

School-to-work transition in Mongolia

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Abstract[#] Relatively little is known about the youth labour market in Mongolia. This report addresses the issue by taking advantage of a recent *ad hoc* School To Work Survey (STWS) on young people aged 15-29 years carried out in 2006 by the National Statistical Office of Mongolia (NSO) with the International Labour Office's (ILO) financial and technical assistance. Chapter 1 studies the macroeconomic conditions of the country: economic transition from a planned to a market economy has caused the emergence of unprecedented problems, such as macroeconomic instability, the emergence of the private sector and the ensuing need for new and higher skills. Chapter 2 focuses on the youth labour market by looking at the determinants at an individual and family level of educational attainment, employment, unemployment and inactivity. Educational attainment is relatively high and increasing, as compared to other countries in the area, which mirrors the perceived need for new and higher skills, confirmed by the declared aspirations of young people. Nonetheless, important constraints seem to affect the supply of education, especially in rural areas. In addition, the country is unable to provide young people with a sufficient number of decent jobs. This translates into high youth unemployment in urban areas and very low productivity jobs in rural areas, especially in the livestock sector. Chapter 3 applies the ILO school-to-work classification disentangling young people: a) with completed transition; b) "in transition"; and c) whose transition has not yet started. Only 0.9 per cent of the sample has completed their transition into decent jobs. The "in transition" group has about three times the unemployment rate, due to the very high portion of young workers wishing to change their job or experiencing important work deficits. Four types of work deficit have been identified: a) about 60 per cent of young employed workers work informally; b) about 74 per cent have a fixed-term contract; c) 12 per cent do not pay income tax; and, d) about 40 per cent work more than 50 hours per week. Chapter 4 studies the size and composition of the demand for skills. It is based on answers to the specific employers and managers' module of the Mongolian STWS. The evidence confirms firms' needs for higher skills and work experience than those actually possessed by young people. There also seems to be a mismatch between job search methods preferred by employers and by young people. This report concludes with a number of policy suggestions for policy-makers and practitioners at all levels, such as: a) the need to increase the quantity and quality of the supply of skills, especially in rural areas; b) a more active role of the Public Employment Service (PES) in providing information, counselling and training not only to the unemployed, but also the discouraged workers and jobseekers who are still at school; c) a closer integration between the educational system, governmental institutions at all levels and social partners to reduce imperfect and asymmetric information on job vacancies, as well as to increase and diversify the supply of on-the-job and off-the-job training for young people.

JEL Classification: I21, J13, J24, J31, J62, P30, R23

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Executive summary and main findings

Relatively little is known about the youth labour market in Mongolia. Previous studies have looked at the drop-out rate or at other specific aspects of the school-to-work transition,¹ but do not provide a comprehensive analysis of the youth labour market. This report addresses the issue by taking advantage of a recent *ad hoc* School to Work Transition Survey (SWTS) of young people aged 15-29 years² carried out in 2006 by the National Statistical Office of Mongolia (NSO) with the International Labour Office's (ILO) financial and technical assistance. The SWTS is a statistical tool that helps countries improve their youth employment policies and programmes through a better understanding of the characteristics and determinants of the youth employment challenge.

The Survey is conducted through interviews of a sample that reflects the composition of the targeted population. Information is collected through a questionnaire that captures both quantitative and qualitative data relating to a number of aspects (e.g. education and training, perceptions and aspirations in terms of employment and life goals and values, job search processes, family's influence in career choice, barriers to and supports for entry into the labour market, wage versus self-employment preference, working conditions, etc.). A second questionnaire gathers information from employers with the aim of determining the extent of demand for young workers and the attitude and expectations of employers when hiring them.

Economic and social context

In Mongolia, economic transition from a planned to market economy began in 1990, at the end of Russian authority. Unprecedented problems emerged, such as macroeconomic instability, the dismantling of the State sector and the need to encourage private initiative, and the ensuing process of workers' reallocation.

The manufacturing sector in particular experienced a dramatic process of downsizing in the mid 1990s and has only recently started expanding again, but still only represents a minor share of employment and, like the service sector, is mainly located in urban areas. The slowness of private sector growth has meant that the industrial restructuring of non-viable State-owned enterprises has increased unemployment in urban areas and the need for many households to resort to agricultural activities in rural areas.

Economic transition further increased a traditionally deep geographical divide between urban and rural areas in a country that is one of the largest and least densely populated in the world. Mongolia is a large continental region sandwiched between Russia and China at the junction of the Siberian taiga forests, Dahurian steppes and Gobi Desert. On one hand, in urban areas, where *aimag* (provinces) and *soum* centres (rural districts) are located, economic transition has meant deep industrial restructuring and weakening of production. On the other, in the almost untouched, vast and sometimes desert rural territories, the dismantling of State-owned and cooperative farms and the privatization of livestock has made herding often the only means of subsistence. A series

¹ Gerelmaa, A. 2005. *World Bank draft policy brief on the Mongolian drop out rate*, unpublished manuscript; National Tripartite Plus Youth Committee. 2005. *Youth employment in the market transition in Mongolia; A national report*, Ulaanbaatar, Unpublished Manuscript; Darii, A. & Suruga, T. 2006. *Economic returns to schooling in transition: A case of Mongolia*, Kobe University, GSICS working papers, September, No. 9; Morris E.; Bruun, O. 2005. *Promoting employment opportunities in rural Mongolia*, ILO, Bangkok.

² The information provided here is broken down for different age groups: teenagers (aged 15-19 years), young adults (aged 20-24 years) and the oldest segment of young people (aged 25-29 years).

of harsh winters and summer droughts resulted in many families losing their animals and moving to urban areas, thereby contributing to local unemployment there.

The new problems compound the old ones, especially poverty, making it harder for many families to survive. Comparison of Mongolia's ranking on the UNDP-based Human Development Index (HDI) and Human Poverty Index (HPI) seems to confirm this. In 2006, it ranked 116 on the former while only 42 on the latter, meaning it is one of the fifty poorest countries in the world. In addition, while the HDI ranking has improved in recent years, essentially due to a fast growth process, the HPI ranking has dropped further. Poverty and inequality are so apparent, dramatic and pervasive that the fight against them should be at the core of any policy intervention aimed at overcoming the difficulties linked to the transition phase and at strengthening and stabilizing the current growth path. Poverty and inequality represent important constraints for future development by hindering the expansion of internal demand, on one hand, and by reducing the competitiveness of the country in international markets, on the other, via a reduction of the educational and employment opportunities of the younger generation.

The first task of governmental institutions and the social partners, interested in the labour market performance of young Mongolians should be to solve the macroeconomic problems of the country by increasing the level of aggregate demand, boosting private sector growth and alleviating the hardship of the poorest households. These are important pre-conditions for young people and their families to support the cost of the transformation, become self-sustaining in the long term and, finally, generate a virtuous circle for economic growth and social development.

General identikit of youth and their households

Mongolia has a young population with 55 per cent below the age of 25 years. The SWTS results show that on average, young people marry early, 22 years for women and 23 years for men. The share of married people in the 15 to 29 age range is 34 per cent in rural areas and 18.2 per cent in urban areas. The relatively young age for marriage is typical of other socialist and developing countries and reflects the traditional model of household and gender roles. The share of divorce in the youth population is very low, at about 0.4 per cent.

For young people, families with more than one child are the norm. About 10 per cent of the youth population in the SWTS sample have a family with three children or more. A slightly higher share of women than men has three children or more because women marry earlier than men.

The one-breadwinner family model is the most common among the youth surveyed. Most women's spouses are employed, whereas most men's spouses are involved in unpaid family work or household duties. Around 62.2 per cent of male partners are in some form of remunerated activity. However, the remaining 37.8 per cent are unemployed, students or men involved in unpaid family work so that the wives are the breadwinners.

The 17 per cent of young people who are migrants confirms the nomadic nature of the population, especially those involved in herding. Not surprisingly, a large share of in-migrants, about 21.2 per cent, is in Ulaanbaatar, with a similar share in the *aimag* centres. In the *soum* centres, the percentage of in-migrants falls slightly to 16 per cent. In-migrants in rural areas are only about 8 per cent.

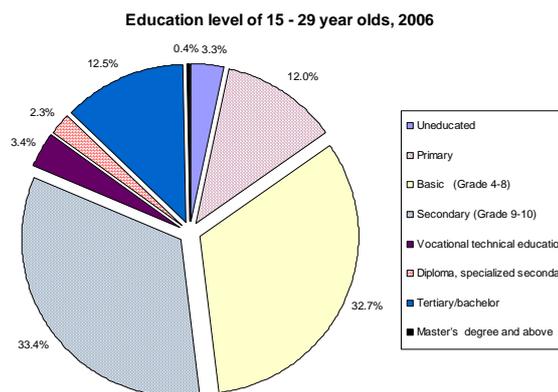
In the sample, the average monthly household income level is very low (TUGs123,580 i.e. about US\$106 and €79). In addition, there is a high level of inequality. Excluding the poorest (under the 10th decile) and the richest (above the 90th decile) households, the ratio of the richest to the poorest households' income is 6.7. At the time of the survey, the share of the population living on US\$30 a month or less was 10.1 per cent and those on US\$60 a month or less was 32.9 per cent.

These shares are, however, lower than those reported by UNDP³ based on average incomes for the period 1990-2004. This would suggest that an improvement has taken place in recent years. The poverty line, defined as the household income below half the median monthly household income is TUGs50,000 (US\$43 or €32).

Educational attainment

Educational attainment is relatively high and rising compared to other countries in the region, reflecting the population's perceived need for new and better skills to cope with the requirements of a quickly changing labour market. The country's relatively good performance in terms of educational attainment is one of the elements explaining its comparatively high ranking in the HDI. Nonetheless, weaknesses emerge in terms of the country's educational endowment.

Most worrying is the share (3.3 per cent) of those aged 15-29 years who are uneducated. As in other developing countries, the share of uneducated young people in Mongolia is twice as high among men as women, the main reason being that parents prefer boys for herding. Nevertheless, women also drop out of school, often for family reasons, such as taking care of the elderly and younger siblings. The share of the uneducated living in rural areas is 6.4 per cent, which is three times higher, in percentage terms, than in urban areas or in *aimag* or *soum* centres, although the larger population of the urban areas means the problem is greater there. The most immediate cause of illiteracy is child labour. About 27 per cent of the drop outs in the sample declared that they left school to take care of livestock. In rural areas in particular, a large proportion of young people drop out of the educational system at age 12 years or below or, in any case, before completing compulsory education, which is up to the age of 15 years in Mongolia. About 11-12 per cent of the entire sample achieved only primary education or below (20.4 per cent for those aged 25-29). Illiteracy and dropping out of compulsory education is not a new phenomenon. It is a heritage of economic transition and, more specifically, of the hardships experienced by many poor households in rural areas after the closure of cooperative farms and their break up into small plots or cattle breeding units.



³ UNDP (United Nations Development Programme), Human Development Report, Oxford University Press, 2006, p. 293.

The country also under performs in higher secondary education, but less so in tertiary education. The share of the sample with a tertiary degree is about 13 per cent and with completed higher secondary education about 56 per cent (26 per cent and about 35 per cent respectively for the 25 to 29 year olds). This performance is better than former socialist and OECD countries in tertiary education (in 2001, 18 per cent only of those aged 25-34 years had tertiary education in OECD countries), but worse in higher secondary education (in 2001, 74 per cent of 25-34 had completed high secondary education in OECD countries). This negative outcome in Mongolia is partly explained by the high drop out rate after finishing only primary or basic secondary.

The educational system has difficulties not only to integrate the weakest groups, but also to produce skilled manual labour through vocational education to those not wishing to continue their post-compulsory education. Less than five per cent of youth in the sample have a vocational/technical education.

But comparison of the level of education of parents and children shows that educational attainment is increasing rapidly, especially for the intermediate levels. For instance, a larger number of young people achieve at least basic and secondary education compared to their parents. There is also a dramatic increase in the number of those with vocational and technical secondary, and specialized secondary diplomas. This is an important sign of the government's efforts and, perhaps more importantly, of the changes in the composition of demand for skills during transition.

The statistical correlation between parents and children's educational attainment is very high, confirming supply constraints in the educational system. Intergenerational transfer of human capital is a clear demonstration of the educational system's difficulty in providing equal opportunities. In terms of the country's growth prospects, it is of concern that talented young people from poor families with low educational attainment are unable to access an affordable education based on their skills. Policy-makers should be aware that intergenerational transfers are one of the main causes of the persistence of income inequality and, therefore, poverty.

Important constraints affect the supply of education, especially in rural areas. Widespread poverty is the first constraint identified in the SWTS report. Although general education (up to the age of 17 years) is free of charge, poor households prefer to engage their children in family run businesses, especially in the livestock sector, rather than satisfying their aspirations for higher education.

The choice between studying and working is made harder by the poor supply of education in rural areas, forcing many young people to move to *soum* or *aimag* centres to continue their studies. This implies costs that cannot be borne by many poor households and can only be alleviated by the establishment of more schools in rural areas.

The scarcity of vocational education and the mismatch between what is offered by the educational system and the requirements of employers in local labour markets, is another important constraint. It reduces the chances of employment for those young people with poor family backgrounds, in terms of education or incomes, and, therefore, reduces their commitment to completing their studies. It is necessary to improve the quality of education in rural areas by introducing, for instance, specific programmes aimed at teaching new agricultural and veterinary techniques.

Evidence from the STWS suggests that the constraints on the educational system frustrate young people's aspirations to higher education and decent jobs. Noteworthy, considering the agricultural structure of the production system, is that about 60 per cent of those still at school aspire to university education and 25 per cent would like to attain a master degree. These figures decrease only slightly with age.

Women have greater expectations of educational attainment than men, explaining their higher attainment level. It is most likely that women consider education an important instrument to escape from discrimination in the labour market later on in their lives. These educational aspirations are only slightly lower in rural than in urban areas, except for those wishing to attain post-tertiary education, which is much lower in rural areas.

Comparisons of these aspirations with those who eventually attain university education suggest that some bottlenecks exist in the system preventing young people from realizing their expectations. In terms of the human capital model, this indicates that they consider the returns relatively low compared to the cost of higher education. This is an important sign for policy-makers.

Labour market characteristics of youth

Youth *wage employment* represents about 16.2 per cent of the sample, which translates to about 34 per cent of the youth workforce (employed plus unemployed) or 48.2 per cent of total youth employment. That is, only one out of two jobs is a wage job, the other one being either for profit or family business. Wage employment is more common in urban than rural areas, where it represents only about 4.5 per cent of the sample. Its very low share in rural areas is explained by unpaid work in family run businesses. Wage employment represents 17.4 per cent of the sample in the capital city, 19.7 per cent in the *aimag* centres and 20.1 per cent in *soum* centres. It is more common among the oldest age segments, with only about 2 per cent of teenagers engaged in wage jobs. The comparable figure rises to 19.1 per cent for young adults and 31.8 per cent for the 25-29 year-olds.

Around 6.5 per cent of youth in the sample (17.8 per cent of the labour force) are *self-employed* with significant differences between gender, educational levels and urban and rural areas: 45.6 per cent of youth with primary education only are self-employed, mainly in rural areas; young men are more frequently self-employed in rural areas, while young women are more frequently self-employed in urban areas. The former are generally involved in agricultural jobs, whereas the latter are in other types of work. Tertiary education is correlated with self-employment in urban, but not rural areas.

The *structure of youth employment* is polarized in the livestock sector where 45 per cent of young people work. The manufacturing sector employs only about 4 per cent of the youth workforce, a share lower than wholesale and retail trade (7.6 per cent), and similar to hotels and restaurants (3.5 per cent), as well as transport and storage (3.9 per cent). The State sector is small: public administration employs 7.8 per cent, education 8.4 per cent and communal services 5.1 per cent.

The polarization of employment in the primary sector is related to the amount of *informal work*. The majority of employed youth do have contracts (59.4 per cent) and about 10 per cent more women than men have a contract (45.6 per cent and 36.3 per cent, respectively). The majority of contracts are fixed-term. The share of temporary employment is constant by gender and represents about 74 per cent of contract holders. Informal work is more frequent among teenagers than young adults, an apparent sign of the low quality jobs offered to the youngest.

Youth unemployment is essentially an urban phenomenon. The urban/rural gap is especially wide for teenagers, but is, nevertheless, significant for young adults. The share of long-term youth unemployment is higher in rural areas. Only about 39 per cent of the unemployed in urban areas remain so for more than a year, whereas in rural areas, the comparable figure reaches 60.5 per cent. This reflects the greater degree of labour turnover in urban areas. Long-term unemployment is negatively related to the educational level and positively related to vocational training.

There is a *gender gap* in employment opportunities, men having a higher unemployment to population ratio compared to women: men 15.7 per cent and women 12.4 per cent. The advantage of women almost vanishes when the unemployment rate is looked at: women 28.9 per cent and men 30 per cent. This is due to the higher inactivity rate of women compared to men: 57.3 per cent and 47.5 per cent, respectively. In addition, women have lower unemployment rates at younger ages (and higher educational attainment), but also higher rates of long-term unemployment. This lower unemployment rate for women being due to their staying at school longer, it disappears for the oldest segments of the sample.

The distribution of *working time* varies for different groups. The peak is 40 hours per week, in line with labour agreements currently in place. However, the distribution is clearly multi-modal, with apparent peaks at 40, 55 and even 70 hours per week, with a high proportion of young people working extremely long hours: about 56 per cent work more than 40 hours and 40 per cent work more than 50 hours. About 50 per cent of women work more than 40 hours and 33 per cent more than 50 hours (63 per cent and 45 per cent, respectively, for men). Long working hours are typical of certain types of activity, such as pastures, which are very common among young people and where productivity is low. Hence long working hours is an important indicator of low quality work.

Determinants of success in education and the labour market

Econometric analysis of the factors affecting educational attainment suggests that the level is increasing with age, is higher for women (by 47 per cent) and higher for young people working while studying. In addition, it is *ceteris paribus* lower for those with more than two children living in rural areas. The *family background* seems to be the most important factor affecting the decision to invest in further education. The educational level of parents is directly correlated with that of their children, even after controlling for other indicators of family welfare, such as number of siblings and the income level of the household. Considering the potentially different characteristics of individuals belonging to different age groups, the analysis has been repeated for young teenagers, young adults and the oldest age group. However, the findings confirm the importance of family background, especially the educational level of parents.

Econometric analysis of determinants of participation in different labour market statuses shows that *educational attainment* is an important determinant of success in the labour market. Education increases the chance of finding a job, but there is evidence that those with intermediate educational levels experience particular hardship. They have higher unemployment and lower employment rates than those with low levels of education. This is related, in part, to young people with low educational levels being absorbed into the primary sector and, also, to the difficulties experienced by those with vocational school diplomas. This finding suggests that job quality matters when looking at the labour market behaviour of young people.

Education, especially tertiary, appears to be an important determinant of earnings. The annual *rate of return to education* is estimated from the SWTS to be between 4.2 and 10 per cent of the salary per year of education nationwide and at least 7.6 per cent for Ulanbaatar. Having a university degree, for instance, means 85 per cent higher wages and a master's degree about 100 per cent higher than the median wage of those with only compulsory education. This means an annual rate of return to education of 9.5 per cent for the specific group of young people with a university degree. Returns to secondary high school are not homogeneous. Holding a specialized secondary school diploma increases wages by 64 per cent compared to the median wage of those with only compulsory education or below. However, those with post-compulsory vocational education are not better off. This is an indication of the problems young people with vocational education have in the labour market, also confirmed by other analyses of employment opportunities by educational categories. Therefore, young people with only vocational education

have less job opportunities and lower wages, suggesting a negative shift in labour demand for this qualification in post-transition Mongolia and of the need to upgrade curricula to the new technical and productive needs of a market economy.

The estimate, corrected for parents' educational level, provides returns to education that are more than double those without these controls. This indicates that education is a function of different family backgrounds and confirms, therefore, the previous conclusion that the educational system does not appear to be able to offer equal educational opportunities to those with different family backgrounds.

Five years of *work experience* or more, compared to one year or less, implies 25 per cent higher earnings, which is a yearly rate of return to work experience of about 5 per cent, assuming an average work experience of about five years. The wage effect of work experience goes up to 50 per cent for those aged 25-29 years. This finding confirms the importance of providing skills to young people in addition to education, and that such skills can only be accumulated by working for long periods. There is no wage premium for those with less than five years' experience, therefore, short employment spells, for instance fixed-term contracts, are unable to provide the necessary skills for young people to increase their productivity and earnings. This upholds the human capital theory whereby employers and employees accumulate specific work experience only when the contract of work is sufficiently long, otherwise the employer fears that employees will use the experience gained in competing firms.

An important focus of the analysis is on *gender wage differentials*. On average, female wages are not lower than those of males. However, this may potentially hide a discriminating behaviour against women, inasmuch as they have better productivity characteristics than men. In particular, women have on average a much higher level of education than men and, therefore, in principle, should have higher wages. In reality, the conditional gender pay gap is quite sizeable since, *ceteris paribus*, the median wage of women is about 25 per cent lower than men with the same characteristics. Decomposing the gender wage differential confirms that women have better productivity characteristics than men, but are paid less. If wages were paid equally, women should have 11.7 per cent more, even if only considering their higher educational attainment. Taking into account the different characteristics of men and women, it appears that women should have, on average, 22 per cent more, a substantial gap, considering the low earnings of Mongolians.

Informal work entails a wage loss of about 30 per cent compared to those with fixed-term contracts and 19 per cent for those with permanent contracts. Migration is not, on average, a statistically significant factor of wage loss and union membership is neutral. Training means lower, not higher, wages. Civil status is not an important determinant of wage differentials. Informal networks as a job seeking method causes a reduction in wage level.

Finally, there is evidence of large *industry and regional wage differentials*. Working in the livestock sector means a reduction of between 40 and 140 per cent, according to the reference sector. Those in rural areas have a 40 per cent lower wage than the rest of the population. All other factors being equal, living in the capital city of Ulaanbaatar implies generally higher wages than elsewhere, and especially higher than some specific regions such as Bayankhongor (-70 per cent), Govialtai (-66 per cent), Sunkhbaatar (-70 per cent), Selenge (-76 per cent), Khovd (-66 per cent), Khuvusgul (-85 per cent).

Transition stages between school and decent work

Analysis of the level and determinants of traditional ILO indicators of the labour market is unsatisfactory to study the specific nature of school-to-work transitions. Indeed, young people differ from adults in the labour market because they lack work experience; their search for a good match continues until the experience gap is filled. Some young people still at school are already looking for work; many "inactive" young people are also looking, although not actively, because

they are discouraged. Those employed may consider their current job only as a mean to fill their work experience gap in the hope of accessing better jobs later; they are thus classified as “employed”, but are actually looking for another job or planning to return to education.

The ILO developed a specific classification, which overlaps the traditional categories of employment, unemployment and inactivity with three new categories aimed at capturing the specific stage of the school-to-work transition process, namely: a) transition completed; b) in transition; c) transition not yet started. These categories are defined as follows:

1. transition not yet started:

- a) youth in school, not seeking work;
- b) inactive youth, not seeking work;

2. in transition:

- a) youth in school, but seeking work;
- b) inactive youth, but seeking work;
- c) unemployed youth;
- d) employed youth, but:
 - (i) considering themselves unemployed;
 - (ii) wishing to change job;
- e) employed youth not wishing to change their job, but:
 - (i) working more than 50 hours per week;
 - (ii) or working with no contract;
 - (iii) or working with a fixed-term contract;
 - (iv) or working, but not paying taxes for their work

3. Transition completed: includes all youth who have been able to access decent work; in this study, decent work is obtained as a residual, including all those employed not falling into any of the previous categories.

The first striking feature, as shown in the table below, is the very small segment of those who have completed their transition to decent work: about 1 per cent of the youth sampled. It is more or less stable across gender, but changes dramatically across age groups: it is lowest among teenagers (0.04 per cent) and increases to 2.4 per cent for those aged 25-29 years. The size of the group with the transition completed is higher in urban than in rural areas where very few respondents had completed their transition.

About 56.5 per cent of the youth in the sample are still in transition. The share of employed youth who are in transition is about 32.6 per cent of the sample population. Among them, 47.8 per cent would like to change job and 49.6 per cent experience a decent work deficit. Four types of work deficits could be identified on the basis of the survey’s results:

- a) about 60 per cent of employed youth work informally;
- b) about 74 per cent of employed youth have a fixed-term contract;
- c) 12 per cent of employed youth do not pay taxes on their earnings;
- d) about 40 per cent of employed youth work more than 50 hours per week.

Youth who have not yet started their transition represent 42 per cent of the sample. More women are at this stage, while young teenagers are more frequently in the pre-transition stage than the

oldest age segments. In addition, the transition not yet started status is more frequent in urban than rural areas. This finding is related both to the higher share of young people at school in urban areas and to the greater availability of job opportunities, albeit of unsatisfactory quality, in rural areas.

Traditional labour market indicators and school-to-work transition indicators for Mongolia, 2006

| <i>Traditional labour market indicators</i> | | <i>School-to-work transition indicators</i> | | | |
|---|-------|---|-------|---|------|
| Inactivity rates | 52.5 | Transition not yet started | 42.6 | In school | 40.0 |
| | | | | Inactive | 2.6 |
| Unemployment ratio | 14.0 | In transition | 56.5 | Discouraged workers | 1.7 |
| | | | | In-school, but job searching | 8.1 |
| | | | | Unemployed | 14.0 |
| | | | | Workers considering themselves unemployed | 0.0 |
| | | | | Workers wishing to change | 16.0 |
| | | | | Workers with decent work deficit | 16.6 |
| Employment ratio | 33.5 | Transition completed | 0.9 | Employed in decent work | 0.9 |
| Total | 100.0 | Total | 100.0 | Total | 99.9 |

Source: SWTS, NSO, 2006.

The analysis highlights the existence of important gender, age and geographical differences. Women are less frequent in the “in transition” group, the explanation being that they often stay at school rather than looking for work and are less willing to accept informal work, especially in the more common herding and other agricultural activities. Many young men leave school below the compulsory age to enter low productivity jobs in the livestock sector, where they remain trapped. Young women experience greater difficulties in looking for work, resorting to the mass media rather than applying directly for jobs or using informal networks.

Important differences exist between teenagers, young adults and those aged 25 to 29 years. The first group is more often at school, while the latter two groups are already “in transition”. In the oldest age segment, the number of those who have completed their school-to-work transition is very small (2.4 per cent), a sign that not only are the jobs of very low quality, but due to the extreme poverty of many households, young people are obliged to keep them to contribute even a small amount to the family’s income.

The urban/rural divide is also crucial. While in urban areas most young people are still at school or unemployed, in rural areas they are already in the “in transition” group, although often employed in jobs with important decent work deficits.

Size and composition of the demand for skills

Answers to the employers and managers’ module of the STWT survey suggest that employers have no specific preference for any age group or marital status. There is a minimal preference for men. There is a marked preference for higher and, at least, secondary or vocational education, even for manual jobs. In addition, firms expressed a need for higher skills and work experience than those actually possessed.

Analysis of skill requirements shows that employers expect young people to possess some degree of work experience and also specific skills that can only be gained through work experience. Even if the majority of employers do not consider previous work experience as the only selection criterion, indirectly it is a pre-condition to accessing work. It is important for young people to have some, even fixed-term, work experience (but not a dead-end job) as a stepping stone to access permanent and decent employment. Simultaneously, it is important to provide some off-the-job training allowing young people to acquire skills more in demand.

Employers' dissatisfaction at the level of skills forces about 70 per cent of them to provide on-the-job training. Generally, this training is paid by the firm and is for a short duration only. It is, therefore, not surprising that training incurs a wage penalty rather than a premium, as employers consider training a sign of a lack of skills rather than a factor leading to increased skill levels. The wage loss is possibly the employer's way of transferring the cost of training to employees.

There is a mismatch between job search methods preferred by employers and young people. A majority of employers uses advertising to fill their vacancies with a very small share relying on informal networks of family and friends to find their employees. This is in sharp contrast to the large share of young employees who did use informal networks to find their jobs. This difference implies that employers perceive informal networks as a constraint, but being hired through them often incurs a wage penalty. This contrast suggests that the government, and private and public employment agencies, should do more to improve the dissemination of information on vacancies.

Policy recommendations

Particular efforts should be made to increase the returns to, and reduce the cost of, education, especially for poor families in rural areas. In addition, upgrading and reforming the educational and training system to the emerging needs of the market economy requires a number of interventions, not only by the government, but also institutions at all levels, including the social partners. Close collaboration between public institutions, unions and employers' organizations is the best means through which to correct the skills mismatch.

An important issue in Mongolia, deserving special attention for its long-term implications, is the number of young people not attending school, clearly a problem of child labour and poverty. Poor households in rural areas are faced with a trade-off between short-term gains and long-term losses. In the short term, they need the help of their children in family-run businesses or in providing basic support to other dependent children and the elderly in the household. In the long term, however, children dropping out of school have low productivity jobs for the rest of their lives, perpetuating the poverty trap for generations. Income support schemes for children from poor families who drop out of school should be strengthened. A better organization of the agricultural sector, perhaps through the promotion of cooperation between small plots and cattle breeding, might help alleviate poverty and workload, thereby allowing children to attend school. For young girls, the provision of kindergartens for their younger siblings or social assistance for the elderly would also help. However, it is also necessary to build schools in rural areas and to drastically reduce the costs of education for drop-out students, including school fees, in-kind payments to schools, transportation and housing costs.

Poverty and related measures, such as household income, number of children, number of siblings, family educational background, income and occupation, and marital status, are the strongest determinants of educational attainment and school drop outs. The educational system needs to equalize educational opportunities, across incomes, geographical locations and gender. For these objectives to be met, it is necessary to consider not only direct costs, but also the indirect and opportunity-cost of education for poor families. Progressive school and university fees could be an option, together with the provision of special allowances for students, including subsidized housing and transportation costs and the implementation of income support schemes for the poorest.

The empirical analysis also highlights the existence of a dramatic urban/rural divide, taking different forms and along different dimensions. Rural areas feature lower educational attainment and, consequently, jobs of very poor quality. Particular interventions should be envisaged to promote educational attainment in rural areas and favour the development of more productive agricultural activities.

Wage penalties for young people undergoing on-the-job training are atypical compared to other countries. This is because employers pay for the training, therefore, to cover training costs they lower wages. This acts as a disincentive to the development of efficient training programmes on a larger scale, which the country is much in need of. In the short term, financial aid or subsidies could be provided to the companies offering training. Employers should also work more closely with the Public Employment Services (PES), as well as with the national educational system, to improve the quality and the availability of training. It is also necessary to sensitize firms in their role as trainers, and to the benefits they will reap, especially in terms of productivity gains, so that investment in training no longer leads to lower wages.

There is evidence in the report of young people finding their job via informal networks, despite employers considering this recruitment method unsatisfactory, and jobs found in this way, incurring a wage loss. This indicates a need to revitalize employment services and improve information sharing on jobs and skills required.

Policy measures should also be introduced to increase the employment prospects of young people and the findings of the STWS indicate a number of *groups to be targeted*.

- First, *teenagers in urban areas* are the most difficult to employ, therefore, training and supply-side measures should be offered to them.
- Second, there is only a small proportion of *the least educated* group involved in self-employment in urban areas, which might be increased by introducing entrepreneurship programmes.
- Third, there are important disadvantages for *young women* in the labour market, despite their higher educational attainment. They find employment at the same rate as men, but when they are unemployed, it is for longer periods and when a job is found, it is for lower wages. This is clearly in opposition to their aspirations and could have dramatic consequences for the stability of households and society if not resolved. A whole set of policy instruments should be implemented to reduce this female disadvantage. First, equal pay measures should be introduced and enforced for equal characteristics. Second, to ensure that these measures work, the legal framework and its application mechanisms should be strengthened and provision made to ease women's access to legal assistance when reporting discriminatory practices of employers. Local authorities could provide such assistance. It is also important to implement affirmative actions to help women overcome barriers and achieve better jobs, better career prospects, better maternity leave provisions, childcare facilities and support schemes in favour of discouraged or long-term unemployed mothers. Part-time work should be explored as a way of helping young women and men to find a better balance between their life and their work.
- Fourth, formal employment (defined as "holding a contract") as opposed to *informal employment* offers a wage premium to the youth. But the data collected in the SWTS also point to a selectivity bias: employers give contracts only to the most productive workers/employees and hire the others without a contract. Hence, the mere formalisation of the low productivity workers would not translate in a wage gain if wages are based on productivity levels. As a consequence, promoting decent working conditions for informal workers, including social security coverage, should be the policy priority.
- Fifth, *unemployed youth in rural areas*, and especially women, experience very long unemployment spells. Therefore, educational, training or employment opportunities – such as public works schemes – should be made available to those out of the labour market for long periods.
- Sixth, several findings highlighted the difficulties experienced by *young people with vocational diplomas*. They had trouble finding a job and, even when they did, their wages

were sometimes lower than those with compulsory education or below, despite employers expressing a need for a workforce endowed with technical skills. This is an important issue to be addressed by policy-makers at all levels. Vocational education and training are important ingredients for the development of new and more efficient production systems and are an important alternative for those young people who do not intend to pursue higher education. Policy-makers should make it a priority to improve the quality of vocational training and, together with firms and unions, link it more to the needs of the local production system. A better system linking school and job market, education and on-the-job training, is needed. The government, local authorities, firms and unions, should contribute to the provision and support of on-the-job and off-the-job training and apprenticeship programmes. In general, the extreme dissatisfaction of employers with the actual skills possessed by young job applicants indicates the need to improve the quality and content of education.

In summary, the following points are highlighted as urgent:

- a) a need to increase the quantity and quality of the supply of skills;
- b) a more active role of the PES in providing information, counselling and training, not only to the unemployed, but also to discouraged workers and jobseekers still at school;
- c) a closer integration of the educational system, government at all levels and social partners to reduce imperfect and asymmetric information on job vacancies as well as to increase and diversify the supply of on-the-job and off-the-job training for young people.

Preface

Table of contents

| | |
|--|---------------------------------------|
| Preface | 2 |
| Table of content | 15 |
| List of Tables | 17 |
| List of Figures | 19 |
| Abbreviations | 20 |
| Executive summary and main findings | Errore. Il segnalibro non è definito. |
| Introduction | 21 |
| Chapter 1: Methodology and overview of the labour market | 22 |
| Introduction | 22 |
| 1.1. The socio-economic context | 22 |
| 1.2. The labour market in Mongolia | 26 |
| 1.3. Youth in the national labour force in Mongolia | 27 |
| 1.4. Survey methodology | 29 |
| Summary remarks | Errore. Il segnalibro non è definito. |
| Chapter 2: Characteristics of youth in the sample survey | 31 |
| Introduction | 31 |
| 2.1. Individual characteristics of youth | 32 |
| 2.2. Household characteristics of youth | 36 |
| 2.3. Aspirations and life goals | 41 |
| 2.4. Educational achievement | 42 |
| 2.5. Vocational and technical training | 50 |
| 2.6. Preparation for school-to-work transition: the youth still in school | 50 |
| 2.7. Employment status and training | 54 |
| 2.8. Wage employment | 58 |
| 2.9. Self-employment | 77 |
| 2.10. Unemployed | 80 |
| 2.11. Outside of the labour force | 87 |
| Summary remarks | Errore. Il segnalibro non è definito. |
| Chapter 3: Stages of school-to-work transitions | 89 |
| Introduction | 89 |
| 3.1. The school-to-work transition approach | 90 |
| 3.2. Youth who have not yet started the transition | 92 |
| 3.3. Youth in transition | 99 |
| 3.4. Characteristics of a successful transition | 110 |
| Summary remarks | Errore. Il segnalibro non è definito. |
| Chapter 4: Creating jobs for young people: The employers perspective | 116 |
| Introduction | 116 |
| 4.1. Characteristics of enterprises | 117 |

| | |
|---|---------------------------------------|
| 4.2. Recruitment of young people | 119 |
| 4.3. Matching expectations | 122 |
| 4.4. Education and training | 123 |
| Summary remarks | Errore. Il segnalibro non è definito. |
| Chapter 5: Summary, Conclusions, and Recommendations | 127 |
| Introduction..... | 127 |
| 5.1. Summary and Conclusions..... | 127 |
| 5.2. Policy recommendations..... | 129 |
| Summary remarks | 131 |
| References..... | 132 |
| Statistical Annexes | 135 |
| Appendix A1. The Mongolian educational system..... | 151 |
| Appendix A2. The “youth experience gap” | 152 |

List of Tables

| | |
|--|-----|
| Table 1.2.1. Distribution of the STWS Household sampling by <i>aimag</i> | 30 |
| Table 2.1.1. Marital status, by sex, age group, urban rural, region and education | 33 |
| Table 2.1.2. Spouse's occupation by gender..... | 34 |
| Table 2.2.1. Place of residence by age and gender (%) | 36 |
| Table 2.2.2. Parents' occupation..... | 37 |
| Table 2.2.3. Parents' education attainment | 38 |
| Table 2.2.4. Summary statistics on household's monthly net income (in '000 TUGs)..... | 39 |
| Table 2.2.5. Measures of inequality of the household's income..... | 40 |
| Table 2.2.6. Different measures of the poverty line..... | 41 |
| Table 2.3.1. Expected level of education for youth in school, sex, age group, urban and rural | 42 |
| Table 2.4.1. Education level, by sex, age group, and urban rural | 44 |
| Table 2.4.2. Education attainment by gender and place of residence (in %)..... | 44 |
| Table 2.4.3. Reasons to leave school for the uneducated by age and gender (in %) | 45 |
| Table 2.4.4. Education attainment by gender and age (%) | 47 |
| Table 2.6.1. Young people still in school | 51 |
| Table 2.7.1. Labour market status by gender, age and location (%)..... | 55 |
| Table 2.7.2. Components of the workforce by gender..... | 55 |
| Table 2.7.3. Components of the workforce by age groups | 56 |
| Table 2.7.4. Young people by employment status and education..... | 56 |
| Table 2.7.5. Informal and temporary employment by gender | 57 |
| Table 2.8.1. Sectoral composition of employment by gender and age group..... | 59 |
| Table 2.8.2. Composition of employment..... | 61 |
| Table 2.8.3. Wage distribution by education (monthly wages and its natural log) | 62 |
| Table 2.8.4. Summary statistics on the wage distribution by education..... | 64 |
| Table 2.8.5. OLS and IV estimates of the annual rate of return to education by gender and age .. | 66 |
| Table 2.8.6. Wage employees, by sex, urban / rural area, age group and initiatives to seek a job. | 71 |
| Table 2.8.7. Juhn, Murphy and Pierce (1993) decomposition of gender wage gap..... | 74 |
| Table 2.8.8. Summary table based on Oaxacha and Blinder decomposition..... | 75 |
| Table 2.9.1. Self-employment by age group and education attainment (%)..... | 78 |
| Table 3.1.1. ILO traditional and school-to-work indicators | 91 |
| Table 3.3.1. Still in-school young people by approaches to seek a job, sex and urban / rural | 101 |
| Table 4.1.1. Enterprises in the Employers' survey by sector of activity | 117 |
| Table 4.1.2. Employers by gender and union membership..... | 118 |
| Table 4.1.3. Enterprises by type of legal status and size | 118 |
| Table 4.2.1. Selection channels for filling new vacancies, by sex of the employer | 119 |
| Table 4.2.2. Employers' evaluation of skills necessary to access a job for available vacancies .. | 120 |
| Table 4.2.3. Preference of employers for different age groups..... | 121 |
| Table 4.2.4. Preference of employers for different civil statuses | 121 |
| Table 4.2.5. Preference of employers as to the gender of applicants..... | 121 |
| Table 4.2.6. Preference of employers as to the educational level of applicants | 122 |
| Table A.2.6.1. Logistic estimate: being still in school rather than in the labour market | 138 |
| Table A.2.7.1a. Multinomial LOGIT regression of determinants of unemployment | 139 |
| Table A.2.7.1b. Multinomial LOGIT regression of determinants of self-employment..... | 140 |
| Table A.2.7.1c. Multinomial LOGIT regression of determinants of wage employment..... | 141 |
| Table A.2.7.1d. Multinomial LOGIT regression of determinants of inactivity..... | 142 |
| Table A.2.7.2a. Multinomial LOGIT regression of determinants of unemployment. The role of parents' occupation | 143 |

| | |
|--|-----|
| Table A.2.7.2b. Multinomial LOGIT regression of determinants of self-employment. The role of parents' occupation | 144 |
| Table A.2.7.2c. Multinomial LOGIT regression of determinants of wage employment. The role of parents' occupation | 145 |
| Table A.2.7.2d. Multinomial LOGIT regression of determinants of inactivity. The role of parents' occupation | 146 |
| Table A.2.8.1. Augmented earnings equations by gender and age group..... | 147 |
| Table A.2.8.2. Oaxaca and Blinder decomposition of the youth gender wage gap..... | 149 |

List of Figures

| | |
|---|-----|
| Figure 2.1.1. Distribution of age at marriage by gender | 34 |
| Figure 2.7.1. Hours worked per week by gender | 58 |
| Figure 2.8.1. Reasons not to be a union member | 70 |
| Figure 2.8.2. Quantity effects on the gender pay gap based on JMP (1993) | 74 |
| Figure 2.9.1. Unpaid family workers as a share of the workforce, by gender | 79 |
| Figure 2.9.2. Unpaid family workers as a share of the workforce, by age group | 80 |
| Figure 2.9.3. Unpaid family workers as a share of the workforce, by age group | 80 |
| Figure 2.10.1. Unemployment rate by age group and urban / rural area | 81 |
| Figure 2.10.2. The youth unemployment rate by age and gender | 83 |
| Figure 2.11.1. Youth activity rate by gender | 87 |
| Figure 2.11.2. Activity rate by age group excluding young people in school | 88 |
| Figure 2.11.3. Activity rate by location excluding young people in school | 88 |
| Figure 3.1.1. Youth by transition stage by gender, age group and location | 91 |
| Figure 3.1.2. Youth by transition stage by gender, age group and location | 92 |
| Figure 3.2.1. Inactivity by educational levels | 93 |
| Figure 3.2.2. Reasons of inactivity by sex | 94 |
| Figure 3.2.3. Future plans of in-school youth by gender | 95 |
| Figure 3.2.4. Future plans of in-school youth by age group | 96 |
| Figure 3.2.5. Future plans of in-school youth by location | 97 |
| Figure 3.2.6. Type of education desired by pre-transition youth in school | 98 |
| Figure 3.3.1. Age at which young people have left school, by gender | 99 |
| Figure 3.3.2. Age at which young people have left school, by location | 100 |
| Figure 3.3.3. Job search methods of unemployed Mongolians by gender | 101 |
| Figure 3.3.4. Job search methods of unemployed Mongolians by location | 102 |
| Figure 3.3.5. Assistance provided by PES to young unemployed by gender | 103 |
| Figure 3.3.6. Assistance provided by PES to young unemployed by location | 104 |
| Figure 3.3.7. Number of applications by youth unemployed (last 12 months), by gender | 104 |
| Figure 3.3.8. Number of applications by youth unemployed (last 12 months), by location | 105 |
| Figure 3.3.9. Number of job interviews by youth unemployed (last 12 months), by gender | 106 |
| Figure 3.3.10. Number of job interviews by youth unemployed (last 12 months), by location | 106 |
| Figure 3.3.11. Perceived obstacles in finding employment, by gender | 107 |
| Figure 3.3.12. Perceived obstacles in finding employment, by location | 108 |
| Figure 3.3.13. Reasons for wishing to changing jobs, by gender | 109 |
| Figure 3.4.1. Employment by ownership type and transition stage | 111 |
| Figure 3.4.2. Sectors of employment by transition stage | 111 |
| Figure 3.4.3. Education attainment by transition stage | 112 |
| Figure 3.4.4. Job tenure by transition stage | 113 |
| Figure 3.4.5. Length of job search by transition stage | 113 |
| Figure 3.4.6. Job search method by transition stage | 114 |
| Figure 3.4.7. Number of applications by transition stage | 115 |
| Figure 3.4.8. Number of job interviews by transition stage | 116 |
| Figure 4.3.1. Employers' evaluation of the skills possessed by young applicants | 123 |
| Figure 4.4.1. Number of trainees per employer | 123 |
| Figure 4.4.2. Type of training provided by employers | 124 |
| Figure 4.4.3. Type of training provided by employers | 125 |
| Figure 4.4.4. Length of training | 126 |
| Figure 4.4.5. The cost of training | 126 |

Abbreviations

| | |
|--------|---|
| ALMP | Active Labour Market Policy |
| CEECs | Central and Eastern European Countries |
| CMTU | Confederation of Mongolian Trade Unions |
| EBRD | European Bank of Reconstruction and Development |
| FSU | Former Soviet Union |
| GDP | Gross Domestic Product |
| GWG | Gender Wage Gap |
| HDI | Human Development Index |
| HPI | Human Poverty Index |
| ICT | Information and Communication Technology |
| ILO | International Labour Office |
| IV | Instrumental Variables |
| JMP | Juhn, Murphy and Pierce |
| LFS | Labour Force Survey |
| MGD | Millennium Development Goals |
| MLSF | Mongolian Labour Force Survey |
| MONEF | Mongolian Employers' Federation |
| MYF | Mongolia Youth Federation |
| NAP | National Action Plan |
| NEP | National Employment Programme |
| NPADW | National Plan of Action for Decent Work |
| NSO | National Statistical Office of Mongolia |
| NTPYC | National Tripartite Plus Youth Committee |
| OECD | Organisation for Economic Cooperation and Development |
| OLS | Ordinary Least Square |
| PES | Public Employment Service |
| STWS | School-to-Work Survey |
| TUG | <i>Tughrik</i> (the Mongolian currency) |
| UNDP | United Nations Development Programme |
| UNIFEM | United Nations Development Fund for Women |
| US | United States |
| WTO | World Trade Organisation |
| YEN | Youth Employment Network |

Introduction

The position of young people in labour markets in transition and developing countries has attracted insufficient attention until now, particularly in Asian countries. Relatively little is known about the youth labour market in Mongolia. Previous studies have looked at the drop-out rate or at other specific aspects of the youth school-to-work transition (Gerelmaa, 2005; National Tripartite Plus Youth Committee, 2005),⁴ but do not provide a comprehensive analysis of the youth labour market.

This report addresses the issue by taking advantage of a recent ad hoc School To Work Survey (STWS) of young people aged 15-29 years⁵ carried out in 2006 by the National Statistical Office of Mongolia (NSO) with the International Labour Office's (ILO) financial and technical assistance.

A national tripartite steering committee was formed in 2005 with the task of formulating an action plan to address the youth employment challenge. To address this, the Government has introduced a set of policies and programmes. The Employment Promotion Law implemented through the National Employment Promotion Programme includes employment promotion and active labour market policies. Policies to promote employment cover five areas: (i) finance and credit; (ii) enterprise development; (iii) rural employment promotion through cooperatives, partnerships, family businesses, animal husbandry and crop production; (iv) employment promotion linked to environmental protection; and (v) employment promotion through tourism and the development of infrastructure. Active labour market policies include job brokerage, training, counselling, information, business incubators, bilateral agreements for migrant workers and policies for employing foreign workers. Measures are also outlined for youth employment and vulnerable groups.

The Mongolian Employers' Federation (MONEF) has come up with a number of proposals to support youth employment, such as policy development, job placement, business surveys, information dissemination, professional training, internship programmes and cooperation with universities. The Confederation of Mongolian Trade Unions (CMTU) adopted a policy document at its 2004 Congress on "The position of CMTU on the issue of youth".⁶ This was aimed at encouraging young people to join trade unions with specific provisions to include them in national employment programmes and to protect young migrants working abroad. It also called for assistance to youth working in the informal sector.

The Mongolia Youth Federation (MYF) carried out a survey on the "Development needs of the Mongolian youth" that pointed to the role of employment as a source of regular income, future security, social status and teamwork, as well as a means to realize their talents and abilities. Among obstacles faced by youth are scarcity of jobs and lack of qualifications, along with bureaucratic red tape, inadequate language ability and inappropriate professional skills. In particular, young people need computer training. The MYF has proposed the following measures for youth employment: (i) a programme should be developed, implemented and monitored by the government and public organizations to address youth employment and job creation; (ii) job openings should be surveyed nationwide to identify training needs; (iii) cooperation between

⁴ Other recent studies on Mongolia include Darii and Suruga (2006) on private returns to education, and Morris and Bruun (2005) on rural labour markets.

⁵ The information provided throughout this report is broken down for different age groups, including young teenagers (aged 15-19), young adults (20-24) and the oldest segment of young people aged 24-29.

⁶ Mongolian Youth Federation: "Development needs of Mongolian youth: A survey", Youth Development Policy Centre, Ulaanbaatar, 2003.

educational institutions and business enterprises should be strengthened; and (iv) employment abroad should be promoted.⁷

The Tripartite-plus Committee on youth employment has also identified a number of priorities for action. These priorities focus on unemployed youth, young graduates, young migrants and the role of information technology. However, to date, too little is known about the characteristics and determinants of the youth employment challenge and the opportunities for and aspirations of young people, their difficulties and working conditions. The aim of this report is to contribute to the on-going debate by providing a detailed analysis of the youth labour market in several dimensions. Based on such an analysis, it also provides policy recommendations intended to inform and provide a background for Government action.

Chapter 1: Methodology and overview of the labour market

Introduction

This chapter places the youth employment condition in a broader national context. Section 1.1 discusses the country's general economic framework to better understand opportunities and constraints confronting the younger generation in Mongolia. It puts the current economic situation in an historical perspective, focusing on the post-transition period, while providing some general analysis of the main macroeconomic indicators in recent years.

It then describes the country's overall level of development, as measured by the UNDP's Human Development Index (HDI) and the Human Poverty Index (HPI). The rank of Mongolia was 116 on the HDI and 42 on the HPI, meaning that Mongolia's position in terms of poverty ranking is much below its position in terms of per capita GDP and other economic indicators and, therefore, its already scant available resources are not easily accessible to all.

The rest of this chapter draws on evidence from the latest national labour market statistics (population, labour force, labour force participation rates, unemployment rates, etc.), first at the national level (in Section 1.2) and then for youth specifically (in Section 1.3). It also aims to identify policies and programmes that impact the employment situation and explain the institutional arrangements for youth employment issues at the national level.

Finally, Section 1.4 explains the STWS survey methodology – the questionnaire development and design of the sampling frame – the main statistical source of the following chapters.

1.1. The socio-economic context

Mongolia is a country with vast territories inhabited by a relatively small population, making it the least densely populated in the world. It is Asian not only in terms of location, but also of the population's ethnic origin. It is now in a situation of extreme poverty, despite its long history and having once been the world's largest empire. In its recent history, it has been squeezed between two of the biggest and most powerful countries in the world, the former Soviet Union (FSU) and China. The influence of these two countries on the economic and political situation of Mongolia has been important and lasting.

Mongolia was also influenced by communist ideals and was a socialist country, but is now in transition from a planned to a market economy. Transition has been strongly influenced by the transformation, on-going, in the two neighbouring FSU republics and China. Transition began in 1990 as a consequence of the process of "disorganization" of the planning system in Russia and

⁷ Labour Market Policy Department of the Ministry of Social Welfare and Labour, Labour Relations Department of the Mongolian Employers' Federation, the Confederation of Mongolian Trade Unions and the Mongolia Youth Federation: *Youth employment in the market transition in Mongolia: A national report*, Draft, ILO-Korea Partnership Programme on "Promoting decent and productive work for young women and men in Mongolia", Ulaanbaatar, 2005.

the sudden reduction of trade flows with the FSU. The reform process was, thereafter, much faster in Mongolia than in FSU republics.

In addition, the economic structure is typical of a developing country that has never undergone an industrial revolution, in as much as the manufacturing sector represents a small share of GDP and employment. Moreover, it is concentrated in a few more densely populated urban areas. The relatively greater share of GDP and employment is provided by the primary sector, including agriculture, herding and the mining industry.

Perhaps as a consequence of low productivity agriculture and herding, the country has one of the world's 50 lowest scores in terms of poverty. Poverty does not only depend on the level of human development and GDP, as shown in more detail in the following. Mongolia is a middle-income country with a relatively high level of education and per capita income. However, other non-monetary indicators, including life expectancy at birth, access to water supply, proportion of children under weight below five years and proportion of population with a very low income, show apparent hardship in satisfying a large part of the population's basic needs.

Macroeconomic framework. Economic activity has traditionally been based on herding and agriculture. However, it has extensive mineral deposits of copper, coal, molybdenum, tin, tungsten, and gold, accounting for a large part of its industrial production. Soviet assistance, at its height, accounted for one-third of GDP, but disappeared almost overnight in 1990-91, with the dismantling of the FSU, leading to a deep recession.

As Darii and Suruga (2006) note, the European Bank of Reconstruction and Development (EBRD) includes Mongolia in the high-intermediate reformers' group along with Bulgaria, Romania, Baltic countries and Albania, in terms of the ranking of liberalization index in transition economies. Russia is in the low-intermediate reformers' group and other FSU countries are also included in this group or in the slow-reformer's group. Therefore, Mongolia, relative to Russia and other FSU countries, has experienced a more rapid liberalization of domestic prices, foreign trade regime, including removal of export controls and taxes, privatization of large- and small-scale enterprises and banking reform.

According to the National Tripartite Plus Youth Committee (NTPYC) (2005), the recent economic evolution can be described as going through the following stages: Economic Decline (1990-1992); End of Decline and Growth Rates Rising (1993-1995); Growth Rates Stabilizing (1996-1999); Growth Rates Falling (2000-2002); Growth Rates Rising Again and Stabilizing (2003-today). The annual average rate of economic growth was 1.9 per cent in 1993-1995 and 3.3 per cent in 1999.

Severe winters and summer droughts in 2000-2001 and 2001-2002 resulted in massive loss of livestock and anaemic GDP growth of 1.1 per cent in 2000 and 1 per cent in 2001. This was compounded by falling prices for Mongolia's primary-sector exports and widespread opposition to privatization. Growth improved to 4 per cent in 2002, 5 per cent in 2003, 10.6 per cent in 2004, 6.2 per cent in 2005 and, according to EBRD (2007) forecasts, 8.4 per cent in 2006. Much of the growth was due to high copper prices and new gold production.

Thanks to a relatively quick recovery from the slowdown of the early 1990s and the excellent growth rate trend of recent years, Mongolia's GDP is estimated to be, in 2006, at around 137 per cent of its 1989 level. This is one of the best performances achieved by a transition country.

According to the EBRD (2007, p. 38-40), in the medium term the country should be able to maintain a growth rate of 5-6 per cent, if there are no major changes in the current economic situation, including the quite rapid pace of reforms and the acquired stability of the State budget. A further positive sign, and an important opportunity for the future growth of Mongolia, is the increasing flow of foreign direct investment (FDI), which has gone up from US\$10 million in 2001 to a high of US\$449 million. However, the country's growth prospects remain vulnerable, not only to weather conditions, but also to fluctuations in global commodity prices, especially for oil, metals and textiles.

During the years 1990 to 1995, when the economy experienced a rapid decline, and then a quick recovery, there was a sharp increase in the percentage of agricultural products in the GDP, reaching 38 per cent, while the other sectors suffered a considerable loss. Nonetheless, since 1995, the share of the agricultural sector in the economy has been steadily declining to 20 per cent of the GDP. There is a recent tendency for non-agricultural sectors to gain a bigger share in the GDP in a consistent manner. As explained later in more detail, the fluctuations in the sectors' shares of GDP closely follow the evolution of the agricultural sector during transition.

The industrial sector's share in the GDP is rising at a relatively slow rate and by the year 2004, it was able to produce 25 per cent of it. The reverse is happening in trade, which accounted for 25.6 per cent of the GDP in 2004, the same as that of the industrial sector. The economy of Mongolia is still composed of service, industry and agriculture and its neighbours influence its economic performance. For example, Mongolia purchases 80 per cent of its petroleum products from Russia.

Remittances from Mongolians working abroad, both legally and illegally, constitute a sizeable portion of imports. Money laundering is a growing problem. Mongolia settled its large debt to Russia at the end of 2003 on favourable terms. It joined the World Trade Organization (WTO) in 1997 and is the only member not participating in a regional trade organization. It seeks to expand its participation and integration into Asian regional economic and trade regimes.

Because of Mongolia's remoteness and natural beauty, the tourism sector has recently shown signs of rapid growth. With spiking international commodity prices, there has been a surge of international interest in investing in its minerals sector, despite the absence of a policy environment conducive to private investment. How effectively it mobilizes private international investment around its comparative advantages (mineral wealth, small population, and proximity to China and its burgeoning markets) will ultimately determine its success in sustaining rapid economic growth. Parliament passed a windfall profits tax on copper and gold that took effect in mid-2006, and major amendments to the minerals law, allowing the government to take an equity stake in major new mines. It is not known what effect these laws will have on mining activities in Mongolia, although major potential investors expressed considerable concern about the changes.

In 2006, Parliament passed four new tax laws: personal and corporate income, value-added and excise, intended to reduce the overall tax burden on taxpayers and stimulate the economy. Most provisions of the new laws took effect on 1 January 2007. No projections of the economic effects are currently available.

Environment. Due to the low population density, most territories are still unspoiled and are beauty and nature reserves available to a growing number of tourists from all over the world to enjoy. However, some territories are experiencing an increasing and worrying degree of pollution.

As a result of rapid urbanization and industrial growth policies under the communist regime, Mongolia's deteriorating environment has become a major concern. The burning of soft coal by individual home or "ger" (yurt in Russian) owners, power plants, and factories in Ulaanbaatar has resulted in severe air pollution. Deforestation, overgrazed pastures, and efforts to increase grain and hay production by ploughing up more virgin land have increased soil erosion from wind and rain. With the rapid growth of newly privatized herds, overgrazing in selected areas is also a concern. Recent rapid and relatively unregulated growth in the mining sector of minerals (gold, coal, etc.) has become the focus of public debate. A great deal of public attention is being paid to non-transparency of the government process of awarding licences, the equitable sharing of economic rents between foreign investors and the government, and the potential impact on the environment. However, the real environmental concern is the sharp boom in the number of informal gold miners, who frequently and illegally use mercury, which may lead to an epidemic of mercury poisoning.

The Human Development Index. One way to assess the degree of welfare and social development of the country is to look at its score in terms of the HDI. This is a composite

indicator elaborated by the United Nations Development Programme (UNDP) to assess the impact of several socio-economic factors on welfare, in addition to the level of per capita GDP. The basic assumption of the HDI is that human development is a multidimensional concept that cannot be fully captured by its monetary proxy, namely per capita GDP. In other words, the main aim of the UNDP in building such an indicator is to take into account the non-monetary dimensions of human development and compare it with per capita GDP across countries, to assess the extent to which a simple, monetary measure of incomes is able to capture the absolute and relative level of welfare of a country's population compared to that of other countries. The dimensions of human development taken into account include life expectancy at birth, adult literacy rate and enrolment ratios for different types of schools. In turn, a comparative assessment is important, in as much as it allows understanding similarities and differences across geographically close countries and also suggests the order of priorities in the policy agenda for government intervention.

As noted in Darii and Suruga (2006), Mongolia had already made some progress in the area of human development in the mid-1990s. In particular, in 1997, the country's rank in terms of the HDI was better than the rank of real GDP per capita. While it ranked 101st on GDP per capita, its HDI rank was 91st and it was classified as a "medium human development" country (UNDP, 1997, Table 1, p.146-48). The authors conclude that the relatively high level of the HDI also indicates that, at that time, Mongolia accorded a high priority to socio-economic development, including education.

According to the last available UNDP (2006) report, in recent years the country has fallen down in the ranking of countries based on their HDI, despite a slight increase in the HDI in absolute terms from 0.642 in 1985 to a high of 0.691 in 2004. In the same year, Mongolia ranked 116 in terms of the HDI, which is 18 positions above the rank based on per capita GDP. In other words, other countries' progress outweighed Mongolia's in terms of human development and even more in terms of growth in per capita income.

In comparative terms, in 2004, Mongolia scored an HDI lower than that of both Russia and other European FSU republics, including Belarus, Ukraine, and also China. However, other Asian FSU republics and transition countries scored similar levels of human development. Viet Nam, Uzbekistan, Kyrgyzstan and Moldova performed better, and Tajikistan and Cambodia worse.

Decomposition of the country's performance along the three main dimensions of the HDI suggests important differences in the speed of human development. Life expectancy at birth was 64.5 years, not one of the highest among middle-income countries, though much higher than those countries that experienced dramatic conflicts or epidemics. The adult literacy rate, relative to the population aged 15 and above, was 97.8 per cent. The combined gross enrolment ratio for primary, secondary and tertiary education was 77 per cent. The annual per capita GDP was US\$2,056 in purchasing power parity. This amounts to an average monthly income of US\$171.3.

While life expectancy has a value similar to the HDI, the education index has a much higher value and the GDP index a much lower value. This is in line with the previous observation that the country scores very low in terms of income (0.50), though the educational level is considered higher than the average of other middle-income countries, with an education index of 0.91. In fact, the education index of Mongolia is at the same level of other FSU republics, while the GDP per capita is much lower.

Overall, decomposition of the HDI suggests that Mongolia has similar problems to other formerly planned economies in Europe and Asia, where a strong presence of the State contributed to levels of education and health services close to, or above, those achieved in countries with a similar level of development, but with weaker economic and political institutions and a smaller presence of the State sector. However, due also to the transitional recession, Mongolia, like many other European and Asian transition countries, scores lower than average per capita GDP levels.

The Human Poverty Index. According to UNDP (2006), Mongolia scores values on the HPI even lower than those on the HDI. Again the basic assumption of the HPI is that per capita GDP is

not a measure of relative welfare, especially in countries where income inequality is dramatic.⁸ In such countries, a relatively high per capita GDP and per capita GDP growth can be achieved without most of the population being involved. In order to capture the degree to which the population actually enjoy increasing standards of living, beyond the uneven increase in per capita GDP, the HPI looks at different dimensions of inequality.

The HPI is an indicator formed as the mean of a series of other indicators of poverty, namely the probability at birth of not surviving to age 40, the adult illiteracy rate, the share of the population without access to an improved water source, the percentage of children under weight for age under the age of five, the percentage of people living on less than US\$1 or US\$2 per day, and the percentage living under the poverty line.

According to the UNDP (2006), the share of the population with an income below the poverty line was 35.6 per cent in the period 1990-2003. About 27 per cent and 74.9 per cent were living on US\$1 and US\$2 per day, respectively.

Interestingly enough, none of the European transition economies is among the 100 poorest countries in the world. Among Asian transition economies, only China (26) and Viet Nam (33) appear on the list, with worse positions than Mongolia.

According to a recent study carried out by the National Statistical Office of Mongolia (2003, p. 9), the poverty level sharply increased in rural areas and decreased in urban areas during the years 1995–2003.

Overall, the performance of Mongolia in terms of the HPI suggests that income inequality and poverty are worrying aspects of the country's profile. They are even more worrying than human development itself and per capita income growth. In a way, it is likely that per capita income growth itself is at high risk, due to the high degree of inequality and poverty existing in the country. In turn, this suggests the fight against poverty and income inequality is an important condition for the country's future growth prospects.

Inequality and poverty are also surely able to significantly affect youth aspirations of higher education, decent jobs and better lives. Discussion of the policy instrument to fight poverty deserves, therefore, special consideration in this report and, hopefully, also in the policy agenda of the government.

In fact, one of the contributions of this study is to provide in Chapter 2 some measures of poverty for the households of young people included in the sample of the STWS in 2006. In addition, it will discuss different policy options to tackle the trade-off between short- and long-term objectives of economic policy in the perspective of an amelioration of opportunities available to young people. In a sense, the fight against poverty could also contribute to the hopes of talented young people, living in poor households, satisfying their legitimate aspirations. In fact, this fight is bound to reduce the cost of their investment in skill formation. In turn, this is the best way not only to foster economic growth, but also to fight income inequality and poverty in the long term.

