older youth are more likely to be absent from both education and the labour force, presumably a reflection of more females undertaking full-time domestic responsibilities as they grow older and leave education.
- Absence from both education and the labour force is positively associated with household size and numbers of young siblings, a likely product of the greater child care responsibilities of female youth in such households.
- Youth from better educated households are more likely to be out of school and the labour force; this is likely a reflection of the link between education and income, and the fact the wealthier youth are less likely to have to work out of necessity.

- Youth from households in which the household head holds a wage job are more likely to be absent from school and the labour force than those from household whose head is in other non-wage employment; this result is explained in part by the fact that non-wage employment is often in family-based production where younger family members also play a role.
- Youth who are themselves the head of household are less likely to be absent from education and the labour force, presumably because this group must work for survival.
- Finally, consistent with the descriptive evidence presented above, absence from both education and the labour force is higher among female youth, and falls as youth education and household income rise.

Table 21. Factors associated with absence from both education and the labour force, labour force participation and unemployment, regression results, Brazil^(a)

		Absent from education and labour force	Labour force participation	Unemployment
Youth characteristics	Age	0.995 (25.78)**	1.084 (36.21)**	0.109 (2.37)*
	Age square	-0.024 (24.12)**	-0.023 (30.36)**	-0.004 (3.61)**
	Female	0.597 (41.60)**	-0.567 (50.86)**	0.357 (22.72)**
	Youth is HH head	-0.177 (8.17)**	0.432 (21.88)**	-0.545 (20.05)**
Household characteristics	Household size	0.033 (5.74)**	-0.033 (6.92)**	0.121 (17.99)**
	No. siblings aged 0-4	0.195 (15.86)**	-0.031 (2.85)**	-0.115 (7.25)**
	No. siblings aged 5-14	-0.080 (7.82)**	0.087 (10.68)**	-0.152 (12.76)**
	Sex of HH head (male)	0.128 (8.42)**	-0.152 (12.51)**	0.011 (0.65)
Youth education	Years of study	-0.125 (14.89)**	0.069 (9.47)**	0.029 (2.55)*
	Years of study squared	0.003 (5.31)**	-0.002 (4.04)**	-0.001 (1.82)
Household head education ^(b)	Elementary	0.041 (1.94)	-0.072 (4.10)**	0.145 (5.63)**
	Secondary	0.098 (3.73)**	-0.182 (8.37)**	0.234 (7.56)**
	Higher education	0.116 (4.56)**	-0.419 (20.24)**	0.368 (12.43)**
Household head employment status ^(c)	No employment	0.153 (8.72)**	-0.190 (13.13)**	0.181 (9.19)**
	Self Employee	-0.076 (4.35)**	0.093 (6.82)**	-0.183 (9.09)**
	Unpaid employee	-0.179 (4.04)**	0.205 (5.80)**	-0.417 (7.36)**
Household income quintile ^(d)	Quintile 2	-0.228 (11.75)**	0.205 (12.17)**	-0.473 (19.48)**
	Quintile 3	-0.397 (18.56)**	0.403 (22.49)**	-0.828 (32.05)**
	Quintile 4	-0.549 (22.73)**	0.483 (24.72)**	-1.094 (38.56)**
	Quintile 5	-0.603 (21.23)**	0.251 (11.39)**	-1.225 (37.01)**
Area of residence	Rural area	-0.094 (4.72)**	0.147 (8.92)**	-0.699 (25.44)**
	State dummies	Yes	Yes	Yes
	Constant	-10.802 (28.43)**	-11.878 (40.79)**	-1.512 (3.33)**
	Observations	68166	68166	41952

Notes: (a) Robust z statistics in parentheses: * significant at 5%; ** significant at 1%; (b) Reference group is household head with no education; (c) Reference group is wage employment; and (d) Reference group is lowest income quintile.

Source: UCW calculations based on *Brazil Pesquisa Nacional por Amostra de Domicílios* (PNAD) 2009.

Youth unemployment

41. Youth unemployment is very high in Brazil. Countrywide, almost one in five young persons in the labour force are without a job. Again, the youth unemployment rate is about three times that of adult Brazilians, suggesting it is problem related particularly to labour market opportunities for youth. Youth unemployment is especially high in urban areas, where one-fifth of active youth are without work. Female youth are particularly disadvantaged in terms unemployment in both rural and urban locations. The female youth unemployment rate is almost three times the male rate in rural areas, and is about one-third higher in cities and towns.

