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Understanding Children's Work
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School to work transitions in Georgia: a preliminary analysis based on household budget survey data

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As part of broader efforts toward 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) project in December 2000. The project 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 project 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 project. 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.

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ABSTRACT

In Georgia, the lack of employment opportunities and with it, the loss of positive motivation and hope in a better future, is among the critical challenges facing the current generation of young people. Many of the employment problems of Georgian young people are rooted in the critical period of transition from education to working life. Yet the routes that young people take from education to employment are poorly understood, and data relating to this transition period are scarce. There is therefore limited empirical basis for formulating policies and programmes promoting youth employment and successful school to work transitions.

This paper constitutes a starting point for more detailed analysis on youth labour market status in the Georgian context and it study is aimed at contributing to fill the lack of information about the transition from education to working life. It therefore analyses a set of youth education and employment indicators based on 2002 Georgia Household Budget Survey. Particular emphasis is placed on measuring the initial transition from school to work for different groups of young people, and on identifying the factors affecting this transition.

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1. BACKGROUND

1. Youth unemployment and underemployment represent growing concerns worldwide. According to ILO estimates, youth in 2002 made up 41 percent of the world's unemployed, 88 million persons in absolute terms. Young workers everywhere invariably have higher rates of joblessness and unemployment and much lower earnings than older workers. Young people are also tend to be concentrated in low-skill informal work, or in hazardous forms of work that are ill-suited to their age and experience.

2. In Georgia, the lack of employment opportunities and with it, the loss of positive motivation and hope in a better future, is among the critical challenges facing the current generation of young people. This is true for youth living in towns and cities with traditional labour markets, and in rural areas where jobs are few. In all, one of every four young persons in the labour force is unable to find a job. It takes an average of six to eight years for Georgian young people to settle into work after leaving school.

3. Many of the employment problems of Georgian young people are rooted in the critical period of transition from education to working life. Yet the routes that young people take from education to employment are poorly understood, and data relating to this transition period are scarce. There is therefore limited empirical basis for formulating policies and programmes promoting youth employment and successful school to work transitions.

4. This study is aimed at beginning to fill this gap by analysing a set of youth education and employment indicators based on 2002 Georgia Household Budget Survey. Particular emphasis will be placed on measuring the initial transition from school to work for different groups of young people, and on identifying the factors affecting this transition. The analysis will include the composition, as well as the timing and duration, of the transition period.

5. The study is structured as follows. Section 2 provides a general overview of macro-economic and labour market trends, as background for the discussion on youth employment in Georgia in the following sections. Section 3 presents a descriptive overview of the time use patterns of young people and how these patterns differ by individual and household characteristics. Section 4 examines the status of young people in the labour market, and the extent to which they are disadvantaged vis-à-vis adult workers. Section 5 discusses the construction of a synthetic indicator measuring the duration and timing of the transition from school to work. Section 6 then applies this indicator to assess the transition to working life in the Georgian context. Section 7 concludes and looks at areas of future research.

2. COUNTRY CONTEXT: MACROECONOMIC AND LABOUR MARKET TRENDS[1]

6. Following independence, Georgia went through an economic collapse, and by the end of 1994 output had fallen by two thirds. Economic stabilization and structural reform measures launched in 1994 succeeded in restoring economic growth; growth averaged 10 percent over the two years 1996 and 1997. However, subsequent economic performance has been weaker: real GDP growth has slowed to 3 percent per year since 1998, reflecting uneven progress in reforms, two major droughts (in 1998 and 2000), and the lingering effects of the 1998 Russian crisis. Today, real GDP is still only 40 percent of its level at independence. With an annual per capita GDP (PPP) of US$2,664 in 2000, Georgia is one of the poorest countries in ECA.[2]

Table 1. - Georgia: Selected macro-economic indicators, 1995 – 2001

	1995	1996	1997	1998	1999	2000	2001
Annual Real GDP Growth (%)	2.6	10.5	10.6	2.9	3.0	1.9	4.5
GDP Level (1990=100)	29.6	32.7	36.1	37.2	38.3	39.0	40.8
Average Annual Inflation, CPI (%)	162.7	39.3	7.0	3.6	19.1	4.0	4.7
FDI (million USD)	6.3	54.4	236.3	221.0	61.7	152.6	96.1
Exchange Rate, GEL/US$ (Average)	1.280	1.250	1.297	1.39	2.02	1.98	2.07

Source: World Bank, IMF, ILO, Georgia: The World Bank (2002) Georgia Poverty Update (2002), Rep. No. 22350-GE and UNICEF (2002), Social Monitor 2002, UNICEF Innocenti Research Centre: Florence data.

7. Economic growth has had only a modest impact on household welfare, and in recent years growth in incomes and private consumption has lagged behind GDP growth. Likewise, the employment content of GDP growth has been insufficient to generate enough new jobs to expand opportunities for the poor. This reflects the relatively narrow sectoral base of the economic recovery, with gains concentrated in industries with only a moderate impact on employment, mainly communications, financial intermediation and transport: while some 75 percent of the real value added in the economy occurred in these industries, they have only 5 percent aggregate share in employment. Moreover, about half of the population, which depends on agriculture for their livelihood, was adversely affected by declining agricultural production. Consequently, the gains of growth were not shared equally, and inequality increased: in 2000, the Gini coefficient (consumption) was 0.39.

8. Increasing inequality and falling consumption increased vulnerability and pushed poverty levels up. Poverty incidence gradually increased from some 14 percent in 1997 to 23 percent in 2000. At the same time, there was a steady increase in the depth and severity of poverty. More remarkably, while only some 20 percent of Georgians currently may be chronically poor, many more are economically vulnerable: over 40 percent of people experience poverty at least once during the year, reflecting a high degree of volatility in household consumption. It is estimated that over 50 percent of the Georgian population is vulnerable to poverty for any upcoming year.

[1] This section is drawn primarily from World Bank, Child Welfare Note – Georgia, unpublished draft, 2004.

[2] In 2000, Georgia's per capita GDP in purchasing parity terms is higher than in Moldova (US$2,109), similar to Armenia (US$2,559) and Kyrgyz Republic (US$ 2,711) and lower than in Azerbaijan (US$ 2,936) and the other European ECA countries. In comparison, the average per capita GDP for ECA amounted to PPP$ 6,794 (see The World Bank, World Development Indicators 2002).

Table 2. - Dynamics of GDP, Employment, Productivity and Wages (1995=100)

	1996	1997	1998	1999	2000
GDP growth	110.4	122.0	125.7	129.4	131.8
Employment growth	105.2	115.2	104.0	106.2	108.6
Productivity growth	105.2	106.8	121.7	123.2	123.2
Real wage	149.1	201.4	253.4	258.7	317.0

Source: UNICEF (2002), *Social Monitor 2002,* UNICEF Innocenti Research Centre: Florence and calculations.

9. The capacity of the public sector to stimulate economic growth and provide quality services to citizens has been fragile. The bulk of budget expenditures (over 90 percent in 2000) was used to cover recurrent costs, in particular transfers (24 percent) - pensions, poverty benefits, assistance to internally displaced people (IDPs), and only some nine percent was allocated for capital expenditures. Altogether, expenditures on social insurance and welfare, health and education account for close to 45 percent of public spending.

10. While employment has expanded since the mid-1990s, and the employment rate is at a respectable 65 percent, employment opportunities differ significantly between urban and rural areas – the employment rate among the urban population is a low 46 percent, and in rural areas it is 73 percent. This reflects the low employment content of industrial growth, and it may reflect underemployment resulting from an overhang of labour in the rural areas. Registered unemployment is at 17 percent, but this may well underestimate the actual rate of unemployment, which is estimated by official sources to be closer to 20-25 percent.[3] Again, unemployment is significantly higher in urban than in rural areas – 26 percent and 6 percent respectively. To a large extent, high unemployment reflects labour shedding from state enterprises, which the private sector has not been able to absorb. Migration abroad, especially to Russia, has served as a risk management strategy in many poor households and has to some extent eased the pressure on the labour market.

Table 3. - Labour force, 1995-2000

	1995	1996	1997	1998	1999	2000
Labour force participation rate (%)			70			65
Employment rate (%)	59.4	62.5	68.4	61.8	63.1	64.5
Annual registered unemployment rate (average percent of the labour force)	2.6	2.4	5.0	5.0	5.5	5.9
Unemployment rate, ILO methodology	...	11.6	5.2	11.1	12.7	10.1

Source: UNICEF (2002), *Social Monitor 2002*, UNICEF Innocenti Research Centre: Florence; The World Bank (1997), Georgia Poverty Assessment.

11. Labour market status is the main determinant of household poverty. While the unemployed and non-participants in the labour market are most likely to be poor, the majority of the poor in Georgia are the working poor, whose earnings are insufficient to pull their families out of poverty. These are often self-employed, underemployed in unrestructured enterprises or employed in the informal sector with insecure, temporary and low productivity jobs. There is also a significant disadvantage to rural location. Earnings inequality is high – the typical "well-paid" worker receives ten

[3] Parliament of Georgia, see: http://www.parliament.ge/ECONOMICS/

times more than a "poorly paid" worker. There are two groups in the labour market who are at a particular disadvantage – women and internally displaced persons (IDPs). There is a large and persistent gender gap in earnings between men and women with similar characteristics (by about ten percent on average, controlling for other factors). The IDPs face extensive barriers to entry into the labour market, lack information about employment opportunities or the connections needed to get a job. The jobs they do get are routinely low paying and insecure.[4]

12. Increased vulnerability has meant an increasing incidence of working children, and the age at which children go to work is declining - in 2000, children age 12 to 14 constituted the largest age groups of working children. A high number of primary and secondary school students work, either in the household or outside the family. This is one of the adverse consequences of the transition: the incidence of child and adolescent labour has risen with household poverty. A study by the State Department for Statistics of Georgia (SDS) indicates that some 16 percent of children age 7 to 17 (823,200 children) fall into the category of working children.[5] Of them, 95 percent are enrolled school, while 5 percent (42,000) do not attend school.