1.2. The labour market in Mongolia

Economic transition has had an important effect on the labour market, including youth employment. On the one hand, the fall in output in the early 1990s caused increasing unemployment due to the closure of many State-owned enterprises and the slow process of job creation in the emerging private sector. On the other hand, the emergence of market-oriented firms also increased the skill content of any type of job, especially in the private sector.

The traditional divide between urban and rural areas has taken on new forms, in particular, the evolution of economic activities in rural areas has affected urban labour markets. As Morris and Brunn (2005) note in their remarkable study of rural Mongolia, the first decade of the transition

⁸ This assumption is based on Amartya's Sen view that a correct measurement of welfare in developing countries should take into account the degree of income inequality.

from a command economy to a market system witnessed tremendous changes in the rural sector with the dismantling of agricultural collectives and State farms, together with cutbacks in public expenditures to support administration, schools, clinics and infrastructure. Privatization of livestock at first provided new opportunities for herders and farmers, as well as workers laid off from government jobs and State-owned enterprises in the cities, to obtain employment in rural areas. Others found jobs in provincial capitals and *soum* centres.⁹

However, increases in the number of herders and livestock came to an abrupt end with a series of harsh winters and summer droughts that resulted in many families losing their animals during 2000–2004. The unemployment and poverty that followed have contributed to a growing stream of migration from rural areas to urban centres. Many migrants live in the traditional tents and urban poverty of the *ger* areas¹⁰ surrounding the cities of Ulaanbaatar, Darkhan and Erdenet.

As a consequence of these changes, the rural population of Mongolia increased dramatically over transition to decrease again to its pre-transition level in more recent years. Currently, 43 per cent of the total population live in rural areas.

As noted by the NTPYC (2005), based on the Labour Force Survey (LFS) data, the labour force participation rate was 64.4 per cent and the employment rate 62.1 per cent in 2004. Independent of the statistical source adopted and the period considered, the participation rate is less than 60 per cent in urban areas and over 75 per cent in rural areas. These rates are low for the region (the employment rate in East Asia was 76.4 per cent in 2004), but are approximately around the world average. The average unemployment rate is 14.2 per cent.

As already noted in Section 1.1, the country's production structure is still very traditional. In rural areas especially, the primary sector, including agriculture, herding and mining, employs by far the largest share of the population, compared to manufacturing and services. Overall, the share of agricultural employment has fluctuated between 15 per cent, in the early 1990s, to over 36 per cent in the mid-1990s. In the 2000s it amounts to about 30 per cent of the total. The manufacturing sector has steadily declined from about 40 to 20 per cent of total employment, due to the decline of the food industry which was fostered by the collective farms.¹¹

With the formal sector unable to absorb unemployed workers coming from rural areas and new labour market entrants, many Mongolians have found employment in the informal economy. Data from the LFS covering the years 2002–2003 indicate that 27 per cent of non-agricultural employment is in informal activities.¹² Most (71 per cent) informal jobs are in urban areas and women hold 45 per cent. In rural areas, informal jobs are related to herding and non-herding activities. Often herders and farmers supplement their incomes with revenue from subsistence activities and commercial production.

1.3. Youth in the national labour force in Mongolia

Mongolia's population is young: more than half below the age of 24 years and over 20 per cent between 15–24 years. The unemployment rate of this age group is higher than that of the rest of the labour force. More than a quarter of all unemployed are below 24 years old. The high rates of

⁹ In Mongolia there are 21 *aimags* (provincial centres) and the capital city of Ulaanbaatar, each of them further divided into a number of *soums* (rural districts). There are 340 *soums*, which are further divided into 1,671 *baghs* (small villages). The capital city is divided in 9 districts of which 4 are suburbans (del Rosario, 2005, p. 33).

¹⁰ “*Ger*” are tent houses. Many people coming from rural areas live in the suburbs of urban areas in *gers*.

¹¹ As Morris and Brunn (2005, Ch. 1) note, in the late 1980s, collective farms were large and important production units, coinciding with *soum* centres. They were able to carry out not only herding, but also agriculture and other related activities typical of the food industry. In addition, they provided important services, including veterinary, but also insurance and so on. The privatisation of collective farms destroyed many farming and industrial activities.

¹² Note that the definition of informal work adopted in the Mongolian LFS is different from the one adopted in this Report (see especially Section 2.7). Here, informal employment is related to any type of labour relationship that is not regulated by a contract.

youth unemployment, concentration of poverty and increasing social problems in urban areas highlight the necessity of employment generation for urban youth.

In the period between 1997 and 2004, the percentage of young people aged 25 years or less decreased by 5.1 points from 28.4 to 23.3 per cent. It has gone down by 7.1 points from 61.4 to 54.3 per cent for those aged 35 years or less.

As shown in the survey conducted by the National Statistics Agency, with the support of the Asian Development Bank, the average unemployment rate is 18 per cent for those aged 15–17 years, 21.2 per cent for the 20–24 year-olds, 14.4 per cent for the 25–29 year-olds and 13.5 per cent for the 30–34 year-olds compared to an average of 14.2 per cent. Those aged 15–24 years are in the weakest groups.

The unemployment rate of the age groups 15–24 years and 15–30 years is very high in urban areas. Women are more frequently unemployed among those aged 15–19 years, but not among young people aged below 35 years.

In the period from 1970 to 1990, there was a higher rate of population growth resulting in more and more young people reaching working age. There was also a workforce surplus in the labour market due to a lower level of demand associated with the transition to market economy. For these reasons, the government has been pursuing a policy of promoting overseas employment for its citizens. According to the 2002 statistics of the Ministry of Foreign Affairs, a total of more than 100,000 Mongolians are studying, working or living abroad.¹³ The average age of emigrants is 31.3, most of them belonging to the age group 20–35 years.

In 2003, money transfers totalling US\$101.6 million were made by overseas workers, amounting to 21 per cent of imports. Among positive economic consequences that cannot be expressed in monetary terms are learning modern technologies and production processes, gaining working skills, learning foreign languages, and changing attitudes to business.

More boys and young men, than girls and young women, are in the labour force as they are more likely to drop out of school to help with family herding or seek other employment. In rural areas, school attendance for boys drops sharply after 10 years old and remains lower than for girls at all levels. This may reflect lower enrolment rates for older male cohorts as well as drop-outs from school. Among herding households, there are indications that wealthier herders with more animals rely on additional labour from poorer families. Some hire adolescent boys who work for food and lodging. This informal labour market for boys and young men may have placed additional burdens for unpaid work on girls and young women (UNIFEM, 2001).

As the Mongolian Government (2006) states in the National Action Plan on Youth Employment, the government places a high priority on generating productive employment as shown in its successfully running National Employment Programme (NEP). Youth are included in the national Millennium Development Goals (MDGs) and are a target group in the first draft for the National Plan of Action for Decent Work (NPADW). The government considers youth employment both an integral part of the Millennium Declaration and a key contribution to meeting other MDGs, including those related to poverty reduction.

In cooperation with other non-governmental agencies, the Mongolian Employers' Federation (MONEF) conducted a survey on "Youth employment during the transition period to the market economy" in 2005 within the context of the action plan on: "Supporting decent and efficient youth labour in Mongolia", which is part of the project entitled "Improving efficiency of the private sector in Mongolia through capacity-building", supported by the ILO and the Republic of Korea. Based on this survey, the Action Plan and Implementing Strategy on Youth Employment has been adopted.

¹³ The adoption of the Law on Export and Import of Work Force in 2001 was intended to promote the services rendered by private companies to citizens in seeking job opportunities abroad. As of the end of 2004, over 3,000 persons were sent abroad by 20 authorized agencies within the workforce and trainee exchange agreements made at the governmental as well as ministerial levels with the Republic of Korea, Japan, Taiwan, and the Czech Republic.

In the middle of the 1990s, the government implemented the national programme to fight unemployment and in 2001 parliament adopted the Promotion of Employment Law. The programme has two basic frames, promotion of employment policy and labour market policy. The government also declared its commitment to following active employment policies towards youth and vulnerable social groups.

1.4. Survey methodology

Aims of the Mongolian STWS. The analysis based on the Mongolian Labour Force Survey (MLFS), does not elucidate the specific nature of the youth labour market problem. In fact, the available statistical sources cover the labour market in general and are insufficient to understand the conditions and hardships of young people in their school-to-work transition. The implications for young people are whether to study or work, type and level of education to achieve, ways to fill their experience gap to make them more appealing to employers than adult workers.

To answer these questions, a key role is attributed to the young person's household and aspirations. However, the information provided on family background in the MLFS is insufficient, inasmuch as it is available only for those who continue to live with their parents. In Mongolia, young people establish their households quite early in life so information on family background is missing for a large number.

However, this is not the only constraint to using the MLFS to study school-to-work transitions. In addition to family background, other important information includes: a) aspirations of young people; b) working while in school; c) reasons to drop out from school; d) participation in training programmes; e) intensity and methods of job search.

For all these reasons, the ILO decided to implement ad hoc STW surveys in a number of countries. This type of survey has some specific features, making it the most valuable source of statistical information on the labour market behaviour of young Mongolian people:

- a) it includes only young people aged 15–29 years, giving a larger sample than the MLFS for the same age group;
- b) it provides detailed information on family background, essential to understand not only educational choices, but also success in the labour market;
- c) it asks questions regarding not only the actual features of young people's participation in the labour market, but also their aspirations;
- d) it detects different types of school-to-work transitions;
- e) it provides detailed information on Active Labour Market Policy (ALMP) carried out by the government, allowing for a first assessment and evaluation of their labour market impact;
- f) in addition, it includes a supplementary questionnaire for employers which provides evidence on youth labour demand;
- g) lastly, it is based on a strong participation of several local partners, including officers from ministerial bodies, members of unions of employers and employees, students organizations, thereby contributing to institution building in the country and increasing awareness of the hardship in school-to-work transition.

Questionnaire. The STWS is based on a questionnaire providing detailed information on a number of issues:

- a) *family background:* information is provided on parents' educational attainment and occupation, on the number of employees and unemployed in the household, as well as on the household income;
- b) *individual characteristics:* this includes the civil status and characteristics of the young people's new household, including the labour market status of the spouse and the number of children;

- c) *educational level and status*: this provides not only the educational qualification of each individual, but also the time and reason for leaving education, the skills that young people aim to gain and those they feel are necessary to find the job they want;
- d) *employment status*: this includes information on the sector, **working conditions**, existence of a contract, the temporary or permanent nature of the job, secondary job holding, on-the-job training, union membership;
- e) *recall data from the time of school*: this poses a key question to reconstruct past labour market experience up until leaving school;
- f) *in-school young people*: this includes the type of education aimed for, the source of income to pay tuition fees and other costs and the possible working activities carried out while in school;
- g) *unemployed young people*: this includes detailed information on job search methods, intensity of job search, **barriers to and supports for entry into the labour market, wage versus self-employment preference**.

The questionnaire of the employers and managers module survey includes detailed information on the ownership and industrial sector of the firm, union membership, number and skill requirements of employees, vacancies, recruitment methods, criteria for personnel selection and training practices.

Sampling method of the STWS. The primary sampling unit is the total population aged 15–29 years, which, at the time of the interview (end of 2006), represented 31.56 per cent of the total population or about 809,000 individuals. As the results of previous similar surveys suggest, a share of 0.5–0.75 per cent was considered adequately representative of the underlying total sample population. The upper bound of 0.75 per cent of the total sample population, representing approximately 6,100 people, was chosen.

The sampling was done in several steps. The first step consisted of selecting households rather than individuals, due to the impossibility of making a list of the total population aged 15–29 years. Step two consisted of sampling those household members within the selected households aged between 15–29 years.

At the end of 2005, the average household size was 4.2 and 1.32 of them was aged 15–29 years, implying the inclusion of at least one member from each selected household. As in previous similar surveys, it was proved that 25–30 households sampled from each primary sampling unit was sufficient to represent the underlying population.

Thereafter, the organizers selected *bags* and *khoroos* as primary sampling units and 30 households were sampled from each *bags* and *khoroos*. According to planning, it was necessary to cover 4,585 households, representing about 0.75 per cent of the total. In turn, this required sampling 154 primary units, as shown in Table 1.

The STWS is based on a two strata (stage) proportional sampling method. In the first stage, the organizers selected administrative units by a proportional probability method and in the second stage, households were selected by a random sampling method, requiring a list of current total households, after which, 30 households were selected by the random sampling method thus providing the sample population of the survey.

Table 1.2.1 Distribution of the STWS Household sampling by *aimag*

Table 1. Distribution of the SWTS household sampling by aimag

| <i>Aimags and the Capital</i> | Number of Households | | | <i>Aimags and the Capital</i> | Number of primary samling units | | |
|-------------------------------|----------------------|-------------|-------------|-------------------------------|---------------------------------|-----------|-----------|
| | Total | Urban | Rural | | Total | Urban | Rural |
| TOTAL | 4585 | 2685 | 1900 | TOTAL | 154 | 90 | 64 |
| West region | | | | West region | | | |
| Total | 723 | 210 | 513 | Total | 24 | 7 | 17 |
| <i>Bayan-Olgii</i> | 160 | 48 | 112 | <i>Bayan-Olgii</i> | 6 | 2 | 4 |
| <i>Govi-Altai</i> | 116 | 35 | 81 | <i>Govi-Altai</i> | 4 | 1 | 3 |
| <i>Zavkhan</i> | 151 | 32 | 119 | <i>Zavkhan</i> | 5 | 1 | 4 |
| <i>Uvs</i> | 149 | 45 | 104 | <i>Uvs</i> | 4 | 1 | 3 |
| <i>Khovd</i> | 147 | 50 | 97 | <i>Khovd</i> | 5 | 2 | 3 |
| Khangai region | | | | Khangai region | | | |
| Total | 1046 | 357 | 689 | Total | 34 | 11 | 23 |
| <i>Arkhangai</i> | 182 | 33 | 149 | <i>Arkhangai</i> | 6 | 1 | 5 |
| <i>Bayankhongor</i> | 157 | 44 | 113 | <i>Bayankhongor</i> | 5 | 1 | 4 |
| <i>Bulgan</i> | 113 | 28 | 85 | <i>Bulgan</i> | 4 | 1 | 3 |
| <i>Orkhon</i> | 157 | 145 | 12 | <i>Orkhon</i> | 5 | 5 | - |
| <i>Ovorkhangai</i> | 216 | 38 | 178 | <i>Ovorkhangai</i> | 7 | 1 | 6 |
| <i>Khovsgol</i> | 223 | 71 | 152 | <i>Khovsgol</i> | 7 | 2 | 5 |
| Central region | | | | Central region | | | |
| Total | 827 | 351 | 476 | Total | 29 | 13 | 16 |
| <i>Govisumber</i> | 24 | 14 | 10 | <i>Govisumber</i> | 1 | 1 | - |
| <i>Darkhan-Uul</i> | 167 | 137 | 30 | <i>Darkhan-Uul</i> | 6 | 5 | 1 |
| <i>Dornogovi</i> | 105 | 60 | 45 | <i>Dornogovi</i> | 4 | 2 | 2 |
| <i>Dundgovi</i> | 95 | 26 | 69 | <i>Dundgovi</i> | 3 | 1 | 2 |
| <i>Omnogovi</i> | 96 | 32 | 64 | <i>Omnogovi</i> | 3 | 1 | 2 |
| <i>Selenge</i> | 166 | 50 | 116 | <i>Selenge</i> | 6 | 2 | 4 |
| <i>Tov</i> | 175 | 33 | 142 | <i>Tov</i> | 6 | 1 | 5 |
| East region | | | | East region | | | |
| Total | 371 | 149 | 222 | Total | 13 | 5 | 8 |
| <i>Dornod</i> | 136 | 71 | 65 | <i>Dornod</i> | 4 | 2 | 2 |
| <i>Sukhbaatar</i> | 100 | 21 | 79 | <i>Sukhbaatar</i> | 4 | 1 | 3 |
| <i>Khentii</i> | 134 | 56 | 78 | <i>Khentii</i> | 5 | 2 | 3 |
| Ulaanbaatar | | | | Ulaanbaatar | | | |
| Ulaanbaatar | 1618 | 1618 | 0 | Ulaanbaatar | 54 | 54 | - |

In addition, 2.3 per cent of the total registered 321,000 enterprises were considered as the sample population to cover in the Employers and Managers module survey. This meant that the employers and managers of 760 enterprises were interviewed. While sampling the employers, the organizers defined the number of enterprises according to their share in the economy.

Chapter 2: Characteristics of youth in the sample survey

Introduction

This chapter provides a detailed picture of young people in Mongolia. Throughout this and the following chapters, different age groups are considered. The STWS includes the main categories of young people suggested by the ILO as a standard for useful international comparison to be homogeneous: a) young teenagers (aged 15-19 years); b) young adults (aged 20-24 years); and c) under 30 years (aged 25-29 years).

These are three distinct groups, with potentially different labour market behaviour. The young teenagers have generally completed, or are close to completion, of compulsory education.¹⁴ In an age of increasing educational attainment, many young teenagers are still studying to obtain a secondary high school diploma. However, a minor component, which may change from one country to another, already abandon education to enter the labour market. This is one of the

¹⁴ In fact, in some countries, and for some individuals who are less successful at school, compulsory education continues after the age of 14. Also, in the case of Mongolia, most young people complete compulsory school at the age of 15, as shown in detail in Appendix A1. However, it is a widely accepted convention to consider the young teenagers a homogeneous group, including those in the process of completing compulsory education and deciding what to do afterwards.

weakest groups, due to their low level of education, and needs special attention. In the case of Mongolia, about 78.8 per cent of young teenagers are still in school.

The young adults include those still at school, who are aiming for a university degree, or have already entered the labour market. Labour market entry at this stage is not necessarily a weakness, provided that young people have already attained the educational qualification aimed at and that its quality is sufficiently high to find a decent job. In the case of Mongolia, 27.2 per cent of young adults are still in school.

The STWS also includes the remaining age segment of the under 30 years. This group includes those who have completed their education, with the exception of the few who have still to complete tertiary education or have gone back to school after dropping out at a younger age. In Mongolia, 7.0 per cent are still at school and the rest have entered the labour market, not necessarily having completed their school-to-work transition.

According to international conventions, despite being demographically young, this last group cannot be considered “young” in a statistical sense. However, when trying to understand juvenile labour market conditions in many countries, the inclusion of this group is even more important due to increasingly difficult school-to-work transition. Only a small part of this group, and only a few of those with the highest educational level, manages to accomplish their transition to the labour market when they are still young adults. For the important differences existing between these three age groups, this distinction is maintained throughout this report.

Among the specific features of the STWS questionnaire, making it a unique source of information on the labour market behaviour of young people, is the availability of information on parents’ educational and economic background, aspirations for their future adult lives, intensity and type of search methods and several types of policy interventions to ease school-to-work transition.

The questionnaire has previously been used by the ILO in several other developing and transition countries. It has been specially designed to capture the most important aspects of youth school-to-work transition and is particularly interesting as it allows for international comparisons, which, in turn, are very important to understand the specificity of labour market hardships experienced in each country. Although many aspects of the youth labour market problem are common to some developing countries, important differences arise across countries.¹⁵

2.1. Individual characteristics of youth

Marital status. The first, and perhaps the most important element affecting young people’s participation in the labour market, is their marital status. As the analysis of the ensuing sections shows, especially in the case of women, marital status affects the decision to study and/or to work, how active a young unemployed person is in seeking a job, and also the type of employment and wage to accept. The marital status also directly affects the fertility rate of young people and, therefore, of the entire country.

Economic transition has caused dramatic changes in the establishment and stability of families. In many transition countries, the reform has coincided with a rapid change from a traditional to a post-modern model of household. The former was characterized by early marriage and fertility decisions and linked to a production system based on manufacturing and providing stable jobs for all. This change has meant the age at marriage and bearing of the first child has increased, as well as the divorce rate, and in the diffusion of non-traditional forms of households, such as living together.

In addition, and related to this, gender roles have undergone rapid and dramatic changes, with an increasing tendency for women to aim for a working career thus creating tensions around their traditional place in the household. In formerly transition countries, women have always had high

¹⁵ Appendix A2 provides a theoretical framework to understand cross-country differences in the youth unemployment problem and the role that different policy instruments may have in helping school-to-work transition.

labour force participation rates compared to women in mature market economies. However, the double burden coincided with an enormous amount of time spent in unpaid family work. Now, this picture is rapidly changing. The increasing cost of childrearing and the greater job and career opportunities for the most motivated women, have meant a reduction in the time they wish to dedicate to unpaid family work.

Table 2.1.1 provides a summary representation of the youth distribution by civil status for different age groups, gender, place of residence, region and education as given by the STWS. The first, most apparent feature, shown by the table is that most people marry quite early, between the ages of 20–29. Among young adults (aged 20–24 years) about 25 per cent are married. In the age group 25–29 years, around 33.33 per cent are single and a very small number live together without being married.

The persistence of a traditional household structure might depend upon the economic transition being slow and, therefore, not bringing about the same cultural changes as in other Central and Eastern European countries (CEECs) and FSU republics. It may also reflect the different history of the country, including its prevailing agricultural structure and a large share of nomads.

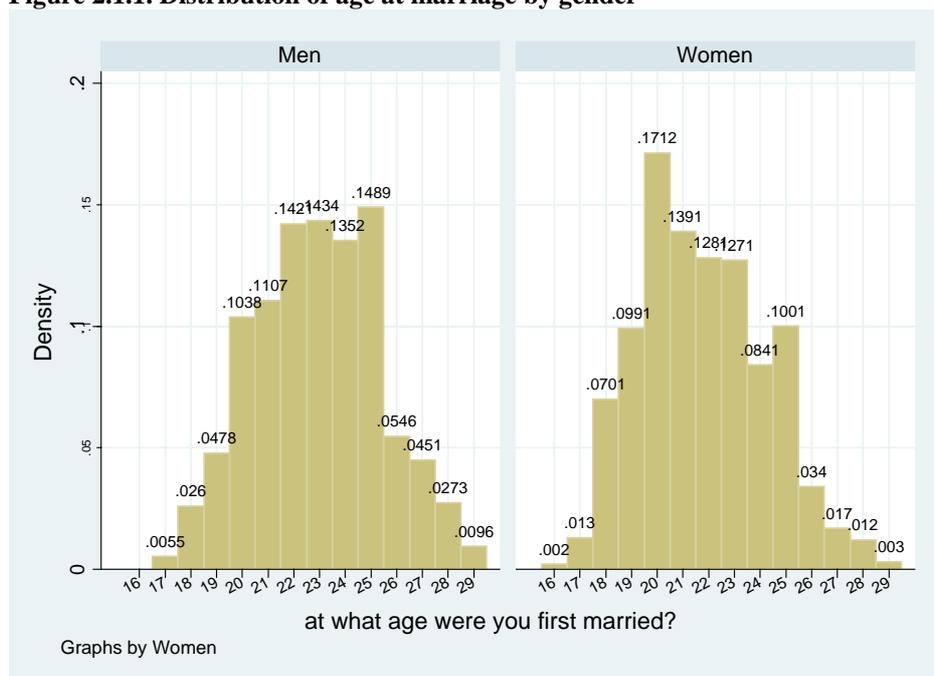
Table 2.1.1. Marital status, by sex, age group, urban rural, region and education

| | 15-29 aged population / thous / | Of which marital status /percent/: | | | | | |
|-----------------------------------|---------------------------------------|------------------------------------|-------------|--------------------|---------------|--------------|-------------|
| | | Never married (%) | Married (%) | Living together | Separated (%) | Divorced (%) | Widowed (%) |
| Total | 808.8 | 73.0 | 25.3 | 1.1 | 0.1 | 0.3 | 0.1 |
| 15-19 | 336.8 | 98.4 | 1.5 | 0.1 | - | - | - |
| 20-24 | 253.0 | 73.2 | 24.9 | 1.4 | 0.1 | 0.2 | 0.0 |
| 25-29 | 219.0 | 33.8 | 62.5 | 2.1 | 0.2 | 1.0 | 0.4 |
| Male | 399.3 | 76.9 | 22.1 | 0.9 | - | 0.1 | 0.1 |
| Female | 409.5 | 69.2 | 28.5 | 1.3 | 0.2 | 0.6 | 0.2 |
| Urban | 445.2 | 79.8 | 18.2 | 1.2 | 0.1 | 0.4 | 0.2 |
| Rural | 363.6 | 64.7 | 34.0 | 0.9 | 0.1 | 0.2 | 0.1 |
| West region | 119.6 | 68.5 | 31.2 | 0.2 | - | 0.1 | - |
| Khangai region | 169.1 | 65.2 | 33.6 | 0.8 | 0.1 | 0.1 | 0.1 |
| Central region | 143.5 | 68.6 | 28.4 | 2.3 | 0.1 | 0.5 | 0.1 |
| East region | 67.7 | 63.9 | 34.8 | 0.2 | | 0.7 | 0.4 |
| Ulaanbaatar region | 308.9 | 83.1 | 15.0 | 1.2 | 0.2 | 0.4 | 0.1 |
| Uneducated | 27.0 | 77.6 | 22.4 | - | - | - | - |
| Primary | 97.2 | 67.2 | 30.9 | 1.3 | 0.1 | 0.3 | 0.3 |
| Basic (Grade 4-8) | 264.6 | 82.1 | 17.1 | 0.6 | | 0.2 | |
| Secondary (Grade 9-10) | 270.1 | 76.4 | 21.7 | 1.4 | 0.2 | 0.3 | 0.1 |
| Vocational technical education | 27.7 | 64.1 | 33.6 | 1.4 | | 0.5 | 0.5 |
| Diploma, specialized secondary | 18.4 | 47.9 | 47.3 | 1.4 | 0.7 | 2.1 | 0.7 |
| Tertiary/bachelor | 100.7 | 51.9 | 45.6 | 1.5 | 0.1 | 0.6 | 0.3 |
| Master's degree and above | 3.0 | 58.3 | 37.5 | 4.2 | - | - | - |

Source: own elaboration on STWS of Mongolia, ILO.

The table also shows that women marry earlier than men. Less than 70 per cent of women in the sample are single, suggesting that the age of marriage is still very low for women (22 years on average) and lower than that of men (23 years on average). Figure 2.1.1 shows the distribution of age at marriage by gender, and confirms that, among married men, the highest share married at between 20–25 years, whereas the peak for women is between 19–23 years. The female distribution is skewed to the left, while the male one is more similar to a normal distribution with a mean at the average age in the sample. About 2 out of 10 women marry at age 20 years, which is the mode of the female distribution, and the peak of the male distribution is at age 25 years.

Figure 2.1.1. Distribution of age at marriage by gender



Note: 0 = men; 1 = women.

Source: own elaboration on SWTS of Mongolia, ILO.

The population in rural areas guarantees the stability of the traditional model of household and gender roles, as shown in Table 2.1.1. The share of married young people is 34 per cent in rural areas, almost twice higher than in urban areas (18.2 per cent). A sign of change in the household model prevalent among young people residing in urban areas, compared to their contemporaries in rural areas, is the greater share of divorce, which is, nevertheless, low at 0.4 per cent of the overall sample. In fact, about 4 per cent of women living in Ulaanbaatar are divorced and account for the largest part of the divorce rate. The corresponding figure for men is zero, but due to the limited data, the reported figures should be taken with due caveat.

Children. The number of children affects not only labour market participation, especially that of women, but also poverty. Considering the low incomes, especially for young people, having several children means, for most households, being under the poverty line.

About 33 per cent of women and 21 per cent of men in the STWS sample have children. Over 90 per cent of them have one or two children, meaning that about 10 per cent of the youth population are in households with three children or more.

Spouse. An important determinant of a married individual’s participation in the labour market is the occupation of their spouse. As expected, in the traditional household model where only one, typically the male partner, is involved in economic activities, Table 2.1.2 shows that most of the women’s spouses are employed, whereas most of the men’s spouses are involved in unpaid family work or in household duties. About 62.2 per cent of male partners are in some form of remunerated activity. However, the rest of Mongolian women are married to unemployed partners, students or men involved in unpaid family work.

Table 2.1.2. Spouse’s occupation by gender

| | Men | | Women | |
|--------------------|---------|--------------|---------|--------------|
| | Percent | Cum. Percent | Percent | Cum. Percent |
| studying/in school | 6.99 | 6.99 | 5.14 | 5.14 |
| Unemployed | 14.79 | 21.78 | 16.31 | 21.45 |
| paid employee | 25.62 | 47.4 | 27.09 | 48.54 |

| | | | | |
|------------------------------------|-------|-------|-------|-------|
| Employer | 0.27 | 47.67 | 0.4 | 48.94 |
| member of cooperatives | | | 0.2 | 49.14 |
| unpaid family worker | 21.37 | 69.04 | 8.36 | 57.5 |
| Self-employed/own account worker | 12.33 | 81.37 | 34.54 | 92.04 |
| household duties | 15.48 | 96.85 | 2.72 | 94.76 |
| unemployed due to health status | 0.27 | 97.12 | 0.81 | 95.57 |
| na (in case of separated/divorced) | 0.14 | 97.26 | 1.41 | 96.98 |
| Other | 2.74 | 100 | 3.02 | 100 |

Source: own elaboration on SWTS of Mongolia, ILO.

Overall, this suggests that newly established households resemble the traditional model and young people maintain traditional gender roles within the family. This contributes to maintaining a low level of women's participation and to generating a household income lower than it would have been if both partners were employed.

Migration. Migration, especially from rural to urban areas, is substantial. A large share of young people, about 17.1 per cent, are migrant. Not surprisingly, the larger share, of in-migrants, about 21.2 per cent, locates in Ulaanbaatar, but a similar share is in the *aimag* centres. In the *soum* centres, it falls slightly to 16 per cent. In rural areas it is only about 8 per cent.

This suggests that internal migration is an important phenomenon and that the direction of net migration is to urban areas. It is a positive tendency to be encouraged inasmuch as, in principle, it is a factor potentially able to contribute to equalising unemployment rate differentials across regions. However, this statement might be mitigated by the following observations regarding the human capital level of migrants compared to those who remain in the local areas.

Being mainly a flow from rural to urban regions, it is not surprising that the share of in-migrants increases with educational attainment, moving from 12.6 per cent for the uneducated and 9.6 per cent for those with primary education to 26.7 per cent and 25 per cent for those with tertiary or master degrees, respectively. The share of in-migrants is also higher than average for those holding intermediate high secondary diplomas in vocational and specialized secondary subjects.

This might suggest that some form of brain drain is taking place from rural, more backward, to urban, more advanced, regions. In fact, considering that those, who wish to attend school and, therefore, migrate to places where the supply of education is higher, are the most talented individuals, migration might cause a reduction of the human capital endowment in rural areas. In turn, this may contribute to geographical differences in growth, and unemployment greater, not lower as one would expect, in the case when migration concerns the least skilled individuals, destined either to unemployment or inactivity.

However, the higher educational levels of those migrating might be a consequence of, as shown below, the second most important cause of migration is to attend educational and training courses.

It is difficult to say, a priori, whether in-migrants receive a wage premium or loss and if their economic conditions in the new workplace are more or less favourable than in their original workplace. Moreover, it is not clear whether the impact of this migration flow is increasing or decreasing the lagging behind of rural areas. All these questions are a matter of empirical investigation and some will be addressed in the following sections.

As to the reasons for migration, the evidence, based on the Mongolian STWS, suggests that most young people move with their family, about 64 per cent. This percentage is particularly high for women, 68.9 per cent.

The next most important cause of migration is to attend educational or training programmes and accounts for 17.2 per cent and 14 per cent of male and female migration, respectively. This is explained by fewer schools, and even fewer universities, in rural areas.

The next most common cause of migration is receiving a job offer in another place and is 14 per cent for men and 8.9 per cent for women, respectively. Finally, more men move in search of a job in another place, most frequently in urban areas.

These figures show that women are less prone to migrate alone. Nonetheless, a larger share of women, about 19 per cent, compared to men (15 per cent), migrates.

2.2. Household characteristics of youth

Educational attainment often proves to be an important predictor of success in the labour market, but is too often the consequence of a better family background. Consequently, for many young people this might be a more important factor of development than education. More specifically, children with a poor family background tend to have less education and, therefore, less job opportunities than those with a better one. It is a difficult challenge for any educational system, especially State owned, to guarantee equal access for all children, regardless of their family background. Special attention should be paid to talented young people from poor backgrounds, in the form of scholarships and other subsidies, provided according to a combination of factors, including merit and household incomes. The household characteristics considered in this Section are as follows: (i) place of residence; (ii) number of siblings; (iii) family background (educational and occupational level of parents); (iv) income level of the household; (v) income inequality; (vi) poverty.

Place of residence. The distribution of the sample population shows an important share in the capital city (Table 2.2.1). The rural population is also relatively large, about 22.2 per cent. What can be called the urban population, including those in the capital and in the *aimag* centres, is about 54 per cent of the total population.¹⁶ Construction of the sample population reflects the geographical distribution within the country.

Young teenagers tend to reside in the capital city and in the *soum* centres rather than in rural areas. This is probably because most of them are still attending high school, which is often not available in rural areas. Among the oldest segment (25–29 years), the share of those living in rural areas is higher than average, perhaps because young people return home after completion of schooling in urban areas.

Women tend to reside more frequently than men in the capital city and, in general, in *aimag* centres, suggesting that men prefer agriculture slightly more than women. In addition, women tend to migrate more frequently than men, often either to follow their parents or to seek educational opportunities.

Table 2.2.1. Place of residence by age and gender (%)

| <i>residence</i> | 15-19 | 20-24 | 25-29 | Men | Women | Total |
|------------------|-------|-------|-------|-------|-------|-------|
| ub | 37.58 | 38.24 | 34.69 | 36.68 | 37.31 | 37.02 |
| aimag center | 18.91 | 16.78 | 15.52 | 16.93 | 17.8 | 17.32 |
| soum center | 26.09 | 20.74 | 22.82 | 23.22 | 23.73 | 23.5 |
| rural | 17.43 | 24.24 | 26.96 | 23.16 | 21.17 | 22.16 |
| Total | 2,829 | 2,199 | 1,836 | 3,432 | 3,439 | 100 |

Source: own elaboration on SWTS of Mongolia, ILO.

Number of siblings. The household size is an important factor that might affect educational attainment, especially for women. A numerous household has a high risk of falling below the poverty line and puts a greater weight on the opportunity cost of education for the children. In developing countries, where the traditional one-breadwinner model of household prevails, it is common to assume that women will be less likely to work in their adult life. As a consequence,

¹⁶ This is exactly the share of urban population reported in UNDP (2006).

the returns from investment in their education are presumed to be lower. This explains the discrimination against women in their access to education. The issue of whether the number of siblings affects educational attainment, once a controlling factor for other important determinants of investment in education, is tested econometrically in a later section.

Unreported calculations show that almost 95 per cent of young people in the sample have siblings, suggesting that households with only one child are almost an exception. About 83 per cent of the youth population having siblings has up to five and about 55 per cent has up to three, meaning that about 17 per cent have more than five and 45 per cent have more than three.

Comparing the number of young people's siblings with the number of their own children, as seen in the previous section, the reduction in the fertility rate of the youngest generation is apparent. This shows the difficulty many young people have in establishing their own family. Low incomes and poverty might also significantly affect fertility.

The number of siblings is higher in rural than urban areas. In particular, households with a single child are almost all located in Ulaanbaatar: there, the share of young people with no siblings is about 9.8 per cent, but only 2.4 per cent in rural areas. This might mirror the lower cost of child rearing and living in rural areas, as well as the need of poorer households to have children to help with agricultural activities in a country where the population density is very low.

Family background. The family background influences many aspects of young people's lives. The family is the first societal unit. It is, therefore, the first social institution towards which young people direct their expectations about their adult life.

This is particularly true in countries where social mobility is low and the economic structure is stable over time. It is interesting to assess the extent to which intergenerational transfer of wealth, income, education and also employment opportunities from parents to children, take place in Mongolia, in view of the important changes the country has recently undergone, including a continuous process of industrial restructuring, especially in urban areas. This tends to change the skill composition of employment and makes it more difficult to maintain a stable social structure. For instance, it becomes less frequent for young people to do the same job as their parents and means they must put more effort into their search for decent jobs.

Intergenerational transfers may be negative or positive for the younger generation, in the sense that they might increase or decrease the level of welfare of the youth population. Empirical evidence, relating to most developing and transition countries, shows that young people from wealthier households, whose parents have higher educational attainment and better jobs, achieve a higher level of education and higher quality and better paid jobs.

Table 2.2.2 shows the distribution of fathers and mothers' occupations. Young people, whose parents have died, are unemployed or retired from the labour market, are about 40 per cent of the sample and are the weakest segment. In particular, orphans are about 2.8 per cent of interviewees. In addition, about 19 per cent were fatherless and 6.1 per cent motherless. This is quite a high share considering the young age of the interviewees. Policy-makers should take this group into consideration.

About 4 per cent had both parents unemployed. The share of unemployed mother or father is the same at about 10.4 per cent. Moreover, a minor share of those individuals whose father is unemployed and whose mother is not unemployed have also a mother who is retired or inactive and is the weakest group in terms of family background.

About 10.3 per cent of young people have both parents retired. A larger share of mothers (21.3 per cent) is retired compared to fathers (15.3 per cent), due to the lower retirement age for women and the higher mortality of men.

The next largest share comprises young people whose father and/or mother is a herdsman, the most common occupation, not only of parents, but also of children.

Table 2.2.2. Parents' occupation

| | <i>Father</i> | <i>Mother</i> |
|--|---------------|---------------|
|--|---------------|---------------|

| | | |
|------------------------------------|-------|-------|
| Administrative, managerial | 3.01 | 2.14 |
| Specialist | 3.91 | 6.59 |
| Engineering, technical and related | 3.45 | 1.29 |
| Clerical and related | 0.23 | 0.84 |
| Service worker | 4.83 | 8.79 |
| Agriculture and fishery worker | 0.33 | 0.31 |
| Production and sales worker | 1.75 | 1.67 |
| Machine and equipment fitter | 0.94 | 0.25 |
| Elementary work | 6.06 | 4.85 |
| Herdsman | 14.58 | 15.42 |
| Farmer | 0.2 | 0.17 |
| Retired | 15.25 | 21.28 |
| Self employed/own account worker | 9.46 | 9.77 |
| Unpaid family worker | 0.36 | 1 |
| Household duties | 1.82 | 6.72 |
| Unemployed/looking for job | 10.35 | 10.35 |
| Employed in overseas | 0.36 | 0.31 |
| Parent deceased | 18.55 | 6.11 |
| Other | 4.57 | 2.14 |

Source: own elaboration on SWTS of Mongolia, ILO.

The educational level of fathers, and especially of mothers, is a good predictor of success, not only in achieving higher education, but also greater employment opportunities. The distribution of educational levels of fathers and mothers is very similar (Table 2.2.3). A larger number of mothers have specialized secondary education and a larger number of fathers have basic or low secondary education. The first evidence of the strong degree of intergenerational transfers and of stability of households' economic and social status is the closeness of the distribution of young people and their parents in terms of educational attainment.

Table 2.2.3. Parents' educational attainment

| | Father | Mother |
|--------------------------------|--------|--------|
| Uneducated | 1.91 | 1.73 |
| Primary | 13.68 | 14.71 |
| Basic | 18.87 | 18.14 |
| Secondary | 27.44 | 26.84 |
| vocational technical education | 9.17 | 7.12 |
| diploma, specialized secondary | 13.86 | 18.52 |
| tertiary/bachelor | 12.71 | 12.12 |
| master's degree and above | 0.86 | 0.68 |
| 9 | 1.49 | 0.15 |

Source: own elaboration on SWTS of Mongolia, ILO.

Household income. This is an important aspect of family background, partially alternative to parents' educational attainments and occupations. However, the two proxies are correlated because education and occupations are generally important determinants of individuals' incomes. Nonetheless, household income correlates to household wealth, which is, in several cases, independent of educational levels. Moreover, education and occupation are important predictors of individuals' incomes. In turn, this means that the incomes of self-employed individuals and households owning their own business, is largely independent of education.

Table 2.2.4 provides some summary statistics relative to the household's income as measured in thousands of *tughrik*, the Mongolian currency. The footnote to the table provides exchange rates for the US dollar and the euro. The average income level of the households in the sample is TUGs123,580, about US\$106.1 and €78.9. However, outliers might affect this average measure

and it is convenient to exclude from the distribution the lowest and highest values, to obtain a more reliable measure of the mean income. Two alternative restrictions have been applied. The first excludes the zeros. In this case, however, the average income is almost the same. When excluding all the households belonging to the deciles lower than the 10th and 90th, then the average income equals TUGs109,770, about US\$94.3 (or €70). The median value, namely the income of the household that divides the distribution in two equal parts, is less affected by extreme values and is, in fact, always equal to TUGs100,000 (US\$85.9 or €63.8), independent of the sample considered.

Whatever the statistics adopted to measure the central tendency of the households' income distribution, it is apparent that the income level of Mongolian households is very low in comparison to many developing and transition countries. Even considering the low cost of living, it is clear that many households live in dramatic economic conditions. The situation has worsened given that many goods and commodities in common use are imported and prices are high.

Table 2.2.4. Summary statistics on household's monthly net income (in '000 TUGs)

| Variable | Obs | Mean | Median | Std. Dev. | Min | Max |
|---|------|--------|--------|-----------|-----|------|
| All | 6415 | 123.58 | 100 | 144.09 | 0 | 9000 |
| No zeros | 6367 | 124.51 | 100 | 144.23 | 1 | 9000 |
| From the 10 th to the 90 th (deciles) | 5153 | 109.77 | 100 | 51.68 | 35 | 236 |

Note: As to the 31st of May 2007, the nominal exchange rates of the TUG to the Euro and the US dollars were as follows: 1 Euro = 1566.8700 Tughrik; 1 Tughrik = 0.0006 Euro; 1 US Dollar = 1164.6993 Tughrik; 1 Tughrik = 0.0009 US Dollars.

Source: own elaboration on SWTS of Mongolia, ILO.

Inequality. The average income does not explain the extent to which economic conditions change across households. The degree to which young people's educational opportunities and success in finding a decent job are evenly distributed, depends on the share of households that live below the poverty line and, more generally, on the share that have lower than average incomes.

The degree of dispersion of the households' income distribution might provide the information necessary to understand the degree to which young people are offered equal opportunities across households. Some measures of dispersion are already provided in Table 2.2.4, including the minimum, maximum household income, as well as the standard deviation, namely the average value of differences of each household's, from the average household's, income. These statistics show that inequality is relatively high. The richest household has a 9,000 times higher income than the poorest. However, again, there are only a few households with TUGs 0 and even fewer with TUGs9,000. Therefore, this ratio might be misleading.

If the the poorest (under the 10th decile) and the richest (above the 90th decile) households are excluded, then the ratio of the richest to poorest becomes 6.7. This is quite a high ratio. While it depends very much on the low income level of some poorer households, the gap with the richest households is still remarkable and suggests that many are unable to provide their children with equal opportunities to education and decent jobs. In fact, the lower the income level of a household, the higher the opportunity cost of education and, therefore, the lower the probability of finding good jobs in the future.¹⁷

A further measure confirming the high degree of inequality is the standard deviation. It measures the average difference from the mean. Here there are important differences according to whether the poorest and richest segments are included in the calculation. When the extreme cases are included, the standard deviation is even greater than the mean value, suggesting that the mean does not completely represent the economic conditions of a large number of households. However, when the poorest and richest households are excluded from the sample, then, the

¹⁷ This statement is based on the assumption that the marginal utility of money is decreasing with higher incomes, like the marginal utility of any other good or commodity. This implies that assuming the same cost of investment in human capital formation, this cost will still be harder to bear for poorer households.

standard deviation suggests that most households have an income between TUGs58,120 (US\$49.9 or €37) and TUGs161,450 (US\$138.6 €103). This confirms the impression that a large number of households live off very low incomes.

Other more complex measures of inequality are given in table 2.2.5 for international comparisons to be made by observers and policy-makers. They measure different aspects of poverty and are, therefore, also precious instruments for policy-oriented analysis aimed at individualizing instruments of intervention for the government. Without going into details,¹⁸ these measures confirm overall the high degree of inequality experienced by Mongolian households.

Table 2.2.5. Measures of inequality of the household's income

| Inequality measures | |
|--|--------|
| Relative mean deviation | 0.1995 |
| Coefficient of variation | 0.4708 |
| Standard deviation of logs | 0.4929 |
| Gini coefficient | 0.2661 |
| Mehran measure | 0.3799 |
| Piesch measure | 0.2092 |
| Kakwani measure | 0.0638 |
| Theil index (GE(a), a = 1) | 0.1094 |
| Mean Log Deviation (GE(a), a = 0) | 0.1164 |
| Entropy index (GE(a), a = -1) | 0.1346 |
| Half (Coeff.Var. squared) (GE(a), a = 2) | 0.1108 |
| Atkinson inequality measures (eps = 1) | 0.1098 |

Note: The indices have been computed excluding the households whose incomes are lower the 10th or above the 90th decile.

Source: own elaboration on STWS of Mongolia, ILO.

Poverty. One unanswered question of the previous discussion is: when is a household considered “poor”? Inequality provides a more general view of the degree to which opportunities are evenly distributed among young people. However, defining when a household can be considered poor is important to understand when, independent of the parents’ educational endowment, it is particularly difficult to provide children with sufficient opportunities for a decent adult life. Poverty can trap households for generations if no external help is provided to those affected. Providing equal opportunity of access to education and decent jobs is an important tool allowing young people to escape the poverty trap.

One of the indicators computed by the UNDP considers the share of the population living on less than US\$1 or 2 a day. According to unreported calculations, at the time of the survey, the portion of the population that lived on US\$30 a month or less was 10.1 per cent and that living on US\$60 a month was 32.9 per cent. These shares are lower than those reported by UNDP (2006, p. 293) as obtained based on average incomes relative to the period 1990-2004, suggesting an improvement in recent years.¹⁹

To define when a household is poor, it is necessary to define first a poverty line, namely a level of income below which a household is considered poor. The simplest poverty line can be fixed at the income perceived by the household occupying half of the median income, and in this case, the poverty line would be TUGs50,000 (US\$42.9 or €31.9), including a quarter of the entire distribution by definition.²⁰

¹⁸ Further details are available from the author on request.

¹⁹ Possible differences in the calculations alone cannot explain the large difference between the UNDP figures and those reported here as based on the STWS.

²⁰ Recall from Chapter 1 that the share of the population under the poverty line was 35.6 per cent on average over the period 1990-2003. The differences from the measures provided in the text might depend on the different period of time considered in the STWS.

However, this measure is very rough and many others have been introduced to take into account several aspects of income distribution, such as finding a poverty line that policy-makers can consider when attempting to reduce inequality and poverty. They are often interested in understanding when a redistributive policy from rich to poor households is actually able to alleviate poverty and reduce inequality.

The measures provided in Table 2.2.6 have been defined so as to allow money transfers from households above the poverty line to households below it, in order to be sure that such money transfer will reduce the overall degree of inequality and poverty (see Lambert and Lanza, 2006). By reducing the degree of poverty inequality, such transfers might also foster economic growth, according to recent literature, suggesting that less inequality means more economic growth.

These poverty lines are relative to the actual household's distribution of incomes and can be defined with respect to different indices of inequality. The table provides measures relative to the Gini and the Theil inequality indices. Based on the Gini, all those transfers from households in the percentiles above 63.3 to those in lower percentiles will reduce inequality. The corresponding benchmark income equals TUGs120,000 (US\$103 €76.6). The benchmark income based on the Theil is slightly lower.

Table 2.2.6. Different measures of the poverty line

| Relative Poverty Line | a9 |
|----------------------------|--------|
| Gini Benchmark Percentile | 63.31 |
| Gini benchmark income | 120 |
| Theil benchmark income | 109.77 |
| Deviation benchmark income | 123.31 |

*Note: The indices have been computed excluding the households whose incomes are lower the 10th or above the 90th decile.
Source: own elaboration on SWTS of Mongolia, ILO.*

The abovementioned measures of poverty are all based on income levels. However, the national government can provide in-kind goods and commodities to poor households in many developing and transition countries. Such aid can also come from external sources, such as foreign governments and international organizations. A more accurate measure of poverty should consider the availability of free health, educational and social services to the poorest households. Though not included in the declared income, these goods and commodities might alleviate the sense of deprivation and social exclusion due to poverty.

2.3. Aspirations and life goals

Aspirations in terms of educational attainment. What are the aspirations, in terms of educational achievement, of young people still at school? Answering this might provide useful suggestions for the direction of future reforms of the educational system, as well as to the aspirations of youth regarding future jobs. Table 2.3.1 suggests that young people still at school aspire to the highest educational levels. About 60 per cent of them wish to reach university level and 25 per cent wish to attain a Master degree. These shares only slightly decrease with age.

Comparison of these aspirations with the share of young people that eventually attain university education (Table 2.4.1) suggests that some bottlenecks exist in the education system preventing them realizing their expectations. In terms of the human capital model, this means that young people consider the returns relatively low compared to the high cost of education. This is an important indication for policy-makers. Women have greater expectations regarding educational attainment than men, which would also help explain their higher attainment, as they consider education an important instrument to escape from discrimination in the labour market

later in their lives.²¹ The most talented and ambitious young women believe that a high level of human capital is an important pre-condition to access stable employment prospects and higher quality jobs. Does higher education provide a higher return in terms of better employment probability and earnings? Section 2.8 in this chapter will attempt to test these hypotheses.

Surprisingly, the aspiration in terms of educational attainment in rural areas is not much lower than in urban areas. The main difference is in the share of those still at school who wish to attain a post-tertiary education, which is much lower in rural than in urban areas. Correspondingly, the share of those at school, who would be happy to complete their education, with a secondary school diploma or below, is much higher. Notice also that the share of young people still at school, who wish to attain a tertiary educational level or above, is three times higher in Ulaanbaatar than in other regions.

Table 2.3.1. Expected level of education for youth in school, sex, age group, urban and rural

| | <i>Of which</i> | | | | | | |
|---|-----------------|------------------------------|-----------------------------------|---|---|--------------------------|-------------------------------------|
| | Primary | Basic (Grade 4- 8) (%) | Secondary (Grade 9- 10) (%) | Vocational technical education (%) | Diploma, specialized secondary (%) | Tertiary/bachelor (%) | Master's degree and above (%) |
| Total | 0.4 | 0.6 | 0.9 | 5.6 | 7.7 | 59.9 | 24.9 |
| 15-19 | 0.2 | 0.5 | 1.1 | 6.9 | 8.9 | 61.6 | 20.6 |
| 20-24 | 1.2 | 1.0 | - | 1.0 | 3.4 | 53.2 | 40.3 |
| 25-29 | - | - | 1.3 | 1.3 | 1.3 | 55.3 | 40.8 |
| Male | 0.4 | 0.9 | 1.3 | 7.4 | 8.6 | 58.4 | 23.1 |
| 15-19 | 0.3 | 0.7 | 1.5 | 9.2 | 9.8 | 60.0 | 18.6 |
| 20-24 | 0.8 | 2.1 | - | 0.8 | 4.2 | 52.1 | 40.0 |
| 25-29 | - | - | 3.3 | - | 3.3 | 56.7 | 36.7 |
| Female | 0.4 | 0.2 | 0.6 | 4.1 | 6.9 | 61.2 | 26.6 |
| 15-19 | 0.2 | 0.3 | 0.8 | 4.9 | 8.2 | 63.2 | 22.5 |
| 20-24 | 1.5 | - | - | 1.1 | 2.6 | 54.1 | 40.6 |
| 25-29 | - | - | - | 2.2 | - | 54.3 | 43.5 |
| Urban | 0.4 | 0.4 | 0.7 | 3.7 | 6.2 | 58.2 | 30.4 |
| 15-19 | 0.1 | 0.1 | 0.9 | 5.0 | 7.6 | 60.4 | 25.8 |
| 20-24 | 1.3 | 1.1 | - | 0.4 | 3.0 | 52.6 | 41.6 |
| 25-29 | - | - | 1.5 | 1.5 | - | 53.7 | 43.3 |
| Rural | 0.4 | 1.0 | 1.5 | 10.1 | 11.1 | 63.7 | 12.2 |
| 15-19 | 0.4 | 1.1 | 1.6 | 10.4 | 11.3 | 63.8 | 11.4 |
| 20-24 | - | - | - | 7.5 | 7.5 | 60.0 | 25.0 |
| 25-29 | - | - | - | - | 11.1 | 66.7 | 22.2 |
| Total | 0.4 | 0.6 | 0.9 | 5.6 | 7.7 | 59.9 | 24.9 |
| West region | 0.3 | 0.3 | 0.9 | 6.5 | 5.3 | 64.7 | 22.0 |
| Khangai region | 0.2 | 0.7 | 0.5 | 7.7 | 8.1 | 71.6 | 11.3 |
| Central region | 0.5 | 0.7 | 2.3 | 7.3 | 8.4 | 63.5 | 17.5 |
| East region | 0.8 | 0.8 | 0.8 | 19.5 | 26.3 | | 10.2 |
| Ulaanbaatar region | 0.4 | 0.5 | 0.7 | 3.0 | 6.2 | 55.2 | 33.9 |
| Total youth in school (in thousands) | 1.4 | 1.9 | 3.2 | 19.0 | 25.8 | 201.9 | 84.1 |

2.4. Educational achievement

²¹ A recent stream of research is attempting to explain the greater educational attainment of women worldwide. See, among others, Dougherty (2003).

Introduction. Fostering the formation of greater and new skills in the youth population is universally considered the main policy objective to increase social integration, fertility, productivity and growth in the long term.

The analysis in this section will shed new light on the possible consequences of the recent reform of the educational system. As a result of the ongoing reforms, from 2005–2006 academic year, the general education system has been extended to 11 years with a 5+4+2 structure²² (Gerelmaa, 2005; del Rosario, 2005).

The section starts with a general assessment of the country's position in terms of educational attainment compared to other countries. It then considers specific educational categories, with a special focus on the weakest group of the uneducated and on some post-compulsory diplomas. The illiteracy rate is still an important component of the youth workforce and is related to poverty and child labour, especially children working during their compulsory schooling years.

The ensuing analysis of factors leading young people to invest in education is done using several econometric methods. They allow identifying instruments for policy intervention to raise the schooling and skill level of the youth population. In synthesis, these include the fight against poverty, introduction of special scholarships and support to talented young people coming from poor families, introduction of bonuses to reduce the indirect cost of education, increase in the number of schools in rural areas and diversification of the supply of education according to local labour market conditions. Rural areas are the ones most in need of intervention. It is necessary to increase the number of local schools and improve their quality by introducing, for example, specific programmes aimed at teaching new agricultural and veterinary techniques.

The use of the multinomial LOGIT model of the choice of different school levels, detects specific factors that explain why some young people leave education with no diploma. The analysis suggests that a large share leaves school because of poverty in the household and the need to help the family during their compulsory school years. The fight against child labour will further reduce the illiteracy rate.

From a policy point of view, it is clear that political authorities face a trade-off between short- and long-term objectives. In the short-term, it might not be thought urgent to reduce child labour as it is contributing to poverty alleviation, while providing local production units, especially in rural areas, with cheap labour. In a period of increasingly hard budget constraints, child labour could be seen as a less urgent problem compared to the fight against poverty. However, in the long-term, it should be obvious that reducing child labour and allowing young people to invest in skills is the best option for poverty reduction for everyone. Compulsory education and helping talented young people from poor families to satisfy their higher educational aspirations is the best option to escape the poverty trap.

Overall evaluation. The emphasis on investment in education, through low or no tuition fees and low or no risk of unemployment, shown by the ease of finding a job, made formerly socialist countries traditionally feature high levels of educational attainment. A number of instruments had the important effect of reducing the cost of education, while the returns from education were essentially non-monetary, in the sense that the more educated people had easier access to the better jobs with better conditions in a more favourable work environment, compared to manual workers. Monetary returns from education were relatively low, due to low average incomes in many former socialist countries and their political emphasis on income equality. This cultural

²² Due to the transition to the 11-year school system, kindergartens, along with primary schools, have offered primary school grade 1 curriculum to 7-year-old children. Students who received primary school grade 1 education in kindergartens in 2004-2005 were promoted to grade 2 of the primary school in the next school year (September 2005-July 2006). This was a temporary measure designed to allow schools a one-year preparation time for receiving children as young as 7 years old as well as to compensate for the shortage of classrooms and teachers for the new age cohort currently available in regular schools. Starting September 2005, schools have assumed full responsibility for primary school grades 1 through 5.

heritage is still obvious in most formerly socialist countries, where educational levels are still very high, as can also be seen by their score on the HDI.

The available evidence based on the STWS suggests that Mongolia still under performs compared to most former socialist countries and especially to FSU republics in terms of educational attainment. Tables 2.4.1 and 2.4.2 provide detailed information on complete educational attainment, but this data should be taken with due caveat, considering that, as shown in the next section, about 43 per cent of the overall sample of interviewees were still at school at the time of interview. This especially applies to the youngest segment, 15–19 years, of which 78.4 per cent were still at school. The data provided here are, therefore, likely to underestimate the overall level of education in the years to come. The most reliable statistics apply to the oldest age segment, 25–29 years, most of who had already completed their education. In fact, only 4.4 per cent of them were still at school.

The tables show that, in 2006, young Mongolians had a level of education lower than the OECD average and also lower than other transitional economies (see O’Higgins, 2003, for a comparative perspective on developing and transition countries).

Table 2.4.1. Education level, by sex, age group, and urban rural

| | 15-29 aged population | | | | Of which: | | | | |
|--------------------------------|-----------------------|------|----------|------------|-----------|-----------|-----------|-----------|-----------|
| | /thous/ | % | Male (%) | Female (%) | 15-19 (%) | 20-24 (%) | 25-29 (%) | Urban (%) | Rural (%) |
| Total | 808.8 | 1 | 49.4 | 50.6 | 41.6 | 31.3 | 27.1 | 55.0 | 45.0 |
| Uneducated | 27 | 3.3 | 68.7 | 31.3 | 38.3 | 40.2 | 21.5 | 19.2 | 80.8 |
| Primary | 97.2 | 12.0 | 58.0 | 42.0 | 45.7 | 28.7 | 25.7 | 24.1 | 75.9 |
| Basic (Grade 4-8) | 264.6 | 32.7 | 51.2 | 48.8 | 69.1 | 14.1 | 16.9 | 45.2 | 54.8 |
| Secondary (Grade 9-10) | 270.1 | 33.4 | 47.0 | 53.0 | 34.3 | 43.0 | 22.6 | 72.0 | 28.0 |
| Vocational technical education | 27.7 | 3.4 | 52.3 | 47.7 | 15.0 | 42.3 | 42.7 | 55.5 | 44.5 |
| Diploma, specialized secondary | 18.4 | 2.3 | 39.7 | 60.3 | 2.7 | 38.4 | 58.9 | 63.7 | 36.3 |
| Tertiary/bachelor | 100.7 | 12.5 | 38.8 | 61.2 | 1.9 | 41.4 | 56.7 | 72.1 | 27.9 |
| Master's degree and above | 3 | 0.4 | 37.5 | 62.5 | - | 12.5 | 87.5 | 87.5 | 12.5 |

Source: own elaboration on SWTS of Mongolia, ILO.

Table 2.4.2. Educational attainment by gender and place of residence (in %)

| | 15-29 | | | 25-29 | | | 15-29 | | | Ages | | |
|------------------------|-------|--------|-------|-------|--------|-------|-------|--------|-------|-------|-------|-------|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total | 15-19 | 20-24 | 25-29 |
| Uneducated | 4.64 | 2.06 | 3.34 | 3.46 | 1.94 | 2.65 | 8.05 | 4.88 | 6.43 | 3.07 | 4.29 | 2.65 |
| Primary | 14.11 | 9.98 | 12.02 | 16.05 | 7.34 | 11.4 | 38.98 | 22.36 | 30.5 | 13.18 | 11.01 | 11.4 |
| Basic | 33.94 | 31.53 | 32.72 | 22.96 | 18.12 | 20.38 | 41.1 | 35.77 | 38.38 | 54.29 | 14.7 | 20.38 |
| Secondary | 31.77 | 34.98 | 33.39 | 24.32 | 31.07 | 27.92 | 7.63 | 27.24 | 17.63 | 27.52 | 45.94 | 27.92 |
| Vocational technical | 3.63 | 3.23 | 3.43 | 5.8 | 5.07 | 5.41 | 0.85 | 3.66 | 2.28 | 1.24 | 4.63 | 5.41 |
| Diploma, specialized | 1.83 | 2.71 | 2.28 | 4.2 | 5.61 | 4.95 | 0.85 | 2.03 | 1.45 | 0.15 | 2.79 | 4.95 |
| Tertiary/bachelor | 9.79 | 15.06 | 12.46 | 22.22 | 29.45 | 26.08 | 2.54 | 4.07 | 3.32 | 0.56 | 16.49 | 26.08 |
| Master's degree | 0.28 | 0.46 | 0.37 | 0.99 | 1.4 | 1.21 | | | | 0 | 0.15 | 1.21 |
| Number of observations | 3,167 | 3,248 | 6,415 | 810 | 927 | 1,737 | 236 | 246 | 482 | 2,671 | 2,007 | 1,737 |

Source: own elaboration on SWTS of Mongolia, ILO.

Illiteracy and child labour. The most striking observation is that a low, but still noticeable share of 3.3 per cent of the population is uneducated. As is typical in other developing countries, in this share of uneducated young people there are twice as many men as women. As also noted in del Rosario (2005, p. 24), parents prefer to use boys rather than girls to herd.

This presence of a large number of young uneducated people is particularly worrying as most of them live in urban areas. Although the share of the uneducated living in rural areas is about

three times higher in percentage terms (at 6.43 per cent) than in urban areas or in the *aimag* or *soum* centres, nonetheless, the larger population in urban areas makes the problem bigger there.

On the positive side, the share of uneducated young people is lower among the oldest segment, at 2.7 per cent, suggesting that some of them manage to achieve primary or basic education in their twenties.²³

Table 2.4.3 provides the distribution of the uneducated by their reason for dropping out without any diploma, by age and gender. The largest share of the uneducated left school because they did not enjoy it. This finding is very similar to that of del Rosario (2005, p. 27) and has many reasons, such as bullying, lack of attention from teachers and, in general, low quality education and poor conditions of schools. Nonetheless, as del Rosario (2005, p. 65-66) finds, this result is to be compared with the attitude of young people to education and their drop-out status; most drop outs, and their families, value education and regret leaving school.

However, about 27 per cent of drop outs declared they left school to tend livestock. This share is significantly lower for women and young teenagers, suggesting that child labour related to herding is more typical of boys and may reduce over time. Many women who remained uneducated did so because it was their parents' choice and in many households, especially those in rural areas, female children are involved in domestic chores. There is also a high share of young males who state economic reasons for dropping out.²⁴

Table 2.4.3. Reasons to leave school for the uneducated by age and gender (in %)

| | All | Men | Women | 15-19 | 20-24 | 25-29 |
|--|-------|-------|-------|-------|-------|-------|
| Failed examinations | 2.82 | 2.56 | 3.33 | 3.33 | 2.6 | 2.5 |
| Did not enjoy schooling | 26.55 | 26.5 | 26.67 | 23.33 | 27.27 | 30 |
| Do not like schooling | 2.26 | 3.42 | 0 | 3.33 | 2.6 | 0 |
| Wanted to work | 2.26 | 2.56 | 1.67 | 0 | 5.19 | 0 |
| Parents did not allow to continue school | 6.78 | 3.42 | 13.33 | 5 | 2.6 | 17.5 |
| Economic reasons | 9.04 | 11.11 | 5 | 20 | 5.19 | 0 |
| Takes care of livestock | 26.55 | 28.21 | 23.33 | 20 | 29.87 | 30 |
| Other | 23.73 | 22.22 | 26.67 | 25 | 24.68 | 20 |
| Number of observations | 177 | 117 | 60 | 60 | 77 | 40 |

Source: own elaboration on SWTS of Mongolia, ILO.