42. Youth living in lower income households appear more susceptible to unemployment. This pattern holds for both male and female youth and in both rural and urban areas of residence. The most disadvantaged group in terms of unemployment is low-income female youth living in urban areas – almost half of females in the labour force from this group is without a job. Unemployment falls as household incomes rises, but the unemployment rate exceeds 10 percent even in highest income households.

Table 22. Youth unemployment, by INCOME QUINTILE, area of residence and sex, Brazil

Income quintile	Total			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Lowest	22.2	38.3	28.9	31.5	47.1	38.5	6.0	14.9	9.1
2	15.5	29.9	21.6	18.9	33.4	25.4	5.9	13.6	8.5
3	12.6	20.6	16.0	14.3	21.6	17.5	4.3	13.3	7.4
4	10.6	17.8	13.7	11.5	18.4	14.5	3.2	10.5	5.7
Highest	10.5	14.5	12.2	11.1	14.7	12.7	1.7	9.1	4.0
Total	14.0	23.4	18.0	16.0	24.9	20.0	5.0	13.3	7.8

Source: UCW calculations based on *Brazil Pesquisa Nacional por Amostra de Domicílios (PNAD) 2009*.

43. More education appears to lower the risk of unemployment among Brazilian young people. This is especially the case moving from no education to elementary education, and from secondary to higher education. Unemployment is highest among uneducated female youth living in urban areas – almost half of those in the labour force from this group are unable to secure work. More education, however, is not a guarantee of a job in Brazil, particularly among female youth living in urban areas. Unemployment among urban female youth with a secondary education is 23 percent and among urban female youth with higher education is 15 percent. High unemployment even among the most educated youth points to possible mismatches between the skills produced by the education system and those needed in the labour market, and underscores the need for better mechanisms for bringing together skilled job seekers and employers.

Table 23. Youth unemployment, by EDUCATION LEVEL, area of residence and sex,^(a) Brazil

Education level	Total			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
No education	14.8	40.5	20.7	20.0	46.4	27.3	5.7	16.8	7.3
Elementary	11.4	24.8	15.4	14.0	29.7	18.7	5.1	11.8	7.0
Secondary	12.2	21.7	16.6	13.1	22.5	17.4	4.7	14.8	9.2
Higher	8.1	14.7	11.9	8.4	15.1	12.3	0.0	1.3	0.7

Notes: (a) Refers to youth not currently in education.

Source: UCW calculations based on *Brazil Pesquisa Nacional por Amostra de Domicílios (PNAD) 2009*.

44. Regression analysis offers further insight into factors associated with youth unemployment. Regression results are reported in Table 21 and summarised below. (Results decomposed by sex are presented in the annex).

- Unemployment is positively associated with household size but is negatively associated with the number of siblings, the results a likely product of the fact that breadwinners, including youth, from households with many dependents can less afford spells of unemployment.
- Youth from better educated households are more likely to be unemployed. Again, this is likely in part a reflection of the link between education and income, and the fact the wealthier youth are less likely to have to work out of necessity.
- Youth from households in which the household head holds a wage job are more likely to unemployed than those from household whose head is in other non-wage employment; this result is explained in part by the fact that non-wage employment is often in family-based production where younger family members also play a role.
- Youth who are themselves the head of household are less likely to be unemployed, presumably because this group must work for survival.
- Consistent with the descriptive evidence presented above, the risk of unemployment is higher among female and urban youth, and rises as household income rises.

Youth wage employment

45. **Four out of every five youth workers in Brazil enjoy wage employment.** This result suggests that while young people are disadvantaged in terms of being able to secure employment they are less disadvantaged in terms of the quality of jobs that they eventually succeed in obtaining. The share of youth in wage employment differs little by sex. The difference by residence in this indicator is, however, very large: 85 percent of employed urban youth are in waged employment against only 50 percent of their rural counterparts. This is in turn a reflection of the continued importance of informal farm employment in rural areas. Two-thirds of all employed rural youth in Brazil remain in farm jobs. Wage employment rises with both household income level (Table 24) and with youth educational levels (Table 25).