13. Child labour is of two main types: (i) economic activity for cash compensation, mostly outside the household; and (ii) household work. It mainly occurs in poor families. According to the SDS survey, 58 per cent of children who are in school are involved in both economic activity and household work, while 15 per cent are involved in economic activity only. Rural children are more frequently engaged in economic activity than children from towns and cities, and boys are much more frequently engaged in economic activity than girls. Some 79 per cent of all children who go to school and work are from rural Georgia. Boys make up over 80 per cent of all the children who go to school and work at the same time. In the town of Guria, almost every third child is working, in Samtskhe-Javakheti, every fourth child.

14. Temporary jobs are the prevalent form of work for the children who are in school; some 97 percent of them have temporary jobs - 87 percent work for their families, 5 per cent work for private businesses, and 3 percent work on their own. Some 95 per cent of working children are engaged in agriculture, 3.2 percent in trade and services.

[4] The World Bank (2002), Georgia Poverty Update, January 10, 2002 (Report No. 22350-GE)

[5] The survey on child labour was carried out by the SDS with the support of ILO in August and November 1999 and in February and May 2000, and is included in: Analytical Report: Trends of Child and Family Well-Being in Georgia (2001).

3. OVERVIEW OF THE TIME USE PATTERNS OF YOUNG PEOPLE

15. This section analyses data relating to the time use patterns of Georgian young people aged 16-24 years.[6] Table 4 breaks the youth population down into four unique activity categories[7] – only in education; combining education and employment; only in employment;[8] unemployed;[9] and inactive.[10] It indicates that education accounts for the largest proportion of young people (43 percent), though secondary and post-secondary enrolment in Georgia is low relative to other Central Asian countries.

16. Among the remaining non-student 16-24 year-olds, those in employment are matched by those that are jobless, suggesting that many young people encounter difficulties transitioning to working life upon leaving school. About two-thirds of jobless youth, in turn, are inactive while the remaining one-third is in the labour force but unable to find a job. The issues of unemployment and joblessness are discussed in more detail in Section 4.

17. Individual and household characteristics appear to have an important influence on young people's time use patterns, as also shown in Table 4:

- **Age**: Most obviously, time use differs with age, as the 16-24 years age range is a period of transition from adolescence to adulthood, and from education to working life. Compared to young adults (20-24 year-olds), teenagers (16-19 year-olds) are more involved in education and less involved in the labour force (employed and unemployed). Teenagers are also less likely to be inactive. Education involvement begins to fall at age 17, roughly coinciding with the end of secondary education, and employment involvement rises from age 19 years onwards. All but 15 percent of young people leave school by age 24, but 60 percent have not settled into employment. The school to work transition is discussed in detail in Sections 5 and 6.
- **Gender**: Female youth involvement in post-secondary and tertiary education is slightly higher than that of male youth, but female young people are much less likely than male youth to be in the labour force upon leaving education. Female labour force involvement is about half that of males, while female inactivity rates are more than double male rates. As discussed below, the "inactive" category captures not only discouraged workers but also persons performing domestic duties and child-rearing, activities typically assigned to females. While women in the labour force experience roughly the same risk of unemployment as their male

[6] The "youth" or "young person" population typically refers to the 15-24 years age cohort. The narrower 16-24 years age cohort is used in this report because data were not available for young people aged 15 years.

[7] The data do not allow to unambiguously identify youth both working and attending school.

[8] An employed person is a one who fulfils any of the following:-a) paid employment; b) at work; c) with a job but not at work at present. This includes persons waiting to rejoin employment. This category includes employers or persons in self-employment. This category of persons should include unpaid family labour who holds a job in a market-oriented establishment irrespective of the number of hours worked during a reference period. However, some countries prefer for special reasons to set a minimum time criterion of the inclusion of unpaid family labour among the employed. Usually, if person works for more than 7+ hours a day, they are considered employed

[9] An unemployed person is a person who fulfils either or all of the following criterion: - a) Without work; b) Currently available for work or; c) Seeking work by taking necessary steps to seek paid employment such steps include applying for jobs, registered in an agency.

[10] An "inactive" person is a person who is neither in the labour force (employed or unemployed) nor in education.

counterparts, there are strong indications that they are disadvantaged in terms of remuneration and access to certain segments of the labour market.;

Table 4. - Time use patterns by various background characteristics, 16-24 years age group

Background characteristic		Distribution of youth by activity status				Total	Jobless
		(1) In education	(2) Employed	(3) Unemployed	(4) Inactive[a]		(3)+(4)
Total		43.3	28.4	8.8	19.5	100	28.3
Age	16	66.1	21.4	3.6	8.9	100	12.5
	17	68.7	17.8	3.1	10.4	100	13.6
	18	56.1	22.1	3.7	18.2	100	21.9
	19	51.7	21.6	7.3	19.4	100	26.7
	20	47.5	27.9	7.9	16.8	100	24.7
	21	41.8	30.8	7.3	20.0	100	27.3
	22	40.0	31.7	12.8	15.6	100	28.4
	23	28.0	33.7	12.6	25.8	100	38.4
	24	15.3	40.7	15.5	28.5	100	44.0
Sex	Female	45.8	20.9	6.9	26.4	100	33.3
	Male	40.5	36.7	10.9	11.8	100	22.7
Nationality	Georgian	48.3	25.9	8.3	17.5	100	25.8
	Azeri	18.1	40.4	5.1	36.4	100	41.5
	Abkhazian	0.0	25.0	0.0	75.0	100	75
	Greek	25.0	37.5	12.5	25.0	100	37.5
	Ossetian	28.3	43.5	10.9	17.4	100	28.3
	Russian	44.8	8.6	27.6	19.0	100	46.6
	Armenian	24.1	47.0	12.9	16.0	100	28.9
	Ukrainian	20.0	0.0	0.0	80.0	100	80
	Other	14.6	16.4	25.5	43.6	100	69.1
HH head education	Elementary or less[b]	36.1	31.6	11.0	21.3	100	32.3
	Not completed secondary[c]	26.8	37.3	10.0	25.9	100	35.9
	Secondary[d]	39.3	30.6	9.1	20.9	100	30
	Higher education	63.9	17.5	7.0	11.6	100	18.6
Employment status of HH head	Employed	39.0	34.0	7.8	19.2	100	27
	Not employed	52.5	15.9	11.3	20.3	100	31.6
HH income quintile	1	31.8	31.0	10.1	27.2	100	37.2
	2	43.2	24.4	11.1	21.3	100	32.4
	3	41.3	28.5	8.4	21.8	100	30.2
	4	45.2	30.7	8.8	15.3	100	24.0
	5	54.2	27.7	5.6	12.5	100	18.1

Notes: (a) "Inactive" refers to group not in labour force and not in education; (b) Completed 4-5 grades or less; (c) Completed 8-9 grades; (d) General education, lyceum, gymnasium, vocational-technical

Source: UCW calculations based on Georgia Household Budget Survey, 2002

- **Nationality**: Nationality appears to have a strong influence on the opportunities available to young people. Overall, Georgian youth are more likely to be in school and less likely to be jobless than young people of other minority nationalities. Russian and Azeri youth face the highest levels of joblessness, at 47 and 42 percent, respectively[11];
- **Parental education**: Parents' education appears to positively influence children's educational attainment and job prospects. Young people with educated parents are more likely to be in school and less likely to be jobless than young people with less educated parents. The differences in time use by parents' educational status, however, are not large with the exception of parents with higher education and;

[11] Figures should be treated with caution due to small sample size

- **Household income**: Household poverty appears to diminish opportunities available to young people. While school enrolment at the compulsory levels vary little by poverty status, youth from poor households are less likely to stay in school beyond compulsory education. Access to fee-based upper secondary and higher education remains strictly circumscribed by affordability for the poor. Other sources suggest that youth from poor households also benefit less from private tutoring to compensate for deficient in-school teaching; private lessons are twice as frequent among the non-poor as among the poor.[12] Poor youth, on the other hand, are much more likely to form part of the ranks of the jobless: jobless rate of poor youth is almost twice that of youth from wealthy households.

18. The data unfortunately do not permit a breakdown of time use patterns by residence. Other information sources, however, point to substantial rural-urban disparities in terms of educational involvement (favouring urban youth) and employment involvement (favouring rural dwellers). While enrolment rates differ little by residence at the compulsory level, there is a dramatic drop in rural relative to urban enrolment at the post-compulsory levels. Overall employment rates stood at 46 percent in urban areas in 2000, against 73 percent in rural areas. The unemployment rate for the same year was 26 percent in urban areas against just six percent in rural areas.[13] Decisions concerning education involvement are of course affected by perceptions of job prospects, and urban children may stay in school longer as a response to poor immediate job prospects.

4. STATUS OF YOUNG PEOPLE IN THE LABOUR MARKET

4.1 Youth unemployment

19. Youth unemployment is the most important and common measure of youth labour market status. The effects of prolonged unemployment early in a person's working life are well-documented: it may permanently impair his or her productive potential and therefore influence lifetime patterns of employment, pay and unemployment. In Georgia, research also points to links between youth unemployment and high risk behaviours, substance abuse, youth crime levels and youth delinquency rates.[14]Youth unemployment is included as an indicator for monitoring the UN Millennium Development Goal to "develop and implement strategies for decent and productive work for youth."[15]

20. Levels of unemployment are very high among Georgian young people, highlighting the difficulties they encounter in making the transition from education to working life. Almost one in four 16-24 year-olds (24 percent) in the labour force, and one in ten of all 16-24 year-olds (nine percent), is affected by unemployment. This level of youth unemployment, however, is not unusual in the context of the Eastern Europe and Central Asia regions (Figure 1). While Georgia level of youth unemployment is not among the highest in the region, it is still above that of a large number of countries.