Illiteracy in the after-compulsory school age should be targeted by educational policy. Integrating young people into compulsory education is the most effective way to increase the job-finding rate and, therefore, reduce unemployment, crime, poverty and social exclusion in the long term. Fighting illiteracy is hard and should be the objective not only of educational policy, but also of employment policy and pro-poor policy. Its most likely cause is child labour because employers, and sometimes parents, hire children during their compulsory school years in the livestock sector. Child labour is an apparent consequence of poverty and confirms concerns expressed earlier that poverty traps too many young people. In order to survive, the poorest households have to resort (at least in the short term) to employing young children in low pay jobs

²³ Del Rosario (2005, p. 17-18) notes that up to 1.2 million Mongolians are involved in some form of adult learning. In addition, in coordination with the Ministry of Education, UNESCO programmes also target the illiteracy rate, supplying courses additional to the formal ones provided by the Mongolian educational system. However, some observers fear that programmes of adult learning might increase the drop out rate, allowing many adults with unfinished education to achieve the same degree as their peers, but with less effort and an insufficient level of knowledge.

²⁴ Del Rosario (2005) reports many examples of discrimination of urban pupils and teachers against other students coming from rural areas and/or from a poor family. The former consider that the latter pull back the class.

to augment their very low income. Income support schemes for the poorest household are an important policy target.²⁵

The government, already aware of this problem, has adopted a new definition of drop out and a new regulation to fight it in the Education Law of 2005. As reported in del Rosario (2005, p. 70), it has already adopted a number of interventions to reduce the drop-out rate: a) abolition of the cost of school dormitories and food for children, through the subsidies; b) free school supplies in the amount of TUGs16,000 (about US\$13.7); c) the implementation of adult learning.

However, it is a matter of concern whether these instruments are sufficient. According to del Rosario (2005), the government is focusing on: poverty/low income or lack of means of subsistence; child labour related reasons, such as herding, necessity to earn a living to help support the family; migration or lack of dormitories, teacher discrimination; and, systemic problems within the educational system. Areas neglected are: physical and/or mental disabilities; lack of communication and social skills; bullying or peer discrimination; and, parents' educational level. Furthermore, the "initiatives to address the issue are considered palliative since they do not carry legal weight and do not provide sanctions against those who, in one way or the other, cause or made cause the dropping out of a child" (p. 7). Moreover, despite government efforts, the supply of education is so weak, especially in rural areas, that the constitutional right to free compulsory education remains hard to achieve practically. As noted in del Rosario (2005), there are only 79 independent primary schools, mainly found in remote *soums*, and 232 independent schools with classes for eight years, consisting of primary and lower secondary schools.

Educational attainment. About 11–12 per cent of the entire sample achieves only primary education and 20.4 per cent of those aged 25–29 years achieves only basic education (the compulsory level), that is 34.4 per cent of this group has compulsory education or below. The country also under performs in secondary education, but less so in tertiary education. In the entire sample, the share of those with a tertiary degree is almost 12.5 per cent. The comparable figure for the oldest age segment rises to slightly more than 26 per cent, which is relatively high, compared to the OECD average and other transitional economies. In 2001, the OECD average for those aged 25–34 years with tertiary education was 18 per cent. Of the same group, 74 per cent had completed high secondary education.

However, less optimistically, of those aged 25–29 years, only about 35 per cent have completed high secondary education. Together with those with tertiary education, this figure reaches only about 55 per cent, a much lower share than that typical of other former socialist countries. An important factor explaining this outcome is the high level of drop-outs after only primary and basic secondary school, if not earlier. This evidence could signal a fault in the educational system not only to integrate the weakest groups, but also to produce skilled manual labour through vocational training for those not continuing post-compulsory education.

A more positive perspective can be obtained by comparing the level of education of parents (Table 2.2.2) and children (Table 2.4.2). It shows the numbers rapidly increasing, especially for the intermediate levels. For instance, a larger number of people achieve at least basic and secondary education. Also, the share of those with vocational and technical secondary and those with specialized secondary diplomas is increasing. This is an important sign of the government's efforts and changes in the composition of demand for skills during transition.

Comparing educational attainment by age classes gives an interesting perspective and a rough approximation of the share of those involved in education at different ages and those successful in completing their diploma as shown in Table 2.4.4. Young teenagers mainly achieved basic education and some also completed secondary education. A share of 13.2 per cent attained

²⁵ The plague of child labour and the ways to fight it are becoming a very hot issue in the agenda not only of international organisations and of national governments in mature market economies. Also national governments in developing countries become increasingly aware that child labour represents a trade-off between short time small advantages and long term important benefits.

primary education only and about 3 per cent are uneducated. Most of the upper age group attained secondary education, but about 15 per cent quit with only basic education. Approximately the same share completed tertiary education. The rest are still involved in tertiary education. The last age group presents a distribution by educational attainment, likely to be close to that of adults, bearing in mind that the average level of education is now higher. About 26 per cent completed tertiary education, a share which is also quite high by international standards.

Table 2.4.4. Education attainment by age ('000 and %)

| | 15-29 aged population /thous/ | Of which: | | |
|--------------------------------|----------------------------------|-----------|-------|-------|
| | | 15-19 | 20-24 | 25-29 |
| Total | 808.8 | | | |
| Uneducated | 27.0 | 3.07 | 4.29 | 2.65 |
| Primary | 97.2 | 13.18 | 11.01 | 11.4 |
| Basic (Grade 4-8) | 264.6 | 54.29 | 14.7 | 20.38 |
| Secondary (Grade 9-10) | 270.1 | 27.52 | 45.94 | 27.92 |
| Vocational technical education | 27.7 | 1.24 | 4.63 | 5.41 |
| Diploma, specialized secondary | 18.4 | 0.15 | 2.79 | 4.95 |
| Tertiary/bachelor | 100.7 | 0.56 | 16.49 | 26.08 |
| Master's degree and above | 3.0 | 0 | 0.15 | 1.21 |

Source: own elaboration on SWTS of Mongolia, ILO.

Determinants of investment in education. It is important to understand what determines the educational choices of young people to find control variables that policy-makers can use as levers to increase the skills level of the population. One important feature, and main aims of an efficient (especially State-owned) educational system, is its ability to integrate young people independent of their social background. Everywhere, young people's educational levels rely on parents, and especially mothers' educational achievements.²⁶

Based on this, the next step in understanding the reasons of low educational attainment would be to measure the extent to which young people's education depends on that of their parents, looking for co-factors affecting educational choices. This is done by means of multiple regression analysis, to take into account other concurrent factors, such as economic conditions in their region, their civil status, the immigrant conditions and living in a rural area. The dependent variable is the level of education attained by an individual, as measured by a discrete dependent variable, taking a value from one to eight, where a value of one stands for individuals who are uneducated, two for those with primary education only, three for basic secondary education, four for general secondary education, five for vocational technical education, six for specialized secondary, seven for tertiary and eight for master degree. Despite the several reforms of the years necessary to attain each educational diploma, the overall structure of pre-tertiary education has remained substantially unchanged (see Table 2.4.1 and Appendix A.1).

First, educational outcomes are a discrete, rather than a continuous variable. Second, it is a qualitative variable, in the sense that outcome increases cannot be measured, but represent different types of education. Third, the outcomes can be ordered from the lowest to the highest value, where a higher value indicates a higher level of education. It could be argued that different types of high secondary school cannot be ordered, in principle, as being superior one to the other. Nonetheless, each diploma requires a different number of years. In addition, as shown in a later section, they tend to generate ordered private returns, both in terms of wages and earnings. For all these reasons, in addition to the Ordinary Least Square (OLS) estimates, an ordered probit estimate is carried out. This is a model for discrete and qualitative dependent variables with ordered outcomes.

²⁶ Mothers are more important than fathers in this respect because they live closer to their children and the informal transmission of cultural notions and values is easier and more direct.

Table A.2.4.1 in the Statistical Annex provides the results of this preliminary exercise.²⁷ The same estimates are presented for the different age groups. The behaviour of these groups is substantially different. The first row of each variable provides the estimated coefficient, whereas the row below represents probability value and, hence, the statistical significance. From individual characteristics, age is an important determinant of educational choice, highly significant especially in the youngest segments.

Confirming the findings of previous studies (del Rosario, 2005, p. 24), women have a significantly higher probability of going into further education than men in every age group. OLS estimates suggest that they have, on average, a 47.4 per cent higher chance than men of achieving the next degree.²⁸ Younger women seem to have a lower advantage than older women, most likely mirroring the compulsory nature of education below aged 20. This remarkable female advantage in education would suggest targeting men when attempting to increase the overall educational level of young people. However, women may be disadvantaged if their secondary or tertiary diploma is in a field that does not coincide with labour market demand.²⁹

Working while studying usually reduces the chances of obtaining a higher degree, but in Mongolia, *ceteris paribus*, those who work and study have more chance of obtaining a higher degree. The impact of this is greater on the oldest groups, who also have a better chance of finding a job. This finding is explained by the high degree of poverty in many households.³⁰

One important factor, related to civil status, is children. One child does not reduce educational attainment in a statistically significant way, but two or more children do.

This also seems to be a key variable from a policy point of view and the implication might be that young people should start having children only after completing their education or, alternatively, there should be other policy responses, such as childcare for students, social welfare benefits and special study grants for those with family responsibilities. Support for poor families might also be a way to help their children to invest in education.

Another factor affecting educational attainment is whether the individual is a migrant or not. Four different categories of migrants are detected in the STWS: (i) those migrating with their family; (ii) those who migrate in search of a better place to study; (iii) those migrating to seek a job; and, (iv) those migrating in search of a job. The first category has, more or less, the same educational chances of permanent residents. The second and third categories both have greater educational attainment than permanent residents. However, while for the second category the impact is higher among teenagers, suggesting that moving is important in the early stages of education, for the third category the impact is greater for young adults and the remaining group of the under 30s. The fourth category *ceteris paribus* has lower educational attainment, which might mirror their initial disadvantage and the need to migrate in search of a job.

²⁷ Given the aims of this report, no other methodological detail is provided in the text, but it is available on request from the author.

²⁸ When the regressor in an OLS estimate is a continuous variable, such as years of work experience, the elasticity at the mean of the covariates, namely the percentage change in the regressand for a percentage change in the regressor, can be computed multiplying the coefficient by the mean of the regressor: $\beta\bar{X}$. In the case of independent dummy variables, like levels of education attainment, the semi-elasticity interpretation is flawed and, following Halvorsen and Palmquist (1980), it should be computed as: $(e^\beta - 1) * 100$. This formula measures the percentage change in the median wage, which is less affected by outliers. Nonetheless, many authors also interpret the estimated coefficients of dummy variables directly as semi-elasticity. This is acceptable when the estimated coefficient is sufficiently close to zero.

²⁹ Unfortunately, the STWS of Mongolia does not provide information on the type of university degree achieved. If women have a higher probability to enrol in, say, humanities, they might experience *ceteris paribus* greater difficulties later to find a job when they enter the labour market.

³⁰ This result should not be biased because of the drop-outs, since they are included in the base category.

Family background affects educational choices. Estimates include controls for the educational level of both parents. The baseline is whether the father or mother has no educational attainment. The findings confirm theoretical expectations. It is particularly important when the father has secondary education, or above, and the impact is dramatic for fathers with tertiary education, or above and the educational level of the mother is greater than the father at every level. Another important aspect of family background is number of siblings, which is a measure of the poverty level of households and also of the relative cost of education across households of different size.

The findings of econometric analysis confirm that *ceteris paribus* an individual's educational attainment depends, in a statistically significant way, on the number of siblings. The negative impact on educational attainment of more than four siblings is significant. This is especially true for the oldest segment, suggesting that the cost of education for larger households is particularly severe in post-compulsory education. Since fertility is an important resource in the country, where the density of population is the lowest in the world, the policy implications of the previous finding would not be to decrease family size. Rather, it would be to help large families by providing their children with special study grants, bonuses to buy books and other materials necessary for school. However, most policy interventions suggested have a high cost to the State, but as the State is experiencing hard budget constraints, and large families below the poverty line are relatively numerous, the cost of specific support might be difficult to afford.

The fight against poverty requires a trade off between short- and long-term objectives. The best pro-poor policy is to increase the employability of young people, making as many of them as possible economically independent and able to contribute to the State budget.

Furthermore, some degree of redistribution from rich to poor families might be implemented by introducing more progressive university fees. In particular, it would be advisable to make education free for children belonging to poor families.³¹ While sometimes difficult to accept from a political point of view, re-distributive policies can be considered Pareto-optimal if they increase the employment opportunities of young people from poor families and makes them taxpayers. Lastly, educational attainment is two times lower in rural areas. This disadvantage to young people living there is especially high for those in post-compulsory education. However, it is difficult to say whether this is matter of concern, since it might simply reflect the lower demand for those skills acquired in school for agricultural activities. The disadvantage is much lower for young teenagers and amounts to a 27 per cent lesser chance of obtaining a higher degree. In addition, from a policy perspective, one implication is that educational establishments in rural areas should be increased and made more attractive to young people by offering subjects in demand, such as agricultural and veterinary studies.

The ordered probit estimates provide results similar to the OLS. One important difference is that it allows for different dummy intercepts for every educational level. All the cut-off dummies are statistically significant, suggesting the existence of fixed effect differences across educational levels.

A question spontaneously arising from observation of the relatively low level of educational attainment of young people in Mongolia is, whether it is demand or supply-side driven? Does it depend on the low demand from the productive sectors or on the hardship and failure of the educational system in effectively integrating young people? A low educational endowment might be both the consequence of low demand for skilled labour due to the traditional, backward production structure of the country and also of educational systems that are too rigid, unable to satisfy demand composition for skill, or are not sufficiently oriented to the market for skills. It could also be the result of the low capacity to pay for or maintain a good system, as well as the

³¹ One objection to this is the high share of the informal sector in Mongolia. This would account for about a third of GDP. Incomes coming from the informal economy might cause important distortions in the implementation of pro-poor and re-distributive policies from rich to poor households. One way to prevent this would be to use different indicators of welfare rather than household income, such as number of siblings, having children, holding property and so on. All these factors significantly affect poverty and might be easier to measure than the declared level of income.

government's policy priorities. Understanding the reasons of low educational attainment is of vital importance not only to increase the welfare of young people, but also to increase long-term productivity and growth prospects, as the recent new growth literature suggests.

In developing countries, there is a strong trade off between helping poor households satisfy their basic needs in the short term and helping their children escape the poverty trap by providing them with better educational opportunities in the long term. It is crucial that the government tackles this trade off and allocates at least part of the scarce available resources to long-term objectives, such as increasing the supply of skills in the country.

2.5. Vocational and technical training

An important, specific aspect of the educational system is its provision of Vocational Education and Training (VET). There is an increasing awareness of VET's importance all over the less developed world (Gill et al., 2000). General education is less negatively affected by structural change than VET. Nonetheless, VET is necessary for the efficient functioning of new production systems and raises the employability of those young people with no intention of going to university. VET was common and well organized during socialism. It was based on on-the-job training and considered equal to formal high secondary education. With the dismantling of the socialist system and the emergence of private firms, its cost became very important, representing a challenge for its survival and development.

This report highlights a number of VET's shortcomings. Above all is its scant supply, most likely due to its increasing cost and the withdrawal from VET of the State and State-owned firms. This explains the low share of young people with vocational high school diplomas. Only 3.4 per cent of young people in the STWS sample have vocational technical education (Table 2.4.1), compared to about 8 per cent of their parents (Table 2.2.3). This confirms the hypothesis of a reduction in the supply of technical skills during the last decades. In addition, there seems to be an apparent mismatch between the supply of and demand for VET. In the meantime, formal vocational education is less and less integrated with on-the-job training.

Evidence in support of the hypothesis that the quality of vocational education is low is also found in the following sections. Young people with a vocational diploma have higher activity rates, but less chance of finding employment, compared to those with high secondary education. Moreover, the share of long-term and very long-term unemployment is much higher among those with compulsory education or below and, even higher, for those with a vocational technical diploma. Furthermore, those with diplomas have lower earnings than those declared by workers with compulsory education only.

These findings contrast sharply with those from the employers' module of the STWS (see Chapter 4). An important share prefers individuals with a vocational diploma not only to fill vacancies in manual jobs, but also professional, suggesting that it is still in demand, but the supply is unable to satisfy this. Employers are not always satisfied with the level of skills and the quality of vocational education, denoting perhaps, a mismatch between its demand and actual supply.

The shortcomings of the Mongolian VET have negative effects on several of the weakest groups, including those who drop out of school immediately after compulsory education and before accessing high secondary education. VET could represent an important alternative if there was a greater integration between the educational system and firms, thereby reducing its cost and encouraging a return to it. Employers' associations and unions could play an important role to renovate, modernize and improve its effectiveness.

2.6. Preparation for school-to-work transition: the youth still at school

Introduction. Young people still at school are a specific group, neither employed³² nor unemployed. They are preparing for school-to-work transition and are considered outside of the labour force, according to ILO’s strict definition of labour market statuses.³³

However, this group is different from other “inactive young people”, who are outside the labour force because they are either disabled or have household and/or childcare responsibilities, or they believe no work is available. The latter two classify them as “discouraged workers”, a category on the fringe of the labour force since they would return to the labour market if their employment prospects were improved. Like the unemployed, therefore, they represent part of the unexploited labour potential.

For several reasons, the ILO’s strict definition of labour market statuses is not fully satisfactory when attempting to understand the youth labour market problem. For instance, though employed or inactive, young people may still seek jobs in the labour market. If one looks at the youth position in terms of their stage in the school-to-work transition, it is useful, from a policy point of view, to distinguish from the rest those who, though inactive, are already seeking jobs. These two groups behave differently in the labour market, have different characteristics and, therefore, will be considered separately in Chapter 3.³⁴

The ILO suggests an amendment to the strict definition of labour market statuses by adopting a school-to-work perspective for young people. Three stages of the school-to-work transition are identified: a) transition not yet started; b) in transition; c) transition completed. It is worth mentioning that the group in transition includes not only the inactive who are seeking jobs, but also the unemployed and those who consider themselves unemployed, those wishing to change their job or declare a decent work deficit. Therefore, this section analyses the specific characteristics of young people still at school, considering them part of the inactive population according to the ILO’s strict definition of labour market statuses

The overall share of young people still at school. Employment is not necessarily the best option for young people, especially young teenagers and young adults: education might be a better option. It is an important aim of any youth policy to reduce the drop out rate from school and university, hence helping young people to stay at school the time necessary for them to achieve the level of education they desire. Quantification of the size and components of young people still at school follows.

About half of the sample was still at school at the time of the interview. The share of those still at school decreases with age and represents 78.8 per cent of young teenagers, 27.2 per cent of young adults and 7 per cent 25-29 year olds. These important shares suggest that young Mongolians aim for higher education, confirmed by comparison to the level of education of parents (Table 2.2.2) and their children (Table 2.4.1).

Table 2.6.1. Young people still at school

| | 15-19 | 20-14 | 25-29 | Total |
|------------------------|-------|-------|-------|-------|
| Yes | 78.77 | 27.2 | 6.97 | 43.2 |
| No | 21.23 | 72.8 | 93.03 | 56.8 |
| Number of observations | 2,671 | 2,007 | 1,737 | 6,415 |

Source: own elaboration on SWTS of Mongolia, ILO.

³² According to the ILO definition of employment, unemployment and inactivity, those young people who are already working even for a very small number of hours, but are paid for that are to be considered employed. For this particular category of young people, the ILO has suggested the definition of “underemployment”: in other words, they work for a number of hours lower than the contract hours.

³³ Staying in school cannot be considered any worse than accessing the labour market early in a young person’s life with very little chance of finding a decent job in the immediate future.

³⁴ For a recent application of the school-to-work approach to understanding the youth labour market in Kosovo, see Corbanese and Rosas (2007).

Determinants of the decisions to stay at school. The following discussion aims to analyse the factors that determine young people's choice to remain at school or enter the labour market. Instead of focusing on unconditional mean differences across some dimensions, the analysis will be carried out in a multiple regression analysis framework. The determinants of being at school rather than in other labour market statuses have been estimated by logistic regression. This is a type of estimator adopted when the dependent variable is not continuous.³⁵ Here, the dependent variable is binary, has an outcome of 1 for those still at school and of 0 for those who have left school and are in the labour market. All other labour market statuses are pooled together, including unemployment, self-employment, unpaid family work, paid employment and inactivity.

Table A.2.6.1 in the Statistical Annex shows the coefficients of these estimates not only for the entire sample, but also for different age groups, and by gender. It is expected that the determinants of the probability to be at school are different according to age group and gender and that such differences cannot be fully understood simply by taking into account the relative age and gender dummies in the main regression.

Note that the exponential of the coefficient measures the odds ratio of being at school for the specific characteristics considered. The odds ratio measures the probability that one event rather than another occurs. In this case, it measures the probability to be at school rather than in the labour market for any given characteristics, holding the others constant. For instance, the coefficient of 0.67 estimated for the gender dummy means that *ceteris paribus* women have 1.96 times more chance than men to be at school rather than in the labour market. When the coefficient is negative, it means a reduction in the odds ratio. When the odds ratio is less than 1, it means that the characteristics considered have a lower chance of the event occurring compared to the baseline. For instance, young adults have 0.11 times the chances of young teenagers (the baseline group in this case) to be at school rather than in the labour market. This confirms the previous finding that the share of young adults still at school is much lower than young teenagers.

The discussion of results will be organized by a group of determinants: a) age groups; b) gender; c) educational levels; d) number of siblings; e) the condition to study and work; f) the civil status and having children; g) being a migrant; h) family background; i) location.

Age groups. As noted previously, the share of young people still at school reduces with age and is radically different for each age group. Given the sharp differences across age groups, different estimates have been run for each group, allowing an understanding of the determinants applying to young people's decision to stay in education which change with age. Differences in coefficients by age groups will be brought to the fore for each point under discussion.

Gender. As already noted, women are twice as likely to be at school as men and this probability increases among young teenagers (about 2.15 times) than in the other age groups. Gender differences are important and suggest, therefore, running separate estimates for men and women in order to capture the different impacts on these two groups.

Educational levels. The baseline is those individuals who have attained compulsory education only. All those holding other educational diplomas have a lower chance of being at school, as shown by negative coefficients, confirming that, with increasing educational attainment, the aspiration to further education decreases. This might depend on the decreasing marginal return on education in the labour market in terms of employment opportunities and earnings. This result holds for different age groups, both men and women, though the statistical significance of coefficients slightly reduces.

One interesting result stands out; the chances of being at school are not decreasing monotonically by educational attainment. The group with the lowest chance of being at school is

³⁵ For methodological details, see Hosmer and Lemeshow (2000).

that of young people with a diploma of vocational education as this type of qualification rarely leads to tertiary education, but tends to the final step of student's educational career. A similar coefficient is found for those with tertiary education or above; only a few of them continue their studies. This is another bottleneck in the educational system, particularly vocational education, and suggests that policy-makers should reduce the institutional and economic constraints that those holding vocational diplomas have to face when accessing further education. This is also important in the light of results shown in the following sections.

Number of siblings. The odds ratio becomes statistically significant when there are two or more siblings and the probability of being at school goes down to 0.3 times lower when the number of siblings is at least five. The impact of the number of siblings on the probability to postpone labour market entry is much higher among young adults. The impact of siblings on the probability to be at school is higher in the sample of women. When a household has more children and is, therefore, poorer, education cuts from the family budget are more likely to adversely affect women. An increasing number of siblings mean a lower probability of them staying at school.

Study and work. In view of the previous discussion, it is not surprising that about 6.2 per cent of those who study also work. This enables many young people from poor families to continue in education. Results confirm that working while studying increases the probability of postponing labour market entry. Doing some type of work increases the chance of staying at school by a factor of 1.8. This odds ratio goes up by age, reaching a value of 2.3 and 2.7 in the case of those aged 20–24 and 25–29 years, respectively. Moreover, the odds ratio of being at school for female students who work is higher and equals almost 2. While studying and working is the only option for some to continue their studies, there is now a vast literature suggesting that this dramatically reduces the quality of education.³⁶ It is, therefore, important to identify this group of students and help them overcome the higher perceived cost of education.

Civil status and having children. Due to the small number of observations relating to young people who are divorced, separated, widowed or living together, only one category is included in the estimates, that of singles. Being in a couple dramatically reduces the probability of being at school. Married individuals have about 0.19 times the chance to be at school compared to singles and single parents have an even lower chance than the rest. The negative impact of having a family on the probability of being at school is increased for the youngest segments and women. Women marry early and few remain at school after marriage, but, nevertheless, have a higher educational attainment than men. This is evidence of women's strong motivation to invest in education.

Being a migrant. Being an in-migrant does not seem to have any impact on the probability to be at school. This confirms previous findings that migration is very common and well received in Mongolia.

Family background. The impact of family background proves, yet again, the importance of this predictor in explaining young people's motivation in pursuing their education. The rationale for this is to be found in the intergenerational transfer of preferences regarding decisions to invest in education, as ascertained by a wide literature. Parents with a high educational achievement weigh less the cost and more the benefit of education, compared to the rest. Moreover, they tend to have higher incomes and, therefore, the cost of their children's education is relatively lower. They are

³⁶ Elsewhere in this report (see, for instance, Chapter 3), it is claimed that a dual educational system, where young secondary school students are required to have some training while studying, increases the quality of education as well as the chances to find employment after finishing school. However, the dual educational system should not be confused with the tendency of some students to do some type of very low paid work, often in sectors that are unrelated to their field of study and with very poor training content.

also more able to suggest ways in which their higher level of education can be used in the labour market, therefore, increasing expected returns (see Table A.2.6.1).

The role of intergenerational transfer of education across different age groups has a greater impact on the youngest segment. It suggests that a young teenager whose father has tertiary education or above has about 5.5 times the chance to still be at school. If the mother also has a university degree, this rises to about 10 times higher than the reference group. Overall, this discussion highlights the importance of the intergenerational transmission of human capital and is a warning to the general educational system and policy-makers that access to education of especially poor young people needs support.

Location. As usual four different types of location are considered. The baseline is constituted of residents in the capital city. Young people living in *aimag* centres, in *soum* centres and in rural areas represent the other cases. The chance of investing in education rather than starting their school-to-work transition is greater in the capital city compared to all other locations. Nonetheless, those living in *aimag* centres do not show up as having significantly lower chances compared to their contemporaries living in Ulaanbaatar. Young people living in *soum* centres have about 0.42 times, and those living in rural areas 0.19 times, the chance of their peers living in the capital city to be still at school. This might be the effect of the insufficient supply of education in rural areas and in *soum* centres and calls, therefore, for policy intervention.

2.7. Employment status and training

Introduction. This section aims, first, at quantifying the different components of the workforce, namely employment, unemployment and inactivity, according to the ILO definition of labour market outcomes. As already noted in Section 2.6, the *inactive* include two groups namely, those still at school and all those who are jobless, but not actively seeking work.

The *employed* comprise three categories: a) those who have worked for pay at least one hour during the reference week of the interview; b) those who declare to be employed, but were temporarily absent from work during the reference week; c) the *self-employed*, those who work for profit or family gain, including unpaid family workers.

The *unemployed* are jobless young people who are available and actively seeking work. The category of unemployment is clearly obtained as a residual once the other two statuses have been defined. This is one of the shortcomings of the strict ILO definition of labour market statuses. This has led the ILO to classify young people participating in the labour market based on different stages of school-to-work transition. This approach is applied to the case of Mongolia in Chapter 3. A specific section is dedicated to each of the above categories:

- a) inactive who are still in school (Section 2.6);
- b) paid work and self-employment (Sections 2.8 and 2.9);
- c) unemployed (Section 2.10);
- d) inactive who are outside of the labour force (Section 2.11).

A distinction between inactive young people should be made from those still at school and the rest. This is why the characteristics of those still at school have already been analysed before any other labour market status.

The composition of the youth population. Table 2.7.1 shows the distribution of all interviewees in the Mongolian STWS according to their labour market status by gender, age group and place of residence. The table allows disentangling the different components of employment and inactivity as defined above. This section focuses only on a specific part of employment: a) young people engaged in paid or salaried work; b) the employed, but temporarily absent from work; c) and part-time workers. The self-employed are studied in Section 2.9.

Overall, paid employment represents about 16.2 per cent of the sample population, about 34 per cent of the workforce (employed plus unemployed) and 48.2 per cent of total employment,

therefore, only one out of two paid jobs is offered to young people. The other job is either for profit or for family businesses. This composition, heavily oriented towards self-employment, is strongly influenced by location, since, as shown below, in rural areas only a few people are offered paid work or work for profit with most of them employed in unpaid family work.

As usual, the temporarily absent from work are small in number as are part-time workers. Together, they represent less than 1 per cent of the sample population. All the components of paid employment are very similar for men and women. The share of part-time work, typically higher among women, is slightly higher among men in Mongolia. As expected, paid work is much more common in the oldest age segments. Only about 2 per cent of young teenagers are engaged in paid work. The comparable figure goes up to 19.1 for young adults and 31.8 for the 25–29 year-olds, respectively. The other components increase slightly with age. Paid work is more common in urban than rural areas, where it represents about 4.5 per cent of the sample population; this very low share in rural areas is not due to greater unemployment, in fact, lower than in urban areas, but rather to a sizeable share of self-employed in unpaid family business. This confirms the impression that in rural areas young people are offered work within the family business as the best alternative to unemployment. The share of paid employment is very similar in the other locations, going from 17.4 per cent in the capital city to 19.7 per cent in the *aimag* centres and to 20.1 per cent in *soum* centres. The other components of paid work do not throw up any important difference by location.

Table 2.7.1. Labour market status by gender, age and location (%)

| | All | Men | Women | 15-19 | 20-24 | 25-29 | Ulaan Aimag Baatar centre | Soum centre | Rural area |
|---|-------|-------|-------|-------|-------|-------|------------------------------|----------------|---------------|
| In school | 41.7 | 40.23 | 43.13 | 78.36 | 25.21 | 4.38 | 55.08 | 48.52 | 37.74 17.89 |
| Unemployed | 14.01 | 15.72 | 12.35 | 8.01 | 19.58 | 16.81 | 12.41 | 16.08 | 21.8 7.46 |
| Self-employed | 6.52 | 10.45 | 2.68 | 0.71 | 7.47 | 14.34 | 3.76 | 3.60 | 5.08 14.78 |
| Unpaid family worker | 10.87 | 9.79 | 11.92 | 5.69 | 14.85 | 14.22 | 0.61 | 1.66 | 3.97 41.92 |
| Engaged in paid work | 15.46 | 15.79 | 15.15 | 2.06 | 19.13 | 31.84 | 17.39 | 19.69 | 20.06 4.49 |
| Part-time work | 0.41 | 0.44 | 0.37 | 0.07 | 0.65 | 0.63 | 0.41 | 0.28 | 0.56 0.35 |
| Temporarily absent from work | 0.28 | 0.28 | 0.28 | 0.07 | 0.15 | 0.75 | 0.12 | 0.92 | 0.14 0.21 |
| Engaged in home duties | 7.72 | 5.46 | 9.91 | 4.16 | 8.97 | 11.74 | 6.7 | 6.01 | 7.66 10.77 |
| On sick leave or leave of absence | 1 | 1.26 | 0.74 | 0.6 | 1.15 | 1.44 | 1.14 | 1.02 | 1.11 0.62 |
| Took care of children, elderly people or patients | 2.04 | 0.57 | 3.48 | 0.26 | 2.84 | 3.86 | 2.37 | 2.22 | 1.88 1.52 |
| Number of observations | 6,415 | 3,167 | 3,248 | 2,671 | 2,007 | 1,737 | 2,449 | 1,082 | 1,436 1,448 |

Source: own elaboration on SWTS of Mongolia, ILO.

The composition of the youth workforce. Looking at this composition by gender, it appears that the unemployment rate is similar. The main difference is in the composition of employment. Women are paid workers more frequently than men, with shares of 35.5 per cent and 30.1 per cent, respectively. This is most likely because of greater job stability and the possibility to better control work commitment in terms of hours and effort. For similar reasons, men are more often self-employed, whereas women are more often self-employed in a family run business.

Table 2.7.2. Components of the workforce by gender

| | Unemployed | Own business | Unpaid family workers | Paid workers | Part-time workers | Temporarily absent from work | Total |
|-------|------------|--------------|--------------------------|--------------|-------------------|------------------------------|-------|
| Men | 498 | 331 | 310 | 500 | 14 | 9 | 1,662 |
| | 29.96 | 19.92 | 18.65 | 30.08 | 0.84 | 0.54 | 100 |
| | 55.39 | 79.19 | 44.48 | 50.4 | 53.85 | 50 | 54.49 |
| Women | 401 | 87 | 387 | 492 | 12 | 9 | 1,388 |
| | 28.89 | 6.27 | 27.88 | 35.45 | 0.86 | 0.65 | 100 |
| | 44.61 | 20.81 | 55.52 | 49.6 | 46.15 | 50 | 45.51 |
| Total | 899 | 418 | 697 | 992 | 26 | 18 | 3,050 |

| | | | | | | | |
|--|-------|------|-------|-------|------|------|-----|
| | 29.48 | 13.7 | 22.85 | 32.52 | 0.85 | 0.59 | 100 |
| | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: own elaboration on SWTS of Mongolia, ILO.

The unemployment rate makes the difference in the composition of the workforce by age groups. It is monotonically decreasing with age.

Table 2.7.3. Components of the workforce by age groups

| | <i>Unemployed</i> | <i>Own business</i> | <i>Unpaid Family workers</i> | <i>Paid workers</i> | <i>Part-time workers</i> | <i>Temporarily absent from work</i> | <i>Total</i> |
|-----------------------|-------------------|---------------------|------------------------------|---------------------|--------------------------|-------------------------------------|--------------|
| Young teenagers (aged | 214 | 19 | 152 | 55 | 2 | 2 | 444 |
| | 48.2 | 4.28 | 34.23 | 12.39 | 0.45 | 0.45 | 100 |
| | 23.8 | 4.55 | 21.81 | 5.54 | 7.69 | 11.11 | 14.56 |
| Young adults (aged 20 | 393 | 150 | 298 | 384 | 13 | 3 | 1,241 |
| | 31.67 | 12.09 | 24.01 | 30.94 | 1.05 | 0.24 | 100 |
| | 43.72 | 35.89 | 42.75 | 38.71 | 50 | 16.67 | 40.69 |
| Aged 25-29 | 292 | 249 | 247 | 553 | 11 | 13 | 1,365 |
| | 21.39 | 18.24 | 18.1 | 40.51 | 0.81 | 0.95 | 100 |
| | 32.48 | 59.57 | 35.44 | 55.75 | 42.31 | 72.22 | 44.75 |
| Total | 899 | 418 | 697 | 992 | 26 | 18 | 3,050 |
| | 29.48 | 13.7 | 22.85 | 32.52 | 0.85 | 0.59 | 100 |
| | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: own elaboration on SWTS of Mongolia, ILO.

Labour market status and education. Education endowment is one of the main determinants of belonging to a given labour market status. One of the returns to education is to increase employability and reduce the chance of being jobless. Table 2.7.4 provides a snapshot of labour market statuses by educational attainment for the entire sample of the STWS. Both stocks and rates are reported. The table shows that the activity and employment rates are a positive and the unemployment rate is a negative function of education. There are, however, exceptions. The activity rate, for instance, is relatively higher for those with primary education or below, compared to those with low and high secondary education, though the most educated (vocational education or above), tend to have a higher activity rate. The employment rate has the same tendency, while the unemployment rate is the reverse: it increases for those with secondary education before decreasing again for those with specialized secondary education or above. The simple explanation for this finding is that those holding a secondary school diploma are most likely to be involved in further education, whereas those with the lowest educational endowment cannot access further education and are, therefore, already in the labour market or have been there for years at the time of interview.

Table 2.7.4. Young people by employment status and education

| <i>Education</i> | <i>15-29</i> | <i>U</i> | <i>E</i> | <i>I</i> | <i>u</i> | <i>e</i> | <i>i</i> | <i>a</i> |
|--------------------------------|--------------|----------|----------|----------|----------|----------|----------|----------|
| Total | 808.80 | 45.12 | 276.40 | 487.28 | 14.03 | 85.97 | 60.25 | 39.75 |
| Uneducated | 26.98 | 1.26 | 14.37 | 11.35 | 8.06 | 91.94 | 42.05 | 57.95 |
| Primary | 97.21 | 3.78 | 45.02 | 48.41 | 7.75 | 92.25 | 49.80 | 50.20 |
| Basic (Grade 4-8) | 264.64 | 10.33 | 59.01 | 195.29 | 14.90 | 85.10 | 73.80 | 26.20 |
| Secondary (Grade 9-10) | 270.06 | 16.76 | 59.90 | 193.41 | 21.87 | 78.13 | 71.62 | 28.38 |
| Vocational technical education | 27.74 | 2.77 | 15.38 | 9.58 | 15.27 | 84.73 | 34.54 | 65.46 |
| Diploma, specialized secondary | 18.41 | 1.01 | 11.47 | 5.92 | 8.08 | 91.92 | 32.19 | 67.81 |
| Tertiary/bachelor | 100.74 | 9.07 | 68.97 | 22.69 | 11.63 | 88.37 | 22.52 | 77.48 |
| Master's degree and above | 3.03 | 0.13 | 2.27 | 0.63 | 5.26 | 94.74 | 20.83 | 79.17 |

Note: Capital letters (U, E, I) represent stock measures of unemployed, employed and inactive young people. Lower case letters (u, e, i, a) measure the rates of unemployment, employment, inactivity and activity. As usual, the unemployment rate is obtained as $u = \frac{U}{E + U}$; the employment rate as $e = \frac{E}{E + U}$; the inactivity rate as $i = \frac{All - E - U}{All}$; and, finally, the activity rate as $a = 1 - i$.

Source: own elaboration on SWTS of Mongolia, ILO.

Informal and temporary employment. The STWS asks whether the interviewees who are employed have a contract for their current job, limited or unlimited in time. This is an important question to detect the extent of informal and temporary employment. Table 2.7.5 answers these questions by gender. About 10 per cent more women than men have a contract: the portion of women with a contract is 45.6 per cent and for men 36.3 per cent. The vast majority are fixed-term contracts. The share of temporary employment is constant by gender and represents about 74 per cent of contract holders. This is an apparent sign of the low quality of jobs offered to young Mongolians, an issue that will be taken up in Chapter 3. There seems to be slightly greater job stability for women. This female advantage might be due either to their higher educational level, or to their tendency to seek jobs able to provide, for instance, paid maternity leave, despite only 11 per cent of employed women declaring that their job provides childcare allowances. The comparable figure for men is 9.2 per cent.

Table 2.7.5. Informal and temporary employment by gender

| | <i>male</i> | <i>female</i> | <i>Total</i> |
|------------------------|-------------|---------------|--------------|
| No contract | 750 | 552 | 1,302 |
| % | 63.67 | 54.44 | 59.4 |
| Contract | 428 | 462 | 890 |
| % | 36.33 | 45.56 | 40.6 |
| Number of observations | 1,178 | 1,014 | 2,192 |
| Fixed-term contract | 316 | 340 | 656 |
| % | 73.83 | 73.59 | 73.71 |
| Permanent contract | 112 | 122 | 234 |
| % | 26.17 | 26.41 | 26.29 |
| Number of observations | 428 | 462 | 890 |

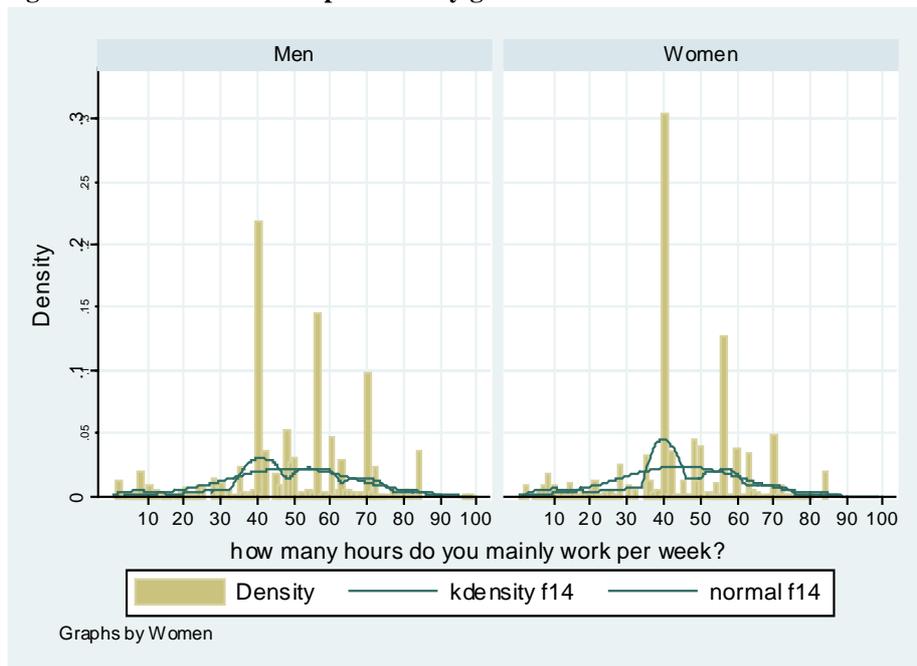
Source: Own elaboration on SWTS of Mongolia, ILO.

Working hours. Figure 2.7.1 shows that the distribution is very dispersed for men and women, suggesting that the work effort is very different across individuals with different occupations. The peak is for those working 40 hours per week, the typical working hours envisaged in labour agreements: 21.8 per cent of men and 30.3 per cent of women work 40 hours a week. However, the distribution is clearly multi-modal, with apparent peaks at 40, 55 and even 70 hours worked per week. Particularly striking, and worrying, is the high share of young people working extremely long hours. About 56 per cent work more than 40 hours and 40 per cent work more than 50 hours. Men are more frequent among those with the heaviest workload. Among women, about 50 per cent work more than 40 hours and 33 per cent work more than 50 hours; among men, the comparable figures are 63 per cent and 45 per cent, respectively. This is typical of certain activities, such as pasturage, common among young people, and where productivity is low. An extremely high number of hours worked is an important indicator of the low quality of work, as shown in Chapter 3.

Women working part-time (less than 40 hours) are a small number. This partly depends on the relatively small number of young women with dependent children which, as noted above, is about 30 per cent. However, this is also due to the extreme poverty of the country, where part-time work is not an option for many firms, due to its high cost. In addition, as is typical of several developing

and transition countries,³⁷ in Mongolia, many women prefer long maternity leave (up to three years), in preference to part-time work.

Figure 2.7.1. Hours worked per week by gender



Source: own elaboration on SWTS of Mongolia, ILO.

Factors affecting the probability to be employed. What are the factors of success in accessing a job? This sub-section will attempt to succinctly answer this question by looking at the factors affecting the probability. The next sections will consider the risk factors of unemployment and inactivity. The analysis is based on Panel (c) of the Tables 2.7.1. and 2.7.2 of the Statistical Annex. Those who are unpaid family workers constitute the baseline group and, therefore, the coefficients in Panel (c) should be considered as measuring the relative risk (or odds ratio) to be employed rather than being unpaid family worker due to the given characteristics. Women have a lower chance of being employed than being unpaid family workers. The returns to education in terms of probability of finding a job rather than being an unpaid family worker are important and increase with education. A young person with a university degree has dramatically higher chances of finding employment than a peer with primary education or below.

2.8. Wage employment

Introduction. This section discusses different aspects of wage employment of young people. It starts from the analysis of the composition of employment by sector of industry. The information is broken down along different dimensions, including age groups, gender, urban/rural areas. The ensuing part of the section focuses on earnings distribution. After having a look at the wage distribution by educational level, Mincerian earnings equations provide a tool to measure returns to education and returns to different educational levels. The analysis considers different aspects of the wage distribution among young people, including work experience, civil status, having children, formal/informal work, methods of job search, industry and location. A special focus is on gender differences in wages. The gender wage gap is decomposed into differences in characteristics and coefficients. Overall, this allows not only a vivid and detailed picture of earnings distribution, but also several policy suggestions.

³⁷ See, for instance, Pastore and Verashchagina (2007) and Malisheva and Verashchagina (2007).

Sectoral composition of employment. The most striking fact that Table 2.8.1 illustrates is the highest share, over 40 per cent, of young people employed in the livestock sector. This is evidence of the continuing agricultural nature of the productive structure. The livestock, and more generally, the agricultural sector has, in fact, further expanded since the start of transition and the ensuing fall in output experienced in urban areas, where the bite of reforms has been stronger. This has also caused, in rural areas, a revival of traditional activities in the primary sector, which has always been one of the most important sectors (for an in-depth analysis of the post-transition transformation of the production structure in Mongolia, see Morris and Brunn, 2005). The data highlight a dramatic polarization of economic activities around the primary sector: including other minor sub-sectors, the primary sector accounts for 45 per cent of total employment. All other sectors are of lesser importance.

The manufacturing sector, for instance, employs about 4 per cent of the youth workforce, a share lower than the wholesale and retail trade (7.6 per cent), and similar to the hotels and restaurants sector (3.5 per cent) as well as the transport and storage sector (3.9 per cent). The State sector share of employment is small. The public administration employs 7.8 per cent, the educational sector 8.4 per cent and the communal services 5.1 per cent of total youth employment. Among other things, the composition of employment provides a first answer to the question posed in Section 2.4 on the reasons for the low supply of skills in Mongolia. It is apparent that as a consequence of the transition and quasi disappearance of the manufacturing sector, the demand for skills is now relatively low. After the transitional recession, the population tended to move to the informal sector in urban areas and to herding, mainly in rural areas.

More men than women work in the livestock sector. In addition, herding is much more common among young teenagers and young adults. The reduction in the share of young people employed in the livestock sector by age might be suggestive of a tendency for them to use this type of employment as a temporary solution. It might also suggest that many young teenagers leave school to work as herders and, therefore, dropping out is closely related to child labour or, more generally, to labour at a very young age in this sector. Also work in the manufacturing sector, as well as in all other sectors, increases with age. This is a consequence of the strong concentration of young teenagers in herding. In a similar vein, since men are more frequent than women in herding, the opposite holds true for the other sectors. For instance, more women than men work in the manufacturing sector.

Table 2.8.1. Sectoral composition of employment by gender and age group

| | <i>All</i> | <i>Men</i> | <i>Women</i> | <i>Young teenagers</i> | <i>Young adults</i> | <i>Oldest segment</i> |
|--|------------|------------|--------------|------------------------|---------------------|-----------------------|
| Crops | 0.73 | 0.93 | 0.49 | 0.87 | 0.23 | 1.09 |
| Livestock | 40.6 | 43.29 | 37.48 | 68.26 | 41.76 | 33.91 |
| Forestry | 0.68 | 0.85 | 0.49 | 1.3 | 0.7 | 0.55 |
| Fishery | 0.18 | 0.25 | 0.1 | 0.43 | 0.12 | 0.18 |
| Mining and Quarrying | 2.74 | 3.82 | 1.48 | 3.48 | 3.36 | 2.09 |
| Manufacturing | 3.88 | 3.14 | 4.73 | 2.61 | 3.6 | 4.36 |
| Electricity, Gas and Water supply | 1.96 | 2.89 | 0.89 | 1.3 | 1.39 | 2.55 |
| Construction | 2.92 | 4.33 | 1.28 | 2.17 | 3.25 | 2.82 |
| Wholesale and Retail Trade and househo | 7.62 | 5.77 | 9.76 | 5.22 | 6.73 | 8.82 |
| Hotels and Restaurants | 3.51 | 1.44 | 5.92 | 6.09 | 4.52 | 2.18 |
| Transport and storage | 3.92 | 6.03 | 1.48 | 1.74 | 3.48 | 4.73 |
| Tourism | 0.82 | 0.85 | 0.79 | 0 | 0.81 | 1 |
| Telecommunication | 0.87 | 0.51 | 1.28 | 0 | 0.35 | 1.45 |
| Financial services | 3.28 | 2.72 | 3.94 | 0.43 | 3.13 | 4 |
| Real estate, renting and business activities | 0.78 | 0.59 | 0.99 | 0 | 1.04 | 0.73 |
| Public Administration, Defence, compuls | 7.85 | 9 | 6.51 | 1.74 | 7.54 | 9.36 |
| Education | 8.44 | 4.67 | 12.82 | 0 | 7.77 | 10.73 |

| | | | | | | |
|---|-------|-------|-------|------|------|-------|
| Health and social security | 2.19 | 1.44 | 3.06 | 0.43 | 2.67 | 2.18 |
| Community, social and personal services | 5.06 | 5.09 | 5.03 | 2.61 | 5.45 | 5.27 |
| Other | 1.96 | 2.38 | 1.48 | 1.3 | 2.09 | 2 |
| Total | 2,192 | 1,178 | 1,014 | 230 | 862 | 1,100 |

Source: own elaboration on SWTS of Mongolia, ILO.

Formal/informal work. Informal work in developing countries has attracted notable and increasing attention among western observers, including international organizations, such as the ILO, the World Bank and the UNDP. Many observers and policy-makers in developing countries believe that this interest is due to a fear of competition. Nevertheless, informal work represents a constraint to the development of the local economy, hindering the development of the formal sector and reducing tax revenues that are vital to the development of public services. In addition, informal work almost always means very low incomes, especially for young people, forcing them into the poverty trap. Low incomes and employment instability negatively affects fertility, health and, as recent research has shown, also happiness. Informal work is very common. Column 2 of Table 2.8.2 shows the composition of informal work across sectors, while the other columns provide information on formal work and, in particular, on whether the work contract is written or oral, allowing a comparison of different degrees of formality. About 60 per cent of the entire youth employment is informal. This is a very high share and confirms the poor employment prospects of young people. As shown in the remainder of the section, according to the results of estimates of earning equations reported later, informality implies a statistically significant wage loss of between 19 and 30 per cent. It is not only a tax loss for the government, but also, as Chapter 3 will indicate, an important cause of work dissatisfaction: many young people working informally wish to change their job, contributing to job instability and slowness of school-to-work transition. Informal work is evenly distributed across industrial sectors, but there are several important exceptions. In particular, and expectedly, it is much more common in the livestock sector, whereas it is almost absent in the State sector and less frequent in the manufacturing and mining sector.

Almost 70 per cent of the young people employed in the livestock sector work informally. Most contracts that are held are only oral or temporary. Informal workers in the livestock sector in rural areas are a very weak group; they have between a quarter and half of the average wage of young people, which is already lower than adults.³⁸ Therefore, these groups deserve attention from policy-makers. Not only do they live in extreme long-term poverty, but this poverty is also likely to trap the next generation. The distribution of informal work by age groups makes it apparent that it is more common among young teenagers. There are more of them working informally than there are in total youth employment. This is surely related to the greater than average share of them in the livestock sector. The share of the young adults over total informal employment is about the same as the total. Similarly, written contracts are more common among those aged 25–29 years and oral contracts more common among young teenagers.

Overall, analysis of informality of working conditions confirms that young teenagers tend to be the weakest group. Whether informality of employment is a consequence or a cause of this further weakness is difficult to say, but policy-makers should be aware that young teenagers leaving the educational system tend to find less decent jobs and, therefore, become trapped in poor employment positions for the rest of their lives. Men work informally more frequently than women. Informal work is also more common in rural than in urban areas. About 80 per cent of informal work is concentrate in rural areas. In urban areas, written contracts are more frequent than oral contracts, whereas it is the opposite in rural areas. Informal work is more common in the western region and also partly in the Khangai region, whereas it is less frequent in the others,

³⁸ The wage penalty for working in the livestock sector is between 40–140 per cent, that for working in rural areas is 40 per cent and that of working in the informal sector of between 19–30 per cent. Overall this is a huge wage gap.

especially in the capital city. Only 14.4 per cent of total informal youth employment is in Ulaanbaatar, against a share of 25.3 per cent of total employment.

Table 2.8.2. Composition of employment

| A | B | Total (%) | Of which | | | |
|---|----|-----------|----------------------|---------------|-------------|----------|
| | | | Without contract (%) | With contract | | |
| | | | | Total (%) | Written (%) | Oral (%) |
| | | 1 | 2 | 3 | 4 | 5 |
| Total | 1 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Grops | 2 | 0.7 | 0.7 | 0.8 | 0.8 | - |
| Livestock | 3 | 40.6 | 67.4 | 1.3 | 0.8 | 17.2 |
| Forestry | 4 | 0.7 | 1.1 | 0.1 | 0.1 | - |
| Fishery | 5 | 0.2 | 0.2 | 0.1 | 0.1 | - |
| Mining and quarrying | 6 | 2.7 | 2.1 | 3.7 | 3.8 | - |
| Manufacturing | 7 | 3.9 | 2.1 | 6.5 | 6.5 | 6.9 |
| Electricity, gas and water supply | 8 | 2.0 | 0.3 | 4.4 | 4.5 | - |
| Construction | 9 | 2.9 | 1.9 | 4.4 | 4.3 | 6.9 |
| Wholesale and retail trade and household goods | 10 | 7.6 | 9.1 | 5.5 | 5.1 | 17.2 |
| Hotels and restaurants | 11 | 3.5 | 3.1 | 4.0 | 3.4 | 24.1 |
| Transport and storage | 12 | 3.9 | 3.5 | 4.5 | 4.4 | 6.9 |
| Tourism | 13 | 0.8 | 0.3 | 1.6 | 1.5 | 3.4 |
| Communication | 14 | 0.9 | 0.1 | 2.0 | 2.1 | - |
| Financial | 15 | 3.3 | 0.3 | 7.6 | 7.9 | - |
| Real estate, renting and business activities | 16 | 0.8 | 0.7 | 0.9 | 0.9 | - |
| Public administration, defence, compulsory social insurance | 17 | 7.8 | 1.2 | 17.6 | 18.0 | 6.9 |
| Education | 18 | 8.4 | 0.5 | 20.1 | 20.8 | - |
| Health and social security | 19 | 2.2 | 0.2 | 5.2 | 5.3 | - |
| Community, social and personal services | 20 | 5.1 | 3.3 | 7.6 | 7.5 | 10.3 |
| Others | 21 | 2.0 | 2.0 | 1.9 | 2.0 | - |
| Total | 22 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 15-19 | 23 | 10.5 | 15.6 | 3.0 | 2.8 | 10.3 |
| 20-24 | 24 | 39.3 | 39.9 | 38.4 | 38.1 | 48.3 |
| 25-29 | 25 | 50.2 | 44.5 | 58.5 | 59.1 | 41.4 |
| Total | 26 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Male | 27 | 53.7 | 57.6 | 48.1 | 48.1 | 48.3 |
| Female | 28 | 46.3 | 42.4 | 51.9 | 51.9 | 51.7 |
| Total | 29 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Urban | 30 | 38.8 | 21.3 | 64.5 | 64.7 | 58.6 |
| Rural | 31 | 61.2 | 78.7 | 35.5 | 35.3 | 41.4 |
| Total | 32 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| West region | 33 | 19.5 | 26.6 | 9.1 | 9.1 | 10.3 |
| Khangai region | 34 | 25.8 | 29.9 | 19.8 | 19.9 | 17.2 |
| Central region | 35 | 18.1 | 15.4 | 21.9 | 22.2 | 13.8 |
| East region | 36 | 11.4 | 13.7 | 7.9 | 7.7 | 13.8 |
| Ulaanbaatar region | 37 | 25.3 | 14.4 | 41.3 | 41.2 | 44.8 |
| Total employees /thous/ | 38 | 276.4 | 164.2 | 112.2 | 108.6 | 3.7 |

Source: own elaboration on SWTS of Mongolia, ILO.

Returns to education. An important strand of the literature on economic transition has asked whether wage determination obeys productivity considerations in new market economies. Moreover, assuming that in mature market economies human capital is the main determinant of labour productivity, what is its role in transition economies? Previous studies have also asked

what the role is, in the context of transition economies, of other typical factors affecting wages in mature market economies, such as gender, civil status, sector of industry, location. Empirical studies have documented an increase in the returns to education and work experience during transition, especially in the early stages of economic transition. This would tend to prove that market forces are come into play and that the emphasis of former socialist countries on equality of outcomes is being abandoned. Indeed, in a market economy, wages are supposedly paid on merit, which depends, usually, on human capital endowment, whatever the theoretical assumptions of the analysis. In fact, profit-seeking firms would be interested in paying higher wages to those employees that contribute more to production (see, among others, for comparative studies, Newell and Reilly, 1999; Trostel et al., 2002; and Flabbi et al., 2007).

In Mongolia (Ulanbaatar), Darii and Suruga (2006) found a rate of return to a year of schooling of 7.2 per cent, which is higher than in most transition countries. The rate of return to university education in Mongolia is the highest among transition economies and the returns to other educational qualifications are comparable with those previously found relative to CEE and FSU countries. The authors also found a specific wage premium of about 9 per cent over the median wage for people aged below 35 years, though the coefficient is statistically significant only at the 10 per cent level.³⁹

Before looking at returns to education, it is of some interest to consider the unconditional wage distribution by educational levels and by gender, namely the wage distribution before controlling for other variables that might affect wages. Tables 2.8.3 and 2.8.4 provide summary statistics on monthly wages from the main job and their log transformation. The tables clearly show that the average wage increases with educational levels, the only exception being those with vocational secondary education. However, the small number of observations available might affect this result. Note also that the degree of dispersion of wages by educational category is very high, which might also affect the mean value. The median wage distribution by education in Table 2.8.4 presents a more stable picture, with the median wage increasing strictly with education, including those holding a vocational education or a master degree. These results are in line with Darii and Suruga's findings (2006).

However, unconditional differences in wages might hide the real nature of the relationship between education and earnings, and to obtain a measure of the wage effect of each educational qualification, it is necessary to take into account differences among individuals working in different places and industrial sectors, as well as with different degrees of work experience. The higher wages of those holding a university degree might be explained by their greater work experience or working in highly paid sectors.

Table 2.8.3. Wage distribution by education (monthly wages and its natural log)

| | <i>Monthly wages from main job</i> | | | | |
|------------|------------------------------------|-------------|------------------|------------|------------|
| | <i>Obs</i> | <i>Mean</i> | <i>Std. Dev.</i> | <i>Min</i> | <i>Max</i> |
| uneducated | 114 | 30.72895 | 38.22403 | 0 | 226 |

³⁹ This finding is consistent with Pastore and Verashchagina (2006, p. 100) for Belarus. As they note, a largely anecdotal literature depicts young people as the true winners of transition. The rationale would be that, holding the educational level constant, young people possess fresh human capital formed during the new era, while older people's knowledge was formed previously and is no longer suitable to the needs of the market economy. To test this hypothesis in Belarus, the authors include in mincerian earnings equations a dummy for individuals aged 30 or below. The coefficient was negative, but not statistically significant. This is hardly surprising as young people earn universally lower wages as a consequence of their lack of work experience. As a further test, they interacted the dummy relative to young people with dummies representing various levels of education attainment. The results relative to 1996 confirmed anecdotal evidence: *ceteris paribus*, young people holding a university degree have a wage premium of about 17 per cent. This gap disappears when other educational groups are considered, for which the coefficient is not significant. In 2001, the advantage of young people with tertiary education dramatically decreases, with the coefficient becoming insignificant. Instead, a statistically significant youth wage premium appears for those with vocational (22.4 per cent) and general secondary (14.8 per cent) education.

| | | | | | |
|---|------------|-------------|------------------|------------|------------|
| c1 = primary | 357 | 201.1969 | 3174.023 | 0 | 60000 |
| c1 = basic | 468 | 255.4671 | 4620.777 | 0 | 100000 |
| c1 = secondar | 475 | 384.0992 | 4566.341 | 0 | 85000 |
| c1 = vocation | 122 | 76.33689 | 51.11727 | 0 | 256 |
| c1 = diploma, | 91 | 2468.811 | 14040.78 | 0 | 100000 |
| c1 = tertiary | 547 | 1553.286 | 15113.5 | 0 | 185000 |
| c1 = master's | 18 | 125.0556 | 32.84629 | 80 | 200 |
| <i>Natutural log of monthly wages from main job</i> | | | | | |
| | <i>Obs</i> | <i>Mean</i> | <i>Std. Dev.</i> | <i>Min</i> | <i>Max</i> |
| uneducated | 79 | 3.495897 | 0.764798 | 1.740466 | 5.420535 |
| c1 = primary | 249 | 3.60847 | 0.900717 | 0.693147 | 11.0021 |
| c1 = basic | 385 | 3.634301 | 0.919429 | 0.693147 | 11.51293 |
| c1 = secondary | 433 | 4.14055 | 0.919425 | 0 | 11.35041 |
| c1 = vocation | 114 | 4.222901 | 0.64106 | 1.94591 | 5.545177 |
| c1 = diploma, | 89 | 4.602225 | 1.436821 | 0.693147 | 11.51293 |
| c1 = tertiary | 539 | 4.730388 | 0.883049 | 0.693147 | 12.12811 |
| c1 = master's | 18 | 4.797913 | 0.252885 | 4.382027 | 5.298317 |

Note: The observations relative to the log transformation are less numerous because some individuals declare a wage lower than 1 or 0. Negative values have been dropped. As to the 31st of May 2007, the nominal exchange rates of the TUG to the Euro and the US dollars were as follows: 1 Euro = 1566.8700 Tughrik; 1 Tughrik = 0.0006 Euro; 1 US Dollar = 1164.6993 Tughrik; 1 Tughrik = 0.0009 US Dollars.

Source: own elaboration on SWTS of Mongolia, ILO.

Table 2.8.4. Summary statistics on the wage distribution by education

| | <i>Uneducated</i> | | <i>Primary</i> | | <i>Basic</i> | | <i>Secondary</i> | | <i>vocational specialised secondary</i> | | <i>Tertiary</i> | | <i>Master</i> | | <i>Total</i> | | | |
|-----------------|-------------------|---------|----------------|----------|--------------|----------|------------------|----------|---|---------|-----------------|-----------|---------------|-----------|--------------|---------|-------|----------|
| | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | | |
| Mean | 3.50 | 30.73 | 3.61 | 201.20 | 3.63 | 255.47 | 4.14 | 384.10 | 4.22 | 76.34 | 4.60 | 2468.81 | 4.73 | 1553.29 | 4.80 | 125.06 | 4.14 | 667.52 |
| Median | 3.40 | 20.00 | 3.43 | 24.00 | 3.64 | 30.00 | 4.22 | 60.00 | 4.35 | 70.00 | 4.44 | 85.00 | 4.61 | 100.00 | 4.79 | 120.00 | 4.25 | 60.00 |
| Variance | 0.58 | 1461.08 | 0.81 | 10100000 | 0.85 | 21400000 | 0.85 | 20900000 | 0.41 | 2612.98 | 2.06 | 197000000 | 0.78 | 228000000 | 0.06 | 1078.88 | 1.05 | 76200000 |
| 10th percentile | 2.51 | 0.00 | 2.71 | 0.00 | 2.71 | 0.00 | 3.00 | 9.50 | 3.40 | 20.00 | 3.91 | 30.00 | 4.25 | 70.00 | 4.50 | 90.00 | 3.00 | 0.00 |
| 90th percentile | 4.61 | 80.00 | 4.61 | 90.00 | 4.61 | 90.00 | 4.94 | 130.00 | 5.01 | 140.00 | 5.19 | 170.00 | 5.30 | 200.00 | 5.19 | 180.00 | 5.01 | 150.00 |
| skew ness | 0.19 | 2.22 | 2.07 | 18.81 | 1.30 | 21.56 | 1.76 | 16.22 | -0.69 | 1.12 | 2.76 | 6.18 | 4.59 | 10.65 | 0.31 | 0.73 | 1.89 | 16.43 |
| iqr | 1.01 | 40.00 | 1.10 | 50.00 | 1.25 | 45.00 | 0.76 | 59.00 | 0.69 | 55.00 | 0.54 | 56.00 | 0.56 | 60.00 | 0.41 | 50.00 | 1.05 | 78.00 |
| kurtosis | 2.63 | 9.58 | 20.21 | 354.89 | 16.75 | 465.92 | 21.30 | 278.96 | 4.04 | 4.97 | 15.73 | 40.40 | 44.64 | 116.56 | 2.22 | 2.75 | 19.44 | 291.39 |

Note: (1) natural log of monthly wages from the main job; (2) monthly wage from the main job.