Table 24. Youth wage employment, by INCOME QUINTILE, area of residence and sex, Brazil

Income quintile	Total			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Lowest	58.2	55.9	57.4	75.3	76.5	75.8	36.6	22	31.8
2	72.8	75.8	73.9	81.2	82.7	81.8	51.8	51.1	51.6
3	80.1	84.7	82	84.7	88	86.1	60.7	63.1	61.5
4	86.6	89.2	87.7	88.9	90.5	89.6	68.4	73.7	70.1
Highest	84.2	87.7	85.7	86.2	88.6	87.2	59.6	66.2	61.5
Total	77.7	81.1	79.1	84.6	86.9	85.6	51.2	47.3	49.9

Source: UCW calculations based on Brazil Pesquisa Nacional por Amostra de Domicílios (PNAD) 2009.

Table 25. Youth wage employment, by EDUCATION LEVEL, area of residence and sex,^(a) Brazil

Education level	Total			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
No education ^(a)	66.3	72.2	67.3	68.4	82.5	71.3	63.2	45.8	61.0
Elementary ^(a)	75.5	66.7	73.2	81.8	81.7	81.8	61.4	35.2	54.3
Secondary ^(a)	85.7	86.1	85.9	88.7	89	88.8	62	61.5	61.8
Higher ^(a)	83.3	89.2	86.6	84.2	89.3	87.1	58	85.2	73.4

Notes: (a) Refers to youth not currently in education.

Source: UCW calculations based on Brazil Pesquisa Nacional por Amostra de Domicílios (PNAD) 2009.

Youth working poor

46. Youth who are working poor are primarily confined to rural areas. About 12 percent of employed youth in rural areas are poor compared with less than two percent of their urban counterparts. Employed female and male youth appear equally susceptible to poverty in both rural and urban areas. The relatively high levels of working poor youth in rural areas points to the importance of expanding non-farm employment opportunities for rural youth. Only about one three employed rural youth current holds a non-farm job, but this group appears much better off. The level of working poverty among rural young people working off the farm stand at less than three percent compared to 17 percent for those working on the farm (not shown).

Table 26. Youth working poor, by EDUCATION LEVEL, area of residence and sex^(a), Brazil

Education level	Total			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
No education ^(a)	11.7	11.3	11.6	7.4	6.5	7.2	18.1	23.1	18.7
Elementary ^(a)	5.6	9.1	6.5	2.9	4.8	3.4	11.6	17.7	13.3
Secondary ^(a)	0.8	1.1	0.9	0.4	0.7	0.5	3.7	4.7	4.1
Higher ^(a)	0.2	0.0	0.1	0.0	0.0	0.0	4.7	0.0	2.1
Total^(b)	2.8	2.9	2.9	1.4	1.4	1.4	11.8	12.1	11.9

Notes: (a) Refers to employed youth not currently in education; and (b) Refers to all employed youth, regardless of education status.

Source: UCW calculations based on Brazil Pesquisa Nacional por Amostra de Domicílios (PNAD) 2009.

47. The share of youth working poor varies falls with level of education. Overall, working poverty declines from 12 percent for uneducated youth to less than one percent for youth with at least a secondary education. Even a small amount of education appears relevant to securing jobs that offer an escape from poverty. The level working poverty among youth with elementary education is only half that of youth with no education. This is further evidence of the value of education in the Brazilian labour market. It is not only easier for educated youth to find a job but the jobs that they do find are more likely to offer an escape from poverty.

6. Conclusions

48. This report presented descriptive evidence of the ways in which young people are disadvantaged in the labour market. Two broad dimensions of labour market disadvantage were investigated – first, labour market disadvantage as reflected by a lack of jobs and, second, labour market disadvantage as reflected by poor quality jobs. The nine countries included in the report are very diverse in terms of their level of development, economic structure and labour force characteristics. Nonetheless, it is possible to identify from the descriptive evidence some common overall policy-relevant conclusions with regard to youth labour market disadvantage.