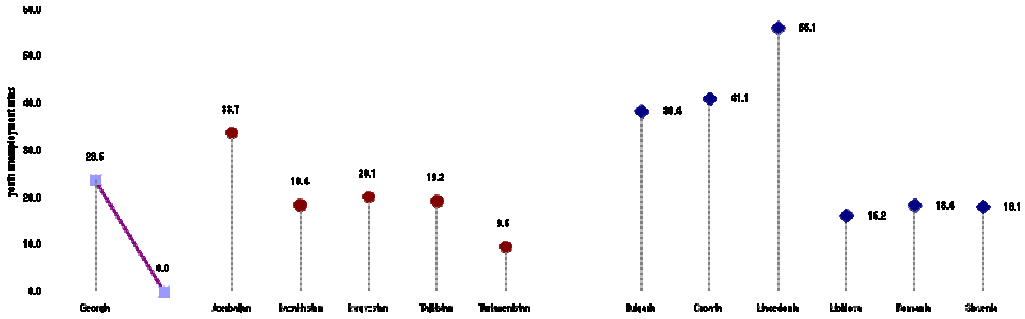
[12] World Bank, Child Welfare Note – Georgia, unpublished draft, 2004.

[13] World Bank, Child Welfare Note for Georgia, unpublished draft, 2004.

[14] According to figure from the State Department of Georgia, for example, just under half of all adolescents have used drugs. Some youth are also forced to participate in commercial sex work (CSW) as a means to escape poverty and find employment. Almost one half (42 percent) of all CSWs in Georgia are female youth between the ages of 16-25 years.

[15]See http://millenniumindicators.un.org/unsd/mi/mi_goals.asp.

Figure 1. Youth unemployment rates, Georgia versus selected Central Asian and South-Eastern Europe countries, around 2001[(a)]



Notes: (a) Survey methodologies and reference years differ across the countries; comparisons are therefore indicative only.

Source: UCW calculations based on Georgia Household Budget Survey 2002, World Bank Labour Force Survey data and UNICEF TransMONEE database 2004

21. Youth unemployment estimates need to be interpreted with caution, however, particularly when looked at in isolation from unemployment dynamics. Low outflows from unemployment and long spell durations are likely to indicate employment problems, but high outflows and short spell durations may merely reflect active search on the part of youth for their "preferred" work. The negative effects of unemployment are therefore largely associated to prolonged (and/or repeated) spells of unemployment, rather than the incidence of unemployment *per se*. Unfortunately, data on unemployment duration were not available in the Georgian Household Budget Survey 2002.

Table 5. - Indicators of unemployment and joblessness for youth, by various background characteristics

Background characteristic		Unemployment ratio[a]	Unemployment rate[b]	Jobless ratio[c]	Jobless to non-student population ratio[d]
Age	16-19	4.8	18.8	20.9	50.3
	20-24	11.1	25.2	32.5	49.7
	16-24	8.8	23.6	28.3	49.9
	25-55	9.1	11.45	28.4	28.7
Sex	Female	6.9	24.8	33.3	61.4
	Male	10.9	22.9	22.7	38.2
Nationality	Georgian	8.3	24.3	25.8	49.9
	Azeri	5.1	11.2	41.5	50.7
	Abkhazian	0.0	0.0	75	75.0
	Greek	12.5	25.0	37.5	50.0
	Ossetian	10.9	20.0	28.3	39.4
	Russian	27.6	76.2	46.6	84.4
	Armenian	12.9	21.5	28.9	38.1
	Ukrainian	0.0	-	80	100.0
	Other	25.5	60.9	69.1	80.8
HH head education	Elementary or less[e]	11.0	25.8	32.3	50.5
	Not completed secondary[f]	10.0	21.1	35.9	49.0
	Secondary[g]	9.1	22.9	30	49.5
	Higher education	7.0	28.6	18.6	51.5
Employment status of HH head	Employed	7.8	34.3	27	62.0
	Not employed	11.3	29.0	31.6	53.6
HH income quintile	1	10.1	17.5	37.2	44.5
	2	11.1	19.5	32.4	45.1
	3	8.4	19.1	30.2	42.9
	4	8.8	18.7	24.0	44.3
	5	5.6	16.8	18.1	66.5

Notes: (a) Unemployment ratio refers to total unemployed expressed as a proportion of total population in same age range; (b) Unemployment rate refers to total unemployed as a proportion of total workforce in the same age range; (c) Jobless ratio refers to total jobless expressed as a proportion of total population in same age range; (d) Refers to total jobless expressed as a proportion of total non-student population in same age group (e) Completed grades 4-5 or less; (f) Completed grades 8-9; (g) General education, lyceum, gymnasium, vocational-technical.

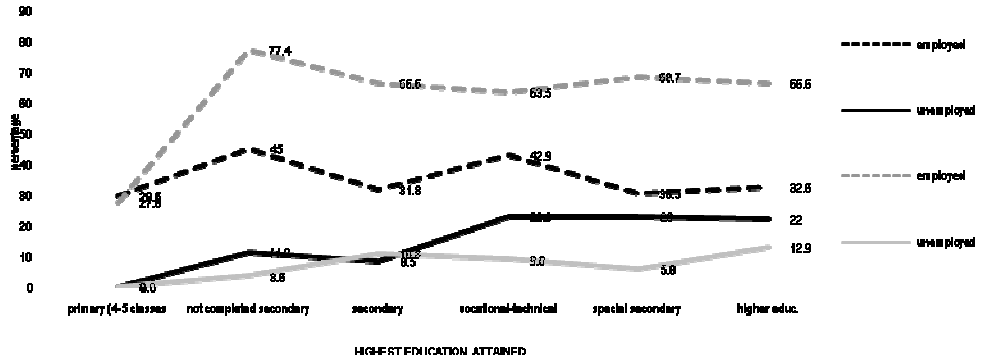
Source: UCW calculations based on Georgia Household Budget Survey, 2002

22. Not all Georgian young people face the same risk of unemployment. As shown in Table 5, aggregate figures for the 16-24 year-old population as a whole mask large variations in unemployment by individual and household characteristics. Young adults are more likely to experience difficulty in finding jobs than teenagers. Youth unemployment is negatively correlated to household income level and the educational

23. status of the household head. Young people from households headed by an unemployed person are much more likely to be themselves unemployed. Female youth face a lower risk of unemployment than male youth, but difference is not large.

24. A higher level of educational attainment does not appear to reduce the risk of unemployment faced by young people. Indeed, the opposite appears to hold true. As shown in Figure 2, 20-24 year-olds in the workforce with at least a special secondary education are more than twice as likely to be unemployed as their similarly-aged counterparts with secondary education or less. 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 more time to secure employment. But even among 30-34 year-olds, all whom have had ample job search time, more educated persons face a greater risk of unemployment. This finding raises questions about the ability of

Figure 2. Young adult employment status, by level of education attainment and age cohort



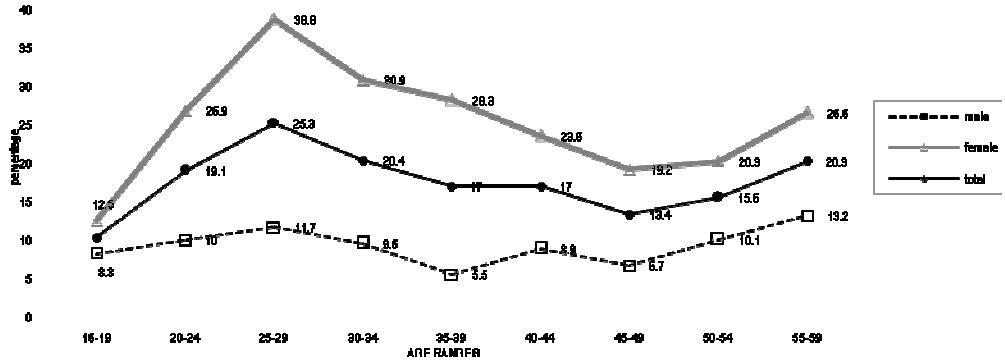
Source: UCW calculations based on Georgia Household Budget Survey 2002

the Georgian schooling system to equip young people with the requisite education and entry-level job skills demanded by the labour market.

4.2 Youth inactivity

25. A very large proportion of the Georgian youth population is also "inactive", i.e., neither in education nor the labour force. This group is also likely to be at risk of encountering difficulties in finding and sustaining stable employment. One-fifth of total Georgian young people, and over one-third of total non-students, is inactive, again with large variation by individual and household characteristics (Table 5).[16] Levels of inactivity levels are much higher among young adults (20-24 year-olds) than adolescents (as more of the latter group are still in school), but actually peak during the period from 25-29 years for both males and females (Figure 3). Inactivity appears to have a particularly important gender dimension: females are much more likely than males to be inactive at every age, with the greatest variation by sex occurring during women's child-bearing years.

Figure 3. Inactivity ratio, by age range and sex



Source: UCW calculations based on Georgia Household Budget Survey 2002

[16] Combining the inactive and the unemployed youth yields total jobless youth, another important indicator of youth employment disadvantage. Twenty-eight percent of total young people, and half of total non-students, are jobless.

26. To what extent do inactive youth represent discouraged workers as opposed to persons who have opted for involvement in activities outside the labour force? Unfortunately, the data do not permit the drawing of a clear line between the two possibilities, meaning that estimates of inactivity (and joblessness) must be interpreted with caution. While some inactive youth may have left or never entered the labour force because of poor job prospects, others may be involved in domestic duties and/or child rearing and still others may be involved in non-formal education or similar activities contributing to their future employability. It is plausible that inactivity is more a reflection of employment difficulties for male youth than female youth, as males are unlikely to stay out of the labour force in order to perform domestic duties or rear children.

27. The issue of inactivity among young people is very important for its economic and social consequences and requires an in depth analysis that is beyond the scope of the present paper.

4.3 Youth employment conditions

28. Obtaining employment *per se* is an insufficient condition for a successful entry into the labour market. Indicators reflecting the conditions of the employed are also critical to assessing the labour market success of young people. This section examines key characteristics of youth employment. Data for a range of descriptive indicators relating to youth employment are analysed, in order to develop a statistical profile of young people's work.

29. Table 6, which breaks down the employed youth population by broad occupational category, indicates that non-waged labour performed within the household is by far the most important form of youth work. Almost three of every four employed young people work without monetary wages for their families. Most of this group works on family farms, a reflection of the continued importance of the agriculture sector in the Georgian economy. Of the remaining working youth, 16 percent are in waged employment and seven percent work on non-family farms.