Source: own elaboration on SWTS of Mongolia, ILO.

Mincerian earnings equations: a short methodological note. Table A.2.8.1 in the Statistical Annex presents the results of OLS earnings equations for all young people in the STWS. Separate estimates are presented for different age groups, as well as for men and women. The equations study the determinants of net monthly wages, while the log of the number of hours worked per week is used as an independent variable.⁴⁰ The equations are augmented to consider not only human capital variables, but also a number of other individual and environmental characteristics, namely gender, civil status, formal/informal employment, the status of migrant, union membership, past experiences of training, type of search method adopted to get the job, the industrial sector of activity, the location and whether one is living in a rural/urban area. The table provides the coefficients for the entire specification.⁴¹

For their flexibility, Mincerian earnings equations are an important source for policy-oriented analysis because they allow the testing of different hypotheses coming from the political debate and for which there is often no evidence. What is the role of education on earnings? Are more educated people better off? What is the role of work experience for young people? How much work experience is necessary for a young person to close the youth experience gap? Does informal work convey a wage premium or a wage penalty? And training? And migration? And finding a job through the informal channel of family and friends? The Mincerian earnings equations allow answers to these questions in a clear and accurate way.

Human capital variables: years of education. What is the annual rate of return to education and how can it be measured? The literature provides two alternatives. The traditional way is by including years of education as an independent variable in Mincerian earnings equations. The coefficient of the years of education can be considered a direct measure of the internal private rate of return to a year of education. The translation of qualifications into years of education is as follows: 0 for the uneducated; 4 for primary education; 8 for basic or incomplete secondary education; 10 for complete secondary education; 12 for vocational and technical secondary education; 13 for specialized technical secondary education; 17 for university degree; and, 19 for a master degree. To see the curricular years of education related to each diploma, see Appendix A.1, which also provides a short description of the educational system and its recent reforms.

Table 2.8.5 provides estimates for different age groups and by gender, including the same controls as in Table A.2.8.1 in the Annex, though for brevity the coefficients of other control variables have been omitted. The estimates give an annual rate of only 4.2, which is stable across different age groups and gender, and is much lower than that of 7.2 found by Darii and Suruga (2004). One possible explanation of this difference is the age of the individuals included in the two samples, since this study uses information only on young people.⁴² Another explanation is that the classification adopted here is slightly different from that used in Darii and Suruga (2006). They have a much flatter measure of years of education, which may cause higher returns

⁴⁰ Log of monthly wages are preferred as dependent variables to using log of hourly wages to test for the statistical significance of the number of hours actually worked.

⁴¹ The coefficients measure the percentage increase of the dependent variable, which is the log of monthly net earnings, for any unit increase of the independent variable. Since the Mincerian earnings equation is a log-linear transformation of an exponential function, coefficients have a semi-elasticity interpretation. In case of independent dummy variables, the semi-elasticity interpretation is partly flawed and the interpretation is that provided in a previous footnote relative to the study of determinants of educational choices. If the independent variable is expressed in log terms, the coefficient measures the elasticity, i.e. the percentage change of the independent variable for any percentage change of the independent variable.

⁴² Young people might have lower returns to education than adults, simply because they lack work experience and it is the combination of education and work experience that makes human capital increase an individual's productivity. Nonetheless, in both studies, the estimates are augmented to consider all observable differences across individuals, including work experience. This suggests that there should be sufficient control for work experience and other factors.

compared to the one adopted here.⁴³ A possible further explanation might be found in the specific sample survey they use, which referred only to those working in the capital city, where wages are generally higher than in other *aimags*, as suggested by the previous discussion. To check this hypothesis, the same estimates presented in Table A.2.8.1 in the Statistical Annex were run only for those living in Ulaanbaatar. In this case, the annual rate of return to education is very close to that found by Darii and Suruga. It equals 7.6 for the entire sample, 6.8 for men and 8.3 for women. It is interesting to note that in the capital city, women have slightly higher rates of return than men, as is typical of many other countries (Psacharopoulos, 1994; Pastore and Verashchagina, 2005).

Table 2.8.5. OLS and IV estimates of the annual rate of return to education by gender and age

| <i>Variable</i> | <i>All</i> | <i>Youngteen</i> | <i>Youngadult</i> | <i>Oldest</i> | <i>Men</i> | <i>Women</i> |
|---|------------|------------------|-------------------|---------------|------------|--------------|
| Years of education (OLS) | 0.0420*** | 0.0087 | 0.0394*** | 0.0409*** | 0.0398*** | 0.0410*** |
| Years of education (Instrumental variables) | 0.1085*** | -0.1912 | 0.1366** | 0.1092*** | 0.1090*** | 0.0757* |
| N | 1900 | 138 | 548 | 691 | 771 | 606 |

Note: The estimates include controls for the same variables included in Table 2.8.1. Instruments are the years of education of father and of mother.

Source: own elaboration on SWTS of Mongolia, ILO.

Human capital variables: educational qualifications. The problem with years of education is that measurement errors could dramatically affect the results. These arise from the need to assign the same number of years to different individuals and also the difference between official and actual years needed to attain a degree and on possible reforms changing the official number of years assigned to each educational qualification. Hence, there might be a problem of overestimation of the returns in those that spend more years in education to attain a given degree or, vice versa. In addition, educational reforms might change dramatically the number of years necessary to attain a given diploma or to complete compulsory education. These changes may or may not cause a change in the private return to a year of education.⁴⁴

With these caveats in mind, following Psacharopoulos (1994), educational qualifications are used instead of years of schooling. Educational categories are the usual ones, as described in Appendix A.1. The baseline group is constituted of those holding basic education or below. The coefficients measure the so-called “wage effects” of educational qualifications, or the percentage increase in earnings for any educational qualification achieved compared to having basic education or below. In this case, the annual rate of return to education is deducted from wage effects of different educational qualifications by dividing the overall effect by the number of years spent to achieve that type of post-compulsory diploma in addition to the number of years necessary to attain compulsory education. The results confirm the expectations that education positively affects earnings. Indeed, the effect of education on earnings is monotonically increasing with educational attainment. The impact is the highest for individuals holding a master degree,

⁴³ The classification they adopt, considering individuals under the age of 30 and therefore following the 4-4-2 educational scheme is: 0 for the uneducated; 4 for primary education; 8 for basic or incomplete secondary education; 10 for complete secondary education; 11 for vocational and technical secondary education; 10.5 for specialized technical secondary education; 15 for university degree. Moreover, they do not take into account a separate category for individuals with a master degree. For comparison, all the augmented earnings equations have been run according to all the different classifications adopted by Darii and Suruga, but the annual rate of return to education provided here does not change in any significant way. It is stubbornly stable at between 4.2-4.8 depending on the specification adopted.

⁴⁴ An interesting study by Groot and Oosterbeek (1994) shows that taking into account the actual number of years needed by individuals to attain a degree, does indeed affect the returns to education, as one would expect if years of education, rather than the qualification attained, increase productivity.

whose wage effect amounts to about 100 per cent compared to the baseline group. The impact of tertiary education is about 85 per cent higher compared to the same reference group.

This means that the annual rate of return to education equals 9.5 per cent for those with a university education.⁴⁵ This is lower than the 12.7 per cent found by Darii and Suruga (2006). The explanation of this difference may be found in the specific selection of their sample, which includes only individuals living in Ulaanbaatar. In any case, both the previous estimates and the ones presented here are much higher than those typical of medium-income countries found by Psacharopoulos (1994) in an analysis considering many countries at a different level of development.

The wage effects of different educational qualifications are roughly comparable to those obtained by Darii and Suruga (2006) in most cases, except for specialized secondary education: 0.159 compared 0.494 in the case considered here. A specialized secondary school diploma increases wages by 64 per cent compared to the median wage of young people with compulsory education. The results also suggest that those with vocational education, especially men, have a very low wage premium compared to those with compulsory education or below. Only women with vocational education have significantly higher wages compared to those with compulsory education. This weakness of vocational education is a consequence of the specific type of knowledge provided to young people, which quickly becomes obsolete in periods of dramatic structural change.

Higher returns to education of women is a typical finding of the relevant literature for all countries (Psacharopoulos, 1994), including transition countries (see, among others, Pastore and Verashchagina, 2006). This is also true for Mongolia, except for tertiary education where men's returns are higher than for the women. The impact of education across different age groups is higher for young adults compared to the oldest age group, probably because work experience becomes more important for the latter. This analysis provides evidence that the relative demand for skills is high in Mongolia and, indirectly, provides support to the claim that it is worth investing in education, despite the high level of poverty in the country. This is an important policy suggestion for policy-makers.

Human capital variables: work experience and tenure. The human capital variables are as follows. Work experience is measured by the number of years in the current job. In a way, this variable is a measure of job tenure rather than of generic work experience. However, considering the high share of fixed-term contracts noted previously (Section 2.7), job tenure is also a good approximation of work experience. The reference category is constituted of those with less than a year of work experience. The survey distinguishes between young people with one through four years of work experience and more than five years. Declared work experience is to be preferred to the more usual measure of potential work experience (age, years of education, age when starting school), due to the high youth unemployment rate and to control for ease of school-to-work transition.⁴⁶

The estimated coefficient of work experience is generally statistically significant only when longer than four years. Having more than five years means an increase in earnings of about 25 per cent with respect to those having less than one year, and with respect to those having four years or

⁴⁵ This figure is obtained dividing the coefficient for university education (β_u) by the nine years that are necessary on average to obtain a university degree after finishing basic education ($Y_u - Y_b$): $r = \frac{\beta_u}{Y_u - Y_b}$.

Multiplying this value by 100 gives the percentage change for every year of additional education.

⁴⁶ Potential work experience is too flat across individuals to measure the actual degree of work experience at that young age. Moreover, in the case of young people, the hypothesis of linearity in work experience cannot be rejected in favour of a concave profile of earnings by work experience, as is typically the case of samples including also the adults.

less. This effect is almost equally distributed by gender, with a slightly higher effect for women. In the oldest age segment, the wage effect of work experience between one and four years is about 25 per cent, and the wage effect of five years or more is about 50 per cent, with respect to those with one year or less. This analysis confirms the importance of having work experience for young people. As noted in Appendix A2, the youth experience gap is behind the lower productivity of young people and, therefore, also their lower earnings and employment chances.

The gender wage gap (GWG). A dummy for women measures the gender wage gap conditional on controls for all the other variables. The gender gap represents the difference in wages between men and women. The literature distinguishes the unconditional from the conditional (sometimes called adjusted or *ceteris paribus*) gender wage gap. The former does not take into account differences in productivity characteristics of men and women and the latter does. Therefore, the unconditional gender wage gap is a measure of the extent to which, on average, women have lower wages. The conditional gender gap might be lower than the unconditional, suggesting that part of the average gender gap is due to the lower productivity of women, for example, less hours worked, lower human capital endowment, less work experience because of maternity leave, working in low productivity jobs and low pay sectors. On the contrary, when the conditional gender gap is greater than the unconditional, it means that women possess productivity characteristics to a greater extent than men, but are paid less

According to Pastore and Verashchagina (2007),⁴⁷ economic transition has generated different outcomes on female wages, with important cross-country differences. During transition, the conditional gender wage gap has remained constant in CEECs, due to greater labour market withdrawal of women, compared to FSU countries, where female wages decreased markedly, while their participation remained more stable. The stability of wages in CEECs has been reinforced by the selection of more skilled women into jobs. If only more skilled women remain employed, then average female wages might increase, not decrease, compared to men.

For young people, the literature's predictions are slightly different as the females have not yet had children, reducing their disadvantage in terms of lower work experience due to maternity leave and increasing their motivation. Therefore, wage differences by gender are lower than among adults.

Elsewhere, it has been shown that young women have an advantage in terms of higher educational levels (section 2.4), of better employment prospects and lower risk of unemployment (Section 2.10), but when unemployed remain so longer than men (Section 2.10). Women have roughly the same average hours of work than men, but a slightly greater chance of holding a contract (Section 2.7). Overall, except for longer unemployment duration, women have an advantage compared to men in the labour market. However, a possible explanation for this might be that women tend to self-select themselves into low paid jobs, exchanging greater job stability, less commitment to work and provision of childcare allowances, for lower pay. The coefficient of the gender dummy should provide a first rough test of whether this is the case.

In unreported estimates, the unconditional gender wage gap, obtained in wage equations including only a dummy for gender is equal to -0.02 and is statistically insignificant. On average, therefore, young women and men have the same wages independent of their characteristics. Adding hours of work to the estimates, slightly increases the wage gap, but only by a small amount, up to -0.04 , and remains statistically insignificant. This suggests that the hours actually worked have little effect on gender differences in wages. However, in the augmented earnings equation, the gender dummy conveys a conditional gender wage gap of -0.22 , suggesting that the median wage of women is about 25 per cent lower than men with the same characteristics.⁴⁸ When controlling for

⁴⁷ See also the literature quoted in Pastore and Verashchagina (2007).

⁴⁸ Darii and Suruga (2006) found a coefficient of the gender dummy of 0.203 in a specification with only human capital variables and few other controls.

individual characteristics, it appears that women have a statistically significant and sizeable wage differential compared to men.

That the conditional is greater than the unconditional gender gap suggests that women have better characteristics than men, but are paid less. Previous analysis has shown, for instance that women have higher educational qualifications, while working roughly the same number of hours as men.⁴⁹ However, this is not necessarily evidence of discrimination against women. It is possible that they put less effort into the same number of working hours or are less motivated in building a career. This might be caused by the increasing opportunity cost of maternity and child rearing. The gap is especially sizeable for the 25–29 age group, lower among young adults and not statistically significant among young teenagers. The increase of the conditional gender wage gap by age might be a consequence of the increased frequency of women who marry and have children, as shown in Section 2.1. The rationale could be that with time passing, women reduce their commitment to market work and invest more time in the household. This, in turn, is mirrored in lower pay for similar characteristics.

Studying while working. A dummy for those individuals who study and work is used to test whether it has a positive effect on productivity because of the increase in the level of human capital or whether it has a negative effect on productivity due to the time spent studying that is subtracted from working. Note that against the importance of the former effect is the so-called sheepskin argument, according to which, education increases earnings only when a final qualification is achieved. Unfinished years of education have no effect on earnings. These two effects are generally contemporaneous and the overall effect of studying while working on earnings is a matter for empirical testing. Studying while working does not affect in any statistically significant way earnings in any of the estimates considered. This seems to reject the hypothesis that studying might reduce productivity and, hence, earnings and the hypothesis that further education might increase productivity level. Indirectly, this coefficient sounds like a confirmation of the existence of sheepskin effects, since continuing education without a degree does not affect earnings.

Formal versus informal employment. A contract is a sign of stability and quality of work compared to informal work. There is strong evidence that contract jobs are of better quality and, therefore, pay higher wages. To test this hypothesis, the estimates include a dummy to capture those who have a fixed-term or permanent contract. The coefficient in this case measures the wage effect of this factor compared to the baseline.⁵⁰ A contract increases young people's wages, especially if it is temporary. The fixed-term contract wage gain compared to those with no contract is about 30 per cent while, in the case of permanent contracts, it is about 19 per cent. In other words, no matter what the level of education and work experience is, if they work informally, they will receive much lower wages. In both cases, the wage premium for formal work is sizeable. Young teenagers and men especially benefit financially from holding a contract. However, while young teenagers have a higher premium in the case of a permanent contract, a fixed-term contract provides a higher gain for men.

Civil Status and children. The civil status of a young person can be an important factor to improve commitment and motivation to work on the supply side. On the demand side, employers often consider that the married employee has greater motivation and, therefore, productivity. Moreover, having an established family implies a greater need of income and a higher opportunity

⁴⁹ This result is not isolated in the transition literature on gender wage differentials. See, for comparison, the case of Belarus: Pastore and Verashchagina (2005; and 2007)

⁵⁰ In fact, it is not uncommon to also find a wage premium for some specific types of informal works. For a survey of the literature and an application in the case of Ukraine, see Maloney (2004).

cost of joblessness. For similar reasons, living with a partner, without having established a household, might have a similar supply and demand side impact. Similar considerations might apply to individuals who are divorced, widowed or separated, though to a lesser extent. Here the baseline group is constituted of single individuals and the coefficients of the dummy variables measure the wage effect of being married, living together, being divorced, widowed or separated, on earnings.

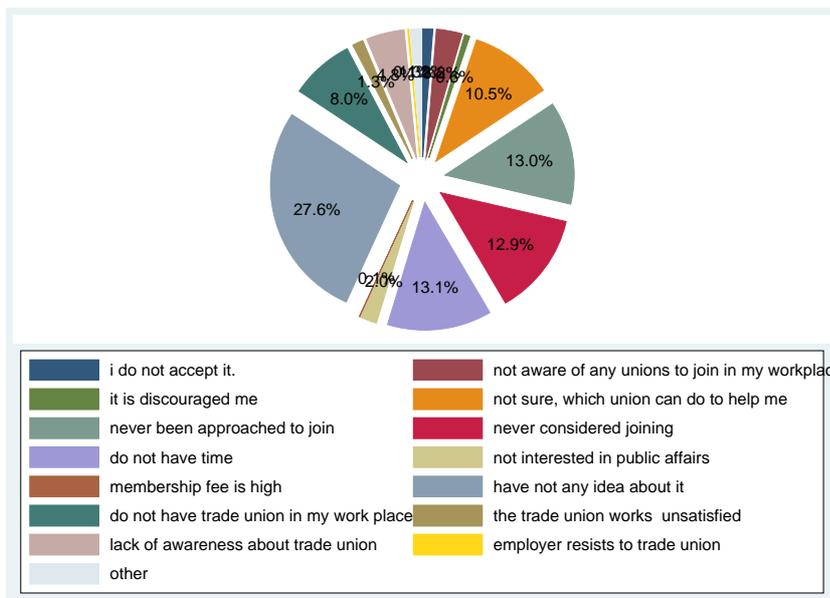
Being a single parent implies notable hardship in reconciling the labour market and family, and might be a factor in reducing productivity, but there is no statistically significant wage effect. Couples have higher wages than singles. There is no wage premium for the divorced, widowed or separated. The premium is essentially a male effect. There is no wage effect for married women and those with partners. This is a typical finding of the literature on determinants of earnings. Married men are more motivated than married women because the women start taking care of the household.

Wage gap or wage penalty for migrants? The literature suggests that immigrants might have a wage penalty due to difficulty in finding a suitable job, lack of local knowledge and language. As noted in Section 2.4, the STWS provides information on different types of immigrants for which we control in the estimates. Interestingly, although always showing a negative sign, there is no statistically significant wage loss for immigrants, whatever the reason of migration, except in the case of young teenagers migrating in search of a job and men migrating after their family. In the latter case, the wage loss amounts to about 23 per cent. In the case of women only, migration for educational purposes causes a statistically significant and sizeable wage gain of around 54 per cent.

Union membership. This typically involves a wage premium in many countries. The literature again suggests supply and demand side explanations for this. The main explanation is that union members have a higher than average educational level and are more involved with employers and managers. In Mongolia only about 8.1 per cent of employed young people are union members (women 8.7 per cent and men 7.6 per cent). This is not a high share, but typically young people tend less to be union members than adults. The results of mincerian earnings equations suggest that all other factors being equal, the wage effect of being a union member is negative, not positive in Mongolia. However, the coefficient is not statistically significant. The only category for which union membership shows a positive coefficient is young teenagers, with a wage premium of about 40 per cent, but again the coefficient is not statistically significant.

Figure 2.8.1 breaks down the reasons why over 90 per cent of the sample does not belong to a union. It shows that about 10 per cent believe unions cannot do anything for them, 13 per cent have never been approached by unions and 8 per cent work in establishments where there are none. This helps explain the weakness of union membership among young Mongolians. About 27.6 per cent have no idea what unions do, 13.1 per cent have no time to join and 12.9 per cent never considered joining, which is worrying not only for the development of unions, but for the development of well-functioning labour market institutions.

Figure 2.8.1. Reasons not to be a union member



Source: own elaboration on SWTS of Mongolia, ILO.

Training. On-the-job training should work like education and increase earnings via an increase in the productivity level. Attending on-the-job training might also be a signal of low productivity and low work experience. The STWS distinguishes training of different lengths: less than one week; one to four weeks; five to eight weeks and more than eight weeks. Training does not seem to impact on productivity. Rather, the training variables are negative, though not statistically significant, suggesting that if there is an effect of training it signals low skill levels.

Methods of job search: the role of informal networks. The STWS provides information on the method of job search adopted by each employee. Recent literature suggests that in the United States, relying on the informal network of friends and relatives has a positive impact on earnings. This implies that, in the United States in particular, informal networks channel correct information from family and friends to employers, therefore, revealing the actual skill level of potential employees (Montgomery, 1991).

However, as the empirical literature of other countries (such as Italy, Pistaferri, 1999; Mendolicchio and Melicani, 2006) shows, “rumour” might distort the information on productivity characteristics of jobseekers relying on informal networks because these networks tend to be lobbies rather than neutral channels of communication. In this last case, relying on an informal network might be a signal of low, not high productivity, and might convey something different from skills. The wage premium, therefore, becomes a wage penalty.

Before looking at the impact of informal networks on wages, it is interesting to measure the extent to which they are important in getting a job. This can be considered another form of return to informal networks. Table 2.8.6 provides the distribution of employees by their method in finding a job.⁵¹ Most employees got their job after assistance from their relatives and friends (33 per cent). A slightly lower share directly applied to employers (31.5 per cent) and about 19.4 per cent answered job offers from employers. This is clear evidence of the high return to informal networks as a job-search method and is in stark contrast to the evidence provided in Chapter 4 on methods of recruitment adopted by employers.

Table 2.8.6. Wage employees, by sex, urban/rural area, age group and initiatives in seeking a job

| | Wage employee | Wage employee (%) | Of which sex and urban rural |
|--|---------------|-------------------|------------------------------|
| | | | |

⁵¹ Chapter 3 provides information on job-search methods of unemployed and at-school young people. Chapter 4 looks at recruitment methods adopted by employers in the employers’ module of the STWS.

| | | /thous/ | | Male (%) | Female (%) | Urban (%) | Rural (%) |
|--|----|--------------|-------|----------|------------|-----------|-----------|
| A | B | 1 | 2 | 3 | 4 | 5 | 6 |
| Total | 1 | 124.2 | 100.0 | 49.4 | 50.6 | 65.9 | 34.1 |
| Through public employment service | 2 | 2.0 | 1.6 | 50.0 | 50.0 | 62.5 | 37.5 |
| Through advertisement (in radio, TV, newspaper etc) | 3 | 8.2 | 6.6 | 53.8 | 46.2 | 86.2 | 13.8 |
| Directly applied to employers | 4 | 39.1 | 31.5 | 46.5 | 53.5 | 48.1 | 51.9 |
| Checked at worksites, farms, factory gates, market or other assembly place | 5 | 7.2 | 5.8 | 50.9 | 49.1 | 68.4 | 31.6 |
| Got assistance from friends and relatives | 6 | 41.0 | 33.0 | 49.5 | 50.5 | 80.6 | 19.4 |
| Soak technical and financial sources to run own business | 7 | 1.0 | 0.8 | 50.0 | 50.0 | 87.5 | 12.5 |
| Through job fairs | 8 | 1.3 | 1.0 | 50.0 | 50.0 | 70.0 | 30.0 |
| Suggestion of employers | 9 | 24.1 | 19.4 | 51.8 | 48.2 | 62.3 | 37.7 |
| Other | 10 | 0.4 | 0.3 | 66.7 | 33.3 | - | 100.0 |

Industry wage differentials. The estimates control for 20 sectors (see Table A.2.8.1 in the Statistical Annex). The baseline is constituted of workers in the livestock sector, representing about 40 per cent of total employment, by far the most important sector of employment for the post-transition generation. The industry wage gap is sizeable, especially against workers involved in the livestock sector. Young people employed in any other sector, except fishery and, partly tourism, receive, *ceteris paribus*, higher wages. The wage differential is greater in favour of young people involved in high risk activities, like the mining sector (+140 per cent), and in other sectors where perhaps the demand for foreigners is high, such as hotels and restaurants (+70 per cent), internal trade (+74 per cent), transportation (+85 per cent), and in some specialized service sectors, such as health (+86 per cent). In tourism, there is a positive and sizeable wage differential (120 per cent), but this effect is not statistically significant, due perhaps to high heterogeneity of wages. In other sectors, though still positive compared to the livestock sector, the differential is lower between 40-50 per cent.

This effect is even greater considering that the estimates also contain a specific control for working in rural areas, which is negative, statistically significant and sizeable, and several other controls for the *aimag* of residence. *Ceteris paribus*, young people working in rural areas experience a wage loss of about 41 per cent. This is especially sizeable for women (-73 per cent) compared to men (-28 per cent).

Overall evaluation. The overall significance level is more than satisfactory for this type of estimate, with the R^2 always more than 0.38. The R^2 is especially high in the case of young teenagers, probably because of the smaller number of observations. The statistical insignificance of the variable measuring the log of weekly hours confirms a priori expectations that the hours actually worked do not affect young people's earnings, independent of age and gender. The oldest segment is the only exception: in this case, a 1 per cent increase in the number of hours worked increases earnings by 17 per cent, though the coefficient is statistically significant only at the 10 per cent level. The estimates seem to suggest that the market gives a sufficient reward to human capital, though this is generally higher in urban areas, especially in the capital city. The urban/rural divide is strong and also affects the market for skills. In rural areas, the demand for labour is very much oriented to low skilled jobs and activities, suggesting a lower return to education and insufficient incentive from the demand side to invest in further education.

The lower wages in this sector might, in future, provide an incentive for young people to obtain higher education. However, the tension between the quality of job opportunities offered and the aspirations of young people for more education and higher quality jobs represents an important factor affecting the potential for migration to urban areas. In urban areas, the estimates show that the return to education is sizeable, suggesting investment in human capital has strong incentives to

increase, but the risk there is that the aspirations of young people for better and higher quality education and jobs find a bottleneck in the educational system.

Returns to education or returns to skill? According to the theory of signalling, education would not be a cause of increased productivity, as one would expect, assuming that higher education causes higher wages. Instead, it would be a signal of pre-school innate ability. More skilled individuals would understand that higher education means higher wages and would strive to increase their educational level to achieve this. If this were the case, the correlation between wages and education would be not explained by the presumably higher productivity of the most educated individuals, but by their innate ability. This would mean that education attainment is endogenously determined by wages and, therefore, the OLS estimation method adopted so far would be flawed.

The typical methodology to test for endogeneity of education is by using Instrumental Variable (IV) techniques.⁵² In cross-section estimates, such as those provided here, the educational level of parents are generally used as instruments. Indeed, parents' education does affect children's education, but not their wages.⁵³ The previous literature confirms the existence of endogeneity bias, which generally increases the annual rate of return to education by about 20 per cent. This would in part confirm that higher wages for higher education are a consequence of greater skills, rather than of greater productivity (Card, 1999; Ashenfelter et al., 1999). It is worth noting that previous estimates rarely considered samples of only young people, as is the case of Table 2.8.5. This also provides IV estimates of the corrected annual rate of return to education, using as instrumental variables the years of parents' education. The results suggest a much greater positive endogeneity bias than that previously found in the literature. The annual rate of return to education based on IV estimates is more than double that based on OLS estimates in all cases, but for women the increase is a little lower. As Card (1999) notes, part of the explanation for this finding may be that marginal returns to schooling for certain subgroups – particularly relatively disadvantaged groups with low educational outcomes – are higher than the average marginal returns to education in the population as a whole.

Decomposing the gender wage gap. The previous discussion found that the unconditional gender wage gap is very low and not statistically significant, whereas the conditional wage gap is, and is sizeable. The explanation might be that women are endowed with certain characteristics that generally increase productivity, but they receive lower returns than men. This might be seen as prima facie evidence of some form of discrimination against women. The Juhn, Murphy and Pierce (1993, JMP) decomposition analysis provides a method to test whether women have better or worse characteristics than men and whether they are paid differently (Table 2.8.7). It allows distinguishing the impact on the gender gap of average differences in characteristics (Q, so-called quantity effect), differences in returns to those characteristics (P, so-called price effect)⁵⁴ and of the residual wage distribution (U), which is unobserved. Differences in the residual distribution might capture the overall degree of wage inequality in the country and the way it affects the gender pay gap.

⁵² Without going into methodological details, it is sufficient to say here that the IV methodology consists of making exogenous, the supposedly endogenous independent variable, namely education, in order to estimate its true impact on earnings. To make education exogenous, it is necessary to use exogenous independent variables that affect the endogenous variable, but do not correlate with the dependent variable. In this specific case, it is necessary to find a variable, which affects education attainment, but not wages.

⁵³ Section 2.4 proved that the educational attainment of parents does affect that of their children. Moreover, omitted results of similar Mincerian estimates of the determinants of youth wages including years of education of parents allow us to reject the hypothesis that they correlate with children's wages.

⁵⁴ The price effects are due to different coefficients in Mincerian earnings equations.

The unconditional gender wage gap is featured in the table and, as noted above, it is very small. However, differences in the other factors are significant. The analysis reveals a very interesting finding, that most of the gender gap is due to differences in the way the market values the same characteristics of men and women. Quantity effects tend to reduce the gap, whereas price effects tend to increase it. Women have better characteristics than men, captured by the fact that these differences favour women and, therefore, reduce the gap. A coefficient of -0.20 can be interpreted as saying that if they were paid in the same way, women would earn 20 per cent more, simply because they are potentially more productive and better educated.

However, when men and women have the same characteristics, a woman is paid less, as shown by the positive price effect. These differences increase the pay gap by about 23 per cent. The algebraic difference between this factor that increases the wage of men and the former factor that increases the wage of women is a wage difference in favour of men of about 3 per cent. The impact of the overall degree of wage inequality existing, though sizeable, does not affect in any significant way, the gender wage gap, as shown by the low value of the “U” effect.

Table 2.8.7. Juhn, Murphy and Pierce (1993) decomposition of gender wage gap

| | <i>T</i> | <i>Q</i> | <i>P</i> | <i>U</i> |
|------|-----------|-----------|----------|-----------|
| Mean | 0.0349739 | -0.200214 | 0.232058 | 0.0031298 |

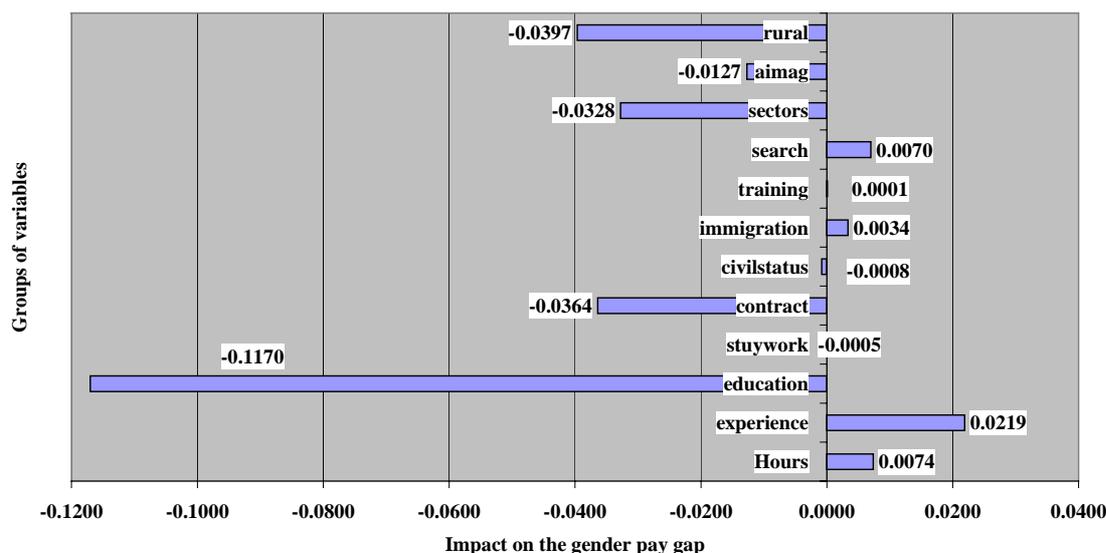
Note: T= total gender wage gap; Q = impact on the wage differential of individual characteristics; P = impact on the wage differential of prices to individual characteristics; U = impact on the wage differential of the residual wage distribution.

Source: own elaboration on SWTS of Mongolia, ILO.

The previous analysis has shown that women are potentially more productive than men. Figure 2.8.2 is a bar chart representing the impact of groups of characteristics on the gender pay gap as based on the JMP (1993) decomposition analysis. The results clearly show that women have characteristics superior to men in terms of their impact on productivity along almost all dimensions.

The dimensions in favour of men are as follows. On average, women have less work experience, due to maternity interruptions. However, the impact on wage differentials would be about 2 per cent. In addition, women work slightly less hours, due to their lower work effort; they use less effective search methods and are more likely to migrate. All the other characteristics of women reduce the gap. Their greater educational endowment outweighs all other factors. If women and men had the same returns to education, women would have about 12 per cent higher wages. Moreover, due to their greater tendency to migrate, women work more often than men in urban areas, where wages are higher. Furthermore, on average, women are employed in better paid sectors and are less likely to work in the informal sector. Previous analysis has shown the greater job stability of women, as measured by their higher share of contracts in general, and permanent contracts, in particular.

Figure 2.8.2. Quantity effects on the gender pay gap based on JMP (1993)



Source: own elaboration on SWTS of Mongolia, ILO.

Overall, the high conditional gender pay gap in favour of men can be attributed to the different way the market remunerates the same characteristics. This result is also confirmed by Oaxaca and Ransom (1994), as reported in Table A.2.8.2 in the Statistical Annex. It is interesting to note that the overall impact of differences in characteristics and coefficients is always in favour of women. Therefore, according to this decomposition analysis, women not only have better characteristics, but are also rewarded more for them. Where then does the gender wage gap in favour of men come from? Table 2.8.8 provides the answer to this question. It gives summary results of the decomposition analysis carried out above: (E) measures the algebraic sum of differences in characteristics and the overall impact in the direction of reducing the gap. The differences in coefficients, called (C), also reduce the gap. The factor that is actually increasing the gap is the difference in the constant term (U), which is due to unobserved differences by gender.

Table 2.8.8. Summary table based on Oaxacha and Blinder decomposition

| | |
|----------------------------------|--------|
| <i>Amount attributable:</i> | -26.6 |
| - due to endowments (E): | -16.6 |
| - due to coefficients (C): | -10 |
| Shift coefficient (U): | 30.1 |
| Raw differential (R) {E+C+U}: | 3.5 |
| Adjusted differential (D) {C+U}: | 20.1 |
| Endowments as % total (E/R): | -474.1 |
| Discrimination as % total (D/R): | 574.1 |

Source: own elaboration on SWTS of Mongolia, ILO.

Policy implications regarding gender differences. The above analysis provides evidence supporting the hypothesis that Mongolian employers pay lower wages to women than men with the same characteristics. This is not only unfair, but also inefficient, inasmuch as it not only reduces the overall productivity of the country, by discouraging the effort of women, but might also reduce employment and participation rates of the least motivated women. The most motivated women, therefore, may decide to pursue their careers, postpone marriage and children, and thereby reduce the fertility rate in a country where the population is small and ageing.

Reducing the degree to which women are paid less should be an important policy objective. Implementing an equal pay policy can do this, requiring strengthening the legal framework and

providing legal assistance to women reporting discrimination practices. Local authorities could provide this assistance and have an important effect on local communities. In addition, action should be taken to help women overcome barriers to better jobs and career prospects; for example, obliging firms to employ women in management roles. This type of positive action would be an important psychological and social factor and affect female labour market behaviour in the long term.

The government should, of course, maintain childcare facilities and employers should guarantee fully-paid maternity leave. The role of tripartite agreements is very important to effectively implement equal pay policies.

Summary remarks and policy implications. The low share of manufacturing and State services suggests that the post-transition production structure is agricultural where the younger generation finds most of their jobs, even when living in urban areas. A distinction is made between formal and informal work by the presence or absence of a labour contract (written or oral). Informal work is more prevalent in young male adults, and those aged 25-29 years, and is concentrated in the livestock sector, thus, confirming the particularly weak position of those involved. Mincerian earnings equations provide a tool to measure returns to education and to different qualification levels. Tertiary education appears to be an important determinant of earnings. Returns to education are not very high on average, but seem to be affected by different skill levels, suggesting sheepskin effects⁵⁵ and that the earnings distribution by educational qualifications is highly non-linear.

However, those with post-compulsory vocational education are not better off than those with compulsory education only, highlighting the problems these young people experience in the labour market, also confirmed by other analysis of employment opportunities by educational categories. This suggests a negative shift in labour demand for this qualification type in post-transition Mongolia, and of the need to upgrade curricula to the present needs of the market economy. The estimate corrected for the level of education of parents provides returns to education that are more than double those without these controls, thereby, confirming the conclusion of Section 2.4 that the educational system is unable to equalize educational chances across individuals with different family backgrounds.

Five years of work experience or more implies 25 per cent higher earnings. The wage effect of work experience goes up to 50 per cent among those aged 25-29 years, confirming the importance of providing skills to young people in addition to education, and suggests that these skills require a reasonably long period to accumulate. Work experience of less than five years is insufficient to increase earnings. In addition, the augmented earnings equation provides information on the wage effect of different factors other than human capital. One important focus of the analysis is on gender wage differentials. On average, female wages are not lower than males. However, this hides discriminating behaviour against women as they have better productivity characteristics.

A specific subsection decomposes the gender wage differential, confirming that if wages were paid equally on the basis of higher educational level, women should have 11.7 per cent more. Once we control for the different characteristics of men and women, it appears that women should have on average 22 per cent more, a sizeable gap, considering overall low earnings. Informal work means a wage loss of about 30 per cent compared to formal fixed-term contracts and 19 per cent to permanent contracts. Migration is not, on average, a statistically significant factor of wage loss. Union membership is neutral. Training brings with it lower, not higher wages. Civil status per se is not an important determinant of wage differentials. Using informal networks as a job seeking method causes a reduction in wage level.

Finally, there is evidence of large industry and regional wage differentials. Working in the livestock sector means a reduction in wages of between 40–140 per cent. In addition, young

⁵⁵ By sheepskin effect, it is meant that educational qualifications are more important than years of education and hence uncompleted years of education do not provide additional benefits in terms of earnings.

people in rural areas have 40 per cent lower wages than the rest of the population. All other factors held constant, living in Ulaanbaatar implies generally higher wages, especially compared to some specific regions such as Bayankhongor (-70 per cent), Govialtai (-66 per cent), Sunkhbaatar (-70 per cent), Selenge (-76 per cent), Khovd (-66 per cent), Khuvusgul (-85 per cent).

The analysis confirms the importance of education as an income multiplier for young people and, therefore, as a buffer against poverty. It also suggests that investment in education should be encouraged. Talented young people from poor family backgrounds should be targeted by subsidies. Women should be helped to reconcile productive and reproductive activities.

2.9. Self-employment

Introduction. The self-employed are young people who work for profit or family gain, including unpaid family workers. Overall, self-employment represents 17.4 per cent of the total sample population and, for most, is the only chance of employment. One out of two young people is self-employed, of which 62.5 per cent are unpaid workers in family businesses. This section treats these two groups separately, starting with the former.

Employed in own business: size and components. As already shown in Table 2.7.1, self-employment has a share of 6.52 per cent of the entire sample population, 13.7 per cent of the workforce and 19.4 per cent of employment. On average, self-employment involves men rather than women. In addition, it is more common among those aged 25-29 years and in rural areas, where it represents about 15 per cent of the sample population compared to the capital city, where it is only 1.7 per cent. In *aimag* and *soum* centres, self-employment is slightly more common than in Ulaanbaatar, with shares of 3.6 per cent and 5.08 per cent, respectively. Overall, this suggests that this component of self-employment is not so much related to trade, services and professional activities as to agriculture.

Table 2.9.1 provides further details on self-employment, important to complete the picture. It shows distribution of self-employment by educational attainment and highlights that those with less education choose self-employment, as expected considering its diffusion in rural areas. Being self-employed is very common among those who have primary education or below, but less common among those with basic or secondary education.⁵⁶ Nonetheless, it is also common among those with vocational technical education or above. This shows that it has two distinct identities: generally linked to agriculture in rural areas; more related to entrepreneurial and professional activities in urban areas. Those with high educational attainment make up the majority of this second type. The table also shows share of self-employment relative to the labour force, rather than the entire population, giving a slightly different perspective. Above all, the share of the labour force is much higher, suggesting that it represents an important opportunity for many young people who have started their school-to-work transition. Approximately, 13.7 per cent of the youth labour force is self-employed and increases with age reaching 18.2 per cent for those aged 25-29 years.

About 21.1 per cent of the uneducated are self-employed increasing to 23.4 per cent for those with primary education. Over 60.9 per cent of those with basic education or below run their own business. This is important for policy-makers: self-employment is an alternative to paid employment, especially for the least skilled and hard to employ. The last columns of the table confirm the two sidedness of self-employment, showing that the least educated self-employed operate in rural areas, whereas the more educated in urban areas. Note that self-employed women are more frequent among those with high educational attainment.

⁵⁶ The strong correlation between incomplete compulsory education and self-employment might suggest that there is a two-way causality chain between these two phenomena: on the one hand, low education pushes towards self-employment; on the other hand, having their own business might strongly reduce the incentives to invest in education.

Table 2.9.1. Self-employment by age group and educational attainment (%)

| | % of the youth population | % of the youth workforce | Of which urban rural and sex | | | |
|------------------------------------|---------------------------|--------------------------|------------------------------|-------------|-------------|-------------|
| | | | Male | Female | Urban | Rural |
| Total | 6.5 | 13.7 | 79.2 | 20.8 | 31.3 | 68.7 |
| 15-19 | 0.7 | 4.3 | 84.2 | 15.8 | 10.5 | 89.5 |
| 20-24 | 7.5 | 12.1 | 79.3 | 20.7 | 34.7 | 65.3 |
| 25-29 | 14.3 | 18.2 | 78.7 | 21.3 | 30.9 | 69.1 |
| Uneducated | 15.9 | 21.1 | 100.0 | - | 2.9 | 97.1 |
| Primary | 13.4 | 23.4 | 97.1 | 2.9 | 5.8 | 94.2 |
| Basic (Grade 4-8) | 5.2 | 16.4 | 92.6 | 7.4 | 14.8 | 85.2 |
| Secondary (Grade 9-10) | 4.3 | 10.8 | 58.2 | 41.8 | 53.8 | 46.2 |
| Vocational technical education | 10.0 | 12.9 | 63.6 | 36.4 | 59.1 | 40.9 |
| Diploma, specialized secondary | 11.0 | 15.0 | 56.3 | 43.8 | 81.3 | 18.8 |
| Tertiary/bachelor | 5.5 | 6.8 | 47.7 | 52.3 | 75.0 | 25.0 |
| Self employed youth /thous/ | 52.7 | | 41.7 | 11.0 | 16.5 | 36.2 |

Who is self-employed? The previous analysis did not allow controlling for the contemporaneous presence of all the determinants of self-employment. This can be done with the help of Panel (b) of Table A.2.7.1 in the Statistical Annex. This is the result of a multinomial logit estimate of belonging to one of several labour market statuses excluding from the sample young people still in education. The thinking is that this is a specific group, often still at an early stage of their school-to-work transition.⁵⁷ The same estimates are replicated for different age groups, by gender and urban/rural areas. The previous discussion highlights remarkable differences across age groups, gender and, above all, urban/rural areas. The multinomial logit model is simply a way to measure the *ceteris paribus* impact of many factors at once, which is not possible in tables that only focus on a few dimensions.

The independent variables include not only the characteristics of individuals, but also households, such as educational level of parents, and location. Note that the exponential of estimated coefficients should be taken as the odds ratio of being self-employed rather than unpaid family workers. With this in mind, it is easy to see the richness of information in the table.⁵⁸

The coefficient of the female dummy variable in the column including the entire sample, suggests that *ceteris paribus* women have about 40 per cent⁵⁹ more chance than men of being self-employed rather than being an unpaid family worker. Therefore, men are twice as likely to be self-employed rather than being unpaid family workers. This result should be read in terms of the specific baseline adopted in the estimates. As women are more likely to be involved in unpaid family work, the odds ratio for self-employment is probably lower than it would otherwise have been if the baseline was employment or unemployment.

Comparing the coefficients of each variable for men and women, it is clear that only a few, such as age, have the same impact on the probability to be self-employed. The impact of other factors is very different across gender, confirming the previous finding that female self-

⁵⁷ Section 2.6 gives a specific analysis of young people who are still in school.

⁵⁸ Section 2.6 gives more information on the interpretation of coefficients in the multinomial logit model, interpretation which is similar to that of the logistic regression, with the only difference that in the former case the baseline is only one of the outcomes. In the multinomial logit regression, one specific labour market status has to be used as the baseline

⁵⁹ This result is obtained by exponentiating the coefficient: $e^{(-\beta)}$. This measures the odds ratio. Since the coefficient is negative, the odds ratio is lower than one, which means that the chances of women belonging to the given labour market status rather than the baseline labour market status are lower than those of men. When the coefficient is positive, $e^{(\beta)}$ returns a value of the odds ratio greater than one. In this case, the given characteristics increase the chances to belong to the given outcome compared to the chances to belong to the baseline outcome.

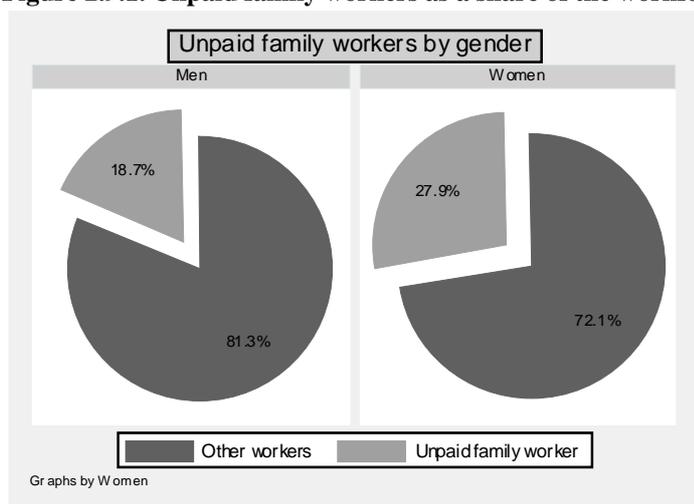
employment is almost only ever present in urban areas and for those types of jobs requiring a high level of education. For instance, women with tertiary education have a greater chance of being self-employed than their peers with compulsory education or below. Married women have less chance of being self-employed than single women. The opposite is true for men.

In addition, the level of a father's education is irrelevant for both genders, whereas a mother's is more important for women than men, probably due to the ambivalent nature of self-employment for men. In their case, self-employment can either be in urban or in rural areas, with very different characteristics. Once controlling for other characteristics, the analysis suggests that self-employment is more common in urban than rural areas. For men, this result is partly at odds with the previous discussion highlighting that self-employment is more common in rural areas. A possible explanation of the difference between unconditional and conditional results is probably that the multinomial logit explains self-employment in urban more than in rural areas. Moreover, the reference group here is unpaid family work. The last two columns would indicate that few determinants are really important, suggesting that other factors are not captured in the data.

Table A2.7.2 in the Statistical Annex presents the same estimates as Table A2.7.1, using as independent variable their occupation. The STWS distinguishes different types of occupations of parents. The other determinants are exactly the same as in Table A.2.7.1. The other variables do not seem to be statistically significant, although the sign and the coefficients are very different from one occupation to the next.

Unpaid family workers. Self-employment also includes young people who work for family gain, but are not directly paid for their work. As already shown in Table 2.7.1, they are 10.9 per cent of the entire sample population, 22.9 per cent of the workforce and 32.4 per cent of employment. This is, therefore, an important component of employment. More women than men work in the family business: 11.9 and 9.8 per cent of the population, respectively. This small difference is magnified when taken as a share of the workforce (Figure 2.9.1). In this case, the percentage of female unpaid family workers reaches almost 30 per cent of the female workforce and is about 10 per cent higher than that of men. These figures confirm the importance of this type of employment for women.

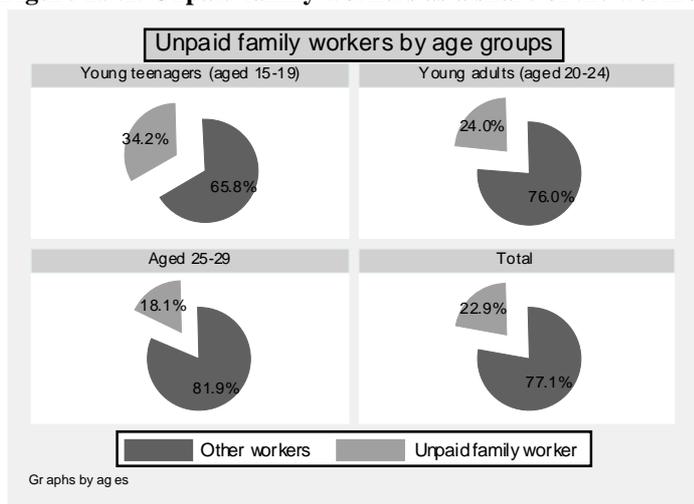
Figure 2.9.1. Unpaid family workers as a share of the workforce, by gender



Source: own elaboration on SWTS of Mongolia, ILO.

Being employed in a family business is more frequent among young teenagers than other age groups. About 34.2 per cent of them are unpaid family workers. The comparable figure for those aged 25-29 years goes down to 18.1 per cent. Therefore, the family business is one of the main options for young teenagers leaving school, the most likely alternative being unemployment.

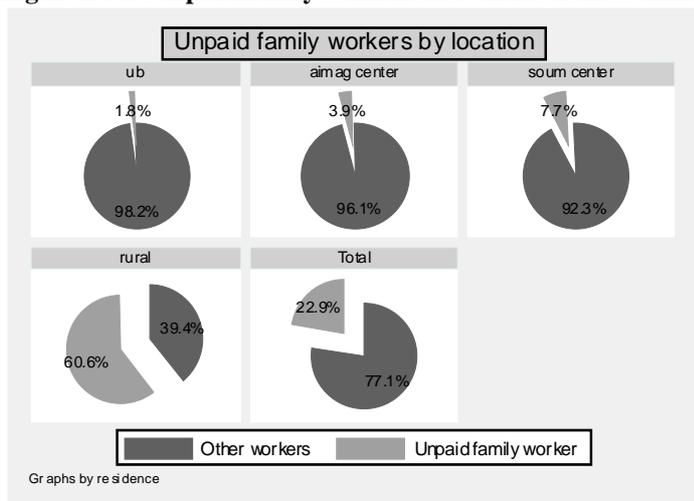
Figure 2.9.2. Unpaid family workers as a share of the workforce, by age group



Source: own elaboration on SWTS of Mongolia, ILO.

Figure 2.9.3 provides evidence that unpaid family work is essentially a rural phenomenon. Less than 2 and 4 per cent of the youth workforce choose this type of self-employment in the capital city and in *aimag* centres, respectively. In rural areas, the comparable figure goes up to 39.4 per cent.

Figure 2.9.3. Unpaid family workers as a share of the workforce, by location



Source: own elaboration on SWTS of Mongolia, ILO.

2.10. Unemployed

Introduction. The unemployed and, especially the long-term unemployed,⁶⁰ are the weakest groups to target. Therefore, it is crucial to assess the size and composition of the determinants of long-term youth unemployment. Typically, the weakest groups of unemployed include the least educated, often men, with little work experience, residing in rural, depressed areas (see, for instance, Beleva et al., 2001, for Bulgaria). This section provides a picture of youth unemployment that identifies the weakest groups to which ALMP should be addressed. The analysis looks not only at the overall youth (long-term) unemployment rate, but also at other hardship indicators experienced by young people in the labour market. The ratio of youth to adult unemployment is an important indicator of the youth disadvantage independent of general

⁶⁰ The long-term are those young people that are unemployed for more than 12 months.

economic conditions. That is, this ratio is a measure of the hardship of school-to-work transition. The latter, therefore, depends on the type of labour market institutions prevailing in the country, including the degree of labour market flexibility and the minimum wage legislation. However, as noted in Appendix A.2, an important aspect of the institutional context is also represented by the characteristics of the educational and training systems and the types of fiscal incentives provided for hiring young people.

The youth unemployment rate and the youth-to-adult unemployment ratio. All combinations of youth unemployment and ratio of youth to adult unemployment rate can be found across countries. Where general economic conditions are bad, the youth unemployment rate is higher, but the ratio of youth to adult unemployment rate is lower than elsewhere. Where the general economic conditions are favourable, but the youth-to-adult unemployment ratio is high, there is a specific youth disadvantage to be addressed by policy intervention. In simple terms, high youth unemployment should be fought with macroeconomic policy, whereas microeconomic policy should help reduce a high ratio of youth-to-adult unemployment. Following the flexicurity approach to microeconomic policy (Cazes and Nesporova, 2007), this should be based on reforms of the educational and training systems, on the definition of the optimal degree of flexibility in the labour market, coupled with a well-designed system of non-employment benefits to provide income stability to those suffering recurrent unemployment.

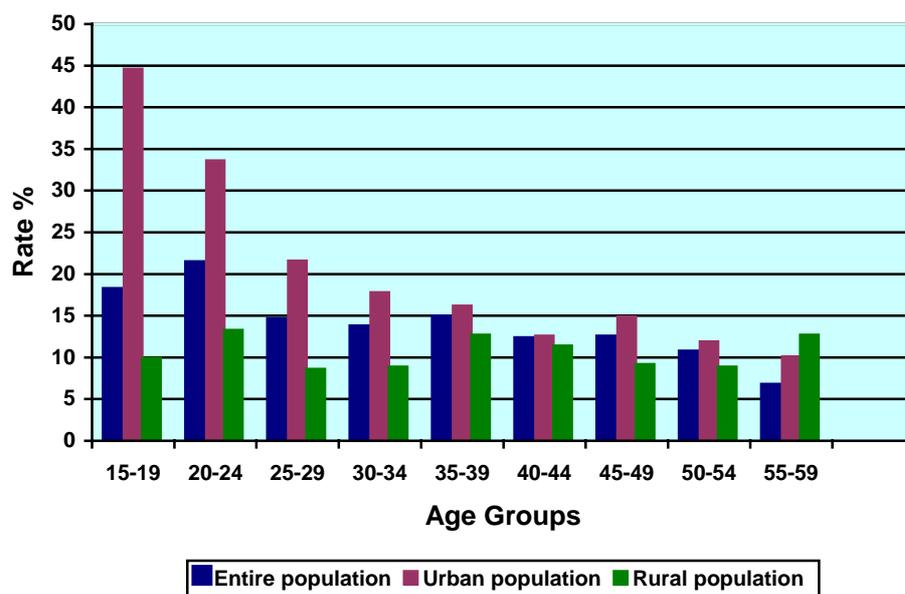
Another important aspect shown in Figure 2.10.1 is, as is typical of several other countries in the entire sample, the unemployment rate of young adults is higher than that of young teenagers, and, in urban areas the opposite is true, where it is extraordinarily high at around 45 per cent. This is an unambiguous indication of the problem of the educational system to integrate young teenagers who, if they drop out have, in fact, fewer chances of finding gainful and stable employment and, therefore, join the unemployment pool.

The urban/rural divide. In terms of the unemployment rate, this is negligible for the over 35 years. This is surprising considering the evidence available relative to some other CEE transition countries, where the unemployment rate is typically higher in rural areas (Boeri, 2000; Beleva et al., 2001; Ingham et al., 2005). However, there are also many examples of transition countries where the unemployment rate is lower in rural areas due to a relatively lower degree of industrial restructuring. There are also rural areas where the reform process is slower and the economic structure more stable. A lower degree of structural change might explain the greater job stability of young people.⁶¹ Consequently, the ratio of youth to adult unemployment rate is much higher in urban than rural areas where it is close to one, suggesting that young and adults have the same chance of being unemployed as those actively seeking jobs. This is the ideal situation when the youth disadvantage is cancelled out, and is typical of places and economic conditions where activities requiring essentially unskilled manual labour are as important as work experience.

Figure 2.10.1. Unemployment rate by age group and urban/rural area

⁶¹ This is especially the case for young females since, during restructuring, firms tend to fire young women more frequently (according to the principle “last-in-last-out”) and, above all, to hire them less frequently (Stefanova et al., 2007).

Unemployment Rate (Classified by Age Groups, Entire Population, Urban and Rural)



Source: National Tripartite Plus Youth Committee (2005).

In urban areas, the ratio is close to 3 for young teenagers, slightly greater than 2 for young adults and about 1.5 for those under 30 years. Young adults and the oldest segment have, on average, a higher educational level, making them more employable. The youth experience gap disappears with age, because they accumulate work experience. While the youth unemployment rate is higher in urban areas, the share of long-term unemployment is higher in rural areas (see Table 2.10.1). Only about 39 per cent of those unemployed in urban areas experience this for longer than a year, whereas in rural areas, the comparable figure is 60.5 per cent. This is probably because of the greater labour turnover in urban compared to rural areas where unemployment is concentrated in the low motivated and unskilled workers. Therefore, rural areas provide some kind of employment for the young because of the lower skill requirement in the agricultural sector, but in urban areas, they experience an increasingly difficult school-to-work transition, due to the greater skill requirement since the reform process.

In addition, in rural areas unemployment is low, but young people are forced to work in low productivity jobs. There is incontrovertible evidence of very low quality jobs offered to young people in rural areas, suggesting that the potential for migration to urban areas or abroad is very high. In urban areas, economic transition and the ensuing processes of industrial restructuring and labour reallocation from traditional manufacturing to more advanced and diverse sectors (Morris and Brunn, 2005), means that employment opportunities for young people are rarer.

Overall, this suggests that any type of employment policy should take into careful consideration the urban/rural divide. Training programmes should be targeted to young people in urban areas and the long-term unemployed in rural areas, to increase their qualifications and skills level. To reduce the potential leakage in the workforce from the already low populated rural areas, it is important to increase job quality by, for instance, increasing the supply of schools to promote educational attainment and favour the development of more productive agricultural activities. If oriented towards the formation of skills used in the agricultural sector, schools might be used as a channel for new production methods.

Another explanation of low youth unemployment in rural areas is, however, in the higher inactivity rate. In transition countries these areas are a reservoir of labour that survives in subsistence agricultural activities, especially where privately owned land is organized in small

plots (extensive agriculture), and the unemployment rate is very high in the urban areas, therefore, incentives to migrate are lower.⁶² The role of inactivity will be discussed in more depth in the next section. However, it is worth remarking that unpaid work on the family farm is insufficient to achieve a decent livelihood and young people should be offered some form of unemployment benefit to cope with their low income and also offered opportunities to invest in the development and accumulation of new skills.

The gender gap in employment opportunities. Table 2.7.1 has shown that men have a higher unemployment to population ratio than women: 15.7 per cent compared to 12.4 per cent. However, as can be seen, the advantage of women almost vanishes when looking at the unemployment rate: female 28.9 per cent male 30 per cent (Table 2.7.2). This is obviously due to the higher inactivity rate of women: female 57.3 per cent male 47.5 per cent. The unemployment rate of men and women is similar at all ages, as shown in Figure 2.10.2.

Figure 2.10.2. The youth unemployment rate by age and gender

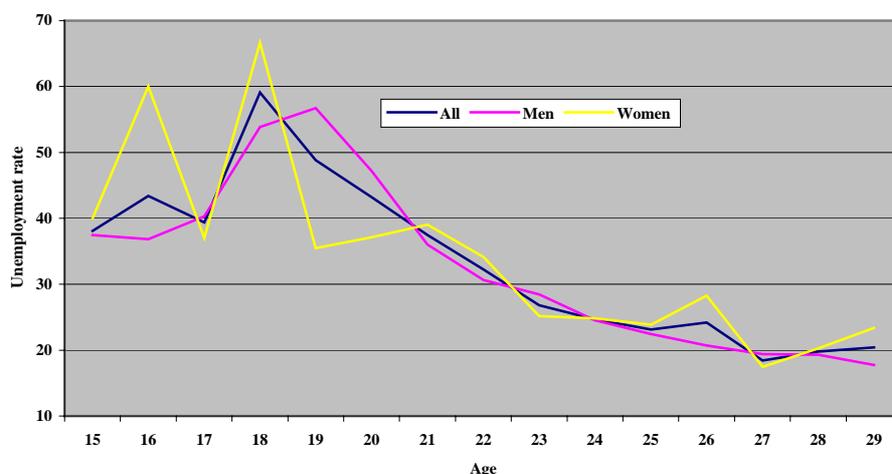


Table 2.10.1 based on the Mongolian STWS, shows youth employment by time taken to find a job. Gender, different age groups, and territorial units are the dimensions along which the information is broken down.⁶³ Similar to other transition countries,⁶⁴ youth unemployment is more common among men. However, the female advantage in terms of lower unemployment rates disappears for the oldest segments of the sample and is mainly due to family commitments. That women invest more in education suggests that even in a country where traditional gender roles are still very strong they aim to attain decent jobs in their adult lives and are not prepared to be relegated to unpaid family work.

⁶² Incentives to migrate from rural to urban areas are low if the unemployment rate is higher in urban areas. Unemployment gaps, more than wage gaps are behind migration flows.

⁶³ The table shows the number of unemployed youth in column (3). Assuming that the sample of the STWS is nationally representative, not only the youth unemployment rate, but also the number of unemployed is higher for young adults compared to young teenagers. However, despite the lower unemployment rate of the 25-29 years, the number of unemployed is higher than that of young teenagers. This does not mirror the distribution by age of the sample, but rather that the unemployment rate is computed over a larger volume of labour force for those aged 25-29 years, simply because the employment share is higher in their case, explaining the higher unemployment rate and lower number of young teenagers unemployed compared to that of the under-30 years.

⁶⁴ This is also a typical finding in many OECD countries. There are also several examples of the opposite situation of countries where women have higher unemployment rates than men.

From a policy point of view, equal pay opportunities should be implemented and enforced by the government to help reconcile work and household activities. This implies provision of maternity leave and help for unemployed mothers.