- **Youth face special barriers to securing employment.** In all nine sample countries, the rate of youth unemployment is at least double that of adult unemployment, indicating that youth unemployment is in large part driven by factors unique to the youth labour market rather than by factors relating to the labour market as a whole. These results highlight the need for targeted policies directed specifically at addressing the special barriers to employment faced by youth.
- **Youth labour market disadvantage is closely associated with low levels of education.** While educated young people have greater initial difficulty in securing jobs in some of the sample countries, the jobs that they do eventually secure are likely to be of better quality. Poorly-educated youth across all sample countries are much more likely to find themselves in low quality non-wage and farm work, and much more likely to be working poor. These results highlight the importance of providing second chance education and training opportunities for disadvantaged youth designed to impart key skills and knowledge of relevance to labour market needs.
- **Female youth are particularly disadvantaged in the labour force.** Young persons facing disadvantage in the labour force, in terms of both a lack of jobs and of low quality jobs, are disproportionately female across all sample countries. Female youth are much more likely to be absent from both education and the labour force, even if they are well educated. They also face a greater risk of unemployment in all countries except Zambia. Those female youth with jobs are much more likely than their male counterparts to be poor. These results underscore the need for policies to expand and improve labour market opportunities for female youth.
- **Youth living rural areas also face greater labour market disadvantages.** While a smaller share of rural youth are technically unemployed, rural youth are more likely to be underemployed, i.e., to have to settle for only part-time or occasional work when they would like to be working full-time. Rural youth are also much less likely to enjoy wage employment a product in large part of limited job opportunities outside of agriculture in most of the sample countries. Expanding *non-farm* enterprise employment for the large proportion of rural youth in agriculture will therefore be critical to improving their employment outcomes.

Annex I. Additional descriptive statistics

Table A1. Youth not in education and not in employment (% of population), by country, residence and sex

Country	Total	Residence		Sex		HH income	
		Urban	Rural	Male	Female	Poorest	Wealthiest
Albania	27.5	23.9	30.8	23.8	31.1	41.9	13.6
Brazil	23.2	23.9	19.2	16.4	30.0	36.6	13.5
Cambodia	7.3	10.4	6.4	3.8	10.8	9.4	6.8
Cameroon	12.3	20.4	6.6	6.9	17.1	4.2	17.3
Indonesia	27.7	23.4	31.5	20.4	35.1	-	-
Jordan	27.9	28.0	27.7	16.8	40.4	-	-
Mexico*	22.6	19.8	25.4	11.7	33.3	-	-
Turkey	41.4	39.6	44.8	25.0	56.8	-	-
Zambia	12.9	26.0	4.8	9.8	15.8		

Notes: *For Mexico ENOE 2009 residence is composed by "more urbanized" and "less urbanized".

Source: UCW calculations based on Albania Living Standards Measurement Survey (LSMS) 2008; Brazil Pesquisa Nacional por Amostra de Domicílios (PNAD) 2009; Cambodia Socio-Economic Survey (SES) 2009; Cameroon Enquête camerounaise auprès des ménages III (ECAM 3) 2007; Indonesia Labor Force Survey (Sakernas) 2010; Jordan National Child Labour Survey 2007; Mexico Encuesta Nacional de Ocupación y Empleo (ENOE) 2009; Turkey Labour Force Survey 2006; and Zambia Labour Force Survey 2008.

Table A2. Selected youth indicators, by residence and sex, Brazil,

		<i>Labour market participation (% of population)</i>	<i>Employment (% of population)</i>	<i>Education involvement (% of population)</i>	<i>Absent from education and from labour force (% of population)</i>	<i>Unemployment (% of labour force)</i>	<i>Absent from education and employment (% of population)</i>
Total	Male	71.3	61.4	46.0	6.5	13.9	16.4
	Female	54.0	41.5	48.9	17.5	23.1	30.0
	Total	62.7	51.5	47.4	12.0	17.8	23.1
Urban	Male	69.9	58.8	46.3	6.8	15.9	17.9
	Female	55.5	41.9	49.4	16.2	24.5	29.9
	Total	62.7	50.3	47.9	11.5	19.7	23.9
Rural	Male	78.7	74.8	44.3	5.1	5.0	9.0
	Female	45.4	39.3	45.8	24.5	13.5	30.6
	Total	63.0	58.0	45.0	14.2	7.9	19.2

Source: UCW calculations based on Brazil Pesquisa Nacional por Amostra de Domicílios (PNAD) 2009.

Table A3. Youth absent from both education and employment, by INCOME QUINTILE, area of residence and sex, Brazil

Income quintile	Total			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Lowest	25.2	46.5	36.6	31.6	49.9	41.6	11.3	37.9	24.7
2	18.0	36.5	27.5	20.5	38.4	29.8	9.2	29.3	18.8
3	15.7	26.9	21.1	17.0	27.4	22.1	8.8	23.9	15.5
4	12.8	22.1	17.2	13.6	22.1	17.6	6.2	22.0	12.9
Highest	11.4	15.9	13.5	11.9	15.7	13.7	2.4	20.3	9.9

Source: UCW calculations based on Brazil Pesquisa Nacional por Amostra de Domicílios (PNAD) 2009.