30. Occupational category also varies considerably by individual and household characteristics:

- **Age:** There is a shift away from family-based non-waged work and towards waged work outside the family as young people grow older. Non-wage family work still, however, accounts for two-thirds of total employment for the 20-24 age group;
- **Sex:** Female youth are more likely than male youth to be in waged work; differences by sex in other occupational categories are generally small. But other forms of gender bias in the labour market are reportedly significant, and likely also affect young female workers;[17]
- **Educational status of household head**: The education of the household head appears to improve the chances of young people of securing paid work outside the household. Almost 40 percent of working youth of educated parents are in waged work, compared to only 13 percent of working youth of uneducated parents;

[17] There is a large and persistent gap in earnings between men and women with similar characteristics (of about 10 percent on average controlling for other factors). The distribution in occupations is also unequal, with women overrepresented in semi-skilled positions and underrepresented in senior positions (World Bank Poverty Survey…FULL CITATION)

Table 6. - Youth employment characteristics by key background indicators, 16-24 years age group

Background characteristic			Occupational category							Ave. weekly working hours
			Employee, wage labour or self employed	Employer	Farmer working on private or rented land	Person working in non agric. sector or in professional activities	Non-wage labour in a HH enterprise	Non-wage labour for a friend	Other	
Total			16.44	0.47	7.2	3.99	70.79	0.94	0.16	41.3
Age group	16-19		2.9	0.0	8.2	3.2	85.1	0.6	0.0	48.2
	20-24		21.4	0.6	6.8	4.3	65.6	1.1	0.2	40.8
Sex and age group	16-19	Male	1.6	0.0	12.0	4.7	81.2	0.5	0.0	53.5
		Female	4.6	0.0	3.3	1.3	90.1	0.7	0.0	41.5
		Total	2.9	0.0	8.2	3.2	85.1	0.6	0.0	48.2
	20-24	Male	18.4	0.8	7.6	5.6	66.7	0.8	0.2	43.2
		Female	26.7	0.3	5.6	2.1	63.6	1.5	0.3	37.5
		Total	21.4	0.6	6.8	4.3	65.6	1.1	0.2	40.8
	25-29	Male	37.7	0.8	11.3	8.6	40.5	0.5	0.6	45.5
		Female	40.7	0.5	6.9	3.4	48.3	0.2	0.0	31.2
		Total	38.9	0.7	9.5	6.5	43.6	0.4	0.4	39.9
	30-35	Male	32.3	2.3	15.8	14.0	34.6	0.5	0.5	47.3
		Female	44.3	0.0	8.1	6.3	40.7	0.6	0.0	35.5
		Total	37.6	1.3	12.4	10.6	37.3	0.5	0.3	41.8
Nationality	Georgian		19.7	0.4	7.2	3.7	67.8	1.0	0.2	41.0
	Azeri		2.0	1.3	9.8	6.5	79.7	0.7	0.0	50.0
	Abkhazian		0.0	0.0	0.0	0.0	100.0	0.0	0.0	
	Greek		0.0	0.0	66.7	0.0	33.3	0.0	0.0	
	Ossetian		5.0	0.0	0.0	0.0	90.0	5.0	0.0	9.0
	Russian		80.0	0.0	0.0	20.0	0.0	0.0	0.0	34.0
	Armenian		8.7	0.0	5.3	1.3	84.0	0.7	0.0	32.2
	Other		55.6	0.0	0.0	33.3	11.1	0.0	0.0	61.9
Employment status, HH head	Employed		12.8	0.5	6.5	3.7	75.7	0.8	0.1	41.0
	Not employed		34.4	0.5	10.4	5.7	46.7	1.9	0.5	41.5
Education attainment of HH head	Elementary or less[b]		13.3	0.0	10.8	6.0	69.9	0.0	0.0	29.5
	Not completed 2ndary[c]		4.6	0.0	7.8	5.9	79.7	1.3	0.7	40.6
	Secondary[d]		14.8	0.5	6.8	3.5	73.4	0.9	0.1	43.1
	Higher education		38.6	1.3	6.3	3.8	48.7	1.3	0.0	40.1
HH income quintile	1		10.8	0.4	9.6	4.4	73.2	1.2	0.4	10.8
	2		16.9	0.0	8.0	2.2	71.6	1.3	0.0	16.9
	3		11.8	0.4	4.4	2.2	79.8	1.5	0.0	11.8
	4		15.2	1.0	8.3	3.8	71.4	0.3	0.0	15.2
	5		28.8	0.4	5.8	7.5	56.7	0.4	0.4	28.8

Notes: (b) Completed 4-5 grades or less; (c) Completed 8-9 grades; (d) General education, lyceum, gymnasium, vocational-technical

Source: UCW calculations based on Georgia Household Budget Survey 2002

- **Household income**: Poverty also appears to affect chances of obtaining waged employment. Over one-quarter of working youth from rich households are in paid work against only nine percent of working youth from poor households. Working youth from rich households also put in considerably longer weekly working hours than their poorer counterparts (44 hours versus 32 hours); and
- **Employment status of household head**: Working youth of unemployed parents are much more likely to be in paid work than working youth of employed parents, suggesting that these young people are more often relied upon as family breadwinners.

31. What do these breakdowns by occupation say about employment quality? The generally low level of waged employment and high level of informal work is significant given that waged employment is typically the most sought-after form of work among young people, and is most likely to offer a measure of job stability and some form of benefits coverage. Informal farm work, on the other hand, is typically low paid and seasonal, and studies indicate that this work does not constitute a reliable route out of poverty.[18] In urban settings, informal work frequently means insecure, non-family work in settings where labour and safety regulations do not apply, leaving workers susceptible to workplace exploitation. In both urban and rural settings, work in the informal economy is generally a poor alternative to formal sector employment.

Table 7. - Youth employment characteristics by age group and sex

Age group	Sex	Contract type[a]		Job stability[b]			
		Written	Verbal	Regular	Temp.	Seasonal	Casual
16-19	Male	66.7	33.3	58.3	33.3	8.3	-
	Female	28.6	71.4	66.7	22.2	11.1	-
	Total	40.0	60.0	61.9	28.6	9.5	-
20-24	Male	86.1	13.9	76.4	8.1	12.2	3.4
	Female	64.8	35.2	84.0	9.0	3.0	4.0
	Total	76.4	23.6	79.4	8.5	8.5	3.6
16-24	Male	85.6	14.4	75.0	10.0	11.9	3.1
	Female	62.2	37.8	82.6	10.1	3.7	3.7
	Total	74.6	25.4	78.1	10.0	8.6	3.4

Notes: (a) Refers on to persons that are employees; (b) Refers only to persons that are employee, employer, or in non-agricultural sector or in professional activities

Source: UCW calculations based on Georgia Household Budget Survey 2002

32. For the minority of children that are in formal sector work, around three-fourths enjoy written contracts and describe their employment as "regular" rather than "seasonal", "temporary" or "casual" (Table 7).

4.4 Youth labour market disadvantage

33. Comparing youth and adult unemployment rates provides some indication of the extent to which young workers are disadvantaged in relation to their adult counterparts in securing jobs. As shown in Table 8, young people and adults are roughly equally likely to find themselves unemployed, inactive or jobless. Young people *in the workforce*, however, are more than twice as likely as their adult counterparts to be without a job, suggesting that there are specific barriers to youth employment that need to be addressed by policymakers. young people in Eastern Europe and other Central Asia countries also find themselves in a disadvantaged labour market position relative to their adult counterparts (Figure 4).

34. The unemployment rate peaks among 20-24 year-olds, but remains very high among the following (25-29 years) population cohort, before falling sharply thereafter (Figure 6). This again illustrates that in many cases the period required to settle into work extends well into adulthood. The labour market status of 25-29 year-olds also constitutes an important policy concern.

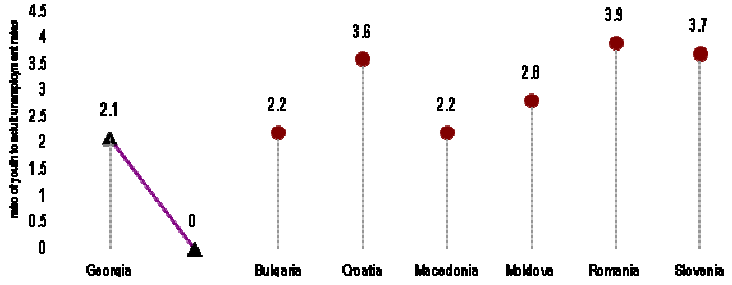
[18] See, for example, World Bank Poverty Study GET FULL CITATION

Table 8. - Differences in youth and adult unemployment and jobless indicators

	Age group	Unemployment ratio	Unemployment rate	Inactivity ratio	Jobless ratio
Youth	16-19	4.8	18.8	16.1	20.9
	20-24	11.1	25.2	21.4	32.5
	16-24	8.8	23.6	19.5	28.3
Adult	25-55	9.1	11.45	19.3	28.4
Youth to adult Ratios	16-19	0.53	1.64	0.83	0.74
	20-24	1.22	2.20	1.11	1.14
	16-24	0.97	2.06	1.01	1.00

Source: UCW calculations based on Georgia Household Budget Survey 2002

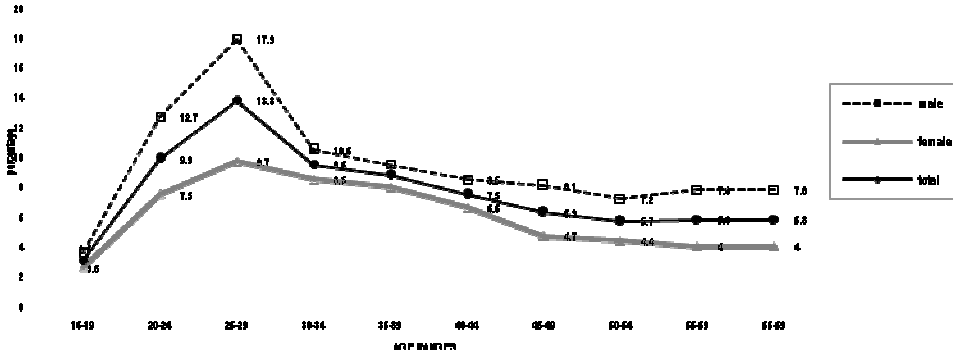
Figure 4. - Ratio of youth to adult unemployment rates, Georgia versus selected Central Asian and South-Eastern Europe countries, around 2001(a)



Notes: (a) Survey methodologies and reference years differ across the countries; comparisons are therefore indicative only .