Table 2.10.1. Unemployed youth, by time to seek a job, sex, age group, urban rural, region and residence

| A | B | Unemployed youth /thous/ | Out of which: time to seek a job /per cent/ | | | | | | |
|--------------------------------|-----------|--------------------------|---|---------------|----------------|----------------|-----------------|--------------------|-------------------------|
| | | | Less than a week (%) | 1-4 weeks (%) | 1-2 months (%) | 3-6 months (%) | 7-11 months (&) | 12 - 24 months (%) | More than 24 months (%) |
| | | 1 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Total | 1 | 45,1 | 2,8 | 5,9 | 13,4 | 20,1 | 9,2 | 25,7 | 22,9 |
| 15-19 | 2 | 8,7 | 2,9 | 7,2 | 18,8 | 26,1 | 10,1 | 29,0 | 5,8 |
| 20-24 | 3 | 21,0 | 3,0 | 6,0 | 15,0 | 22,2 | 7,2 | 26,3 | 20,4 |
| 25-29 | 4 | 15,4 | 2,5 | 4,9 | 8,2 | 13,9 | 11,5 | 23,0 | 36,1 |
| Male | 5 | 25,6 | 4,4 | 7,4 | 12,3 | 19,7 | 9,9 | 24,6 | 21,7 |
| 15-19 | 6 | 5,5 | 4,5 | 6,8 | 20,5 | 22,7 | 11,4 | 27,3 | 6,8 |
| 20-24 | 7 | 12,4 | 5,1 | 8,2 | 13,3 | 22,4 | 8,2 | 23,5 | 19,4 |
| 25-29 | 8 | 7,7 | 3,3 | 6,6 | 4,9 | 13,1 | 11,5 | 24,6 | 36,1 |
| Female | 9 | 19,5 | 0,6 | 3,9 | 14,8 | 20,6 | 8,4 | 27,1 | 24,5 |
| 15-19 | 10 | 3,2 | - | 8,0 | 16,0 | 32,0 | 8,0 | 32,0 | 4,0 |
| 20-24 | 11 | 8,7 | - | 2,9 | 17,4 | 21,7 | 5,8 | 30,4 | 21,7 |
| 25-29 | 12 | 7,7 | 1,6 | 3,3 | 11,5 | 14,8 | 11,5 | 21,3 | 36,1 |
| Urban | 13 | 25,3 | 4,0 | 7,0 | 15,4 | 22,9 | 11,4 | 20,9 | 18,4 |
| 15-19 | 14 | 5,3 | 4,8 | 7,1 | 21,4 | 26,2 | 14,3 | 26,2 | - |
| 20-24 | 15 | 11,2 | 4,5 | 6,7 | 16,9 | 29,2 | 7,9 | 18,0 | 16,9 |
| 25-29 | 16 | 8,8 | 2,9 | 7,1 | 10,0 | 12,9 | 14,3 | 21,4 | 31,4 |
| Rural | 17 | 19,8 | 1,3 | 4,5 | 10,8 | 16,6 | 6,4 | 31,8 | 28,7 |
| 15-19 | 18 | 3,4 | - | 7,4 | 14,8 | 25,9 | 3,7 | 33,3 | 14,8 |
| 20-24 | 19 | 9,8 | 1,3 | 5,1 | 12,8 | 14,1 | 6,4 | 35,9 | 24,4 |
| 25-29 | 20 | 6,6 | 1,9 | 1,9 | 5,8 | 15,4 | 7,7 | 25,0 | 42,3 |
| Total | 21 | 45,1 | 2,8 | 5,9 | 13,4 | 20,1 | 9,2 | 25,7 | 22,9 |
| Ulaanbaatar | 22 | 16,3 | 3,9 | 10,1 | 16,3 | 26,4 | 11,6 | 15,5 | 16,3 |
| Aimag center | 23 | 9,1 | 4,2 | 1,4 | 13,9 | 16,7 | 11,1 | 30,6 | 22,2 |
| Soum center | 24 | 15,6 | 1,6 | 4,8 | 11,3 | 14,5 | 6,5 | 32,3 | 29,0 |
| Rural | 25 | 4,2 | - | 3,0 | 9,1 | 24,2 | 6,1 | 30,3 | 27,3 |
| Total | 26 | 45,1 | 2,8 | 5,9 | 13,4 | 20,1 | 9,2 | 25,7 | 22,9 |
| Uneducated | 27 | 1,3 | - | - | 30,0 | 20,0 | - | 30,0 | 20,0 |
| Primary | 28 | 3,8 | 10,0 | 10,0 | 3,3 | 10,0 | 10,0 | 26,7 | 30,0 |
| Basic (Grade 4-8) | 29 | 10,3 | 1,2 | 6,1 | 11,0 | 11,0 | 8,5 | 30,5 | 31,7 |
| Secondary (Grade 9-10) | 30 | 16,8 | 3,0 | 4,5 | 14,3 | 22,6 | 10,5 | 22,6 | 22,6 |
| Vocational technical education | 31 | 2,8 | | 9,1 | | 13,6 | 4,5 | 40,9 | 31,8 |
| Diploma, specialized secondary | 32 | 1,0 | 12,5 | | 25,0 | 12,5 | 25,0 | 12,5 | 12,5 |
| Tertiary/bachelor | 33 | 9,1 | 1,4 | 6,9 | 19,4 | 31,9 | 8,3 | 22,2 | 9,7 |
| Master's degree and above | 34 | 0,1 | - | - | - | 100,0 | - | - | - |

Source: own elaboration on SWTS of Mongolia, ILO.

Long-term unemployment. Short (even repeated) periods of unemployment are likely to have relatively limited long-term consequences. However, extended periods early in working life may have negative consequences. To understand the importance of preventing long unemployment spells, it is important to recall one key point of the European Union Employment Guidelines: young people should receive some opportunity for training, education or work experience before being unemployed for six months. Keeping this in mind, this section now looks at the duration of unemployment of young people.

At the time of the survey, 57.8 per cent of unemployed youth had experienced an unemployment spell of longer than six months, those with long (12-24 months) and very long (more than 24 months) spells is 48.6 per cent, high compared to other transition countries (see Table 2.10.1).⁶⁵ Typically, young people are unemployed for less time than adults because of their higher labour turnover in an attempt to gain experience by moving from employment to periods of unemployment, education and training. In Mongolia, the high share of youth long-term unemployment might be not only because of the large unemployment pool, but also on a low degree of labour market flexibility and scarcity of educational and training opportunities.

The share of long-term unemployment is higher for those aged 25-29 years as, once they have found employment, it tends to be more stable. However, those who are unsuccessful in finding a job remain unemployed longer. This would suggest that policy-makers should emphasise education, training or, better still, employment opportunities. For the younger segments, reduction of the drop out rate would be more effective in reducing the length of unemployment. For young teenagers and young adults, investment in human capital is important to increase their chances of employment in the future.

Female long-term unemployment. Women have lower unemployment rates than men, but the opposite is true of their periods of unemployment. The hypothesis is that women seek stable employment more frequently than men and are, therefore, less mobile in the labour market. If stable employment cannot be found, they prefer to wait, rather than going into the informal sector. As noted in Section 2.7, although temporary work is evenly distributed by gender, men accept informal work more frequently. Table 2.10.2 gives the distribution of long-term unemployment by gender for those young people who have children. It shows that the share of very long-term unemployment is much greater for women with children than men with children. As unemployed women with children are the larger number, this might be an important factor to explain the longer unemployment duration of women.

Table 2.10.2. Unemployment duration by gender and people with children

| | <i>Men</i> | <i>Women</i> | <i>Total</i> |
|-------------------------------|------------|--------------|--------------|
| Less than a week | 1 | 0 | 1 |
| | 2.08 | 0 | 0.91 |
| 1-4 weeks | 6 | 2 | 8 |
| | 12.5 | 3.23 | 7.27 |
| 1-2 months | 5 | 7 | 12 |
| | 10.42 | 11.29 | 10.91 |
| 3-6 months | 10 | 8 | 18 |
| | 20.83 | 12.9 | 16.36 |
| 7-11 months | 4 | 5 | 9 |
| | 8.33 | 8.06 | 8.18 |
| 12 - 24 months | 11 | 20 | 31 |
| | 22.92 | 32.26 | 28.18 |
| More than 24 months | 11 | 20 | 31 |
| | 22.92 | 32.26 | 28.18 |
| Number of observations | 48 | 62 | 110 |

Source: own elaboration on SWTS of Mongolia, ILO.

The provision of more part-time jobs would help women reconcile the labour market with unpaid family work and reduce long-term unemployment. Part-time work could be considered an alternative to unemployment or to working in the informal sector for some women. However, as

⁶⁵ Beleva et al. (2001) find that 49.9 per cent of Bulgarian unemployed youth had spells longer than a year and 72.3 per cent longer than six months.

this is costly for firms that have to hire two people instead of one, there is a need to implement and enforce equal pay/equal opportunity arrangements in favour of women, while promoting low-cost childcare facilities and maternity leave.

Youth long-term unemployment and education. The level of human capital endowment is an important dimension of long-term youth unemployment. It is a proxy of the observed skills that young people possess. Table 2.10.1 clearly shows that education is an important dimension of (long-term) unemployment. The return to education in terms of a smaller chance of remaining in the unemployment pool is high, not only for those with tertiary education or above, but also for those with general secondary and specialized secondary education. This finding confirms the decisive role of education as a leverage to reduce (long-term) youth unemployment in the future.

Vocational education. The share of those with unemployment spells longer than 12 months is over 70 per cent among the unemployed holding diplomas of vocational secondary education. Women with vocational educational diplomas still have a sizeable wage premium. However, men's wages are not significantly different from a statistical point of view compared to those men with compulsory education only. The low return to education in terms of wages and employment opportunities for those with vocational education only highlights the problem of its quality. As vocational education is very specific, it is more likely to become obsolete during transition. From a policy perspective, this calls for in-depth reforms to address issues of mismatch between supply and demand of vocational skills and updating of curricula. Vocational schools should change their specialization and adapt their subjects to meet the needs of a quickly changing labour market.

Determinants of youth unemployment. What are the risk factors that might affect the probability of being unemployed?. The panels (a) of the Tables A.2.7.1 and A.2.7.2 in the Statistical Annex provide the means to tackle this issue. As already shown in Section 2.7,⁶⁶ these tables measure the factors affecting the "choice" to be in a given labour market status and the extent to which unemployment and the ensuing poverty is transferred from parents to children, creating a poverty trap. Those with general secondary and tertiary education are more at risk of becoming unemployed than those with primary education or below. This finding contrasts with the composition of labour demand analysed in Chapter 4.⁶⁷ The negative effect of secondary and tertiary education on the risk of unemployment is similar for almost all subgroups of the sample population and, in rural areas, is 22.8 times higher. An explanation is that general secondary education alone is not seen by employers as providing any specific skills and is, therefore, only an access to university. Section 4.2 confirms this impression.

However, this is not the case for tertiary education, when young people look for better jobs and their search takes time. This hypothesis would find support in the low statistical significance of the coefficient for tertiary education among the oldest segment in the sample.

Immigrants are less at risk of unemployment than residents.

The high positive sign for the location variables confirms the already noted strong regional unemployment differential existing in the country. This suggests looking at whether the risk factors of unemployment are the same or different in urban and rural areas. Holding only a diploma of specialized secondary education is a risk factor in rural, but not urban areas.

⁶⁶ Refer to Section 2.7 also for methodological details and for the interpretation of coefficients in the multinomial logit model.

⁶⁷ One possible explanation of this apparently surprising result could be the baseline adopted in the analysis: the coefficient would tell us that those with secondary or university education are more likely to be unemployed than unpaid family workers. The coefficient should not be read as a risk of individuals with secondary or tertiary education being unemployed rather than employed. In fact, tertiary education increases the chances of being employed either in paid work or in own business.

The risk of unemployment is lower in larger households, perhaps related to a family allotment. A way to capture the extent to which unemployment is the result of intergenerational transfer is to look at the role of parents' education on the risk of unemployment of their children.

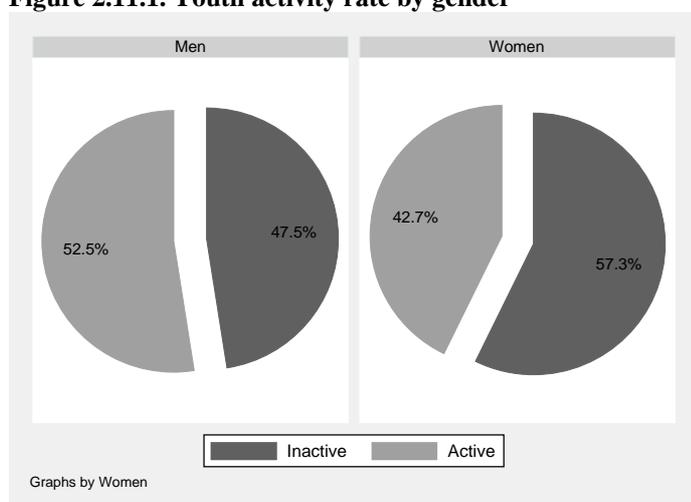
Table A.2.7.2 gives the coefficient of parents' occupations on the probability of a young person being unemployed and the results show that the impact of parents' occupations is not particularly strong on the risk of being unemployed rather than being an unpaid family worker. This again might be due to the baseline adopted and to unpaid family work being a very similar status to unemployment. Even if a variable is not significant it does not mean that it has no affect on the probability of being unemployed altogether. An unemployed father seems to be irrelevant to the choice of young people between unemployment and unpaid family work. This is not true of those whose mother is unemployed or an unpaid family worker. These seem to be factors of risk of unemployment. A young Mongolian whose mother is unemployed is four times more likely to be unemployed. This effect is particularly strong for young teenagers and young adults, but reduces with age. It is also more frequent for women, confirming that their behaviour is more affected by their mothers' characteristics and the behaviour of boys by their fathers' characteristics. Intergenerational unemployment traps are higher in rural than urban areas.

2.11. Outside of the labour force

Introduction. As noted earlier, there are two groups of inactive young people according to their inactivity. School attendance is the first reason to be outside of the labour force. However, being in school is the "transitory job" of young people, making them behaviourally different from the rest (those who have already completed their education, are jobless, but not actively seeking work). For this reason, they have been the focus of Section 2.6 of this chapter.

Size and components of inactivity. The STWS disentangles different reasons for young people to be outside the labour force: a) engaged in home duties; b) on sick leave; c) taking care of children (Table 2.7.1). Overall, the inactivity rate equals 52.5 per cent for the entire sample. However, as noted earlier, much of inactivity is due to young people still at school. Excluding this last group, the average inactivity rate becomes about 10.8 per cent. Women are more inactive in both categories. Overall, they are about 57.3 per cent of the sample and men are 47.5 per cent, as shown in Figure 2.11.1. However, excluding the young people in school, the inactivity rate of women is 13.3 per cent. The comparable figure for men is 7.3 per cent. The difference is due to women being outside the labour force more frequently, to take care of children (Table 2.7.1).

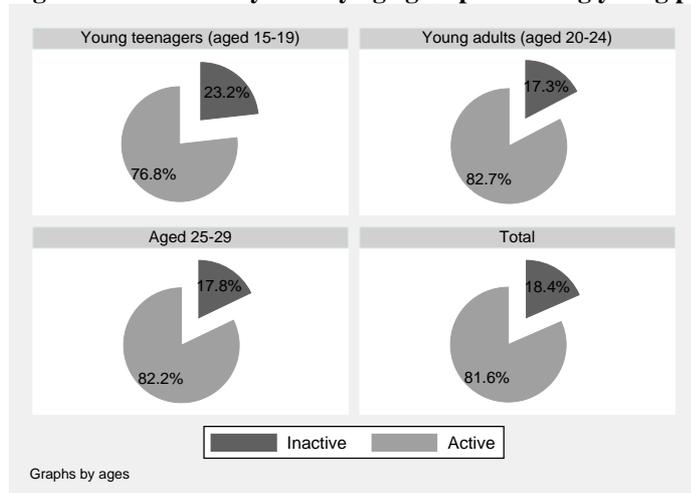
Figure 2.11.1. Youth activity rate by gender



Source: own elaboration on SWTS of Mongolia, ILO.

The overall inactivity rate reduces strictly with age (Table 2.7.1), perhaps due to the high share of young teenagers and young adults still at school. When excluding young people at school, it appears that the inactivity rate is still lower for older ages, but the gap dramatically reduces. Figure 2.11.2 shows that the youth inactivity rate for young teenagers goes down to 23.2 per cent, which is only about 5 percentage points higher than average.

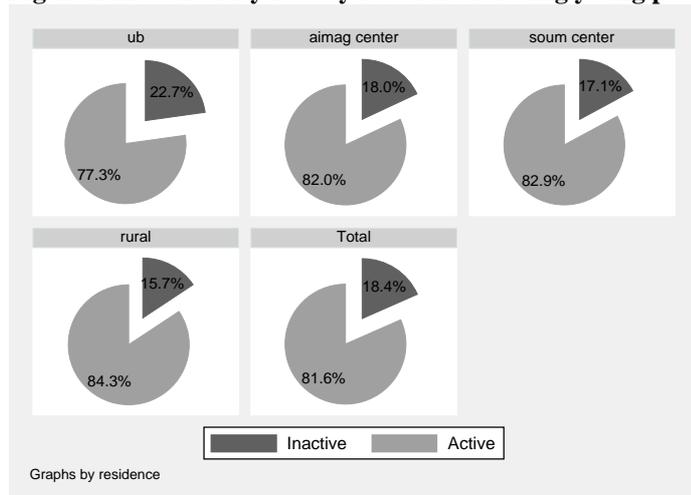
Figure 2.11.2. Activity rate by age group excluding young people at school



Source: own elaboration on SWTS of Mongolia, ILO.

Overall, the inactivity rate is much higher in urban than rural areas, mainly because of the higher share of young people still at school. Youth inactivity reached 65.3 per cent in urban areas and only 30.8 per cent in rural areas (Table 2.7.1), confirming the impression that urban areas are unable to offer employment opportunities to young people, as already shown by the spatial distribution of unemployment. In urban areas, where the supply of education and unemployment are both higher, young people might prefer to be at school rather than be unemployed or inactive. However, the lower inactivity rate in rural areas is mainly due to working in family businesses, often unpaid. Figure 2.11.3 corroborates this; it shows inactivity rate by location excluding young people at school

Figure 2.11.3. Activity rate by location excluding young people at school



Source: own elaboration on SWTS of Mongolia, ILO.

Risk factors of inactivity. Which factors affect the probability of being inactive? Panels (d) of the Tables A.2.7.1 and A.2.7.2 in the Statistical Annex allow controlling for different types of risk

factors,⁶⁸ showing that women are as likely to be inactive as men. All other things being equal, having three children or more, increases the chance of being inactive by about three times. Moreover, the father's level of education slightly reduces the risk of being inactive. Inactivity appears to be higher in urban than rural areas. Some of this inactivity is captured by other variables, such as the parents' level of education, which is higher in urban areas. Moreover, in rural areas, the share of unpaid family work (the reference category), is much higher than that of inactivity, compared to urban areas. As shown in Table 2.7.1, the share of unpaid family workers is about 41.9 per cent in rural areas and only 0.6 per cent in Ulaanbaatar.

Chapter 3: Stages of school-to-work transitions

Introduction

This chapter studies the labour market behaviour of youth sampled by stage of transition, and attempts to analyse the main determinants of each stage. Chapter 2 focused on the traditional ILO classification of employment, unemployment and inactivity. However, this distinction is difficult to apply, meaningless or even misleading in the case of young people. Such problems of definition might, therefore, affect the policy implications of this analysis. To understand this, employment is considered as a transitory status and the search for a good job match continues until the experience gap is filled (See Annex A.1, for a summary discussion of the issue). Young people differ from adults in their approach to the labour market because they lack work experience. Some young people still at school are already looking for work and many "inactive" young people are also looking, although not actively, because they are discouraged and feel their work experience insufficient to appeal to employers, especially in periods of economic distress. In addition, when some form of employment is found, many consider this only as a tool to fill their work experience gap in the hope of accessing better quality jobs later. As a consequence, they are classified as "employed", but are actually seeking other work or planning to return to education.

This suggests that only looking at employment, unemployment and inactivity rates might be insufficient to understand the real nature of the youth labour market problem and the issue of school-to-work transition. The ILO (2004) proposed alternative, specific categories. They suggested not only looking at the number of hours spent in paid work, but also at the transition stage reached and to consider a school-to-work transition completed only when the young person has accessed "decent work". The ILO (2004) defines "decent work" as work that is productive, generates adequate income and guarantees rights at work and social protection. Very often, young people work with informal, intermittent and insecure arrangements, meaning low productivity, earnings and employment protection, or they are simply underemployed.

This chapter aims to complement the findings of previous chapters by looking at the stages of school-to-work transition. Three different statuses have been identified: a) transition not yet started; b) in transition; c) transition completed. This approach represents a new and very fruitful perspective, not only to better understand labour market behaviour, but also to define an optimal youth employment policy.

For the first time the ILO classification of school-to-work transition is applied, based on the STWS. The main conclusion is that only about 1 per cent of the sample has completed their transition to decent work. About 56.5 per cent are still in transition, meaning they are still looking for decent work, whether they are employed, unemployed or inactive. Of the employed, 47.8 per cent feel they would like to change their job and 49.6 per cent experience a decent work deficit. The share of employed in transition is about 32.6 per cent of the sample population, twice the unemployment ratio of 14 per cent. This suggests strong competition for jobs, involving all three

⁶⁸ See Section 2.7.1 for methodological details about the way this table was built.

categories. This mass of jobseekers exerts a potentially important downward pressure on already very low wages. There is a vicious circle in place enabling only a few young people to complete their school-to-work transition and the lack of alternatives causes, in turn, increasing precariousness in employment relationships.

The outline of the chapter is as follows. Section 1 gives the definition of stages of school-to-work transition and also gives the per cent distribution of the sample according to transition stage, by sex, age group, urban/rural area, educational level and household average monthly income. Each of the following three sections is dedicated to one of the stages of STW transitions. Section 2 will discuss the main characteristics of youth not yet started their transition, distinguishing those in school from the inactive. Sex, age groups, urban/rural areas and educational levels will be the main dimensions for each component of the pre-transition stage. For the at school youth, information on future plans and life goals will also be provided. Section 3 will focus on youth in transition, divided by nature of transition (inactive, unemployed, in temporary/non-career employment) and length of the transition period. For each status, information is provided on demographic variables, as well as on education levels, job search methods and main obstacles in finding a job. In addition, plans and reasons for changing jobs is discussed for youth in temporary employment or non-career employment. Section 4 studies the distribution of transitioned youth according to ease of transition, by sex and age group, education level, occupation, economic sector, status in employment, formal or informal sector and job search method. A concluding section will summarize the main findings and draw some policy implications.

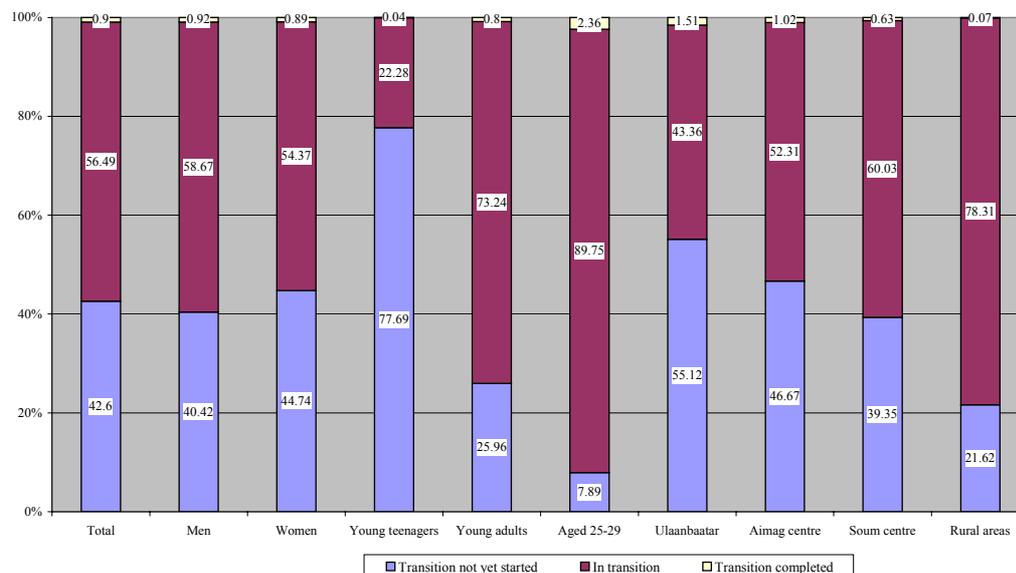
3.1. The school-to-work transition approach

The detailed questionnaire of the Mongolian STWS allows disentangling the three different stages of transition. Group a) is subdivided into two distinct subgroups: a1) in school, not seeking work; a2) inactive, not seeking work. Group b) is subdivided into six subgroups: b1) in school, but seeking work; b2) inactive, but seeking work; b3) unemployed; b4) employed, but considering themselves unemployed; b5) employed, but wishing to change job; b6) employed not wishing to change their job, but: 1) working more than 50 hours per week; 2) or working with no contract; 3) or working with a fixed length contract; 4) or working, but not paying taxes for their work. Group c) includes all youth who have been able to access decent work. In this study decent work is obtained as a residual including all those employed not falling into any of the previous categories. Figure 3.1.1 provides a synopsis of the percentages of the three main components of the sampled population. The first feature of this figure is the very small segment of those who have completed their transition. It is more or less stable across gender, but changes dramatically across age groups. It is lowest among young teenagers (0.04 per cent) and increases up to 2.4 per cent for those aged 25-29 years and is higher in urban than rural areas. In the last geographical location, very few respondents had completed their transition. This confirms how misleading it can be to only look at the employment share.

The second most apparent feature is that many young people, who seem to be inactive, are, in fact, seeking work in some way or another. They are considered to be “discouraged workers”. This share of discouraged workers is anti-cyclical, because when the economy is growing, less feel discouraged, whereas when the economy is in a downturn, they withdraw from actively seeking work. Overall, those who have not yet started their school-to-work transition are about 42 per cent of the sample. More women are at this stage, while young teenagers are more frequently in the pre-transition stage than the oldest age segments. In addition, the pre-transition portion is more frequent in urban than rural areas. This finding is related both to the higher share of young people at school in urban areas and the greater availability of job opportunities, albeit unsatisfactory, in rural areas. With the exception of young teenagers, the largest portion is in transition. This share represents about 90 per cent of the sample of 25-29 year-olds and about 80 per cent of those in rural areas. These findings confirm the impression that the traditional category of “employment” is misleading. Most of the employed youth have jobs they consider

unsatisfactory and want to change as soon as possible, either to return to education or training, or to seek a better quality job.

Figure 3.1.1. Youth by transition stage by gender, age group and location



Source: own elaboration on SWTS of Mongolia, ILO.

Table 3.1.1 compares the two ILO classifications and shows that about 10 per cent of the inactive in the traditional ILO definition are actually seeking work: the two comparable figures are 52.5 per cent for the inactive and 42.6 per cent for those whose transition has not yet started. About 82.7 per cent of the inactive jobseekers are in school. Discouraged workers are only about 1.7 per cent of the total sample. Generally, the component of inactive job seekers is very high, compared to other countries.⁶⁹ Almost all workers in the traditional category of “employment” are, in fact, “in transition” towards decent work. That is why, while the employment to population ratio is 33.5 per cent and the employment rate 70.5, the portion that have completed their transition is only 0.9 per cent. Those in transition are 56.5 per cent of the sample and around 16 per cent of those employed wished to change jobs. Almost all the rest (16.8 per cent) had decent work deficits.

Table 3.1.1. ILO traditional and school-to-work indicators

| Traditional labour market indicators | | School-to-work transition indicators | |
|--------------------------------------|------|---|------|
| Inactivity rates | 52.5 | Transition not yet started | 42.6 |
| | | In school | 40.0 |
| | | Inactive | 2.6 |
| Unemployment rate | 29.5 | In transition | 56.5 |
| Unemployment ratio | 14.0 | Discouraged workers | 1.7 |
| | | In-school, but job searching | 8.1 |
| | | Unemployed | 14.0 |
| | | Workers considering themselves unemployed | 0 |
| | | Workers wishing to change | 16.0 |
| | | Workers with decent work deficit | 16.6 |
| Employment rate | 70.5 | Transition completed | 0.9 |
| Employment ratio | 33.5 | Employed in decent work | 0.9 |

Source: own elaboration on SWTS of Mongolia, ILO.

Figure 3.1.2 disentangles the two components, not-yet in transition and in transition. The main difference between men and women is there are more women at school, either seeking or not seeking work, than men. About 42 per cent of women and 38.2 per cent of men are at school,

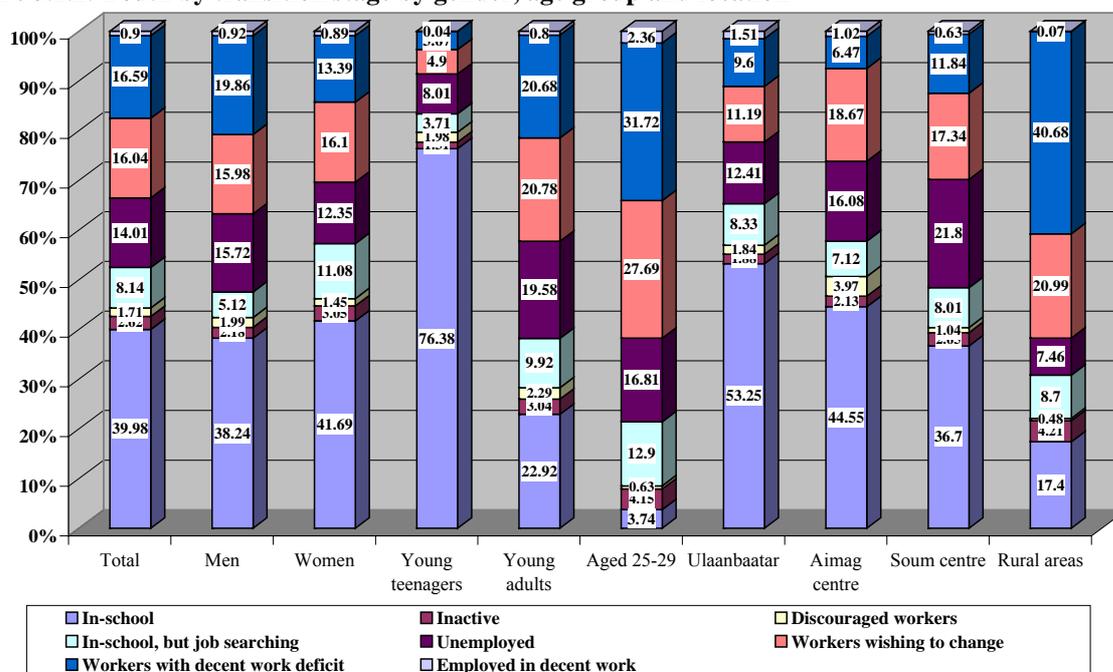
⁶⁹ See, for instance, the case of Kosovo (Corbanese and Rosas, 2007, p. 31).

whereas 3.1 per cent of women and 2.2 per cent of men are inactive. The portion that is discouraged is equal across gender and 11.1 per cent of women and 5.1 per cent of men seek work while at school. This reflects the lower job opportunities of women.

Within the in transition group more men than women are unemployed or have work deficits. Men enter the labour market earlier and, consequently, are more frequently unemployed, have jobs they wish to change, or have important work deficits. The share of employed women and men wishing to change jobs is very similar. However, considering the lower employment rate of women, in relative terms women wish to change their jobs more often than men, 37.7 per cent and 30.4 per cent, respectively. In general, women experience greater hardship in finding a job and are dissatisfied and wish to change more often. This is obviously related to the higher share of women at school.⁷⁰

Geographical differences are important and there are very different models of school-to-work transition in urban and rural areas. In Ulaanbaatar, perhaps, due to lack of job opportunities, 53.3 per cent of young people are at school compared to 17.4 per cent in rural areas. In rural areas, 21 per cent wish to change jobs and 40.7 per cent experience decent work deficit. The comparable figures in the capital city are only 11.2 per cent and 9.6 per cent. The aimag and the soum areas are intermediate cases.

Figure 3.1.2. Youth by transition stage by gender, age group and location



Source: own elaboration on SWTS of Mongolia, ILO.

3.2. Youth who have not yet started transition

The group who had not started their transition at the time of the survey differs from the ILO definition of inactive inasmuch as it does not include the inactive or those at school already seeking work. The inactive that seek work are “discouraged workers” and represent 1.7 per cent of the sample and 57.3 per cent of them are men. Those still at school but already seeking work represent 8.1 per cent and only 31 per cent of them are men.

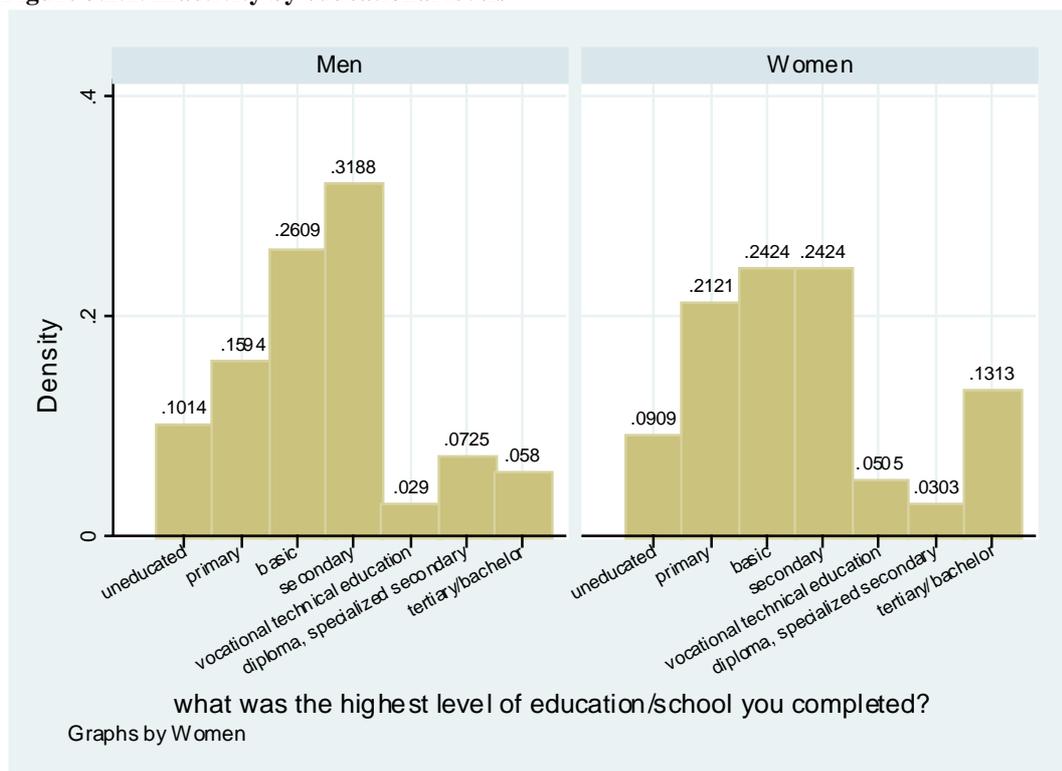
⁷⁰ Whether the lack of decent work is an incentive or a disincentive for investment in education depends on which of the following two effects prevails. Unemployment and, more generally, the lack of decent work opportunities tend, on the one hand, to reduce the returns to education and, on the other hand, to reduce the alternative cost of education (see, for instance, Pastore, 2005). This issue will be the object of future research.

The overwhelming majority of the young teenagers who have not yet started their transition are still at school (76.4 per cent). Only 1.3 per cent of those in the pre-transition stage are inactive. The comparable figures for young adults are respectively 22.9 per cent and 3 per cent. For those aged 25-29 years, the proportions revert in favour of the inactive, representing 4.2 per cent of the total, against the 3.7 per cent of those at school. Rural areas have the largest share of inactive and the smallest share of at school, 4.2 and 17.4 per cent, respectively. In the capital city, however, at school is 53.3 per cent and inactive is 1.9 per cent. The *aimag* and *soum* centres represent intermediate cases between the rural areas and Ulaanbaatar. The reduction in the supply of education when moving from urban to rural areas explains these geographical differences.

What is the educational level of those who are inactive and have not yet started their transition? Figure 3.2.1 answers this question by providing the distribution by educational level. It shows that the vast majority, namely 84 per cent of men and 78.8 per cent of women have general secondary education or below. This reaches a peak for young people holding general secondary education, 31.8 per cent of men and 24.4 per cent of women. A large share of the inactive has basic education, 26.1 per cent for men and 24.2 per cent for women. This distribution mirrors closely that of the overall sample (see Table 2.4.1).

This represents another return to education as, not only do those with higher educational levels have lower unemployment rates and higher earnings, but they are also less likely to be inactive. Notice also that the lowest share of inactive are those holding a diploma of vocational technical education, 2.9 per cent of men and 5.1 per cent of women. This reflects the high relative demand for this type of educational qualification, as Chapter 4 will highlight. The share of inactive with a diploma of specialized secondary or tertiary education is about 7.3 per cent of men and 3 per cent of women. It is interesting to note that 5.8 per cent of men and, more importantly, 13.1 per cent of women in this group hold a university degree. The high share of inactive women with university degrees is most probably linked to the hardship they experience in finding decent work and reconciling it with the household. It is a worrying that women, who have invested in their education and are highly motivated, are, inactive. Policy aimed at promoting equality of opportunities for women will reduce this.

Figure 3.2.1. Inactivity by educational levels



Source: own elaboration on SWTS of Mongolia, ILO.

Figure 3.2.2 shows that sickness, injury or pregnancies are the causes of inactivity for 34.4 per cent of men and 30.8 per cent of women.⁷¹ This suggests prompt policy interventions aimed at promoting employment for young people with disabilities or health problems, envisaging, for instance, special quotas. The presence of a large number of pregnant women among the inactive, depends on the young average age at first birth. It would be important to assess the extent to which, after giving birth, women return to the labour market. Some women who start a family before finding work might stay out of the labour market or unemployed for a long time.⁷² Policies promoting employment for women with children could be important to help reduce the risk of remaining jobless in the future.

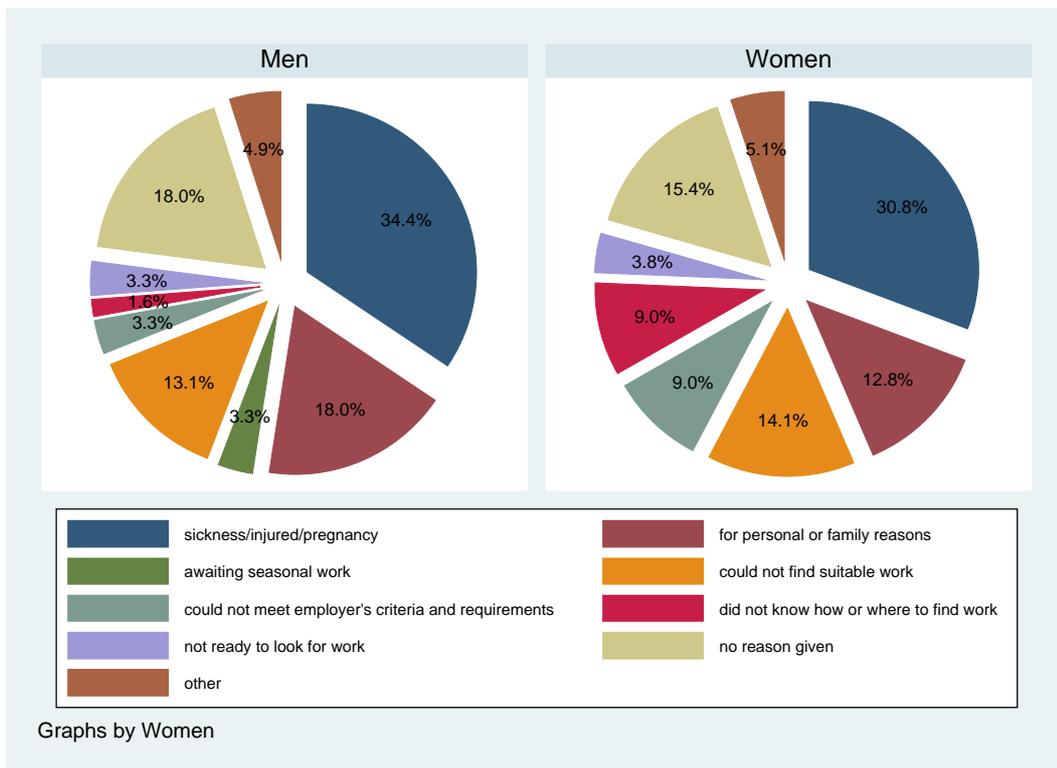
Personal or family problems are the second most important cause of inactivity, 18 per cent of men and 12.8 per cent of women. Other factors of inactivity are indications of the specific difficulty some have in seeking work and represent a factor of inactivity of 18 per cent of men and 32.1 per cent of women. A share as high as 13.1 per cent of men and 14.1 per cent of women could not find suitable work, while 3.3 per cent of men and 9 per cent of women could not meet employer's criteria and requirements. Of men, 1.6 per cent and 9 per cent of women did not know how or where to find work. This difficulty in finding suitable work reflects not only a low demand for labour, but also the lack of decent jobs (Section 3.1). It is, therefore, of the utmost importance that employers and the government increase the quality of jobs available, by introducing and implementing arrangements aimed at reducing the long working hours and and introduce fiscal incentives to foster the adoption of official work contracts of longer duration.

In addition, policy-makers could provide counselling services, especially for women, to assist them to search and apply for job vacancies. It is difficult for the public employment services (PES) to reach this group if they are not registered and actively seeking work. However, improving the services might also be an incentive for the inactive to register in the medium and long term. Closer links between employers and PES could also help spread information on available vacancies, reaching not only the unemployed, but the inactive. Employers should also use different channels to spread information of vacancies so as to reach young people not actively seeking work.

Figure 3.2.2. Reasons of inactivity by gender

⁷¹ Unfortunately, the STWS does not allow disentangling these three causes of inactivity. In particular, it is not possible to quantify the share of the inactive that are disabled or pregnant.

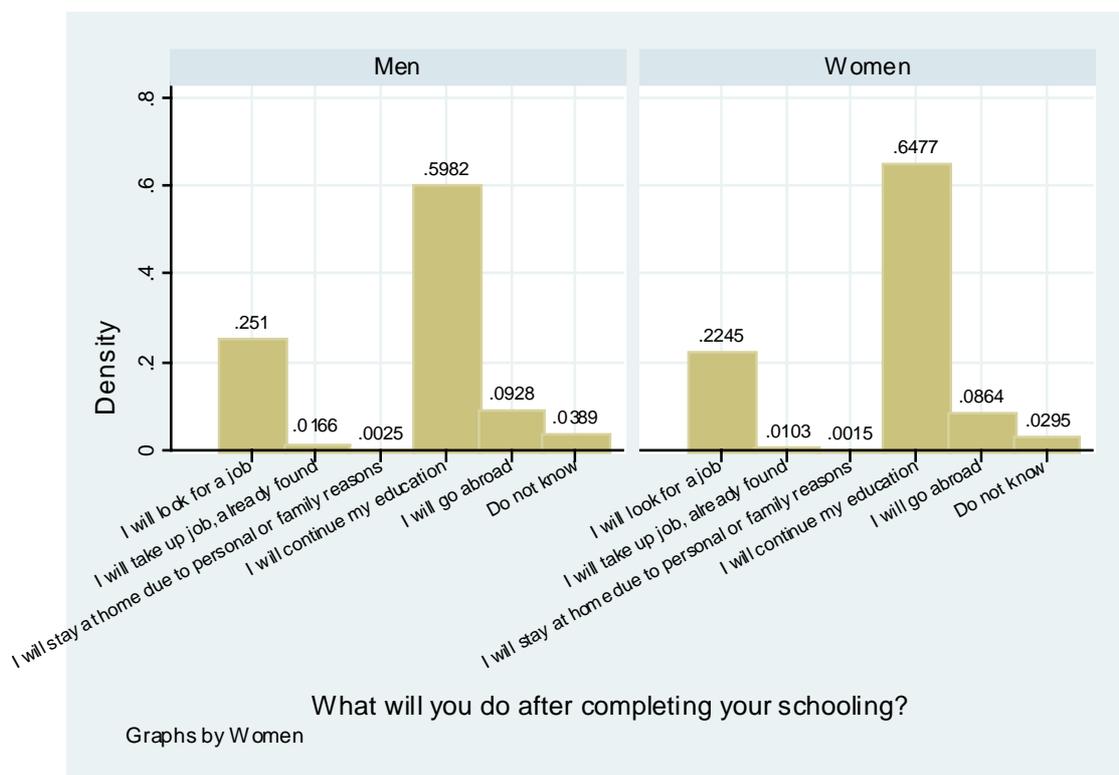
⁷² To verify this hypothesis longitudinal data are necessary and should be gathered in another survey.



Source: own elaboration on SWTS of Mongolia, ILO.

A specific question in the STWS asks those at school about their immediate plans on completion of their studies and Figure 3.2.3 shows that most of them, who have not yet started their transition, wish to continue their education. This option is chosen by 65 per cent of women and 60 per cent of men. However, the number wishing to continue their studies is very positive, suggesting that more and more young people aim for a better education and this corresponds with the expectations of employers, as Chapter 4 will show. It also suggests that they understand the lack of opportunities in the labour market and, even if they find a job it will be of low quality, therefore, they feel that further study is their best option. Only 25 per cent of men and 22.5 per cent of women wish to look for a job after completing their studies. An important component of 9.3 per cent of men and 8.6 per cent of women, wish to go abroad on completion of their studies. Employers, trade unions and the government, at all levels, should act to avoid further reduction in the workforce in future.

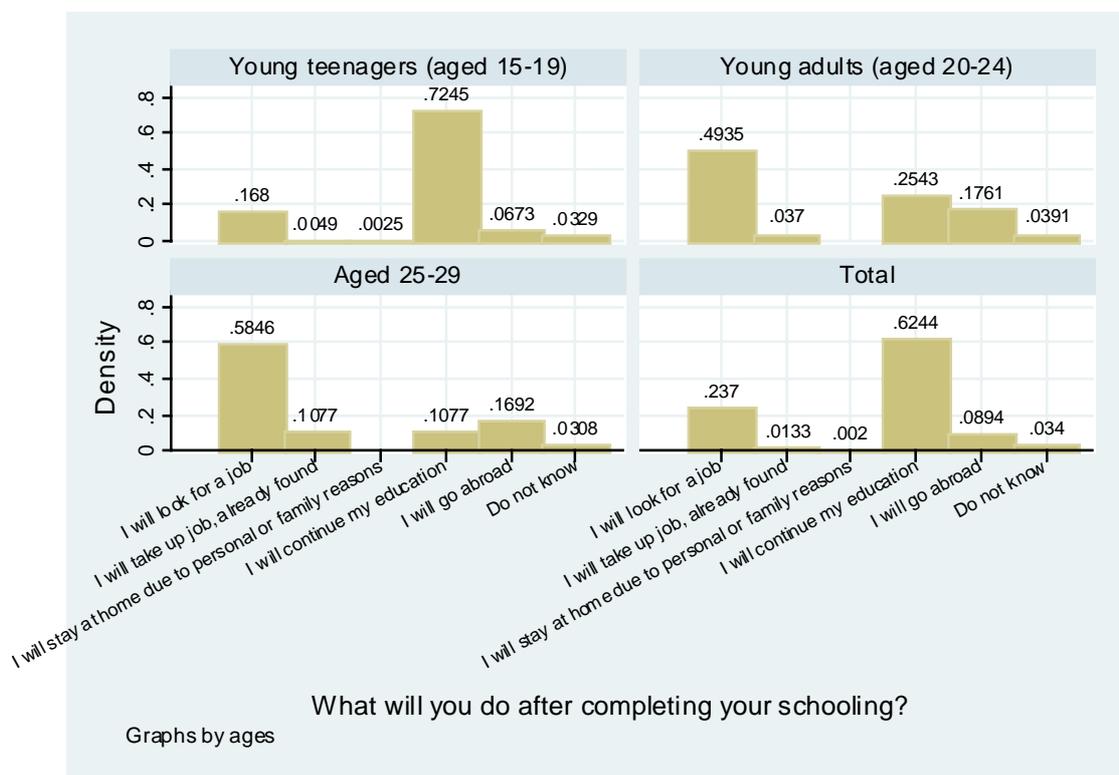
Figure 3.2.3. Future plans of at-school youth by gender



Source: own elaboration on SWTS of Mongolia, ILO.

Figure 3.2.4 provides answers to the same questions as Figure 3.2.3, but by age group. As expected, answers depend strictly on age. In particular, the share of those wishing to continue their studies shrinks from 72.4 per cent to 10.8 per cent when going from young teenagers to those aged 25-29 years. Conversely, the share of those wishing to seek work increases from 16.8 per cent to 58.5 per cent for the same age groups. A more worrying aspect is the increase in the share of those wishing to go abroad, 6.7 per cent for the youngest segment and 16.9 per cent for the oldest. This, yet again, reflects the scarcity of job opportunities.

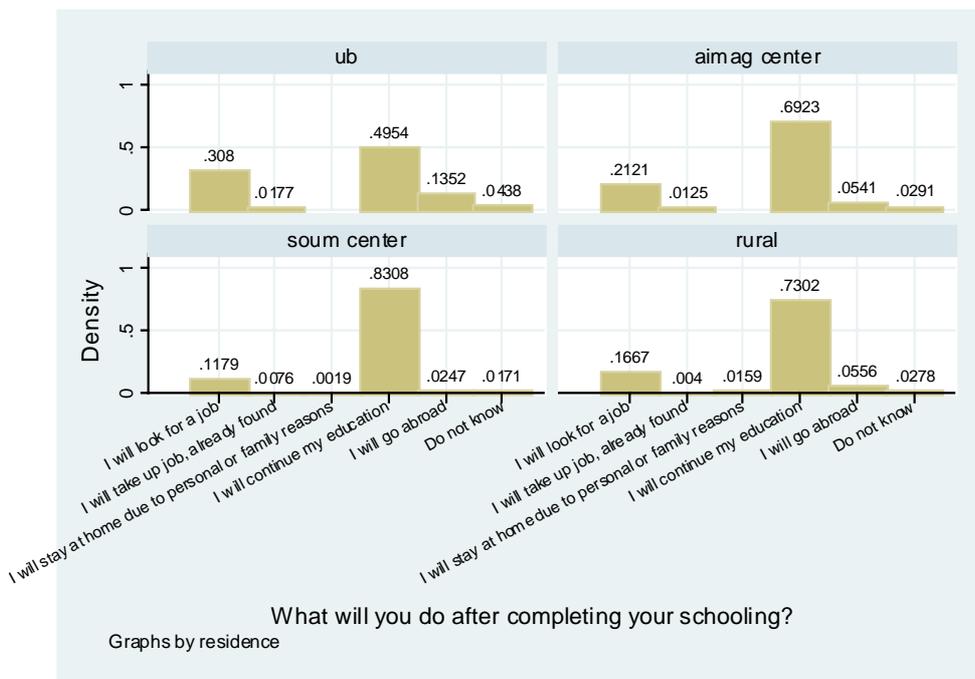
Figure 3.2.4. Future plans of in-school youth by age group



Source: own elaboration on SWTS of Mongolia, ILO.

When looking at the post-school decisions of young people in different locations (Figure 3.2.5), it appears that in rural areas the share of those wishing to continue their studies is larger and those wishing to seek work smaller than in urban areas, with the exception of *soum* centres. The gap in terms of percentage of the latter category in the capital city and in rural areas is about 15 per cent, or half of the share in urban areas. This clearly confirms the impression that the intentions of young people at school are strongly influenced by their perception of job opportunities, which are less appealing in terms of quality of work in rural areas. The Figure also shows that most of the migration potential is in the capital city, where those wishing to move abroad reaches a high of 13.5 per cent, almost one and a half times greater than average. This, in turn, depends on the high unemployment rate typical of the capital city and the perception of lack of work opportunities there.

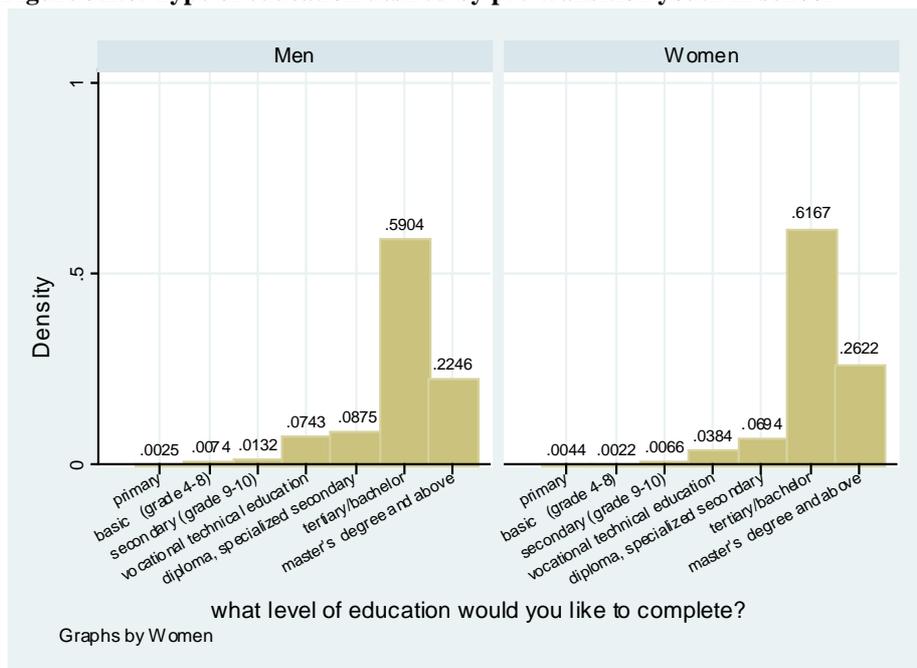
Figure 3.2.5. Future plans of at-school youth by location



Source: own elaboration on SWTS of Mongolia, ILO.

It is interesting that the majority of those at school in the transition category “not yet started” aim to achieve at least tertiary education, 61.7 per cent of women and 59.0 per cent of men. If those aiming to reach post-graduate studies are included, it appears that almost 90 per cent of women and over 80 per cent of men aim to further their education, corresponding to the expectations of prospective employers as the next chapter will show. Nonetheless, these findings contrast with the relatively low share of young people with high educational attainment and suggest that there is some sort of supply constraint on education. This is an important indication for policy-makers on the need to fulfil the aspirations of employers and students for more and better education, especially in rural areas.

Figure 3.2.6. Type of education desired by pre-transition youth in school



Source: own elaboration on SWTS of Mongolia, ILO.

The policy implications of these findings are in favour of a reform of the educational system aimed at reducing the cost of education for the poorest segments of the population, especially in rural areas. Policies aimed at stimulating employment growth for the young generation, especially in urban areas, are important to avoid further migration flows. As shown in the previous chapter the unemployment rate is much higher in urban than rural areas, whereas job opportunities offered in rural areas are of very low quality. As a consequence, there is an important migration potential in urban areas and aspirations for higher education in rural areas.

3.3. Youth in transition

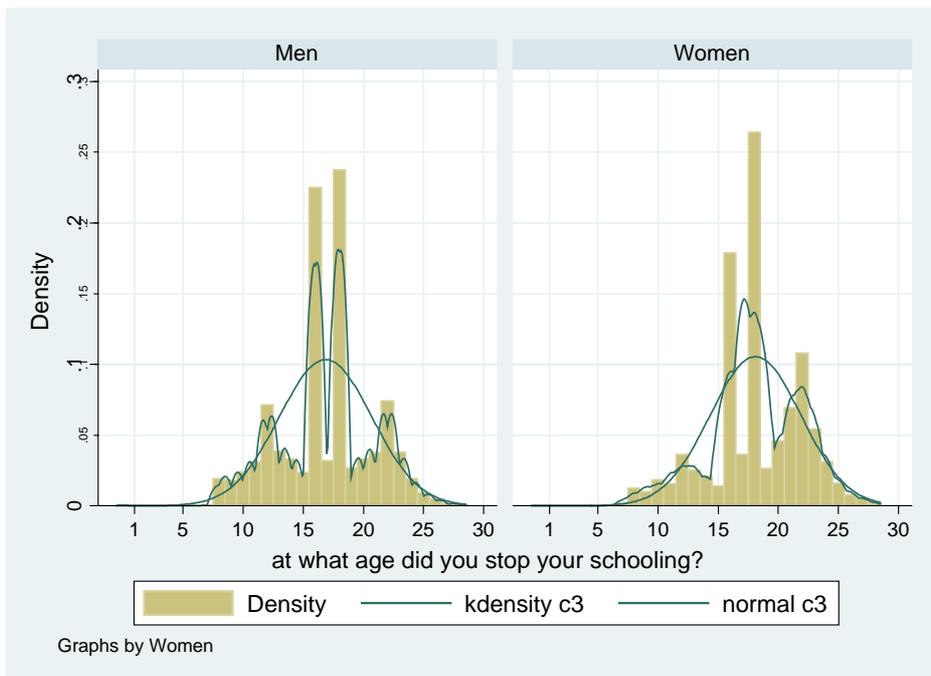
The number of young people in transition is 56.5 per cent of the population, which compares to a youth unemployment ratio of 14 per cent. There is, hence, a ratio of about 4 between the new indicator of in transition and the traditional indicator of unemployment.⁷³ The share of those wishing to change their job, or of respondents with a decent work deficit, is over 16 per cent each and, therefore, greater than the unemployment ratio. This confirms that looking at the traditional indicators of labour market status is misleading if there is an interest in understanding the degree of stability of employment and of job satisfaction. Looking at the group in transition is expected to shed new light on the actual degree of labour market stability, which can be seen as a pre-condition for adult life.

Figure 3.1.2 shows that there are more men in transition. The other components of the in transition status are similar across gender, suggesting that an important portion of Mongolian women consider education an alternative to inactivity, open unemployment or employment with work deficits. The same figure also shows that young teenagers are, in general, still at school, but about 1.3 per cent of them have plans to work. However, it is also true that the share of young people not at school under the age of 19 is still relatively high compared to OECD countries (see, for a detailed report on this issue, del Rosario, 2005).

Figure 3.3.1 shows the distribution of young people by gender and age on leaving school. An important number of them leave school before the completion of compulsory education and also a large number leave the educational system after the age of 22, either because they complete college education later or because they go back to school. Women tend to stop their schooling later than men, confirming their higher educational attainments.

Figure 3.3.1. Age at which young people have left school, by gender

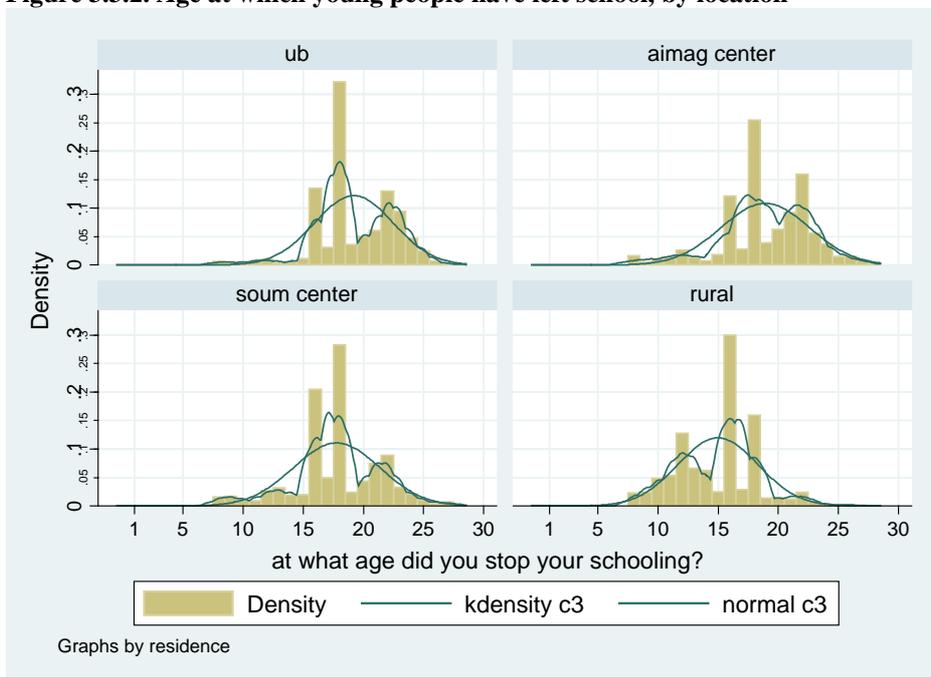
⁷³ This is a very high ratio, greater than that found in previous studies relative to countries where youth unemployment is a major issue. See, for comparison, the case of Kosovo in Corbanese and Rosas (2007).



Source: own elaboration on SWTS of Mongolia, ILO.

Figure 3.3.2 shows the same information as Figure 3.3.1, but by location of the interviewee. As expected, in rural areas young people stop their schooling earlier, confirming the previous impression that child labour, especially related to herding is a major cause of dropping out of school. The peak of 12 years old is typical of those who leave school to help with herding.

Figure 3.3.2. Age at which young people have left school, by location



Source: own elaboration on SWTS of Mongolia, ILO.

Type of search methods of young people who are at school. Table 3.3.1 shows that young people, who are still at school, adopt very different search methods, with two being most common. The largest share of 40.9 per cent look at vacancy announcements in newspapers and internet websites. Relying on their personal network is the second most common method and preferred by 30.9 per cent, and is more common among women in urban areas. Men prefer to look

for jobs through advertisements. Registering at the public employment service is the third most common method. About 9 per cent, with a slightly higher share of men, rely on this. Only a few individuals apply direct to employers.

Two observations can be made. First, job search methods of those still at school differ from those of the unemployed and also employees. Differences might reflect the intensity of job searching and the greater experience of the unemployed. Second, differences exist with respect to recruitment methods of employers as discussed in the next chapter.

Table 3.3.1. Still at-school youth by approaches to jobseeking by gender and urban/rural area

| A | B | Youth, seeking work while still at school /thous/ | Total | | | Of which | | | | | |
|--|---|---|-----------|--------|---------|----------|-------|----------|---------|--------|----------|
| | | | | | | Urban | | | Rural | | |
| | | | Total (%) | Male % | Female% | Total % | Male% | Female % | Total % | Male % | Female % |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Total | 1 | 12.6 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Registered in public employment service | 2 | 1.1 | 9.1 | 9.5 | 8.5 | 5.7 | 6.3 | 5.0 | 22.7 | 20.0 | 28.6 |
| Looked for media (newspaper, internet, etc.) | 3 | 5.2 | 40.9 | 46.0 | 34.0 | 44.3 | 52.1 | 35.0 | 27.3 | 26.7 | 28.6 |
| Applied for particular employers | 4 | 0.5 | 3.6 | - | 8.5 | 3.4 | - | 7.5 | 4.5 | - | 14.3 |
| Visited to various entities | 5 | 0.7 | 5.5 | 4.8 | 6.4 | 5.7 | 6.3 | 5.0 | 4.5 | - | 14.3 |
| Seek assistances of friends and relatives | 6 | 3.9 | 30.9 | 25.4 | 38.3 | 31.8 | 22.9 | 42.5 | 27.3 | 33.3 | 14.3 |
| Soak technical and financial assistances to start own business | 7 | 0.3 | 2.7 | 3.2 | 2.1 | 2.3 | 2.1 | 2.5 | 4.5 | 6.7 | - |
| Attended and registered to job fairs | 8 | 0.2 | 1.8 | 1.6 | 2.1 | 2.3 | 2.1 | 2.5 | - | - | - |
| Other | 9 | 0.7 | 5.5 | 9.5 | - | 4.5 | 8.3 | - | 9.1 | 13.3 | - |

These findings suggest that jobseekers still at school should be helped in several ways, including improving the labour market relevance of educational outcomes, providing skills more in demand, improving relations with firms and unions and providing career guidance services.

Discouraged workers. They represent about 2 per cent of the sample population, with a slightly higher share of men. Age differences are relatively small, but it is noteworthy that the portion of discouraged workers goes from 2.3 per cent among young teenagers to 0.6 per cent among those aged over 25 years. The rate of discouragement is higher in the *aimag* centres, at about 4 per cent, and lower in rural areas, at about 0.5 per cent. In the capital city, the share is relatively lower than in the *aimag* and *soum* centres, but much higher than rural areas, at about 1.8 per cent. Even if discouraged workers make up only a small part of the youth population, policy-makers should, nevertheless, make them an important policy objective.

Job search methods and intensity of job search of unemployed youth. This sub-section adds information on job search methods and its intensity by looking at the number of applications submitted and the number of interviews. The preferred job search method of the unemployed by gender are presented in Figure 3.3.3. About 20 per cent use PES. Differences by gender are concentrated in the use of media and networks of friends and relatives. This suggests that men tend to use informal networks more frequently. The young unemployed prefer informal networks. In addition, as noted in the previous chapter, informal networks entail a wage loss.