Table A4. Youth absent from both education and employment, by EDUCATION LEVEL, area of residence and sex,^(a) Brazil

Education level	Total			Urban			Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
No education	58.6	87.0	70.0	65.9	87.3	74.5	39.6	86.3	57.9
Elementary	23.7	62.4	39.9	27.5	64.9	43.2	13.6	55.7	31.2
Secondary	20.4	43.1	32.1	21.5	42.6	32.3	10.8	47.2	30.5
Higher	16.0	25.6	21.6	15.8	25.9	21.8	20.7	16.2	18.2

Notes: (a) Refers to youth not currently in education.

Source: UCW calculations based on Brazil Pesquisa Nacional por Amostra de Domicílios (PNAD) 2009.

Table A5. Selected youth indicators, by residence and sex, Cameroon

		Labour market participation (% of population)	Employment (% of population)	Education involvement (% of population)	Absent from education and from labour force (% of population)	Unemployment (% of labour force)	Absent from education and from Employment (% of the population)
Total	Male	69.4	66.7	50.8	4.2	3.9	6.9
	Female	66.1	62.9	35.1	13.8	4.8	17.1
	Total	67.7	64.7	42.5	9.3	4.4	12.3
Urban	Male	54.8	49.8	53.1	6.8	9.0	11.8
	Female	44.9	38.5	45.8	21.6	14.2	28.2
	Total	49.6	43.9	49.3	14.6	11.5	20.4
Rural	Male	79.8	78.6	49.2	2.4	1.4	3.5
	Female	81.2	80.2	27.5	8.3	1.2	9.3
	Total	80.5	79.4	37.8	5.5	1.3	6.6

Source: UCW calculations based on Cameroon Enquête camerounaise auprès des ménages III (ECAM 3) 2007.

Table A6. Youth absent from both education and employment, by INCOME QUINTILE, area of residence and sex, Cameroon

Income quintile	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Lowest	7.4	18.4	13.2	2	4.6	3.4	2.4	5.7	4.1
2	15.2	20.6	18.1	4.4	6.6	5.6	6.2	8.6	7.5
3	12.2	26.5	19.7	3.8	10.2	7.2	6.7	15.8	11.5
4	12.9	32.1	23.1	5.1	12.3	8.6	9	23	16.1
Highest	10.7	27.9	19.7	1.7	20.6	10.3	8.1	26.2	17.3

Source: UCW calculations based on Cameroon Enquête camerounaise auprès des ménages III (ECAM 3) 2007.

Table A7. Youth absent from both education and employment, by EDUCATION LEVEL, area of residence and sex, Cameroon^(a)

Education level	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
No education	29.2	58.8	48.6	7	11.9	10.6	10.5	17.5	15.5
Primary	14.4	41	27.9	3.6	8.9	6.4	6.9	18.1	12.8
Secondary	9.4	21.8	15.9	2.5	6.8	4.3	5.8	15.6	10.5
Higher	17.2	23.3	20.1	--	--	--	15.5	26.1	20.5

Notes: (a) Refers to youth not currently in education.

Source: UCW calculations based on Cameroon Enquête camerounaise auprès des ménages III (ECAM 3) 2007.

Annex II. Additional descriptive statistics

Table A8. Factors associated with absence from both education and the labour force, labour force participation and unemployment, regression results, by sex, Brazil^(a)