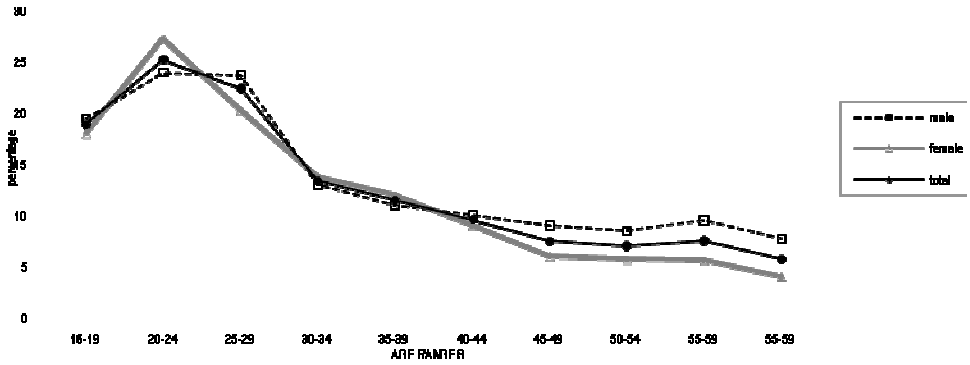
Source: UCW calculations based on Household Budget Survey 2002, World Bank Labour Force Survey data and UNICEF TransMONEE database 2004

Figure 5. - Unemployment ratio, by age range and sex



Source: UCW calculations based on Georgia Household Budget Survey 2002

Figure 6. - Unemployment rate, by age range and sex



Source: UCW calculations based on Georgia Household Budget Survey 2002

35. Differences between youth and adults in terms of work characteristics also provide an indication of youth labour market disadvantage. As shown in Table 9, the occupational profile of young workers differs dramatically from their adult counterparts. While youth work is concentrated overwhelming in non-waged family employment, adult work is distributed more evenly across waged work, farm work and family work. Young people are much less likely than adults to be involved in waged work, and much more likely to be performing informal work. This suggests that adult workers in general enjoy a greater degree of job security and social protection, and are less exposed to the instability and various risks associated with informal sector work. Young people and adults differ little in terms of the intensity of work, each averaging around 41 working hours per week.

Table 9. - Differences in youth and adult employment characteristics

Background characteristic	Work modality								Ave. weekly working hours
	Employee, wage labour or self employed	Employer	Farmer working on private or rented land	Person working in non agric. sector or in professional activities	Non-wage labour in a HH enterprise	Non-wage labour for a friend	Other	Employee, wage labour or self employed	
Youth (16-24 years)	16.4	0.5	7.2	4.0	70.8	0.9		0.2	41.3
Adults (25-54 years)	36.7	1.6	21.6	11.2	28.4	0.2	0.2	0.2	41.6

Source: UCW calculations based on Georgia Household Budget Survey 2002

Table 10. - Youth employment characteristics by age group and sex

Age group	Contract type[a]		Job stability[b]			
	Written	Verbal	Regular	Temp.	Seasonal	Casual
Youth (16-24 years)	74.6	25.4	78.1	10.0	8.6	3.4
Adults (25-54 years)	81.2	18.8	83.9	6.1	6.5	3.5

Notes: (a) Refers on to persons that are employees; (b) Refers only to persons that are employee, employer, or in non-agricultural sector or in professional activities

Source: UCW calculations based on Georgia Household Budget Survey 2002

36. Among those in formal sector employment, adults are more likely than young people to benefit from a written contract and to enjoy “regular” rather than “temporary”, “seasonal” or “casual” employment (Table 10).

5. MEASURING THE DURATION OF THE TRANSITION FROM SCHOOL TO WORK[19]

37. The majority of youth, in both developed and developing countries, transits through school before entering beginning to work. Often some period of a time elapses between the end of the school cycle and the start of the productive cycle. The transition process from school to work serves different purposes and its length and nature are arguably the result of a variety of forces.

38. In the simplest human capital model, individuals acquire education up to the point where the marginal return to one additional year of education is higher than its marginal cost, the latter largely being the opportunity cost of being out of work. In this stylized model, there is no transition from school to work, as individuals start working just after they leave school, and there is no room for either voluntary or involuntary unemployment as the model implicitly assumes zero utility of leisure and excess labour demand.

39. In reality, though, such transition is unlikely to be immediate as young individuals will spend some time looking for the best job match. Wait unemployment can hence arise if there are returns to search. In addition, young workers might well experience consecutive spells of employment in different jobs as they search (on the job) for better opportunities than the one currently at hand or they might alternate periods of employment to periods of unemployment if on the job search is ineffective.

40. Even in a world when there is no return to search, and hence where there are no efficiency gains associated to the search process, (voluntary or involuntary) youth unemployment will arise is the demand labour is low relative to the supply (and wages do not adjust), or market wages is below workers' reservation wages. Young individuals who are looking for their first job are particularly at risk of falling into involuntary unemployment if they are poor substitutes for adult workers or there are rigidities in the labour market (such as hiring and firing costs[20]) that make the substitution between adult and young workers costly for the firm. Eventually young individuals might end up being absorbed into the labour market as the older cohorts retire, but this process might turn out to be lengthy and hampered by the arrival on the market of new cohorts of school leavers. Again, in a world with unemployment or inactivity, workers might alternate spells of employment and unemployment or change jobs as labour demand or reservation wages change over a worker's life cycle.

41. The process is made even more complex by the fact that school leaving time is endogenous and most likely influenced by the expectation about the transition to work and the kind of job that will be obtained at the end of the transition. A better understanding to this transition period would require integrating the analysis of optimal school leaving age with that of employment search and labour force participation.[21] Here we limit our attention to the issue of measuring such a transition in a way that is suitable for cross country comparison and as a basis for further analysis.

42. Based on the above discussion, it should be clear that the transition from school to work is by no means a linear well defined process, with individuals leaving school once for all, possibly searching over a certain period of time and then landing in their first job, the latter being a definite port of entry into employment for life. Perhaps the

[19] For a more detailed discussion of the school to work transition issues and indicators see "Transition from education to the labour market in Sub-Saharan Africa: An analysis for 13 countries" ,UCW, 2005

[20] See for example Bentollilla and Bertola (1990) and Canziani and Petrongolo ( )

[21] In a companion paper we are trying to approach these issues using a real option approach.

start point of this transition is well defined if individuals never re-enter into school and if school attendance is universal. The greatest difficulty arises if one tries to define the end point of this transition. Individuals might alternate periods of employment to periods of unemployment, change jobs or possibly even stay out of work for the rest of their life. Young individuals might take up temporary jobs, work in the household farm or enterprise or devote to household chores for lack of better work opportunities or for the potential return these initial work experience have in terms of future employment and income prospects. These problems are particularly relevant in developed countries and in the urban areas of the developing countries where women's labour force participation (at least in the market) is low, individuals often associate work to schooling, and , most important, underemployment, self employment, home production, and causal employment are widespread.

43. Although in principle very important, the issues highlighted above make relatively little sense when one is confronted with the data, especially the ones from developing countries. In most cases the data provide only information on whether an individual in school and/or in employment (perhaps distinguishing between market and non-market work). In the next section, hence, we develop a simple indicator that in view of data limitations does not make justice of the issues raised above.

5.1 A Synthetic Indicator

44. We develop a simple indicator of transition from school to work that should be comparable across countries. In order to describe the transition process from school to work we derive the distribution of school leaving age and the distribution of age of entry into the first job. As a synthetic indicator of this transition we compute the difference between the average school leaving age and the average age of first entry into work.

45. We are not the first ones to attempt to describe the school to work transition process. For example OECD (1998a, 1999, 2000) uses the age at which 50 per cent of individuals are in employment to determine the end point of the transition. Measures of transition based on such definition implicitly assume that the overall portion of individuals getting into employment is above 50% (otherwise no transition would be ever completed) and that the overall proportion of individuals who enter in employment in any given country is roughly comparable (otherwise this indicator is biased by the overall differences in participation across countries). None of these assumptions is likely to be true, especially in developing countries. Similar problems occur when estimating the starting point of the transition. For example, OECD indicators implicitly assume that all children do transit through the school system and that the vast majority of them stays in school at least until the end of compulsory school. An assumption that can be hardly maintained in most developing countries.

46. While the assumptions at the base of the OECD indicator arguably represent no much of a problem in developed countries, they might be a serious source of bias, as just mentioned, in comparing data from developing countries with very different levels of overall labour market participation in adulthood, especially among women, and of school attendance.

47. Below we try to circumvent these problems by standardizing our measures of school to work transition to the population at risk, i.e. those who indeed eventually transit through school and participate to the labour force.

48. Ideally to model the transition process from school to work, one would need longitudinal data with detailed job history information that follow individuals from childhood into adulthood or alternatively cross sectional data with retrospective

information that allow to reconstruct work histories. In the absence of these data, which is generally the case in developed countries, one can use cross sectional data to measure the length of the transition. Under appropriate assumptions, the available cross sectional data allow consistently identify the parameters of interest.

49. Indicators and their interpretation depends on the underlying assumptions, we find then necessary to spend some time describing such assumptions also in order to favour comparability with other indicators.

50. Suppose there exists an age a_{min}, such that for $a>a_{min}$ individuals never transit into school and such that for $a<=a_{min}$ individuals never transit out of school.