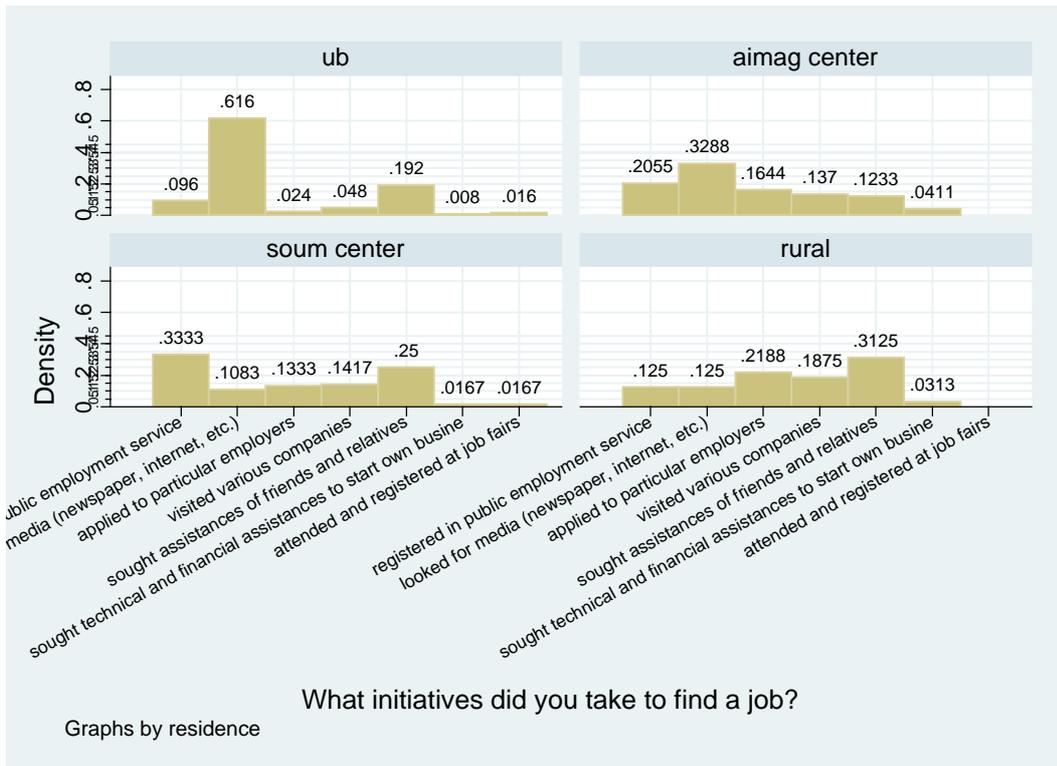
Figure 3.3.3. Job search methods of unemployed Mongolians by gender



Source: own elaboration on SWTS of Mongolia, ILO.

Figure 3.3.4 provides answers to the same question, but by location. Informal networks are common among young unemployed in rural areas, over 30 per cent. In urban areas, the use of the media is most common, over 60 per cent. This may be due to the size of the youth labour market in the capital city, where other job search methods are almost never used. However, in smaller rural labour markets, personal networks tend to provide information on vacancies and PES are used to a greater extent in *aimag* and in *soum* centres.

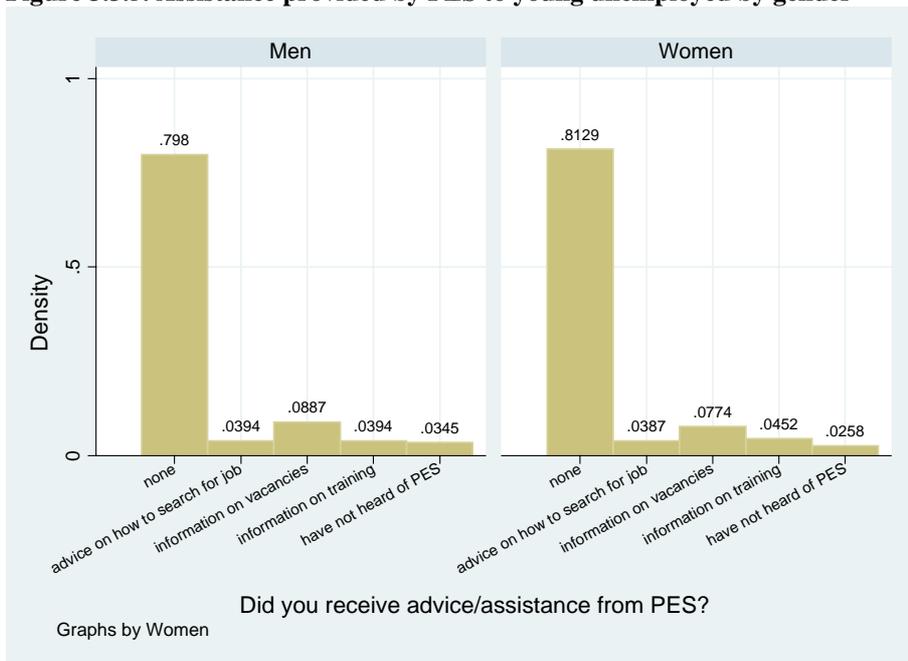
Figure 3.3.4. Job search methods of unemployed by location



Source: own elaboration on SWTS of Mongolia, ILO.

Figure 3.3.5 might provide an answer as to why only about 20 per cent of the sample register with the PES. It does not provide any assistance to about 80 per cent and only about 4 per cent of the unemployed youth received advice on job search, 9 per cent received information on vacancies and about 4 per cent received information on training courses. A small share of around 3 per cent did not even know of the PES. This is clearly an important area of policy intervention. A more active role of the PES might help reduce the time necessary for young people to accomplish their transition or, at least, find some form of employment.

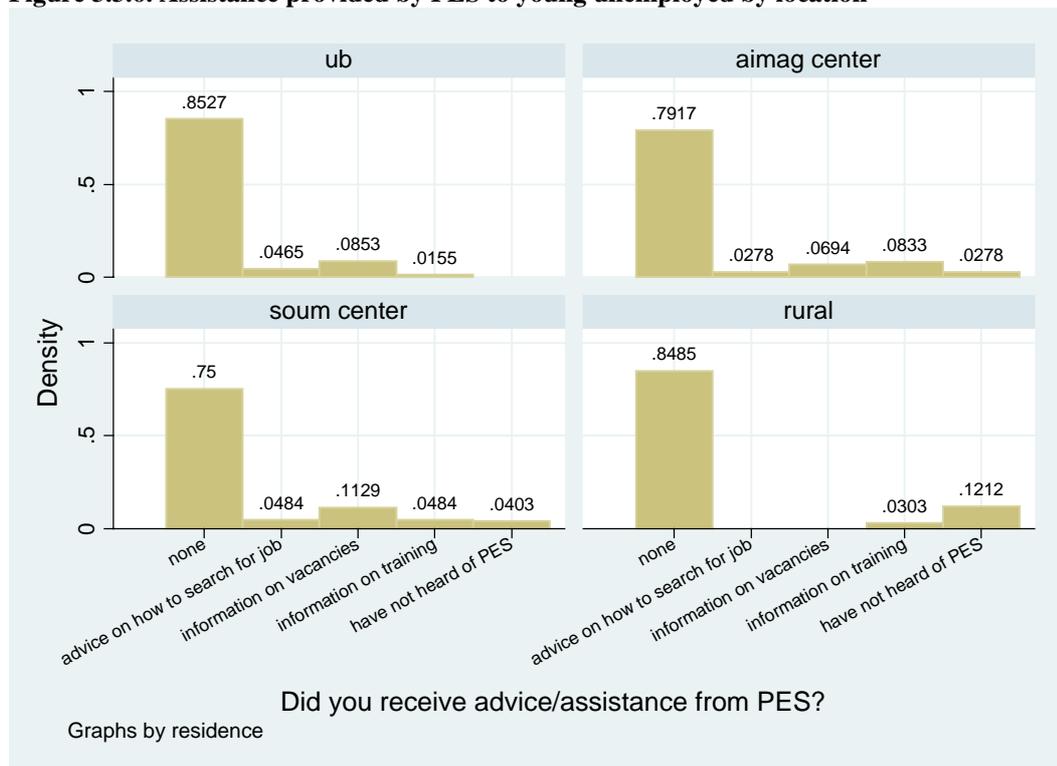
Figure 3.3.5. Assistance provided by PES to young unemployed by gender



Source: own elaboration on SWTS of Mongolia, ILO.

Figure 3.3.6 shows the distribution of beneficiaries of the activities of the PES by location. It is more active in *aimag* and *soum* centres than in the capital city and rural areas. About 85 per cent of unemployed youth in Ulaanbaatar and in rural areas received no assistance from the PES. In rural areas, a share as high as 12.1 per cent did not even know of its existence. In the capital, the PES provides information on vacancies for 8.5 per cent of the sample and advice on jobseeking for 4.7 per cent. Training programmes are almost absent, denoting the PES inactivity in the capital. Training programmes are concentrated in the *aimag* and *soum* centres and there is more information available on vacancies and assistance in jobseeking.

Figure 3.3.6. Assistance provided by PES to young unemployed by location



Source: own elaboration on SWTS of Mongolia, ILO.

One way to assess the intensity of job searching is to measure the number of applications submitted and job interviews attended. Figure 3.3.7 clearly shows that this intensity is not very high. About 50 per cent had not applied for a job directly in the 12 months preceding the interview. Less than 15 per cent had made more than two applications. Men sought work more actively than women, but became discouraged more easily. The share of women who had submitted at least one application in the last 12 months before the interview was only 14.4 per cent, compared to 26.5 per cent of men, but the share of women submitting more than one application was more than that of men.

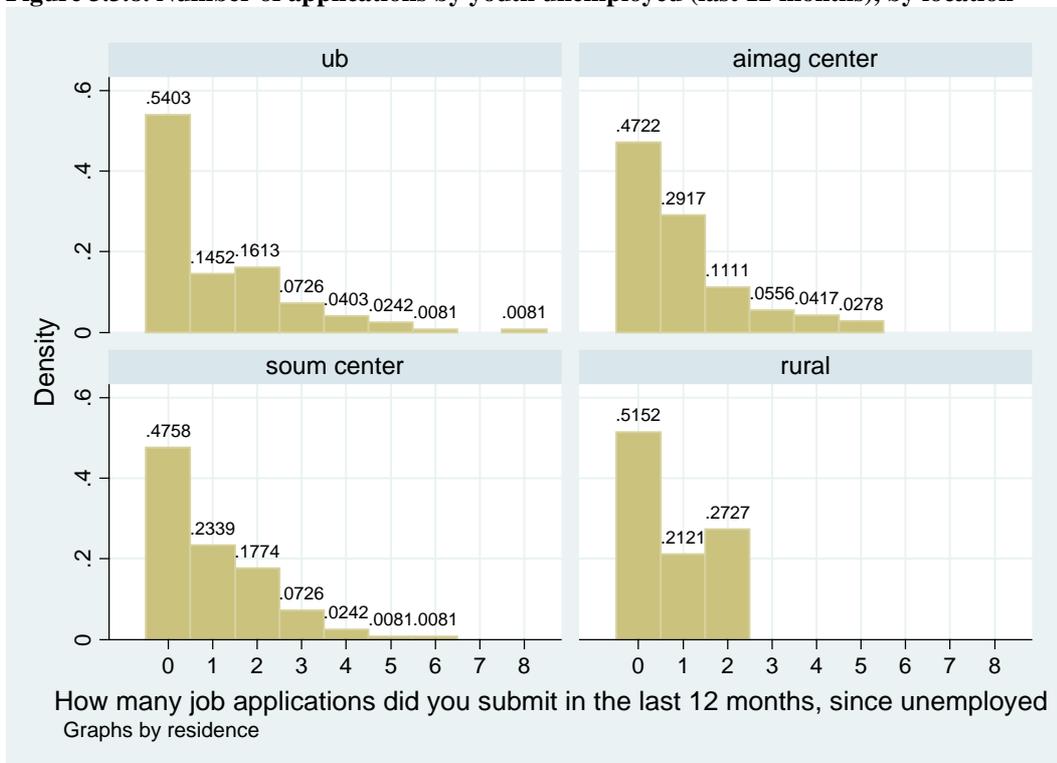
Figure 3.3.7. Number of applications by youth unemployed (last 12 months), by gender



Source: own elaboration on SWTS of Mongolia, ILO.

Figure 3.3.8 suggests that the intensity of job search is much higher in *aimag* and *soum* centres than in the capital city and, even more so, in rural areas. In rural areas, youth unemployed submitted, at most, two applications. Over 50 per cent of them submitted no applications at all. In the capital city, compared to other urban areas, there is a lower share of youth unemployed who submitted more applications, perhaps because of the higher unemployment rate there.

Figure 3.3.8. Number of applications by youth unemployed (last 12 months), by location

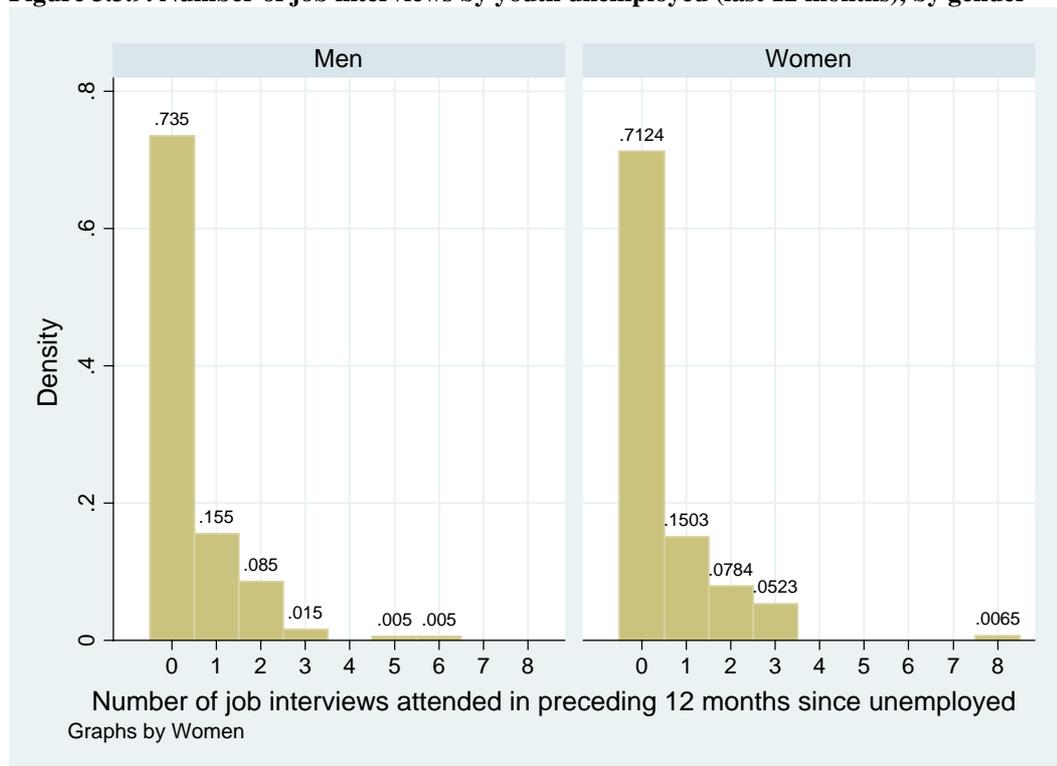


Source: own elaboration on SWTS of Mongolia, ILO.

The intensity of job search is not high when measured by the number of job interviews attended in the last 12 months of unemployment. Over 70 per cent never reached the stage of a job

interview, while only about 15 per cent attended one interview. The share of those with more than two interviews was very low and there were small differences between men and women.

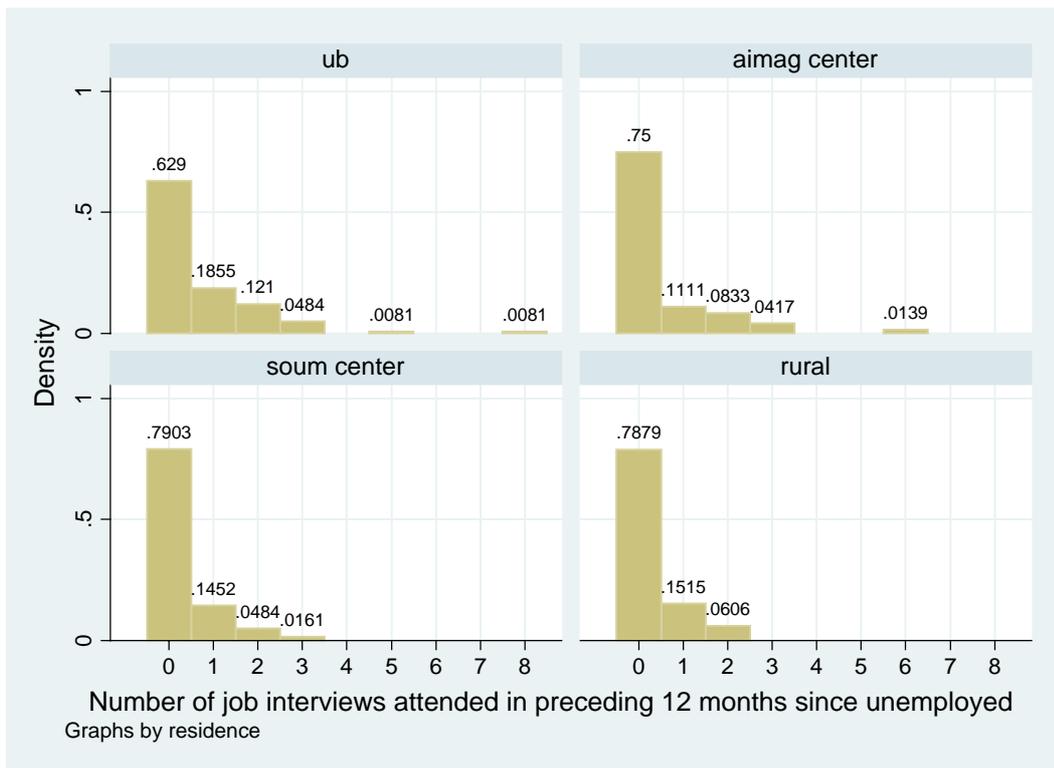
Figure 3.3.9. Number of job interviews by youth unemployed (last 12 months), by gender



Source: own elaboration on SWTS of Mongolia, ILO.

Figure 3.3.10 shows the distribution of answers to job interviews by location of the respondent. It paints a slightly different picture compared to that highlighted by the number of applications. The indicator of search intensity considered here suggests a greater intensity in the capital city and in the *aimag* centres than in the *soum* centres and rural areas. In particular, the share of the unemployed in the capital who had not had any job interview was only 62.9 per cent, about 10 percentage points smaller than in *soum* centres and rural areas.

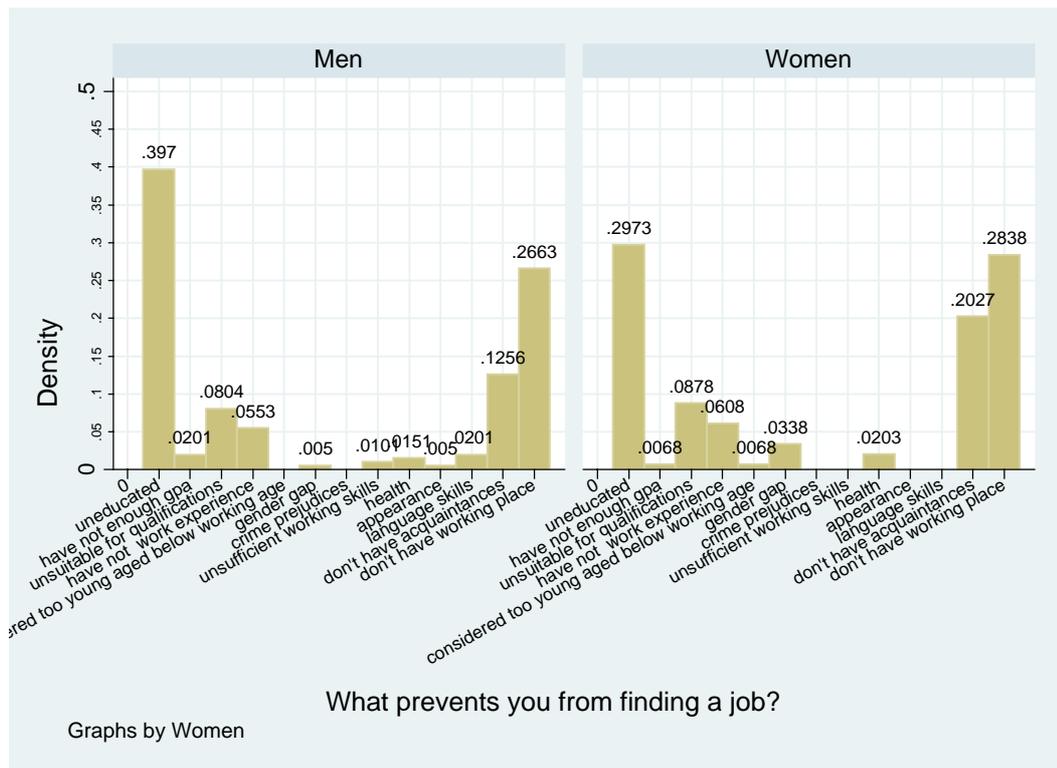
Figure 3.3.10. Number of job interviews by youth unemployed (last 12 months), by location



Source: own elaboration on SWTS of Mongolia, ILO.

Looking at the perceived obstacles to finding a job could provide important indications for policy-makers. The STWS contains a specific question and the distribution of answers is shown in Figure 3.3.11. The largest portion of unemployed, about 39.7 per cent of men and 29.7 per cent of women, consider the lack of education a major obstacle to finding a job and others feel that the lack of suitable qualifications is an obstacle. Overall, this is a clear suggestion that education is perceived as an important vehicle to finding a job. Young people also feel their qualifications are insufficient, suggesting that the educational system should be closer to labour market needs. There is also an important proportion who believes that the economy is not providing enough jobs, over 25 per cent of both men and women. The share of those youth unemployed (more women than men), who believe that not being part of a sufficiently large informal network reduces their chances of employment, is also significant. About 5.5 per cent of men and 6 per cent of women feel their work experience is not sufficient for them to appeal to employers.

Figure 3.3.11. Perceived obstacles in finding employment, by gender

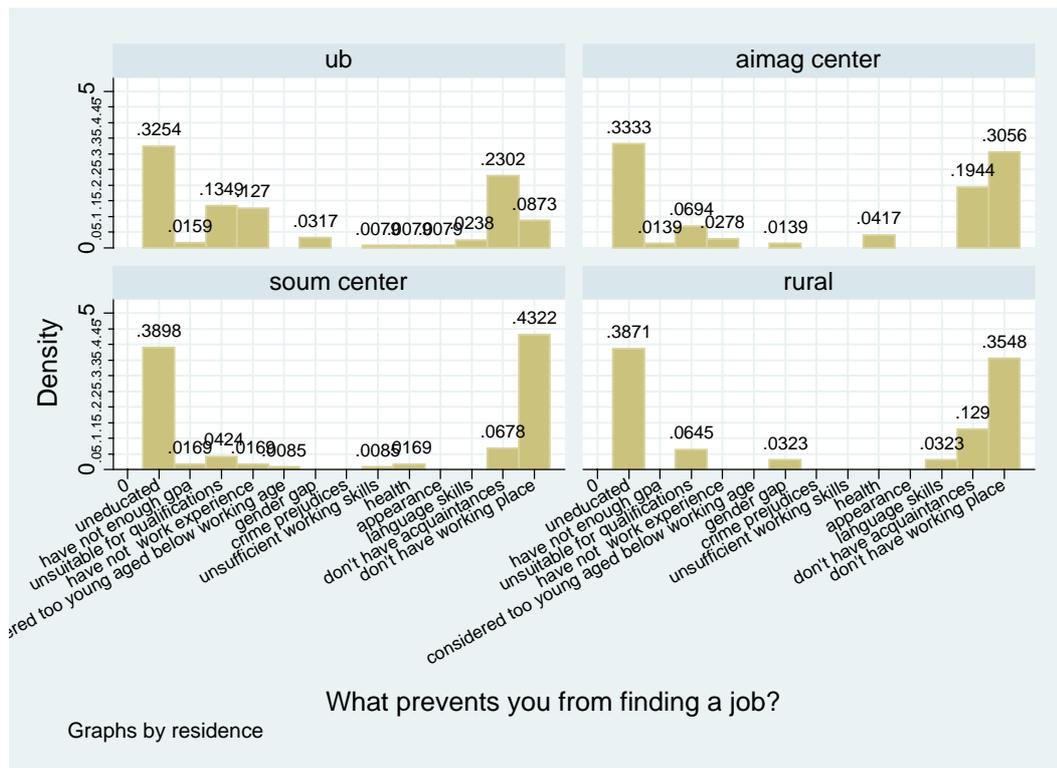


Source: own elaboration on SWTS of Mongolia, ILO.

Obstacles to finding a job differ geographically. Despite, a youth unemployment rate higher in urban areas, the share of those who feel there are no jobs available is actually higher in rural areas and in *soum* centres, confirming that the available jobs in rural areas are of such low quality, they are considered to be worthless.

The perceived gap of education is higher in rural than in urban areas, hiding supply rather than demand side explanations. In other words, young people in rural areas actually have a low level of education compared to the demand. Nevertheless, in urban areas, and especially in the capital, a larger fraction of youth unemployed feels their qualifications do not match those required by employers. Also higher in urban areas is the perceived experience gap. About 11.3 per cent of youth unemployed in Ulaanbaater feel they have insufficient work experience compared to less than 3 per cent in other areas, which is most likely, a reflection of the higher skill content of jobs available in the capital.

Figure 3.3.12. Perceived obstacles in finding employment, by location

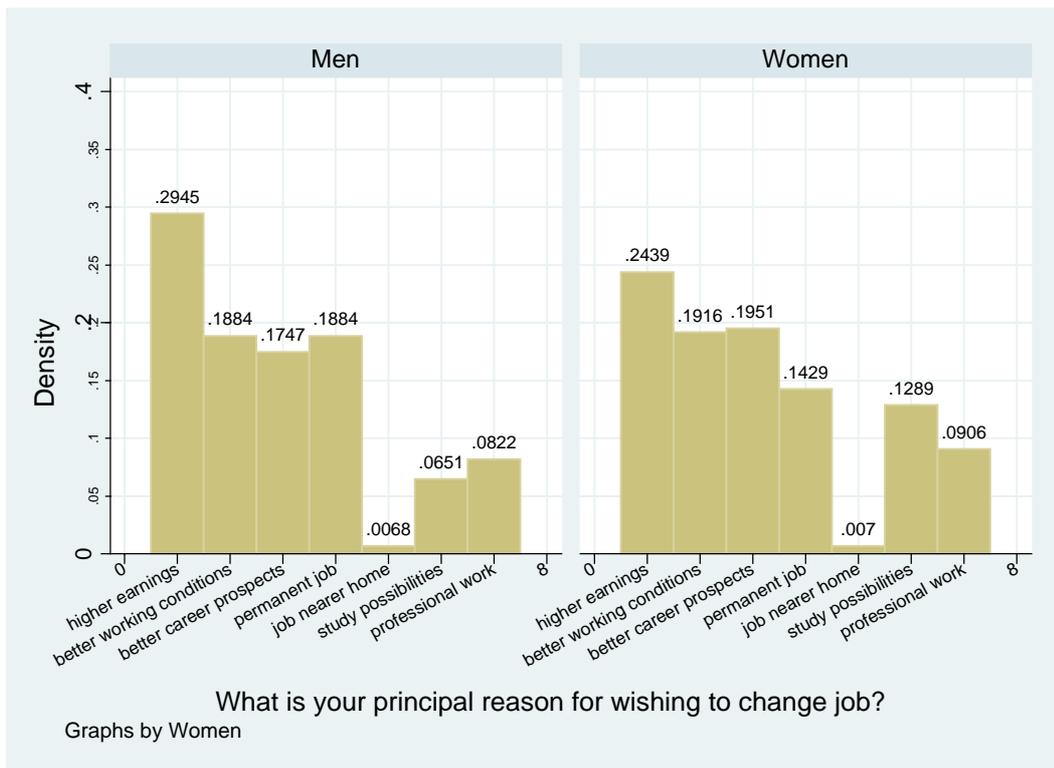


Source: own elaboration on SWTS of Mongolia, ILO.

The “in transition” group. Those who wish to change their job or have important decent work deficits are the second largest group in Mongolia. The “in transition” group is also more numerous than that of the unemployed. None of the employed respondents considered themselves unemployed (Table 3.1.1). Not surprisingly, a proportion of those employed wish to change their job due to dissatisfaction. Answers to a question on job satisfaction show that 61.3 per cent of those employed enjoy their work, 13.4 per cent are dissatisfied and 20.9 per cent are partly satisfied.

Figure 3.3.13 shows the distribution of answers to the question on reasons for wishing to change jobs. Around 30 per cent of men and 24.4 per cent of women would like to find a job paying more. An important share of male (18.8 per cent) and of female (14.3 per cent) workers would like to have a permanent job, confirming that young people consider temporary jobs unsatisfactory. Other youth employed would like better working conditions and better career prospects. About 13 per cent of female workers would like to change their job to enable them to continue their studies. Only a small proportion wishes to change to find a job closer to home.

Figure 3.3.13. Reasons for wishing to change jobs, by gender



Source: own elaboration on SWTS of Mongolia, ILO.

Employed workers with important work deficits. Four sources of work deficit have been identified: 1) working more than 50 hours per week; 2) working with no contract; 3) working with a fixed-term contract; 4) working, but not paying taxes. For many, more than one deficit is present at any given time, but it is sufficient that only one is present to be included in the “in transition” group. This component is 16.9 per cent of the entire sample. As shown, in Section 2.7 and 2.8, about 60 per cent have no contract and about 74 per cent have a fixed-term contract. These two important sources of work deficit explain the “in transition” group. In addition, 12 per cent of those with a contract do not pay taxes, meaning they have no access to pension schemes and other social security services, therefore, a large number of young Mongolians work in very unstable conditions. About 40 per cent of employed workers work more than 50 hours per week, explaining the rest of the “in transition” group.

This Section has shown that many young Mongolians belong to the “in transition” group. This is an important issue that should be addressed vigorously by policy-makers and social actors, involving introducing more rights at work for young people. Moreover, an effort should be made to promote the adoption of contract work with permanent jobs, an important condition for greater job satisfaction and, in turn, for their level of productivity and for the growth prospect of the country. Rights at work should be promoted not only by the government, but also by all institutions operating in the labour market, including the educational system, the PES and social partners. The educational system should increase awareness of the importance of decent work, while the PES and the social partners should influence the behaviour of employers. Trade unions should promote more actively employment protection and the government should improve the legal framework.

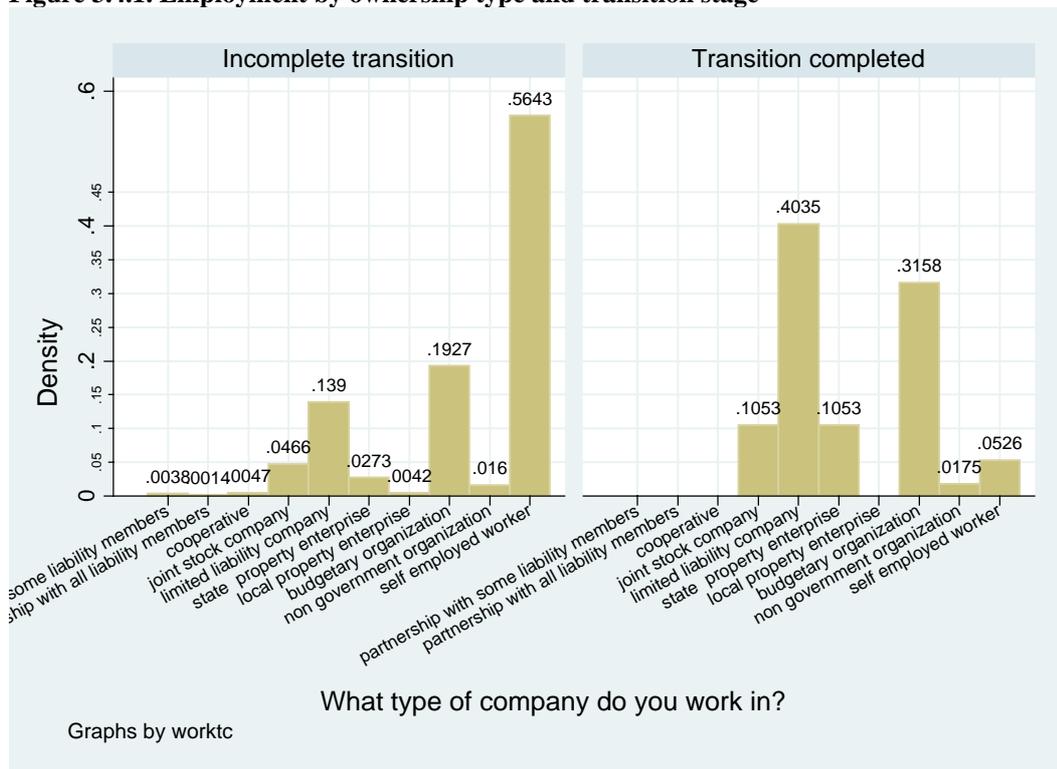
3.4. Characteristics of a successful transition

Young people who have successfully completed their school-to-work transition are those with a career or permanent job, enjoying decent working conditions and social protection. Only 0.9 per cent is in this category, with no gender differences. Age is an important predictor; the share of “transited” youth aged 25-29 years is more than double, reaching 2.4 per cent. Most young people

with decent and productive work reside in the capital, where the share reaches 1.5 per cent. There is almost no one in the sample, who has completed transition, living in rural areas, confirming that jobs there are of very low quality.

What are the determinants of successful transitions? Are there specific sectors or individual characteristics distinguishing the employed in decent jobs from the rest? The remainder of this section compares the characteristics of successful transitions with those of the rest of the “in transition” group. The ownership of a company or firm is the first characteristic looked at. Figure 3.4.1 shows that “transited” individuals are employed in very different types of companies from the others. Most are employed in limited liability companies (40.4 per cent), in budgetary organizations (31 per cent), in joint stock companies (10.3 per cent) and in the State sector (10.3 per cent). A smaller proportion is self-employed or employed in non-governmental organizations. However, most of the youth employment is concentrated in self-employment.

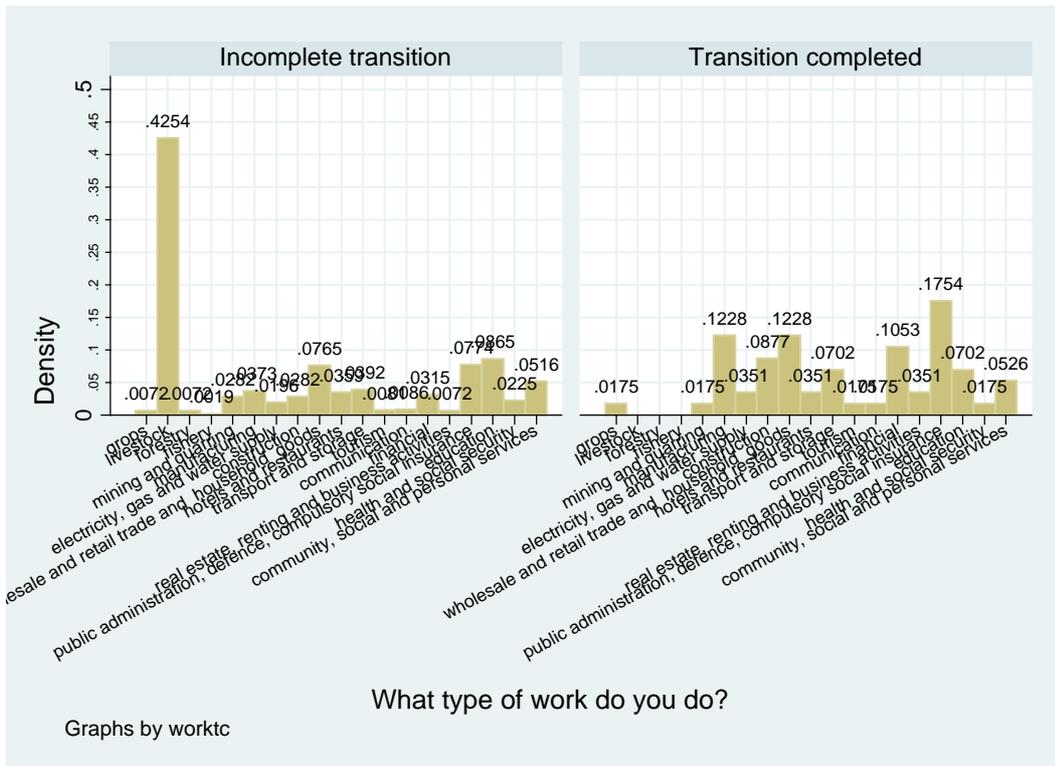
Figure 3.4.1. Employment by ownership type and transition stage



Source: own elaboration on SWTS of Mongolia, ILO.

The livestock sector offers the majority of jobs to those “in transition”, but none to the “transited” group, where 17.6 per cent are employed in the public services sector or in other public services and communal utilities (Figure 3.4.2).

Figure 3.4.2. Sectors of employment by transition stage

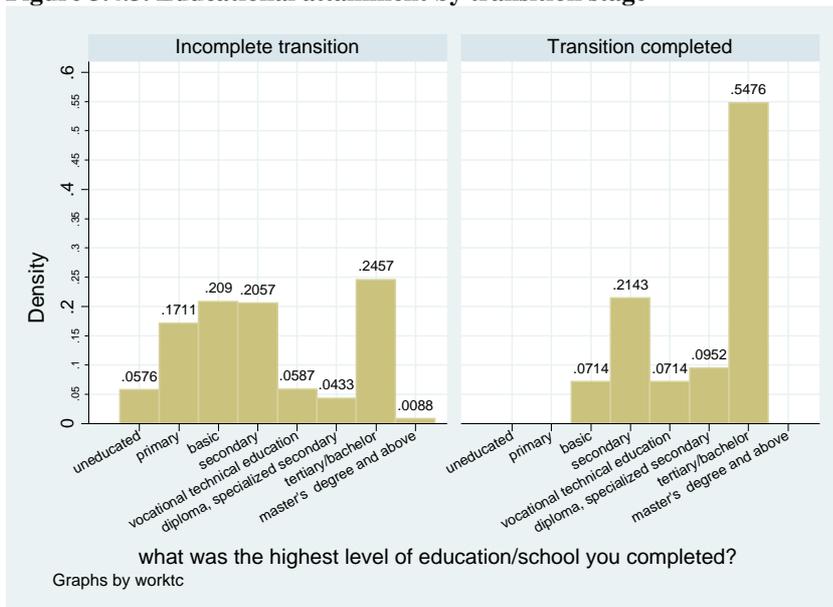


Source: own elaboration on SWTS of Mongolia, ILO.

About 10.3 per cent of the “transited” group belong to a union, a slightly higher share than the average of 8.1 per cent, suggesting that, although not providing any wage premium, union membership is sometimes associated with better working conditions.

When looking at the individual characteristics of successfully “transited” individuals, one single factor stands out: education. About 53.5 per cent of the “transited” youth hold a university degree, a much higher share than average, even when considering only the employed young people. This finding confirms the importance of education as an instrument, not only to access jobs and higher than average wages, but also to successfully complete the school-to-work transition.

Figure 3.4.3. Educational attainment by transition stage



Source: own elaboration on SWTS of Mongolia, ILO.

Figure 3.4.4 shows that young people, who have successfully completed their transition, have lower than average job tenure. About 68.9 per cent have tenures of one to four years and only about 15 per cent have shorter or longer tenure. This suggests that more time is necessary to access decent work than other jobs. It is also due to the time it takes to complete higher education.

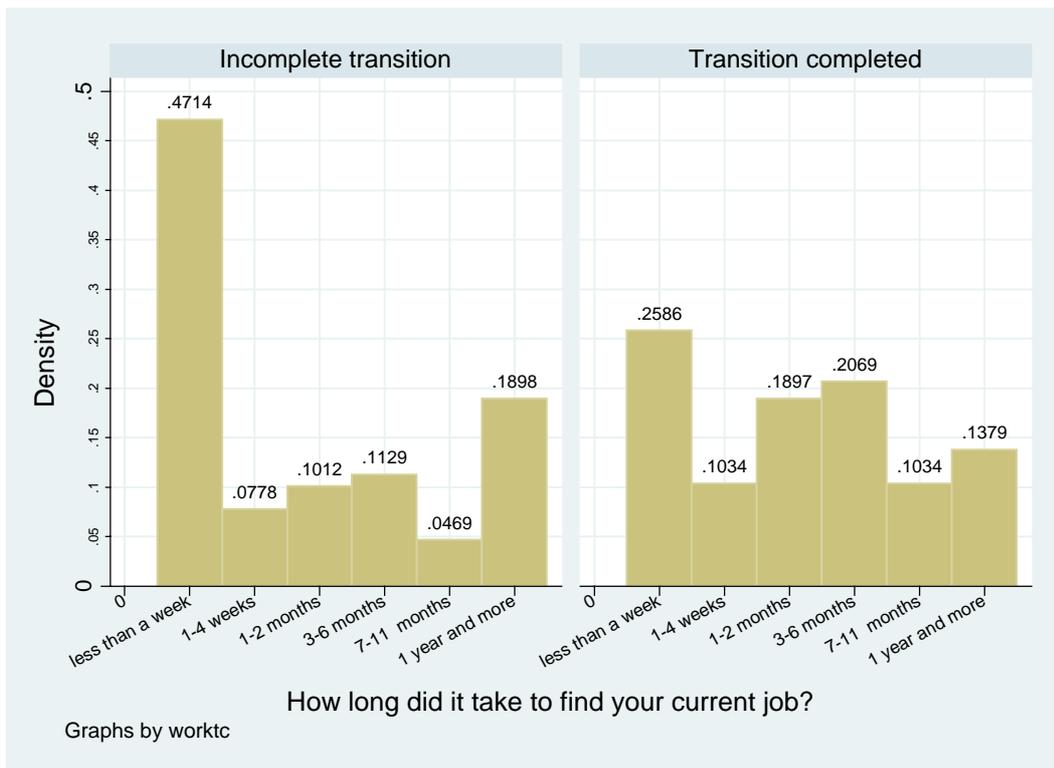
Figure 3.4.4. Job tenure by transition stage



Source: own elaboration on SWTS of Mongolia, ILO.

To access decent jobs, it appears that those with successful transitions experienced longer than average unemployment spells (Figure 3.4.5). Most young people in the “in transition” stage needed a very short time to access their current job: 47.1 per cent in less than one week, but probably these jobs were of low quality and often in family businesses. Others in the “in transition” group waited much longer: 24 per cent for more than 6 months and 19 per cent for more than a year. For “transited” young people, 75.9 per cent waited less than 6 months before finding their current job, 24 per cent more than 6 months and 13.8 per cent more than a year. In summary, young “transited” individuals waited a slightly longer time to access their decent jobs, but this has to be considered as a sign of job quality. These findings support the hypothesis that the urgency to earn some income pushes many young people to take the first available job, resulting in many ending up in dead-end jobs.

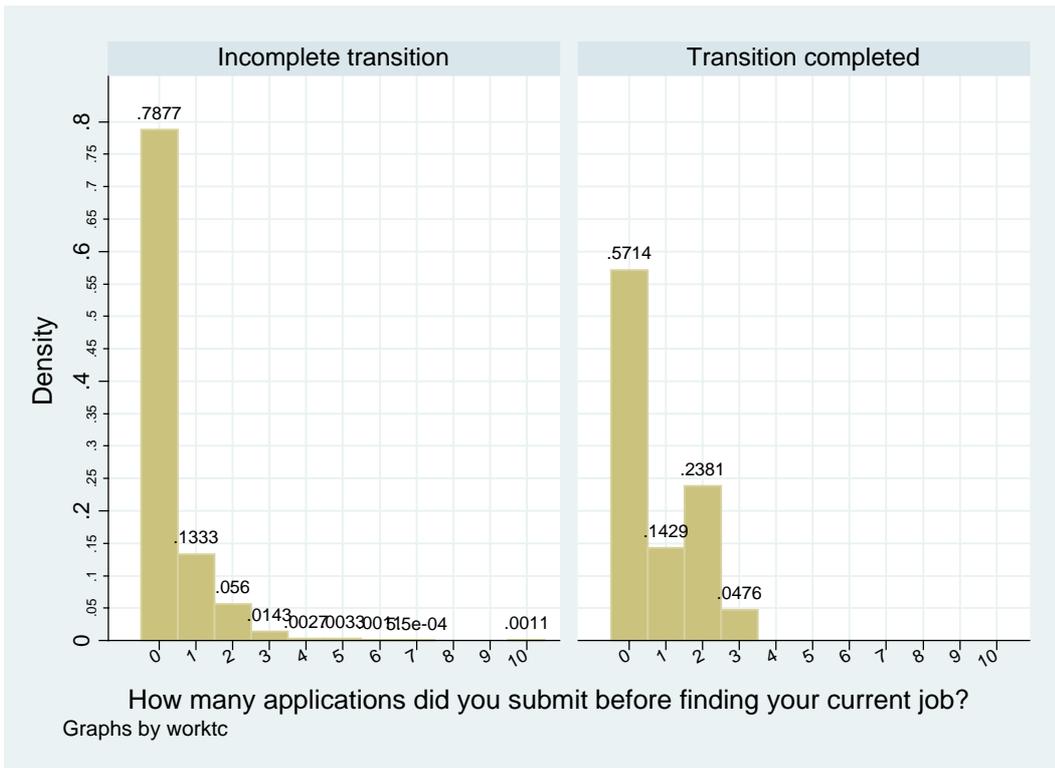
Figure 3.4.5. Length of job search by transition stage



Source: own elaboration on SWTS of Mongolia, ILO.

Figure 3.4.6 shows that job search methods are not an important discriminator between incomplete and completed transitions. If any significant difference does exist, it is in the relatively higher share of those who accessed their current job through the PES among the “transited” compared to the “in transition”: 7.6 against 1.7 per cent. Moreover, a slightly higher share of the “transited” used informal networks (35.9 against 32.9 per cent) and a slightly lower share followed employers’ suggestions (15.1 against 19.7 per cent). The share of those who found a job by applying directly to employers is high in both cases at about 32 per cent. Overall, these findings mean that informal networks are not only important to access jobs, but also to access decent jobs. This result suggests a slightly different view from that of employers, as discussed in Chapter 4. However, the findings also confirm the importance of direct applications to employers and also the potential role of PES, which should be improved to reduce imperfect and asymmetric information in labour market entry, thereby reducing unemployment spells and favouring a better match between labour demand and supply. The important role that informal networks seem to have is a sign of the unsatisfactory working of the youth labour market in informing young people of vacancies and also employers on the characteristics of potential candidates.

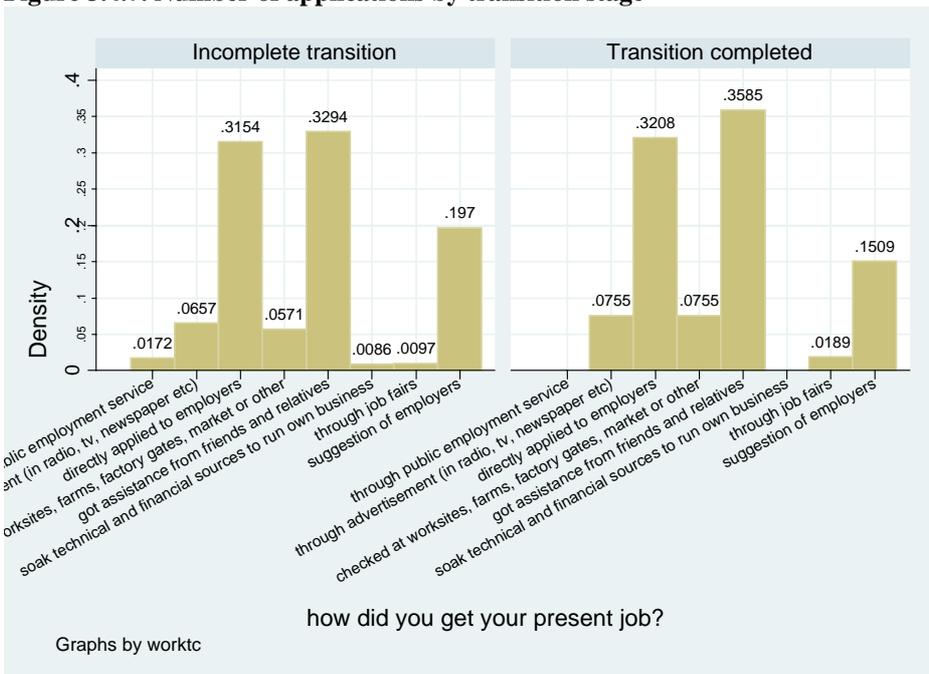
Figure 3.4.6. Job search method by transition stage



Source: own elaboration on SWTS of Mongolia, ILO.

Did successful jobseekers search more intensively than those in the “in transition” group? The evidence based on the STWS supports a positive answer, whatever the indicator of job search adopted. As Figure 3.4.7 shows, about 78.8 per cent of the “in transition” group submitted no application. The comparable figure for the “transited” group is 57.1 per cent. As a consequence, the shares of those in the “transited” group who have submitted one or more applications is higher. Again, this finding confirms that those who spend more time and effort in jobseeking are more successful.

Figure 3.4.7. Number of applications by transition stage



Source: own elaboration on SWTS of Mongolia, ILO.

About 84 per cent of the “in transition” group did not attend any job interview before finding their current job. The comparable figure for those who have completed their transition is 73.2 per cent.

Figure 3.4.8. Number of job interviews by transition stage



Source: own elaboration on SWTS of Mongolia, ILO.

Chapter 4: Creating jobs for young people: The employers’ perspective

Introduction

This chapter provides information on labour demand using the employers’ survey on a sample of enterprises. The employers and managers’ questionnaire provides information on the characteristics of firms, their methods to fill vacancies, their skill requirements, including educational attainment, gender and work experience. This information is very detailed and valuable as it shows the degree to which young people’s investment in the acquisition of skills matches the actual requirements of firms.

It provides information on:

- employer by sector and number of employees;
- employer by type of enterprise and number of employees;
- preferred hiring age by industry and occupation;
- preferred hiring gender by industry and occupation;
- preferred level of education by occupation (administrative, professional and manual);
- assessment of skills of young employees or job applicants;
- most important factors considered by employers in their hiring decisions.

The information available is of decisive importance to understand the mismatch between the demand for and the supply of skills in the youth labour market. Such information is important for policy-makers interested in reforming the labour market, as well as the educational and training system.

It provides in Section 1 a description of the characteristics of firms. Section 2 focuses on the recruitment methods and practices by employers. Section 3 discusses the extent to which job applicants match the employers' requirements and expectations. Section 4 discusses the way employers deal with mismatch between their expectations and actual skills. They might provide, for instance, training programmes for their employees. Section 5 has a special focus on the role of work experience in determining the demand for labour by employers. Work experience is the main weakness and the extent to which employers expect this might explain the youth unemployment rate and the ratio of the youth-to-adult unemployment rate. Some summary remarks and policy implications follow.

4.1. Characteristics of enterprises

Sector of activity. The enterprises in the employers' survey belong to many different sectors. Enterprises in wholesale and retail trade and household goods, and in education, have the largest share. Other sectors where enterprises in the sample are concentrated are manufacturing, hotels and restaurants, public administration, defence, compulsory social insurance and others. Enterprises in the livestock sector are only a small share of the total for, at least, three reasons: first, these are family run businesses; second, they are not the most in demand, especially after the recent crisis of the agricultural sector; third, they do not have particular skill requirements.

Table 4.1.1. Enterprises in the employers' survey by sector of activity

| | Total | Share to total % |
|---|-------|------------------|
| Crops | 35 | 4.6 |
| Livestock | 15 | 2.0 |
| Forestry | 4 | 0.5 |
| Mining and quarrying | 12 | 1.6 |
| Manufacturing | 56 | 7.4 |
| Electricity, gas and water supply | 35 | 4.6 |
| Construction | 37 | 4.9 |
| Wholesale and retail trade and household goods | 125 | 16.6 |
| Hotels and restaurants | 55 | 7.3 |
| Transport and storage | 16 | 2.1 |
| Tourism | 2 | 0.3 |
| Communication | 19 | 2.5 |
| Financial | 21 | 2.8 |
| Real estate, renting and business activities | 13 | 1.7 |
| Public administration, defence, compulsory social insurance | 60 | 7.9 |
| Education | 95 | 12.6 |
| Health and social security | 71 | 9.4 |
| Community, social and personal services | 33 | 4.4 |
| Others | 51 | 6.8 |
| Total | 755 | 100.0 |

Firms are almost equally distributed in terms of size. The smallest category with 1 to 9 employees is 28.7 per cent of the total; 10 to 19 is 19.1 per cent; 20 to 49 is 29 per cent; and, more than 50 is 23.2 per cent. Half of those answering the employers' module of the STWS were women. Almost all the employers belong to a union of workers or of employers. This is a much

higher share than that of young people. Men are more frequently members of employers' associations than women.

Table 4.1.2. Employers by gender and union membership

| | Sex | | | | | | Total | |
|-----------------------------|-------|------------------------|--------------------|--------|------------------------|--------------------|-------|--------------------|
| | Male | | | Female | | | total | Share to total (%) |
| | total | Share to sub total (%) | Share to total (%) | total | Share to sub total (%) | Share to total (%) | | |
| Only trade union | 72 | 40.0 | 20.5 | 108 | 60.0 | 26.7 | 180 | 23.8 |
| Only employers' association | 257 | 47.9 | 73.2 | 279 | 52.1 | 69.1 | 536 | 71.0 |
| Both | 19 | 59.4 | 5.4 | 13 | 40.6 | 3.2 | 32 | 4.2 |
| Not any | 3 | 42.9 | 0.9 | 4 | 57.1 | 1.0 | 7 | 0.9 |
| Total | 351 | 46.5 | 100.0 | 404 | 53.5 | 100.0 | 755 | 100.0 |

Firms in the survey are relatively young: almost 50 per cent were established in the 10 years prior to the survey; 20 per cent between 11 and 20 years; the rest are older. The oldest segment, with 51 or more years, is 11.7 per cent of the sample. With regard to their legal status, Table 4.1.3 shows that most of them are privately owned with, however, an important share still supported by the State. Limited liability companies are 42 per cent, but budgetary organizations are about 30 per cent of the sample. State-owned enterprises and organizations owned by local authorities are a minority share. Cooperatives are a large share of small-sized enterprises. Enterprises with 50 or more employees are mainly limited liability companies, budgetary organizations or joint stock companies.

Table 4.1.3. Enterprises by type of legal status and size

| | By number of employees | | | | | | | | | | | | Total | |
|---|------------------------|----------------------|------------------|-------|----------------------|------------------|-------|----------------------|------------------|-------------|----------------------|------------------|-------|------------------|
| | 1-9 | | | 10-19 | | | 20-49 | | | 50 and more | | | total | Share of total % |
| | total | Share of sub total % | Share of total % | total | Share of sub total % | Share of total % | total | Share of sub total % | Share of total % | total | Share of sub total % | Share of total % | | |
| Partnership with some liability members | 10 | 83.3 | 4.6 | | | | 2 | 16.7 | 0.9 | | | | 12 | 1.6 |
| Partnership with all liability members | 13 | 86.7 | 6.0 | 1 | 6.7 | 0.7 | | | | 1 | 6.7 | 0.6 | 15 | 2.0 |
| Cooperative | 41 | 65.1 | 18.9 | 14 | 22.2 | 9.7 | 7 | 11.1 | 3.2 | 1 | 1.6 | 0.6 | 63 | 8.3 |
| Joint stock company | 8 | 14.8 | 3.7 | 5 | 9.3 | 3.5 | 9 | 16.7 | 4.1 | 32 | 59.3 | 18.3 | 54 | 7.2 |
| Limited liability company | 98 | 30.9 | 45.2 | 68 | 21.5 | 47.2 | 91 | 28.7 | 41.6 | 60 | 18.9 | 34.3 | 317 | 42.0 |
| State property enterprise | 4 | 16.0 | 1.8 | 3 | 12.0 | 2.1 | 5 | 20.0 | 2.3 | 13 | 52.0 | 7.4 | 25 | 3.3 |
| Local property enterprise | 1 | 5.0 | 0.5 | 4 | 20.0 | 2.8 | 9 | 45.0 | 4.1 | 6 | 30.0 | 3.4 | 20 | 2.6 |
| Budgetary organization | 29 | 12.9 | 13.4 | 44 | 19.6 | 30.6 | 94 | 42.0 | 42.9 | 57 | 25.4 | 32.6 | 224 | 29.7 |
| Non government organization | 5 | 55.6 | 2.3 | 3 | 33.3 | 2.1 | | | | 1 | 11.1 | 0.6 | 9 | 1.2 |
| Self employed worker | 2 | 100.0 | 0.9 | | | | | | | | | | 2 | 0.3 |
| Other | 6 | 42.9 | 2.8 | 2 | 14.3 | 1.4 | 2 | 14.3 | 0.9 | 4 | 28.6 | 2.3 | 14 | 1.9 |
| TOTAL | 217 | 28.7 | 100.0 | 144 | 19.1 | 100.0 | 219 | 29.0 | 100.0 | 175 | 23.2 | 100.0 | 755 | 100.0 |

Only a few enterprises in the sample declare the cost of labour as their specific competitive advantage. Nevertheless, many rely on high productivity and quality of labour. Other factors are

considered to be competitiveness in domestic markets, as well as marketing. Not many firms feel that being competitive in international markets is important: only about 2 per cent indicated this as the most important factor for their survival in the market and an even lower share indicated it as a secondary factor.

4.2. Recruitment of young people

Type of selection. Most enterprises in the sample select personnel through announcement of vacancies, 39.2 per cent place an advertisement in the media. A significant share relies on schools and training institutions (24.6 per cent), with a predominance of schools (19.2 per cent). A sizeable share (16.2 per cent) also uses the PES. Internal promotions are an important share (6.9 per cent), suggesting that experience from temporary work can be a stepping-stone to a permanent job. Only a small share of enterprises (1.7 per cent), stated they relied on informal networks to hire new employees. There are only small differences based on employers' gender. Women rely more often on public announcement and training institutions, whereas men rely more often on PES and internal promotions.

Employers' selection methods are in sharp contrast to the job search methods of young people who are unemployed, those unemployed but still at school (Section 3.2) and those who are employed (Section 2.8). An advantage of the STWS is that it gathers information on job-search methods of all categories of young people and employers, allowing a comparison of the demand and supply of youth labour, information not readily available elsewhere. The relative majority of employees declared that they found their present job through informal networks (33 per cent) or by applying directly to employers (31.5 per cent), rather than answering job advertisements (6.6 per cent). This sharp contrast might suggest that employers see informal networks as an external constraint rather than as a choice.

Table 4.2.1. Selection channels for filling new vacancies, by gender of the employer

| | | | | | | | Total | |
|---|-------|------------------------|--------------------|--------|------------------------|--------------------|-------|--------------------|
| | Male | | | Female | | | Total | Share to total (%) |
| | total | Share to sub total (%) | Share to total (%) | total | Share to sub total (%) | Share to total (%) | | |
| Through an announcement | 19 | 37.3 | 32.8 | 32 | 62.7 | 44.4 | 51 | 39.2 |
| From the schools | 11 | 44.0 | 19.0 | 14 | 56.0 | 19.4 | 25 | 19.2 |
| From training institutions | 2 | 28.6 | 3.4 | 5 | 71.4 | 6.9 | 7 | 5.4 |
| From public employment services | 12 | 57.1 | 20.7 | 9 | 42.9 | 12.5 | 21 | 16.2 |
| Relatives or friends | 1 | 50.0 | 1.7 | 1 | 50.0 | 1.4 | 2 | 1.5 |
| Promoting employees who work in my business | 5 | 55.6 | 8.6 | 4 | 44.4 | 5.6 | 9 | 6.9 |
| Other | 8 | 53.3 | 13.8 | 7 | 46.7 | 9.7 | 15 | 11.5 |
| Total | 58 | 44.6 | 100.0 | 72 | 55.4 | 100.0 | 130 | 100.0 |

Employers' evaluation of youth interest in accessing a job. Employers were asked for their evaluation of young people's interest in applying for a job. Their impression is that wages are the main interest of the vast majority, with a small minority interested in career prospects and matching their actual qualifications to the skill requirements. Other characteristics, including a pleasant environment and reputation, are perceived by employers as less important to young people when applying for a job. This suggests that young people in Mongolia perceive a job as a tool to escape poverty.

Requirements to do a job successfully. Employers are asked to declare the skill requirements for vacant jobs, administrative, professional and manual. The picture that emerges, as summarized in Table 4.2.2, is that no one skill is more important, but rather they are interested in different types of skills to suit the vacancy.

For administrative jobs, teamwork is considered important (17.9 per cent), existing knowledge of the business world (15.9 per cent), ability to take responsibility (15 per cent), communication skills (14.5 per cent). Information and communication technology (ICT) skills are in high demand from employers (20 per cent). Some consider previous work experience important (12.5 per cent). Other skills are less valued, including a good command of foreign languages, explained by the picture emerging in Section 4.1 of firms oriented to the domestic, rather than the international market.

For professional jobs, previous work experience and communication skills are valued more than the ability to work in a team and knowledge of the business world. For manual jobs, three skills are important: ability to take responsibility; previous work experience; and, good communication skills. Ability to work in a team is also valued.

The overall picture that emerges is partly unfavourable to young people. Employers not only require previous work experience, but skills that, in fact, cannot be learned at school, such as ability to work in a team, knowledge of the business world and ability to take responsibility. The few skills that are either innate, to some extent, for example, communication and teamwork, or that can be learned at school, for example, ICT and foreign languages, are not much in demand. This confirms that the main problem for young people is their lack of generic and specific skills that can only be learned through work experience or specific training.

From a policy point of view this means there should be more opportunities for young people to access jobs and attend training programmes. Employers declared they provided some training programmes to newly hired employees, which will be analysed in the following sections.

Table 4.2.2. Employers' evaluation of skills necessary to access a job

| | Administrative | | Professional | | Manual | |
|-----------------------------------|----------------|------------------|--------------|-----------------|--------|------------------|
| | Total | Share to total % | Total | Share to total% | Total | Share to total % |
| Information and technology skills | 70 | 9.3 | 81 | 10.7 | 19 | 2.5 |
| Computer knowledge and skills | 83 | 11.0 | 56 | 7.4 | 15 | 2.0 |
| Command of foreign languages | 15 | 2.0 | 26 | 3.4 | 17 | 2.3 |
| Knowledge of the business world | 120 | 15.9 | 22 | 2.9 | 8 | 1.1 |
| Communication skill | 110 | 14.6 | 149 | 19.7 | 102 | 13.5 |
| Teamwork skills | 135 | 17.9 | 94 | 12.5 | 65 | 8.6 |
| Good appearance | 5 | 0.7 | 5 | 0.7 | 8 | 1.1 |
| Desirable | 5 | 0.7 | 28 | 3.7 | 34 | 4.5 |
| Previous work experience | 94 | 12.5 | 159 | 21.1 | 161 | 21.3 |
| Skills to take responsibility | 113 | 15.0 | 125 | 16.6 | 299 | 39.6 |
| Strong-minded | 1 | 0.1 | 1 | 0.1 | 18 | 2.4 |
| Other | 4 | 0.5 | 9 | 1.2 | 9 | 1.2 |
| Total | 755 | 100.0 | 755 | 100.0 | 755 | 100.0 |

Employers' preference for a specific age group. Employers were asked to state their preference for specific age groups, civil status, sex and educational level of applicants. Table 4.2.3 summarizes the answers for different age groups, according to type of job. The majority of employers have no specific preference for adult (30 years or more) or young people (15-29 years). However, this lack of preference is greater for manual/production workers than administrative and

professional workers. Less than 1 per cent of employers declare that they prefer child labour, that is children aged less than 15. Employers prefer adults to young people for administrative positions, whereas they prefer young people to adults for professional or manual positions.