		Absent from education and labour force		Labour force participation		Unemployment	
		Male	Female	Male	Female	Male	Female
Youth characteristics	Age	0.824 (13.15)**	1.069 (21.18)**	1.164 (25.70)**	1.010 (24.35)**	0.082 (1.27)	0.117 (1.76)
	Age square	-0.020 (12.59)**	-0.025 (19.49)**	-0.024 (20.86)**	-0.022 (20.85)**	-0.003 (2.12)*	-0.004 (2.60)**
	Youth is HH head	-0.552 (11.39)**	0.112 (4.28)**	0.818 (20.82)**	0.168 (6.82)**	-0.853 (18.73)**	-0.267 (7.49)**
Household characteristics	Household size	0.088 (9.53)**	0.023 (3.08)**	-0.056 (7.80)**	-0.037 (5.77)**	0.102 (10.48)**	0.145 (15.15)**
	No. siblings aged 0-4	-0.128 (5.08)**	0.282 (18.68)**	0.191 (9.47)**	-0.075 (5.36)**	-0.201 (7.75)**	-0.070 (3.34)**
	No siblings aged 5-14	-0.115 (7.27)**	-0.072 (5.29)**	0.116 (9.78)**	0.074 (6.41)**	-0.143 (8.72)**	-0.159 (9.00)**
	Sex of HH head (male)	-0.023 (0.92)	0.260 (12.99)**	-0.102 (5.56)**	-0.212 (12.78)**	0.011 (0.45)	0.065 (2.77)**
Youth education	Years of study	-0.207 (17.00)**	-0.078 (6.53)**	0.108 (10.46)**	0.073 (6.74)**	0.012 (0.77)	0.027 (1.47)
	Years of study square	0.008 (11.24)**	-0.000 (0.72)	-0.005 (8.95)**	-0.001 (1.12)	0.0001 (0.09)	-0.001 (1.38)
Household head education ^(b)	Elementary	0.081 (2.47)*	-0.004 (0.14)	-0.125 (4.83)**	0.008 (0.34)	0.171 (4.89)**	0.117 (3.05)**
	Secondary	0.131 (3.06)**	0.040 (1.17)	-0.248 (7.58)**	-0.092 (3.06)**	0.292 (6.76)**	0.178 (3.95)**
	Higher	0.182 (4.46)**	0.044 (1.33)	-0.566 (18.44)**	-0.275 (9.59)**	0.480 (11.61)**	0.269 (6.25)**
Household head employment status ^(c)	No employment	0.187 (6.82)**	0.129 (5.52)**	-0.201 (9.48)**	-0.179 (8.89)**	0.205 (7.48)**	0.155 (5.44)**
	Self employee	-0.095 (3.21)**	-0.068 (3.02)**	0.159 (7.72)**	0.038 (2.04)*	-0.188 (6.56)**	-0.186 (6.53)**
	Unpaid employee	-0.172 (2.44)*	-0.157 (2.67)**	0.230 (4.41)**	0.163 (3.27)**	-0.420 (5.38)**	-0.416 (4.97)**
Household income quintile ^(d)	Quintile 2	-0.313 (9.38)**	-0.189 (7.63)**	0.232 (8.87)**	0.182 (8.00)**	-0.531 (15.21)**	-0.434 (12.58)**
	Quintile 3	-0.404 (11.61)**	-0.395 (14.25)**	0.405 (14.86)**	0.397 (16.23)**	-0.866 (23.41)**	-0.812 (22.18)**
	Quintile 4	-0.589 (15.07)**	-0.524 (16.71)**	0.499 (16.95)**	0.474 (17.77)**	-1.126 (27.84)**	-1.092 (27.09)**
	Quintile 5	-0.633 (13.99)**	-0.588 (15.85)**	0.311 (9.45)**	0.224 (7.39)**	-1.251 (26.60)**	-1.245 (26.37)**
Area of residence	Rural area	-0.290 (8.32)**	0.003 (0.11)	0.376 (14.83)**	-0.029 (1.30)	-0.789 (20.02)**	-0.625 (15.87)**
	State dummies	Yes	Yes	Yes	Yes	Yes	Yes
	Constant	-8.626 (14.13)**	-11.390 (22.87)**	-12.881 (29.57)**	-11.628 (28.61)**	-1.165 (1.84)	-1.308 (1.98)*
	Observations	34159	34007	34159	34007	23945	18007

Notes: (a) Robust z statistics in parentheses: * significant at 5%; ** significant at 1%; (b) Reference group is household head with no education; (c) Reference group is wage employment; and (d) Reference group is lowest income quintile.

Source: UCW calculations based on *Brazil Pesquisa Nacional por Amostra de Domicílios (PNAD) 2009*.