51. In this case at age_{min} at which those who ever transit through school all happen to be in school. In this case it is easy to show that if by S we denote the event of being in school, the probability of leaving school at age a, denoted by SL_a is nothing but:

$$(1)\quad SL_a=-[P(S_{a+1})-P(S_a)] \qquad a>a_{min}$$

i.e. the change in enrolment across two consecutive ages. Equation (1) simply states that, if, say 90% of children arein school at age 10 and 80% are in school at age 11, then 10% of children must have dropped out between age 10 and age 11.

52. Assume in addition that for any age $a<a_{max}$, individuals never transit out og work for $a>=a_{max}$ individuals never transit into work. Again this implies that at a_{max} all who ever work are simultaneously in work. This assumption - that is admittedly more unrealistic than the previous one - rules exit from employment. before a_{max} and exit from inactivity above a_{max}. In this case, if by W we denote work and by EW_a the probability of entry into work at age a this is

$$(2)\quad EW_a =P(W_{a+1})-P(W_a) \qquad a<a_{max}$$

i.e. the increase in participation from one year to the other. Similarly to equation (1), equation (2) simply states that, if, say 10% of children are in work at age 14 and 15% are in work at age 15, then 5% of children must have started to work between age 14 and age 15.

53. One major difficulty with these indicators is that not all individuals make a transition through school (a relevant problem in developing countries) and, most important, that not all individuals transition into work. This is particularly true for women especially if work is defined as participation to a market oriented economic activity. Hence we derive these indexes conditional on individuals ever transiting into the relevant state m as for the others there is no transition to be defined.

54. Under the assumptions above, the average school leaving age conditional on ever having been in school:

$$(3)\quad E(SL)=\Sigma_{a>amin}\, a\, [SL_a/P(S_{amin})]$$

and the distribution of age of entry into work is

$$(4)\quad E(EW)=\Sigma_{a<amax}\, a\, [EW_a/P(W_{amax})]$$

55. Notice that $P(W_{amax})= \quad \Sigma_{a<amax} EW_a$ and hence $\Sigma_{a<amax}[EW_a/P(W_{amax})]=1$. A similar reasoning applies to the weights in (3).

56. We compute our synthetic index as

(5) $I= E(SL)-E(EW)$

57. This index is the average gap between age of entry into work conditional on ever entering into work and average exit from school conditional on ever being in school. Obviously this is the average age gap for those who ever enter into work (hence the true school to work transition age gap) only under the assumption that age of exit from school is uncorrelated with the probability of entering into work later in the life cycle, an assumption that perhaps some would reasonable find not very compelling.

5.2 Empirical implementation

58. In this section we describe the empirical implementation of our indicator – when – as in our case – only one cross section is available. As a first step, we fit a probit model on the probability of being in school across all individuals in the sample separately for males and females. We regress this on a polynomial in age. Fitting a probit model is useful to smooth the age participation profiles in the presence of measurement error and small sample sizes and allows – if required - to make out of sample predictions. We identify a_{min} as the turning point in the estimated age participation profile. We do the same for the probability of work. We use these estimated probabilities to compute the indicators in (3) and (4) and ultimately (5).

59. One drawback of this procedure when applied to a single cross section is that our index is derived from a comparison of individuals of different ages at a given time, and hence from different birth cohorts. The bias is difficult to determine. If there is a secular increase in school leaving age without relevant changes in the age of first employment across cohorts one might end up underestimating the length of the transition period from school to work. If also the age of first employment shows a secular increase, the bias could go in either direction. However if one is ready to assume that this bias is similar across countries, then one can still make a sensible inference on differences across countries.

6. ASSESSMENT OF THE TRANSITION TO WORKING LIFE

60. This section examines routes young people take from education to the workforce utilising the indicator described in the previous section. Two methodologies are used to measure the school to work transition. The first employs the synthetic indicator described above, and involves using estimated probabilities to compute the average age of school leaving and job entry. The second makes use of cohort indicators to identify school leaving and job entry ages, following the approach utilised by OECD. The school leaving age is defined as the first age at which 50 percent of the cohort is not in education[22] and the job entry age is defined as the age at which 50 percent of the cohort is employed but not studying[23]

61. Both methods are designed to measure the timing and duration of the transition and in the case of Georgia they should give similar results. We use here the OECD indicator as well to favour comparison with other countries. Neither method permits conclusions to be drawn regarding the "efficiency" or "success" of the transition in the Georgian context. A better understanding of the efficiency of the transition period would require integrating the analysis of optimal school leaving age with that of employment search and labour force participation.

62. The beginning point of the transition for both methodologies is taken as the first age at which schooling is no longer compulsory.[24] This is the age at which youth can choose between continuing with their education or exploring their prospects in the job market. It is also the age at which those who stay in education must make a choice between the main education and training routes leading to work or to tertiary study, or to both. The end of compulsory schooling is therefore a point of key concern to policy makers.

6.1 Assessment of the duration and timing of the transition based on estimated probabilities

63. Table 11 presents school to work transition characteristics applying the synthetic indicator based on estimated probabilities. The synthetic indicator reveals two noteworthy features of the transition in Georgia – the relatively late school leaving age and the relatively long period of settling into work after leaving school. These two features together mean that the total duration of the transition is almost 11 years.

64. Young people do not leave school on average until the age of 20 years, four years after the end of compulsory schooling. This indicates that, despite the serious quality concerns and poor physical conditions that characterise the education system, most young people choose to invest considerable time in upper secondary and tertiary education before entering the labour market full-time. As shown in Figure 8, the estimated average school leaving age in Georgia is not largely different from the school leaving age in OECD countries.[25]

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[22] I.e., the first age at which the population is not composed primarily of students.

[23] I.e., the first age at which the population is composed primarily of workers.

[24] Other starting points are of course possible. OECD, for example, has adopted the definition of the starting point as the age at which fewer than 75% of the population are in education but not working (OECD, 1996). Eurostat has adopted the definition of the average age at which young people leave education (full or part-time) for the first time for use in supplementary Labour Force Surveys that examine the transition from school to work.

[25] The calculation of average school leaving age is, however, different; comparisons are therefore indicative only.

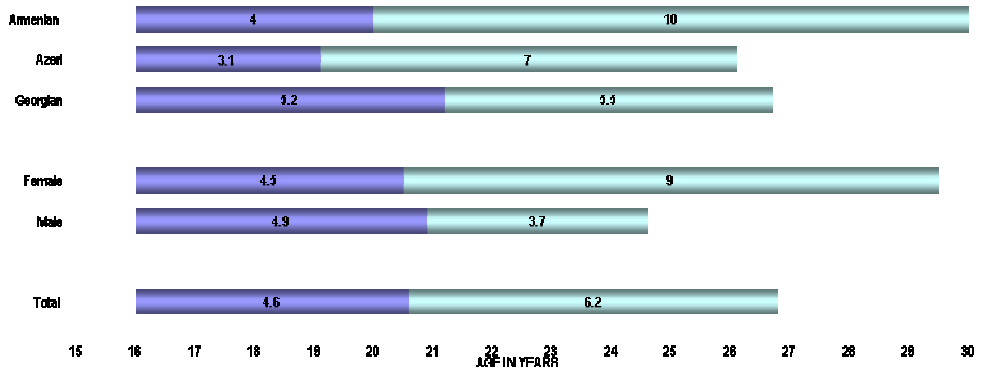
Table 11. - School to work transition characteristics based on estimated probabilities,[a] by various background characteristics

Background characteristic		Transition milestones			Composition and duration of transition		
		(a) Beginning point of transition 1st age at which compulsory schooling is not compulsory	(b) Age of leaving education Ave. age of leaving education based on estimated probability	(c) Age of entering work Ave. age of entering work based on estimated probability	Post compulsory education period (b)-(a)	Settling into work period (c)-(b)	Total (c)-(a)
Total		16	20.6	26.8	4.6	6.2	10.6
Sex	Male	16	20.9	24.6	4.9	3.7	8.6
	Female	16	20.5	29.5	4.5	9	13.5
Nationality	Georgian	16	21.2	26.7	5.2	5.5	10.7
	Azeri	16	19.1	26.1	3.1	7	10.1
	Armenian	16	20.0	30.0	4	10	14

Notes: (a) Estimated probabilities calculated on the basis of the age at which work participation rate is at its maximum

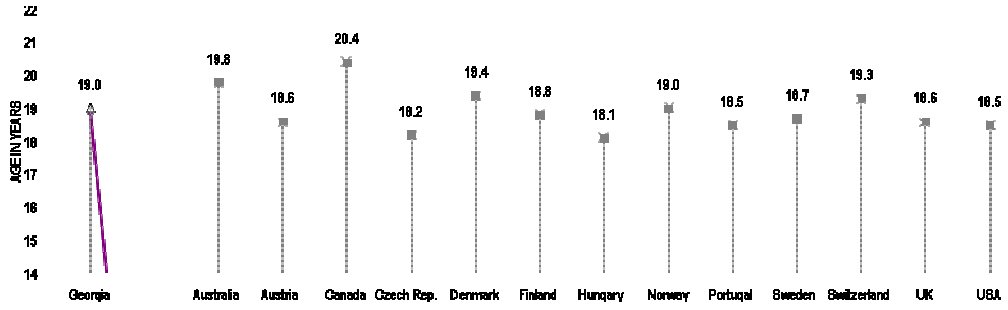
Source: UCW calculations based on Georgia Household Budget Survey 2002

Figure 7. - School to work transition characteristics based on estimated probabilities,[a] by various background characteristics



Source: UCW calculations based on Georgia Household Budget Survey 2002

Figure 8. - Average school leaving age,[a] Georgia versus selected OECD[b] countries



Notes: (a) The calculation method for average school leaving age and reference year differ between Georgia and OECD countries; comparisons are therefore

indicative only.

Source: UCW calculations based on Georgia Household Budget Survey 2002 and OECD, *From Initial Education to Working Life: Making Transitions Work*, OECD 2000.

65. The length of the second phase of the transition constitutes a greater concern in terms of efficiency of the transition process. Georgian young people take an average of almost six years to settle into work, suggesting that they are met with significant labour market entry problems upon leaving education, and must deal with a drawn out period of job search and/or inactivity. An initial period of unemployment following schooling is not unusual as young people spend time looking for the best job match, but the length of this jobless period in Georgian context extends well beyond what could plausibly be considered "wait" unemployment. As noted above, long periods of initial joblessness can translate into permanently reduced productive potential and job prospects, and therefore constitute a particular policy concern. Also, youth during such a long transition period is heavily exposed to risky behaviour.