Generally, these results suggest that young people have a disadvantage compared to adults in many fields, but especially in administrative positions. In professional and manual jobs, employers consider the more recently gained human capital and the greater physical strength sufficient compensation for the lack of young people's work experience.

Table 4.2.3. Preference of employers for different age groups

| Age | Administrative | | Professional | | Manual/Production | |
|---------------|----------------|------------------|--------------|------------------|-------------------|------------------|
| | Total | Share to total % | Total | Share to total % | Total | Share to total % |
| below 15 | 7 | 0.9 | 4 | 0.5 | 4 | 0.5 |
| 15-29 | 111 | 14.7 | 260 | 34.4 | 217 | 28.7 |
| above 29 | 293 | 38.8 | 184 | 24.4 | 161 | 21.3 |
| No preference | 344 | 45.6 | 307 | 40.7 | 373 | 49.4 |
| Total | 755 | 100.0 | 755 | 100.0 | 755 | 100.0 |

Employers' preference for a specific civil status. Table 4.2.4 presents answers to the preferred civil status of applicants by type of job. Most employers do not consider civil status important, but nevertheless prefer to hire young married people, confirming the results of the wage impact of civil status discussed in Section 2.8. This might explain why civil status has no statistically significant impact on youth wages.

Table 4.2.4. Civil status preference of employers

| | Administrative | | Professional | | Manual/Production | |
|-------------------|----------------|------------------|--------------|------------------|-------------------|------------------|
| | Total | Share to total % | Total | Share to total % | Total | Share to total % |
| Unmarried workers | 15 | 2.0 | 35 | 4.6 | 25 | 3.3 |
| Married workers | 151 | 20.0 | 112 | 14.8 | 97 | 12.8 |
| No preference | 589 | 78.0 | 608 | 80.5 | 633 | 83.8 |
| Total | 755 | 100.0 | 755 | 100.0 | 755 | 100.0 |

Employers' preference for a specific gender. Table 4.2.5 shows that, in general, employers have no preference. However, of those who have a preference, a relative majority prefers men, especially for administrative and manual jobs. This preference is due to the nature of the job, since, for example, manual jobs require physical strength and are, therefore, more suited to men. The preference for men is much lower for professional jobs. This finding suggests there is not a strong demand-side explanation for different job opportunities and wages across individuals of different gender. In section 8, it has been shown that the unconditional wage gap of women is not different in a statistical sense from that of men. When the educational level of women is considered, it appears that employers pay higher wages to men for the same characteristics.

Table 4.2.5. Employers' gender preference

| | Administrative | | Professional | | Manual/Production | |
|----------------|----------------|------------------|--------------|------------------|-------------------|------------------|
| | Total | Share to total % | Total | Share to total % | Total | Share to total % |
| Female workers | 93 | 12.3 | 131 | 17.4 | 105 | 13.9 |
| Male workers | 132 | 17.5 | 151 | 20.0 | 173 | 22.9 |
| No preference | 530 | 70.2 | 473 | 62.6 | 477 | 63.2 |
| Total | 755 | 100.0 | 755 | 100.0 | 755 | 100.0 |

Employers' preference for a specific educational qualification. Table 4.2.6. shows employers' answers by job type. The results provide new answers to questions already addressed. What is the demand for educational qualifications in Mongolia? Does it pay young people to invest in education? The answers in Section 2.8 were positive: young people with tertiary education earn double the salary of their peers with only compulsory education. The table also shows that this is due to the strong preference of employers for young people with high education, even for manual positions, and is certainly true when the job is administrative or professional.

An important share of employers prefers individuals with a vocational diploma not only for manual, but also for professional jobs, suggesting that vocational education is in demand. However, given the low wages of those with vocational education diplomas compared to other types of high school diplomas, would suggest that they fall short of employers' expectations.

Employers prefer those with, at least, secondary to those with only compulsory level or below education, even when the job is manual, perhaps reflecting, on the one hand, the low level of compulsory education and, on the other hand, their feeling that those with secondary education or above are more able to take advantage of training courses.

Table 4.2.6. Preference of employers as to the educational level of applicants

| | Administrative | | Professional | | Manual/Production | |
|--------------------------------|----------------|------------------|--------------|------------------|-------------------|------------------|
| | Total | Share to total % | Total | Share to total % | Total | Share to total % |
| Basic (Grade 4-8) | 7 | 0.9 | 7 | 0.9 | 16 | 2.1 |
| Secondary (Grade 9-10) | 16 | 2.1 | 40 | 5.3 | 160 | 21.2 |
| Vocational technical education | 22 | 2.9 | 136 | 18.0 | 248 | 32.8 |
| Diploma, specialized secondary | 79 | 10.5 | 163 | 21.6 | 74 | 9.8 |
| Tertiary/bachelor | 438 | 58.0 | 334 | 44.2 | 79 | 10.5 |
| Master's degree and above | 167 | 22.1 | 38 | 5.0 | 10 | 1.3 |
| No preference | 26 | 3.4 | 37 | 4.9 | 168 | 22.3 |
| Total | 755 | 100.0 | 755 | 100.0 | 755 | 100.0 |

Policy-makers should, therefore, favour young people's investment in education, in particular, by revitalizing vocational education as it is much on demand, but perhaps of an inferior quality. There appears to be a mismatch between the composition of demand, as based on employers' expectations, and the actual supply. Curricula need to be upgraded, developing new fields, which requires upgrading the skills and knowledge of teachers.

4.3. Matching expectations

The STWS also attempts to understand the extent to which the supply of, and demand for, skills match, based on employers' expectations. To assess this the employers and managers' module includes a specific question to assess the level and quality of skills possessed by recent applicants, such as writing, technical and communication skills, educational attainment and its quality, ability to adapt to a new environment and realistic expectations about work. Four outcomes are possible, poor, adequate, good or excellent.

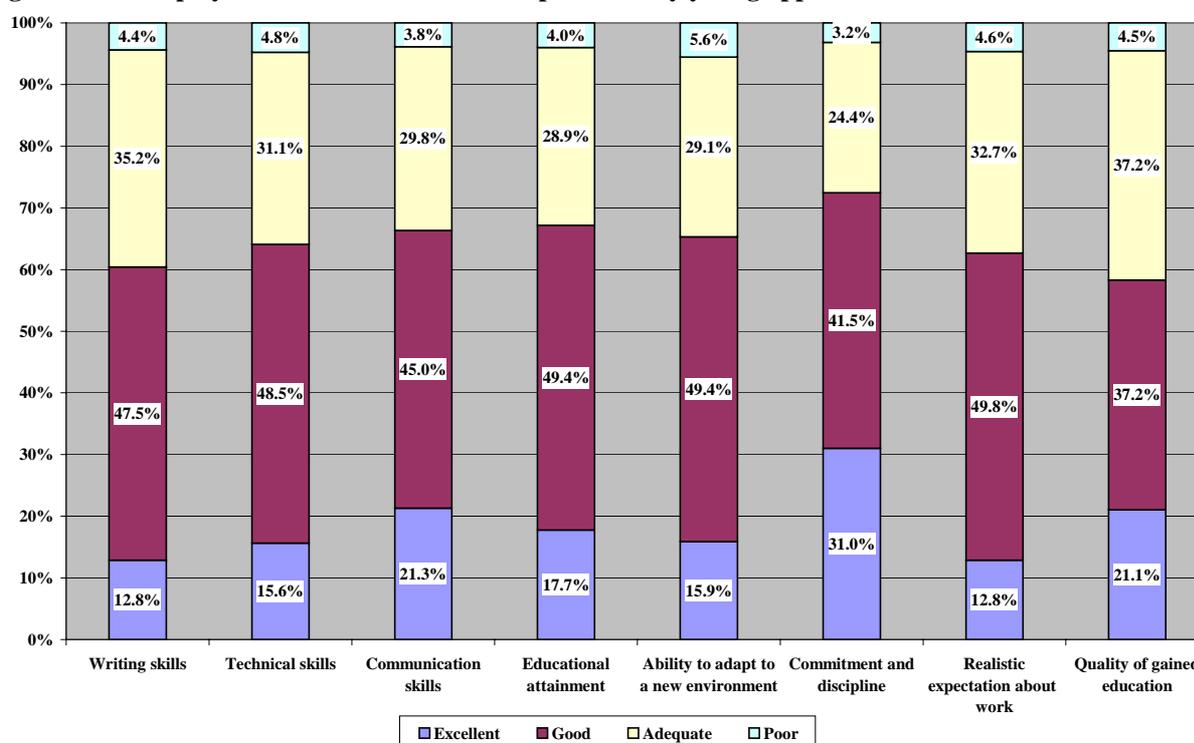
This type of assessment is important as it checks the employers' perception of youth skills against the actual level they possess. The existence of a mismatch between demand and supply of skills might indicate a difficulty of the educational and training system to orient the production of skills to the employers' expectations.

Figure 4.3.1 shows that the share of young applicants who appear to employers to be poorly endowed with skills is relatively low, 3.2 per cent for work commitment and discipline and 5.6 per cent for their ability to adapt to a new environment. This appears to be a satisfactory result for the educational and training system and for the ability of families to raise their children well.

This corresponds to the share of the total, 31 per cent, showing an excellent degree of commitment and discipline, considered by employers to be most frequent among young people, suggesting their commitment to work and to maintain their job. A relatively high share show an excellent quality of education (21.1 per cent) and excellent communication skills (21.3 per cent). Excellence in other skills, such as writing, is less frequent as is the degree of realism of work expectations. The proportion of those with excellent communication skills, educational attainment and ability to adapt to a new environment is intermediate.

On a less positive note, on average, writing skills and also the quality of education is considered relatively low by employers. About 40 per cent considered these skills just adequate or poor. Many of them also considered that technical skills were just average.

Figure 4.3.1. Employers' evaluation of the skills possessed by young applicants

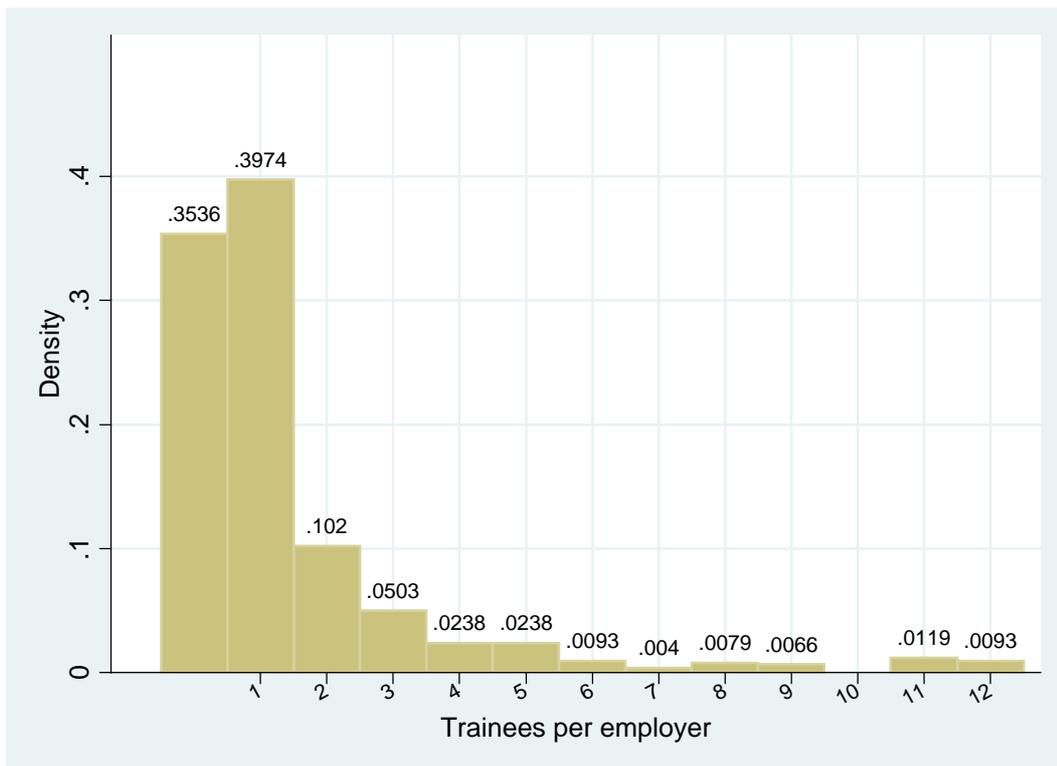


Overall, the employers' assessment of skill levels is relatively satisfactory. However, their perception of skills learned within the educational system is low.

4.4. Education and training

The previous section has shown that not all employers feel that the quality of education is good or excellent, especially the skills learned in the educational system. What is the solution to this supply/demand skill mismatch? Training for job specific skills is one answer employers might give. Figure 4.4.1 shows the percentage of firms that provide on-the-job training to any given number of employees.

Figure 4.4.1. Number of trainees per employer



Note: 0- zero trainees; 1- from 1 to 9; 2 from 10 to 19 and so on up to 10 that means from 90 to 99. 11- a number of trainees from 100 to 199 and 12- 200 trainees or more.

Source: own elaboration on the Mongolian STWS.

Therefore, while many employers consider the average skill level sufficient for the purpose, others consider it important to integrate skill level and composition by training programmes. As around 98.2 per cent of those who provide training claim that it is specific to the job, this again means that they feel that there is some form of skill shortage.

What type of training was provided by employers? About 26 per cent offered on-the-job training, which is job specific and aims to transfer those skills necessary to do the job. However, most of the training was done in the classroom, about 73 per cent, and only about 56 per cent included some form of practise. Few trainees were supervised.

Figure 4.4.2. Type of training provided by employers



Note: 1- on-the-job training; 2-training in the classroom with practice; 3- training in the classroom, without practice; 4- overseas training. 7.8 per cent of respondents did not specify the type of training.
 Source: own elaboration on the Mongolian STWS.

Figure 4.3.3 shows that most training is carried out within the organization (33.9 per cent) or in public agencies (46.1 per cent). Only a small part is carried out in private. International organizations make an important contribution to raising skill levels of newly hired employees.

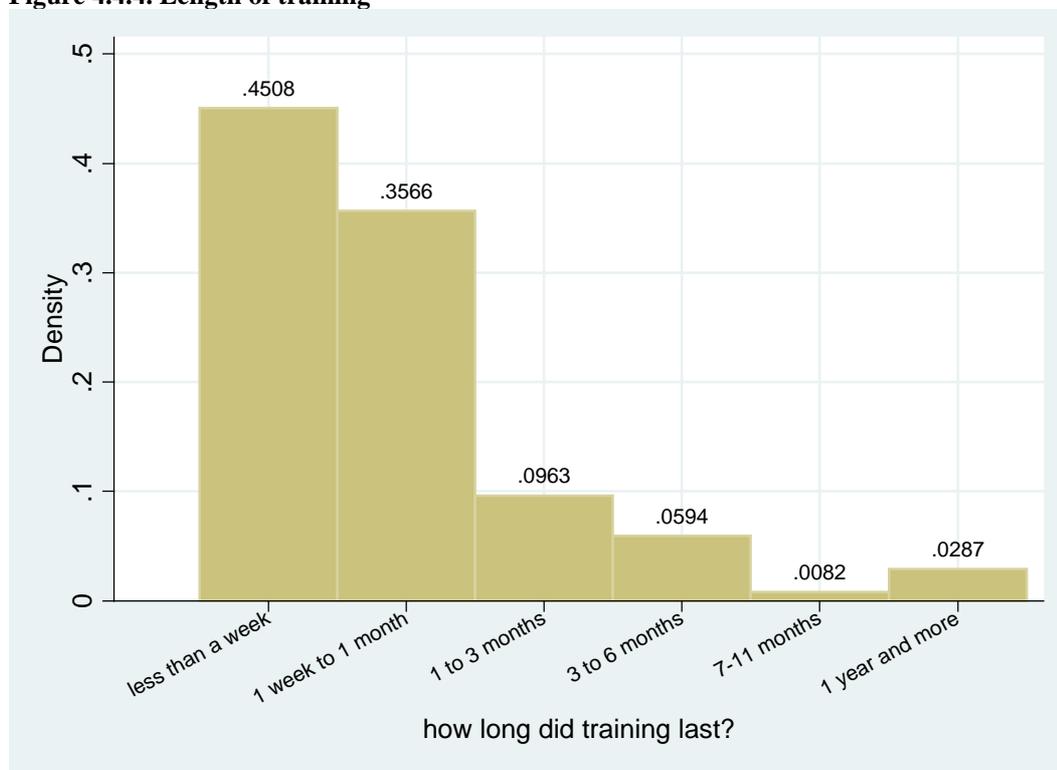
Figure 4.4.3. Who provided the training



Note: 1 own organization; 2 private training agency; 3 public agency; 4 international organization. 2.6 per cent of respondents did not specify the type of organization.
 Source: own elaboration on the Mongolian STWS.

Figure 4.4.4 shows that the length of training programmes is relatively short: 45 per cent less than a week and over 80 per cent not more than 2 weeks. This could suggest that the perceived cost of training is considered high, but who bears this cost? The STWS provides important information on this.

Figure 4.4.4. Length of training

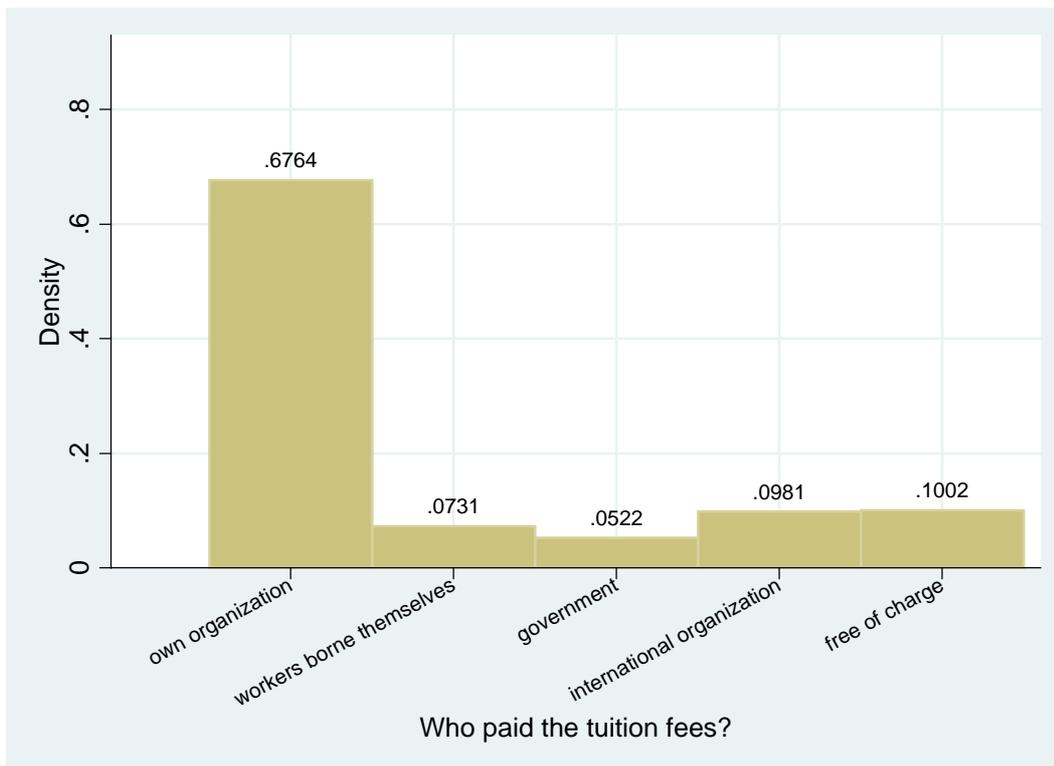


Note: 1- less than a week; 2- 1 week to 1 month; 3-from 1 to 3 months; 4-from 3 to 6 months; 5- from 7 to 11 months; 6-1 year or more.

Source: own elaboration on the Mongolian STWS.

Figure 4.4.5 shows that the short duration of training programmes and their content oriented to the formation of job-specific skills reflects the fact that in most cases (67.7 per cent) the cost is borne by the employer. Only in 7.3 per cent of cases did workers bear the cost themselves. This might explain why the wage effect of training was generally found to be negative (Section 2.8). If the cost of training is borne by firms, this could suggest that they internalize the returns to increased productivity of training and could be a concurrent explanation that employers consider attending a training programme as a sign of insufficient skill endowment. The government contribute to the cost of training in only 5.2 per cent of cases. International organizations are, however, important donors.

Figure 4.4.5. The cost of training



Note: 1 cost of training was borne by the organization; 2 cost was borne by workers; 3 cost was borne by the Government; 4 cost was borne by an international organization; 5 free of charge.
 Source: own elaboration on the Mongolian STWS.

Chapter 5: Summary, Conclusions and Recommendations

Introduction

This chapter attempts to summarize the main findings of the report and learn lessons on:

- (i) where blockages exist preventing young people finding decent employment;
- (ii) where supply and demand do not match and why;
- (iii) who the most disadvantaged youth are, i.e. those likely to face the most difficult transition.

Moreover, it attempts to identify and analyse the factors behind the youth employment problem based on the survey results. Some of the important factors include: (a) demographic factors; (b) macroeconomic factors; (c) labour market institutions; (d) labour market reservations; and, (e) organization and voice.

Furthermore, policy recommendations cover both supply- and demand-side measures that aim to ensure more and better jobs for young people. These recommendations do not aim to be concrete, but rather to serve as the basis for discussion by tripartite institutions.

5.1. Summary and Conclusions

Blockages that prevent young people from finding decent employment. As in other countries, young Mongolians attempt to overcome their human capital gap compared to adults. They try to overcome their educational gap through the educational system and through the training system and the labour market their job-specific work experience gap. Blockages exist for many young people at different stages of school-to-work transition.

The first stage of development implies the acquisition of the most appropriate level of education, in the household and through the educational system. Family values are transferred to children, first through the financial and cultural incentives that parents provide and consists of the

educational level of the family, their occupation, which is a proxy of their culture of labour and income. Since these opportunities are not offered to everybody equally, the educational system has the role of providing the same chances of achieving the level of education to fit the potential of the largest number of young people.

This report provides much evidence showing that family background affects, in many different ways, the level of educational attainment. The study of the determinants of educational attainment in Section 2.4 suggests that the decision to invest in it and its level is a positive function of the parents' own educational level. Section 3.1 also confirms that the probability of remaining at school, rather than accessing the labour market, depends strictly on the educational level of parents.

Overall, this favours the hypothesis that educational opportunities are not evenly distributed across people with different family backgrounds. This is an apparent failure of one of the main objectives of any educational system, namely to provide equality of opportunity to all.

A cause for concern about the supply of education is the still high share of uneducated young people (3.3 per cent) and the share of those who were unable to complete compulsory education (32.7 per cent). The analysis of the determinants of investment in education has shown that the largest share of these particularly weak groups resides in rural areas and come from poor family backgrounds, as measured by the educational level of parents.

The most likely and immediate cause of poor educational attainment is child labour, especially in agricultural areas and in herding, as highlighted in several studies (del Rosario, 2005; Gerelmaa, 2005) and in some documents of the Mongolian Government (2006). Child labour is the consequence of widespread poverty in Mongolia, highlighted in Section 1.1.

It is only a very few young people, through strong family support, who are able to quickly and easily accumulate human capital and, therefore, reduce the cost and increase the returns to education. Others, find the cost too high and drop out of school, consequently, entering the labour market too early and, therefore, find it difficult to access decent jobs, sometimes for the rest of their lives.

Vocational education is a specific bottleneck. Several chapters show that, despite being much in demand by employers (Chapter 3), it provides very low returns, both in terms of employment opportunities (Section 2.7) and of earnings (Section 2.8). In addition, as noted in Chapter 4, employers' answers to questions regarding educational requirements for jobs and actual levels of technical and vocational skills possessed by applicants, suggest that young people are unable to satisfy the expectations of potential employers.

Supply and demand problems in matching. Analysis of employers' assessment of young applicants' skills suggest that, while the level of education is relatively satisfactory and applicants are very disciplined, nonetheless, their writing skills are very poor. Furthermore, the quality of education is perceived by employers to be very low, suggesting a mismatch between the supply of and demand for skills.

Identifying the most disadvantaged youth. The analysis in the previous chapter identified several weak groups: a) in-transition young people, especially those residing in rural areas; b) long-term unemployed in rural areas; c) unemployed in urban areas; d) women that have not yet started their transition.

The most disadvantaged youth include those from poor families in rural areas where educational opportunities are very low and there is little chance to escape the poverty trap. They have the choice of remaining unemployed for a very long period or finding jobs that are less than decent. The in transition group is especially large in rural areas. These are employed young people with important decent work deficits, often working without a contract or with a temporary contract, doing a job requiring long hours. Herding is for many the job of their parents and their only chance of survival. Young people dropping out of the educational system too early because of child labour are perhaps the most important target group for policy intervention.

Despite the lower than average unemployment rate, the youth long-term unemployment share is much higher in rural than urban areas. This is an indication that unemployment in rural areas is particularly hard to overcome for many young people when they enter the unemployment pool. The long-term unemployed in rural areas are an important group with a high risk of social exclusion.

Young unemployed in urban areas are another important target for policy intervention. Analysis of the distribution of unemployment across different locations shows that youth unemployment is essentially an urban phenomenon.

Young people aspiring to vocational education are also a specific target group, as previously noted, based on several types of analysis in this report. This is due to the old curricula offered by the educational system whereby students acquire skills that are not in demand.

Gender differences are numerous and are not always in favour of men. In general, women have a higher educational attainment, while their unemployment rate is not higher than men. However, while some young men work in low productivity jobs, especially in rural areas, young women tend to be inactive more often than men.

5.2. Policy recommendations

This section summarizes the main policy suggestions of this report, based on the targeting analysis of the previous section. The policy recommendations are very much in line with the aims of the Mongolian Government (2006) as detailed in the National Action Plan on Youth Employment.

Furthermore, it is important to stress that the focus of the following discussion is on the micro-level, but does not mean that macroeconomic factors are not important. On the contrary, aggregate demand management and policies aimed at increasing the growth rate and reducing the poverty and inequality level are an important pre-condition for the success of any policy aimed at smoothing school-to-work transition for the younger generation.

In line with Morris and Brunn (2005), particular attention should be paid to the restructuring of the agricultural sector. After economic transition and the ensuing privatization of livestock, herding became an important source of livelihood for many households in rural areas. However, small production units were unable to resist the hard climatic conditions and many of them are now in a very difficult economic situation, not only detrimental to the agricultural sector, but also to the families involved. Many experience poverty, pushing their children towards social exclusion. There is a need for intensive agricultural production, which could be achieved by implementing “exit strategies” for the smallest units, combining economic diversification and sustainable livelihoods for herding families.

However, the micro-reforms suggested below are very important to increase the competitiveness of the country in the international division of labour and to boost economic growth in the long term.

Supply side measures. These concern the individual, the family and, above all, the government and other policy-makers, including the social partners. Sometimes, they should involve the strengthening of the educational and training system and at other times they should aim at increasing the opportunities available in the labour market.

One important policy objective would be to increase the educational opportunities of the entire population in general and, in particular, the weakest groups, identified in the previous section. This can be done using a set of measures aimed at increasing the returns and reducing the cost of investment in human capital accumulation. It is important to bear in mind that the costs of education include, not only the direct cost (school and or university fees), but more importantly the indirect costs, such as books, teaching materials, transportation, and the opportunity costs, that is the income lost when attending school.

As del Rosario (2006, p. 17 and 25) notes, virtually all schools have at least eight grades, while schools up to grade 10 are mainly found in the larger towns and cities. However, in rural areas, many families cannot afford the cost of commuting or moving and this is a major cause of the drop out rate. Providing better training and easier school-to-work transition can increase the returns to education. Applying sufficiently progressive university fee rates can reduce the cost of education for the poorest segment of the population, without affecting the State budget. Educational systems where the cost is low for students are supported by the State. If educational opportunities are not evenly distributed, the system draws resources from the poorest taxpayers, often not using schools and universities, to the rich families whose children are using schools and universities. It is possible to redistribute the cost of education from poor to rich families to equalise opportunities across different income groups. This is very important in a country where large shares of the population are below the poverty line. The indirect and opportunity costs of education can be reduced by bringing schools into rural areas and by helping the neediest students to achieve their education in the shortest possible time.

The analysis in Chapter 3 has shown that a share as high as 70 per cent of the newly employed young people need training. However, the State finances this in only a few cases and it is more often employers and workers who pay. The wage loss associated with attendance at training programmes, noted in Section 2.8, suggests that employers pay for training in the first place, but then transfer the cost to young people by paying them lower wages. This can be taken as evidence of several shortcomings of the training system: a) it is less than optimal; b) it is too job-specific; c) the acquired skills are very difficult to transfer; d) it is of low quality, since it does not increase the productivity of young people, at least not in the short term.

Contributing to a reduction in training costs for firms and employees, and also an increase in the quantity and quality of training, is an important goal for the government. Increasing the quantity and quality of the educational system would contribute to reducing the demand for training in the first place. A better quality of education would meet the needs of employers and this, in turn, would require a closer collaboration between schools and universities, on one hand, and enterprises and other social actors, on the other.

The State sector, especially at the local level, should contribute its own supply of off-the-job training for the unemployed, so to increase their employability and reduce the cost of on-the-job training by firms. The quality of training could be improved with new and more in-depth programmes and teaching skills that are more in demand. Training systems should promote analysis of local labour markets to assess the actual level and composition of the demand for training by employers.

At the intermediate level, the introduction of the duality principle in the educational system might be very useful for firms, while maintaining a low cost of intervention for the State. The duality principle means having some kind of training together with education, especially for those aiming at a vocational degree and, when implemented, facilitates school-to-work transition and reduces the overall unemployment rate.

Vocational education is a weak link of the system, as highlighted in several sections. The duality principle would guarantee, in the case of vocational education, a continuous upgrading of the curricula and teaching methods. Agreeing on common training programmes with firms would acquaint teachers with the new needs of the emerging market economy. This would be an important achievement in a country where the production system is undergoing dramatic and continuous structural change. One of the main difficulties of the dual system, however, is the need to establish a close and continuous collaboration between educational institutions, trade unions and unions of employers, as well as other local institutions. This entails an enormous effort from all sides.

Nonetheless, the returns to this type of investment in social cohesiveness would be very high, not only for the educational system, but for the country as a whole. There is sufficient evidence here to suggest that, especially in rural areas, vocational schools should train young people to deal with new production techniques to help increase productivity.

Demand side measures. A closer collaboration between educational institutions and employers, promoted by the unions, might help reduce the mismatch between the supply of and the demand for skills. Employers should make educational institutions and local authorities aware of their actual needs so as to help them adapt to the new needs of the market economy.

In addition, young people need more information on the type of skills in demand and the type of jobs actually available in local labour markets. This is substantiated by the role informal networks play in increasing the job finding rate, despite the wage loss they bring with them. The PES may have an important role to play in this field. It should not only collect information regarding available local vacancies, making them accessible to potential applicants, but also provide counselling to unemployed young people.

In addition, the local PES can use the information available on vacancies, as well as on the employment register, to contribute to the monitoring of the demand for labour and skills, together with local authorities and the social partners. Identifying the PES and other local institutions for this task might help in the need to study and forecast the evolution of the composition of demand for labour in local labour markets as stated in the National Action Plan on Youth Employment (Mongolian Government, 2006). Identification of emerging and declining sectors and skills could be important to reform and continuously adapt the education and training system.

Particular attention should be paid to reducing the constraints of talented young people in establishing their own business. Young people returning after a period of working abroad could bring with them new production and organization methods to boost productivity and should be encouraged to do so by removing all existing legal and financial constraints.

Summary remarks

This chapter summarizes the main findings of the report and, based on them, offers some policy recommendations. Emphasis is put on the role of the education and training systems as key instruments to ease school-to-work transition.

This does not imply that macroeconomic policy is not important. On the contrary, boosting economic growth and alleviating poverty are important pre-conditions to helping the younger generation overcome their youth experience gap and access higher quality jobs. Policies aimed at increasing the skill level of the population are key to improving the long-term growth prospect of the country.

Some school-to-work transition problems highlighted in the chapter are also common to other countries. However, they are particularly difficult to tackle in Mongolia because of the process of transformation the country has undergone during the last decades. Structural change brings with it dramatic tensions in matching supply of and demand for skills. In turn, if adequately reformed and adapted to the needs of the market economy, the education and training systems could play a key role in reducing skill shortages, while easing school-to-work transition.

As this chapter suggests, particular attention should also be paid to increasing the returns and reducing the cost of education for poor families, especially in rural areas. In addition, upgrading and reforming the education and training systems to meet the emerging needs of the market economy requires a number of interventions, not only by national policy-makers, but also by institutions at all levels, including the social partners. Close collaboration between public institutions, unions and employers' organizations is the best means to reduce the mismatch between the composition of the demand for, and the supply of, skills.

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Statistical Annexes

This annex includes either additional information on survey methodology or additional tables and should be taken as an integral part of the report. The numbering of tables is as follows: the letter A stands for Annex, the first digit is the chapter, the second the section, and the last the relative numbering.

Table A.2.4.1. The determinants of young people education attainment

| Variable | <i>OLS</i> | | | | <i>Ordered Probit</i> | | | |
|------------------------------|------------|------------|------------|------------|-----------------------|------------|------------|------------|
| | All | Aged 15-19 | Aged 20-24 | Aged 25-29 | All | Aged 15-19 | Aged 20-24 | Aged 25-29 |
| Age | 0.1810 | 0.2547 | 0.2364 | 0.0512 | 0.1613 | 0.4632 | 0.1509 | 0.0620 |
| | 0.0000 | 0.0000 | 0.0000 | 0.0359 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Women | 0.3877 | 0.1449 | 0.5008 | 0.5590 | 0.3680 | 0.2489 | 0.4289 | 0.4884 |
| | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Broth1 | 0.0415 | 0.0269 | 0.1558 | 0.1165 | 0.0551 | 0.0530 | 0.1406 | 0.0886 |
| | 0.5327 | 0.6657 | 0.3065 | 0.5098 | 0.3358 | 0.5439 | 0.2945 | 0.4384 |
| Broth2 | 0.0200 | -0.0111 | 0.1941 | -0.1617 | 0.0465 | -0.0004 | 0.1314 | -0.0647 |
| | 0.7957 | 0.8572 | 0.1979 | 0.3368 | 0.4937 | 0.9966 | 0.3254 | 0.6930 |
| Broth3 | -0.0134 | -0.0322 | 0.0395 | -0.1883 | 0.0205 | -0.0360 | 0.0384 | -0.1067 |
| | 0.8464 | 0.6139 | 0.7934 | 0.2427 | 0.7289 | 0.7240 | 0.7488 | 0.3919 |
| Broth4 | -0.0640 | -0.1573 | 0.1528 | -0.3213 | -0.0573 | -0.2790 | 0.1014 | -0.2000 |
| | 0.2872 | 0.0329 | 0.3350 | 0.0443 | 0.3261 | 0.0163 | 0.4267 | 0.1510 |
| Broth5 | -0.1694 | 0.0017 | -0.0884 | -0.4990 | -0.1342 | -0.0071 | -0.1362 | -0.3501 |
| | 0.0764 | 0.9834 | 0.6100 | 0.0023 | 0.0812 | 0.9558 | 0.3668 | 0.0056 |
| Broth6 | -0.2790 | -0.0375 | -0.1384 | -0.5571 | -0.2338 | -0.0704 | -0.1250 | -0.4145 |
| | 0.0021 | 0.6656 | 0.4338 | 0.0016 | 0.0051 | 0.6717 | 0.4286 | 0.0023 |
| Broth7plus | -0.3022 | -0.0396 | -0.2048 | -0.4343 | -0.2356 | -0.0512 | -0.1974 | -0.2940 |
| | 0.0027 | 0.7298 | 0.2491 | 0.0086 | 0.0098 | 0.7740 | 0.2281 | 0.0225 |
| Study & work | 0.6658 | 0.1429 | 0.6396 | 0.7642 | 0.5866 | 0.2704 | 0.5424 | 0.6394 |
| | 0.0000 | 0.0237 | 0.0000 | 0.0000 | 0.0000 | 0.0072 | 0.0000 | 0.0000 |
| Married | 0.0688 | -0.1976 | 0.1076 | 0.1853 | -0.0090 | -0.3932 | 0.0856 | 0.0809 |
| | 0.4400 | 0.3408 | 0.4620 | 0.2172 | 0.9123 | 0.1232 | 0.5140 | 0.4145 |
| Live together | -0.1752 | 0.2357 | -0.2095 | -0.1892 | -0.1523 | 0.3747 | -0.1073 | -0.2092 |
| | 0.3417 | 0.1839 | 0.4804 | 0.4276 | 0.3350 | 0.1073 | 0.7067 | 0.2347 |
| Divorced, separated, widowed | -0.1662 | 0.0000 | -0.7301 | -0.2471 | -0.2877 | | -0.4734 | -0.3766 |
| | 0.5340 | | 0.0055 | 0.4165 | 0.2267 | | 0.0215 | 0.0888 |
| Lone parent | -0.1741 | -0.1816 | -0.0871 | -0.3532 | -0.1905 | -0.3334 | -0.1192 | -0.3269 |
| | 0.2251 | 0.6065 | 0.6853 | 0.0885 | 0.1255 | 0.4559 | 0.4951 | 0.0420 |
| Child1 | -0.0510 | -0.0970 | -0.2629 | 0.1383 | -0.0332 | -0.0974 | -0.1797 | 0.1423 |
| | 0.5848 | 0.7324 | 0.0894 | 0.3315 | 0.6864 | 0.7443 | 0.1346 | 0.1191 |
| Child2 | -0.6309 | 0.3266 | -0.7480 | -0.2235 | -0.4982 | 0.5863 | -0.5846 | -0.1088 |
| | 0.0000 | 0.4103 | 0.0001 | 0.1210 | 0.0000 | 0.2814 | 0.0000 | 0.1828 |
| Child3plus | -1.0741 | 0.3099 | -0.1517 | -0.4979 | -0.8468 | 0.5870 | -0.2090 | -0.3119 |
| | 0.0000 | 0.5019 | 0.8077 | 0.0037 | 0.0000 | 0.4163 | 0.6392 | 0.0130 |
| Immigrant with family | -0.0118 | -0.0710 | 0.0382 | -0.0796 | -0.0330 | -0.1031 | -0.0009 | -0.0580 |
| | 0.8261 | 0.0820 | 0.7109 | 0.4618 | 0.5034 | 0.1777 | 0.9912 | 0.5064 |
| Immigrant for education | 0.2131 | 0.1525 | 0.2419 | 0.4154 | 0.2070 | 0.2287 | 0.2272 | 0.1989 |
| | 0.0437 | 0.0315 | 0.1884 | 0.1422 | 0.0059 | 0.0361 | 0.0843 | 0.4314 |
| Immigrant seeking a job | 0.7294 | -0.1026 | 0.5583 | 0.7989 | 0.5549 | -0.1763 | 0.3907 | 0.6416 |
| | 0.0000 | 0.6046 | 0.0269 | 0.0000 | 0.0000 | 0.6138 | 0.0756 | 0.0000 |

| | | | | | | | | |
|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Immigrant looking for a job | -0.3932 | 0.7808 | -0.4471 | -0.7433 | -0.3323 | 1.1939 | -0.4306 | -0.5312 |
| | 0.1237 | 0.0461 | 0.2508 | 0.0035 | 0.1665 | 0.0055 | 0.3727 | 0.0081 |
| Primary father | 0.0119 | 0.1457 | -0.0691 | 0.1564 | 0.0501 | 0.2488 | -0.0669 | 0.1818 |
| | 0.9137 | 0.2152 | 0.7308 | 0.5781 | 0.6579 | 0.1866 | 0.6696 | 0.4542 |
| Basic father | 0.0451 | 0.1731 | -0.1180 | 0.2479 | 0.0724 | 0.2746 | -0.0980 | 0.2422 |
| | 0.6961 | 0.0979 | 0.5461 | 0.3898 | 0.5491 | 0.1152 | 0.6004 | 0.2930 |
| Secondary father | 0.2213 | 0.3131 | 0.1948 | 0.3578 | 0.2658 | 0.5140 | 0.1921 | 0.3510 |
| | 0.0564 | 0.0025 | 0.3346 | 0.2176 | 0.0233 | 0.0098 | 0.2682 | 0.1308 |
| Voctecsec father | 0.3033 | 0.2531 | 0.3376 | 0.5812 | 0.3134 | 0.4205 | 0.3111 | 0.4945 |
| | 0.0225 | 0.0203 | 0.1190 | 0.0590 | 0.0082 | 0.0226 | 0.1098 | 0.0491 |
| Specsec father | 0.4770 | 0.3176 | 0.5000 | 0.8777 | 0.4490 | 0.5360 | 0.4003 | 0.6825 |
| | 0.0001 | 0.0021 | 0.0173 | 0.0037 | 0.0000 | 0.0004 | 0.0152 | 0.0033 |
| Tertiary father | 0.5346 | 0.4110 | 0.4171 | 1.1963 | 0.5032 | 0.6965 | 0.3352 | 0.9868 |
| | 0.0004 | 0.0001 | 0.0695 | 0.0001 | 0.0002 | 0.0004 | 0.1496 | 0.0005 |
| Master father | 0.6418 | 0.2239 | 0.4552 | 1.8611 | 0.6477 | 0.3810 | 0.3516 | 2.2171 |
| | 0.0064 | 0.1463 | 0.2064 | 0.0000 | 0.0008 | 0.1204 | 0.2573 | 0.0000 |
| Education missing father | 0.0800 | 0.2349 | 0.1282 | 0.1884 | 0.1062 | 0.3699 | 0.0856 | 0.1916 |
| | 0.4959 | 0.0285 | 0.5162 | 0.4931 | 0.3464 | 0.0393 | 0.6383 | 0.3892 |
| Primary mother | 0.1497 | 0.3023 | -0.0180 | 0.1480 | 0.2418 | 0.4284 | 0.0963 | 0.2131 |
| | 0.2582 | 0.1183 | 0.9523 | 0.5773 | 0.0610 | 0.2109 | 0.7010 | 0.3638 |
| Basic mother | 0.4543 | 0.4638 | 0.3795 | 0.2166 | 0.5736 | 0.7043 | 0.4309 | 0.3298 |
| | 0.0008 | 0.0109 | 0.2107 | 0.4289 | 0.0000 | 0.0248 | 0.1384 | 0.1407 |
| Secondary mother | 0.6615 | 0.5905 | 0.6212 | 0.5905 | 0.7860 | 0.9346 | 0.6589 | 0.6539 |
| | 0.0000 | 0.0012 | 0.0432 | 0.0338 | 0.0000 | 0.0030 | 0.0127 | 0.0055 |
| Voctecsec mother | 0.6572 | 0.5392 | 0.8986 | 0.3773 | 0.7723 | 0.8270 | 0.8984 | 0.4582 |
| | 0.0000 | 0.0041 | 0.0051 | 0.2047 | 0.0000 | 0.0093 | 0.0007 | 0.0440 |
| Specsec mother | 0.8280 | 0.5632 | 0.9009 | 0.9722 | 0.8961 | 0.8760 | 0.8749 | 0.9129 |
| | 0.0000 | 0.0019 | 0.0036 | 0.0006 | 0.0000 | 0.0091 | 0.0005 | 0.0003 |
| Tertiary mother | 0.8863 | 0.6294 | 1.0468 | 0.9910 | 0.9563 | 1.0000 | 1.0289 | 0.9300 |
| | 0.0000 | 0.0006 | 0.0014 | 0.0015 | 0.0000 | 0.0019 | 0.0002 | 0.0006 |
| Master mother | 0.7890 | 0.5013 | 1.2868 | 0.9084 | 0.8561 | 0.7907 | 1.1875 | 0.8010 |
| | 0.0002 | 0.0161 | 0.0075 | 0.1912 | 0.0000 | 0.0110 | 0.0020 | 0.0873 |
| Education missing mother | 0.3605 | 0.4720 | 0.3678 | 0.1651 | 0.4943 | 0.7272 | 0.4384 | 0.2644 |
| | 0.0176 | 0.0155 | 0.2498 | 0.5469 | 0.0005 | 0.0407 | 0.1513 | 0.2647 |
| Rural | -0.7488 | -0.2358 | -1.0174 | -1.2379 | -0.7287 | -0.4138 | -0.8888 | -1.0216 |
| | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| _cons | -0.7343 | -1.8498 | -1.9989 | 2.4978 | 1.7416 | 6.5455 | 1.7729 | -0.4510 |
| | 0.0001 | 0.0000 | 0.0008 | 0.0010 | 0.0000 | 0.0000 | 0.0015 | 0.3150 |
| Cut-off point 2 | | | | | 2.7531 | 7.5987 | 2.7122 | 0.6936 |
| | | | | | 0.0000 | 0.0000 | 0.0000 | 0.1129 |
| Cut-off point 3 | | | | | 4.0894 | 9.5897 | 3.4552 | 1.7519 |
| | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0001 |
| Cut-off point 4 | | | | | 5.4274 | 11.5268 | 5.0743 | 2.8408 |
| | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cut-off point 5 | | | | | 5.6208 | 11.9354 | 5.2666 | 3.0518 |
| | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cut-off point 6 | | | | | 5.7686 | 12.0232 | 5.4011 | 3.2602 |
| | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cut-off point 7 | | | | | 7.8617 | | 7.7680 | 5.5301 |
| | | | | | 0.0000 | | 0.0000 | 0.0000 |
| Number of observations | | | | | | | | |
| R ² | | | | | | | | |

Note: Dependent variable is the educational level of young people taking the following values: 1 = individuals who are uneducated; 2 = primary education only; 3 = basic secondary education; 4 = general secondary education; 5 = vocational technical education; 6 = specialised secondary education; 7 = tertiary; and 8 = master degree

The figures under the coefficient are probability values. Legend: $p < 0.05$ means statistically significant at the 10 per cent level; $p < 0.01$ means significant at the 5 per cent level; and $p < 0.001$ means significant at the 1 per cent level.

The Huber/White/sandwich estimator of variance is used in place of the traditional calculation.

The estimates include also omitted controls for residence in a given Aimag.

Source: own elaboration on SWTS of Mongolia.

Table A.2.6.1. Logistic estimate: being still in school rather than in the labour market

| <i>Variable</i> | <i>All</i> | <i>Young Teenagers (15-19)</i> | <i>Young adults (20-24)</i> | <i>Aged 25-29</i> | <i>Men</i> | <i>Women</i> |
|-----------------|------------|------------------------------------|---------------------------------|-------------------|------------|--------------|
| youngadult | -2.1722*** | | | | | |
| youngold | -3.4812*** | | | | | |
| women | 0.6740*** | 0.7703*** | 0.3659* | 0.3725 | | |
| secondary | -0.1395 | -0.1607 | 2.4621*** | 3.4042** | 0.3376* | -0.0421 |
| voctecsec | -2.3310*** | -1.8958*** | 0.2277 | 0.6399 | -1.4679*** | -2.3174*** |
| specsec | -1.9318*** | | 0.2481 | 2.4181 | -0.9882 | -1.7493* |
| tertiary | -2.0317*** | 2.4746* | 0.343 | 1.9379 | -0.8833** | -1.6772*** |
| master | -1.4973* | | 2.1941* | 1.8737 | 0.5864 | -0.3374 |
| broth1 | -0.1731 | -0.2211 | -0.5175 | 0.0704 | -0.2638 | -0.2651 |
| broth2 | -0.4593* | -0.6107 | -0.6638* | 0.2897 | -0.5195 | -0.571 |
| broth3 | -0.7681*** | -0.7522* | -1.0473*** | -1.0345 | -0.6105 | -1.1106*** |
| broth4 | -0.9469*** | -0.8879* | -1.3130*** | -0.336 | -0.9988** | -0.8956** |
| broth5plus | -1.1850*** | -1.1278** | -1.6343*** | -0.1766 | -1.0437** | -1.3083*** |
| studywork | 0.5808*** | 0.2246 | 0.8288*** | 0.9892** | 0.5070* | 0.6800* |
| married1 | -1.6604*** | -1.5588* | -0.8482* | -1.0918 | -0.8775 | -1.3927*** |
| loneparent | -1.0353* | -0.9287 | 0.1648 | -0.3124 | -0.4047 | -0.8859 |
| child1 | 0.0382 | | | -0.2215 | -0.1246 | 0.1218 |
| child2 | -0.0184 | | | -0.741 | 0.6663 | 0.0451 |
| child3plus | 0.5887 | | | 0.5181 | 0.9704 | 1.4435 |
| immigrant | 0.21 | 0.1236 | 0.2693 | -0.0628 | 0.2569 | 0.1357 |
| primaryf | 0.5439* | 0.9477** | 0.2871 | -1.6515 | 0.7614 | 0.3359 |
| basicf | 0.5197* | 0.6475* | 0.1932 | -0.782 | 0.7071* | 0.2567 |
| secondaryf | 0.7012** | 0.8743** | 0.2346 | -1.249 | 0.9400** | 0.29 |
| voctecsecf | 0.7595** | 0.9893** | 0.3501 | -0.8648 | 0.8235* | 0.6269 |
| specsecf | 1.1400*** | 1.2581*** | 0.7543 | -0.5304 | 1.3587*** | 0.7163 |
| tertiary1f | 1.4075*** | 1.7078*** | 1.145 | -0.4838 | 1.7634*** | 0.9957* |
| edmissf | 0.5119* | 0.6406* | 0.3483 | -0.8385 | 0.9153* | 0.1073 |
| primarym | 0.0915 | -0.1143 | 0.8797 | 16.5136*** | 0.0554 | 0.153 |
| basicm | 0.398 | 0.4199 | 0.4708 | 16.7606*** | 0.3447 | 0.4321 |
| secondarym | 0.7558* | 0.7054 | 0.695 | 16.4390*** | 0.3414 | 1.0748 |
| voctecsecm | 0.9081* | 0.8804 | 0.6734 | 17.0163*** | 0.657 | 1.1276 |
| specsecm | 1.1847*** | 1.3731* | 0.9444 | 16.8661*** | 0.9672* | 1.3255* |
| tertiary1m | 1.3304*** | 1.7179** | 0.8147 | 16.8851*** | 0.9969* | 1.5610** |
| edmissm | 0.4027 | 0.5971 | 0.3624 | 16.1261*** | 0.2095 | 0.6477 |
| aimagcentre | -0.2004 | 0.2877 | -0.6236** | -0.4303 | -0.1558 | -0.3396 |
| soumcentre | -0.8660*** | -0.5077** | -2.2934*** | -1.4041** | -1.0700*** | -0.9268*** |
| rural | -1.6538*** | -1.4279*** | -1.9560*** | -1.2476 | -1.9442*** | -1.4665*** |
| age | | -0.8163*** | -0.4185*** | 0.0057 | -0.5388*** | -0.4649*** |
| children | | -0.6947 | -0.2424 | | | |
| cons | 0.8829* | 14.4843*** | 6.4876*** | -20.4544 | 9.9551*** | 9.7434*** |

Source: own elaboration on SWTS of Mongolia.

Table A.2.7.1a. Multinomial LOGIT regression of determinants of unemployment

| <i>l</i> | <i>Young teenagers (15-19) Young adults (20-24) Aged 25-29 Men Women Urban Rural</i> | | | | | | | |
|--------------------------------|--|--------------------------------|-----------------------------|-------------------|------------|--------------|--------------|--------------|
| | <i>All</i> | <i>Young teenagers (15-19)</i> | <i>Young adults (20-24)</i> | <i>Aged 25-29</i> | <i>Men</i> | <i>Women</i> | <i>Urban</i> | <i>Rural</i> |
| <i>Panel (a): Unemployment</i> | | | | | | | | |
| youngadult | -0.2048 | | | | -0.3429 | -0.0507 | -0.6152 | 0.3135 |
| youngold | -0.0416 | | | | -0.0751 | 0.3039 | -0.4573 | 0.3906 |
| women | -0.8834*** | -0.2618 | -0.7206** | -1.4639*** | | | -0.4132 | -0.4944 |
| Basic | 0.1043 | 0.239 | 0.136 | -0.0959 | 0.2515 | 0.2348 | -0.3432 | 0.5311 |
| secondary | 0.7345*** | 0.9347* | 0.9741*** | 0.3216 | 1.0593*** | 1.1614*** | 0.3823 | 1.3254*** |
| voctecsec | 0.393 | 1.0666 | 0.2426 | 0.3398 | 0.8271 | 0.5418 | 0.5399 | 0.5046 |
| specsec | 1.2677 | -37.2659*** | 21.8627*** | 1.0679 | 1.0822 | 1.7581* | 0.2182 | 3.1252*** |
| tertiary1 | 2.5657*** | -2.9713** | 3.5920*** | 1.8812* | 2.8656* | 3.0209*** | 2.0174** | 3.5061*** |
| Broth1 | -0.2869 | -0.9241 | -0.2875 | -0.9986 | -0.894 | 0.5067 | -0.2799 | -1.3794 |
| Broth2 | -0.3047 | -1.4215 | -0.4213 | -0.045 | -0.7448 | 0.265 | 0.0898 | -1.5795* |
| Broth3 | -0.2112 | -1.4678 | -0.5682 | 0.5758 | -0.7526 | 0.148 | 0.4216 | -1.3940* |
| Broth4 | -0.4473 | -1.725 | -0.2005 | -0.3898 | -0.599 | -0.5758 | 0.0994 | -1.3921* |
| Broth5plus | -0.373 | -1.7279 | -0.1265 | -0.3965 | -0.76 | -0.3728 | 0.2682 | -1.2987* |
| studywork | -0.1709 | 0.0829 | -0.2102 | -0.1969 | -0.7044 | 0.3781 | -0.1218 | -0.7931 |
| married1 | -0.4717 | -1.7876 | -0.256 | -0.4596 | -0.167 | -1.4632*** | -1.1680** | -0.0706 |
| loneparent | 0.8234 | -0.9467 | 1.2354* | 0.8629 | 1.9042 | 0.1231 | 20.0444*** | 1.8587** |
| Child1 | -0.0971 | | | 0.0943 | 0.2169 | -0.149 | 0.8823 | -1.0462* |
| Child2 | -0.2133 | | | -0.0617 | -0.3599 | -0.191 | 0.7901 | -1.4126* |
| Child3plus | -0.2507 | | | 0.0942 | 0.2091 | -0.2967 | 0.612 | -1.3205 |
| immigrant | -0.4648* | -0.6898 | -0.323 | -0.5264 | -0.6980* | -0.8394*** | -0.3182 | -0.3134 |
| primaryf | -0.5902** | -1.1054* | -0.8215* | -0.1539 | -0.5223 | -0.9337*** | -0.36 | -0.5511 |
| basicf | -0.8154*** | -1.8817*** | -0.8140** | -0.0923 | -0.7696** | -0.8868** | -1.0089** | -0.5475 |
| secondaryf | -0.496 | -0.7874 | -0.7932* | 0.0681 | -0.7760* | 0.2427 | -0.578 | -0.6022 |
| voctecsecf | 0.0268 | 0.3626 | 0.4003 | -0.779 | -0.3667 | 0.385 | 0.9998 | -0.8076 |
| specsecf | -1.1787*** | -0.8064 | -1.5812** | -1.2368* | -1.2334** | -0.6012 | -1.2411** | -1.0535* |
| tertiary1f | -0.7071 | -1.1368 | -0.8485 | -0.1103 | -1.2576* | 0.1198 | -0.5967 | -0.6357 |
| primarym | -0.2365 | -0.2649 | -0.0451 | -0.5528 | -0.317 | -0.4166 | -1.5560** | 0.5368 |
| basicm | 0.0862 | -0.5093 | 0.1197 | 0.0888 | -0.1687 | 0.088 | -0.7491 | 0.6082 |
| secondarym | 0.3683 | -0.4562 | 0.6463 | 0.5923 | 0.4986 | 0.5446 | -0.4762 | 0.8839 |
| voctecsecm | 0.0464 | -0.8992 | -0.1146 | 0.2254 | -0.209 | 0.5883 | -1.1087 | -0.1484 |
| specsecm | 0.4816 | 0.8443 | 0.7408 | -0.0488 | 0.4327 | 0.2851 | -0.7574 | 1.8159*** |
| tertiary1m | -0.0223 | 0.35 | -0.0509 | -0.6952 | 0.8 | -0.2952 | -1.1094 | 1.145 |
| Ub | 4.1025*** | 4.4764*** | 3.7231*** | 4.7736*** | 3.9426*** | | | |
| aimagcentre | 3.6458*** | 4.4566*** | 2.9622*** | 4.9797*** | 3.5201*** | 2.6330*** | -0.4895 | |
| soumcentre | 3.1897*** | 4.0153*** | 3.1426*** | 3.1757*** | 3.0899*** | 2.4911*** | -1.0828*** | |
| Age | | 0.0708 | -0.1592* | -0.0029 | | | | |
| children | | 1.0295 | -0.2858 | | | | | |
| cons | -0.0699 | 0.2724 | 2.9596 | 0.1291 | 0.289 | 0.4789 | 4.7688*** | -0.6536 |

Note: Dependent variable is the labour market status of young people excluding those still in education. The following labour market statuses are considered: 1) unemployment; 2) self-employment; 3) unpaid family workers; 4) wage employment; 5) inactive. The category 3) is considered as the baseline and therefore all coefficients should be read in relation to the baseline status. The exponential of the coefficient measures the impact of a given characteristics on the odds ratio of being in a given labour market status, say unemployment, rather than being involved in unpaid family business.

*Legend: * means $p < 0.05$, or statistically significant at the 10 per cent level; ** means $p < 0.01$, or significant at the 5 per cent level; and *** means $p < 0.001$, or significant at the 1 per cent level.*

The Huber/White/sandwich estimator of variance is used in place of the traditional calculation.

Source: own elaboration on SWTS of Mongolia.

Table A.2.7.1b. Multinomial LOGIT regression of determinants of self-employment

| 2 | All | Young teenagers (15-19) | Young adults (20-24) | Aged 25-29 | Men | Women | Urban | Rural |
|----------------------------------|------------|-------------------------|----------------------|------------|-----------|-----------|------------|------------|
| <i>Panel (b) Self-employment</i> | | | | | | | | |
| Youngadult | 1.2791*** | | | | 1.2118*** | 1.2788 | 1.0633* | 1.1979*** |
| Youngold | 1.8611*** | | | | 1.8212*** | 2.1036** | 1.6982** | 1.5758*** |
| women | -2.1475*** | -1.8116* | -1.8017*** | -2.8216*** | | | -0.9232*** | -3.9001*** |
| basic | -0.3491* | -0.6317 | -0.5227 | -0.3756 | -0.2275 | 0.5246 | -0.3641 | -0.296 |
| secondary | 0.0109 | 0.5361 | -0.1631 | -0.0604 | 0.135 | 2.0327** | 0.3663 | -0.128 |
| vocetecsec | 0.2031 | 1.4252 | -0.0648 | 0.3467 | 0.4935 | 1.9241* | 1.1147 | -1.2447 |
| specsec | 1.6798* | 2.4427 | 22.0162 | 1.5259 | 1.4374 | 3.4980*** | 1.2878 | 2.6345 |
| tertiary1 | 2.1480*** | 28.1159*** | 2.6178** | 2.0059** | 2.1298 | 3.9044*** | 2.1791** | 1.3329 |
| broth1 | 0.0177 | 16.2963*** | -0.4251 | -0.1662 | -0.3635 | 0.3132 | -0.1112 | -0.4809 |
| broth2 | -0.0964 | 15.8211*** | -0.3169 | 0.1386 | -0.3105 | -0.1252 | 0.1087 | -0.5652 |
| broth3 | -0.1172 | 14.7388*** | -0.3121 | 0.4032 | -0.3604 | -0.4802 | 0.3586 | -0.7353 |
| broth4 | -0.4463 | 15.2057 | -0.7619 | -0.1794 | -0.4004 | -1.3228* | -0.1275 | -0.8347 |
| broth5plus | -0.1446 | 15.3359*** | -0.1862 | -0.15 | -0.3209 | -0.7494 | 0.4224 | -0.7326 |
| studywork | -0.2489 | 1.7357 | -0.5034 | -0.3816 | -0.5862 | 0.2472 | -0.1915 | -0.3547 |
| married1 | 0.386 | 0.101 | 0.2925 | 0.4816 | 0.9270* | -1.6889** | -0.2145 | 0.5932 |
| loneparent | 0.3772 | -32.7730*** | -0.3208 | 1.0132 | 0.0176 | -0.5955 | 20.2029 | -0.4317 |
| child1 | 0.3014 | | | 0.452 | 0.4446 | 0.5593 | 0.7803 | 0.7389 |
| child2 | 0.2164 | | | 0.2889 | 0.4044 | 0.4114 | 0.7184 | 0.5837 |
| child3plus | 0.3471 | | | 0.6044 | 1.178 | -0.1141 | 0.4833 | 1.1115* |
| immigrant | -0.1271 | -1.4884 | -0.0477 | 0.0125 | -0.2619 | -0.9343** | -0.1101 | -0.016 |
| primaryf | -0.3823 | -0.4243 | -0.7705* | -0.0141 | -0.6038* | 0.1384 | 0.1559 | -0.7489** |
| basicf | -0.4650* | -1.505 | -0.4715 | -0.1113 | -0.7260* | -0.0286 | -0.1489 | -1.0141*** |
| secondaryf | -0.0363 | -32.1539*** | -0.3281 | 0.5938 | -0.3938 | 0.9294* | 0.1034 | -0.2357 |
| vocetecsecf | 0.2554 | -0.428 | 0.3636 | 0.1857 | 0.017 | 0.5571 | 1.547 | -0.6405 |
| specsecf | -0.7171* | -0.1696 | -0.4011 | -1.4908** | -0.9788* | 0.3999 | -0.4489 | -1.5530* |
| tertiary1f | 0.1836 | 1.3368 | 0.3445 | 0.2938 | -0.1016 | 0.7889 | 0.6105 | -0.9359 |
| primarym | 0.0129 | 19.6629 | -0.2936 | -0.0476 | 0.1944 | -0.9242* | -1.1666 | 0.2576 |
| basicm | 0.0299 | 19.6258*** | -0.6318 | 0.4461 | 0.1449 | -0.569 | -1.0548 | 0.484 |
| secondarym | 0.1969 | 19.1779*** | 0.1707 | 0.4907 | 0.2741 | 0.4809 | -0.5651 | 0.1226 |
| vocetecsecm | -0.2641 | 19.5889*** | -0.5718 | -0.401 | -0.3293 | 0.0286 | -1.3535 | -0.0174 |
| specsecm | 0.077 | 20.7445*** | -0.3273 | -0.0844 | 0.0593 | -0.1743 | -1.1682 | 0.6037 |
| tertiary1m | 0.2622 | 19.7339*** | -0.6019 | 0.208 | 0.7977 | 0.2697 | -0.7942 | -0.0239 |
| Ub | 2.5999*** | 1.6316 | 2.3750*** | 3.2437*** | 1.9568*** | | | |
| aimagcentre | 1.5521*** | -30.8627*** | 1.1611** | 2.7878*** | 1.1771** | 1.7153** | -0.9796* | |
| soumcentre | 1.1893*** | 1.2502 | 1.0620** | 1.2755*** | 0.6194* | 2.1646*** | -1.3716*** | |
| Age | | 0.2009 | 0.0826 | 0.0952 | | | | |
| children | | 1.5204 | 0.1308 | | | | | |
| _cons | -1.4539* | -38.4891 | -1.3889 | -2.5499 | -1.1913 | -3.0286* | 0.9215 | -0.8303 |

Note: Dependent variable is the labour market status of young people excluding those still in education. The following labour market statuses are considered: 1) unemployment; 2) self-employment; 3) unpaid family workers; 4) wage employment; 5) inactive. The category 3) is considered as the baseline and therefore all coefficients should be read in relation to the baseline status. The exponential of the coefficient measures the impact of a given characteristics on the odds ratio of being in a given labour market status, say unemployment, rather than being involved in unpaid family business.