Table A9. Factors associated with absence from both education and the labour force, labour force participation and unemployment, regression results, by sex, Cameroon^(a)

		Labour force participation		Absent from education and labour force		Unemployment	
		Male	Female	Male	Female	Male	Female
Youth characteristics	Age	0.0307 (0.27)	0.1263 (1.24)	0.2907 (1.60)	0.3000 (2.43)*	0.0383 (0.16)	0.2535 (1.08)
	Age squared	0.0032 (1.07)	-0.0008 (0.31)	-0.0071 (1.52)	-0.0063 (2.01)*	0.0002 (0.03)	-0.0053 (0.89)
	Youth is the HH. head	0.3492 (4.69)**	0.0907 (1.28)	-0.8056 (4.59)**	-0.0678 (0.78)	-0.2863 (1.93)	-0.0200 (0.14)
	Nationality	0.2709 (1.24)	0.3569 (1.81)	-0.7020 (1.54)	-0.1852 (1.00)	-0.1908 (0.44)	-0.3668 (0.79)
Household characteristics	No. siblings	0.0179 (0.62)	0.0215 (1.00)	0.0058 (0.15)	0.0669 (2.69)**	-0.0282 (0.60)	0.0710 (1.78)
	No. adult	-0.0429 (1.49)	-0.0241 (0.92)	0.0375 (0.92)	-0.0450 (1.29)	0.0165 (0.32)	-0.1000 (1.82)
	HH size	-0.0153 (1.59)	0.0046 (0.54)	0.0170 (1.19)	-0.0247 (2.21)*	0.0387 (2.41)*	0.0209 (1.21)
	Male HH head	0.1832 (3.39)**	-0.0861 (1.90)	-0.1955 (2.28)*	0.3418 (5.63)**	-0.2686 (2.52)*	-0.1056 (1.12)
Youth education ^(b)	Primary	0.2717 (2.37)*	0.3328 (4.59)**	-0.8139 (6.30)**	-0.2726 (3.53)**	-0.3038 (1.69)	0.3573 (1.85)
	Secondary or higher	-0.7166 (6.51)**	-0.2585 (3.46)**	-1.3662 (9.40)**	-0.7854 (9.04)**	-0.2421 (1.32)	0.3915 (1.93)
Household head education ^(c)	Primary	-0.1096 (1.56)	-0.0785 (1.30)	0.1311 (1.10)	-0.0798 (1.11)	0.2758 (1.96)*	-0.0531 (0.39)
	Secondary	-0.4021 (5.43)**	-0.1611 (2.46)*	0.2864 (2.16)*	-0.1246 (1.60)	0.4148 (2.66)**	-0.1720 (1.16)
	Higher than secondary	-0.7629 (7.32)**	-0.3641 (4.05)**	0.3345 (1.85)	-0.4673 (4.09)**	0.4766 (2.07)*	0.1168 (0.60)
Household ehad employment status ^(d)	No employment	-0.7588 (10.86)**	-0.4639 (6.26)**	0.4029 (3.44)**	0.0296 (0.37)	0.7744 (5.27)**	0.5294 (3.81)**
	Self employee	0.3164 (6.24)**	0.2465 (5.30)**	0.1212 (1.32)	-0.1505 (2.76)**	0.1238 (1.13)	-0.2444 (2.49)*
Household wealth ^(e)	Poor	0.0853 (1.59)	0.4243 (8.25)**	0.0010 (0.01)	-0.4624 (6.71)**	-0.1871 (1.64)	-0.1118 (1.03)
Local labour market characteristics	Prime age employment to pop.ratio	4.1418 (7.02)**	5.4717 (10.11)**	-2.7149 (2.25)*	-5.2092 (8.10)**	0.4213 (0.32)	-2.0652 (2.00)*
	Share of youth of working age pop.	-0.6460 (0.85)	2.3390 (3.33)**	-1.4267 (1.14)	-2.2595 (2.52)*	2.0199 (1.23)	-2.0254 (1.28)
Area of residence	Rural	0.1447 (2.55)*	0.3420 (6.49)**	-0.2055 (2.01)*	-0.4377 (6.42)**	-0.4713 (4.08)**	-0.6146 (5.40)**
	Controls for provinces	Yes	Yes	Yes	Yes	Yes	Yes
	Constant	-4.1298 (3.34)**	-7.4131 (6.62)**	-0.8373 (0.40)	1.6013 (1.19)	-3.4722 (1.25)	-1.6562 (0.63)
	Observations	5344	5719	5386	5768	3397	3333

Notes: (a) Robust z statistics in parentheses; * significant at 5%; ** significant at 1% (b) Reference group is no education; (c) Reference group is no education; (d); (d) Reference group is wage employment; (e) Reference group is non-poor.

Source: UCW calculations based on Cameroon Enquête camerounaise auprès des ménages III (ECAM 3) 2007.