66. The length and composition of the transition are very different for male and female young people in Georgia. Females spend an average the same numbers of years as males in post-compulsory education and spend an average of four additional years settling into work. The duration of transition for girls is almost as twice as long as that of boys. While this points to greater labour market entry problems for females, it also likely reflects the different social roles played by males and females after education. While males are likely to enter the labour market immediately, many females stay out of the labour force for a period after education to take up domestic and child rearing responsibilities. The total duration of the transition is 13.5 years for females against 8.6 years for males.

67. Nationality also appears to influence transition routes. Young people of Armenian descent face a much longer period of settling in to work than young people of Georgian or Azeri descent.

6.2 Assessment of the duration and composition of the transition applying cohort indicators (OECD)

68. Table 12 presents school to work transition characteristics based on the cohort indicators defined above. As expected the results are very similar, and the main use of this section is to offer some preliminary international comparison. Unfortunately, estimates of the school to work transition do not exist with either methods for other countries in the sub region, so we use OECD countries to give a rough comparison. The first age at which a cohort ceases to be comprised of primarily of students is 20 years, and therefore the post compulsory schooling period applying this measure is four years in duration. The cohort indicators also point to a very long settling in to work period, particularly for girls. Only at age 30.5 years is one-half of females employed and not in school, while males reach this milestone at just 23.5 years. Accordingly, the total length of the transition is 7.5 years for boys and 14.5 years for girls.

69. The age of leaving education and entering work applying the cohort indicators also varies considerably by household income. Young people from wealthier households invest a greater period of time in post-compulsory education period and require much less time to settle into work.

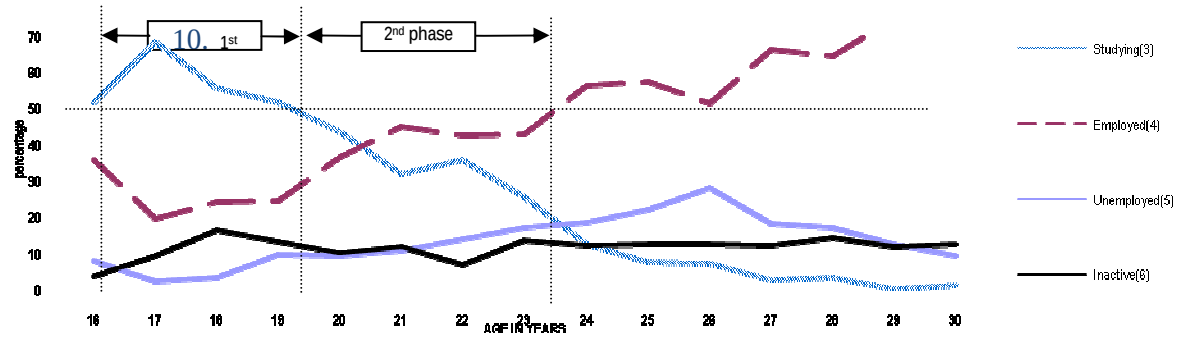
Table 12. - School to work transition characteristics based on cohort indicators, by various background characteristics

Background characteristic		Transition milestones			Composition and duration of transition		
		(a) Beginning point of transition: 1st age at which compulsory schooling is not compulsory	(b) Age of leaving education: 1st age at which 50% of cohort is not in education	(c) Age of entering work: 1st age at which 50% of cohort is employed but not in education	Post compulsory education period (b)-(a)	Settling into work period (c)-(b)	Total (c)-(a)
Total		16	19	27	3	8	11
Sex	Male	16	20	23.5	4	3.5	7.5
	Female	16	20	30.5	4	10.5	14.5
Household income quintile	1-3	16	18.5	27	2.5	8.5	11
	4-5	16	21.5	25	5.5	3.5	9

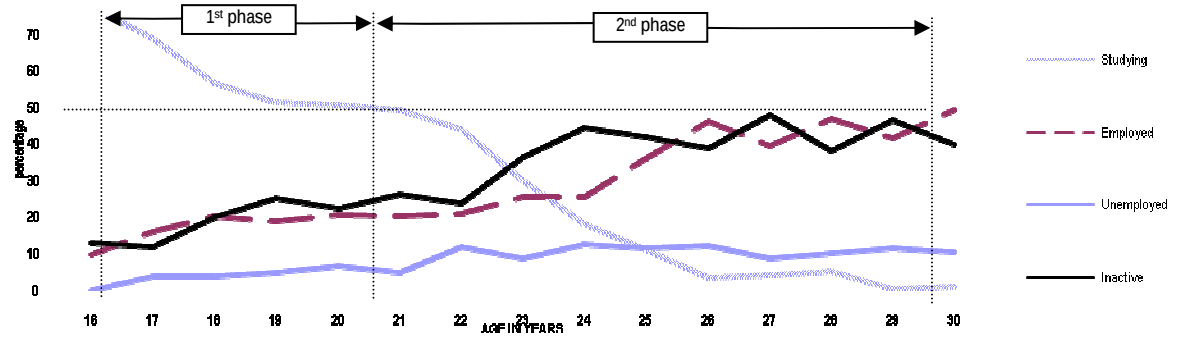
Source: UCW calculations based on Georgia Household Budget Survey 2002

Figure 9. - Student-to work transition, first(1) and second(2) phase, by sex, Georgia

(a) Male



(b) Female



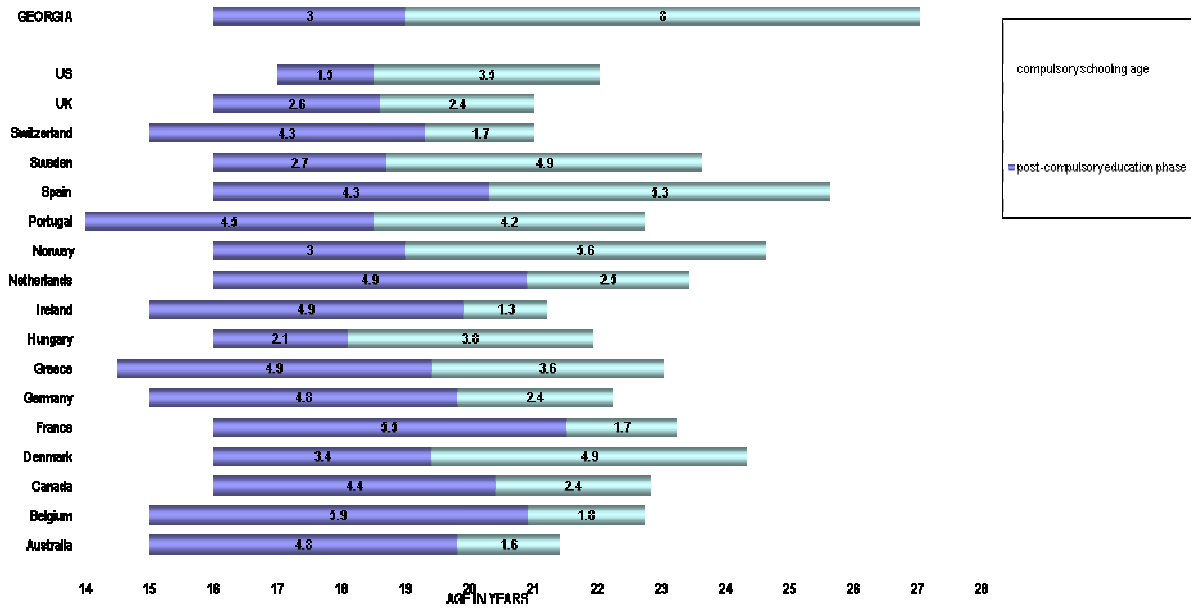
Notes: (1) Post compulsory education period (difference between compulsory schooling age and age at which 50% of cohort is not in education); (2) Settling into work period (difference between (a) age at which 50% of cohort is not in education and (b) age at which 50% of cohort is not in education and 50% of the cohort is working) (3) Studying exclusively; (4) Employed exclusively (i.e., not working); (5) Not employed but actively seeking work; and (6) Not studying, not employed and not actively seeking employment.

Source: UCW calculations based on Georgia Household Budget Survey 2002

70. Similar cohort-based indicators applied to OECD countries serve to highlight the long relative duration of the settling into work period in Georgia (Figure 10). This suggests that Georgian young people face much greater labour market entry problems than young people in developed economies, and that policies designed to facilitate the transition to work should be a particular priority in Georgia.

71.

Figure 10. - Duration and composition of the transition from school to work, Georgia and selected OECD countries



Note: The reference year for OECD and Georgia data differ; comparison is therefore indicative only.

Source: UCW calculations based on Georgia Household Budget Survey 2002 and OECD, *From Initial Education to Working Life: Making Transitions Work*, OECD 2000.

6.3 Factors influencing schooling and employment decision

72. The data available for Georgia do not contain sufficient information to satisfactorily try to identify the determinants of youth unemployment and the duration of school to work transition. We have tried in any case to use the information at hand, also to show how more in depth analytical work could be carried out once more suitable data are available.

73. We have estimated two simultaneous reduced form equations for the probability of being in school and that of being working. As the two decisions are clearly correlated we have used a bivariate probit model for the estimates[26]. We have hence modelled the probability of being in school and the probability of being in employment as function of a set of explanatory variables including age of the young person, household income, education level of the parents, employment status (employed or unemployed) of the household head and ethnicity. In order to avoid to model the issue relatives to separation of the youth from the household of origin, we have excluded form the sample the individuals who were head of household. The number of youth aged 16 to 35 years household head is about 5 per cent of the individuals in the age range considered. The results of the estimates are reported in the Appendix, Table A1. The results indicate that, as expected, the two decisions are not independent, but strongly negatively correlated.