Legend: * means $p < 0.05$, or statistically significant at the 10 per cent level; ** means $p < 0.01$, or significant at the 5 per cent level; and *** means $p < 0.001$, or significant at the 1 per cent level.

The Huber/White/sandwich estimator of variance is used in place of the traditional calculation.

Source: own elaboration on SWTS of Mongolia.

Table A.2.7.1c. Multinomial LOGIT regression of determinants of wage employment

| 4 | All | Young teenagers (15-19) | Young adults (20-24) | Aged 25-29 | Men | Women | Urban | Rural |
|---------------------------|------------|----------------------------|-------------------------|------------|-----------|------------|------------|-------------|
| Panel (c) Wage employment | | | | | | | | |
| youngadult | 0.2992 | | | | 0.1996 | 0.426 | -0.032 | 0.1469 |
| youngold | 0.8351*** | | | | 0.8317** | 1.1899*** | 0.4559 | 1.0123* |
| women | -1.1391*** | 0.0154 | -0.7596** | -2.0225*** | | | -0.5908* | -1.1575*** |
| basic | 0.0936 | 0.2439 | 0.023 | 0.0176 | 0.023 | 0.7452* | -0.1542 | -0.2598 |
| secondary | 0.9296*** | 1.1952* | 0.8658* | 0.8937* | 1.0297*** | 1.8419*** | 0.8190* | 0.0022 |
| vocsecsec | 1.2785*** | 2.3825 | 1.0952* | 1.3619* | 1.5525** | 1.8849*** | 1.5862** | 1.2238* |
| specsec | 3.0985*** | -0.6747 | 23.5252*** | 3.1312*** | 2.6900** | 4.0726*** | 2.3439** | 4.0413*** |
| tertiary1 | 4.4087*** | -3.6872** | 4.8728*** | 4.3193*** | 4.5069*** | 5.2544*** | 4.0192*** | 5.3844*** |
| broth1 | 0.395 | -0.1381 | -0.481 | 0.4638 | -0.0275 | 0.9434 | 0.231 | 20.7656 |
| broth2 | 0.2604 | -0.8993 | -0.3555 | 0.656 | 0.1247 | 0.4718 | 0.4373 | 20.6988*** |
| broth3 | 0.2841 | -1.283 | -0.4867 | 1.1025 | 0.0295 | 0.2771 | 0.7413 | 20.3930*** |
| broth4 | -0.013 | -1.5586 | -0.2023 | 0.2254 | -0.037 | -0.3227 | 0.3608 | 20.1820*** |
| broth5plus | 0.3785 | -1.3706 | 0.0576 | 0.5852 | 0.1362 | 0.1281 | 0.8873 | 20.3167*** |
| studywork | -0.1275 | 0.5849 | -0.2312 | -0.1187 | -0.5234 | 0.3053 | -0.0609 | -1.0842 |
| married1 | -0.2797 | -2.3861 | -0.1234 | -0.1286 | 0.4235 | -1.6404*** | -0.9992* | 0.642 |
| loneparent | 0.3302 | -33.6215*** | 0.8604 | 0.6432 | 1.5405 | -0.5823 | 19.7289*** | 0.608 |
| child1 | 0.2363 | | | 0.6027 | 0.4226 | 0.182 | 1.1576* | -0.5622 |
| child2 | -0.0061 | | | 0.2206 | 0.2181 | -0.2052 | 0.8296 | -0.3045 |
| child3plus | -0.2116 | | | 0.1746 | 0.7944 | -0.7546 | 0.5871 | -1.5393 |
| immigrant | -0.4525* | -1.0779 | -0.3097 | -0.3756 | -1.0092** | -0.5067 | -0.2657 | -0.6974 |
| primaryf | -0.2934 | -0.6974 | -0.2831 | -0.0473 | -0.3492 | -0.5052 | 0.0597 | -0.6256 |
| basicf | -0.6697** | -0.9905 | -0.6511 | -0.3125 | -0.7200* | -0.6148* | -0.8465* | -0.5179 |
| secondaryf | -0.4585 | -0.4851 | -0.5055 | -0.2883 | -0.7311* | 0.2333 | -0.5346 | -0.9777 |
| vocsecsecf | -0.0634 | -0.3357 | 0.3326 | -0.5063 | -0.2529 | 0.141 | 0.8221 | 0.1272 |
| specsecf | -0.8688** | 1.329 | -0.7874 | -1.5604** | -0.7706 | -0.3337 | -0.9096* | -1.017 |
| tertiary1f | -0.3507 | -0.5273 | -0.2922 | -0.0414 | -0.6043 | 0.1613 | -0.2436 | 0.1912 |
| primarym | -0.3039 | 0.2927 | -0.3692 | -0.5412 | -0.3146 | -0.6580* | -1.5694** | 0.2697 |
| basicm | 0.06 | -0.2122 | -0.1038 | 0.222 | -0.1669 | -0.0878 | -0.7935 | 0.5733 |
| secondarym | 0.5839* | -0.5601 | 0.7526 | 0.9659 | 0.5428 | 0.8805* | -0.277 | 1.2512* |
| vocsecsecm | 0.2681 | 0.1613 | 0.0699 | 0.2529 | 0.0621 | 0.6387 | -0.95 | 1.6671* |
| specsecm | 0.2816 | 0.5962 | 0.3935 | -0.0912 | -0.1253 | 0.3886 | -0.9247 | 1.3984* |
| tertiary1m | 0.1736 | 1.1317 | -0.2013 | -0.2354 | 0.3538 | 0.4714 | -0.908 | 1.2231 |
| Ub | 4.2786*** | 4.6850*** | 4.3098*** | 4.6667*** | 4.1993*** | | | |
| aimagcentre | 3.5564*** | 3.3301** | 3.4337*** | 4.5522*** | 3.3186*** | 2.5844*** | -0.7434 | |
| soumcentre | 3.0953*** | 3.1360*** | 3.4423*** | 2.9419*** | 2.7419*** | 2.5859*** | -1.3374*** | |
| Age | | 0.0728 | 0.0094 | 0.0151 | | | | |
| children | | 1.1822 | -0.386 | | | | | |
| _cons | -1.9692*** | -1.5244 | -1.7579 | -1.6985 | -1.3914 | -1.8578** | 2.9268** | -22.4408*** |

Note: Dependent variable is the labour market status of young people excluding those still in education. The following labour market statuses are considered: 1) unemployment; 2) self-employment; 3) unpaid family workers; 4) wage employment; 5) inactive. The category 3) is considered as the baseline and therefore all coefficients should be read in relation to the baseline status. The exponential of the coefficient measures the impact of a given characteristics on the odds ratio of being in a given labour market status, say unemployment, rather than being involved in unpaid family business.

Legend: * means $p < 0.05$, or statistically significant at the 10 per cent level; ** means $p < 0.01$, or significant at the 5 per cent level; and *** means $p < 0.001$, or significant at the 1 per cent level.

The Huber/White/sandwich estimator of variance is used in place of the traditional calculation.

Source: own elaboration on SWTS of Mongolia.

Table A.2.7.1d. Multinomial LOGIT regression of determinants of inactivity

| 5 | All | Young teenagers (15-19) | Young adults (20-24) | Aged 25-29 | Men | Women | Urban | Rural |
|-----------------------------|-----------|----------------------------|-------------------------|------------|-----------|-----------|------------|----------|
| <i>Panel (d) Inactivity</i> | | | | | | | | |
| youngadult | -0.4561* | | | | -0.49 | -0.319 | -0.7715* | -0.3648 |
| youngold | -0.3325 | | | | -0.1217 | -0.1002 | -0.7367 | -0.047 |
| women | 0.0844 | 0.5147 | 0.3203 | -0.5110* | | | 0.5886* | 0.1921 |
| basic | -0.3276 | -0.1533 | -0.3808 | -0.3832 | -0.099 | -0.234 | -0.6394 | -0.3454 |
| secondary | 0.3211 | 0.695 | 0.253 | 0.2407 | 0.9468** | 0.6350** | 0.1349 | 0.4045 |
| voctecsec | -0.3525 | 0.1334 | -1.1590* | 0.1489 | 0.2243 | -0.1943 | -0.0825 | -0.1735 |
| specsec | 1.5080* | -37.3334*** | 22.0738*** | 1.4558 | 1.9186 | 1.7929** | 0.9275 | 0.0733 |
| tertiary1 | 2.0336*** | 32.4816*** | 2.1802** | 1.9822** | 2.0641 | 2.4769*** | 1.7153* | 1.3409 |
| broth1 | -0.0639 | -0.978 | 0.2332 | -0.3009 | -0.6093 | 0.5617 | -0.3004 | 0.9982 |
| broth2 | -0.1703 | -0.9131 | 0.1051 | -0.2322 | -0.1019 | -0.0975 | -0.0011 | 0.5699 |
| broth3 | 0.0666 | -0.8033 | 0.2077 | 0.3901 | -0.4742 | 0.2532 | 0.5202 | 0.687 |
| broth4 | -0.1363 | -1.4625 | 0.2406 | 0.0434 | -0.0057 | -0.4872 | 0.3579 | 0.2254 |
| broth5plus | -0.1768 | -1.1885 | 0.1967 | -0.2121 | -0.1621 | -0.4746 | 0.3459 | 0.4191 |
| studywork | -0.0737 | -0.1996 | 0.2047 | -0.2678 | -0.1787 | 0.2262 | -0.1901 | 0.4757 |
| married1 | -0.2092 | -0.0491 | -0.2918 | -0.1467 | -0.2157 | -0.9572* | -0.8517 | -0.1787 |
| loneparent | 0.4447 | 0.3276 | 0.6055 | 0.5943 | 1.8099 | -0.1561 | 19.9543*** | 0.2605 |
| child1 | 0.9133** | | | 0.9727 | 1.0666 | 0.9092* | 1.9735*** | 0.1561 |
| child2 | 0.7255* | | | 0.8402 | 1.0458 | 0.5934 | 1.7278** | 0.0931 |
| child3plus | 1.0954** | | | 1.3810* | 0.295 | 1.0717* | 1.8921** | 0.6436 |
| immigrant | -0.3614 | -1.2069 | -0.1981 | -0.3244 | -0.7935* | -0.5453* | -0.1528 | -0.6934* |
| primaryf | -0.4646* | -1.4842** | -0.2846 | -0.0774 | -0.4429 | -0.6750** | -0.4337 | -0.2199 |
| basicf | -0.6078** | -1.5328*** | -0.2536 | -0.4646 | -0.7998* | -0.5369* | -0.8462* | -0.3699 |
| secondaryf | -0.5965* | -0.9886 | -0.7826 | -0.0808 | -0.6767 | -0.0218 | -0.748 | -0.1856 |
| voctecsecf | 0.1224 | -0.281 | 0.397 | -0.0625 | 0.1128 | 0.1783 | 1.004 | 0.1005 |
| specsecf | -0.8503* | -0.3136 | -0.5788 | -1.5598** | -1.1718* | -0.1876 | -1.0704* | -0.2521 |
| tertiary1f | -0.4918 | -1.8414 | -0.5934 | 0.1769 | -0.4688 | -0.1264 | -0.4689 | -0.2958 |
| primarym | 0.059 | 1.356 | 0.1771 | -0.4492 | 0.5299 | -0.2795 | -1.1806 | 0.1725 |
| basicm | 0.2668 | 0.8973 | 0.0858 | 0.3635 | 0.8532 | -0.05 | -0.4585 | 0.1336 |
| secondarym | 0.8701** | 1.1525 | 1.1264* | 0.8855 | 1.6938*** | 0.8100* | 0.0191 | 0.9481* |
| voctecsecm | 0.1565 | -0.5429 | 0.2798 | 0.0052 | 0.7206 | 0.2467 | -1.0811 | 0.6224 |
| specsecm | 0.5834 | 1.3904 | 0.6683 | 0.1274 | 1.0889* | 0.2732 | -0.4703 | 0.1172 |
| tertiary1m | 0.2353 | 2.466 | 0.1002 | -0.6462 | 1.466 | 0.114 | -0.7641 | 0.3246 |
| ub | 3.5135*** | 3.2322*** | 3.5508*** | 4.0457*** | 2.9019*** | | | |
| aimagcentre | 2.4608*** | 2.0907* | 2.1049*** | 3.8237*** | 1.7427*** | 2.0250*** | -1.1285** | |
| soumcentre | 1.8514*** | 2.0013*** | 2.3641*** | 1.5603*** | 1.2473*** | 1.7067*** | -1.8903*** | |
| age | | 0.0287 | -0.0543 | 0.0827 | | | | |
| children | | 0.4155 | 0.9280* | | | | | |
| _cons | -0.7589 | 0.2534 | -0.8015 | -3.0942 | -0.9348 | 0.5885 | 3.3275** | -1.1252 |

Note: Dependent variable is the labour market status of young people excluding those still in education. The following labour market statuses are considered: 1) unemployment; 2) self-employment; 3) unpaid family workers; 4) wage employment; 5) inactive. The category 3) is considered as the baseline and therefore all coefficients should be read in relation to the baseline market status. The exponential of the coefficient measures the impact of a given characteristics on the odds ratio of being in a given labour market status, say unemployment, rather than being involved in unpaid family business.

Legend: * means $p < 0.05$, or statistically significant at the 10 per cent level; ** means $p < 0.01$, or significant at the 5 per cent level; and *** means $p < 0.001$, or significant at the 1 per cent level.

The Huber/White/sandwich estimator of variance is used in place of the traditional calculation.

Source: own elaboration on SWTS of Mongolia.

Table A.2.7.2a. Multinomial LOGIT regression of determinants of unemployment. The role of parents' occupation

| <i>I</i> | <i>All</i> | <i>Young teenagers (15-19)</i> | <i>Young adults (20-24)</i> | <i>Aged 25-29</i> | <i>Men</i> | <i>Women</i> | <i>Urban</i> | <i>Rural</i> |
|-------------------------------|------------|--------------------------------|-----------------------------|-------------------|-------------|--------------|--------------|--------------|
| <i>Panel (a) Unemployment</i> | | | | | | | | |
| fmanager | 0.6608 | 2.0768 | 0.7613 | 0.3752 | 0.5111 | 0.4331 | 19.2475*** | 1.292 |
| fspecialist | 0.069 | 0.8402 | -0.1346 | -0.701 | -0.2573 | 0.4406 | -0.7782 | -0.0688 |
| ftechnical | -0.0941 | 21.4917 | -1.342 | 21.5043*** | -1.0895 | 20.0151*** | -0.6159 | -12.8671*** |
| fservice | 0.0087 | 1.2685 | -0.6522 | 1.0103 | 0.7325 | 0.104 | 0.4523 | -0.8982 |
| fagricult | -1.2205 | -47.4414 | -0.227 | 3.8356*** | -1.2386 | -0.0323 | -0.9201 | -35.9616*** |
| fproduction | -0.2463 | -2.5665* | -0.1919 | 20.0916 | 0.1462 | -0.755 | -0.53 | -0.0014 |
| felementary | -0.4371 | -0.9745 | -0.8988 | 1.1407 | 0.1776 | -0.5723 | -1.0235 | 0.4957 |
| fherdsman | -0.4282 | 0.1441 | -0.568 | -0.4475 | -0.4665 | -0.5069 | -0.9349 | -0.4298 |
| fretired | -0.5625** | -0.477 | -0.5688 | -0.6370* | -0.4847 | -0.3054 | -0.6215 | 0.0128 |
| fselfemplo~d | -0.6093 | -2.0329* | -1.2442* | -0.0336 | -1.3998** | 0.491 | -1.0137* | 0.9428 |
| funpaid | -0.2881 | -1.6845 | -0.4136 | 0.511 | -1.0623 | 0.3884 | -0.9328 | 0.545 |
| funempl | -0.001 | -0.3168 | -0.2884 | 0.7773 | 0.5079 | -0.4236 | -0.1527 | -0.7345 |
| fother | 0.2865 | 1.2749 | 0.4115 | 0.0052 | 1.0519 | -0.1341 | 1.3112 | 0.4617 |
| mmanager | -1.0349 | -33.9543 | -0.9106 | 20.3107 | -1.5927 | -0.1216 | -2.2204* | 1.1162 |
| mspecialist | -0.0248 | -0.564 | 1.33 | -1.2768 | 0.8805 | -0.5847 | -1.701 | 3.1132** |
| mtechnical | -1.2132 | -48.4594 | 0.6086 | -2.6984* | -0.3264 | -1.2528 | -2.7196* | 4.4012 |
| mservice | 0.2913 | 0.7136 | 0.6424 | -0.5169 | 0.1586 | 0.3843 | -1.1163 | 2.3217** |
| magricult | 1.3538 | -43.5319 | 1.9972* | -17.9203*** | -29.5281*** | 1.4768 | -2.1265 | 2.9376* |
| mproduction | 0.2231 | 0.2569 | 22.3104*** | -38.8269*** | -0.3621 | 0.6402 | -1.6756 | 1.1316 |
| melementary | 1.4065* | 2.1134* | 1.7475 | 0.5633 | 1.099 | 1.6073 | 0.0708 | 2.4703* |
| mherdsman | -0.4633 | -2.0215** | -0.1378 | -0.2718 | -0.7334 | -0.7484 | -0.9638 | 0.3387 |
| mretired | 0.1676 | 0.092 | 0.6243 | -0.2024 | 0.1944 | -0.0033 | -0.9024 | 1.1159 |
| mselfemplo~d | -0.3582 | 2.0884 | -0.6209 | -0.3917 | -0.5271 | 0.9517 | -1.3562 | 1.1831 |
| munpaid | 1.0871** | 1.4676 | 1.0990* | 1.5439 | 1.6560** | 1.1166* | -0.0436 | 1.8961* |
| munempl | 1.3861*** | 2.6221** | 1.8048** | 0.081 | 1.5050* | 1.4420** | -0.1083 | 3.0812*** |
| motherjob | 0.9331 | 21.3697*** | 0.3542 | 19.4475*** | 21.7950*** | 0.5937 | -0.4538 | 1.9467 |

Note: Dependent variable is the labour market status of young people excluding those still in education. The following labour market statuses are considered: 1) unemployment; 2) self-employment; 3) unpaid family workers; 4) wage employment; 5) inactive. The category 3) is considered as the baseline and therefore all coefficients should be read in relation to the baseline status. The exponential of the coefficient measures the impact of a given characteristics on the odds ratio of being in a given labour market status, say unemployment, rather than being involved in unpaid family business.

The estimates in the table presents only the coefficients of the variables relative to the parents' occupation. The other independent variables are the same as in Table A.2.7.1.

*Legend: * means $p < 0.05$, or statistically significant at the 10 per cent level; ** means $p < 0.01$, or significant at the 5 per cent level; and *** means $p < 0.001$, or significant at the 1 per cent level.*

The Huber/White/sandwich estimator of variance is used in place of the traditional calculation.

Source: own elaboration on SWTS of Mongolia.

Table A.2.7.2b. Multinomial LOGIT regression of determinants of self-employment. The role of parents' occupation

| <i>I</i> | <i>All</i> | <i>Young teenagers (15-19)</i> | <i>Young adults (20-24)</i> | <i>Aged 25-29</i> | <i>Men</i> | <i>Women</i> | <i>Urban</i> | <i>Rural</i> |
|----------------------------------|------------|--------------------------------|-----------------------------|-------------------|------------|--------------|--------------|--------------|
| <i>Panel (b) Self-employment</i> | | | | | | | | |
| fmanager | 1.1678 | -43.4126 | 2.0555 | 0.7716 | 0.8811 | 1.899 | 20.7533*** | -0.1936 |
| fspecialist | 0.2998 | 3.6927* | -0.1578 | -0.2545 | -0.5742 | 1.7363 | -0.3668 | 0.3112 |
| ftechnical | 0.8089 | -24.04 | -1.4242 | 22.3289*** | -0.5591 | 21.4476 | 0.6931 | -42.7125*** |
| Fservice | -0.341 | 3.4551 | -1.5266* | 1.075 | 0.3557 | 0.2248 | 0.5652 | -34.5245*** |
| fagricult | 0.8903 | -44.4145 | 1.5513 | 27.5191 | 0.4746 | 3.1625 | -43.2969 | 25.2859*** |
| fproduction | -1.5387 | -46.8587 | -1.1289 | -16.6912*** | -0.8926 | -31.9359*** | -1.5143 | -34.3206*** |
| felementary | -0.4251 | 0.9189 | -1.6108 | 1.4513 | 0.2598 | -0.4232 | -0.6606 | -0.2502 |
| fherdsman | -0.6024** | 0.0432 | -1.1219** | -0.2375 | -1.0117*** | 0.2741 | -0.6403 | -0.9423*** |
| fretired | -0.3575 | -1.0702 | -0.1759 | -0.5476 | -0.4489 | 0.4414 | -0.0202 | -0.9838** |
| fselfemplo~d | -0.1713 | -2.207 | -0.3006 | -0.3804 | -0.8034 | 1.1375 | -0.2209 | -33.8997*** |
| funpaid | -0.658 | -0.1227 | -32.1857*** | 0.3384 | -2.0445* | 1.1569 | -1.1755 | -0.9346 |
| funempl | -0.0632 | -0.4042 | -0.6448 | 0.7092 | 0.493 | -0.8266 | -0.0895 | -0.9297 |
| fother | 0.406 | -44.319 | 0.1326 | 0.7506 | 0.5422 | 0.7273 | 1.814 | -0.2058 |
| mmanager | -1.7717 | 33.7764 | -2.7074* | 20.2887*** | -1.5493 | -32.9067*** | -2.7053* | -34.6469*** |
| mspecialist | 0.4557 | 23.0624*** | 1.275 | -0.4677 | 1.5196 | -0.2705 | -1.0684 | 0.9055 |
| mtechnical | -2.2158 | -23.8868 | -0.066 | -38.9229*** | -0.4723 | -33.7588*** | -47.9577 | 39.4977*** |
| mservice | 0.0003 | 16.4263*** | 0.385 | -0.9756 | -0.1459 | -0.0666 | -1.3496 | 0.6644 |
| magricult | 0.1181 | -22.656 | -0.2019 | -3.5454* | 0.6227 | -32.0180*** | -46.0613 | -22.239 |
| mproduction | 0.9727 | 23.2540*** | 22.5833 | -1.5555 | 1.4491 | 0.4602 | -1.0049 | 2.6341 |
| melementary | 0.7075 | -22.5204 | -0.0735 | 0.3766 | 0.4543 | 0.8274 | -0.4253 | 0.0499 |
| mherdsman | 0.3964 | 19.6073*** | 0.3908 | 0.3026 | 0.8339* | -0.9914 | -0.5315 | 0.7712 |
| mretired | -0.0622 | 21.2024*** | -0.4307 | -0.0852 | 0.2139 | -0.7235 | -1.0674 | 0.266 |
| mselfemplo~d | 0.4352 | 22.5016*** | -0.3655 | 1.1782 | 0.2172 | 1.8370** | -0.4887 | 0.8107 |
| munpaid | 0.8631 | 20.4081*** | 0.7415 | 1.1867 | 1.8536** | -0.1771 | -0.327 | 1.5994* |
| munempl | 0.3288 | -24.3605 | 0.4743 | -0.6539 | 0.9376 | -0.236 | -1.1637 | 1.8532* |
| motherjob | 0.6262 | 0.6527 | 0.0268 | 18.9257 | 21.8942*** | -0.8025 | -0.462 | -33.6284*** |

Note: Dependent variable is the labour market status of young people excluding those still in education. The following labour market statuses are considered: 1) unemployment; 2) self-employment; 3) unpaid family workers; 4) wage employment; 5) inactive. The category 3) is considered as the baseline and therefore all coefficients should be read in relation to the baseline status. The exponential of the coefficient measures the impact of a given characteristics on the odds ratio of being in a given labour market status, say unemployment, rather than being involved in unpaid family business.

The estimates in the table presents only the coefficients of the variables relative to the parents' occupation. The other independent variables are the same as in Table A.2.7.1.

*Legend: * means $p < 0.05$, or statistically significant at the 10 per cent level; ** means $p < 0.01$, or significant at the 5 per cent level; and *** means $p < 0.001$, or significant at the 1 per cent level.*

The Huber/White/sandwich estimator of variance is used in place of the traditional calculation.

Source: own elaboration on SWTS of Mongolia.

Table A.2.7.2c. Multinomial LOGIT regression of determinants of wage employment. The role of parents' occupation

| <i>I</i> | <i>All</i> | <i>Young teenagers (15-19)</i> | <i>Young adults (20-24)</i> | <i>Aged 25-29</i> | <i>Men</i> | <i>Women</i> | <i>Urban</i> | <i>Rural</i> |
|----------------------------------|------------|--------------------------------|-----------------------------|-------------------|------------|--------------|--------------|--------------|
| <i>Panel (c) Wage employment</i> | | | | | | | | |
| fmanager | 1.2318 | 2.6783 | 1.7053 | 0.8573 | 0.8717 | 1.3734 | 20.2206*** | 0.761 |
| fspecialist | 0.6215 | -43.1672 | 0.4432 | -0.0133 | 0.1184 | 1.2565 | -0.2011 | 1.5708 |
| ftechnical | 0.2613 | 23.9373*** | -0.6494 | 20.7899*** | -0.5963 | 20.3018*** | -0.3441 | 23.3025*** |
| fservice | -0.3538 | 0.597 | -1.1317 | 0.8007 | 0.0726 | 0.1352 | 0.1033 | -0.2091 |
| fagricult | -1.0182 | -44.3994 | -0.9712 | 4.4275 | -0.5061 | -0.832 | -0.7803 | -8.6174*** |
| fproduction | -0.4305 | -2.0059 | -0.489 | 19.8133*** | -0.3576 | -0.8354 | -0.7351 | 2.5555 |
| felementary | -0.1405 | 0.5967 | -1.0627 | 1.5444 | 0.5508 | -0.4094 | -0.6417 | -0.1801 |
| fherdsman | -0.3819 | 1.0008 | -0.6545 | -0.1354 | -0.6093 | -0.3369 | -1.1513 | -0.08 |
| fretired | -0.4356* | 0.055 | -0.1895 | -0.7582* | -0.2128 | -0.3103 | -0.3808 | -1.0276* |
| fselfemplo~d | -0.7802 | -1.6458 | -1.2956* | -0.6886 | -1.3580* | 0.0738 | -1.1937* | 0.4587 |
| funpaid | -0.0119 | -0.8778 | -0.0816 | 0.6651 | -0.3992 | 0.2138 | -0.5956 | -34.5298*** |
| funempl | 0.1736 | 0.7091 | -0.0894 | 0.5299 | 0.5185 | -0.0566 | -0.0076 | 0.0079 |
| fother | 0.1128 | 2.8514** | -0.7937 | -0.062 | 1.0201 | -0.3758 | 1.1886 | 0.05 |
| mmanager | -1.0682 | -35.4376 | -1.7334* | 21.4412*** | -1.1888 | -0.6684 | -2.2013* | 1.5984 |
| mspecialist | -0.056 | -0.4284 | 0.9724 | -1.1144 | 0.7621 | -0.3462 | -1.5553 | 0.8892 |
| mtechnical | -1.3306 | -47.4407 | -0.4893 | -1.4911 | -0.6623 | -1.435 | -2.8773** | 7.0215*** |
| mservice | 0.5936 | 0.6955 | 0.9899 | -0.1956 | 0.519 | 0.6102 | -0.7236 | 1.3108 |
| magricult | 1.1878 | -42.9154 | 1.6527 | 19.1807*** | 1.1933 | -0.2132 | -2.0924 | -31.6575*** |
| mproduction | 1.1004 | 0.5837 | 22.9390*** | -1.1156 | 1.3348 | 0.8642 | -0.6041 | -35.9079*** |
| melementary | 1.4364* | 1.7119 | 2.0594* | 0.5268 | 1.414 | 1.1849 | 0.1423 | 2.7370* |
| mherdsman | -0.3801 | -1.6861* | -0.2794 | -0.4662 | -0.2537 | -1.1083** | -0.6664 | -0.4087 |
| mretired | 0.0907 | -0.0439 | -0.0083 | 0.043 | -0.0625 | 0.0881 | -0.9829 | 1.1131* |
| mselfemplo~d | -0.374 | 1.1696 | -0.9363 | 0.31 | -0.5656 | 1.0172 | -1.3245 | 1.1443 |
| munpaid | 1.3051*** | 0.9665 | 1.8718*** | 1.4471 | 1.7772** | 1.4524** | 0.1983 | 2.4291** |
| munempl | 1.2370** | 2.4193* | 1.4065* | 0.0415 | 1.6458** | 0.95 | -0.2101 | 2.1456* |
| motherjob | 1.3568 | 21.9524*** | 0.4223 | 19.9471*** | 22.6576*** | 0.4982 | -0.0064 | 4.0131** |

Note: Dependent variable is the labour market status of young people excluding those still in education. The following labour market statuses are considered: 1) unemployment; 2) self-employment; 3) unpaid family workers; 4) wage employment; 5) inactive. The category 3) is considered as the baseline and therefore all coefficients should be read in relation to the baseline status. The exponential of the coefficient measures the impact of a given characteristics on the odds ratio of being in a given labour market status, say unemployment, rather than being involved in unpaid family business.

The estimates in the table presents only the coefficients of the variables relative to the parents' occupation. The other independent variables are the same as in Table A.2.7.1.

*Legend: * means $p < 0.05$, or statistically significant at the 10 per cent level; ** means $p < 0.01$, or significant at the 5 per cent level; and *** means $p < 0.001$, or significant at the 1 per cent level.*

The Huber/White/sandwich estimator of variance is used in place of the traditional calculation.

Source: own elaboration on SWTS of Mongolia.

Table A.2.7.2d. Multinomial LOGIT regression of determinants of inactivity. The role of parents' occupation

| <i>I</i> | <i>All</i> | <i>Young teenagers (15-19)</i> | <i>Young adults (20-24)</i> | <i>Aged 25-29</i> | <i>Men</i> | <i>Women</i> | <i>Urban</i> | <i>Rural</i> |
|-----------------------------|------------|--------------------------------|-----------------------------|-------------------|------------|--------------|--------------|--------------|
| <i>Panel (d) Inactivity</i> | | | | | | | | |
| fmanager | 0.4293 | -44.1704 | 0.369 | 0.8203 | -0.5532 | 0.5863 | 19.4612 | -0.1969 |
| fspecialist | 0.2701 | 0.9712 | -1.0869 | -0.0521 | -1.3486 | 1.071 | -0.4393 | -0.3242 |
| ftechnical | 0.4753 | -21.4899 | 0.3271 | 20.5129 | -0.1505 | 20.3190*** | -0.2068 | 22.7677 |
| fservice | -0.1138 | 0.0456 | -0.7398 | 1.4414 | 0.4562 | 0.2365 | 0.2084 | 0.0286 |
| fagricult | 0.0275 | -0.9681 | 0.0845 | -33.7473*** | 0.6968 | -0.0277 | 0.8408 | -36.7545*** |
| fproduction | 0.0905 | -2.5578* | 0.277 | 20.9074*** | 0.2457 | -0.2584 | -0.1386 | 0.3438 |
| felementary | -0.4478 | -3.0378 | -0.8446 | 1.5315 | 0.0258 | -0.48 | -1.0693 | 0.9783 |
| fherdsman | -0.5629** | -0.7933 | -0.9519* | -0.0862 | -0.8347* | -0.5524 | -1.6841* | -0.1325 |
| fretired | -0.5252* | -1.7604* | -0.1532 | -0.7738* | -0.0783 | -0.5003* | -0.6088 | -0.2556 |
| fselfemplo~d | -0.7174 | -1.9737* | -1.0812 | -0.736 | -1.9045** | 0.3663 | -1.1862* | 0.2211 |
| funpaid | -0.1642 | -1.0763 | -0.1345 | 0.2595 | -0.4084 | -0.1827 | -1.1933 | 1.3395 |
| funempl | 0.3032 | -0.2235 | 0.2758 | 0.6274 | 1.0755 | -0.1698 | -0.0017 | 1.1604 |
| fother | -0.5328 | -0.6816 | -0.0415 | -2.066 | -0.1057 | -0.7743 | 0.6615 | -1.1166* |
| mmanager | -0.3205 | 56.652 | -0.5696 | 20.7446*** | 0.5356 | -0.0021 | -1.2715 | -33.7284*** |
| mspecialist | -0.5471 | 1.2566 | 1.3581 | -2.3918* | 1.0307 | -1.1027 | -1.9580* | -33.0119*** |
| mtechnical | -0.535 | -46.2334 | 1.1075 | -1.412 | 1.3903 | -0.9196 | -1.9009 | -23.0126*** |
| mservice | 0.5758 | 2.7866 | 1.2197 | -0.709 | 1.7737* | 0.2189 | -0.5989 | 0.347 |
| magricult | 1.9926* | 3.0287 | 2.0658* | 20.3913 | 2.8131* | 1.0024 | -2.5388 | 3.6888*** |
| mproduction | 1.4369 | 3.1 | 23.2092*** | -0.7394 | 2.4885 | 1.072 | -0.2945 | 1.9902 |
| melementary | 1.1559 | 2.5759 | 2.2689* | -0.4914 | 2.3051* | 0.831 | 0.0324 | 0.8349 |
| mherdsman | 0.3017 | 1.5939 | 0.7002 | -0.145 | 1.7124** | -0.5045 | -0.2168 | 0.4623 |
| mretired | 0.4803 | 2.5351* | 0.7724 | 0.0727 | 1.6129* | 0.0758 | -0.4848 | 0.4195 |
| mselfemplo~d | 0.1737 | 3.9822* | 0.1063 | 0.1723 | 1.6269* | 0.9991 | -0.6286 | -1.0924 |
| munpaid | 1.0248* | 2.8285 | 1.4992* | 1.1709 | 3.1045*** | 0.5902 | 0.0413 | 0.9542 |
| munempl | 1.2318** | 3.9286** | 1.5889* | -0.0326 | 2.8326*** | 0.6649 | -0.133 | 1.0697 |
| motherjob | 1.5181 | 23.4269 | 1.2077 | 19.9876*** | 23.0415 | 0.9712 | 0.2378 | 2.7827 |

Note: Dependent variable is the labour market status of young people excluding those still in education. The following labour market statuses are considered: 1) unemployment; 2) self-employment; 3) unpaid family workers; 4) wage employment; 5) inactive. The category 3) is considered as the baseline and therefore all coefficients should be read in relation to the baseline status. The exponential of the coefficient measures the impact of a given characteristics on the odds ratio of being in a given labour market status, say unemployment, rather than being involved in unpaid family business.

The estimates in the table presents only the coefficients of the variables relative to the parents' occupation. The other independent variables are the same as in Table A.2.7.1.

*Legend: * means $p < 0.05$, or statistically significant at the 10 per cent level; ** means $p < 0.01$, or significant at the 5 per cent level; and *** means $p < 0.001$, or significant at the 1 per cent level.*

The Huber/White/sandwich estimator of variance is used in place of the traditional calculation.

Source: own elaboration on SWTS of Mongolia.

Table A.2.8.1. Augmented earnings equations by gender and age group

| <i>Variable</i> | <i>All</i> | <i>Young teenagers (15-19)</i> | <i>Young Adults (20-24)</i> | <i>Oldest segment (25-29)</i> | <i>Men</i> | <i>Women</i> |
|-----------------------------------|------------|--------------------------------|-----------------------------|-------------------------------|------------|--------------|
| Log of weekly hours | 0.0959 | 0.2413 | -0.1245 | 0.1752* | 0.0999 | 0.1334 |
| Work experience from 1 to 4 years | 0.0767 | 0.1971 | -0.0570 | 0.2502*** | 0.1199 | 0.0519 |
| We 5plus | 0.2210*** | 0.1196 | 0.0286 | 0.3950*** | 0.1942* | 0.2359* |
| Women | -0.2226*** | -0.0466 | -0.1961* | -0.2110*** | - | - |
| Secondary | 0.1412* | 0.2004 | 0.1998 | 0.0772 | 0.1107 | 0.2068* |
| Voctecsec | 0.1627* | 0.1092 | 0.2179 | 0.1270 | 0.0162 | 0.3290** |
| Specsec | 0.4941** | 0.5191 | 0.6052** | 0.3642 | 0.4228* | 0.5577** |
| Tertiary | 0.6164*** | - | 0.7041*** | 0.4738*** | 0.6325*** | 0.5603*** |
| Master | 0.6836*** | - | 0.6382 | 0.6329*** | 0.5060* | 0.5191 |
| Studywork | -0.0752 | 0.2461 | -0.0421 | -0.0774 | -0.0730 | -0.0625 |
| Fixed-term contract | 0.2648*** | 0.2787* | 0.2251* | 0.2393** | 0.3268*** | 0.2210** |
| Permanent contract | 0.1720** | 0.4724** | 0.1176 | 0.1516 | 0.1931 | 0.2166** |
| Married | 0.1272** | 0.3797 | 0.0192 | 0.1309* | 0.1772** | 0.0160 |
| Livetog | 0.3452** | 0.0000 | 0.7496** | 0.2105 | 0.3874* | 0.1999 |
| Divsepwid | 0.0028 | 0.0000 | -0.6728* | 0.0827 | 0.2986 | -0.1125 |
| Loneparent | 0.0235 | -0.2032 | -0.2127 | 0.1204 | -0.0613 | -0.0003 |
| immwithfam | -0.0917 | 0.0199 | -0.1999 | -0.0736 | -0.2046** | 0.1421 |
| Immeduc | -0.1012 | 0.1794 | -0.2977 | 0.1331 | -0.5491 | 0.4294* |
| Immjob | -0.0107 | 0.1139 | -0.1509 | 0.0334 | -0.0342 | 0.0040 |
| immlooking | 0.0468 | -2.4586*** | 0.1742 | 0.0605 | 0.1692 | -0.1483 |
| Union member | -0.0689 | 0.3985 | -0.1579 | -0.0511 | -0.1010 | -0.1062 |
| train1 | -0.0673 | -0.7542 | -0.0862 | -0.0447 | -0.1447 | -0.0027 |
| train14 | -0.0262 | 0.1615 | -0.0307 | -0.0108 | 0.0929 | 0.0157 |
| train58 | -0.1845* | 0.0000 | -0.1817 | -0.1747* | -0.2903* | -0.2608 |
| Trainmore | -0.1406 | -1.1949* | -0.3972 | -0.0782 | -0.2559 | -0.1406 |
| Informnet | -0.1134* | 0.0102 | -0.1004 | -0.1706* | -0.1989* | -0.0510 |
| Empldirect | -0.0389 | 0.0371 | 0.0406 | -0.1316 | -0.0019 | -0.0540 |
| Sgrops | 0.5354* | 0.0410 | -0.0036 | 1.0140*** | 0.1519 | 0.9494** |
| Sforestry | 0.4401* | 0.1969 | 0.0435 | 0.5647 | 0.5234** | 0.5011 |
| Sfishery | 0.2483 | 0.3993* | 0.6776** | -0.1816 | 0.3912 | -0.0633 |
| Sminquarr | 0.8785*** | 0.5504 | 0.9792** | 0.9255** | 0.9424*** | 0.8658*** |
| Smanufact | 0.3445** | 0.1577 | 0.2995 | 0.5154** | 0.3578* | 0.3964* |
| Selectr | 0.3471** | 0.3020 | 0.2696 | 0.5007** | 0.2530 | 0.3851 |
| Sconstruct | 0.3933** | 0.4253 | 0.1487 | 0.7325*** | 0.3979** | 0.6217* |
| Strade | 0.5539*** | 0.2486 | 0.2311 | 0.8336*** | 0.5750* | 0.5329** |
| Shotels | 0.5360*** | 0.3952 | 0.5357** | 0.4840** | 0.5350** | 0.4069* |
| Stransp | 0.6160*** | 0.3872 | 0.6887*** | 0.6313*** | 0.6535*** | 0.5120 |
| Stourism | 0.7828 | 0.0000 | 1.3658 | 0.5647** | 0.2702 | 1.5666 |
| Scommunic | 0.4745** | 0.0000 | 0.6190* | 0.5472* | 0.2814 | 0.7246** |
| Sfinanc | 0.3578** | -0.1559 | 0.1160 | 0.6366*** | 0.3555 | 0.4587* |
| Sestate | 0.3751** | 0.0000 | 0.0961 | 0.4188* | 0.5936*** | 0.4634* |
| Spubadm | 0.2766** | -0.1845 | 0.2204 | 0.4218** | 0.2208 | 0.3783* |
| Seduc | 0.2747* | 0.0000 | 0.2028 | 0.4013* | 0.1121 | 0.4138* |
| Shealth | 0.6179* | -0.7104 | 0.0473 | 1.1923* | 1.0487 | 0.3832 |
| Spersserv | 0.3071** | -0.0143 | 0.2213 | 0.4968** | 0.2121 | 0.4550* |
| Sother | 0.4955*** | 0.2757 | 0.5451** | 0.5078** | 0.5920*** | 0.3608 |
| Arkhangai | 0.0336 | 0.0000 | -0.1123 | 0.1235 | 0.1313 | -0.3371 |
| Bayanulgii | 0.0643 | -0.0197 | -0.1908 | 0.322 | -0.1877 | 0.5118 |

| | | | | | | |
|----------------|------------|-----------|-----------|-----------|------------|------------|
| Bayankhongor | -0.3507*** | -0.4482 | -0.2929 | -0.2844* | -0.2432 | -0.3718** |
| Bulgan | 0.0257 | 0.106 | 0.0079 | 0.0884 | -0.0146 | 0.1955 |
| Govialtai | -0.4193** | 0.1739 | -0.1803 | -0.7300** | -0.4391* | -0.5010 |
| Dornogobi | -0.0049 | 0.8199 | 0.0347 | 0.0401 | 0.0138 | 0.0176 |
| Dornod | -0.1397 | 0.1289 | -0.2107 | -0.0707 | -0.2571* | 0.0454 |
| Dundgobi | -0.2071 | 0.0317 | -0.5456** | -0.071 | -0.1792 | -0.4413 |
| Zavkhan | -0.0323 | -0.0092 | -0.0602 | 0.0459 | 0.0576 | -0.0504 |
| Uvurkhangai | -0.2252 | 1.0079 | -0.1524 | -0.3042 | -0.1379 | -0.6575 |
| Umnugobi | 0.0526 | 0.2279 | 0.1076 | 0.0422 | 0.0669 | 0.1078 |
| Sunkhbaatar | -0.3541*** | -0.3029 | -0.3630** | -0.3101* | -0.3218* | -0.2479 |
| Selenge | -0.2729*** | 0.0099 | -0.19 | -0.2537* | -0.2832** | -0.2683* |
| Tuv | -0.0557 | -0.3398 | 0.2726 | -0.2317 | -0.1763 | 0.0358 |
| Uvs | 0.1183 | -0.0125 | 0.1783 | 0.3155 | 0.2092 | -0.1540 |
| Khovd | -0.4209*** | -0.1425 | -0.5485** | -0.3552** | -0.5859*** | -0.1649 |
| Khuvusgul | -0.1634* | 0.0207 | -0.1344 | -0.1588 | -0.2329* | -0.0477 |
| Khentii | -0.3287*** | 0.3534 | -0.3862** | -0.3332* | -0.4703*** | -0.2511* |
| Darkhanuul | -0.0099 | -0.2524 | 0.1129 | -0.012 | 0.0475 | -0.0460 |
| Orkhon | 0.5283 | -0.8057 | 0.527 | 0.9014 | 1.1720* | -0.4099* |
| Gobisumber | 0.1352 | 0 | 0.01 | 0 | 0.1199 | 0.0000 |
| Rural | -0.3451*** | -0.2172 | -0.3152* | -0.3517** | -0.2487** | -0.5506*** |
| _cons | 3.3281*** | 2.4550*** | 4.3739*** | 2.8195*** | 3.2812*** | 2.9800*** |
| N | 1852 | 165 | 717 | 970 | 1042 | 810 |
| Ll | -2.20E+03 | -1.00E+02 | -8.40E+02 | -1.10E+03 | ##### | -900.0000 |
| Aic | 4.50E+03 | 305.3669 | 1.80E+03 | 2.40E+03 | 2600.0000 | 1900.0000 |
| R ² | 0.38 | 0.60 | 0.41 | 0.38 | 0.40 | 0.46 |

Note: Dependent variable is the natural log of declared monthly wages.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Source: own elaboration on SWTS of Mongolia.

Table A.2.8.2. Oaxaca and Blinder decomposition of the youth gender wage gap

| Variable | <i>Men</i> | | | <i>Women</i> | | | <i>decomposition</i> | | |
|--------------|-------------|-------|------------|--------------|-------|------------|----------------------|-------|-------|
| | Coefficient | Mean | Prediction | Coefficient | Mean | Prediction | Attrib | Endow | Coeff |
| lhours | 0.1 | 3.855 | 0.385 | 0.133 | 3.765 | 0.502 | -11.7 | 0.9 | -12.6 |
| we14 | 0.12 | 0.385 | 0.046 | 0.052 | 0.427 | 0.022 | 2.4 | -0.5 | 2.9 |
| we5plus | 0.194 | 0.417 | 0.081 | 0.236 | 0.299 | 0.07 | 1.1 | 2.3 | -1.2 |
| women | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| secondary | 0.111 | 0.205 | 0.023 | 0.207 | 0.252 | 0.052 | -2.9 | -0.5 | -2.4 |
| voctecsec | 0.016 | 0.056 | 0.001 | 0.329 | 0.06 | 0.02 | -1.9 | 0 | -1.9 |
| specsec | 0.423 | 0.036 | 0.015 | 0.558 | 0.06 | 0.034 | -1.8 | -1 | -0.8 |
| tertiary | 0.633 | 0.213 | 0.135 | 0.56 | 0.368 | 0.206 | -7.1 | -9.8 | 2.7 |
| master | 0.506 | 0.006 | 0.003 | 0.519 | 0.015 | 0.008 | -0.5 | -0.5 | 0 |
| studywork | -0.073 | 0.097 | -0.007 | -0.063 | 0.089 | -0.006 | -0.2 | -0.1 | -0.1 |
| contrlim | 0.327 | 0.292 | 0.095 | 0.221 | 0.4 | 0.088 | 0.7 | -3.5 | 4.2 |
| conrunlim | 0.193 | 0.107 | 0.021 | 0.217 | 0.14 | 0.03 | -1 | -0.6 | -0.3 |
| married | 0.177 | 0.475 | 0.084 | 0.016 | 0.485 | 0.008 | 7.6 | -0.2 | 7.8 |
| livetog | 0.387 | 0.016 | 0.006 | 0.2 | 0.019 | 0.004 | 0.3 | -0.1 | 0.3 |
| divsepwid | 0.299 | 0.002 | 0.001 | -0.112 | 0.016 | -0.002 | 0.2 | -0.4 | 0.7 |
| loneparent | -0.061 | 0.009 | -0.001 | 0 | 0.078 | 0 | -0.1 | 0.4 | -0.5 |
| immwithfam | -0.205 | 0.089 | -0.018 | 0.142 | 0.119 | 0.017 | -3.5 | 0.6 | -4.1 |
| immeduc | -0.549 | 0.012 | -0.006 | 0.429 | 0.015 | 0.006 | -1.3 | 0.2 | -1.4 |
| immjob | -0.034 | 0.044 | -0.002 | 0.004 | 0.047 | 0 | -0.2 | 0 | -0.2 |
| immlooking | 0.169 | 0.011 | 0.002 | -0.148 | 0.007 | -0.001 | 0.3 | 0.1 | 0.2 |
| union | -0.101 | 0.082 | -0.008 | -0.106 | 0.102 | -0.011 | 0.3 | 0.2 | 0.1 |
| train1 | -0.145 | 0.051 | -0.007 | -0.003 | 0.11 | 0 | -0.7 | 0.9 | -1.6 |
| train14 | 0.093 | 0.041 | 0.004 | 0.016 | 0.067 | 0.001 | 0.3 | -0.2 | 0.5 |
| train58 | -0.29 | 0.027 | -0.008 | -0.261 | 0.017 | -0.005 | -0.3 | -0.3 | -0.1 |
| trainmore | -0.256 | 0.017 | -0.004 | -0.141 | 0.016 | -0.002 | -0.2 | 0 | -0.2 |
| informnet | -0.199 | 0.15 | -0.03 | -0.051 | 0.193 | -0.01 | -2 | 0.9 | -2.8 |
| empldirect | -0.002 | 0.135 | 0 | -0.054 | 0.194 | -0.01 | 1 | 0 | 1 |
| sgrops | 0.152 | 0.006 | 0.001 | 0.949 | 0.006 | 0.006 | -0.5 | 0 | -0.5 |
| sforestry | 0.523 | 0.008 | 0.004 | 0.501 | 0.005 | 0.002 | 0.2 | 0.1 | 0 |
| sfishery | 0.391 | 0.003 | 0.001 | -0.063 | 0.001 | 0 | 0.1 | 0.1 | 0.1 |
| sminquarr | 0.942 | 0.036 | 0.034 | 0.866 | 0.016 | 0.014 | 2 | 1.9 | 0.1 |
| smanufact | 0.358 | 0.035 | 0.012 | 0.396 | 0.054 | 0.022 | -0.9 | -0.7 | -0.2 |
| selectr | 0.253 | 0.033 | 0.008 | 0.385 | 0.01 | 0.004 | 0.4 | 0.6 | -0.1 |
| sconstruct | 0.398 | 0.048 | 0.019 | 0.622 | 0.015 | 0.009 | 1 | 1.3 | -0.3 |
| strade | 0.575 | 0.061 | 0.035 | 0.533 | 0.112 | 0.06 | -2.5 | -2.9 | 0.5 |
| shotels | 0.535 | 0.014 | 0.008 | 0.407 | 0.069 | 0.028 | -2 | -2.9 | 0.9 |
| stransp | 0.653 | 0.064 | 0.042 | 0.512 | 0.017 | 0.009 | 3.3 | 3.1 | 0.2 |
| stourism | 0.27 | 0.01 | 0.003 | 1.567 | 0.009 | 0.014 | -1.1 | 0 | -1.1 |
| scommunic | 0.281 | 0.006 | 0.002 | 0.725 | 0.016 | 0.012 | -1 | -0.3 | -0.7 |
| sfinanc | 0.355 | 0.031 | 0.011 | 0.459 | 0.048 | 0.022 | -1.1 | -0.6 | -0.5 |
| sestate | 0.594 | 0.007 | 0.004 | 0.463 | 0.01 | 0.005 | -0.1 | -0.2 | 0.1 |
| spubadm | 0.221 | 0.1 | 0.022 | 0.378 | 0.078 | 0.029 | -0.7 | 0.5 | -1.2 |
| seduc | 0.112 | 0.052 | 0.006 | 0.414 | 0.156 | 0.064 | -5.9 | -1.2 | -4.7 |
| shealth | 1.049 | 0.015 | 0.016 | 0.383 | 0.035 | 0.013 | 0.3 | -2 | 2.3 |
| spersserv | 0.212 | 0.056 | 0.012 | 0.455 | 0.062 | 0.028 | -1.6 | -0.1 | -1.5 |
| sother | 0.592 | 0.024 | 0.014 | 0.361 | 0.01 | 0.004 | 1.1 | 0.8 | 0.2 |
| arkhagngai | 0.131 | 0.029 | 0.004 | -0.337 | 0.019 | -0.006 | 1 | 0.1 | 0.9 |
| bayanulgii | -0.188 | 0.063 | -0.012 | 0.512 | 0.052 | 0.027 | -3.8 | -0.2 | -3.6 |
| bayankhongor | -0.243 | 0.062 | -0.015 | -0.372 | 0.083 | -0.031 | 1.6 | 0.5 | 1.1 |

| | | | | | | | | | |
|-------------|--------|-------|--------|--------|-------|--------|-------|-------|------|
| bulgan | -0.015 | 0.019 | 0 | 0.195 | 0.032 | 0.006 | -0.7 | 0 | -0.7 |
| govialtai | -0.439 | 0.025 | -0.011 | -0.501 | 0.006 | -0.003 | -0.8 | -0.8 | 0 |
| dornogobi | 0.014 | 0.027 | 0 | 0.018 | 0.037 | 0.001 | 0 | 0 | 0 |
| dornod | -0.257 | 0.036 | -0.009 | 0.045 | 0.036 | 0.002 | -1.1 | 0 | -1.1 |
| dundgobi | -0.179 | 0.035 | -0.006 | -0.441 | 0.017 | -0.008 | 0.1 | -0.3 | 0.5 |
| zavkhan | 0.058 | 0.044 | 0.003 | -0.05 | 0.04 | -0.002 | 0.5 | 0 | 0.4 |
| uvurkhangai | -0.138 | 0.032 | -0.004 | -0.657 | 0.012 | -0.008 | 0.4 | -0.3 | 0.6 |
| umnugobi | 0.067 | 0.04 | 0.003 | 0.108 | 0.037 | 0.004 | -0.1 | 0 | -0.2 |
| sunkhbaatar | -0.322 | 0.059 | -0.019 | -0.248 | 0.053 | -0.013 | -0.6 | -0.2 | -0.4 |
| selenge | -0.283 | 0.032 | -0.009 | -0.268 | 0.031 | -0.008 | -0.1 | 0 | 0 |
| tuv | -0.176 | 0.015 | -0.003 | 0.036 | 0.023 | 0.001 | -0.4 | 0.1 | -0.5 |
| uvs | 0.209 | 0.022 | 0.005 | -0.154 | 0.007 | -0.001 | 0.6 | 0.3 | 0.3 |
| khovd | -0.586 | 0.036 | -0.021 | -0.165 | 0.032 | -0.005 | -1.6 | -0.3 | -1.4 |
| khuvusgul | -0.233 | 0.072 | -0.017 | -0.048 | 0.09 | -0.004 | -1.2 | 0.4 | -1.7 |
| khentii | -0.47 | 0.026 | -0.012 | -0.251 | 0.036 | -0.009 | -0.3 | 0.5 | -0.8 |
| darkhanuul | 0.047 | 0.028 | 0.001 | -0.046 | 0.028 | -0.001 | 0.3 | 0 | 0.3 |
| orkhon | 1.172 | 0.022 | 0.026 | -0.41 | 0.023 | -0.01 | 3.5 | -0.2 | 3.7 |
| gobisumber | 0.12 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rural | -0.249 | 0.391 | -0.097 | -0.551 | 0.291 | -0.16 | 6.3 | -2.5 | 8.8 |
| _cons | 3.281 | 1 | 3.281 | 2.98 | 1 | 2.98 | | | |
| Subtotal | | | | | | | -26.6 | -16.6 | -10 |

Source: own elaboration on SWTS of Mongolia.

Appendix A1. The Mongolian educational system

The Mongolian education system has changed substantially compared to the time of the centrally planned economy.⁷⁴ The formal school system comprises primary, secondary, and higher education and pre-school education is also provided.

Although a 10 years of schooling general education system was inherited from the previous regime, and is still in place, the composition of primary, incomplete secondary and complete secondary education (3+5+2 structure) has changed several times during the transition period. For example, the structure was changed into a 6+2+2 model in 1990. In the 1992-1993 academic year, it was changed back to the 3+5+2 structure. However, since 1993-1994, the 10 years of schooling general education system has adhered to the present 4+4+2 structure. Despite these changes in structure, the curriculum was not change. Therefore, the above modifications did not have much influence on the entire system and its accomplishments.

The current system comprises three levels:

- primary education (4 years, from age 7-11 years);
- basic or incomplete secondary school (4 years, from the age 11-15 years);
- complete secondary school (final 2 years, from age 15-17 years).

Compulsory education ends at 15 years, when the diploma of non-complete secondary education is granted. Primary and lower secondary education together comprises the basic compulsory educational level provided free by the State, as stated in the constitution. A combination of basic education and high school is termed as general education (Law on Education, 2002). Also, the last two years of general education are free.

At the end of the first two stages, primary and lower secondary, graduates have two possibilities for high secondary:

- (a) general secondary school;
- (b) technical and vocational school, and training, TVET.

Both graduates from incomplete and complete secondary education can join TVET, which further requires 2.5 and at least one year to complete, respectively. TVET comprises specialized complete secondary schools, as well as post secondary diploma programmes housed in higher educational institutions. Correspondingly, graduates from the former are given a complete secondary education diploma and those from the latter a technical specification diploma. TVET graduates have the possibility to access higher educational institutions.

Tertiary education comprises higher education diplomas and bachelor degrees. Institutions involved in higher education are of the following types: colleges, institutions and universities. The length of higher education is three years for the diploma programme (diploma of higher education) and four years for graduate programme (diploma of bachelor degree). However, for some professional courses, the length can vary, for example, medical science. Graduates from universities and the 16 other higher educational institutions can obtain a diploma, a bachelor degree or a master degree. Pre-doctoral and doctoral degree courses are also offered. Some higher educational institutions are approved by the Ministry of Education to provide magistrate (two years) and doctoral programme (three or four years). Non-formal and distance educational activities cut across the entire system.

⁷⁴ For more detailed analysis of the Mongolian educational system and law framework, see Gerelmaa (2005) and del Rosario (2005).

Appendix A2. The “youth experience gap”

This appendix provides a general theoretical framework useful when thinking of cross-country differences in the youth unemployment problem and the role of different policy instruments to help young people have a smooth school-to-work transition.⁷⁵ The main reason for young people moving between different labour market statuses is their lower level of human capital and, therefore, productivity compared to adults, which *ceteris paribus* makes employers prefer adults. Human capital has three general components: education, generic work experience and job-specific work experience. Generic work experience includes the ability to cope with the functional distribution of tasks within an organization, to respect deadlines and the internal hierarchy of an organization. All these skills can be learned in any type of job and are easily transferred from one job to another. Job specific work experience comprises specific skills that can only be gained and used in a given type of job. They include the ability to carry out specific types of task, such as, in rural areas, harvesting, feeding livestock.

This type of reasoning helps solve a typical puzzle of youth labour markets. With ever increasing educational attainment worldwide, the educational level of the younger generation is almost always greater than the old generation. Despite this, young people still have lower chances of finding employment. Why is that? The likely explanation is their lack of the other two components of human capital, generic and job-specific work experience. That is, that behind the youth unemployment problem, there is a “youth experience gap”.

Aiming to fill this gap, young people move in and out of employment in search of a best job-worker match, but if not found quickly, they tend to become unemployed or inactivity while searching for a better job. During employment, some young people become aware of their gaps in education or training and, consequently, return to school.

Youth unemployment is clearly related to the hardship involved in accumulating work experience. In the neo-liberalist view, causes of youth unemployment, especially the long spells experienced by many young people, can be found in past unemployment experiences, reducing their chances of finding gainful employment. In this stream of economic thought, unemployment causes a process of deskilling from the supply side: since the unemployed cannot use their skills because they are unemployed, they have lower productivity. On the demand side, employers see unemployment as a stigma: a sign of lack of skills and motivation. Lowering the share of long-term unemployment and reducing the average period would be an important policy target for neo-liberalists.

Neo-liberalists suggest that by rendering the labour market more flexible through legalizing and encouraging part-time and fixed-term contracts, the policy-makers will provide a simple and effective solution to young people’s problem of work experience, enabling them to find the job they desire. There are two ways to make this might happen. First, easily accessible fixed-term contracts would provide young people with more opportunities to gain the work experience they need and learn different working methods and tasks through short periods of employment. Second, increasing the degree of turnover in the labour market reduces the number of young people, who could become unemployed, or shortens the average duration of unemployment.

It should now be clear why, within this framework, labour market flexibility and low entry wages are the best solution to ease school-to-work transition. These solutions to the youth experience gap also have the merit of being low cost, since they automatically exist in the labour market. This is an important aspect of such a policy and helps understand its appeal in a time of increasingly stringent budget constraints for many governments worldwide.

⁷⁵ See Caroleo and Pastore (2007) for a more detailed discussion.

Two arguments cast doubt on this solution to youth unemployment, suggesting that it is too simplistic and in need of amendments. The first⁷⁶ is based on the empirical finding that only the least skilled and least motivated fall into long-term unemployment, therefore, there would be no lower job finding rate for them; instead the causal link would go in the opposite direction. Less skilled individuals would experience greater difficulty in finding gainful employment and, as a consequence, also longer unemployment spells.

The policy implications of this reasoning are important. Training programmes finely tune to the least skilled and motivated groups would be the best policy option to reduce youth unemployment. They would be more effective than increasing labour market flexibility. There is no guarantee that labour market flexibility would help the least skilled and least motivated and it is more likely it would only help those who are more motivated, better educated and have better.

The second argument⁷⁷ criticises the effectiveness of labour market flexibility to actually help young people increase their human capital to the level of adults with similar education. The reasoning is that fixed-term contracts only generate sufficient incentive to invest in the formation of generic work experience. They do not allow young people to increase other skills specific to a given type of job due to their short time horizon. Why should employers and employees invest in the accumulation of skills specific only to a given type of job if the contract is temporary?

It is a common occurrence in countries with increased flexibility in youth labour markets that short-term contracts fail to provide young people with specific work experience. This type of market failure should be addressed by providing incentives to prolong short-term contracts or, specific programmes of on-the-job training aimed at enabling young people to accumulate job specific work experience.

In addition, from a more practical point of view, there is increasing empirical evidence to support the view that fixed-term contracts create precariousness of income for many young people experiencing frequent interruptions to their career. Too many temporary workers end up in dead-end jobs that they hoped would be a stepping stone to decent work.

The above arguments help understand why, in many of the countries, increasing flexibility of labour market entry has reduced youth unemployment only to a small extent, while generating work precariousness. Fixed-term contracts alone cannot rule fill the youth experience gap.

Moreover, the experience of flexibility has shown that what its advocates usually consider its main advantage, namely its supposed universality is, in fact, one of its major shortcomings. Labour market flexibility is not the best solution for every country and confirms the wisdom that there are no such policy interventions that fit any country or economic condition. Labour market flexibility alone proves too often to be ineffective. It is a good instrument in particular types of labour market conditions where, for instance, there is also a high average level of educational attainment, where it goes together with flexibility in the market for goods and financial services.

These arguments also explain why labour market flexibility is only one of the policy instruments adopted in any country to help young people fill in the youth experience gap. Efficient educational and training systems, passive income support schemes on a contractual basis, fiscal incentives for employers, who are willing to hire long-term unemployed, prove to be no less important instruments.

It is certainly difficult to find policies concordant with the institutional framework of any country. However, comparison of different countries' outcomes in addressing the problem of school-to-work transition suggests that youth unemployment is lower where:

- a) educational systems are more flexible;
- b) educational systems follow a dual (as opposed to a sequential) principle, which means that young people are provided training while at school and not after school;

⁷⁶ This argument can be traced back to the work of such economists as Heckman and Borjas (1980) and Heckman and Singer (1984).

⁷⁷ Becker (1962) provides the theoretical basis for this argument.

- c) where labour market flexibility is coupled with high educational attainment;
- d) where ALMP is fine-tuned to the needs of the weakest groups and targeting and evaluation of training programmes are implemented in a systematic way to discard the least effective and develop the most effective;
- e) where households do not bear all the cost of youth unemployment.

The educational system is more flexible if it foresees few or no obstacles to young people moving from one curriculum to another, does not impose constraints to access a given type of education and requires a reasonable number of years to attain a diploma. The educational systems that are more flexible and provide training, together with general education, appear to be more inclusive and feature lower drop out rates.

To sum up, labour market flexibility is not the one-size-fit-all solution to every problem young people encounter during their school-to-work transition. Labour market institutions are also very important. In particular, in the case of young people, the educational and training systems play a no less important role than the degree of labour market flexibility.