74. The marginal effects of the estimates (Appendix, Table A.2) show that household income is positively correlated both with work and school. This result should however be taken with care because of the endogeneity of household income. Given the nature of youth employment, mainly in the informal and in the family business, it

[26] We could have also employed a simultaneous hazard rate model. Preliminary explorations however, have shown similar results to those discussed here. Given the paucity of the data available, we have not deemed worth the cost of using such a more complex analytical instrument.

is not possible to exclude the contribution of working youth to household income and this can create or accentuate a spurious correlation.

75. Youth from more educated parents tends to stay in school longer and to enter the labour market later. However, this does not imply a longer transition period. If anything the transition for youth coming for more educated parents tend to be shorter.

76. Ethnicity also has an effect on employment and schooling decisions along the lines discussed above.

77. We have used the estimated model to simulate the duration of the school to work transition phase as measured by the difference between the average age of beginning to work and the average age of leaving school. The model predicts this duration reasonably well and so it appears also a useful instrument for policy simulation. We have tried a few experiments by considering the effects of changes in household, income and/or in the education level of the household head. The effects of such changes on the duration of the school to work transition are almost negligible[27]. Other factors are hence at play in determining the duration. Unfortunately, given the few information available, we cannot identify the relative importance of individual and household characteristics with respect to the effects of labour market institutions, structure of production etc.

7. SUMMARY OF MAIN FINDINGS AND POSSIBLE NEXT STEPS

78. The preceding analysis of the time use patterns and labour market status of young people suggests that the Millennium Development Goal target of "developing and implementing strategies for decent and productive work for youth"[28] is particularly relevant in the Georgian context.

79. Georgian young people in the workforce are more than twice as likely as their adult counterparts to be without a job, suggesting that there are specific barriers to youth employment that need to be addressed by policymakers. The youth unemployment rate, at 24 percent, is higher than all but one of the Central Asian countries for which data are available. Among Georgian young people out of school, one-third is inactive and one-half is jobless.

80. A low proportion of Georgian working youth are in waged employment and a very high proportion are in informal work, particularly in comparison to adult workers. This is significant given that waged employment is typically the most sought-after form of work among young people, and is most likely to offer a measure of job stability and some form of benefits coverage. In both urban and rural settings, work in the informal economy is generally a poor alternative to formal sector employment.

81. Georgian young people take an average of over six years to settle into work, suggesting that they are met with significant labour market entry problems upon leaving education, and must deal with a drawn out period of job search and/or inactivity. We have, unfortunately, no data that allow us to compare the duration of the transition from school to work with other countries in the region. The only comparison possible is with OECD countries, and the results show that the duration of the transition is much longer for Georgian youth compared to their OECD counterparts.

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[27] The effects on age of leaving school and/or of starting work are not necessarily negligible, but the effects on average age appears to compensate each other.

[28] Millennium Development Goal Target No. 16.

82. Other findings emerging from the analysis in terms of time spent in education, employment stratus and characteristics and transition from school to work are summarised below:

- Female youth involvement in post-secondary and tertiary education is slightly higher than that of male youth, but female young people are much less likely than male youth to be in the labour force upon leaving education. The average time needed to settle into work upon leaving school is much longer for female youth
- Nationality appears to have a strong influence on the opportunities available to young people. Overall, Georgian youth are more likely to be in school and less likely to be jobless than young people of other minority nationalities.
- Parents' education appears to positively influence children's educational attainment and job prospects.
- Household poverty diminishes opportunities available to young people. Youth from poor households are less likely to stay in school beyond compulsory education. The jobless rate of poor youth is almost twice that of youth from wealthy households.
- Young adults are more likely to experience difficulty in finding jobs than teenagers. This is again an indication of the difficult transition from school to work: more educated youth appears to have more difficulty in finding jobs.
- Young people from households headed by an unemployed person are much more likely to be themselves unemployed.
- Nationality influences transition routes. Young people of Armenian descent face a much longer period of settling in to work than young people of Georgian or Azeri descent

83. This paper constitutes a starting point for more detailed analysis on youth labour market status in the Georgian context. We have concentrated our attention on the issue of measuring the transition duration in a way that is suitable for cross country comparison. There is a need to extend the analysis, to "open the box" of the transition, both in terms of additional information and in term of construction of an analytical framework.

84. At the information level, more data are necessary to understand the characteristics of the transition beside its duration: data on job search, temporary employment, etc. would be very important.

85. The transition process is made even more complex by the fact that school leaving time is endogenous and most likely influenced by the expectation about the probability to work and the kind of job that will be obtained at the end of the transition. At the same time, the probability of finding employment and its characteristic are influenced by the school achievement of the youth. A better understanding to this transition period and of its efficiency would require integrating the analysis of optimal school leaving age with that of employment search and labour force participation.

APPENDIX 1

TABLE A1: RESULTS OF BIVARIATE PROBIT ESTIMATES.

Bivariate probit regression	Number of obs =	9508				
	Wald chi2(20) =	2818.25				
Log likelihood = -8028.8661	Prob > chi2 =	0.0000				
variable	Coef.	Std.	z	P>|z|	[95% Conf. nterval]	
Employ						
age	0.1977	0.0270	7.32	0.000	0.1448	0.2507
age2	-0.0021	0.0005	-4.08	0.000	-0.0031	-0.0011
heduc_less then primary	0.3793	0.0602	6.30	0.000	0.2614	0.4973
heduc_not completedsecondary	0.4449	0.0558	7.97	0.000	0.3355	0.5544
Heduc completed secondary	0.2180	0.0359	6.07	0.000	0.1476	0.2884
lnexp	0.0654	0.0210	3.12	0.002	0.0243	0.1065
head_employ	0.4375	0.0306	14.30	0.000	0.3775	0.4974
Nationality dummies:						
Other	-0.2439	0.0788	-3.10	0.002	-0.3983	-0.0895
Azeri	0.2417	0.0534	4.52	0.000	0.1369	0.3464
Armenian	0.3396	0.0559	6.07	0.000	0.2299	0.4492
_cons	-4.5727	0.3514	-13.01	0.000	-5.2613	-3.8841
Study only						
age	-0.1658	0.0486	-3.41	0.001	-0.2611	-0.0706
age2	-0.0011	0.0011	-1.06	0.288	-0.0032	0.0009
heduc_less then primary *	-0.4867	0.0805	-6.05	0.000	-0.6445	-0.3290
heduc_not completedsecondary*	-0.7062	0.0757	-9.32	0.000	-0.8547	-0.5578
Heduc completed secondary*	-0.4127	0.0408	-10.11	0.000	-0.4927	-0.3327
ln hh. expenditure	0.1782	0.0272	6.56	0.000	0.1249	0.2315
Employment status of H. head*	-0.3303	0.0370	-8.92	0.000	-0.4029	-0.2578
Nationality dummies:						
Other*	-0.4432	0.1000	-4.43	0.000	-0.6392	-0.2472
Azeri*	-0.8321	0.0822	-10.12	0.000	-0.9932	-0.6710
Armenian*	-0.3895	0.0750	-5.20	0.000	-0.5364	-0.2426
_cons	3.6080	0.5632	6.41	0.000	2.5040	4.7119
/athrho	-2.4199	0.3746	-6.46	0.000	-3.1540	-1.6858
rho	-0.9843	0.0117			-0.9964	-0.9336
Likelihood-ratio test of rho=0: chi2(1) = 1706.77 Prob > chi2 = 0.0000						

TABLE A2.1:MARGINAL EFFECTS ON THE PROBABILITY OF BEEING EMPLOYED.

Marginal effects after biprobit							
y = Pr(employ=1,studyonly=0) (predict, p10)							
= .43780473							
variable	dy/dx	Std. Err.	z	P>|z|	[95% C.I.]		X
age	0.0779	0.0106	7.33	0.000	0.0571	0.0988	25.522
age2	-0.0008	0.0002	-4.08	0.000	-0.0012	-0.0004	680.329
heduc_less then primary *	0.1504	0.0236	6.38	0.000	0.1042	0.1966	0.075
heduc_not completedsecondary*	0.1760	0.0216	8.13	0.000	0.1336	0.2184	0.094
Heduc completed secondary*	0.0853	0.0139	6.13	0.000	0.0580	0.1126	0.634
ln hh. expenditure	0.0258	0.0083	3.12	0.002	0.0096	0.0420	4.074
Employment status of H. head*	0.1682	0.0113	14.83	0.000	0.1460	0.1905	0.695
Nationality dummies:							
Other*	-0.0936	0.0292	-3.21	0.001	-0.1507	-0.0364	0.033
Azeri*	0.0960	0.0213	4.52	0.000	0.0544	0.1377	0.071
Armenian*	0.1348	0.0220	6.12	0.000	0.0916	0.1780	0.063
(*) dy/dx is for discrete change of dummy variable from 0 to 1							

TABLE A2.2: MARGINAL EFFECTS ON THE PROBABILITY OF BEEING IN SCHOOL.

Marginal effects after biprobit							
y = Pr(employ=0,studyonly=1) (predict, p01)							
= .08833069							
variable	dy/dx	Std. Err.	z	P>|z|	[95% C.I.]		X
age	-0.027	0.009	-3.10	0.002	-0.043	-0.010	25.522
age2	0.000	0.000	-1.10	0.273	0.000	0.000	680.329
heduc_less then primary *	-0.058	0.007	-7.97	0.000	-0.073	-0.044	0.075
heduc_not completedsecondary*	-0.076	0.006	-12.23	0.000	-0.088	-0.064	0.094
Heduc completed secondary*	-0.071	0.008	-8.86	0.000	-0.087	-0.056	0.634
ln hh. expenditure	0.029	0.004	6.35	0.000	0.020	0.037	4.074
Employment status of H. head*	-0.058	0.007	-7.83	0.000	-0.072	-0.043	0.695
Nationality dummies:							
Other*	-0.053	0.009	-6.02	0.000	-0.070	-0.036	0.033
Azeri*	-0.081	0.006	-13.74	0.000	-0.093	-0.070	0.071
Armenian*	-0.049	0.008	-6.51	0.000	-0.064	-0.034	0.063
(*) dy/dx is for discrete change of dummy variable from 0 to 1							